In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF DARREN JOHN POBAR

I, **Darren John Pobar,** of 200 Roma Street, Brisbane, Queensland, 4000 state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

Current position

1. I am the Forensic Manager of the Scientific Section in the Forensic Services Group (FSG) of the Queensland Police Service (QPS) which is based at Police Headquarters (PHQ) at 200 Roma Street, Brisbane.

Qualifications and experience

2. I am the holder of the following tertiary qualifications:

   (a) Bachelor of Applied Science – Medical Laboratory Science from Queensland University of Technology in 1987;

   (b) Masters of Science – Forensic Science from Griffith University in 1996; and

   (c) Masters of Business Administration from the University of Southern Qld in 2005.

3. I was sworn into the QPS in 1990 as a Constable of Police. Whilst working for the QPS I have held the following positions:

   (a) Between 1990 and 2001, I worked in the Major Crime Unit (previously the Physical Evidence Unit), Scientific Section at PHQ. During that time, I progressed in rank from Constable to Senior Constable and then Sergeant of Police;

   (b) Between 2001 and 2007, I was promoted and worked in roles as a Senior Sergeant

in the Major Crime Unit (previously the Physical Evidence Unit) and Senior Sergeant in Quality and Training, Scientific Section, PHQ;

(c) Between 2007 and 2013, I was promoted and worked as an Inspector of Police as the Regional Forensic Services Coordinator for the Metropolitan South Region based at Upper Mt Gravatt;

(d) Between 2013 and 2016, I worked as an Inspector of Police as the State Forensic Services Coordinator based at PHQ where my central function role was responsibility for the Forensic Services Group staff in Southern, Northern and Far Northern Regions;

(e) Since 2016, I have worked as an Inspector of Police in the Scientific Section located at PHQ.

4. Since joining the QPS, I have completed numerous policing and management related workshops and courses including:

(a) 1994 FBI Post Blast Course; FBI Footwear Impressions Evidence Course and the Criminal Investigative Analysis Course;

(b) 1997 Selection Panel Course;

(c) 1998 Australia New Zealand Counter-Terrorism Committee (ANZCTC) National Blast Courts;

(d) 2000 Crime Scene Proficiency – Train the Trainer Course;

(e) 2001 National Association of Testing Authorities (NATA) Internal Audit Course;

(f) 2002 NATA Lead Auditor Course;

(g) 2004 ANZCTC Exercise Management Course;

(h) 2006 CBR Scene Management Workshops; and

(i) 2005 Panel Convenors Course;

(j) 1997-2003 Management Development Program – Legal Studies 1, 2 and 3 and Management Studies 1, 2 and 3.

5. I also have obtained the following awards or formal recognition during my service:

(a) 1990 Dux Award C and D Squads - Qld Police Academy;

(b) 2002 Queensland Police Service Medal (QPSM) (awarded to recognise diligent and ethical service by QPS members and is not granted as of right by virtue of long service); then 2006 – 15 Year Clasp; 2010 – 20 year Clasp; 2015 – 25 year clasp and 2020 – 30 year clasp;

(c) 2006 National Medal (recognising ethical and diligent service as a sworn member of an Australian Police service) then 2016 – 1st Clasp;

(d) 2014 National Police Service Medal

6. I do not have a curriculum vitae (CV) document available. Responses to questions 1 to 5 above form the basis of the contents of a CV.

Forensic Manager role

7. I am currently the substantive Forensic Manager of the Scientific Section, FSG which provides a range of forensic services to police investigators in specialisations of major crime scene, ballistics, documents, chemical criminalistics and vehicle inspections.

8. My position supervises and manages staff in six forensic service units namely:

(a) Major Crime Unit (MCU);

(b) Ballistics unit (BU);

(c) Documents Examination Unit (DEU);

(d) Analytical Services Unit (ASU);

(e) Vehicle Inspection Unit (VIU); and

(f) Quality and Training Unit.

9. My duties as the Forensic Manager of the Scientific Section (as cited in IN004 Position Description Inspector Forensics) include:

(a) Provide leadership and manage staff and laboratory authorisations to ensure the maintenance of NATA accreditation;

(b) Manage the functions and resources in an efficient and effective manner that is consistent with strategic organisational and operational policing objectives;

(c) Develop, implement and evaluate appropriate strategies, plans, and procedures to enable continuous improvement and enhance forensic outcomes;

(d) Consult, liaise and network with appropriate Service, government and non-government organisations and represent the Service in various internal and

external forums;

(e) Provide high quality advice on forensic issues;

(f) Coordinate or conduct investigations regarding issues of performance and conduct of work units and employees of the Service; and

(g) Maintain a work environment committed to professional standards, ethical practices and discipline.

Attached and marked '**Exhibit 2**' is a copy of that position description.

10. I report to my substantive supervisor who is Superintendent Bruce McNab, Forensic Commander FSG. The current relieving Superintendent is Acting Superintendent Duncan McCarthy.

11. The following people report to me:

(a) Senior Sergeant [redacted], Quality and Training;

(b) Senior Sergeant [redacted] Ballistics Unit;

(c) Senior Sergeant [redacted], Vehicle Inspection Unit;

(d) Acting Senior Sergeant [redacted], Major Crime Unit (position currently vacant);

(e) Professional officer 5 [redacted] Analytical Services Unit; and

(f) Professional officer 5 [redacted], Document Examination Unit.

12. A scientific officer in the context of a non-ballistics forensic officer is a highly qualified sworn member of the QPS trained in a number of forensic disciplines. Scientific officers undertake scene and laboratory examinations and provide opinion evidence in the areas of:

(a) fire/explosion scene examination;

(b) crime scene examination;

(c) shoe/tyre impression evidence;

[redacted]

Darren John Pobar Witness

(d) blood pattern analysis;

(e) presumptive screening tests;

(f) hair examinations; and

(g) Cannabis examinations.

13. Scientific officers compile reports and statements on their findings and present expert testimony in courts of law. Scientific officers have a Bachelor of Science degree and complete postgraduate qualifications as part of the internal training program.

14. The Inspector Scientific Section, FSG supervises 15 sworn scientific officers who are based at PHQ and 7 officers who are located in the forensic facility at Coomera Police Station. The Coomera based scientific officers report to the PHQ Scientific Section and operate with MCU as a single service delivery model.

15. I do not supervise the following scientific officers employed by the QPS:

(a) 6 officers who are based in Cairns and 3 officers who are based in Townsville. These officers are supervised by Inspector [redacted], Forensic Manager Far Northern Region and Northern Region; and

(b) 2 officers who are based in Rockhampton who are supervised by Acting Inspector [redacted], Forensic Manager Central Region (this position is currently vacant).

Typical circumstances in which a Scientific Officer attends a crime scene or location

16. Scientific officers conduct forensic examinations related to biological evidence at crime scenes and in the laboratory. Although assessed on a case by case basis, requests for service are predominantly for more serious crime scenes such as homicides, attempted murders, rapes and sexual assaults requiring additional physical and chemical detection techniques and/or bloodstain pattern analysis examinations. Scientific officers have a range of techniques at their disposal in addition to those used by scenes of crime officers to comprehensively screen for blood, seminal fluid and other biological material.

17. In general terms, first response police attend crime scenes and secure the scene. For

serious crime, plain clothes investigators will attend to take over the investigation and further assess investigative needs. A Forensic Coordinator will be contacted by investigators who then request assistance of forensic officers including scientific officers if they believe additional skill sets are required for the case.

18. In regional centres such as Cairns, Townsville and Rockhampton requests for scientific officer services will also generally be made via the local Forensic Coordinator or investigator.

19. Laboratory examination requests in the PHQ laboratory are usually submitted by investigating officers when lodging exhibits at the Forensic Reception Centre in the building. Cases are then tasked to individuals by the Major Crime Unit Team Leader. For regionally based scientific staff, laboratory examination requests are usually made via a Queensland Police Records and Information Management Exchange (QPRIME) task with the property lodged at a QPS property point. Scientific officers may also seize items direct from a crime scene and further examine these exhibits later in the laboratory.

20. Outside of business hours which, in South East Queensland (SEQ), is generally before 0700hrs or after 2200hrs, an on-call service is available. Requests for scene attendance are made via phone to the Inspector Scientific Section who will then contact the on-call officer. I cannot advise on the local call out arrangements for regional scientific officers.

Units within the Scientific Section

21. The Scientific Section comprises the following units:

    (a) Major Crime Unit (MCU) – The MCU comprises of sworn staff who conduct major crime scene and laboratory examinations and provide opinion evidence in the disciplines of crime scene examinations, biological presumptive screening tests and hair examinations, bloodstain pattern analysis, fire/explosion scenes, Cannabis examinations and shoe/tyre impression evidence. MCU includes Coomera based scientific officers on the roster as a single service delivery model to directly support Southern, South-East, North Coast and Brisbane Regions. MCU/Coomera staff also provide backup support

to the remainder of the state.

(b) Ballistics Unit (BU) – The BU comprises sworn and unsworn staff who conduct ballistic crime scene and laboratory examinations and provide opinion evidence on firearms and toolmark certifications and examinations and shooting scene examinations and reconstructions. The BU provides a statewide service.

(c) Document Examination Unit (DEU) – The DEU comprises unsworn staff who conduct forensic examinations and provide opinion evidence in relation to handwriting/signatures, machine generated documents, indentation and ink examinations and other document examinations. The DEU provides a statewide service.

(d) Analytical Services Unit (ASU) – The ASU comprises unsworn staff who conduct forensic examinations and provide opinion evidence in relation to chemical criminalistic disciplines of ignitable liquid residues, paint/polymers, glass, gun-shot residues, capsicum spray and light bulbs. ASU staff also conduct Cannabis examinations. The ASU provides a statewide service.

(e) Vehicle Inspection Unit (VIU) – The VIU comprises sworn and unsworn staff who conduct forensic examinations and provide opinion evidence on the mechanical condition of vehicles including trucks and motorbikes to assess any causal contribution to a traffic incident. The VIU provides a statewide service.

(f) Quality and Training Unit – The Quality and Training Unit conducts monitoring and maintenance of the quality systems across the Scientific Section including proficiency testing, auditing, corrective and improvement actions and other quality system compliance. This Unit also directly manages the training requirements of the MCU and provides some oversight of training delivered to the other Units. This Unit comprises of one Senior Sergeant, one temporary technical officer level 2 (TO2) and one administrative officer 3 (AO3) whose main role is general admin support for the entire Scientific Section.

22. The Senior Sergeant Quality and Training role, similar to that which exists within the Quality Management Section, is responsible for the Scientific Section quality systems in place under NATA accreditation. The role is a locally based function to manage proficiency testing performed across 16 of the 22 specialised Scientific Section disciplines, maintain internal auditing processes, corrective and improvement actions and other quality system compliance. Continual liaison and reporting is maintained with the Quality Management Section.

Forensic Managers and Forensic Coordinators

23. 'Forensic Manager' is a term to designate FSG regional Inspectors and PHQ Section Inspectors. Forensic Managers are responsible for the strategic and operational management and coordination of forensic service delivery in their area of responsibility. There are nine Inspectors (5 regional and 4 PHQ based) that have the designation of Forensic Manager. The Inspector Scientific Section position interacts regularly with Forensic Managers based in South East Queensland to deliver forensic services and less frequently with North Queensland Forensic Managers.

24. 'Forensic Coordinators' are at the rank of Senior Sergeant and responsible for planning, coordinating and supervising forensic service delivery to major incidents including multidiscipline involvement from Scenes of Crime Scientific, Fingerprint, Forensic Imaging and Electronic Evidence areas. They oversee the ongoing forensic casework, sampling and exhibit prioritisation for protracted complex matters and provide briefings and advice to investigators. They also liaise with supervising and stakeholder Forensic Managers on service delivery matters in their area of responsibility. There are 8 Senior Sergeant Forensic Coordinator positions statewide.

25. Outside shift hours the Inspector Scientific Section interacts directly with SEQ based Forensic Coordinators for calls for service and as required in normal shift hours. The position interacts intermittently with non-SEQ (Cairns, Townsville, Rockhampton) Forensic Coordinators that have their own scientific officers under local control. Interaction may occur for example as a result of a request for forensic support from Brisbane.

Darren John Pobar Witness

Quality management in collecting biological material

26. The procedure used by scientific staff to collect biological material is CSE 101 Biological Evidence.

27. Proficiency testing for scientific officers in collecting biological material is undertaken through scene assessments and technical reviews of case files.

28. A scene assessment is a review by another forensic officer authorised in the type of examination being conducted i.e. crime scene examination, to assess the ongoing competence of the officer under test. The review assesses compliance to procedures, examination techniques and general competence in the examination. Scientific officers must have a scene assessment completed every two years.

29. A technical review is a review conducted on either a hard copy or electronic case file to ensure the examinations and findings contained in the file have been based on appropriate procedures and techniques, observations sufficiently recorded, and conclusions are sound and justifiable. Technical reviews are conducted by forensic officers who hold the same authorisation/s as the case file under assessment. Scientific officers have 100% of their case files technically reviewed. Technical reviews do not involve re-examination of exhibits.

30. A verification review is undertaken where non-biometric identifications take place such as firearms and shoesole identifications (matches). This type of review is performed by an authorised person and involves undertaking an independent full examination of the actual comparison exhibits.

31. An administrative review is a review conducted on either a hard copy or electronic case file to ensure the file complies with quality system case file procedures. It ensures the administrative requirements to finalise a case file are completed. Any trained forensic officer or administrative officer can undertake administrative reviews.

Forensic Services Group

Darren John Pobar Witness

32. FSG management meetings occur generally monthly – two monthly in person and/or video link depending on location, The meetings are usually attended by the FSG Superintendent, Inspectors, Superintendent office staff and any guest attendees. Minutes of FSG Management meetings are held by the Superintendent's Office FSG. A copy of the minutes of meetings I am recorded as having attended from July 2017 to date, are attached and marked **'Exhibits 3 to 8'.**

33. I do not recall any reoccurring or systemic issues with the collection of biological material having been raised at FSG management meetings.

34. I do recall an issue with tapelift sample kits around 2008 when FSG moved to subsampling. There was an issue with the adhesiveness of the tapelift used to sample surfaces and the lift was overly 'sticky' and challenging to handle. I believe Quality Management Section took action to change the lift provided in the kits to a less adhesive option to rectify the issue.

Other issues

35. There have been no systemic issues/problems raised to me regarding the collection techniques of biological samples by Scientific staff.

36. In relation to the QPS staff member DNA elimination database, due to confidentiality of the limited elimination DNA database I am not advised on any contamination events. Scientific officers provide personal permission to the DNA Management Unit, to be advised if a contamination event has occurred with a sample but there is no obligation for staff to report any further. I do not recall any scientific officer advising me of any contamination event associated with their sampling.

37. Scientific officers can view DNA results on the Forensic Register. From my experience the officers are interested in the results of their sampling as it may contribute to probative evidence for an investigation and/or also influence if further items are submitted or requests are made for items to be resampled/tested.

38. In relation to the terminology, 'no DNA detected' and 'insufficient DNA for further processing' I do not recall any detailed explanation or training given to scientific officers regarding the terminology. I am unaware of any training given to other police. I do recall

there being an explanation on options available as part of the reporting data on the Forensic Register.

My understanding of the term 'no DNA detected' was it indicated no DNA was present at the first stage of the extraction process. My understanding of the term 'Insufficient DNA for further processing' was gleaned only in recent times possibly March 2022 and I believed it indicated the amount of DNA extracted fell between a set threshold and would not be further progressed as a matter of routine. Prior to 2018 I do not recall the

Darren John Pobar Witness

phrase 'Insufficient DNA for further processing' being used to report DNA results.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this day of August 2022

[redacted]

Darren John Pobar Witness

JUSTICE & ATTORNEY-GEN

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 60) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF DARREN JOHN POBAR
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice number 2022/00060 – Requirement to give information in a written statement – Darren Pobar dated 29/07/2022
2.	QPS Position Description – Inspector IN004 - Forensics
3.	Forensic Services Group Management Meeting Minutes – 2017
4.	Forensic Services Group Management Meeting Minutes – 2018
5.	Forensic Services Group Management Meeting Minutes – 2019
6.	Forensic Services Group Management Meeting Minutes – 2020
7.	Forensic Services Group Management Meeting Minutes – 2021
8.	Forensic Services Group Management Meeting Minutes – 2022

EXHIBIT 1

Notice number: 2022/ 00060

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Darren Pobar

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Thursday 11 August 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 29th day of July 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 000 60

Schedule of topics for statement

Inspector Darren Pobar

1. State your current position in the QPS.

Qualifications and experience

2. List your post-graduate qualifications, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held.

4. Identify any courses or diplomas you have completed since joining the QPS.

5. Identify any awards or formal recognition you have been given since joining the QPS.

6. Attach a current CV.

Current role

7. State the duties of your current position. If you are temporarily acting in a position different to your current substantive position, include the duties of both your substantive position and the acting position.

8. Identify the person or people (name, rank and position) who you report to.

9. Identify the person or people (name, rank and position) who report to you.

10. Explain what a Scientific Officer is and the role of a Scientific Officer.

11. Identify how many Scientific Officers you supervise, including where they are geographically located. Explain if those Scientific Officers are a part of the Scientific Section of the Forensic Services Group (**FSG**).

12. Identify if there are Scientific Officers employed by the QPS that you do not supervise. Identify where they are located and who they are supervised by.

13. Explain the typical circumstances in which a Scientific Officer attends a crime scene or other location to collect biological material for forensic DNA testing. Explain the processes and circumstances which lead to a Scientific Officer being contacted and attending a crime scene, starting with the actions of a first responder to a crime scene. As part of your answer:

(a) explain how the process varies, if at all, between incidents that occur within business hours and incidents that occur outside of business hours; and

(b) explain if the process is different for Scientific Officers outside of South East Queensland compared to those within South East Queensland.

Scientific Section

14. Identify how many QPS units are in the Scientific Section, the name of each unit, and the functions of each unit. As part of your answer, explain and expand upon how the work of the Quality and Training Unit within the Scientific Section compares with the functions of the Quality Management Section. As part of your answer, identify what staff make up the Quality and Training Unit.

Forensic Managers and Forensic Coordinators

15. Explain the role and duties of a Forensic Manager. Identify, as part of your answer, the rank of a Forensic Manager and how many Forensic Managers there are in Queensland. Identify how closely you work with Forensic Managers, if at all.

16. Explain the role and duties of a Forensic Coordinator. Identify, as part of your answer, the rank of a Forensic Manager and how many Forensic Managers there are in Queensland. Identify how closely you work with Forensic Coordinators, if at all.

Quality management in collecting biological material

17. Name the policies and procedures concerning the collection of biological material by the QPS.

18. Identify what proficiency testing (if any) is undertaken by police officers who collect biological material for DNA testing.

19. Explain what a scene assessment is and what it involves. Identify which staff members must be subjected to a scene assessment, and how often scene assessments occur. Identify who conducts scene assessments.

20. Explain what a technical review is – its purpose and what it involves – and whether there are different types of technical review. Identify who conducts technical reviews.

21. Explain what an administrative review is – its purpose and what it involves – and whether there are different types of administrative review. Identify who conducts administrative reviews.

Forensic Services Group

22. Are there FSG management meetings? If yes, how often do they occur, by what means (e.g. in person or by video-link), and who typically attends?

23. For as long as you have been attending those meetings, have any reoccurring or systemic issues/problems with the collection of biological samples for forensic DNA testing been raised or discussed at those meetings?

24. Are you aware of any issues concerning the tape lifts used by the QPS around the time when the QPS started sub-sampling in about 2008? If yes, please provide full details of the problem. Explain how you became aware of the issue, and what was done in response (if anything).

25. Are minutes kept of FSG management meetings? If yes, provide the minutes for any meetings you have attended since July 2017.

Other issues

26. Have you ever observed, or has anyone ever raised with you, any other reoccurring or systemic issues/problems with the collection of biological samples for forensic DNA testing, for example that the methods, systems, processes, protocols, guidelines, or standards are not being followed, or that there are systemic problems with the collection processes, systems or methods? If so, provides details of the communication(s) raising the issue(s). If not, please confirm that you are not aware that there have been any issues raised.

27. If QHFSS determine that a sample has matched with the DNA of a staff member at the QPS who has contributed to the elimination database, are you or anyone in the Scientific Section notified of this? If yes, how? Has anyone ever raised with you this issue of contamination from a QPS Scientific Officer occurring?

28. Do Scientific Officers get notified of the results or matches of the DNA testing of biological material which they collect? From your observations, are Scientific Officers interested in the DNA results or matches of the material which they collect?

29. Are you aware if the terminology introduced in around 2018 of 'No DNA detected', 'DNA insufficient for further processing', and any similar worded results, were explained to police officers such as investigators, SOCOs and SOs? If yes, how? Was any training about the terms used and the options available delivered to police officers such as investigators, SOCOs and SOs? Was any training or explanation given to other staff in the Scientific Section?

30. What is your own understanding of the terminology referred in the first sentence of paragraph 28, above? Has that understanding changed since 2018? If yes, how?

EXHIBIT 2

Queensland Police Service

Position Description

With Honour We Serve

Rank	Inspector	Role Code	IN004	Function	Forensics
Role Scope	The Inspector role is responsible for the management and coordination of forensic service delivery within the area of responsibility.				

Selection Criteria

Are you the right person for the job?	All members are expected to espouse, practice and fulfil their duties in a manner consistent with the: ▪ QPS Values of Integrity, Professionalism, Community and Respect and Fairness; ▪ QPS Purpose to Prevent, Disrupt, Respond and Investigate; and ▪ Leadership Competencies for Queensland (LC4Q). Your application will be assessed against the Selection Criteria and Rank Profile Criteria.		
Integrity Criteria	1	A standard of personal integrity as required by the Commissioner of the Queensland Police Service.	
Qualification Criteria	2	Successful completion of Management Development Program (MDP) Level 3; or Successful completion of Leadership Capability Program (LCP), Level 3.	
Role Specific Criteria	3	Holds/has held a Forensic authorisation in Crime Scene examination; or Is/has been certified as an expert practitioner in a recognised Forensic discipline.	
Rank Profile Criteria *These criteria reflect the LC4Q and are consistent for each rank.* *Your response should address the Leadership LC4Q competencies in the context of the Key Accountabilities for this position and with regard to the associated Position Profile.* *The LC4Q stream for* ***Inspector*** *is* ***Program Leader.*** *For assistance with the QPS context for these criteria please refer to the link below to the Leadership Centre.*	4	**Vision:**	▪ Leads strategically ▪ Stimulates ideas and innovation ▪ Leads change in complex environments ▪ Makes insightful decisions
	5	**Results:**	▪ Develops and mobilises talent ▪ Builds enduring relationships ▪ Inspires others ▪ Drives accountability and outcomes
	6	**Accountability:**	▪ Fosters healthy and inclusive workplaces ▪ Pursues continuous growth ▪ Demonstrates sound governance

Key Accountabilities	
Role Context Key Accountabilities outline specific roles and responsibilities for this position	▪ Provide quality leadership of a forensic area, including the management of staff and laboratory authorisations to ensure the maintenance of NATA accreditation. ▪ Manage the functions and resources to ensure efficiency and effectiveness consistent with strategic organisational and operational policing objectives. ▪ Develop, implement and evaluate appropriate strategies, plans, and procedures to enable continuous improvement and enhance forensic outcomes. ▪ Consult, liaise and network with appropriate Service, government and non-government organisations and represent the Service in various internal and external forums. ▪ Provide high quality advice on forensic issues. ▪ Coordinate or conduct investigations regarding issues of performance and conduct of work units and employees of the Service. ▪ Maintain a work environment committed to professional standards, ethical practices and discipline.

Additional Information	
Notes	Nil.
Supporting Documentation	In preparing your application it is essential you consider: ▪ The LC4Q in the QPS context is outlined in a document hosted by the Leadership Centre titled 'QPS Leadership Competencies' and is available at: ▪ Please refer to the notes section for this vacancy to access Position Profile information. Copy and paste the link into a browser to access the Position Profile relevant to this vacancy.

Privacy Collection Statement

The Queensland Police Service (QPS) is collecting information for the purpose of processing your application for an advertised internal QPS vacancy. The collection of this information is authorised by the Police Service Administration Act 1990.

Current @ 20.06.2022

EXHIBIT 3

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
18 January 2017
Large POC Conference Room, Level 5, Police Headquarters
0900hrs – 1200hrs

Chair	Acting Superintendent Scott McLaren			
Minutes				
Attendees	**Name**	**Position**	**Name**	**Position**
			Troy O'Malley	A/Inspector, FTU
			Darren Pobar	Inspector, SCI
			David Neville	Inspector, QMS
	David Keatinge	Inspector, NBA		
Visitors				
Apologies				

Item #	**Item Description**	**Officer**
1.	Open Meeting – Welcome, introductions and apologies	Chair

DMS

-
- Q-Health is fully functional as of 12 January 2017.
- Turnaround time for results is currently 40 days.

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
1 February 2017
Superintendent's Conference Room, Police Headquarters
0900hrs – 1030hrs

Chair	Acting Superintendent Scott McLaren			
Minutes				
Attendees	**Name**	**Position**	**Name**	**Position**
			Troy O'Malley	A/Inspector, FTU
			Darren Pobar	Inspector, SCI
	David Keatinge	Inspector, NBA	David Neville	Inspector, QMS
Visitors				
Apologies				

Item #	**Item Description**	**Officer**
1.	Open Meeting – Welcome, introductions and apologies	Chair

QMS

- Audits have been progressing.
- SOC course to commence next month.
- Advance SOC course to commence next month.
- Lab upgrades –
- FR Project - . FR upgrade to be released soon.

DMS

- Number of staff are currently off work.
- Workload has increased.
- Contaminations are on the rise – 7 in January
- A number of vacant positions have been filled.

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
16 February 2017
Queensland Fire Emergency Services Academy,
Whyte Island
0800hrs – 1030hrs

Chair	Acting Superintendent Scott McLaren			
Minutes				
Attendees	**Name**	**Position**	**Name**	**Position**
			Darren Pobar	Inspector, SCI
	David Keatinge	Inspector, NBA		
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	David Neville	Inspector, QMS	Troy O'Malley	A/Inspector, FTU
Item #	**Item Description**			**Officer**
1.	Open Meeting – Welcome, introductions and apologies			Chair

	DMS • • DMS will be moving back to PHQ 2 March 2017. • Since 21 January, results have tripled. • QHealth and DNA Results are online on QPRIME.	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
30 March 2017
Supt's Office, [redacted] Police Headquarters
0900hrs – 1130hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		Troy O'Malley	A/Inspector, FTU
			[redacted]	[redacted]
			Darren Pobar	Inspector, SCI
			David Neville	Inspector, QMS
			[redacted]	[redacted]
Visitors			**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	David Keatinge	Inspector, NBA		

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 09:05hrs	Chair
2.	**ACTION ITEMS**	Chair

[redacted]

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
27 April 2017
Supt's Office, [redacted] Police Headquarters
1100hrs – 1330hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		Troy O'Malley	A/Inspector, FTU
	[redacted]		[redacted]	[redacted]
	David Keatinge	Inspector, NBA	Darren Pobar	Inspector, SCI
	[redacted]		[redacted]	
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	[redacted]		**Name**	**Position**

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1100hrs	Chair
[redacted]		
	• **Actions:** QMS to provide results for specified QMS details re: Request for service, proficiency testing, results of internal/external audits, review of corrective action, review of complaints and procedure reviews. **COMPLETED** • **Action:** S/Sgt Jamie Cook to prioritise tasks and ensure completion. **COMPLETED** • **Action:** QMS to review compliance requests for SOCO's to attend court. **COMPLETED**	
[redacted]		

8.	**QUALITY MANAGEMENT**
	• Inspector Neville to return from leave mid-May.
	• External audits to commence in June. Emails will be sent our soon.
	• Senior Sergeant Bill Crick completed audits in
	• Corrective Action
	  ○ Requirements for Forensic Managers to complete After The Fact.
	  ○ Non NATA requirement
	  ○ **Action:** A/Inspector Cross to follow up with Forensic Managers and Coordinators re: accreditation and is it relevant?
	  ○ Conduct once a year peer reviews with Forensic Managers & Supt.
	  ○ FM's and FC's are encouraged to call each other for advice while on the job.
	  ○ **Action:** create small working group to discuss peer reviews. , .
		All

	• FR Development (QH)
	  ○ FR Testing has commenced.
	  ○ **Action:** A/Insp O'Malley results of FR testing to present to results management.
	  ○ PERS was requested to record presentation.
	  ○ QA issues with receiving items. Suggestion was to send to QMS who will assess the issue and then send back to origin for corrective actions.	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
11 May 2017
Supt's Office, [redacted] Police Headquarters
0900hrs – 1100hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		Troy O'Malley	A/Inspector, FTU
			[redacted]	[redacted]
			Darren Pobar	Inspector, SCI
	David Keatinge	Inspector, NBA	[redacted]	
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	[redacted]			

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 0900hrs	Chair

[redacted]

8.	**QUALITY MANAGEMENT** • Internal Audits – were recently audited. No issues. was identified as being understaffed. • External Audits – to commence next week. S/Sergeant Bill Crick will be travelling to • Corrective Actions – currently 90 actions are outstanding. 25 corrective and 65 are improvements. Inspectors have the ability to view corrective actions. Example – Scientific can see OIC and SCI. • Procedure Reviews – there a number of procedures that are waiting on review. Changes to be made to Procedure CSE 100 Crime Scene Examination. FSG all email to be sent out this afternoon.	All
	• Queensland Health FR Development – Sub sampling has commenced. It was noted that Sub Sampling in labs was fine but caused issues in the field.	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
6 June 2017
Supt's Office, [redacted] Police Headquarters
1100hrs – 1240hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			David Neville	Inspector, QMS
			Darren Pobar	Inspector, SCI
	[redacted]			
	David Keatinge	Inspector, NBA/SR		
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies	Chair

[redacted]

8.	**QUALITY MANAGEMENT**
	• Audits were completed in
	• An issues was identified in Statements were not professional. Issued a corrective action and provided an example statement and how it should be written. Insp Neville requested that this be bought to the attention of the OIC's and Staff.
	• External audits
	  ○ 26 July
	  ○ t 27 July
	  ○ 27 July
	  ○ 24 July
	  ○ 25 July
	• 2 corrective actions for .
		All

	• FR Commercialisation [QLD H]: ○ FR at QH goes live next week – 15 June 2017.	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
22 June 2017
Supt's Office, [redacted] Police Headquarters
0900hrs – 1100hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		David Neville	Inspector, QMS
			Darren Pobar	Inspector, SCI
	Troy O'Malley	A/Inspector, FTU	[redacted]	[redacted]
	[redacted]			
	David Keatinge	Inspector, NBA/SR		
	[redacted]	[redacted]	[redacted]	[redacted]
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	[redacted]			

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies	Chair

[redacted]

[redacted]

8.	**QUALITY MANAGEMENT** • [redacted] audit to be carried out • [redacted] audit has been delayed due to no assessor being available Correct Produce for exhibit labelling/photographs of labels • Insp Neville advised that a number of crime scene envelopes have been received with no data, so FFS will not accept the sample • Necessary information required on the exhibit labels has been limited to barcode/FR number and brief description • Number of examples (photographs) of poor labelling were provided and procedures not being followed. [redacted] advised that errors had been discussed with members responsible, OIC apologised, no explanation provided for error • Discussion around correct procedures being followed and FFS requirements • A/Supt McLaren advised that acronyms will not be acceptable, full descriptions required • Discussion around suitable solutions. 1) OIC/FM to ensure compliance with procedures prior to sending the FFS. 2) FSG to accept that FFS will send back whole exhibit if discrepancy is found • SCI advised that they use printed labels generated from information uploaded to the FR and then photographs are taken	All

- QMS advised that they would prefer SCI stop using printed labels as they have no second check identifier. SCI advised that they do use item numbers and therefore second check is accounted for

FR "Go live"

- FTU advised that FFS "Go Live" with the FR has had no significant issues
- All new cases will be processed through the FR. Existing cases will stay with AUSLAB until completion.
- 291 samples have been submitted through the FR, 80 of these were major crime
- FFS are developing KPI's around the volume/duration allowed for the processing of samples. These will be visible on the FR as they become available
- 11 samples on hold due to errors regarding sample envelopes. Majority of errors revolve around mislabelling. These errors will be recorded by FFS as a requirement of their NADA certification
- FFS brought on 77 extra staff for DNA
- Priority 1 samples are highlighted in the FR, NBA enquired if OIC's can have visibility of priority 1's status
- **Action:** FTU to follow up and confirm possibility of OIC having status of P1 visible
- [redacted]
- Discussion around other states and their access to FR or similar systems [redacted]
- Discussion around allowing access of Forensic Medical Officers to the FR. Priority has been given to their access
- Discussion around pathologist current access to the FR.
- **Action:** FTU to look into providing suitable devices to FFS in order to allow afterhours access to FR
- Discussion around importance of operational officers attending joint meeting of FSG and FFS. Issues around Forensic Officers being on a course for the period in which the meeting was scheduled.
- **Action:** Support Officer to organised amended date for joint meeting to allow

[redacted]

	• A/Supt McLaren advised that 3rd July will result in newly christened Superintendents. New Superintendent of FSG should be appointment from this pool SOC Course: • QMS raised discussion regarding SOC course and proposed changes to the level of requirements. • Proposed that current course be amended to an advanced SOC examination course. Access to course will be merit based • Discussion around raising the number of vacancies within current course and running an addition refresher course for Sgt and SSgt already acting in the positions • A/Supt McLaren advised that course needs to be redirected/marketed as a refresher and not as an advancement. Course does not release members as MC's for FM's	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
4 July 2017
Supt's Office, [redacted] Police Headquarters
1030hrs – 1215hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		David Neville	Inspector, QMS
			Darren Pobar	Inspector, SCI
	Troy O'Malley	A/Inspector, FTU	[redacted]	
	[redacted]	[redacted]		
	David Keatinge	Inspector, NBA/SR		
	[redacted]	[redacted]		
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]		

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1030hrs	Chair

[redacted]

8.	**QUALITY MANAGEMENT**
	• Statement and exhibits are still an issue.
	• Management Review Report Discussion
	
	Management Review Report
	1st half of 2017.
	4th July 2017
	
	The suitability of policies and procedures;
	There are a number of policies and procedures that have been identified as requiring improvement:
	-CSE101 requires updating to include use of dual and single DNA laboratories.
	-Use of statement generator and labelling of photographs to be discussed today to improve quality of statements.
	
	The outcome of recent internal audits;
	• The most significant issue identified has been with the quality of statements. This includes poor spelling, grammar, use of jargon, lack of structure or chronology and inclusion of observations that are not within the case record. Corrective actions have been issued. The QMS is undertaking a state-wide review of statements post peer review to monitor quality.
	• Issues with exhibits identified including:
	  o Failure to complete label
	  o Failure to update QPrime with location of exhibit
	• Relevant corrective actions issued.
	
	Assessments by external bodies;
	• There have been no external assessments during this reporting period.
	• Next external audits are:
		Inspector QMS

	○ 25/7/17 Toowoomba ○ 26/7/17 Warwick ○ 31/7/17 Sunshine Coast ○ 1/8/17 Bundaberg ○ 2/8/17 Gladstone ○ 3/8/17 Rockhampton ○ 22/8/17 Mackay ○ 23/8/17 Whitsunday ○ 24/8/18 Ayr ○ 25/8/17 Townsville ○ 28/8/17 Coomera ○ 29/8/17 Logan or Gold Coast ○ November FSG ○ December Cairns	

	• External audits – discussion regarding external audits and the extent of the audit. A full assessment will be completed. Every testing site (technical) will be tested every 18 months and a full assessment completed every 5 years. • Testing of blood – discussion were held regarding the job in [redacted] (SOC officer asked to take a photograph of blood on the floor from a DV incident). If an officer is reporting something to be blood, evidence should be taken at the time to justify statement ie blood sample. This will be an issue when hearing the matter in court. Suggestion is that the SOC officer should make a note ie. SOC officer asked if testing was required (additional services) and if the investigator has declined, ensure that is included. It was suggested this topic be added to Advance Scenes of Crime Course next year. • QPRIME Summaries – notes for causes of death. Add notes that will assist the experts ie. Markings appear to be injections marks. • Statements – review statements for consistency. Statements appear to be too complex for what they are trying to say. Senior Sergeants to review statements for consistency. Suggestions for a statement builder. It was noted that this issue should form part of the Risk Management Plans. A list should be placed together of those officers who can conduct statement reviews. Insp Neville will send out an email for statement and what is expected as a base line. OIC's need to communicate with staff to ensure statements are completed. • **Action:** Insp QMS to provide stats to Supt for statements generated across the state. • **Action:** Forensic Managers and Coordinators to conduct monthly audits on statements. • Minimal standard for photo descriptions. Label photos	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
20 July 2017
Supt's Office, [redacted] Police Headquarters
0900hrs – 1035hrs

Chair	Acting Superintendent Scott McLaren			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			David Neville	Inspector, QMS
			Darren Pobar	Inspector, SCI
	Duncan McCarthy	S/Sgt, FPB	[redacted]	
	Troy O'Malley	A/Inspector, FTU		
	[redacted]	[redacted]		
	David Keatinge	Inspector, NBA/SR		
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 0900hrs			Chair

[redacted]

8.	**QUALITY MANAGEMENT** • Email sent out to managers on how blood is reported. Need to change wording in notes. • • **Action:** Insp Neville and to conduct Facility Forensic Review across the state. • Audits – internal and external to be conducted over the next 5 months. • Peer review statements updated. Forensic Coordinators to nominate Peer Review Officer and monitor performances. S/Sgt Morley indicated issue with 95 Form and Statement. Investigators want both. Information in 95 Form is in the statement. • .	Inspector QMS

	• QLD Health Transition from Profiler Kits for Major Crime to the suggested Identifier Plus. Supt FSG meeting with FSS next week.	

Queensland Police Service
Forensic Services Group Operational Briefing

AGENDA
18 August 2017
Supt's Office, [redacted] Police Headquarters
1000hrs – 1200hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		David Keatinge	Inspector, NBD/SR
			[redacted]	[redacted]
			David Neville	Inspector, QMS
			Darren Pobar	Inspector, SCI
	Troy O'Malley	A/Inspector, FTU	[redacted]	
	[redacted]	[redacted]		
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Item #	**Item Description**			**Officer**

[redacted]

8.	**QUALITY MANAGEMENT:** • Results of recent audits. Recent Audits did not identify any non-compliance. A minor condition was issued relating to info in statement not in case notes. Good results. Upcoming Audits: [redacted]. For complete list refer to Audit Calendar on Intranet. • Outstanding Corrective Action 4 Outstanding Corrective Actions on FR. 1 matter from 2016 won't be finalised until Dec 2017. 4 Outstanding Improvement Actions on FR	Inspector QMS

	DNA – Nil issues at this time. CS finishing on Friday 25/8 PS taking over SCI – Nil issues at this time	
OPR	FTU – Health have transitioned to FR. Have reported on cost effectiveness of system. Fees/Fortnightly meetings/FTA. Looking at	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
14 September 2017
Supt's Office, [redacted] Police Headquarters
1000hrs – 1200hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]	[redacted]	
	Ewen Taylor	S/Sgt, DMS		
	[redacted]	[redacted]	David Neville	Inspector, QMS
	Duncan McCarthy	Inspector, FPB	Darren Pobar	Inspector, SCI
	Troy O'Malley	A/Inspector, FTU		
	[redacted]	[redacted]		
Visitors	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]		
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]		
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1000hrs			Chair

[redacted]

	• SAIK Kits – discussion if SAIK samples should be collected at the same time as reference samples. Should it be mandatory that a SAIK kit cannot be submitted until a reference sample is received. Insp Dave Neville raised concerns re: delay in reference samples. **Action:** S/Sgt Ewen Taylor to follow up on SAIK Kits – should reference samples and SAIK kits be submitted at the same time.	

9.	**QUALITY MANAGEMENT** • Audits – conditions for	Inspector QMS

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
10 October 2017
Supt's Office, [redacted] Police Headquarters
1000hrs – 1200hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]	[redacted]	[redacted]	
	Troy O'Malley	A/Inspector, FTU		
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1000hrs			Chair

[redacted]

9.	**QUALITY MANAGEMENT**
	• Corrective Actions:
	  ○ 16 outstanding
	  ○ 5 for QMS approval
	• Insp Keatinge sent an email to NATA to request an extension for responses from . Due date 18/10/17.
	• Corrective Action Process – a reminder to ensure reporting officers is recorded. Include initials on entires.
	• Internal Audits:
	  ○ – week of 16 October
	  ○ – week of 23 October
	  ○ – week of 30 October
		Inspector QMS

	Action: Add item to next management meeting agenda re – lodging bones without form. • DNA Elimination Database. A/Insp Ewen Taylor raised there is an option to be notified if there is a hit at a scene. **Action:** A/Insp Taylor to distribute email to FSG all re: being notified of contamination events. • [redacted] raised issues about not being notified if their staff are requested for search coordination's. Investigators should be contacting FC's and not [redacted] **Action:** [redacted] to make enquires re: notifying FC for search coordinators • A review on Forensic consumables is being conducted. • A reminder the OPR is on Monday 16 October.	

[redacted]

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
26 October 2017
Meeting Room, P-638, Level 6, P Block, QUT Gardens
Point Campus
1100hrs – 1200hrs

Chair	Inspector Darren Pobar			
Minutes				
Attendees	**Name**	**Position**	**Name**	**Position**
	Ewen Taylor	A/Inspector, DMS	Dave Keatinge	Inspector, QMS
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
			Troy O'Malley	A/Inspector, FTU
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1000hrs			Chair

9.	**QUALITY MANAGEMENT** • Audits ○ – this week ○ ane – next week ○ and – November • Corrective Actions ○ Looking at including a bring up date on the FR as a reminder	Inspector QMS

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
07 November 2017
Supt's Office, [redacted] Police Headquarters
1000hrs – 1030hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]			
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]	[redacted]	[redacted]	[redacted]
	Troy O'Malley	A/Inspector, FTU	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]		
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]		
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1000hrs			Chair

[redacted]

9.	**QUALITY MANAGEMENT:**
	• Results of recent audits.
	  • audits went well.
	  • Main issues are statements. Need to have peer reviewing statements.
	  • Description of exhibits needs to be more detailed. Example – if you collect a shirt description should include: size, brand, colour, conditions.
	  Action: to send out email advice to OIC's and Officers re: exhibit descriptions.
	  • Next external audit will be December 2017.
	• Outstanding Corrective Action
	• Management Review
		All

EXHIBIT 4

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
18 January 2018
Supt's Office, [redacted] Police Headquarters
11:30hrs – 13:40hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]	Troy O'Malley	A/Inspector, FTU
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 11:30hrs			Chair

[redacted]

9.	**QUALITY MANAGEMENT:** • Results of recent audits. • Outstanding Corrective Action • Management Review	Inspector QMS
15.	**ROUND TABLE**	

	• DNA
	  ○ Very high workload in Results and Samples.
	  ○ 2017 – 9000 validation results
	  ○ 2016 – 5000 validations results
	  ○ Backlog on results which was at 1000. Staff members completed overtime to bring the worklist down to 300.	

- QMS
  - External audits are commencing this year.
  - Internal audits –)
  - Regional Coordinators – if possible, please donate Sergeant and Senior Sergeant to assist with audits for 6 months. Only condition is travel within the state.
  - Corrective actions – please progress and finalise prior to external audits.
  - Ongoing issue with officers placing fingerprint information on the incorrect QPRIME entry. Inspector Keatinge to send an email to FSG all.
  - DNA Tape lifts – currently have no tape lifts until February. Issues with shipping from the manufacture from USA. It is requested that units identify other areas in the region to monitor their stock levels.
  - EOI for SOC course has been sent out.
  - .

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
30 January 2018
Supt's Office, [redacted] Police Headquarters
10:30hrs – 12:00hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]		Troy O'Malley	A/Inspector, FTU
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

9.	**<u>QUALITY MANAGEMENT:</u>** • Results of recent audits. • Outstanding Corrective Action • Management Review • DMS	Inspector QMS

	○ Info for Regional Managers – Queensland Health have exhausted profiler kits. A meeting has been arranged on Friday with FSS to discuss volume crime. ○ Increase in workload. Figures indicate a 60% increase since last year. Current solution is with overtime. Inspector Taylor spoke with HR to discuss staffing options. Officer Foxover commencing in DMS next week. ○ Vacant Senior Constable position has been filled and will be filled after Comm Games. ○ Will hold a discussion with A/Inspector Troy O'Malley re FR automation.	
	• QMS ○ Sent out email to all FM and FC re: incorrect idents on QPRIME. ○ Any out of date consumables are to be sent to QMS for use in training. ○ 7 outstanding corrective actions. ○ Sterile drapes are currently being trialled in . Positive feedback so far. ○ Internal auditors – a number of nominations have been received	

Queensland Police Service
Forensic Services Group Operational Briefing

AGENDA
15 February 2018
Supt's Office, [redacted] Police Headquarters
10:45hrs – 12:00hrs

Chair	Acting Superintendent Arthur Van Panhuis			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]			
	Ewen Taylor	A/Inspector, DMS	Dave Keatinge	Inspector, QMS
	Duncan McCarthy	A/Inspector, FPB	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

9.	**QUALITY MANAGEMENT:** • Results of recent audits. • Outstanding Corrective Action • Management Review	Inspector QMS

14.	**GENERAL BUSINESS:**	
	• DK: External Audit next week @ . DP & DK attending. Internal audits identifying inconsistencies with statements. A peer review should take about 20mins NOT 5. CISEP program currently on hold and being reviewed. CSE100: Procedure re Blood being reviewed. Feedback required. Visual Studio replaces FR Help – DK will be line Manager for Leo and Tim	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
1 March 2018
Supt's Office, [redacted] Police Headquarters
10:30hrs – 12:00hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]			
	[redacted]	[redacted]	Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	David Neville	Inspector, Projects		
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 10:00hrs			Chair

[redacted]

9.	**QUALITY MANAGEMENT:**
	• External Audit – Queensland Audit Office:
	  ○ FSG will be audited by QAO. Supt and Insp Keatinge have a meeting with QAO to discuss the matter.
	  ○ Superintendent for QPS
	  ○ Inspector David Keatinge POC for FSG
	  ○ Main objectives for audit – 1. The collection, deliver and storage of forensic evidence effectively and efficiently, 2. Analyse and report forensic evidence accurately and efficiently, 3. Work together to provide efficient forensic services.
	  ○ Will be reviewing FR, internal and external audits
	  ○ QAO will be interviewing officers.
	  ○ Please ensure corrective actions are completed.
	• A number of bring up action items for corrective actions
	• External audits will commence in November
	• Please look at your current CA's, how you are actioning them and look at your past 12 months.
	• There are 19 CA's across the state, 10 IA's. Please read PFS101.
	•
	•
	• Audits for occur October/November.
	• Surveillance Audits to be conducted in
	• Scene assessments and proficiency testing – please include name
	• Section 5 of the Standard – add authorisations and qualifications on FR.
	• Incorrect latents on QPRIME - There is a checkbox on the FR that officers can tick
		Inspector QMS

12.	**PROJECT UPDATES: *by exception***
	• FR Transition
	  ○ Meetings with PSBA f/n
	  ○ Troy O'Malley and Ben Morgan commenced working for BDNA as contractors.
	  ○ Contract is yet to be signed. Currently in procurement stage. AC Condon will cover the contract costs for the first 3 months.
	  ○ Inspector David Neville will commence his temporary role as the Senior Project Officer. The vacant AO5 role will be advertised externally.
	  ○ To all managers – please advise of any FR issues.	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
15 March 2018
Supt's Office, [redacted] Police Headquarters
1000hrs – 1200hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	
			Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Apologies	**Name**	**Position**	**Name**	**Position**
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

10.	**QUALITY MANAGEMENT:**
	• Queensland Audit Office want further information
	  ○ FSG Org Chart
	  ○ Role descriptions – a sample will be provided from each area
	  ○ Forensic policy and procedure
	  ○ User manual for FR
	  ○ Relevant forensic reports
	  ○ Forensic services performance indicators
	• External audits for [redacted] in May.
	• QAO process will not commence until May. Qld Health have provided info to QOA
		Inspector QMS

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
29 March 2018
Supt's Office, [redacted] Police Headquarters
0900hrs – 1045hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	Duncan McCarthy	S/Sgt, FPB	[redacted]	
	[redacted]		David Neville	Inspector, Projects
Visitors	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Apologies			**Name**	**Position**
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

	• Standard of Dress / Appearance	

10.	**QUALITY MANAGEMENT:**
	• Results of recent audits.
	  ○ [redacted] Audit – procedural changes
	  ○ OC has procedural changes on staff meetings and agendas.
	  ○ Modified NATA DOC in July 2015. Checks and balances on new forms.
	  ○ Statement generated – change to NATA logo.
	  ○ Streamline info for exhibits going to FSS.
	  ○ [redacted] audit went well.
	  ○ Audit Scheduled for 2018 will be available soon.
	  ○ Nata Audit for [redacted] – 14-18 May 2018.
	• Outstanding Corrective Action
	• Meeting with QAO
	  ○ Will focus on DNA and FPB processes
	  ○ Regional visits will most likely be Cairns or Townsville.
	  ○ They are looking for end-to-end process for SOC.
		Inspector QMS

13.	**PROJECT UPDATES: *by exception***
	• FSG Projects [INSP NEVILLE]
	  ○ FR Transition
	  ▪ 3 month contract with Bdna with the possibility of 4 month extension.
	  ▪ FR being transferred to new server.
	  ▪ LOL up and running.
	  ▪ Insp Neville documenting FR.
	  ▪ Tim Middleton will be offline to assist PSBA to document process.
	  ▪ Establishing user group across sates
		Chair

	• DMS ○ Profile person samples. Pay each sample sent to FSS. ○ 92% success rate when tested again. ○ Volunteer samples from retired offices have not been destroyed since was serving (2016). ○ A/Insp Taylor arranging for these to be destroyed. ○ Contaminations – pls remind staff. A refresher course to be held by .	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
24 April 2018
Supt's Office, [redacted] Police Headquarters
10:00hrs – 12:00hrs

Chair	[redacted]			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]		[redacted]	
Visitors	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]		
Apologies	**Name**	**Position**	**Name**	**Position**
	David Neville	Inspector, Projects		
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1030hrs			Chair

[redacted]

	• QMS ○ Help is requested with the training course in e. An EOI has been sent.	
	• DMS ○ PP21 Kits – FM have been advised of the supply issues. Other jurisdictions are having the same problem. Third kits arrived yesterday and will be finalised today. ○ QLD Health are going to fund research paper. Feedback from Ian Fraser is they need to run a privacy test. ○ ○ QLD Health require new computers. ○	

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
6 June 2018
Supt's Office, [redacted] Police Headquarters
1100hrs – 1300hrs

Chair	Acting Superintendent Simon Palmer			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
	[redacted]		Dave Keatinge	Inspector, QMS
	Ewen Taylor	A/Inspector, DMS	Darren Pobar	Inspector, SCI
	Duncan McCarthy	A/Inspector FPB	[redacted]	[redacted]
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	David Neville	Inspector, Projects		
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1030hrs			Chair

[redacted]

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
19 June 2018
Supt's Office, [redacted] Police Headquarters
1300hrs – 1500hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			Dave Keatinge	Inspector, QMS
			Darren Pobar	Inspector, SCI
			[redacted]	
Visitors	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Apologies	**Name**	**Position**	**Name**	**Position**
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies 1300hrs			Chair

[redacted]

14.	**PROJECT UPDATES: *by exception***
	• FSG Projects [INSP NEVILLE]
	  ○ FR Transition
	  ▪ BDNA has submitted another offer. This is currently in discussion.
	  ▪ Meeting with Michel Lok (GM QHealth) on Friday with Supt. Another meeting was held with AC Condon, AC McCarthy, Supt Frieberg and Mickel Lok.
	  ▪ Current BDNA contract expires 20/06/2018. This has been extended for another month.
	  ▪ 40 hours per week from BDNA contractors.
	  ▪ Future governance for FR.
	  ▪ All requested will be socialised. Other units must be consulted prior to changes occurring.
		All

[redacted]

	• QMS ○ Corrective Actions – down to 8. Outstanding include [redacted]. ○ Improvement Actions – 3 ○ 17025 Standard – Management Review. Booked for discussion on 5 July 2018 for management meeting. ○ Finalising response to NATA audit report. ○ [redacted] ○ Positive feedback from OIC re: access to training records on FR. ○ [redacted]	

[redacted]

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
2 August 2018
Supt's Office, [redacted] Police Headquarters
1100hrs – 1330hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
	[redacted]		David Keatinge	Inspector, QMS
	Dave Neville	Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]		[redacted]	
Visitors	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]	[redacted]		
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

11.	**QUALITY MANAGEMENT:**
	• Results of recent audits.
	  ○ Internal audits begin next week
	  ○ will be first.
	  ○ Trialling new system of reviewing case files prior to visit.
	• Outstanding Corrective Actions
	• QAO
	  ○ Preview of CSU audit.
	  ○ Walk through by QAO on 08/08/18 on
	  ○ Regional Visits – .
	  ○ When QAO
		Inspector QMS

Queensland Police Service
Forensic Services Group Operational Briefing

MINUTES
4 September 2018
Supt's Office, [redacted] Police Headquarters
0900hrs – 1100hrs

Chair	Superintendent Dale Frieberg			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	[redacted]
			David Keatinge	Inspector, QMS
	David Neville	Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

9.	**QUALITY MANAGEMENT** • Trialling new audit process. Feedback so far is positive. • It is the responsibility of the FM to select officers for auditing. • Main issue at the moment is peer and tech reviews. • Discussions RE: no longer labelling photos. Positive reviews received.	Inspector QSM

	• Streamlining amount of information provided to QHealth. • No update from QAO. 1 month worth of exhibits have been provided. • Inspector David Keatinge is commencing leave for 3 weeks tomorrow.	

12.	**PROJECT UPDATES – *by exception***
	• Regional DNA Labs
	  ○ Rockhampton Lab is on schedule and almost completed. .
	• Forensic Register
	  ○ Still working on transition.
	  ○ Inspector David Neville working closely with
	  ○ Current priority is to fix the 9-digit barcode issue. Need to transition and update codes to accept 10-digit barcodes. This will take approx. 2-3 months to complete.
	  ○ Any urgent work – please email Superintendent Frieberg, Inspector Keatinge and Inspector Neville to triage.
		Various

13.	**GENERAL BUSINESS**.	All

	• DMS
	  ○ TAT – 9 weeks.
	  ○ Looking at copying the FPB evidence notice and replicate for DMS. Prosecutions has been consulted.
	• QMS
	  ○ Nil	

Queensland Police Service
Forensic Services Group Operational Briefing

AGENDA
23 October 2018
Supt's Office, [redacted] Police Headquarters
0900hrs – 1100hrs

Chair	Superintendent Bruce McNab			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	
			David Keatinge	Inspector, QMS
	David Neville	Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair

[redacted]

11.	**QUALITY MANAGEMENT:** • Results of recent audits. • Outstanding Corrective Actions	Inspector QMS

[redacted]

17.	**GENERAL BUSINESS:**	

	• FSG Policy to be adjusted to only permit barcoding and addition of SAIKs of the FR if a reference sample from the victim has been taken.
	  ○ Interim policy – When IO attends SOC with Kit for barcoding, SOC officer must ask if reference sample has been taken. If it has not, the IO must obtain.
	  ○ Insp Neville to draft briefing note	

Queensland Police Service
Forensic Services Group Operational Briefing

AGENDA
23 October 2018
Supt's Office, [redacted] Police Headquarters
0900hrs – 1100hrs

Chair	Superintendent Bruce McNab			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	
	[redacted]		David Keatinge	Inspector, QMS
	David Neville	Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	**Name**	**Position**	**Name**	**Position**
	[redacted]			
Item #	**Item Description**			**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies			Chair
[redacted]				
11.	**QUALITY MANAGEMENT:** • Results of recent audits. • Outstanding Corrective Actions			Inspector QMS
[redacted]				

Queensland Police Service
Forensic Services Group Operational Briefing

AGENDA
08 November 2018
Supt's Office, [redacted] Police Headquarters
1000hrs – 1130hrs

Chair	Superintendent Bruce McNab			
Minutes	[redacted]			
Attendees	**Name**	**Position**	**Name**	**Position**
	[redacted]		[redacted]	
	[redacted]		David Keatinge	Inspector, QMS
	David Neville	Inspector, DMS	Darren Pobar	Inspector, SCI
	[redacted]			
Visitors	**Name**	**Position**	**Name**	**Position**
Apologies	[redacted]			

Item #	**Item Description**	**Officer**
1.	**OPEN MEETING** – Welcome, introductions and apologies	Chair

[redacted]

EXHIBIT 5

FSG Management Meeting

31 January 2019 1000hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Superintendent Bruce McNab

Attendees

- A/Inspector Duncan McCarthy, CER
- [redacted]
- Inspector David Neville, DMS
- [redacted]
- Inspector David Keatinge, QMS
- Inspector Darren Pobar, SCI
- [redacted]

Minute Taker [redacted]

Apologies

-

Visitors

-

Minutes

[redacted]

FSG Management Meeting

14 February 2019 1000hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Superintendent Bruce McNab

Attendees

- A/Inspector Duncan McCarthy, CER
- [redacted]
- Inspector David Neville, DMS
- [redacted]
- Inspector Darren Pobar, SCI
- [redacted]

Minute Taker [redacted]

Apologies

- Inspector David Keatinge, QMS
- [redacted]

Visitors

-

Minutes

[redacted]

FSG Management Meeting

28 February 2019 0900hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Superintendent Bruce McNab

Attendees

- A/Inspector Duncan McCarthy, CER
- [redacted]
- Inspector David Neville, DMS
- [redacted]
- Inspector David Keatinge, QMS
- [redacted]
- Inspector Darren Pobar, SCI
- [redacted]

Minute Taker [redacted]

Apologies

-

Visitors

-

Minutes

[redacted]

- FSG Suggestion Box from [redacted]: There is currently no triage of 'Volume Crime' DNA exhibits. Solution – Officers are to speak with FM/FC regarding prioritization.

- Just in Case SAIK – QH introduced policy with regarding to SAIK's being taken without a complaint being submitted by victim. Minimal consultation with QPS.

FSG Management Meeting

13 March 2019 1000hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Superintendent Bruce McNab

Attendees

- [redacted]
- Inspector David Neville, DMS
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- A/Inspector Jamie Cook, QMS
- [redacted]
- Inspector Darren Pobar, SCI
- [redacted]
- [redacted]

Minute Taker [redacted]

Apologies

- [redacted]

Visitors

Minutes

[redacted]

FSG Management Meeting

28 March 2019 1000hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Superintendent Bruce McNab

Attendees

- [redacted]
- Inspector David Neville, DMS
- [redacted]
- A/Inspector Jamie Cook, QMS
- [redacted]
- Inspector Darren Pobar, SCI
- [redacted]

Minute Taker [redacted]

Apologies

Visitors

- [redacted]

Minutes

[redacted]

- DNA
  - P1 turnaround on DNA samples has increased which has a flow on effect at QH.
  - Volume Crime – 30 day turnaround.
  - Major Crime – varies between 12 and 50 days

FSG Management Meeting

11 April 2019 1100hrs | Superintendent's Conference Room, [redacted] PHQ

Chair: Superintendent Bruce McNab

Attendees

- [redacted]
- [redacted]
- Inspector David Neville, DMS
- [redacted]
- A/Inspector Ewen Taylor, NBD/SR
- [redacted]
- [redacted]
- Inspector David Keatinge, QMS
- Inspector Darren Pobar, SCI
- [redacted]
- [redacted]

Minute Taker: [redacted]

Apologies

- [redacted]

Visitors

- [redacted]
- [redacted]

Minutes

[redacted]

- Splitting summaries – FR
  - This is currently in the pipeline with Troy and Ben (BDNA).
  - ETA – before next management meeting.
- Additional function on the FR – visual to see exhibit record

[redacted]

Inspector Neville

- Visibility on the FR to see QH task list.
- Option 1 – A screen list which can only be access by FM and FC to track the progress of the samples
- Option 2 – QH work list.
- Both options will be commenced with Insp Neville to have a visual on the QH work list

FSG Management Meeting

11 June 2019 1000hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Inspector David Neville

Attendees

- [redacted]
- Inspector David Keatinge, QMS
- [redacted]
- Inspector Darren Pobar, SCI
- [redacted]

Minute Taker [redacted]

Apologies

- Superintendent Bruce McNab
- [redacted]

Visitors

Minutes

Topic	Presenter
[redacted]	

FSG Management Meeting

3 July 2019 1100hrs | Superintendent's Conference Room, [redacted] PHQ

Chair Inspector Darren Pobar

Attendees

- [redacted]
- Inspector David Keatinge, QMS
- [redacted]

Minute Taker [redacted]

Apologies

- Superintendent Bruce McNab, FSG
- [redacted]
- Inspector David Neville, DMS
- [redacted]

Visitors

- [redacted]

Minutes

Topic	Presenter
[redacted]	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Wednesday 25 September 2019

Location: Superintendent's FSG Conference Room, [redacted] Police Headquarters

Time: 10:00am – 12:00pm

Chair: Acting Superintendent Phil Stevens

Attendees:

[redacted]

Inspector Darren Pobar, SCI

[redacted]

Inspector David Neville, DMS

[redacted]

Inspector David Keatinge, QMS

[redacted]

Apologies

[redacted]

Secretary: [redacted]

Item		Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

EXHIBIT 6

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 16 January 2020
Location: Conference Room 3, [redacted] Police Headquarters
Time: 10:00am – 12:00pm
Chair: Acting Superintendent Simon Palmer
Secretary: [redacted]
Attendees:
[redacted]
Inspector David Neville, DMS
[redacted]
Inspector David Keatinge, QMS

Inspector Darren Pobar, SCI
[redacted]

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

	QMS: • Insp Keatinge seeking feedback from staff with the new notification system DMS: • Turnaround times have increased from 10 days to 17 days. This is due to the Christmas Closure.	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 6 February 2020
Location: Conference Room 3, [redacted] Police Headquarters
Time: 1:00pm – 3:00pm
Chair: Superintendent Bruce McNab
Secretary: [redacted]
Attendees:

[redacted]
A/Senior Sergeant Steve Foxover, DMS
[redacted]
Inspector David Keatinge, QMS

Inspector Darren Pobar, SCI
[redacted]
Senior Sergeant Duncan McCarthy, FPB

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • [redacted] • Inspector David Neville • [redacted]	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

8.0	General Business	
8.1	QMS • [redacted] • Forensic Register Contract – the preferred supplier has gone out to QLD Government and Federal Government for negotiations. • [redacted] resigned from the QPS. Any FR developments are on hold. Currently using the AO6 salary for any urgent developments.	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Wednesday 4 March 2020
Location: Conference Room 3, [redacted] Police Headquarters
Time: 1:00pm – 3:00pm
Chair: Superintendent Bruce McNab
Secretary: [redacted]
Attendees:

[redacted]
Inspector David Neville, DMS
[redacted]
Inspector David Keatinge, QMS
Inspector Darren Pobar, SCI

Inspector Duncan McCarthy, SEA
[redacted]
[redacted]

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair
2.0	**Minutes of Previous Meeting**	
2.1	Review minutes and action items from previous meeting • Refer to action register	All

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

	In preparation ○ Krosch MN. Forensic DNA sampling success rates for common exhibits: a Queensland perspective. Planned submission to Australian Journal of Forensic Sciences. ○ [redacted] • News: ○ QHFSS are in the process of validating a Y-STR kit and the newest regular STR kit which will significantly improve DNA capabilities in QLD and reduce need to outsource.	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

10.2	SOC Refresher Course • 3 SOC refresher courses are booked in • 9-13 March, 30 March – 3 April and 11-15 May. • The aim is for all SOC officers to complete this training prior to the end of 2020. • Thank you to Asha Haxton for organising this course.	
11.0	**Meeting Finalisation**	
11.1	Next Meeting – 01/04/2020	Chair
11.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Tuesday 5 May 2020
Location: Microsoft Teams
Time: 11:00am – 1:00pm
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector David Neville, DMS

Inspector David Keatinge, QMS

Inspector Darren Pobar, SCI
Inspector Duncan McCarthy, SEA

A/Senior Sergeant Cassie Thompson, FSG

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2		Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

8.0	Meeting Finalisation	
8.1	Next Meeting – TBC	Chair
8.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

Minutes

Meeting Date: Tuesday 9 June 2020
Location: Microsoft Teams
Time: 11:30am – 1:00pm
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector David Neville, DMS

A/Senior Sergeant Cassie Thompson, FSG

Inspector David Keatinge, QMS
Inspector Darren Pobar, SCI
Inspector Duncan McCarthy, SEA

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

10.1	Next Meeting – 07/07/2020	Chair
10.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Wednesday 8 July 2020
Location: Microsoft Teams
Time: 12:30pm – 1:30pm
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector David Keatinge, QMS
Inspector Darren Pobar, SCI

A/Senior Sergeant Cassie Thompson, FSG

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • Inspector David Neville, DMS	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

	QMS • [redacted] • 5 External Nata Audits scheduled for this year. Will be desktop technical audits. • Restructure of SOC course. Going very well. Next course will reduce from 16 to 6 week course in Brisbane. Aiming for October for the next course. Potential to run 3 course	

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

7.1	Next Meeting – 06/08/2020	
7.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

AGENDA

Meeting Date: Wednesday 19 August 2020
Location: Microsoft Teams
Time: 11:00am – 12:30pm
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector David Neville, DMS

Inspector David Keatinge, QMS
Inspector Darren Pobar, SCI
A/Inspector Duncan McCarthy, SEA

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • • A/Senior Cassie Thompson, Project Officer	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

8.0	Meeting Finalisation	
8.1	Next Meeting – 16/09/2020	
8.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

AGENDA

Meeting Date: Wednesday 28 October 2020
Location: Microsoft Teams
Time: 10:00am – 11:00am
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector David Neville, DMS
Inspector David Keatinge, QMS

Inspector Darren Pobar, SCI

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • • Inspector Duncan McCarthy, SEA	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

8.0	Forensic Register	
8.1	Update on Forensic Register – the next steps • Meeting with BDNA – next steps moving forward. • Working Group – [redacted] • Moving to a new version. • Discussion on the code and QPS ownership. • Troy O'Malley to come over to management meeting to discuss FR. November meeting. ACTION: Supt's office to invite Troy O'Malley to next meeting.	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

11.0	Meeting Finalisation	
11.1	Next Meeting – 18/11/2020	
11.2	Close	Chair

EXHIBIT 7

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 18 March 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Acting Superintendent Duncan McCarthy
Secretary:
Attendees:

Inspector David Neville, BIO

Inspector Darren Pobar, SCI
A/Inspector Jamie Cook, QMS

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair
4.0	**QMS Audit Process – between FM and OIC**	
4.1	Audit process between FM and OIC's	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

	• Working on a process with the FMs and FC and sharing the load of reviews. • Summary of process to be put together and send out for feedback. A/Supt McCarthy and A/Insp Cook will be sending that out soon. • Issue with the Audit that it needs to be completed by a S/Sgt. May cause issues with NATA. Will address this in the feedback.	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

10.0	Meeting Finalisation	
10.1	Next Meeting – 15/04/2021	Chair
10.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

AGENDA

Meeting Date: Thursday 15 April 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector David Neville, BIO

Inspector Duncan McCarthy, SEA

Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS

Apologies:

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

- QMS
  - Audits – Next Surveillance NATA audit – in . Will include SOC stations in .
  - Training sessions for internal audits next week.
  -
  -
  -
  - New SOC program on Sharepoint.
  - SOC Refresher training –
  - FR – meeting with BDNA next week re: QP127
- SEA
  - Thank you to assisting with reviews.
  -
- BIO
  - Slow down in results in DNA? Noticed in

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

8.1	Next Meeting – 20/05/2021	Chair
8.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 20 May 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Acting Superintendent Gai Bolderrow
Secretary:
Attendees:

Inspector David Neville, BIO

Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS

Inspector Duncan McCarthy, SEA

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair
2.0	**Minutes of Previous Meeting**	
2.1	Review minutes and action items from previous meeting • Refer to action register	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

	• Forensic Register
	  ○ Spoke with ORGCC regarding QPRIME and connecting to FR.
	  ○ Recruiting additional people to assist with project.
	  ○ Could take 4-6 weeks to complete.	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

	QMS • Next SOC Course – 16/08/2021. EOI to be send out May/June. If areas have vacancies, please contact S/Sgt Burke. • [redacted] • Corrective Actions - CA must follow 2008 template. Will be return if incorrect. CA officer should be a senior officer.	

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

10.1	Next Meeting – 17/06/2021	Chair
10.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 17 June 2021
Location: Microsoft Teams
Time: 10:00am – 11:30am
Chair: Acting Superintendent Gai Bolderrow
Secretary: [redacted]
Attendees:

Inspector David Neville, BIO
[redacted]
Inspector Duncan McCarthy, SEA
[redacted]

Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS
[redacted]

Apologies

[redacted]

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

10.1	Next Meeting – 15/07/2021	Chair
11.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 15 July 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Acting Superintendent Gai Bolderrow
Secretary:
Attendees:

Senior Sergeant Steve Foxover, BIO

Inspector Duncan McCarthy, SEA

Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS

Apologies

Inspector David Neville, BIO

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • Inspector David Neville	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

10.0	**General Business – *by exception***	
10.1	General business from Unit Heads • QMS ○ FR Compliance Audit Checklist. Remote surveillance audit will be increased on the FR. OIC's will need to ensure FR compliance checklists are completed. ○	All

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

	• DNA - nil	

11.0	Meeting Finalisation	
11.1	Next Meeting – 19/08/2021	Chair
11.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 19 August 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Acting Superintendent Duncan McCarthy
Secretary:
Attendees:

Inspector David Neville, BIO

Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

	[redacted]	
8.0	**General Business – *by exception***	
8.1	General business from Unit Heads QMS • [redacted] • Audits – still a number outstanding. Any issues, call Jamie Cook. • New SOC course started Monday. Next course to commence March 2022. • [redacted] • FR Upgrade – looking at training authorisations and personnel records. BIO • DNA TAT – major crime – 8 weeks. Met with health – blamed Cold Case. Suggested a join CBRC submission to gain more staff. Getting more figures.	All

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

9.0	Meeting Finalisation	
9.1	Next Meeting – 16/09/2021	Chair
9.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 16 August 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Acting Superintendent Duncan McCarthy
Secretary:
Attendees:

Inspector David Neville, BIO

Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS

Apologies

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

- QMS
  - Corrective Actions and Improvement Actions – FM's please review and action.
  - Audits – please submit paperwork to QMS.

[redacted]

- BIO
  - TAT – nearly a week for FP Ident. Have several staff COVID duties and members on sick leave.
  - Will be reducing the number of FPB staff going on deployments.
  - Has been receiving complaints from FC and Investigators.

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 16 August 2021
Location: Microsoft Teams
Time: 9:00am – 10:30am
Chair: Superintendent Dale Frieberg
Secretary: [redacted]
Attendees:

Inspector David Neville, BIO
[redacted]

Inspector Duncan McCarthy, SEA
[redacted]

Inspector David Keatinge, QMS
[redacted]

Visitors

[redacted]

Inspector Darren Pobar, SCI

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

7.0	**General Business – *by exception***	
7.1	General business from Unit Heads • QMS ○ CA – please finalised by end of year. ○ Internal audits completed for the year. ○ External audits Surveillance – [redacted] ○ SOC Course to be gazetted soon – please start thinking about vacancies. Wont start until April 2022.	All

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

- BIO
  - [redacted]
  - TAT – over 3 days. Quality over quantity.
  - TAT for DNA – fairly good.
  - Elimination database – fairly old (2011). Option –

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

8.0	Meeting Finalisation	
8.1	Next Meeting – 18/11/2021	Chair
8.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Wednesday 17 November 2021
Location: FSG Conference Room 3, [redacted] PHQ
Time: 9:00am – 10:30am
Chair: Superintendent Dale Frieberg
Secretary: [redacted]
Attendees:

Inspector David Neville, BIO
[redacted]

Inspector Duncan McCarthy, SEA
[redacted]
Inspector Darren Pobar, SCI
Inspector David Keatinge, QMS
[redacted]

Visitors
[redacted]

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • Nil	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

	QMS – SOC Program – 3 courses next week. Only 8 members a course.	
	FPB TAT – 0 hours. DNA TAT – 5 weeks. Influx of samples submitting to QH for DNA. Insp Neville will start to triaging jobs.	

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

7.0	**Meeting Finalisation**	
7.1	Next Meeting – 16/12/2021	Chair
7.2	Close	Chair

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 16 December 2021
Location: Supt FSG Conference Room, [redacted] PHQ
Time: 10:00am – 11:30am
Chair: Inspector Darren Pobar
Secretary: [redacted]
Attendees:
Superintendent Dale Frieberg, FSG
[redacted]
[redacted]
Inspector David Keatinge, QMS
[redacted]

Visitors
[redacted]

Apologies
Inspector David Neville, BIO

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair

[redacted]

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

8.1	General business from Unit Heads BIO • Briefly spoke about the non-compliance in DNA Sampling. Will provide monthly reporting to D/O's and provide some educational pieces. • FPB TAT – 2 days	All

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

[redacted]

9.0	Meeting Finalisation	
9.1	Next Meeting – 20/01/2022	Chair
9.2	Close	Chair

OFFICIAL

QUEENSLAND POLICE SERVICE

FSG Managers Meeting

MINUTES

Meeting Date: Thursday 20 January 2022
Location: Microsoft Teams Meeting
Time: 09:00am – 10:30am
Chair: Superintendent Dale Frieberg
Secretary:
Attendees:

A/Inspector Steve Foxover, BIO

Inspector Duncan McCarthy, SEA

Inspector Darren, Pobar -SCIS

Apologies

Inspector David Neville, BIO

Inspector David Keatinge, QMS

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies • Inspector David Neville, BIO • Inspector David Keatinge, QMS	Chair
2.0	**Minutes of Previous Meeting**	
2.1	Review minutes and action items from previous meeting • Refer to action register	Chair
3.0	**Superintendent Briefing**	

6.0	QMS	
6.1	• Corrective Actions ○ Need to be finalised appropriately and in a timely manner. ○ To date some are still are outstanding. ○ FR version may go live in March ○ [redacted] **ACTION ITEM:** Supt Frieberg to send out BDNA figures – **done.**	S/Sgt Jamie Cook
6.2	• NATA External Audits ○ [redacted] for External Audits	S/Sgt Jamie Cook

	QMS • Internal Audits are ramping up.	
	[redacted]	
9.0	**Meeting Finalisation**	
9.1	Next Meeting – 24/02/2022	Chair
9.2	Close	Chair

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

Meeting Date: Wednesday 23 February 2022
Location: Microsoft Teams Meeting
Time: 09:00am – 11:00am
Chair: Superintendent Dale Frieberg
Secretary:
Attendees:

Inspector David Neville, BIO

Inspector Darren, Pobar -SCIS

S/Sgt Ewen Taylor, NBD/SR
Inspector Duncan McCarthy, SEA

Inspector David Keatinge, QMS

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

4.3	• DNA presented to Senior Managers Conf on DNA compliance rates currently 54%-83% compliance • QH triaging DNA samples and threshold of testing. • Media attention as a result of .	Inspector David Neville

9.0	**Meeting Finalisation**	
9.1	Next Meeting – 24/03/2022	Chair
9.2	Close	Chair

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

Meeting Date: Wednesday 30 March 2022
Location: Microsoft Teams Meeting
Time: 9:30am – 10:30am
Chair: Superintendent Bruce McNabb
Secretary: [redacted]

Attendees:

Inspector David Neville, BIO
[redacted]
Inspector Duncan McCarthy, SEA
[redacted]
Inspector Darren Pobar, SCI

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair

[redacted]

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

8.0	Meeting Finalisation	
8.1	Next Meeting – 19 April 2022	Chair
8.2	Close	Chair

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

Meeting Date: Tuesday 3 May 2022
Location: Microsoft Teams Meeting
Time: 1:00pm – 2:30pm
Chair: Superintendent Bruce McNab
Secretary: [redacted]
Attendees:

A/Inspector Steve Foxover, BIO
[redacted]
Inspector David Keatinge, QMS

A/Inspector Ewen Taylor, NBD/SCD
Inspector Duncan McCarthy, SEA
[redacted]
Inspector Darren Pobar, SCI
[redacted]

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Chair
1.2	Apologies	Chair

[redacted]

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

[redacted]

8.0	**Meeting Finalisation**	
8.1	Next Meeting – 31 May 2022	Chair
8.2	Close	Chair

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

Meeting Date: 24 May 2022
Location: Microsoft Teams Meeting
Time: 11:00am – 12:30pm.
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector Dave Neville, BIO

Inspector David Keatinge, QMS

Inspector Duncan McCarthy, SEA

Inspector Darren Pobar, SCI

Visitors:

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Superintendent Bruce McNab
1.2	Apologies • • Inspector David Neville, BIO •	Superintendent Bruce McNab

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

10.0	**Scenes of Crime Course**	
10.1	Seeking advice from regions and sections in relation to current and projected vacancies that may require a trainee on the next SOC course • Inspector Keatinge has received responses. • NFA	Inspector David Keatinge
11.0	**General Business – *by exception***	
	General business from Unit Heads by exemption	All
	QMS • 70 bugs in FR system. Bdna have been working to fix these. • Meeting with Bdna tomorrow to improve systems and determine how long it will take to rectify.	

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

12.0	Meeting Finalisation	
12.1	Next Meeting – 28 June 2022	Chair
12.2	Close	Chair

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

Meeting Date: 28 June 2022
Location: Microsoft Teams Meeting
Time: 11:00am – 12:30pm
Chair: Superintendent Bruce McNab
Secretary:
Attendees:

Inspector Duncan McCarthy, SEA

Inspector Darren Pobar, SCI

Visitors:

	Item	Responsible
1.0	**Welcome and Apologies**	
1.1	Opening and Welcome	Superintendent Bruce McNab
1.2	Apologies • Insp Dave Keatinge, QMS • Insp Dave Neville, DNA COI	Superintendent Bruce McNab

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

QUEENSLAND POLICE SERVICE
FSG Managers Meeting
MINUTES

12.0	Meeting Finalisation	
12.1	Next Meeting – 26 July 2022	Chair
12.2	Close	Chair

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF CASSIE THOMPSON

I, **Cassie Thompson,** of 5 Sheridan Street, Cairns, Queensland, 4870 state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

Current Employment

1. I am the Far Northern Region Forensic Coordinator at the rank of Senior Sergeant stationed in the Cairns Forensic Facility.

Qualifications and experience

2. I am the holder of the following tertiary qualifications:

   (a) Bachelor of Science from Griffith University in 1993

   (b) Bachelor of Science with Honours Class 1 in Anatomy from the University of Queensland in 1994

   (c) Master of Science in Forensic Science from Griffith University in 2014

3. Prior to joining the Queensland Police Service (QPS), my work history included the following:

   (a) [redacted]

(b) [redacted]

4. I commenced at the QPS Academy in October 1997 and was sworn into the QPS in April 1998. I have worked in the following areas since that time:

(a) In April 1998, I commenced work in General Duties at Mackay Police Station.

(b) In August 1999, I transferred to General Duties at Airlie Beach Police Station.

(c) In October 2001, I transferred to General Duties at Mossman Police Station. During my time at Mossman, I progressed to Senior Constable.

(d) In July 2005, I obtained a position as a Forensic Scientist (Scientific Officer) in Cairns Scientific Section, and immediately transferred to Brisbane Scientific Section to undertake training.

(e) In December 2007, I returned to Cairns Scientific Section as a Scientific Officer.

(f) In July 2010, I transferred to Gold Coast Scientific Section. During my time at Gold Coast Scientific Section I progressed to Sergeant, Senior Forensic Scientist, after completing my Master of Science in Forensic Science.

(g) In April 2021, I was promoted to the Far Northern Area as the Forensic Coordinator.

Forensic Coordinator role

5. The current qualifications required to obtain a Forensic Coordinator position is the successful completion of the Scenes of Crime Officer training course or a level of knowledge and skill which, in the opinion of the Superintendent, Forensic Services Branch is equivalent.

6. I am the Forensic Coordinator for the Far Northern Area (also called Far Northern Region). This area covers from Cardwell in the south, north to the Islands of the Torres Strait, all of Cape York including down to Kowanyama on the west coast, and west to Croydon.

7. My duties as the Forensic Coordinator are primarily to plan and coordinate the multidisciplinary forensic response to major incidents to meet investigative priorities in compliance with the Forensic Services Quality System. Major incidents include homicides, unusual deaths, and serious violence against the person. This includes consulting with investigators and specialists to coordinate forensic evidence examinations, provide investigator briefings, including explaining significance of conclusions and findings from crime scene and laboratory examinations, and to coordinate and review the forensic brief of evidence for complex multidisciplinary cases when required.

8. Additionally, I form a role in advising the Inspector, Forensic Manager in my area on issues which might affect the Forensic Services Quality System that cannot be rectified.

9. The Forensic Manager responsible for the Far Northern Area is Inspector [redacted]

10. I report directly to Inspector [redacted]

11. I have one person who directly reports to me, the AO3 Admin & Review Administration Officer.

12. In the Far Northern Area, there are four Scenes of Crime (SOC) units, as listed below. Scenes of Crime Officers (SOCO) in Far Northern Region report to their respective Officer in Charge (OIC). Those OICs report directly to Inspector [redacted].

    (a) Cairns Scenes of Crime, housed in the Cairns Forensic Facility with Cairns Scientific Section;

    (b) Mareeba Scenes of Crime;

    (c) Innisfail Scenes of Crime; and

(d) Thursday Island Scenes of Crime.

13. There is one Scientific Unit that is responsible for the Far Northern Region, the Cairns Scientific Section. Scientific Officers report to their respective OIC who reports directly to Inspector [redacted].

14. Attached and marked as '**Exhibit 2**' to this statement is a copy the Far Northern Area Forensic Services Organisational Chart.

Crime Scenes

15. The Forensic Coordinator is typically contacted to be involved in managing a crime scene in relation to major incidents where consideration is being given to a multidisciplinary response or when the attending officer is seeking support and advice in relation to a scene.

16. The process that leads the Forensic Coordinator to be contacted typically commences with the first responding police requesting attendance of a SOCO unit via Police Communications, who subsequently will contact the SOC unit for deployment. Dependent on the job, the SOCO will either immediately contact the Forensic Coordinator, such as for overt suspicious death scenes, or may attend the scene to obtain further information and then contact the Forensic Coordinator. For overt scenes requiring a multidisciplinary or protracted response, the local Investigators may also directly contact the Forensic Coordinator.

17. Information is obtained from the SOCO, and further information gathering from the Investigators occurs to obtain situational awareness. Upon consideration of the information and circumstances, additional resources such as Scientific Section in Cairns, or other forensic support units in Brisbane, are contacted for deployment as required.

18. As a single officer function, I am required to manage my workload and therefore my attendance at the scene depends on several factors. I will typically attend the scene for multidisciplinary matters, overt suspicious death scenes or protracted person offences

that are within an achievable travel distance. For other matters, several factors are considered to determine the value in my scene attendance, including the following:

(a) The nature and complexity of the incident (further explained in next question);

(b) The level of experience of the attending forensic officer/s;

(c) Limitations in the ability to travel to the area by transport options such as small planes, and the priority of other forensic officers or equipment;

(d) Limitations in arriving at the scene whilst the scene is active, and any delays that might be attributed to waiting for Forensic Coordinator attendance for limited or no benefit;

(e) Confidence in the capabilities of the officers at the scene, including having other experienced SOCO or Scientific Officers who can undertake scene coordination duties as they arise;

(f) If the on-scene supervision and coordination requirements of the matter can / are being suitably undertaken by staff at the scene;

(g) The capability to maintain regular distal contact with scene examiners;

(h) The value of my presence at the scene versus the value to other functions and responsibilities;

(i) Conflicting priorities including provision of statements with court timeframes, evidence in court or related training exercises to maintain my experience;

(j) Fatigue management of the single officer role of the Forensic Coordinator

19. If the Forensic Coordinator is not at the scene, regular contact is maintained with all parties to provide advice, supervision, feedback and direction.

20. The determination as to the deployment of Scientific Officers at a crime scene is a multi-factorial consideration that is heavily dependent on the specific circumstances of each incident. This consideration occurs in the initial stages of the incident, however,

can reoccur at any stage throughout an incident if new information arises or circumstances change.

21. For incidents of a complex and protracted nature, such as a suspicious-death investigation, and / or incidents that require utilisation of scientific specific skill sets at the scene, a Scientific Officer will be deployed.

22. For other matters that may not specifically require a scientific specific skill set, a number of factors are taken into consideration, including the following:

    (a) The nature and complexity of the incident, this includes considerations such as the number and extent of scenes, the relationships of the people involved, the type/amount of evidentially valuable items in a scene and the work required on those items, the amount and complexity of the bloodstaining, the availability of background information and time required to complete examinations;

    (b) The level of experience of the attending forensic officer/s. Experienced SOCOs often hold naturally higher levels of skill and knowledge that are suitable to undertake examinations, whilst less experienced staff may require assistance of either experienced SOCOs or Scientific Officers;

    (c) Logistical considerations including the amount of time for staff to arrive at a location, the needs of the examination such as daylight, the environmental conditions and the ability of local police to appropriately secure the area;

    (d) The Cairns Scientific Unit comprises six staff, covering the entire region. Considering leave, days off and other factors there are generally less than 6 staff deployable at any time. Therefore, consideration is also given to resourcing and fatigue management to ensure the health and wellbeing of staff is maintained, and ensuring they are capable of responding to matters they will be required to attend rather than matters that can be suitably undertaken by attending Scenes of Crime Staff.

23. Since I commenced as a Forensic Coordinator, I am not aware of any occasion in which no Scientific Officer has attended a crime scene even though, normally they would attend.

24. The process I undertake when attending a crime scene in the Far Northern Area, or when I undertake the Forensic Coordinator role distally, involves:

    (a) I obtain information from First Responding officers, First Responding Scenes of Crime Officers and Investigators. I establish with the Investigators the investigative priorities at that time.

    (b) I then brief the attending Forensic Officers, relaying the investigative information known at that time. In collaboration with the attending Forensic Officers / Specialists, I establish a forensic plan for the examination of the scene. This includes consideration of known circumstances to establish the boundary of the scene and the level of examination required, including the level of trace DNA and fingerprint examination required.

    (c) The primary Scientific Officer then typically leads the examination of the primary area of interest, assisted by other Scientific Officers and Scenes of Crime Officer/s. As further information becomes apparent/available to the forensic officers at the scene throughout their examination they relay that information to the Forensic Coordinator.

    (d) The Forensic Coordinator remains the conduit for information flow between Forensic Officers and Investigators. I remain in contact, either in person or by phone, with Investigators and Forensic Officers to relay information between both areas and maintain situational awareness.

    (e) The Forensic Manager in Far Northern Region does not have a forensic background. I advise the Forensic Manager of the deployment but typically he is not involved in scene examination processes.

25. In consideration of the initial forensic briefing and plan, the examining Forensic Officer, either Scientific Officer or SOCO, who has direct scene exposure and

knowledge, typically determines the type of forensic evidence to test for, where to sample from and the method of sampling. When uncertain, clarification is sought from the Forensic Coordinator or Scientific Officer and a collaborative decision is made considering information known at the time.

26. The Forensic Officer examining the item/area takes possession and responsibility of any samples collected by them or at their direction. That officer transports those items back to the Forensic Property Point within the Scenes of Crime facility where the items are lodged. The OIC of each unit and the Forensic Manager are responsible for the Forensic Property Point where the samples are initially kept.

27. Samples for DNA analysis are either sent by registered post or are hand delivered to Queensland Health Forensic and Scientific Services (QHFSS).

28. Samples for biological evidence are collected via variety of methods as outlines in procedure CSE 101 Biological Evidence. The location from which each sample is collected is identified and recorded in-situ with a Forensic Exhibit Number (FEN) depicted on a sticky label. Most subsamples result in in-tube samples which are placed inside a white crime scene envelope. A matching FEN label is attached on the side of the tube and also on the exterior of the envelope. The exterior of the envelope also records the Forensic Register number and a brief description of the item. This process is photographed.

29. Within the SOC property point, subsampled items are stored either in the designated QHFSS mailing box or individually on a shelf in the property point. Whole items collected for further subsampling are packaged in brown paper, bearing the same style of labelling as the crime scene envelope, and stored on the shelves of the property point. Items for long term storage are transferred to the Police Station Property Point.

30. The training, procedures and manuals that I am aware of that regulate the matters discussed in paragraphs 15 to 29, above are:

    (a) *The Scenes of Crime Development Program;*

    (b) *The Scientific Training Program;*

(c) *CSE 100 Crime Scene Examination;*

(d) *CSE 101 Biological Evidence;*

(e) *LFD 100 Latent Fingerprint Identification;*

(f) *PFS 100 Quality Manual;*

(g) *CSM 100 Crime Scene Management; and*

(h) *OPM s 2.25.17 DNA.*

Sub-sampling

31. Most items are subsampled by Forensic Officers and in-tube sub-samples sent to QHFSS. Some whole items such as cigarette butts, condoms and female sanitary items are submitted as whole items for analysis. I am not aware of every circumstance in which other whole items would be sent to QHFSS for DNA analysis, however the below are two instances I would consider:

    (a) When dual examinations are required and the performance of one would affect the outcomes of another. For example, requiring both urine testing and saliva testing of larger areas of a garment. The whole item would be submitted for Forensic Biology and Forensic Chemistry to work together in a laboratory at QHFSS to undertake best testing; or

    (b) When information is received of a specific area of seminal fluid deposition, however a garment has been washed limiting police screening techniques. The item would be submitted for microscopic testing by QHFSS.

32. My understanding of sub-sampling is it is the taking of small samples from stains or areas of interest on an item. This process produces an in-tube exhibit suitable for analysis at QHFSS without further handling. Forensic Officers who hold the Crime Scene Examination authorisation perform sub-sampling. Sub-sampling is undertaken either in-situ at a scene or in DNA Laboratories within the Scenes of Crime / Forensic Facilities.

33. The procedures and manuals I am aware of that relate to the matters referred to in the two paragraphs immediately above are:

    (a) *OPM s 2.25.17 DNA;*

    (b) *CSE 101 Biological Evidence; and*

    (c) *PST 104 Seminal Fluid Screening and Sampling Protocols.*

34. The only disadvantage to police conducting sub-sampling that I am aware of is the inability of QHFSS to readily re-sample an area if required or the knowledge of sample locations to allow pooling of samples if required.

The Forensic Register

35. I have access to the Forensic Register (FR). However, I am not aware of the naming of levels of access and am not in a position to provide that advice.

36. The FR is used by Forensic Officers. To my knowledge, Investigators do not have access to the FR.

37. Forensic Officers can undertake either electronic notes or hard copy (paper) notes. When Forensic Officers do electronic notes, all notes pertaining to their examination, including information, observations, examinations and exhibits collected are contained on the FR.

38. Forensic Officers utilising hard-copy paper notes record all the information within their hard copy paper casefile and provide a summary of the notes and a list of exhibits collected on the FR.

39. If photographs are taken at the scene by a Forensic Officer, these are in a digital format and are also uploaded to the FR examination summary.

40. All officers can utilise the Case Management Entry section of the FR to record job-related conversations, emails and non-examination matters. The Case Management

section is also utilised to upload a copy of the forensic officer's statement and record technical and administrative reviews.

41. I typically utilise the Case Management Entry of the FR to record my involvement with a matter including information received, conversations had, and briefing provided.

42. My awareness of the communication of the results of DNA testing is based solely on my learned experience. I am not in a position to provide specific advice as to all the processes that may be available.

43. My experience is that the communication of DNA results depends on the nature of the result.

    (a) Within Far Northern Region, links from Crime Scene Samples to the National DNA database (NCIDD), termed Cold links, are reported to the Forensic Coordinator, collecting Forensic Officer, OIC of collecting Forensic Officer and specified investigative/intelligence units via an email notification.

    (b) My understanding is that DNA results relating to comparisons of Crime Scene Samples to DNA Evidence samples, are added to the FR on the exhibit screen and later uploaded directly to QPRIME. There is no specific notification to the Forensic Coordinator. I am not in a position to provide advice as to if any other Forensic Officer or Investigating Officer receives any specific notifications.

    (c) My understanding is that the DNA unit review and check results before they are released to QPRIME.

    (d) As QHFSS also utilise the FR, I can see their results on the FR occurrence sheet as they are added, which I understand can be prior to any checking by DNA Unit. I am however not conversant with that part of the FR and cannot provide definite advice as to the processes involved.

44. SOCO and Scientific officers can access results by manual interrogation of the FR, similar to the Forensic Coordinator. I am not in a position to provide advice as to the

levels of access and visibility of those officers to areas of the FR. Investigating officers cannot access the FR.

Quality management

45. As a Forensic Coordinator, I overview in-scene examinations undertaken for major incidents, but do not directly observe/supervise the examination and sampling. As the sole Forensic Coordinator for the region, my workload at the time and the point of the investigation will determine when I overview each examination. During the initial active stages of an investigation, I overview results as soon as possible. I continue to overview examinations/results and speak with Forensic Officers and Investigators periodically until the examinations are completed. Overviewing includes specifically checking a case on the FR and reviewing the daily FR occurrence sheet for my area.

46. I undertake a yearly Internal Audit of each Forensic Unit. This includes having authorised officers review casefiles and provide feedback of procedure compliance. Any issues detected in any part of these processes are relayed to the officer and/or their OIC and the Quality Management Section.

47. My involvement in supervision of in-laboratory sampling is the same as described for in-scene above.

48. My involvement in the supervision of information entered into the FR in relation to biological material obtained from a crime scene is the same as described for in-scene above.

49. The procedures I am aware of that relate to the role a Forensic Coordinator is to have in quality management are:

    (a) *PFS 100 Quality Manual*; and

    (b) *QMS 100 Internal Audits.*

Technical reviews, administrative reviews, scene assessments

50. My understanding is a technical review is the review of an examination by another appropriately qualified officer. It involves checking notes, information, examination processes and sampling to ensure appropriate forensic practice. The review checks procedures are followed, and conclusions reached are supported by the observations and result documented.

51. I am not aware of any different types of technical review.

52. My understanding of an administrative review is an administrative process to ensure compliance with the relevant casefile procedure. It can be conducted by any QPS officer authorised to perform the procedure or administration officers after appropriate instruction. Administrative reviews do not hold any technical review capacity and are an administrative capacity only.

53. My understanding of a Scene Assessment is it is an assessment conducted every two years on every officer authorised to undertake Crime Scene Examination. The assessment is typically conducted in-person by the assessing officer at the scene with the subject officer. A *PFS 51 Scene Assessment* form is completed.

Issues in quality management

54. An error in sampling biological or transporting biological matter would typically be identified by the examining forensic officer, the officer conducting a technical review of the casefile or by any officer overviewing the examination. The matter may not be raised to the Forensic Coordinator if it does not significantly compromise results and may be dealt with in each section.

55. If I was made aware of the issue, I would make inquiries to establish the root cause of the error and ensure a process was put in place to rectify the root cause. Consideration would also be given to if the examination or sample needed to be retaken, if possible. If the issue compromises the result, the Investigating Officer would be advised by either the subject officer, the OIC of the subject officer or the Forensic Coordinator.

Significant issues that affect the FSG Quality System would be raised to the Forensic Manager and the Quality Management Section.

56. I have not had experience of an error in biological evidence being disclosed once the evidence has been provided to Police Prosecutions and/or the Office of the Director of Public Prosecutions (DPP). If the matter were to occur, in addition to the above steps, I would take steps including ensuring the subject officer, or myself, directly contact the investigating officer, discussing the impact of the issue and if further examination or samples are required and that DPP was informed and if statements required withdrawal or addendums. If the matter required a detailed forensic explanation, I would ensure the subject officer, their OIC or myself (or a combination of those people) communicated with the DPP to ensure clarity.

57. During my time as a Scientific Officer and Forensic Coordinator, the only issue I can recall encountering regarding biological matter is the transportation of exhibits from Cairns to QHFSS by hand. This process is controlled by Cairns District. Due to the large physical distance, my understanding is that the exhibit transport process, termed an exhibit run, is scheduled to occur monthly by QGAir aircraft transport. This is subject to the availability of QGAir who can cancel flights, placing a delay in the delivery of samples. Cairns District is currently in discussion meetings to achieve work around processes to maintain consistent delivery of samples to QHFSS.

Forensic medical examinations

58. I do not have substantial involvement in Forensic Medical Examinations other than to have discussions with investigators about any value in obtaining them.

59. In the Far Northern Region, Forensic Medical Examinations are conducted by the Government Medical Officer.

60. Once a biological sample is taken during a Forensic Medical Examination, the Investigating Officer takes possession and responsibility for the sample and they lodge the sample at the Police Station Property Point, with the Police Station OIC responsible for that property point. If samples are taken during a non-intimate Forensic Procedure,

such as fingernail scrapings, the attending forensic officer takes possession of the samples, and they are lodged at the Station Property Point until analysis is required.

61. Depending on the matter under investigation, samples are either delivered via registered post or hand delivered via an exhibit run utilising QGAir transport.

62. I am not aware of any issues in the availability or conduct of Forensic Medical Examinations.

Issues with the withdrawal of results

63. I cannot recall experiencing any issues whereby QHFSS have provided a positive DNA result/profile, and then, upon a request for a statement about that result/profile, have asked to withdraw the result.

64. I cannot recall having ever directly received any information from the DNA Management Section about the retraction of results by QHFSS.

65. The potential consequences for an investigation, where there is a withdrawal of results by QHFSS after first reporting that there was a DNA result/profile, depend on how vital the sample is, the stage of the investigation and the other evidence.

66. If the sample is a central/vital sample, a falsely higher or lower level of association of a person to an offence could be implied. This could enhance investigators charging the wrong person or stall an investigation as evidence conflicts leaving an offender at large.

Forensic reviews

67. I am not aware of an official definition of 'Forensic Review'. My general understanding is that it is the review of all examinations previously undertaken in a matter to ascertain if examinations were appropriate and sufficient at that time.

68. I have had limited experience with Forensic Reviews and am unaware of any official roles of the Forensic Coordinator. Other than to be the reviewing officer, I am unaware if there are other roles the Forensic Coordinator may be required to undertake. In that reviewing role, I would obtain the background information in relation to the matter

known at the time, review the forensic examinations conducted and results obtained and view the matter objectively to identify if the examinations were appropriate and suitable at the time and if there were /are other forensic avenues that could be explored.

69. I have limited experience with Forensic Reviews. I am unsure who typically requests a Forensic Review other than a requesting Investigating Officer, with the results returned to the Investigating Officers. If the matter reviewed obtained outcomes significant to the involved units, that advice would be provided to the OIC of the unit. If the outcomes were significant enough to warrant improved forensic processes, that advice would be provided to the Forensic Manager and the Quality Management Section.

Property points

70. In QPS stations, I am aware of only Scenes of Crime Property points, Vehicle Examination Area Property Point and general Police Station Property Points.

71. I do not hold sufficient knowledge to any detail of Station Property Points or any other type of property point to comment on those areas.

72. Scenes of Crime Property Points and Vehicle Examination Areas are temporary property points for the storage of items undergoing examination. These are accessible only by Forensic Officers. These property points are not for long term storage of items.

73. Procedure *PFS100 Quality Manual* outlines accommodation security, exhibit packaging and storage guidelines for storage of exhibits. I am not aware of the building requirements needed for Forensic Property Points.

74. In relation to the audit processes required for Scenes of Crime Property Points, I am aware only of the yearly Internal Audit process required in which exhibits held in the property point are selected to ensure packaging and continuity compliance with procedures. I am not able to comment on any further audits that may be required to be undertaken outside these times.

75. Scenes of Crime Property Points are maintained and managed by the OICs associated with the attached SOCO / Scientific sections, with overall responsibility by the Forensic Manager. I do not audit any property points other than during above mentioned yearly Internal Audits.

76. I do not hold sufficient knowledge to discuss any other Police Property Points.

77. I am not directly aware of any reoccurring problems, or failures to follow policy, in the management of property points containing biological material in my area.

78. I am not aware of any issues in conducting the yearly Internal Audit of forensic sections. I am not in a position to provide advice on any other regular, or otherwise, audits in my area.

79. The results of the audit of property as part of the yearly internal audit are documented on audit documentation QMS 06 (page 4 Property) and QMS 05. Those documents are returned to the Quality Management Section. I am unable to provide advice on any other Property Point audit processes.

80. The yearly internal audit process that relates to Scenes of Crime Property Points addresses the exhibits contained within that Property Point, rather than the layout or structure of the room. The audit of exhibits held in Scenes of Crime Property Point is a broad approach relating to continuity and packaging of all exhibits and does not specifically address biological exhibits independently. Results of the audits I have conducted are recorded on QMS 05 and QMS 06 (page 4 section 'Property') forms completed during the audits of Cairns Forensic Facility (2021; 2022); Mareeba SOC (2021, 2022) and Innisfail SOC (2021). Those documents are available if required, however the results of my inspection of Scenes of Crime Property Points conducted during those yearly Internal Audits have not raised any specific ongoing concerns in relation to biological exhibits in FNR Scenes of Crime Property Points.

DNA testing results and communication

81. I do not hold sufficient knowledge to outline all methods of communication of DNA results to all parties. This information would be available through the DNA unit.

82. Other than Cold Link results sent by email (as previously discussed), I obtain DNA analysis results through extended manual interrogation of the Forensic Register. Results of note I forward to the Investigating Officer and Scientific Officer via email or phone call. For prioritized results, I maintain contact with the DNA Unit who will verbally advise when a result is available.

83. I am generally aware of various result lines used to categorise results, with accompanying explanatory paragraphs, through self-learning. I have not received specific training on the meaning of result lines and I do not hold sufficient knowledge to comment on the correct use and interpretation of those lines by other officers.

84. I am aware results are issued for several stages in the analysis of a single sample, which can become overwhelming to understand, particularly in large cases. I am aware some results have advice to consider further testing. I am aware other results lines provide advice that conflicts with its outcome. For example 'ITEM HAS BEEN EXAMINED/SUB-SAMPLED' in the explanatory paragraph indicating a subsample has been taken, however the explanation I have received from DNA Management Unit is that that is not always the case. This causes confusion as results are expected that may never arrive.

85. I am not aware of if/how Investigators are educated about the terms used, other than through general conversation with Forensic Officers. I am aware that Scientific and Scenes of Crime officers receive some DNA training during their training program, however I am not aware of the exact nature of that training.

86. I cannot recall being directly advised of any errors made by the QHFSS laboratory. I am aware that result lines are at times present in some results stating words to the effect of 'Incorrect result issued' and another result subsequently issued. I cannot specifically provide an example of these.

Backlogs

87. Over the 17 years I have been a forensic officer, I have vague recollection of mention of backlogs at QHFSS. However, I cannot specifically identify any particular point in time or communication.

88. My understanding is the current typical wait time for sampling processing is 6-8 weeks. My experience is that this relates to a crime scene sample being compared to the NCIDD database and providing a cold link.

89. My experience is that timeframes for formal comparison of results to DNA Evidence Samples is longer, and can vary depending on the complexity of the sample and if a statement has been requested of QHFSS. I cannot provide specific timeframe examples.

90. Delays in issuing DNA results, for any reason, has impacted my ability as a Scientific Officer to meet court mandated statement timeframes. Scientific statements frequently rely on DNA analysis results to subsequently undertake expert analysis and reconstruction. Forensic Coordinators can at times provide summary reports, collating all the forensic evidence. This further cannot be completed until completion of the Scientific Officers statement. Delays in releasing DNA results prevents those officers from providing statements to the courts in required timeframes.

Issues raised about collection

91. I do not recollect ever having any issues regarding QPS' collection of samples for DNA testing raised directly with me.

TAKEN AND DECLARED before me at Cairns in the State of Queensland this 4th day of August 2022.

[redacted].....

Cassie Thompson Witness

[redacted]

... [redacted] .....

Cassie Thompson Witness

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF DAVID JAMES KEATINGE

I, **David James Keatinge,** of 200 Roma Street, Brisbane, Queensland 4001 state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

Current employment

1. I am currently the Inspector, Quality Manager, Quality Management Section (QMS), Forensic Services Group (FSG), Operations Support Command.

Qualifications and experience

2. My qualifications include: -
   (a) Bachelor of Science 1986, University of Queensland, St Lucia Campus
   (b) Graduate Diploma in Education 1987, University of Queensland, St Lucia Campus
   (c) Master of Business Administration 1996, University of Queensland, St Lucia Campus
   (d) Master of Science in Forensic Science 1999, Griffith University.

3. My work history since commencing with the Queensland Police Service (QPS) is: -
   (a) Constable - Brisbane City Station 1994-1995
   (b) Scientific Officer Constable, Scientific Section, Police Headquarters 1995- 1997
   (c) Scientific Officer Senior Constable Scientific Section, Forensic Services Branch 1997-1999
   (d) Scientific Officer Sergeant Scientific Section, Forensic Services Branch 1999-2002
   (e) Officer In Charge Senior Sergeant, Forensic Standards Unit, Forensic Services Branch 2002 – 2009

(f) Inspector, Scientific Section, Forensic Services Group 2009 – 2016

(g) Inspector, Forensic Manager, North Brisbane and Southern Area, Forensic Services Group 2016 -2017

(h) Inspector, Quality Manager, Quality Management Section, Forensic Services Group 2017- current.

4. The Forensic Standards Unit was part of the NATA Project Unit. The NATA Project Unit was responsible for the accreditation of forensic facilities and the implementation of a quality system to meet the requirements of the International standard ISO 17025. The unit comprised of 5 staff members. Once QPS forensic facilities received accreditation, the name of the NATA Project Unit changed to become what is now referred to as the Quality Management Section.

5. The Scientific Section is an operational support section within FSG. The specialised areas with the in the section are:

(a) Analytical Services Unit – paint/polymer analysis, glass examinations, guns shot residue analysis, ignitable liquid residue analysis, cannabis analysis

(b) Ballistics Unit – weapon certification/examination and tool mark examinations

(c) Document Examination Unit – handwriting/signature examinations

(d) Major Crime Unit - major crime examination and reconstruction, bloodstain pattern analysis, fire and explosive scene examinations and impression evidence comparison

(e) Vehicle Inspection Unit - vehicle and component identification, mechanical examinations relating to serious crashes.

6. I was the forensic manager/forensic coordinator for North Brisbane and Southern Area FSG from 2016-2017. I was responsible for the management of 12 Scenes of Crime Sections. These sections provided both a major crime and volume crime forensic response to the North Brisbane and Southern Areas. I was also responsible for the management of major crime cases where multidisciplinary forensic teams were deployed.

7. A Forensic Services Group Organisational Chart details the sections and units and how they interact in the overall structure. This chart is attached and marked **'Exhibit 2'.**

Quality Management Unit

8. As the Quality Manager, I am responsible for maintaining the overall quality management system for QPS forensic services statewide. I report directly to the Laboratory Director, Superintendent, Forensic Services Group. The functions of the QMS include -

(a) Development and management of forensic technical procedures
(b) Development and management of administrative procedures associated with forensic services, i.e. case information management and document control
(c) Ensuring procedures keep in step with scientific advances and reflect world best practice by conducting and managing appropriate research
(d) Training and developing forensic officers and maintaining training records to meet the Standards of a Registered Training Organisation (2015)
(e) Determining standards for equipment and consumables to be used for forensic purposes
(f) Ensuring compliance with ISO/IEC 17025 & AS 5388 in consultation with Regional Forensic Managers
(g) Ensuring that forensic officers maintain competencies and undergo regular competency tests
(h) Ensuring that the court testimony of forensic officers is regularly assessed
(i) Coordinating an internal auditing program that monitors compliance with all NATA requirements and maintains accreditation
(j) Ensuring that all non-compliances and opportunities for improvement are appropriately addressed
(k) Consulting with regional managers in relation to the quality of forensic services and the technical activities of forensic officers within their regions, and
(l) Providing advice to the Superintendent, FSG, in relation to the quality of forensic services and the technical activities of forensic officers within the regions.

9. 10 staff work within QMS.

10. The staff roles within the QMS include: -

(a) Senior Sergeant Jamie Cook, Quality Management Officer responsible for compliance, proficiency, and maintenance of FSG procedures

(b) Senior Sergeant Asha Haxton, Quality Management Officer responsible for the management of SOC training statewide

(c) Sergeant – currently vacant, SOC training facilitator

(d) Principal Research Officer (PO5) Dr Matt Krosch responsible for coordinating and undertaking forensic related research projects both internal and external to the QPS

(e) Technical Officer (AO4) [redacted] responsible for the Forensic Register system administration

(f) Administration Officer (AO5) [redacted], Team Leader, Forensic Reception Centre responsible for the supervision of Forensic Reception Centre staff that perform property duties of forensic exhibits that come into Police Headquarters. Administration Officer (AO5) [redacted], Team Leader, Forensic Reception Centre responsible for the supervision of Forensic Reception Centre staff that perform property duties of forensic exhibits that come into Police Headquarters.

(g) Administration Officer (AO4) [redacted] Property Officer, Forensic Reception Centre responsible for the property duties

(h) Administration Officer (AO3) [redacted], Forensic Reception Centre responsible for admin duties associated with property

(i) Administration Officer (AO3) [redacted], Forensic Reception Centre responsible for admin duties associated with property

(j) Administration Officer (AO3) [redacted], Forensic Reception Centre responsible for admin duties associated with property.

QPS Scenes of Crime Officers and Scientific Officers

11. I am not in a position to accurately or comprehensively explain the role and typical duties of a Scenes of Crime Officer (SOCO). Senior Sergeant Asha Haxton, QMS holds a better understanding and knowledge of the roles and duties of SOCOs.

12. I am not in a position to accurately or comprehensively explain how SOCOs are trained or instructed in policies concerning the collection and sampling of biological material. Senior Sergeant Asha Haxton, QMS holds a better understanding and knowledge of the training of SOCOs.

[redacted]

13. I am not in a position to accurately or comprehensively explain the typical duties of a Scientific Officer. Senior Sergeant Letitia Everist, Scientific Section holds a better understanding and knowledge regarding the duties of a Scientific Officer.

14. I am not in a position to accurately or comprehensively explain how Scientific Officers are trained or instructed in policies concerning the collection and sampling of biological material. Senior Sergeant Letitia Everist, Scientific Section holds a better understanding and knowledge regarding the training of a Scientific Officer.

15. I am not in a position to accurately or comprehensively explain what external standards the training program for SOCOs and Scientific Officers comply with. Senior Sergeant Asha Haxton, QMS and Senior Sergeant Letitia Everist, Scientific Section hold a better understanding and knowledge of the training programs for both SOCOs and Scientific Officers.

16. The FSG Organisational Chart at marked as **'Exhibit 2'** assists with understanding the sections and units within the QPS that contain the SOCOs and Scientific Officers.

National Association of Testing Authorities (NATA)

17. FSG received NATA accreditation in accordance with ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories) in 2005 and with AS 5388 (Forensic analysis) in 2014.

18. NATA is the only third-party accreditation body that assesses FSG's technical compliance to operate in accordance with ISO/IEC 17025 and AS 5388.

19. NATA conducts a surveillance audit of all accredited FSG sections every 18 months and conducts a technical audit of all accredited FSG sections every 3 years. The purpose of these assessments is to monitor FSG's continuing fulfilment of ISO/IEC 17025 and AS 5388 for its scope of accreditation.

20. I am currently a technical assessor and assist with NATA assessments of other police jurisdictions forensic facilities.

21. To ensure maintenance of accreditation with NATA, FSG is required to have an internal audit program in place. This program involves conducting internal audits of each forensic facility within FSG. These audits include a review of the facility, exhibits, personal records and the technical assessment of casework completed by FSG practitioners. The relevant Forensic Manager or Forensic Coordinator is responsible for conducting these audits every 12 months.

DNA Collection

22. I am not in a position to accurately or comprehensively explain in what circumstances physical items suspected to contain DNA are sent to QHFSS and in what circumstances QPS officers take samples and send a vial with the sample to QHFSS. Scientific Officers are trained or instructed in policies concerning the collection and sampling of biological material.

23. Senior Sergeant Asha Haxton, QMS holds a better understanding and knowledge regarding items tested for biological material at crime scenes.

24. Crime Scene Examination Procedure CSE 101 – Collection of Biological Evidence regulates the collection protocols for biological material that may yield DNA or other information of potential value.

25. I understand that some police jurisdictions sub sample from physical items. I cannot comment on whether sending a sample in a vial instead of sending the physical item has affected the quality of DNA results that are returned.

26. I am not aware of any departures from policy concerning the collection of biological material.

27. I am not able to comprehensively explain how and by whom biological materials are transported from a crime scene, or where they are taken to and stored and how they are

then provided to QHFSS. Senior Sergeant Asha Haxton, QMS, holds a better understanding and knowledge regarding transportation of biological materials.

28. The Forensic Reception Centre (FRC) is located on [redacted], Police Headquarters. The FRC is responsible for the receipt, storage and disposal of items received for forensic examination at Police Headquarters. I supervise the five staff at the FRC.

29. I am not able to comprehensively explain the audit and quality management processes associated with QPS station property points. Senior Sergeant Asha Haxton, QMS, holds a better understanding and knowledge regarding the audit and quality management processes associated with QPS station property points. FSG designated exhibit storage rooms are not considered part of QPS station property points.

30. FSG designated exhibit storage rooms are audited annually as part of the FSG internal audit process and are also audited as part of the NATA external audit process. I am not aware of any failures in relation to the auditing of FSG exhibit storage rooms.

31. I am not aware of any reoccurring problems, or failure to follow policy in the management of FSG designated storage rooms.

32. There have been only minor administrative issues that QHFSS have raised with me with respect to the collection and submission of biological material to QHFSS. In some cases, FSG have been requested by QHFSS to adjust FR records to reflect that the exhibit category type correlates to the physical exhibit received by QHFSS staff. These have occurred infrequently since I commenced as the Quality Manager in 2017.

33. I am aware that in the report by the Queensland Audit Office (QAO) entitled *Delivering forensic services Report 21: 2018-19* at pages 37 to 38, it is observed that only one of eight property facilities that were visited could provide evidence that it had completed the annual property audit each year. The report also observed that the QPS 'has limited assurance that all crime scene exhibits, including forensic exhibits, are stored securely and accounted for'.

34. These findings relate to QPS station property points only. No issues were raised by the QAO in relation to any FSG designated exhibit rooms. QMS is not responsible for

auditing QPS station property points other than FSG designated exhibit storage rooms. I am not aware of any FSG sections or QMS taking any action in response to the observations raised in the QAO report.

Technical reviews, Scene assessments, 'Train the Trainer'

35. The technical review examines the process by which conclusions or opinions are reported in individual case records. Working notes and technical information including sampling, examination and testing information are checked against the relevant operational procedures and acceptable forensic practice. Technical reviews may only be performed by staff who are qualified in the relevant discipline/s.

36. The technical review process is located in PFS 100 Quality Manual, Section 13.5 Technical Reviews.

37. For scenes of crime officers, a technical review must be performed on all examinations pertaining to major crime. A technical review of the case file must be performed prior to the release of a statement or report for both major and volume crime examinations.

38. Senior Sergeant Asha Haxton, QMS, can provide further details regarding technical review of trainees.

39. I am not aware of any reoccurring departure from policies and guidelines with respect to the FSG technical review process.

40. Results of technical reviews are maintained by individual FSG sections. I do not have access to these results. I can only see that an entry has been added to the Forensic Register (FR) case file indicating a technical review had been completed. If there is an ongoing issue which has been identified – then a corrective action or improvement action may need to be initiated and QMS will oversee this process. Since performing the role of Quality Manager, I do not recall any ongoing issues relating to the collection of biological evidence of a technical nature. Many of the issues that have been identified through the corrective/improvement process have been usually administrative related.

41. A scene assessment is the independent assessment of work undertaken. Scenes of Crime officers are required to undertake a scene assessment every two years and be assessed by another officer authorised in that discipline.

42. The relevant QPS policy regarding scene assessments can be found in PFS 100 Quality Manual and PFS51 Scene Assessments.

43. I am not aware of any departures from policies and guidelines with respect to scene assessments.

44. The FR stores data relating to the completion of scene assessments, and this is audited as part of the internal and external audit processes.

45. I am not able to comprehensively explain the detail around the 'Train the Trainer' program. Senior Sergeant Asha Haxton, QMS, holds a better understanding and knowledge regarding that program.

46. The QMS staff are responsible for overviewing the annual internal audits conducted of FSG facilities which includes assessing the work performance for each officer within each facility.

Equipment for DNA collection

47. The QMS is responsible for determining standards for equipment and consumables used for the sampling and collecting of biological/forensic material for DNA testing. This involves consultation with relevant staff both within FSG and QHFSS.

48. The DNA collection kits utilised by QPS FSG are highly customised based on research, development and validation testing to ensure the viability of DNA analysis processes with our partner QHFSS, DNA Analysis Unit.

49. The QMS staff are responsible for overviewing the annual internal audits conducted of FSG facilities which includes checking compliance of equipment.

50. The procedure relevant to DNA testing equipment is the QMS 06 – Facility Audit checklist. NATA can check for compliance with ISO17025/AS5388 when undertaking external assessments of accredited FSG facilities.

51. I do not know of any reoccurring problems, or failures to follow policy, in the selection, use and maintenance of equipment for the collection, storage and transportation of biological material.

Forensic Medical Examinations

52. The QMS does not undertake any role with respect to practices, policies and procedures relating to Forensic Medical Examinations. The development of policy in relation to FSG involvement in Forensic Medical Examination is legislatively based and covered in OPM (s.2.23- Forensic Procedures) and PPRA (Chapter 17, Part 2 ss.448-456).

53. I am not aware of any reoccurring problems in the conduct of forensic medical examinations.

54. I do not have any involvement with any of the processes surrounding intimate forensic examinations. Sexual Assault kits are not conducted by FSG officers. External packaging is barcoded by FSG for recording on the FR prior to being transferred to QHFSS.

The Forensic Register

55. QMS staff including myself use the FR for a variety of purposes i.e., searching and/or modifying personal records including authorisations and training records, equipment records, relevant case files, status of corrective/improvement actions.

56. The FSG internal audit process involves the auditing of FR data. NATA surveillance and technical assessments also review FR data for all FSG accredited sites.

57. Results of FSG internal audits involving checking relevant aspects of FR data are held electronically within the QMS file server.

58. The FR will prompt staff to undertake an internal check of biological material prior to it being sent to QHFSS for analysis. This check involves checking relevant QPrime entries, FR entries and checking packaging of the exhibit being submitted. All biological evidence consumables are recorded on the FR. There is a requirement to record batch numbers in relation to the receipt of consumables. This can be audited for quality control purposes.

59. I am not involved with DNA results coming back from QHFSS on the FR.

60. The QMS staff are not involved with training for general QPS officers to understand and interpret the results of a forensic analysis of biological material. I understand that staff from the DNA Management Section can provide this training.

Dr Matthew Krosch Report

61. In 2019, Dr Matt Krosch had a discussion with Inspector David Neville and me about the possibility of evaluating FR data to see if there was any correlation between different sampling techniques used on various surfaces and DNA success rates from the samples analysed. Both Inspector Neville and I supported the initiative. I reviewed the findings documented by Dr Krosch and recall making no further comment to the draft paper.

62. I was hoping that the project findings would provide FSG with relevant information on the success rates for different types of sampling methods of biological evidence taken from a variety of surface types.

63. As a result of the findings, an aid memoire was developed by FSG staff and is in the process of being distributed to forensic officers. This guide provides forensic officers with the suggested sampling technique to use for different types of biological evidence taken from certain types of surfaces and/or targeted areas (i.e., steering wheels).

64. I was interested in seeing if the results were able to indicate which collection method should be adopted for different types of surfaces to maximise the best chance of obtaining a DNA profile.

65. I did not seek or receive any feedback or commentary from QHFSS in relation to the results of the paper.

66. I did not seek any advice from other law enforcement agencies in other jurisdictions regarding any of the results published in the paper.

Sampling consumables and equipment

67. The sampling consumables used by the QPS currently, and since 1 July 2017, include:

(a) DNA Tapelift Kit

(b) Forensic Swab

(c) Fingernail Scraping Kit.

68. Since July 2017 the forensic swab kit contains a [redacted] swab with [redacted].

69. I have limited knowledge of sampling consumables used by QPS during 2003-2008. I understand that the DNA tapelift kit, forensic swab and fingernail scraping kit have been utilised by FSG since 2009/2010.

70. The QMS is responsible for determining standards for equipment and consumables used for the sampling and collecting of biological/forensic material for DNA testing. This involves consultation with relevant staff both within FSG and QHFSS.

71. The DNA collection kits utilised by QPS FSG are highly customised based on research, development and validation testing to ensure the viability of DNA analysis processes with our partner QHFSS, DNA Analysis Unit. These have been used by FSG since 2009/2010.

72. Dr Matt Krosch, QMS, can provide further response as to the processes and methods involved when deciding on what equipment/consumables to use for the sampling and collection of biological material.

Other matters

73. The QMS is not involved with a forensic review of a particular investigation.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 18th day of August 2022

[redacted]

David James Keatinge

Witness

JUSTICE OF THE PEACE (QUALIFIED)
QUEENSLAND GOVERNMENT
[redacted]
DEPT. OF JUSTICE & ATTORNEY-GENERAL

13/13.

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF DAVID JAMES KEATINGE
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice number 2022/00030 – Requirement to give information in a written statement – David Keatinge
2.	Forensic Services Group organisational chart

EXHIBIT 1

Notice number: 2022/ 00080

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: David Keatinge

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement prepared either in affidavit form or verified as a statutory declaration under the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Friday 29 July 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted], with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 15th day of July 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00030

Schedule of topics for statement

Inspector David Keatinge

Current employment

1. State your current rank and position in the QPS.

Qualifications and experience

2. List your post-graduate qualifications, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held. In providing the work history:

   (a) Explain the purpose of the NATA Project Unit and how many staff were employed in that unit.

   (b) Explain the function of the Scientific Section and what units comprised the Scientific Section, and what each of those sections did while you were in that role.

   (c) Explain how the role of Forensic Manager, when you held it, was different (if at all) to the role of Forensic Coordinator, and identify what staff you supervised in that position.

4. Attach a current CV.

5. Explain the structure of the Forensic Services Group (**FSG**), and where the sections/units you worked in fit into the structure.

Quality Management Unit

6. Explain your current role, including what staff you supervise and who you report to. Detail the purpose and functions of the Quality Management Unit (**QMU**).

7. Identify how many people work in the QMU.

8. Detail each of the staff roles within the QMU, and who currently holds those roles.

QPS Scenes of Crime Officers and Scientific Officers

9. Explain the role and typical duties of a Scenes of Crime Officer (**SOCO**). Explain the qualifications (if any) and training required for that role. Identify what organisation or unit conducts the training.

10. Outline how, if at all, SOCOs are trained or instructed in policies concerning the collection and sampling of biological material.

11. Explain the role and typical duties of a Scientific Officer. Explain the qualifications (if any) and training required for that role. Identify what organisation or unit conducts the training.

12. Outline how, if at all, Scientific Officers are trained or instructed in policies concerning the collection and sampling of biological material.

13. Identify what external standards the training programs for SOCOs and Scientific Officers comply with.

14. Explain what group, sections and/or units within the QPS contain SOCOs and Scientific Officers.

National Association of Testing Authorities (NATA)

15. Identify each NATA administered standard related to the collection, storage and/or testing of biological material for which QPS maintains accreditation. Advise what year each accreditation was initially obtained.

16. Explain the frequency and nature of each occasion NATA checks the QPS accreditation of each of those standards.

17. Identify any other standards related to the collection, storage and/or testing of biological material for which QPS maintains accreditation from a body other than NATA.

18. Identify your role at NATA what it involves and when you were appointed to the role.

DNA collection

19. Explain how, when dealing with a crime scene, items are tested for biological material. Explain in what circumstances physical items suspected to contain DNA are sent to QHFSS, and in what circumstances QPS officers take samples and send a vial with the sample to QHFSS.

20. Identify which QPS policy or policies (if any) regulate the matters in the paragraph immediately above, and which policy or policies regulate the collection of DNA evidence more broadly.

21. Based on your knowledge, explain how the practices described in paragraph 19 compare to the practices in other Australian states and territories. Has the practice of sending a sample in a vial instead of sending the physical item to QHFSS affected the quality of DNA results that are returned?

22. Outline any departures from policy or policies concerning the collection of biological material that have occurred on more than one occasion.

23. Explain how and by whom biological materials are transported from a crime scene, and where they are taken to and stored. Explain how and by whom biological materials are taken from that storage point and provided to QHFSS.

24. Explain what the Forensic Reception Centre is, and your role with respect to the Forensic Reception Centre.

25. Explain the different types of property points at QPS stations. Explain the audit and quality management processes for property points managed by FSG.

26. Have there been any failures to regularly audit FSG property points? If so, provide details.

27. Have there been any reoccurring problems, or failure to follow policy, in the management of the FSG property points? If so, provide details.

28. Outline what issues or problems, if any, QHFSS have raised with you with respect to the collection of biological material and/or the submission of biological material to QHFSS.

29. In the report by the Queensland Audit Office entitled *Delivering forensic services Report 21: 2018-19* at pages 37 to 38, it is observed that only one of eight property facilities that were visited could provide evidence that it had completed the annual property audit each year. The report also observed that the QPS 'has limited assurance that all crime scene exhibits, including forensic exhibits, are stored securely and accounted for'. Outline what actions, if any, have been taken by the Quality Management Unit in relation to these and similar observations about property facilities in the report. Outline what actions, if any, other units or sections of the FSG have taken in response to these observations. Provide details of any change in policy or procedure.

Technical reviews, Scene assessments, 'Train the Trainer'

30. Explain what a technical review is – its purpose and what it involves – and whether there are different types of technical review. Identify who conducts a technical review and the minimum rank a police officer must hold in order to conduct a technical review.

31. Identify which QPS policies, guidelines or similar documents (if any) concern technical reviews.

32. Outline how often technical reviews are conducted for major crimes, and any further detail about technical reviews specific to major crimes.

33. Outline how often technical reviews are conducted for volume crimes, and any further detail about technical reviews specific to volume crimes.

34. Outline any departures from policies and guidelines you are aware of with respect to how technical reviews are conducted, who participates and completes a technical review, and how often they are conducted.

35. Provide any data concerning the conduct of technical reviews and aggregate results of technical reviews since 2003.

36. Explain what a scene assessment is and what it involves. Identify which staff members must be subjected to a scene assessment, and how often scene assessments occur. Identify who conducts a scene assessment and the minimum rank a police officer must hold in order to conduct a scene assessment.

37. Identify which QPS policies, guidelines or similar documents (if any) concern scene assessments.

38. Outline any departures from policies and guidelines you are aware of with respect to how scene assessments are conducted, who participates and completes a scene assessment, and how often they are conducted.

39. Provide any data concerning the conduct of scene assessments and the aggregate results of scene assessments since 2003.

40. Explain what the 'Train the Trainer' program is and what it involves. Explain which staff members conduct and which staff members participate in the 'Train the Trainer' program, and how often it occurs.

41. Identify any further type of oversight that the Quality Management Unit has over the work of SOCOs and Scientific Officers.

Equipment for DNA collection

42. Explain what role the Quality Management Unit has in the selection and purchase of equipment used in the collection, storage and transportation of biological material?

43. Explain what role the Quality Management Unit has in the auditing and/or quality management of the equipment referred to in the paragraph immediately above.

44. Identify any policies, guidelines or similar documents relevant to the matters discussed in the two paragraphs immediately above. Identify any NATA administered standard related to such equipment for which QPS maintains accreditation.

45. Have there been any reoccurring problems, or failures to follow policy, in the selection, use and maintenance of equipment for the collection, storage and transportation of

biological material? If so, provide details and any available data about those problems or failures.

Forensic Medical Examinations

46. Identify what role, if any, the Quality Management Unit has in devising, implementing and/or monitoring the practices, policies and procedures related to forensic medical examinations.

47. If the Quality Management Unit does have some role, have there been any reoccurring problems, or failures to follow policy, in the conduct of forensic medical examinations? If so, provide details.

48. Do you have any overview/involvement from a DNA collection quality management perspective regarding the training, policies, methods, systems, or processes surrounding intimate forensic examinations, forensic orders insofar as they relate to the taking of a DNA sample by court order, sexual assault kits or the taking of DNA samples from people charged with indictable offences? If yes, please detail. Attach any relevant policy or guideline covering the topics touching on collecting DNA in such circumstances, including training and auditing.

The Forensic Register

49. Explain the ways in which you use the Forensic Register in your position.

50. Explain the main ways staff in the Quality Management Unit use the Forensic Register.

51. What audits or quality management processes does the Quality Management Unit conduct of data held in the Forensic Register, including the frequency of those audits or quality management processes.

52. Where and how are the results of those audits and/or quality management processes stored? Provide any data concerning the results and of those audits and/or quality management processes.

53. Does the Forensic Register prompt other staff within QPS to conduct audits or quality management processes in relation to any process or item that is related to the collection of biological materials? If so, provide details.

54. Do you consider or look at DNA results coming back from QHFSS on the Forensic Register?

55. Is the Quality Management Unit involved in any training for general QPS officers to understand and interpret the results of a forensic analysis of biological material?

Dr Matthew Krosch Report

56. Explain your role in the initiation, continuation and finalisation of Dr Matthew Krosch's data collection and analysis project which led to the paper entitled *Variation in forensic DNA profiling success among sampled items and collection methods: a Queensland perspective*.

57. Explain what you considered may result from the project, in terms of analysis of police and/or laboratory procedures.

58. In terms of the results that were reported in Tables 2 and 4 in the paper, were there any results which:

    (a) you considered to be unexpected or concerning;

    (b) that you considered significant for police procedures in terms of collection of DNA samples;

    (c) that you considered significant for the operation of the Forensic DNA Analysis Unit at QHFSS.

59. Did you seek or receive any feedback or commentary from the QHFSS in relation to the results of the paper? If so, provide details of any conversations and attach file notes, if taken, and attach any correspondence.

60. Did you seek expert or other advice, including advice from law enforcement agencies in other jurisdictions, regarding any of the results published in the paper? If so, provide details of any conversations and attach file notes, if taken, and attach any correspondence.

Sampling consumables and equipment

61. What sampling consumables are used by the QPS currently, and since 1 July 2017 (for example, brand and type of swab used)?

62. List the sampling consumables used by the QPS between 2003 and 2017.

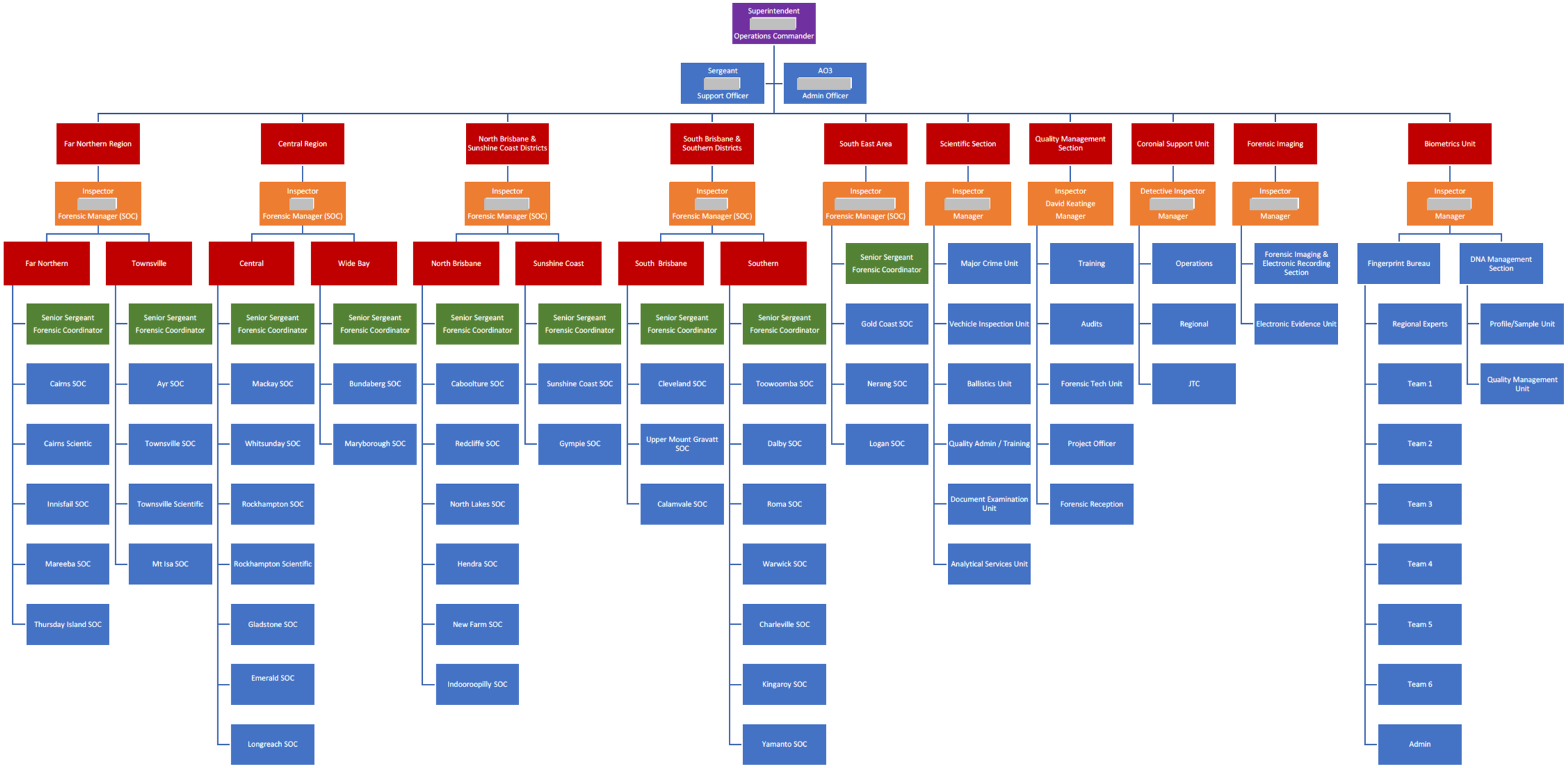
63. What role – including research – does the Quality Management Unit have in the decision of what consumables and equipment used for the sampling and collecting of biological/forensic material for DNA testing?

64. Outline the processes, systems, and methods for electing what equipment and consumables to use for the collection of samples for DNA testing.

Other matters

65. If a Forensic Review occurs in a particular investigation, is the Quality Management Unit involved in any way in the Forensic Review? If so, outline the nature of that role.

EXHIBIT 2


Superintendent
Operations Commander
Sergeant
Support Officer
AO3
Admin Officer
Far Northern Region
Central Region
North Brisbane & Sunshine Coast Districts
South Brisbane & Southern Districts
South East Area
Scientific Section
Quality Management Section
Coronial Support Unit
Forensic Imaging
Biometrics Unit
Inspector
Forensic Manager (SOC)
Inspector
Forensic Manager (SOC)
Inspector
Forensic Manager (SOC)
Inspector
Forensic Manager (SOC)
Inspector
Forensic Manager (SOC)
Inspector
Manager
Inspector
David Keatinge
Manager
Detective Inspector
Manager
Inspector
Manager
Inspector
Manager
Far Northern
Townsville
Central
Wide Bay
North Brisbane
Sunshine Coast
South Brisbane
Southern
Senior Sergeant
Forensic Coordinator
Cairns SOC
Cairns Scientic
Innisfail SOC
Mareeba SOC
Thursday Island SOC
Ayr SOC
Townsville SOC
Townsville Scientific
Mt Isa SOC
Mackay SOC
Whitsunday SOC
Rockhampton SOC
Rockhampton Scientific
Gladstone SOC
Emerald SOC
Longreach SOC
Bundaberg SOC
Maryborough SOC
Caboolture SOC
Redcliffe SOC
North Lakes SOC
Hendra SOC
New Farm SOC
Indooroopilly SOC
Sunshine Coast SOC
Gympie SOC
Cleveland SOC
Upper Mount Gravatt SOC
Calamvale SOC
Toowoomba SOC
Dalby SOC
Roma SOC
Warwick SOC
Charleville SOC
Kingaroy SOC
Yamanto SOC
Gold Coast SOC
Nerang SOC
Logan SOC
Major Crime Unit
Vechicle Inspection Unit
Ballistics Unit
Quality Admin / Training
Document Examination Unit
Analytical Services Unit
Training
Audits
Forensic Tech Unit
Project Officer
Forensic Reception
Operations
Regional
JTC
Forensic Imaging & Electronic Recording Section
Electronic Evidence Unit
Fingerprint Bureau
Regional Experts
Team 1
Team 2
Team 3
Team 4
Team 5
Team 6
Admin
DNA Management Section
Profile/Sample Unit
Quality Management Unit

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF JAMES BRUCE COOK

I, **Senior Sergeant James Bruce Cook**, of the Quality Management Section, Forensic Services Group, [redacted] QPS Headquarters, 200 Roma St, Brisbane state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

1. I am currently employed by the QPS as a Quality Management Officer within the Quality Management Section (QMS), Forensic Services Group (FSG).

Qualifications and experience

2. My post-graduate qualifications, the year obtained, and the institute from which the qualifications were obtained, are as follows:

   (a) Bachelor of Applied Science (Human Movement Studies) – 1992 – University of Queensland.

   (b) Diploma of Public Safety (Policing) – 2004 – Queensland Police Service.

   (c) Diploma of Fire Investigation – 2006 – Queensland Fire and Rescue Service.

   (d) Master of Science (Forensic Science) – 2008 – Griffith University.

3. My work history since commencement of employment with the QPS is as follows:

   (a) May 1998 to December 1998 – Commenced employment with QPS and completed training as a QPS Recruit at the QPS Academy, Oxley.

[redacted] ..... [redacted] .....
James Bruce Cook Witness

(b) December 1998 to May 2003 – Sworn in as a Constable of Police 04/12/1998 and then performed General Duties in the Oxley District, Metro South Region, Brisbane (majority of this period based within Moorooka Division).

(c) May 2003 – transferred to the Scientific Section, FSG (then Forensic Services Branch) on the 4th Floor QPS Headquarters – commenced training and duties as a Scientific Officer, Brisbane.

(d) May 2004 – promoted to the rank of Senior Constable as a Scientific Officer at the Scientific Section, Brisbane.

(e) May 2008 – promoted to the rank of Sergeant as a Scientific Officer at the Scientific Section, Brisbane.

(f) December 2009 to March 2013 – promoted to the rank of Senior Sergeant as a Senior Forensic Scientist at the Scientific Section, Brisbane and performed duties as the Unit Head, Major Crime Unit, Scientific Section, Brisbane.

(g) March 2013 to September 2016 – performed duties as Senior Forensic Scientist responsible for Quality Assurance, Training, and supervision of the Analytical Services Unit, Document Examination Unit and Administration Officers at the Scientific Section, Brisbane.

(h) September 2016 to Current – transferred to QMS, FSG, located on the Ground Floor QPS Headquarters – performing duties as a Quality Management Officer.

4. Courses and diplomas I have completed since joining the QPS are as follows:

(a) Diploma of Public Safety (Policing) – 2004 – Queensland Police Service.

(b) Diploma of Fire Investigation – 2006 – Queensland Fire and Rescue Service.

(c) National Bomb Scene Examination Course (Melbourne) – 2007 – Australia-New Zealand Counter-Terrorism Committee.

[redacted] [redacted]

James Bruce Cook Witness

(d) Chemical / Biological / Radiological Crime Scene Investigation Course (Melbourne) – 2008 – Emergency Management Australia.

(e) Master of Science (Forensic Science) – 2008 – Griffith University.

(f) QPS Management Development Program Levels 2 and 3 – 2008-2011 – QPS.

(g) Internal Audits Course – 2012 – National Association of Testing Authorities (NATA).

5. Awards or formal recognition I have received since joining the QPS are as follows:

(a) Accredited as an Expert in Crime Scene Investigation – 2014 – Australian Forensic Field Sciences Accreditation Board (AFFSAB).

(b) Accredited as a National Assessor in Crime Scene Investigation – 2014 – Australian Forensic Field Sciences Accreditation Board (AFFSAB).

6. Attached as **'Exhibit 2'** to this statement is a copy of my CV.

Current Role

7. The duties of my current position include:

(a) Coordination of the internal audit program within FSG to ensure maintenance of accreditation with NATA.

(b) Coordination of the Quality Improvement System within FSG to ensure that any nonconformities identified are documented and appropriate action is taken to correct the issue.

(c) Assist NATA with the requirements of their external audit program of forensic facilities within FSG to ensure maintenance of accreditation with NATA.

(d) Coordinate the proficiency testing program for facilities and practitioners within FSG.

(e) Update FSG forms and procedures as required to maintain their currency.

(f) Assist with projects within FSG as required by the Inspector QMS.

(g) Provide advice to the FSG Management Group as required.

Prior to 2020, the duties of my position included only (e) to (g) above, but the duties listed (a) to (d) were added in October 2020 when my position was amalgamated with another Senior Sergeant position within QMS.

8. My position reports to the Inspector QMS, also known as the Quality Manager, a position currently occupied by Inspector David Keatinge.

9. There aren't any positions which currently report to me.

10. QMS currently comprises five positions, and is structured as follows:

(a) Inspector QMS (Quality Manager).

(b) S/Sgt (Quality Management Officer – Compliance & Standards) – my position, reports to the Inspector QMS.

(c) S/Sgt (Quality Management Officer – Training) – S/Sgt Asha Haxton, reports to the Inspector QMS.

(d) Sgt (Quality Officer – Training) – Position currently vacant, reports to the S/Sgt (Quality Management Officer – Training).

(e) Principal Research Officer – PO5 Dr Matt Krosch, reports to the Inspector QMS.

Policies and standards

11. Policies, procedures, manuals and similar documents relevant to the collection, transportation, storage and/or sampling of biological material for forensic DNA testing, including documents relevant to presumptive testing for biological material, include:

(a) AS ISO/IEC 17025 'General requirements for the competence of testing and calibration laboratories' (Standard)

(b) AS 5388 'Forensic analysis' (Standard)

(c) QPS 'Operational Procedures Manual' (Service Manual)

(d) PFS 100 'Quality Manual' (FSG Administrative Procedure)

(e) CSE 100 'Crime Scene Examination' (FSG Technical Procedure)

(f) CSE 101 'Biological Evidence' (FSG Technical Procedure)

(g) CSE 104 'Fingernail Scrapings' (FSG Technical Procedure)

(h) CSE 105 'Leuco Crystal Violet (LCV) Detection and Enhancement of Bloodstains' (FSG Technical Procedure)

(i) CSE 111 'Hair and Fibre Detection and Collection' (FSG Technical Procedure)

(j) CSE 115 'Use of Combur Test Strips' (FSG Technical Procedure)

(k) CSE 119 'ABAcard Hema-Trace' (FSG Technical Procedure)

(l) HEX 100 'Hair Examination and Comparison' (FSG Technical Procedure)

(m) PST 100 'Tetramethylbenzidine (TMB) Screening Test for Blood' (FSG Technical Procedure)

(n) PST 101 'ABAcard P30 Test for Seminal Fluid' (FSG Technical Procedure)

(o) PST 102 'Luminol Detection and Enhancement of Bloodstains' (FSG Technical Procedure)

(p) PST 104 'Seminal Fluid Screening and Sampling Protocols' (FSG Technical Procedure)

(q) PST 105 'Forensic Light Sources' (FSG Technical Procedure)

(r) PST 106 'Enhancement of Impression Evidence' (FSG Technical Procedure).

[redacted] [redacted]

James Bruce Cook Witness

12. There are many roles within the QPS which share responsibility for considering whether QPS policies, procedures and manuals relevant to the collection, transportation, storage and/or sampling of biological material for forensic DNA testing reflect national best practice and/or international best practice. The Standards listed above, AS ISO/IEC 17025 and AS 5388, outline best practice as agreed upon by groups of international and national experts, respectively. FSG Administrative and Technical Procedures incorporate the requirements of these Standards into more detailed instructions for trained and authorised forensic practitioners. Subject matter experts from specialist sections within FSG, for example the Scientific Section, also provide input to ensure FSG procedures represent best current practice. Subject matter experts are frequently members of national advisory groups, which include members from each Australian jurisdiction, to ensure that information is shared between jurisdictions so that each maintains currency with national best practice. The QMS Research Officer, Dr Matt Krosch, advises FSG members of research results in current published literature, across the spectrum of forensic disciplines in which QPS provides services, to ensure members are made aware of new developments in these disciplines. In addition, the FSG Management Group provides strategic direction which is reflected in policies and procedures. My role within QMS includes liaison with Dr Krosch, the FSG Management Group and subject matter experts to ensure FSG Administrative and Technical Procedures remain consistent with best practice.

13. From my own knowledge, I can offer the following explanation of the function, structure and relationships between the following organisations, and the personnel who make up these organisations:

    (a) Australia New Zealand Policing Advisory Agency (ANZPAA) – Group comprising the Commissioners, or equivalent, of each Australian and New Zealand policing jurisdiction, responsible for sharing ideas between jurisdictions and determining policy for the jurisdictions as a collective, where appropriate.

    (b) ANZPAA National Institute of Forensic Science (ANZPAA NIFS) – A directorate of ANZPAA, comprising a group of personnel recruited to research,

project and administrative positions, responsible for coordinating forensic research between the jurisdictions and coordinating provision of proficiency testing services to each of the jurisdictions.

(c) Australia New Zealand Forensic Executive Committee (ANZFEC) – Group comprising the Forensic Laboratory Directors from each of the Australian and New Zealand policing jurisdictions, responsible for sharing of information between the jurisdictions, and determining policy for the Forensic Laboratories as a collective, where appropriate.

(d) Australian Forensic Science Assessment Body (AFSAB), formerly Australian Forensic Field Sciences Accreditation Board (AFFSAB), is a professional body, which reports to ANZPAA NIFS, comprising representatives from Forensic Laboratories within the Australian policing jurisdictions, which is responsible for accreditation and reaccreditation of forensic experts within the fields of Crime Scene, Fingerprints and Firearms.

14. I am not aware of any significant role played by any of the organisations listed above in setting standards used by the QPS in the collection, transportation, storage and/or sampling of biological material for forensic DNA testing.

15. I am not aware of any significant role played by any of the organisations listed above in setting and auditing standards used by the QPS in the collection, transportation, storage and/or sampling of biological material for forensic DNA testing.

16. FSG maintains accreditation by the National Association of Testing Authorities (NATA) against the following standards:

(a) AS ISO/IEC 17025 'General requirements for the competence of testing and calibration laboratories' (accreditation obtained 2005)

(b) AS 5388 'Forensic Analysis' (accreditation obtained 2014/15)

(i) AS 5388.1 'Forensic analysis Part 1: Recognition, recording, recovery, transport and storage of material'

(ii) AS 5388.2 'Forensic analysis Part 2: Analysis and examination of material'

(iii) AS 5388.3 'Forensic analysis Part 3: Interpretation'

(iv) AS 5388.4 'Forensic analysis Part 4: Reporting'

17. NATA conducts full reaccreditation assessments, also known as external audits, of FSG facilities every 3 years. These assessments include a review of facilities, exhibits and personnel records by NATA auditors, and also technical assessment of casework completed by FSG practitioners. The audits of casework are completed by technical auditors sourced by NATA from other Australian and New Zealand jurisdictions. A surveillance assessment is conducted by NATA 18 months after the preceding reaccreditation assessment, whereby facilities, exhibits and personnel records are assessed by NATA auditors only. My role includes provision of assistance to NATA auditors during the audit process, including supply of information and documentation prior to the audit, physical assistance during the conduct of audits, and provision of a response to the results of the audit, including undertaking any action required by NATA.

18. Internal audits are conducted within all FSG facilities every 12 months. These audits include a review of compliance relating to Management Records (including Proficiency Testing), Document Control, Accommodation requirements, Case Review and Reporting, Training Records, Exhibits, Supplies and Consumables, Equipment (including Calibration and Servicing), Vehicles, past Corrective Action required due to nonconformities identified, and Case Files. I disseminate the requirements for each audit to local Forensic Managers and Coordinators, who physically conduct the audits at each location and then return the necessary documentation to me for review. I provide a written summary of the results of the audit to the Quality Manager and local managers, including identification of any specific Corrective or Improvement Actions to be undertaken which have arisen from the audit results.

19. The following FSG documents are completed during the internal audit at each FSG facility as described above:

(a) Form QMS 06 'Facility Audit Checklist' – One of these forms is completed for each FSG facility during the annual internal audit (i.e., one facility is a work unit at a particular location, e.g., Warwick Scenes of Crime). The checklist is completed by the local Forensic Manager or Forensic Coordinator (or alternative member approved by the Quality Manager). The checklist includes a variety of checks which relate to each of the categories listed above in Paragraph 18.

(b) Form QMS 05 'Exhibit Audit Checklist' – One of these forms is completed for each FSG facility during the annual internal audit. The checklist is completed by the local Forensic Manager or Forensic Coordinator (or alternative member approved by the Quality Manager). The checklist includes a variety of more detailed checks which relate to four randomly chosen exhibits held within the facility. These checks include appropriateness of labelling, packaging, recording of exhibit continuity and recording of details on the Forensic Register (QPS Forensic Case Management Information System).

(c) Form QMS 09 'Case File Audit Checklist – Scenes of Crime' – One of these forms is completed to assess casework for each practitioner at each FSG Scenes of Crime facility during the annual internal audit (i.e., one checklist completed for each practitioner). The checklist is completed by an experienced and similarly authorised practitioner from a different FSG facility. These checks include appropriateness of notes, photos, exhibits, statement and hardcopy case files.

(d) Form QMS 07 'Case File Audit Checklist – Scientific Section' – One of these forms is completed to assess casework for each practitioner at each FSG Scientific Section during the annual internal audit (i.e., one checklist completed for each practitioner). The checklist is completed by an experienced and similarly authorised practitioner from a different FSG Scientific Section. These checks include appropriateness of notes, photos, exhibits, statement and hardcopy case files.

[redacted] [redacted]

....

James Bruce Cook Witness

Proficiency testing

20. A 'Forensic Authorisation' is analogous to a 'licence' to undertake examinations, or casework, within a specific forensic discipline. Once a practitioner within FSG has received sufficient training in a particular forensic discipline (e.g., crime scene examination, bloodstain pattern analysis or fingerprint identification), and successfully completed any required assessments and/or other prerequisites such as mentored casework, they may be issued with a 'Forensic Authorisation' by the Laboratory Director (Superintendent FSG). This means they are deemed competent and are 'licenced' to undertake and report on casework in that forensic discipline.

21. The following proficiency testing related to the collection, transportation, storage and/or sampling of biological material for forensic DNA testing is undertaken by members of FSG:

    (a) 'After the Fact' (ATF) online crime scene examination assessment is undertaken by one representative from each Scenes of Crime (SOC) facility and one representative from each Scientific Section every 12 months. The ATF assessment comprises an online mock crime scene and requires the participant to navigate their way through the online scene as they would examine a real crime scene. Notes are recorded, images are captured, and exhibits are nominally collected. The participant must then successfully complete an online assessment, usually comprising 21 multi-choice questions.

    (b) A 'Scene Assessment' is completed every 2 years for each Scenes of Crime Officer (SOCO) and Scientific Officer (SO). These assessments are conducted at a real crime scene by another officer who also holds the Forensic Authorisations which must be held by the subject officer to conduct the scene examination. This is an assessment of the subject officer's individual competence as demonstrated during completion of the forensic examination.

    (c) 'Court Witness Monitoring' is an appraisal of an FSG member's performance when giving evidence in Court, and is sought on any occasion a SOCO or SO attends Court and provides witness testimony. This assessment may be

completed by the Prosecutor, Investigating Officer or a senior colleague from FSG.

(d) SOs who are authorised in 'Hair Examination' (i.e., determination whether hair exhibits are of human origin and whether they are suitable for DNA analysis) also participate in an annual proficiency test in this discipline. This proficiency test is manufactured by a commercial proficiency testing service provider based in the USA and draws participants from all over the world. In Australia, the participating jurisdictions purchase this test from ANZPAA NIFS.

Technical and administrative reviews

22. A technical review is a review of casework completed by a SOCO or SO to ensure that appropriate technical procedures have been followed, and that the results of examinations conducted support any opinions or conclusions formed. A technical review may only be conducted by another member who has completed the forensic training required by the case officer to complete their examinations. An administrative review is a review of casework to ensure compliance with relevant administrative case file procedures. These reviews may be completed by any FSG member authorised to conduct casework and also by suitably trained administrative officers. Completion of technical and administrative reviews, as required by procedures, are overseen by Officers in Charge at each FSG facility and also by responsible Forensic Managers. The Forensic Register has the capacity for supervisors to run compliance audits which list examinations that require technical or administrative review, designed to assist with compliance. Requirements for completion of both technical and administrative reviews are contained within FSG Administrative Procedure PFS 100 'Quality Manual', and these requirements reflect the relevant requirements in the Standards AS ISO/IEC 17025 'General requirements for the competence of testing and calibration laboratories' and AS 5388 'Forensic Analysis'.

Equipment for DNA collection

23. QMS has an important role in the selection and purchase of equipment used in the collection, storage, transportation or sampling of biological material, in conjunction

with Queensland Health Forensic and Scientific Services (QHFSS), QPS Procurements Section and subject matter experts within FSG. Any changes to equipment and consumables used to collect biological material are overseen by the QMS Research Officer and the Quality Manager. Whilst it was before my time in QMS I understand that, historically, many trials have been conducted within FSG, and through collaborative research with QHFSS, to determine the effectiveness of equipment and consumables used in the DNA collection and sampling processes. Equipment and consumables must be compatible with the QHFSS DNA analysis process, comply with relevant Standards, and be practical for use by SOCOs and SOs. Contract negotiations with suppliers of these goods are conducted through engagement between QMS and the QPS Procurements Section.

24. It is the responsibility of supervisors, Officers in Charge and Forensic Managers responsible for the various Scenes of Crime and Scientific facilities to ensure that the approved equipment and consumables are used by their practitioners. These items are centrally supplied by the QPS Logistics Section to the various forensic facilities, hence compliance with this requirement is not difficult to achieve. The FSG internal audit process, conducted by local Forensic Managers and overseen by QMS as described previously, ensures that forensic facilities and vehicles contain the approved equipment and consumables, and that these items are within their expiry date.

25. QMS ensures that any equipment and consumable items used in the collection, storage, transportation or sampling of biological material are compliant with the requirements of the Standards AS ISO/IEC 17025 'General requirements for the competence of testing and calibration laboratories' and AS 5388 'Forensic Analysis'. I am aware of the existence of an additional Standard ISO 18385 'Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes – Requirements', and also aware that it is the preference of QPS for any supplier of relevant equipment and consumable items to be accredited against this Standard. (The Quality Manager, Inspector David Keatinge, and the QMS Research Officer, Dr Matt Krosch, would be able to provide greater detail about current arrangements for supply of these items, and accreditation of suppliers.)

[redacted] [redacted]

James Bruce Cook Witness

26. I am not aware of any reoccurring problems, systemic issues, or failures to follow policy, in the selection, use and maintenance of equipment for the collection, storage and transportation of biological material involving FSG members.

27. As outlined in Paragraph 24, changes in equipment or procedures relating to the collection of biological material most commonly occur through collaboration between members of QMS, FSG subject matter experts, QPS Procurements Section and QHFSS. Changes in equipment or procedures may result from any combination of advice from QHFSS, advice from expert advisory groups, results of published literature, experimental trials conducted, and practicalities associated with production and supply of items. FSG members are advised of changes in equipment or procedures, and if these changes are significant, they are provided with instruction and training in the use of the new equipment or change in procedures. FSG procedures, both administrative and technical, are published on the QPS intranet as a reference for all members.

Property points

28. The QPS has 'Property Points' for storage of exhibits, and these property points are at locations designated by a member of the QPS Executive, usually the Assistant Commissioner responsible for that QPS region or command. The nature and operations of any given property point are dependent upon local structure. Typically, a QPS district may have a large property point for centralised exhibit holdings, and may have smaller property points at some stations, whether for long term exhibit holdings, or temporary storage of exhibits until they can be transferred to a larger property point with responsibility for long term exhibit storage. FSG facilities do not have property points responsible for long term exhibit storage, and some FSG facilities do not have a designated property point at all, relying on use of other local property points. FSG property points are responsible for the temporary storage of exhibits after collection, or while waiting for examination following collection by a forensic officer or submission for examination by a QPS member outside FSG. Exhibits are then forwarded to an external provider of analytical services (e.g., QHFSS for the vast majority of DNA analysis from biological samples) when required, or are transferred to a property point responsible for long term exhibit storage, usually in the area where the Investigating

Officer is located. As described in Paragraph 18, internal forensic audits are conducted of property points located within FSG facilities annually, completed by the responsible Forensic Manager or their delegate. This process examines a selection of up to eight exhibits, including the physical exhibits themselves and data entry on the Forensic Register and QPRIME (QPS databases), to ensure compliance with requirements. The internal audit process is overseen by QMS; specifically my role within QMS. In addition to FSG requirements, the Ethical Standards Command (ESC) requires annual auditing of a variety of areas of risk management within all QPS facilities, including property points. These audits are completed by the responsible Inspector/Manager. I am not aware of the specific requirements of these audits with respect to property points as QMS is not involved in the process, whether within or outside FSG. I have no knowledge of ESC's audit requirements with respect to property points within or outside FSG facilities.

29. My role assumed responsibility for coordination of the internal forensic audit process within FSG facilities in late 2020. Since that time, I can confirm there have not been any failures to regularly audit FSG property points.

30. My role has oversight of the internal forensic audit process within FSG facilities, including their property points, but does not have direct involvement with the management of FSG property points. I can confirm that I am not aware of any reoccurring problems, or failure to follow policy, in the management of FSG property points.

31. I have not been privy to details contained within the report by the Queensland Audit Office (QAO) entitled *Delivering forensic services Report 21: 2018-19*. To the best of my knowledge, the results of this report were provided to the FSG Management Group (i.e., Superintendent and Inspectors). I do recall discussion at that time which related to QAO findings with respect to exhibits and property points, however I also recall being assured that any negative findings related to property points outside FSG, not FSG property points. I can't specifically recall who provided this information, but it was most likely the Quality Manager, Inspector David Keatinge. I'm not aware of any

actions taken by QMS, or any other unit or section within FSG, in response to the QAO report.

Other issues

32. I have never observed, nor has anyone ever raised with me, any reoccurring or systemic issues/problems with the collection of biological samples for forensic DNA testing.

33. I have coordinated the internal forensic audit program within FSG facilities since late 2020, and have not observed, nor has anyone raised with me, any problems in complying with the auditing standards and policies of FSG, including the timeframes by which those audits must be completed.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 19 day of August 2022

[redacted] .....

James [redacted]

[redacted] .....

Witness

[redacted]

JUSTICE & ATTORNEY-GENERAL

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF JAMES BRUCE COOK
INDEX TO EXHIBITS

Exhibit no.	Description
1.	2022-00061 notice to provide statement (Cook QPS)
2.	CV of James Bruce Cook

EXHIBIT 1

Notice number: 2022/ 00061

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Jamie Cook

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Thursday 11 August 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted], with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

[redacted] **29th day of July 2022**

[redacted]

Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00061

Schedule of topics for statement

Senior Sergeant Jamie Cook

1. State your current position in the QPS.

Qualifications and experience

2. List your post-graduate qualifications, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held.

4. Identify any courses or diplomas you have completed since joining the QPS.

5. Identify any awards or formal recognition you have been given since joining the QPS.

6. Attach a current CV.

Current role

7. State the duties of your current position. Explain the differences, if any, with the position you held immediately prior to 2020.

8. Identify the person or people (name, rank and position) who you report to.

9. Identify the person or people (name, rank and position), if any, who report to you.

10. Explain the structure of the Quality Management Section and where your position sits within that structure. As part of your answer, identify if there are separate units that make up the Quality Management Section, and if there are, name each unit and identify which unit you work in.

Policies and standards

11. Identify each policy, procedure, manual and similar document you are aware of that is relevant to the collection, transportation, storage and/or sampling of biological material for forensic DNA testing, including those documents relevant to presumptive testing for biological material.

12. Identify whose role it is, if anyone's, to consider whether QPS policies, procedures and manuals relevant to the collection, transportation, storage and/or sampling of biological material for forensic DNA testing reflect national best practice and/or international best practice?

13. For the following organisations, explain, from your own knowledge, the function of that organisation, how those organisations are structured and related to each other, and what personnel make up those organisations:

    (a) Australia New Zealand Policing Advisory Agency (**ANZPAA**);

    (b) ANZPAA National Institute of Forensic Science (**ANZPAA NIFS**);

    (c) Australia New Zealand Forensic Executive Committee (**ANZFEC**); and

    (d) Australasian Forensic Science Assessment Body.

14. Explain what role, if any, each of those organisations have in setting standards used by the QPS in the collection, transportation, storage or sampling of biological material for forensic DNA testing.

15. Explain what role, if any, each of those organisations have in setting and auditing standards used by the QPS in the collection, transportation, storage and/or sampling of biological material for forensic DNA testing. Explain what your role is with respect to any such audits.

16. Identify each National Association of Testing Authorities (**NATA**) administered standard related to the collection, transportation, storage and/or sampling of biological material for which the QPS maintains accreditation. Advise what year each accreditation was initially obtained.

17. Explain the frequency and nature of each occasion NATA checks the QPS' accreditation of each of those standards. Explain what your role is with respect to NATA checks and audits.

18. What standards, processes, equipment and facilities related to either crime scene examination or the collection, transportation, storage and sampling of biological material for forensic DNA testing are you or your unit involved in auditing? For each, explain the auditing procedure and how often auditing occurs.

19. Provide an explanation of each of the following documents, including when each document is used, and who uses each document (and confirm the correct name and number for each document):

    (a) Facility audit checklist;

    (b) Exhibit audit checklist;

    (c) Case file audit checklist – Scenes of Crime Officer;

    (d) Case file audit checklist – Scientific Officer.

Proficiency testing

20. Identify and explain what a forensic authorisation is.

21. Identify what proficiency testing related to the collection, transportation, storage and/or sampling of biological material for forensic DNA testing must be undertaken by Scenes of Crime Officers (**SOCOs**), Scientific Officer (**SOs**), and any other police officers involved in the collection, transportation, storage and/or sampling of such material.

22. If not already part of your answer to paragraph 21, explain 'After the Fact' proficiency testing, scene assessments, and court witness monitoring. For each of those three matters:

    (a) identify what the testing/assessment/monitoring involves;

    (b) explain how often the testing/assessment/monitoring occurs, and

    (c) identify who conducts and who is subjected to the testing/assessment/monitoring.

Technical and administrative reviews

23. Explain, to your knowledge, what a technical review is and what an administrative review is. Do you, or anyone in the Quality Management Section, oversee or check compliance with any requirements to conduct technical reviews and administrative reviews? Identify if the conduct of those reviews are relevant to complying with any external standards or accreditations.

Equipment for DNA collection

24. Explain what role the Quality Management Section has in the selection and purchase of equipment used in the collection, storage, transportation or sampling of biological material?

25. Explain what role the Quality Management Section has in the auditing and/or quality management of the equipment referred to in the paragraph immediately above.

26. Identify any policies, guidelines or similar documents relevant to the matters discussed in the two paragraphs immediately above. Identify any standard from an external organisation related to such equipment for which QPS maintains accreditation.

27. Have there been any reoccurring problems, or failures to follow policy, in the selection, use and maintenance of equipment for the collection, storage and transportation of biological material? If so, provide details and any available data about those problems or failures.

28. How are changes in equipment or procedures relating to the collection of biological material implemented in the QPS?

Property points

29. Explain the different types of property points at QPS stations. Explain the audit and quality management processes for property points managed by the Forensic Services Group (**the FSG**), and if and how you are involved with those processes.

30. Have there been any failures to regularly audit FSG property points? If so, provide details.

31. Have there been any reoccurring problems, or failure to follow policy, in the management of the FSG property points? If so, provide details.

32. In the report by the Queensland Audit Office entitled *Delivering forensic services Report 21: 2018-19* at pages 37 to 38, it is observed that only one of eight property facilities that were visited could provide evidence that it had completed the annual property audit each year. The report also observed that the QPS 'has limited assurance that all crime scene exhibits, including forensic exhibits, are stored securely and accounted for'. Outline what actions, if any, have been taken by the Quality Management Section in relation to these and similar observations about property facilities in the report. Outline what actions, if any, other units or sections of the FSG have taken in response to these observations. Provide details of any change in policy or procedure.

Other issues

33. Have you ever observed, or has anyone ever raised with you, any reoccurring or systemic issues/problems with the collection of biological samples for forensic DNA testing, for example that the methods, systems, processes, protocols, guidelines, or standards are not being followed, or that there are systemic problems with the collection processes, systems or methods? If so, provides details of the communication(s) raising the issue(s). If not, please confirm that you are not aware that there have been any issues raised.

34. Have you ever observed, or has anyone raised with you, problems in complying with the auditing standards and policies of the QPS, including the timeframes by which those audits must be completed? If so, provide details of the problem. If not, please confirm you are not aware of any problem.

EXHIBIT 2

7. Qualifications

Please list any internal, tertiary or other courses undertaken or currently being attempted (latest first).
Insert the appropriate course, year(s) and results (if applicable) in the corresponding cell.

[redacted]

Relevant tertiary course or qualifications (incl. external institutions)

Course	Year(s)	Institution
Accredited National Assessor in Crime Scene Investigation	**2014**	**Australian Forensic Field Sciences Accreditation Board (AFFSAB)**
Accredited Expert in Crime Scene Investigation	**2014**	**AFFSAB**
Internal Audits Course	**2012**	**National Association of Testing Authorities (NATA)**
Master of Science in Forensic Science	**2003-2008**	**Griffith University, Brisbane**
CBR Crime Scene Investigation Course (Melbourne)	**2008**	**Emergency Management Australia**
National Bomb Scene Examination Course (Melbourne)	**2007**	**Australia-New Zealand Counter-Terrorism Committee (ANZCTC)**
Diploma of Fire Investigation	**2006**	**Queensland Fire & Emergency Services (QFES)**
Diploma of Public Safety (Policing)	**2004**	**Queensland Police Service Academy**
Bachelor of Applied Science	**1989-1992**	**University of Queensland, Brisbane**

8. Service History

Date of induction: **04/12/1998** Current tenure expiration date*: **N/A**

Please provide BRIEF details of your service history. You may include substantial periods of relieving and secondment where relevant to the key selection criteria. Abbreviate where necessary.
Insert the appropriate period, rank, function and location (latest first) in the corresponding cell.
*This is a mandatory field. If not applicable, please enter 'N/A'.

Period (latest first)	Rank	Function	Location
12/09/2016 - Current	**S/Sgt**	**Quality Management Officer**	**Quality Management Section, FSG**
28/12/2009 - 11/09/2016	**S/Sgt**	**Senior Forensic Scientist**	**Brisbane Scientific Section, FSG**
14/04/2008 - 27/12/2009	**Sergeant**	**Scientific Officer**	**Brisbane Scientific Section, FSG**
31/05/2004 - 13/04/2008	**Senior Constable**	**Scientific Officer**	**Brisbane Scientific Section, FSG**
31/05/2003 - 30/05/2004	**Constable**	**Scientific Officer**	**Brisbane Scientific Section, FSG**
01/01/2000 - 30/05/2003	**Constable**	**General Duties Officer**	**Moorooka Division, Oxley District, Metro South Region**
04/12/1999 - 31/12/1999	**Constable**	**General Duties Officer**	**Acacia Ridge Division, Oxley District, Metro South Region**
04/12/1998 - 03/12/1999	**Constable**	**General Duties Officer (FYC)**	**Oxley District, Metro South Region**

[redacted]

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF OLIVIA MCINTYRE

I, **Olivia McIntyre,** of 200 Roma Street, Brisbane, Queensland 4001 state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

1. I am an AO4, DNA Management Officer.

Qualifications and experience.

2. I have not completed any post graduate education.

3. In the year 2000 I commenced with the Queensland Police Service (QPS) as a trainee within the Traffic Adjudication Section, Metropolitan North Region. This position was based at Regional Office, Brisbane City. I held this position for 1 year.

4. In the year 2002 I transferred at level to AO2, administration officer, DNA Management Section, Police Headquarters. I held this position for 3 years.

5. In the year 2005 I was promoted to AO3, administration officer, DNA Management Section, Police Headquarters. I held this position for 14 years.

6. In the year 2019 I was promoted to AO4, DNA Management Officer, DNA Management Section, Police Headquarters. This is my current position.

7. During my time with the QPS, I have completed the following training:

   (a) Introduction to Project Management

   (b) Phase 1 of Diploma of Public Safety (Police Intelligence Training)

(c) Justice of the Peace (Qualified)

(d) Certificate III in Business (Office Administration)

(e) I 2022, I was presented with the award for Most Outstanding Administrator, Women in Policing Awards.

8. I have attached a copy of my CV marked **'Exhibit 2'.**

Current role

9. My duties currently overlap across both the Results Management Unit and the DNA Liaison and Major Crime Unit, both of which sit within the DNA Management Section. I act as a key point of contact for investigators and Forensic Coordinators providing advice on DNA testing and results returned for major incidents which are mostly homicides. These are generally 'hot jobs' (i.e. contemporary high profile unsolved matters) or 'cold cases' (historical unsolved cases that are being reviewed in an attempt to find new evidence). I collate the information in relation to evidence collected and results returned. I am the conduit for ordering additional testing for these matters.

10. I report to Sergeant [redacted] who supervises the DNA Liaison and Major Crime Unit.

11. I have no direct reports.

12. The DNA Management Section consisted of the following units:

(a) The Sample Management Unit. This unit undertakes checks of reference samples taken from persons to ensure their collection was lawful according to the provisions of the *Police Powers and Responsibilities Act 2000* (the PPRA), prior to submission to Queensland Health Forensic and Scientific Services (QHFSS) for analysis.

(b) The Results Management Unit. This unit receives the results of DNA testing from QHFSS, assigns the names of the individuals identified, and reports these results to QPRIME.

(c) The DNA Liaison and Major Crime Unit. This unit acts as a point of liaison between QHFSS and investigators.

(d) The Profile Management Unit. This unit coordinates the exchange of DNA information with other states, monitors court outcomes and manages the destruction of profiles from the database in accordance with the Act.

13. I am aware that DNA samples taken from persons are received in the mail or are hand delivered to the DNA Management Section. The Sample Management Unit are responsible for quality assuring all person samples prior to submission to QHFSS for analysis.

14. I am aware that the majority of samples, referred to as intelligence samples, are from persons where proceedings for an indictable offence have commenced or continued by arrest for inclusion on the National Criminal Investigation DNA Database (NCIDD). All evidence and intelligence samples are checked to ensure that the offence the DNA was taken for was in fact indictable, the charged person is an adult, the sampler is an authorised DNA sampler, and that the identity of the person has been verified through the taking of fingerprints either at the same time or whilst in Police custody for this offence. Any samples taken using a DNA Sample Notice are checked to ensure it is collected within 7 days.

15. I am aware that reference samples are often taken by consent and checks are made to ensure that consent is properly documented. If a reference sample is taken by court order, checks are made to ensure the court order documentation is signed or verbally authorized by a Magistrate.

16. I am aware that the Profile Management Unit monitors court outcomes and requests the destruction of the samples and results of testing (the profile) if a person is found not guilty or if the proceedings are discontinued. I undertake the destruction of the profiles by removal of identifying information from NCIDD and the local DNA database on the Forensic Register (FR). In order to comply with the PPRA regarding the destruction of a DNA sample, I also request that QHFSS destroy any residual sample materials.

Olivia McIntyre Witness

17. I am aware that results of DNA testing are received from QHFSS via a worklist on the FR. Staff within the DNA Results Management Unit undertake a number of checks of each result including ensuring the relevant person reference samples were lawfully collected and confirming that the crime scene exhibit that the person sample has linked to is relevant to the crime that the result has been reported against. The processes followed by the Results Management Unit are in accordance with the current procedures and fall generally into the categories of: intelligence result (cold link); evidence result (warm link) which can include comparison to offender evidence reference samples, victim/elimination reference samples or autopsy reference samples; and negative results which can include person exclusions, no comparable profiles, or no DNA profile.

(a) I am aware that cold link is a term used to describe when an unknown profile is identified by comparison to the NCIDD. Where the result involves a hit against NCIDD, the information provided by QHFSS includes the unique barcode number of the person identified. Results Management Unit staff identify who the barcode number belongs to and inserts their name into the result. The information is then reported to QPRIME with expanded information to assist investigators to interpret the result. Cold links linking a Queensland DNA profile to a DNA profile from another state require further action by the Results Management Unit. A nationally approved form is used to request further information from the other state to enable us to release the intelligence information to QPRIME for the investigators.

(b) I am aware that when a result is reported, the expanded wording of the result is reported to QPRIME as a 'Person DNA Scene Link' report or 'Forensic Supplementary' report which is viewable by the investigating officer. This result is assigned via a task report on QPRIME to the applicable Senior Sergeant Crime Manager who is responsible for reviewing all tasks and forwarding them on to the applicable police for further investigation where appropriate. The information, for cold links or Priority 1 jobs only, is also emailed to the relevant Scenes of Crime Officer who collected the exhibit, their supervisor, and the Forensic Coordinator / Manager.

Olivia McIntyre Witness

(c) I am aware that there is proforma result wording that is used for all DNA results that are reported to QPRIME, which has previously been agreed upon between QPS / QHFSS. For identifications, this can be identified as results for single source profile results, and results relating to mixed DNA profiles.

No simplification of DNA results provided by QHFSS is conducted by the DNA Management Section.

The positive identification reports that are created on QPRIME have a one-line result header to allow an 'at a glance' review of all reports. Each report also contains on the Narrative tab, the full expanded wording provided and agreed upon by QHFSS.

There has been a substantial body of work put into simplifying results to be used and published to make DNA results clearer for investigators. This combined effort has tried to find a balance between conveying accurate scientific information and using language that can be readily understood by investigators and the courts. The current resource of DNA result lines has been reviewed and discussed between QHFSS and QPS and a new volume of result lines has been agreed upon. This new, reduced and simplified volume of result lines is almost ready for implementation.

18. I am aware that the task that is sent to Crime Managers - to advise that a new DNA result has been created ready for review - identifies the information within as either a person identification or an unidentified profile that is linked to another crime scene sample. No specific information regarding the DNA result is included in that task itself. The email that is sent to Forensic Coordinators etc for cold links/hot jobs is a direct transcribing of the wording of the Person DNA Scene Link report on QPRIME (expanded wording). The title of that email would detail the QPRIME number, FR number and possibly the operation name if applicable. This email template has been used since May 2022. Attached and marked as **'Exhibit 3'** is a copy of the email advice that is sent when cold link and priority 1 results are released.

Olivia McIntyre Witness

19. My role relating to hot jobs involves being a liaison point between the forensic coordinator and the allocated case scientist in relation to all DNA testing that is being conducted, and the results that have been returned. I review all the results that have been returned for the applicable case, and provide regular updates to the forensic coordinator on the current status of DNA testing.

20. I provide advice in relation to exhibits that may benefit from further testing (dependent on the result that has initially been returned). I provide detailed exhibit lists, which includes all forensic exhibits that have been collected for the applicable matter, which I have grouped to show each scene that the exhibits have been collected from. When required, I have attended case conference meetings organised by the forensic coordinator relating to the status update of the investigation.

21. My role in relation to cold cases involves being the liaison point between the cold case forensic coordinator and QHFSS. I review all requests for testing, prior to allocating the requests to QHFSS. I attend quarterly meetings held relating to the overview / status of all cold cases currently active at QHFSS.

22. The process involved in starting a hot job, involves the Forensic Coordinator contacting Senior Sergeant Stephan Foxover, DNA Management Section, and requesting assistance from our office.

23. A permanent liaison point was created in June 20202 to be a conduit between QHFSS and the forensic coordinator for both hot jobs and cold cases. I have been in this position since June 2020. This work takes up approximately 70% of my workload.

Involvement in specific investigations

24. I completed an initial forensic review of the [redacted] job in July / August 2021. I was asked to complete a forensic exhibit spreadsheet in relation to this matter in July / August 2021.

25. I was asked to be involved in the [redacted] and [redacted]) investigations from the commencement of these operations. This included completing a regular forensic exhibit / result review, requesting further testing on

exhibits, briefing the forensic coordinator / manager on DNA results received, and in the case of [redacted] attending a case conference with forensic personnel and investigating officers.

26. I was not involved in a 'hot job' in relation to the [redacted] investigation.

[redacted] *investigation*

27. My involvement was identifying exhibits that returned the result of 'DNA Insufficient' and forwarding an email to Senior Sergeant Gerard Simpfendorfer asking him to organize reworks of the four samples.

28. I was aware of the results of the retesting. However this was not through reporting the results relating to the investigation, but from compiling a spreadsheet of exhibits from 2018 that underwent further analysis after initially returning the result of 'DNA insufficient'. This is the data that is referred to in paragraphs 51 and 52 of this statement. I advised the DNA management team, which included Inspector David Neville on 14 November 2018, specially in relation to the result that was obtained from FEN [redacted]

[redacted] *investigation*

29. I became involved in Operation [redacted]. That was within a couple of days of the deceased being located. My involvement was at the

request of the Forensic Coordinator for the investigation Senior Sergeant [redacted]. I am unable to confirm whom within DNA Management Section provided approval for me to work on this operation. I have been unable to locate any written request in relation to the initial request for my involvement.

30. My initial role involved compiling a forensic exhibit spreadsheet, grouping exhibits within the spreadsheet to show the parent exhibit (where applicable) and scene that each exhibit was collected from. I provide regular updates of the exhibit spreadsheet to the forensic coordinator, which included the addition of any further exhibits that are collected, the addition of fingerprint identifications, and all DNA results. In the initial stages of the investigation, I provided regular briefings to the Forensic Coordinator of all DNA results that had been received and reported to QPRIME. I identified exhibits that returned the initial result of 'DNA insufficient' and submitted a request to QHFSS requesting further testing via the forensic register. [redacted] Attached and marked as **'Exhibit 4'** is a spreadsheet of exhibits that were submitted for further testing, and the results of the further analysis.

[redacted]

31. I became involved in Operation [redacted] the day after the operation commenced. My involvement was at the request of the Forensic Manager for this investigation Inspector Duncan McCarthy. I believe it was Sergeant Libby Harris who provided approval for me to be involved in this matter. Attached and marked as **'Exhibit 5'** is the request I received from Inspector McCarthy requesting my assistance.

32. My initial role involved compiling a forensic exhibit spreadsheet, grouping exhibits within the spreadsheet to show the parent exhibit (where applicable) and scene that each exhibit was collected from. I provide regular updates of the exhibit spreadsheet to the Forensic Manager, which included the addition of any further exhibits that are collected, the addition of fingerprint identifications, and all DNA results. In the initial stages of the investigation, I provided regular briefings to the Forensic Manager of all DNA results that had been received and reported to QPRIME. I identified exhibits that

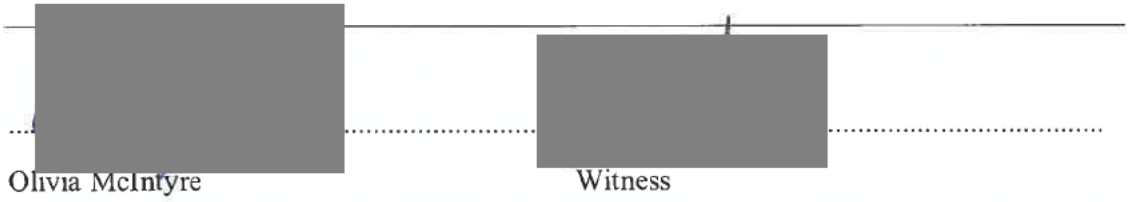
returned the initial result of 'DNA insufficient' and liaised with the Forensic Manager to identify exhibits that were critical and required further testing by QHFSS. I submitted the request for any further testing via the forensic register. There were 23 exhibits that returned the initial result of 'DNA insufficient' Fourteen exhibits were submitted for further analysis. Attached and marked as **'Exhibit 6'** is a spreadsheet of exhibits that were submitted for further testing, and the results of the further analysis.

33. I recall a conversation that I had with Kylie Rika of QHFSS which occurred between January – June 2021. I cannot remember the context of the original phone call, however as part of the conversation, I discussed with Kylie the success I had been seeing on results returned from exhibits that originally returned the result of 'DNA insufficient'. Kylie indicated that she had also noticed profiles successfully being obtained. Kylie indicated that she thought it might have something to do with some new machine that QHFSS had. Kylie indicated that she thought it might be worthwhile reviewing the current threshold that they currently stop testing at (0.08). She indicated that she intended to speak to other people at a higher level than herself.

34. When required, I brief senior officers within the DNA Management Section on all information that I believe to be relevant to my position and anything that is potentially contentious. This could be to a Sergeant, Senior Sergeant or Inspector level, depending on who the appropriate audience is. I do recollect discussing my conversation with other people within the DNA Management Section, however I am unable to specifically recall to whom I provided the information. I have no written notes or emails about this conversation.

The Options Paper

35. In January 2018, Acting Inspector Ewen Taylor emailed myself, and three other staff within DNA Management, a copy of a report issued by QHFSS titled 'A review of the automatic concentration of DNA extracts using Microcon Centrifugal Filter Devices: Options for QPS consideration (The Options Paper)'.



Olivia McIntyre Witness

36. I was an AO3 administration officer at the time of becoming aware of The Options Paper. My substantive position was within the DNA Profile Management Unit, however I was assisting the DNA Results Management Unit at this time.

37. I am aware that the email was sent to a number of staff including Senior Sergeant Ruben Collopen, Acting Senior Sergeant Ken Gee Kee, Sergeant Libby Harris, and myself. It requested feedback on the report.

38. I have attached and marked **'Exhibits 7, 8 and 9'**, all emails that I was a party to regarding the Options Paper.

39. I did not attend any meetings with QHFSS or have any communications with QHFSS regarding the Options Paper.

40. I have no notes relating to the Options Paper.

41. All of the staff included in the email were senior to me. Given no one else replied, I read the report and replied to Ewen that it seemed reasonable given the statistics that were provided by QHFSS.

42. This was my lay person view of The Options Paper. My understanding of it was that QHFSS exhibits that were tested through the auto-microcon process were returning very limited successful results. My understanding of the consequences was that QHFSS scientists would order reworks on critical / priority 1 exhibits. QHFSS would have more time to focus on other results, thus resulting in faster turn-around times of results.

43. I am aware that the changes that were proposed in The Options Paper were put into practice in February 2018. I have no knowledge of how the changes were communicated to investigators and forensic personnel.

44. I am aware that after the implementation of the new process, if contact was received within our office about the result, we were all able to provide advice on how to request further testing of the relevant sample/s.

45. I have been asked by DNA management to compile data on the success rate of samples that originally returned the result of 'DNA insufficient' that have been further processed

and returned a useable profile. I have observed that exhibits that have proceeded through further testing have returned a useable profile on more occasions than the statistics that were initially provided within The Options Paper by QHFSS.

46. I am unaware of any training being provided to investigators, Scenes of Crime Officers and Scientific Officers. I have however provided advice to forensic officers relating to the 'hot jobs' that I manage that additional testing may be beneficial on exhibits that returned the initial result of 'DNA insufficient'.

Result of 'DNA insufficient'

47. I have implemented the process of automatically requesting further testing of exhibits that initially returned the results of 'DNA insufficient' at the request of Inspector David Neville for hot jobs. From memory this was implemented approximately 12 months ago. This was implemented due to the success rate that was observed when other exhibits from unrelated cases were retested.

48. My original understanding of the result 'DNA insufficient for further processing', was that a profile was obtained only a small percentage of the time. This was based on the information that was contained within The Options Paper.

49. My opinion changed once I commenced managing 'hot jobs' and was more involved in viewing the results that were being returned for these investigations. I was observing that a useable profile was being obtained approximately 30% of the time, which differed to the advice that was provided within The Options Paper.

Data from instances of retesting 'DNA insufficient' results

50. I am aware that Senior Sergeant Gerard Simpfendorfer managed the Sample Management, Liaison, and Results Management Units within the DNA Management Section. Within the first half of 2018, Gerard was on an Expression of Interest, and did not return to the DNA Management Section until approximately May-June 2018. Gerard was not my manager; however, he did occasionally ask me to compile data for him.

Olivia McIntyre Witness

51. I was asked to compile a dataset of all exhibits that originally returned the result of 'Insufficient DNA' that were submitted for further testing. I was to show on this dataset what the result was after the further testing had been conducted. I commenced compiling this data in June 2018, so I assume I received the request to compile the data at approximately this time. I am unable to locate an email request, therefore I assume the request was verbal.

52. I compiled a spreadsheet of all exhibits that originally returned the result of 'DNA Insufficient' that were submitted for further testing. Information included was the date of the original result, the date that a request was submitted to QHFSS for further testing, the applicable exhibit number, the exhibit category, the date of the new result, and details of the new result. The data collected was from March – December 2018. The data showed that there was an approximate 16% success rate in obtaining a useable profile. The data was provided to Senior Sergeant Gerard Simpfendorfer. I have no knowledge of how the data was used. I was advised by Senior Sergeant Gerard Simpfendorfer in December 2018 that I was no longer required to collate the data.

2021 — 2022 retesting data

53. In 2021 and 2022 I collected data regarding the retesting of DNA samples. In December 2021, Inspector David Neville requested the data. Sergeant Libby Harris and I were involved in collating this initial dataset.

54. I collated data relating to exhibits that returned the initial result of 'DNA insufficient' that were submitted for further testing. The dataset showed the Exhibit Number; Offence type; Exhibit Description; Exhibit Category; the date the request was submitted to QHFSS for further testing; and the result that was returned after the further analysis was completed. As a result of the information entered, I added pivot tables to the spreadsheet which provided an analysis of the results that were obtained. The data was initially requested in December 2021. The data included on the spreadsheet was from January 2021 – June 2022.

55. The data was provided to Inspector David Neville. I am unaware of how the results were used.

[redacted] ..... [redacted] .....

Olivia McIntyre Witness

Sexual assault matters since February 2018

56. I collected data relating to sexual offences that initially returned the result of 'DNA insufficient that had been submitted for further testing between January 2021 and the time of the request. I was asked to collect this data by Inspector David Neville in March 2022.

57. I am involved in a further review that has been conducted of all exhibits from sexual offences that returned the initial result of 'DNA insufficient'. This review was requested by Inspector David Neville in April 2022.

58. The initial data that I collected was a subset of the data that was collected between January 2021 and the time of the request for all crime types. I filtered out all crime types excluding sexual offences. The data that was provided in March 2022, showed that there was an approximate 50% success rate in obtaining a useable profile from a sample that was initially tested 'DNA insufficient'. This data was provided to Inspector David Neville. I am unaware of how the data was used.

59. I provided specifications in relation to a data extract that was obtained from BDNA of all sexual offences that returned the result of DNA insufficient. This review was to determine if there were exhibits that required further analysis at QHFSS that may assist in the investigation of the offence for which they were collected.

60. I am aware that the cases that were initially reviewed included unsolved occurrence. The review has now been expanded to include the review of withdrawn matters.

61. I am aware that the in-depth review of these occurrences was conducted by Detective Sergeant John Saunders. This included reviewing the circumstances surrounding the offence on QPRIME and making a recommendation on whether further testing was required.

Retraction of results

62. I am aware of QHFSS retracting / withdrawing results that were originally reported to the QPS. This could occur when a request for a statement was received, and upon further review the initial interpretation was deemed to be incorrect.

63. I am aware that the QPS started to see more withdrawal of results after the implementation of PowerPlex 21 and interpretation of profiles using the STRmix statistics package. This change occurred in 2013.

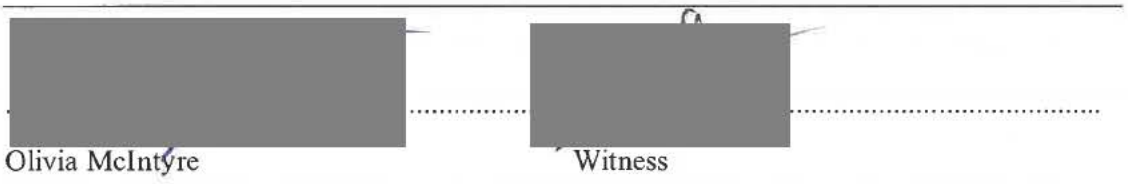
64. I am aware that between 2013 and 2022 there have been approximately 440 results that have changed. This includes the complete withdrawal of an identification, as well as a significant change in the likelihood ratio that a person has contributed to a profile.

65. I am aware that the QPS are now advised of the complete withdrawal of a result via an intelligence report, and by the electronic correction of results within the Forensic Register. Prior to the implementation of the receipt of intelligence reports, written advice used to be provided via email notification to a nominated QPS business email account.

66. I have previously collected data in relation to the retraction of results. The data collected provided information about the applicable exhibit number, the original result obtained, and the new result after the initial result was retracted. The initial data collected was between November 2019 and October 2020. I have since expanded this dataset to include data from 2013 to now. The data was provided to Inspector David Neville. I am unaware of how this data was used. I have attached a copy of this data marked **'Exhibit 10'**

67. I personally did not conduct a review into the likely effect that such retractions have had on investigations and prosecutions.

68. I am unable to provide any data relating to the likely effect that such retractions have had on investigations and prosecutions.



Olivia McIntyre Witness

The Forensic Register

69. I am aware that the FR was implemented in October 2003. The FR is a case management system, used by all QPS forensic personnel from the initial forensic crime scene, through to review of all results obtained, including fingerprints, DNA, and other forensic results. From memory, QHFSS commenced using the FR in mid-2017. The FR has not significantly changed in its purpose since its initial implementation.

70. I do not hold sufficient knowledge or understanding in relation to the permissions within the FR that allow different visibility for QHFSS and QPS.

71. The additional access I remember viewing included quantification data. I do not believe QPS had the ability to alter this data. The access was provided by Tim Middleton who was employed as a contractor within the Forensic Technology work unit. The people that had this access were attached to the 'Results Management' work unit on the FR. This information did have value to our work unit, in particular for providing information to the Homicide Investigation Unit Cold Case Unit (HIU CCIT) in relation to Cold Case investigations. This was for when HIU CCIT were trying to make a determination if further testing outside QHFSS would be beneficial.

72. I am aware that Justin Howes, who is a Team leader at QHFSS, became aware of the access within a couple of months of QPS obtaining it. QHFSS described QPS having this access as a data breach.

73. To my knowledge, the FR was developed by Troy O'Malley and his support IT people. Troy and his staff worked within the Forensic Technology Unit at QPS. I am unable to provide details of when the FR was developed. I do know that the FR went live in October 2003.

Buccal swabs

74. I identified that there were a significant number of DNA person samples that were failing to obtain a DNA profile. This issue existed between 2008 and 2015. From my understanding, QHFSS changed their processes in approximately 2008, whereby for intelligence samples they would only run a sample once, and if it did not obtain a

sufficient profile after that run, they would provide advice that the sample had failed to profile.

75. I provided advice to Inspector Tony Carstensen, who was the inspector who managed the DNA Management Unit at the time, that the issue was identified. I believe Inspector Tony Carstensen negotiated with QHFSS to change their processes, so that a sample was run twice before the sample was reported as failing to profile.

76. Regarding the current collection and testing processes for buccal swabs, I do not hold sufficient knowledge or understanding in relation to this matter.

77. I have attached and marked **'Exhibit 11'** statistics relating to the number of samples processed by QHFSS, and the number of samples that failed to obtain a profile. Included in this data are statistics relating to person samples that were reprocessed at the request of QPS.

Intelligence reports, quality control flags, other issues

78. I have no recollection of QHFSS raising any issues surrounding the collection of samples for DNA testing.

79. I am aware that an intelligence report contains information provided by QHFSS which falls outside the realm of normal result validation. Information that could be received via intelligence report could include information relating to the withdrawal / correction of results, paternity results, advice regarding quality events that have occurred at QHFSS, and QPS relating quality issues. All intelligence reports are emailed to the DNA Management QPS business account. The intelligence report is then allocated to the appropriate area to deal with.

80. A QHFSS quality event is when an issue has occurred in the processing of crime scene sample/s at QHFSS which may have affected the final results that are released to the QPS. A QPS quality issue is reported when QHFSS analyse a crime scene sample and detect the presence of a profile that is recorded in the QPS DNA Elimination Data Base. This indicates a QPS employee has inadvertently captured their own DNA. A QPS quality issue report may also include the detection of a DNA profile from an

environmental DNA sample from a QPS DNA laboratory.

81. A quality control flag relates to when a quality issue is identified relating to a crime scene exhibit. The quality issue with the crime scene exhibit could have originated at QHFSS or QPS. The notification of the quality issue is provided by QHFSS and is sent electronically on the Forensic Register and via intelligence report which is received via email. The intelligence report and validated result on the FR, relating to QPS related quality issues, is managed by Inspector David Neville.

82. I am aware that the QPS is notified by way of electronic result on the FR, and via intelligence report. Inspector David Neville is notified of these results.

83. I am aware that a modification is made to the original result that was released to QPRIME to indicate that that result is no longer valid. The new result is reported to QPRIME indicating that all previous results for that exhibit are no longer valid, and that the new result information should be treated as the correct information. A Mandatory Disclosure of Forensic Results Report which includes the intelligence report received from QHFSS is generated and reported to QPRIME and email to the action / arresting officers. If the result relates to a hot job, the report is also emailed to the applicable forensic coordinator.

84. I am aware that it is an identified issue whereby a sample / swab is being collected from an intimate area of the body as a part of the SAIK is returning a result of either 'No DNA Detected' or 'DNA insufficient for further processing'. As indicated in my response to questions 40-43, a review is currently being conducted in relation to these samples.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 30th day of August 2022

[redacted] ..... [redacted] .....

Olivia McIntyre Witness

JUSTICE OF THE PEACE (QUALIFIED) QUEENSLAND GOVERNMENT Reg.No.: [redacted] DEPT. OF JUSTICE & ATTORNEY-GENERAL

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
A3

STATEMENT OF OLIVIA MCINTYRE
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice Number 2022/00055 – Requirement to Give Information in a Written Statement – Olivia McIntyre
2.	Resume of Olivia McIntyre
3.	Email from Olivia McIntyre to various FSG members titled DNA result [redacted] 23/06/2022
4.	Spreadsheet of exhibits - examination summary notes (contains personal information)
5.	Email from Duncan McCarthy (QPS) to Olivia McIntyre titled Op [redacted] Homicide [redacted]
6.	Spreadsheet of exhibits – exhibits submitted for further testing and the results of the further analysis
7.	Email from Ewen Taylor (QPS) to various FSG members titled FSS Options Paper – 30/01/2018
8.	Email to Ewen Taylor (QPS) from Olivia McIntyre titled RE: FSS Options Paper – 30/01/2018
9.	Email from Ewen Taylor (QPS) to Olivia McIntyre titled FSS Options Paper – 31/01/2018
10.	Spreadsheet of dataset data – Retraction of results from 2013 to present
11.	Spreadsheet of statistics - total number of reworks requested between January 2001 and June 2022

EXHIBIT 1

Notice number: 2022/ 00055

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Olivia McIntyre

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Wednesday 10 August 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 27th day of July 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00055

Schedule of topics for statement

Ms Olivia McIntyre

1. State your current position in the QPS (job title and AO level).

Qualifications and experience

2. List your post-graduate qualifications, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held.

4. Identify any courses or diplomas you have completed since joining the QPS.

5. Identify any awards or formal recognition you have been given since joining the QPS.

6. Attach a current CV.

Current role

7. State the duties of your current position.

8. Identify the person or people (name, rank and position) who you report to.

9. Identify the person or people (name, rank and position) who report to you.

Functions of the DNA Management Section

10. Identify how many units are in the DNA Management Section, the name of each unit, and the functions of each unit.

11. Within the DNA Management Section, explain what steps are taken to check that samples of biological material are lawfully taken, and to ensure that DNA samples are retained and destroyed in accordance with legislative requirements.

12. Explain what the staff in the DNA Management Section do once they receive a DNA result from Queensland Health Forensic and Scientific Services (**QHFSS**). Identify which unit of the DNA Management Section those staff work in. Explain if and how the processes of the relevant unit change depending on the type of result reported.

13. As part of your response to paragraph 12, above:

    (a) explain what a 'cold-link' or 'cold-linked' sample or result is;

    (b) explain which police officers the results are communicated to, and whether or not the results are communicated via QPRIME;

(c) explain whether the relevant unit(s) of the DNA Management Section simplifies the results, and if so, how those results are simplified; and

(d) identify what wording is used to communicate results to crime managers/investigating officers, how that wording was agreed upon, and how long that wording has been used. Identify any procedure/policy document regarding the language used to express results.

14. If not already discussed in response to any of the paragraphs above, explain what a 'hot job' is and what a 'cold case' is. Explain your role and duties in relation to 'hot jobs' and 'cold cases', including the process of opening a 'hot job' matter. Estimate how long you have had roles and duties with respect to 'hot jobs' and 'cold cases', and estimate what proportion of your work comprises dealing with 'hot jobs' and 'cold cases'.

Involvement in specific investigations

15. Identify if you completed a hot job or some other tasks in relation to an investigation into the death of any of the following persons: [redacted] and [redacted]

[redacted] *investigation*

16. Explain what role you had in requesting further testing of four samples that initially returned results stating 'DNA insufficient for further processing' or something similar (hereinafter, **'DNA insufficient'**) in the investigation into the death of [redacted]

17. Were you aware of the results of that further testing? If yes, what were they? What role did you have in dealing with the results of the retesting? Include details of who you communicated with about those results, and when.

[redacted] *investigation*

18. Explain when you became involved in the investigation into the death of [redacted] and what your role was. Identify who requested, directed and/or approved that you be involved with the matter. Provide details of any such request, direction and/or approval.

19. Explain what work you have been conducting in relation to the [redacted] investigation. Include, in your answer, how many DNA results have come back with the result 'DNA insufficient', how many of those results of 'DNA insufficient' have been submitted for retesting, and what are the results of the retesting. Identify who sends requests for retesting to QHFSS.

[redacted]

20. Explain when you became involved in the investigation into the murder of [redacted] and what your role was. Identify who requested, directed and/or approved that you be involved with the matter. Provide details of any such request, direction and/or approval.

21. Explain what work you conducted in the matter. Include, in your answer, how many DNA results came back with the result 'DNA insufficient', how many of those results of 'DNA insufficient' were submitted for retesting, and the results of the retesting.

22. Provide your recollection of a conversation or conversations you had with Kylie Rika about the results of retesting you were experiencing, including what was said during that conversation and approximately when the conversation was had.

23. Explain what you did with the information you learned from those conversations, including, potentially, briefing-up a supervisor. Provide any records or notes of any such briefing-up.

The Options Paper

24. Explain how you first became aware of the report entitled *A review of the automatic concentration of DNA extracts using Microcon Centrifugal Filter Devices: Options for QPS consideration* (January 2018) (**the Options Paper**).

25. At the time you first became aware of the Options Paper, what was your position and in which unit(s) of the DNA Management Section were you working?

26. Explain what you were asked to do with the Options Paper, by whom you were asked, and what you did in relation to that request.

27. Attach any correspondence you were party to regarding the Options Paper.

28. Did you attend any meetings with QHFSS regarding the Options Paper, or have any communications with staff from QHFSS regarding the Options Paper? If yes, provide details about those meetings and/or conversations.

29. Attach any notes you made/have/possess relating to the Options Paper or meetings about the Options Paper.

30. At the time you considered the Options Paper, what was your understanding of the Options Paper? What was your understanding of the consequences (positives and/or negatives) of accepting the options presented to QPS/QHFSS and that the QPS/QHFSS accepted?

31. When were the changes proposed by the Options Paper put into practice and how were they put into practice? Are you aware of any internal QPS communication surrounding the implementation of the Options Paper/changes in testing (i.e. to investigators, scenes of crime officers, scientific officers)? If so, to who, by who, in what format (email, QPRIME entries) and when?

32. What consequences (positive and negative) of the QPS having accepted the Options Paper have you observed?

33. Was the terminology introduced by the Options Paper (e.g. *No DNA detected* or *DNA insufficient for further processing*) explained to police officers such as investigators, SOCOs and SOs? If yes, how? Was any training about the terms used and the options available delivered to other police officers such as investigators, SOCOs and SOs?

Result of 'DNA insufficient'

34. Have you/the QPS adopted a process of automatically requesting that DNA results reported as 'DNA insufficient for further processing', or something similar, be reworked/further worked? If yes, when did you/the QPS implement the approach? Was it at someone's direction? If yes, who? And why was it implemented?

35. What is your understanding of the result 'DNA insufficient for further processing' and any similarly worded results? Has your understanding always been the same? If not, what was it previously, when did it change and why did it change?

Data from instances of retesting 'DNA insufficient' results

May to December 2018 retesting data

36. Who is Senior Sergeant Gerard Simpfendorfer? In the first half of 2018, what was his role and what relation did it have to your role at that time?

37. What did Senior Sergeant Simpfendorfer ask you to do in about May 2018 in relation to the retesting of items that initially produced a result of 'DNA insufficient' (and clarify if the request was in May 2018 or at some other time)? What method of communication did he use in making that request?

38. What did you do in response to that request? Detail the data you collected in response to that request, what time period you collected that data, what the data showed (if anything), who the data was given to, and, if you know, how the data/results were used.

2021 – 2022 retesting data

39. Identify if you were involved, in 2021 and/or 2022, in collecting data about the retesting of DNA results that initially returned results of 'DNA insufficient'. If yes, identify who asked you to collect the data and when you were asked.

40. Detail the data you collected, what time period you collected that data, what time period the data came from, what the data showed (if anything), who the data was given to, and, if you know, how the data/results were used.

Sexual assault matters since February 2018

41. Identify if you have been involved in collecting data about the retesting of DNA results that initially returned results of 'DNA insufficient' in investigations about sexual offences. If yes, identify who asked you to collect the data and when you were asked.

42. Detail the data you obtained/collected, how you obtained it, what time period the data came from, what the data showed (if anything), who the data was given to, and, if you know, how the data/results were used.

43. In your answer to the question in the above paragraph:

    (a) identify if you included or excluded: cases where a complaint was withdrawn, cases where the charge did not proceed or the defendant was found not guilty, or cases where a conviction has already been obtained; and

    (b) whether you and/or the DNA Management Section considered other circumstances of the cases, such as information on QPRIME and/or unsolved crime reports, and then made any recommendations about further action to other police officers, such as investigators.

Retraction of results

44. Explain your awareness of an issue whereby QHFSS provide a positive DNA result/profile, and then, upon a request for a statement about that result/profile, QHFSS seek to retract the result. If you are not aware of any such issue, please confirm.

45. Assuming you are aware of such an issue, when do you recall it first occurring or becoming an issue? Do you know why it was not an issue before then, and why it then became an issue at around that time?

46. Are you aware of how often, approximately, this occurred? If yes, provide an estimate?

47. When this occurs, in what form are the QPS notified of the retraction of results? Are you or the QPS advised of the reason for the retraction?

48. Have you collected data in relation to how often the retraction of results has occurred? If yes, detail the data you collected, what period is covered by the data you collected, what the data showed (if anything), who the data was given to, and, if you know, how the data/results were used.

49. Have you conducted any further studies or analyses into the likely effect that such retractions have had on investigations and prosecutions? If yes, provide full details of those studies or analyses, including who asked you to conduct them, when they were conducted, and what period of data was analysed.

50. Attach copies of those studies or analyses, including any tables or schedules of data.

The Forensic Register

51. Outline, from your memory, when the Forensic Register (**FR**) was created and implemented by the QPS. Also outline what it did when it was first implemented – i.e. when just QPS were using it – and what it does now and how it works. Identify, from your memory, at what point QHFSS started using the FR.

52. Explain how the FR is divided: whether QHFSS have access to a certain interface, and the QPS have access to a difference interface.

53. Explain during what time period some staff in the QPS had additional access to certain information within the FR, which, once such access was discovered by QHFSS, was revoked by QHFSS. Explain what type of further information the QPS had access to during this period, whether the QPS could alter or manipulate that information, and whether that information was peer-reviewed. Identify, if you know, how such access came about, and what person (if any) caused or organised QPS staff to have such access. Identify which people gained such access. Explain if that information had any value or use in your work.

54. Identify at what point in time QHFSS staff became aware of the access described in the above paragraph, and who at QHFSS first became aware of the information. Identify how QHFSS reacted to learning of the access.

55. To your knowledge, who developed the FR? In what unit/section did the person(s) who developed the FR work at the time they developed the FR?

Buccal swabs

56. Provide an account of the problems that QPS were encountering with the DNA testing of buccal swabs, including the time period of that problem.

57. Explain what was done in response to that problem, and outline the current QPS processes and procedures for the collection and testing of buccal swabs.

58. Provide any statistics or data you compiled, or were involved in gathering, which concerns the collection or testing of buccal swabs, or which concerns results from samples obtained by buccal swabs.

Intelligence reports, quality control flags, other issues

59. Has QHFSS ever raised with you any issues/problems surrounding the QPS' collection of samples for DNA testing, for example that the methods, systems, processes, protocols, guidelines, or standards are not being followed, or that there are systemic problems with the collection processes, systems or methods for the collection of samples for DNA testing? If so, provides details of the communication(s) raising the issue(s). If not, please confirm that you are not aware that there have been any issues raised.

60. Explain what an intelligence report is, and what it usually covers. Identify who typically sends an intelligence report, who typically receives an intelligence report, and by what means an intelligence report is sent.

61. Explain what a 'quality control flag' is, and what it usually covers. Identify who typically sends a quality control flag, who typically receives the quality control flag, and by what means a quality control flag is sent.

62. If QHFSS determined that a sample had matched with the DNA of a staff member at the QPS who has contributed to the elimination database, how is the QPS notified of this? Is it by an intelligence report and/or some other means? Who in the QPS is notified of that result?

63. If QHFSS advise of a problem with a DNA result that has already been issued to the QPS on an earlier occasion and that the DNA Management Section have already pushed through to QPRIME, what steps do you/the DNA Management Section take in response to that advice. Include full details of what you would communicate to police officers and/or prosecution lawyers (if anything).

64. Identify if you have encountered, or had communicated to you, any reoccurring or systemic issues concerning the use of, or results from, sexual assault identification kits. If yes, provide details of those issues, when they were raised/occurred, and how they have been dealt with (if at all).

EXHIBIT 2

Olivia McIntyre

Experience

2019 - Current
DNA Management Officer (AO4), DNA Management Section

- Retained responsibilities for AO3 role as detailed below following position reassessment
- Produce exhibit matrices in relation to homicide/complex investigations
- Manage Hot job and Cold Case investigations on behalf of the DNA Management Section providing proactive forensic assessment and advice to the Investigations team
- Responsible for Beta-testing the new Forensic Register system, and subsequently testing and managing issues with the released version to ensure accurate and timely release of DNA information

2005 - 2019
Administration Officer (AO3), DNA Management Section

- Provide advice regarding DNA collection and results to external clients including Investigating Officers, Detectives and Forensic Coordinators
- Provide advice to forensic scientists of the Dept. of Health regarding QPS processes and change management
- Advise senior management in relation to DNA testing based on legislation and QPS policies
- Provide advice to DNA Management Section staff on the release of DNA result information via the Forensic Register online system
- Manage and maintain current skills and up-to-date knowledge of the team
- Resolve complex problems relating to the release of DNA result information
- Provide information, advice and submissions to senior management on quality management and complex results management issues
- Analyse, evaluate and interpret statistics, reporting the findings to management
- Identify and coordinate administrative tasks to staff based on team goals and workloads
- Prioritise and allocate work tasks across my team, monitor workflows and provide staff guidance
- Represent the DNA Management Section at forums and committee meetings regarding cold cases, major incidents, operations
- Advise committee meeting attendees on collection of DNA samples and DNA testing available at other laboratories nationally
- Coordinate and perform quality management and compliance audits
- Strong skills in the use of QPRIME, Forensic Register, National Criminal Investigation DNA Database (NCIDD) and QWIC (Justice court result system)
- Staff training

Training

Introduction to Project Management
2017

Phase 1 of Diploma of Public Safety (Police Intelligence Training) 2007/2008

Justice of the Peace (Qualified)
2001

Certificate III in Business (Office Administration)
2000

Key Strengths

- Hardworking and highly motivated
- Proven ability to lead, supervise and train staff
- Ability to manage complex tasks that require in-depth research
- Over 20 years' experience in administration
- Strong attention to detail
- Self-motivated and highly process driven

Referees

2002 - 2005

Administration Officer (AO2), DNA Management Section

- Analysis and quality assurance audits of forensic results data
- Liaise with QPS officers and Dept of Health personnel
- Updating CRISP with DNA link and suspect information
- Association link charting (Analyst Notebook)
- Quality assurance audits of DNA related paperwork
- Collate reporting of DNA statistics
- Train staff on forensic results reporting
- Prepare meeting minutes
- Prepare returns (lost time, overtime, personnel movements)
- Index of inward and outward correspondence and maintaining the QPS correspondence registers

2000 - 2002

Administration Officer (AO2), Traffic Adjudication Section

- Answer telephone enquiries from internal and external clients
- Prepare and post traffic summonses
- Index incoming correspondence and Traffic Breach Reports
- Data entry using Polaris (QPS) and Trails (Qld Transport system) IT systems

EXHIBIT 3

[redacted]

From: McIntyre.OliviaM[OSC]
Sent: Thursday, 23 June 2022 10:23
To: Brock.NicoleE[OSC]; Scarinci.ShaneM[OSC]; Forensic Coord SEA; OIC SOC Logan
Subject: DNA RESULT [redacted] Forensic Case File [redacted]

Please be advised that a DNA Result has been reported in relation to the following occurrence:

Occ Number: [redacted]
Forensic Register Number: [redacted]

Cold Link - Previously Arrested [redacted]

Forensic Barcode: [redacted] Property Tag: [redacted]
Description: A - No visible stain (fabric)
Location / Owner: [redacted]

Person Identified: [redacted]

[redacted]

Forensic link chart: [redacted]

Full details of this identification should be reviewed on the Person DNA Scene Link report on this occurrence.

DNA Results Management Unit | DNA Management Section
Forensic Services Group | Operations Support Command | Queensland Police Service
GPO Box 1440 | Brisbane QLD 4001 | Australia
[redacted] Police Headquarters | 200 Roma Street | Brisbane QLD 4000 | Australia
[redacted]

EXHIBIT 4

EXHIBIT 5

[redacted]

From: McCarthy.DuncanJ[OSC]
Sent: [redacted]
To: McIntyre.OliviaM[OSC]
Cc: Neville.DavidH[OSC]
Subject: Op [redacted] - homicide [redacted]

Olivia,

I'm commencing discussions this morning with the IC / Homicide on the early prioritisation of our current forensic exhibits from yesterdays murder scenes. Could I request that you commence creating one of your wonderful exhibit matrix products for this operation under [redacted] please? We are currently at 120 exhibits today, which I'll work through on its clunky format, but your pivot tables etc will be invaluable in the coming weeks.

If there are any issues / concerns with this request please let me know.

Cheers

Duncan.

Duncan McCarthy
Inspector, Forensic Manager - South East Region, Queensland Police Service.
Adjunct Fellow of the University of Queensland.
[redacted]

EXHIBIT 6

[redacted]

EXHIBIT 7

[redacted]

From: Taylor.EwenN[OSC]
Sent: Wednesday, 31 January 2018 07:05
To: Collopen.RubenB[OSC]; Gee Kee.KenN[OSC]; Harris.LibbyA[ESC]; McIntyre.OliviaM[OSC]
Subject: FSS Options paper
Attachments: Review of efficacy of Microcons_options for QPS.doc

Good morning,

For your advice please.

Cheers,

Ewen TAYLOR
Acting Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE

Phone [redacted]
Email [redacted]
Address GPO Box 1440 Brisbane 4001

HealthSupport
Queensland

A review of the automatic concentration of DNA extracts using Microcon® Centrifugal Filter Devices: Options for QPS consideration.

January 2018

Justin Howes and Cathie Allen

Great state. Great opportunity.

Queensland Government

A review of the automatic concentration of DNA extracts using Microcon® Centrifugal Filter Devices: Options for QPS consideration.

Published by the State of Queensland (Queensland Health), January 2018

This document is licensed under a Creative Commons Attr bution 3.0 Australia licence. To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au

© State of Queensland (Queensland Health) **2018**

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:
Forensic DNA Analysis, Forensic and Scientific Services, Department of Health, GPO Box 48, Brisbane QLD 4001.

Disclaimer
The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

Document Details

Contact for enquiries and proposed changes

If you have any questions regarding this document or if you have a suggestion for improvements, please contact:

Contact officer: Justin Howes
Title: Team Leader – Forensic Reporting and Intelligence Team
Phone: [redacted]
Email: [redacted]

Contents

Document Details 2
1. Abstract 3
2. Definitions 3
3. Introduction 3
4. Data interrogation 4
5. Assessment of 'auto-microcon' results 5
6. Datamine of the difference in pre- and post- Microcon® Quantification values 5
7. Results and Discussion 6
7.1 Assessment of 'auto-microcon' results 6
7.2 Datamine of the difference in pre- and post- Microcon® Quantification values 8
8. Options for consideration 9
9. References 10

1. Abstract

All casework DNA extracts that underwent a concentration step using the Microcon® process were evaluated and categorised into whether there was meaningful information obtained or not. This evaluation primarily focussed on samples that underwent an 'auto-microcon' process in 2016.

The findings of this evaluation are presented for the Queensland Police Service to advise on whether they would prefer their Priority 2 samples to continue with the 'auto-microcon' process, or to cease this automatic step and notify the laboratory if particular samples are requested to be reworked.

These options relate to Priority 2 (Major Crime) samples only, as the process developed in 2012 for Priority 3 (Volume Crime) samples will be reinstated with the operationally-required move to process these samples using PowerPlex® 21 system (PP21).

2. Definitions

DNA Profile Intelligence: DNA profile information available for interpretation by Forensic DNA practitioners that is able to be provided to clients.

Fail: In this report, this is DNA profile information that was not suitable for comparing to reference DNA profiles and other casework samples. This word was used to filter the data into two possible outcomes (fail/success).

NCIDD: National Criminal Investigation DNA Database.

QPS: Queensland Police Service.

Success: In this report, this is DNA profile information that was obtained that was suitable for comparing to reference DNA profiles and other casework samples. This word was used to filter the data into two possible outcomes (fail/success).

3. Introduction

Microcon® Centrifugal Filter Devices desalt and concentrate macromolecular solutions such as DNA-containing solutions. They employ Amicon's low binding, anisotropic, hydrophilic regenerated cellulose membrane [1].

The use of Microcon® filters to concentrate extract has been a standard post-extraction process within Forensic DNA Analysis to reduce the volume of

extract from approximately 100uL to ≤35µL for amplification with PowerPlex® 21 system.

Since the implementation of PP21 amplification kit within Forensic DNA Analysis for casework samples in December 2012, extracts with low Quantification values were recommended to be concentrated. Templates of <0.132ng (Quantification <0.0088ng/uL) were found to exhibit marked stochastic effects after amplification [2]. Consequently, a workflow that directed extracts automatically to a concentration step based on Quantification value was implemented ('auto-microcon' process) for Priority 2 samples.

A workflow for Priority 3 samples remained within active Standard Operating Procedures to have the DNA extracts not amplified, nor automatically concentrated with Microcon® filters, but to be held after Quantification and QPS informed that low levels of DNA were obtained that were insufficient for further processing at that stage [3][4].

Anecdotally, the suitability to provide QPS with DNA profile Intelligence from extracts that have been concentrated has been noted to be limited, and added to scientist's time and availability to direct resources to samples with more DNA detected.

4. Data interrogation

The 'auto-microcon' data was interrogated by assessing the DNA profile outcome results reported as Exhibit Report lines as a function of the Quantification value.

The Exhibit lines were interrogated and grouped into two interpretation outcomes as follows:

1. 'Fail': DNA profile interpretation outcomes of 'Complex unsuitable for interpretation', 'No DNA profile', 'Partial unsuitable for interpretation', 'No DNA Detected';

2. 'Success': All other DNA profile outcomes including single source DNA profiles matching assumed known contributors or different reference DNA profiles, mixtures that were suitable for comparison to reference DNA profiles, DNA profiles that were suitable for loading to NCIDD.

NB. These descriptions were used to filter the data. A 'fail' does not mean there was a Quality failure in the process; a 'success' does not necessarily mean a DNA match.

~~5.1.~~5. Assessment of 'auto-microcon' results

Formatted: Bullets and Numbering

Intent
Evaluate the 'success' or 'fail' outcomes for PP21 samples that were processed in 2016 through the 'auto-microcon' workflow.

Data Analysis
The samples applicable to this experiment had Quantification values in the range 0.001ng/µL to 0.0088ng/µL, and a total number of samples that were processed this way was determined. This total number excluded environmental samples, samples without Quantification values, samples not requested for further work, samples where quality flags were raised, and samples that had not returned results at the time of data collection.

DNA profile interpretation outcomes were grouped into either 'success' or 'fail' as a function of the Quantification value. A percentage of samples that fell into these categories was determined.

The 'auto-microcon' data could be expressed as a function of Quantification value.

The percentage of samples that had an 'auto-microcon' process and led to an NCIDD upload was obtained. This data could be filtered further into the outcome from the NCIDD load, at the time of data collection.

6. Datamine of the difference in pre- and post- Microcon® Quantification values

Intent
Evaluate the difference between the Quantification values obtained for samples prior to the 'auto-microcon' step, and then after the 'auto-microcon' process. This is to assess, through the Quantification data, the effectiveness of the Microcon® step in concentrating the DNA extract.

As this is purely a datamining experiment, only the samples that yielded a result of 'success' were examined.

Data Analysis

The samples applicable to this experiment had Quantification values above 0.001ng/µL and less than 0.015ng/µL where the final result was 'success'.

This range was considered by the author to be able to provide a sufficient demonstration of the trend of the data (N=278 samples).

~~6.~~7. Results and Discussion

Formatted: Bullets and Numbering

7.1 Assessment of 'auto-microcon' results

There were N=1449 samples in the 'auto-microcon' Quantification range, excluding certain samples as per Section 5.

The percentage of samples that resulted in a determination of 'fail' was 89.4% (Fig 1). As expected, the number of 'fails' increased when the Quantification decreased and approached the Limit of Detection of Quantification ie. 0.001ng/µL (Fig 2). This was considered to be due to there being less DNA detected in the extract, and therefore less DNA to concentrate.

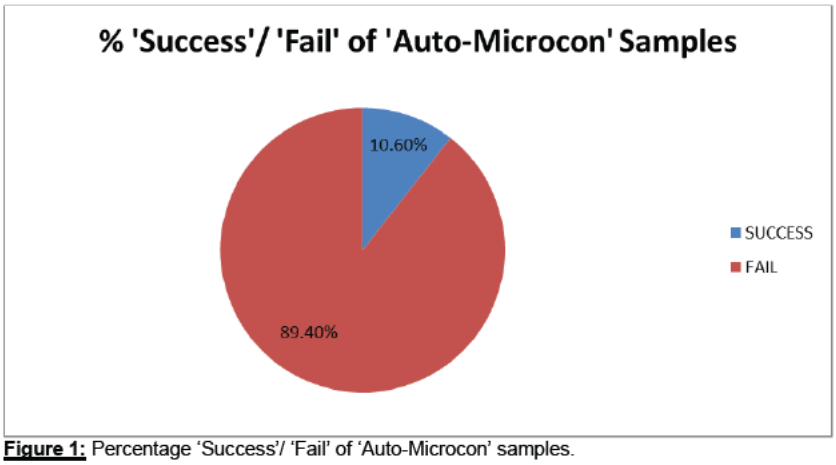


Figure 1: Percentage 'Success'/ 'Fail' of 'Auto-Microcon' samples.

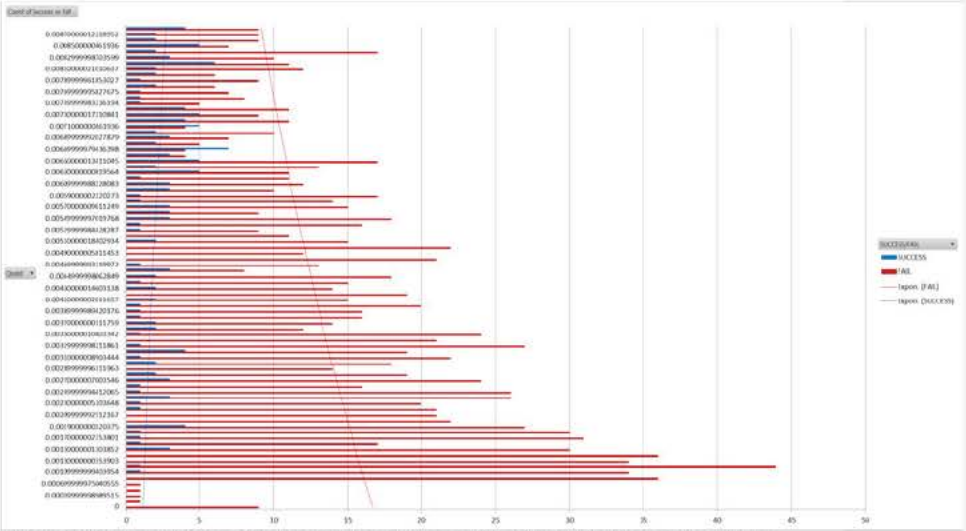


Figure 2: Spread of data and categorised as 'Success'/ 'Fail' for 'Auto-Microcon' samples.

If samples were not processed through the 'auto-microcon' process, what DNA Intelligence would the client miss out on? To evaluate this, the 'success' data was drilled down to the samples that had some NCIDD interaction and in particular, where they were the only samples in the case that were NCIDD-suitable for that particular profile. This represented 1.86% of all 'auto-microcon' samples. In looking at samples that provide *new* Intelligence, that is DNA information available for future linking, or has provided a cold-link, this equated to 1.45% of all 'auto-microcon' samples (Fig 3)..

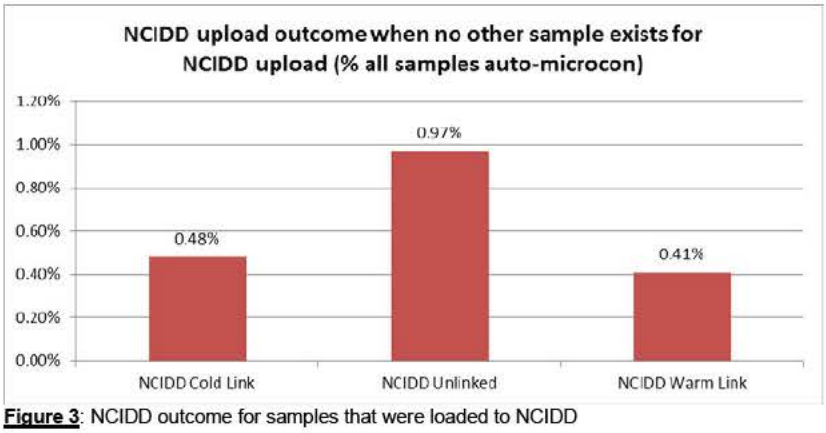


Figure 3: NCIDD outcome for samples that were loaded to NCIDD

This 1.45% of 'auto-microcon' samples is considered to be the pertinent value for the client to assess if the 'auto-microcon' process was not performed.

7.2 Datamine of the difference in pre- and post- Microcon® Quantification values

The samples applicable to this experiment had Quantification values above 0.001ng/µL where the final result was 'success'.

As the Microcon® process concentrates the DNA extract from approximately 100uL to approximately 35µL, in theory it would be a reasonable expectation to obtain approximately two to three-fold increases in DNA Quantification after concentration. Figure 4 shows the plot of the differences found for samples that resulted in 'success'.

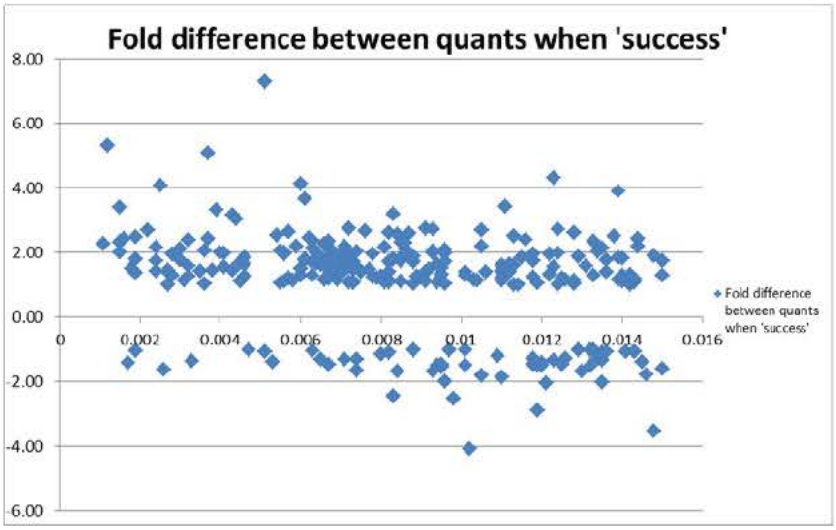


Figure 4: Quantification differences pre and post concentration

The findings are not unexpected as the scatter focusses mostly around two-fold increases in Quantification. It was also not unexpected to observe the variable results. Anecdotally, variability in success rates is found at profile management stage when assessing results of samples that have had this concentration step.

DNA can be lost in the process as seen in Fig 4 where the Quantification values decreased after concentration (below the horizontal axis). Variability in results could be attributed to a number of things, including but not limited to the slight

differences between operators and instrumentation, the differences in substrate type and level of degradation, and the variability in Quantification result.

8. Options for consideration

The options to consider are:

1. Continue with 'auto-microcon' process for Priority 2 (Major Crime) casework; or,

2. Cease the 'auto-microcon' process for Priority 2 (Major Crime) casework and report the exhibit result of 'DNA insufficient for further processing' based on Quantification result.

    a. Priority 1 samples could proceed with the 'auto-microcon' process. If a DNA concentration rework is required, the Microcon® process can be ordered manually by the scientist.

In considering continuing or discontinuing the automatic concentration of DNA extracts for Priority 2 (Major Crime) samples, some key elements to consider include, but are not limited to:

- The opportunity to link DNA profiles on NCIDD would not be initially possible (without automatic concentration) for approximately 1.45% of samples that would qualify for this process. Of the 'auto-microcon' data set (N=1449 samples) evaluated, 1.45% equates to 21 samples;

- Time and cost for processing all samples in the 'auto-microcon' range, including batch preparation, Quality checking and control;

- Time and cost for processing these samples further with additional rework options, as one would expect with low levels of DNA detected initially;

- The ability to potentially reallocate staff time currently allocated to processing, interpreting and reporting 'auto-microcon' samples, to samples with higher DNA yield, thus improving the turnaround time for results on these samples;

- The opportunity to conserve DNA extract for further processing with other technologies should that be considered (eg. Y-STR analysis, Low Copy Number analysis);

- The improved ability to provide quick results to QPS (using the Forensic Register at Quantification stage) indicating low levels of DNA detected, thus enabling QPS to employ further strategies at their discretion (eg. further sampling of items, request the rework);

- The continued ability to process the DNA extract upon client request or depending on priority (eg Priority 1 – Critical Priority).

~~7.~~9. References

Formatted: Bullets and Numbering

[1] QIS 19544v11 – Concentration of DNA Extracts Using Microcon Centrifugal Filter Devices

[2] PowerPlex® 21– Amplification of Extracted DNA Validation. Megan Mathieson, Thomas Nurthen, Cathie Allen. December 2012. Forensic DNA Analysis.

[3] QIS 23008v15 – Explanation of EXR/EXH Results

[4] QIS 24012v13 – Miscellaneous Analytical Section Tasks

EXHIBIT 8

[redacted]

From: McIntyre.OliviaM[OSC]
Sent: Wednesday, 31 January 2018 08:17
To: Taylor.EwenN[OSC]
Cc: Collopen.RubenB[OSC]; Harris.LibbyA[ESC]; Gee Kee.KenN[OSC]
Subject: RE: FSS Options paper

Good morning Ewen,

Further to our conversation, based on the statistics provided by FSS, it would appear it is not worthwhile continuing with the 'auto-microcon' process for Priority 2 samples.

If FSS ceases continuing with the 'auto-microcon' process for Priority 2 samples, I would imagine QPS can still request certain samples that are pertinent to an investigation be submitted through the 'auto-microcon' case, if it is required.

To identify these samples, I would imagine one of the following scenarios would apply:

1. If investigating police contact the DNA Management Section to inquire about testing, DMS staff can facilitate the 'auto-microcon' process on results that have been validated as ''DNA insufficient for further processing', or
2. Results that are 'DNA insufficient for further processing', from unsolved occurrences are sent to a worklist for assessment by staff from DMS to determine whether further testing should be initiated.

Given the statistics provided by FSS, in relation to 'success' rates for these samples, I would imagine that Management may want to go with option 1.

Forwarded for your information.

Kind regards

Olivia McIntyre | DNA Management Officer | Profile Management Team | DNA Management Section
Forensic Services Group| Operations Support Command | Queensland Police Service
GPO Box 1440 | Brisbane QLD 4001 | Australia
[redacted] Police Headquarters | 200 Roma Street | Brisbane QLD 4000 | Australia
[redacted]

From: Taylor.EwenN[OSC]
Sent: Wednesday, 31 January 2018 7:05 AM
To: Collopen.RubenB[OSC] [redacted] Gee Kee.KenN[OSC] [redacted] Harris.LibbyA[OSC] [redacted] McIntyre.OliviaM[OSC] [redacted]
Subject: FSS Options paper

Good morning,

For your advice please.

Cheers,

Ewen TAYLOR
Acting Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE

Phone [redacted]
Email [redacted]
Address GPO Box 1440 Brisbane 4001

EXHIBIT 9

[redacted]

From: Taylor.EwenN[OSC]
Sent: Wednesday, 31 January 2018 11:21
To: McIntyre.OliviaM[OSC]
Cc: Collopen.RubenB[OSC]; Harris.LibbyA[ESC]; Gee Kee.KenN[OSC]
Subject: RE: FSS Options paper

Thanks Olivia,

As discussed, I am in agreement. The 'auto-microcon' process would appear inefficient in this context, with time and resources appearing to be better spent in more worthwhile endeavours.

I am inclined to recommend your option 1, with an additional line added to the Q-prime update advising investigators of their option to request this additional process if required.

Does anyone have any further comment before I reply?

Cheers,

Ewen TAYLOR
Acting Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE

Phone [redacted]
Email [redacted]
Address GPO Box 1440 Brisbane 4001

From: McIntyre.OliviaM[OSC]
Sent: Wednesday, 31 January 2018 8:17 AM
To: Taylor.EwenN[OSC] [redacted]
Cc: Collopen.RubenB[OSC] [redacted] Harris.LibbyA[OSC] [redacted] Gee Kee.KenN[OSC] [redacted]
Subject: RE: FSS Options paper

Good morning Ewen,

Further to our conversation, based on the statistics provided by FSS, it would appear it is not worthwhile continuing with the 'auto-microcon' process for Priority 2 samples.

If FSS ceases continuing with the 'auto-microcon' process for Priority 2 samples, I would imagine QPS can still request certain samples that are pertinent to an investigation be submitted through the 'auto-microcon' case, if it is required.

To identify these samples, I would imagine one of the following scenarios would apply:

1. If investigating police contact the DNA Management Section to inquire about testing, DMS staff can facilitate the 'auto-microcon' process on results that have been validated as ''DNA insufficient for further processing', or

2. Results that are 'DNA insufficient for further processing', from unsolved occurrences are sent to a worklist for assessment by staff from DMS to determine whether further testing should be initiated.

Given the statistics provided by FSS, in relation to 'success' rates for these samples, I would imagine that Management may want to go with option 1.

Forwarded for your information.

Kind regards

Olivia McIntyre | DNA Management Officer | Profile Management Team | DNA Management Section
Forensic Services Group| Operations Support Command | Queensland Police Service
GPO Box 1440 | Brisbane QLD 4001 | Australia
[redacted] Police Headquarters | 200 Roma Street | Brisbane QLD 4000 | Australia
[redacted]

From: Taylor.EwenN[OSC]
Sent: Wednesday, 31 January 2018 7:05 AM
To: Collopen.RubenB[OSC] [redacted]; Gee Kee.KenN[OSC] [redacted]; Harris.LibbyA[OSC] [redacted] McIntyre.OliviaM[OSC] [redacted]
Subject: FSS Options paper

Good morning,

For your advice please.

Cheers,

Ewen TAYLOR
Acting Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE

Phone [redacted]
Email [redacted]
Address GPO Box 1440 Brisbane 4001

EXHIBIT 10

Offence	nal result date	Original result	Link type	New result date	New result	Notes	Explanatory notes re change in result
Murder	09/08/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	05/09/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Rape	06/07/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	04/09/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Robbery	05/06/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	16/12/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Murder (inc attempts)	08/06/2018	Two person mixed DNA profile 2 person mix - support for contribution 100 to 1000 2 person mix profile - support for contrib > 100 billion	Evidence	03/09/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Burglary/Enter with intent	31/05/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	24/12/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Wounding	21/12/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	31/08/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Wounding	16/07/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	19/07/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Assault	04/04/2013	Two person mixed DNA profile No statistical interpretation performed	No statistic interp	13/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
UUMV	12/07/2013	3 person mixed DNA profile not deconvoluted	No statistic interp	13/12/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
UUMV	12/07/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	13/12/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Burglary/Enter with intent	13/05/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	30/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Burglary/Enter with intent	30/05/2013	3 person mixed DNA profile not deconvoluted	No statistic interp	14/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Burglary/Enter with intent	07/02/2013	Single source DNA profile UKM2 NCIDD upload single source DNA profile	Unknown Profile	21/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Burglary/Enter with intent	31/05/2013	3 person mixed DNA profile not deconvoluted	No statistic interp	11/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Burglary/Enter with intent	09/12/2013	Partial DNA profile- NCIDD- possible sub-threshold peaks UKM1	Unknown Profile	10/12/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder (inc attempts)	05/12/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	15/06/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
UUMV	19/03/2018	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	04/06/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
UUMV	19/03/2018	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	24/05/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Sexual offences	27/03/2018	Two person mixed DNA profile 2 person mixed profile - conditioned on 2 person mix remaining - low support for contrib	Evidence	18/05/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Drug offences	07/06/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	24/06/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Sexual offences	23/07/2013	Three person mixed DNA profile	No statistic interp	25/07/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Child offences	30/01/2018	SS DNA profile 9 loci and above LR > 100 billion	Evidence	18/05/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	27/03/2018	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix profile - support for contrib > 100 billion	Evidence	14/05/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder	23/03/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person rem - support for contrib 1 million to 1 billion	Evidence	04/05/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Robbery	05/03/2018	Three person mixed DNA profile NCIDD upload - mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence / Intelligence	01/05/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Robbery	27/03/2018	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion 3 person mix profile - support for contrib > 100 billion	Evidence	27/04/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
GBH/Unlawful Wounding	06/02/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	10/04/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
GBH/Unlawful Wounding	19/12/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - low support for contribution	Evidence	10/04/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Murder	01/08/2016	SS DNA profile 9 loci and above LR > 100 billion	Evidence	27/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder	08/07/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	27/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder	28/07/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	27/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
UUMV	07/03/2018	Three person mixed DNA profile NCIDD upload - mixed DNA profile	Intelligence result	26/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder	15/09/2016	SS DNA profile 9 loci and above LR > 100 billion	Evidence	21/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
GBH/Unlawful Wounding	26/07/2017	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile	Intelligence result	06/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Assault	29/01/2018	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	02/03/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Sexual offences	04/07/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	01/03/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Murder	04/10/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix profile - support for contrib > 100 billion	Evidence	27/02/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Drug offences	18/12/2017	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion	Evidence	22/02/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result

	Wounding		30/06/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contribution 100 to 1000	Evidence	02/02/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder (inc attempts)		27/05/2017	Three person mixed DNA profile 3 person mix - support for contrib 10 000 - 100 000 3 person mix - support for contrib 1 million - 1 billion	Evidence	31/01/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		05/09/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	23/01/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		02/06/2014	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	08/12/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Burglary/Enter with intent		14/06/2014	Three person mixed DNA profile Mixture - low support for contrib or supports non contrib	Nil linked barcodes	06/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		07/12/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	23/01/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		02/03/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix - low support for contribution	Evidence	23/01/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		05/07/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	05/01/2018	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding		03/07/2017	SS DNA profile 9 loci and above LR > 100 billion	Evidence	06/12/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV		14/01/2014	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UK M1	Unknown Profile	17/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Assault		14/03/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	30/11/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Assault		02/05/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	30/11/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		28/03/2017	Three person mixed DNA profile NCIDD upload - mixed DNA profile UKM1	Intelligence result	29/11/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		04/07/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contribution 1000 to 10 000	Evidence	29/11/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		10/02/2017	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000	Evidence	28/11/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		20/09/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	24/11/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		14/07/2017	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion	Evidence	24/11/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Sexual offences		26/07/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contrib 1 million - 1 billion	Evidence	20/11/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences		17/07/2013	Two person mixed DNA profile No statistical interpretation performed	No statistic interp	18/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		07/07/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	30/10/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder (inc attempts)		15/06/2017	Two person mixed DNA profile 2 person mix - supports non contribution NCIDD upload - Intel mixed DNA profile	Evidence / Unknown Profile	24/10/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug offences		05/07/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	05/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		17/07/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	16/10/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Burglary/Enter with intent		31/05/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	12/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		27/07/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	03/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	UUMV		17/06/2013	Single source DNA profile UKM2	Unknown Profile	05/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	UUMV		17/06/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	16/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		20/09/2013	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKF1	Unknown Profile	10/07/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Assault		05/06/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	10/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Sexual offences		04/04/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	05/09/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding		11/10/2013	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM4	Unknown Profile	30/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		29/08/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	29/08/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with intent		07/03/2014	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	22/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences		27/07/2013	Two person mixed DNA profile No statistical interpretation performed	No statistic interp	18/09/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		05/06/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on -	Evidence	22/08/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with intent		02/07/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	28/04/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		29/06/2013	Two person mixed DNA profile No statistical interpretation performed	No statistic interp	16/09/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result

	Burglary/Enter with intent	20/08/2013	Three person mixed DNA profile Mixture - low support for contrib or supports non contrib	Nil linked barcodes	05/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery	13/04/2017	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion NCIDD upload - Intel mixed DNA profile UKM1	Evidence / Unknown Profile	15/08/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Stealing	30/05/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	28/04/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences	19/06/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	05/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Domestic Violence	12/07/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	07/08/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder (inc attempts)	07/03/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	06/07/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	24/05/2017	Three person mixed DNA profile 3 person mix - low support for contribution	Evidence	15/06/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery	17/03/2017	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	13/06/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV	29/05/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	11/02/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	UUMV	25/01/2013	Two person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM1	Unknown Profile	30/01/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences	21/11/2014	Three person mixed DNA profile	No statistic interp	21/11/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	rape	15/11/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contrib 1 million - 1 billion	Evidence	06/04/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery	17/05/2016	Single source DNA profile UKM1 NCIDD upload single source DNA profile	Intelligence result	21/03/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Wounding	07/08/2014	Three person mixed DNA profile	No statistic interp	07/08/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	03/02/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	06/03/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder	21/11/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	03/03/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape	19/09/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	13/01/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	16/12/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	16/12/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Sexual offences	09/12/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person rem - support for contrib 1 billion-100 billion	Evidence	14/12/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery	17/12/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	05/03/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	25/02/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion NCIDD upload - mixed DNA profile UKM5	Evidence / Unknown Profile	30/11/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug offences	11/12/2013	Three person mixed DNA profile 3 person mix - supports non contribution	Evidence	14/01/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with intent	29/01/2014	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM2	Unknown Profile	12/08/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Miscellaneous	14/06/2014	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	05/12/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	27/09/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	29/11/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Sexual offences	13/10/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	24/11/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Property	30/11/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	03/01/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug offences	28/09/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	22/11/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	22/05/2015	Two person mixed DNA profile - 2 person mix profile - support for contrib > 100 billion	Evidence	18/11/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	12/06/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix- support for contrib 1 billion - 100 billion	Evidence	18/11/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug offences	10/12/2015	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion	Evidence	14/10/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences	19/08/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	03/11/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	24/09/2014	Two person mixed DNA profile Intel report required for further interpretation	Evidence	28/09/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with intent	15/12/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	23/09/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	UUMV	17/06/2013	Three person mixed DNA profile No statistical interpretation performed 3 person mix - supports non contribution	Evidence	13/05/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with intent	12/09/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	14/09/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape	06/06/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	12/06/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	02/07/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	17/09/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery	19/08/2013	3 person mixed DNA profile not deconvoluted	No statistic interp	15/01/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

Burglary/Enter with intent	30/05/2013	3 person mixed DNA profile not deconvoluted	No statistic interp	14/01/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Assault	18/05/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	12/09/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Rape	06/07/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 bill on 3 person mix - support for contribution 1000 to 10 000	Evidence	02/09/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Weapons offences	25/08/2015	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	14/10/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Sexual offences	19/06/2015	Three person mixed DNA profile NCIDD upload - mixed DNA profile UKF1	Unknown Profile	03/07/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Rape	03/06/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	25/08/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Rape	03/06/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contrib 10 000 - 100 000 -	Evidence	25/08/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Sexual offences	11/08/2015	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix remaining - supports non contribution 2 x 3 person mix remaining- support for contrib 1000 to 10000	Evidence	17/08/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder	20/04/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	04/08/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Robbery	22/12/2015	Three person mixed DNA profile NCIDD upload - mixed DNA profile UKM1 3 person mix profile - support for contrib > 100 billion	Evidence / Intelligence	19/07/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Drug offences	02/12/2014	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	20/04/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Fire/Arson	08/01/2015	Single source DNA profile < NCIDD matching stringency UKM1	Unknown Profile	10/09/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	08/06/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix- support for contrib 1 billion - 100 billion	Evidence	15/07/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Robbery	03/12/2015	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UkM1	Intelligence result	14/07/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Sexual offences	15/04/2016	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion	Evidence	22/06/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Drug offences	14/06/2016	Three person mixed DNA profile 3 person mix - support for contrib 100 000 to 1 million	Evidence	14/06/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Murder	10/06/2014	Two person mixed DNA profile 2 person mix - supports non contribution	Evidence	26/02/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Sexual offences	18/04/2016	Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 NCIDD upload - mixed DNA profile UKF1	Evidence / Unknown Profile	03/06/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Robbery	15/04/2016	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion	Evidence	19/05/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	03/05/2013	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	08/04/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	08/05/2013	Three person mixed DNA profile No statistical interpretation performed 3 person mix - supports non contribution	Evidence	02/02/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Rape	25/11/2015	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	18/05/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Robbery	25/01/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contrib 100 000 to 1 million	Evidence	18/05/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Wounding	29/07/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	18/05/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Murder	07/11/2013	Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 3 person mix profile - support for contrib > 100 billion	Evidence	13/05/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	24/03/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	10/05/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Murder	19/01/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	05/05/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
Rape	07/01/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	04/05/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Murder (inc attempts)	09/10/2013	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM2	Intelligence result	27/04/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	12/09/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix- support for contrib 1 billion - 100 billion	Evidence	21/04/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Wounding	18/01/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribut on > 100 bill on	Evidence	14/04/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Assault	22/03/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 bill on	Evidence	22/03/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
iberty offences	08/12/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	04/03/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
Robbery	15/02/2016	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	15/02/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result

	Robbery		19/11/2015	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM2 3 person mix - support for contrib 1 million - 1 billion	Evidence / Unknown Profile	15/02/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding		05/06/2015	Two person mixed DNA profile 2 person mixed profile - conditioned on 2 person mix rem - support for contribution > 100 billion	Evidence	12/02/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Sexual offences		02/10/2015	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	03/02/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		23/11/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	11/01/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		27/03/2013	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion	Evidence	17/12/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding		28/07/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix- support for contrib 1 billion - 100 billion	Evidence	20/10/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		29/06/2013	Three person mixed DNA profile 3 person mix - support for contrib 100 000 to 1 million	Evidence	18/09/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Child offences		17/08/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix profile - support for contrib > 100 billion	Evidence	02/09/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences		08/09/2016	Three person mixed DNA profile NCIDD upload - mixed DNA profile UKM4	Unknown Profile	07/10/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug offences		09/09/2016	Three person mixed DNA profile Excluded from mixed DNA profile	No statistic interp	07/10/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		03/07/2013	Three person mixed DNA profile 3 person mix - support for contrib 100 000 to 1 million	Evidence	18/08/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		07/05/2015	Single source DNA profile Possible sub-threshold information	Evidence	24/06/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		20/03/2015	Two person mixed DNA profile 2 person mixed profile - conditioned on 2 person mix rem - support for contribution > 100 billion	Evidence	22/06/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		20/03/2015	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion 2 person mix profile - support for contrib > 100 billion	Evidence	10/06/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		14/08/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	05/06/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		06/03/2015	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	26/05/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		19/11/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	08/04/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		27/07/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	02/04/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		11/02/2016	Single source DNA profile UKM1 NCIDD upload single source DNA profile	Unknown Profile	22/02/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Child offences		11/02/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	01/04/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		23/07/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	19/03/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		06/02/2014	Three person mixed DNA profile - 3 person mix profile - support for contrib > 100 billion	Evidence	19/03/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		06/09/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	19/03/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		11/09/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion -	Evidence	19/03/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Wounding		10/04/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	18/03/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		03/09/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix remaining- support for contrib 1000 to 10000 3 person rem - support for contrib 1 million to 1 billion	Evidence	16/02/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (inc attempts)		09/10/2013	Two person mixed DNA profile 2 person mix - supports non contribution	Evidence	27/04/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding		07/11/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contribution 1000 to 10 000	Evidence	06/02/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		21/07/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	06/02/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		30/07/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	06/02/2015	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Child offences		29/09/2014	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	06/02/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		17/05/2016	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	15/09/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		07/11/2014	Two person mixed DNA profile 2 person mixed profile - conditioned on 2 person rem- support for contrib 1 million to 1 billion	Evidence	02/02/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Deaths		06/09/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	29/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

	Murder	16/08/2013	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000 3 person mix profile - support for contrib > 100 billion	Evidence	09/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	19/12/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	07/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	18/12/2013	Single Source DNA profile - assumed known contributor	Evidence	07/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	18/03/2014	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion Suspect check - support for contribution > 100 billion	Evidence / Intelligence	07/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	19/12/2013	Three person mixed DNA profile Suspect check - support for contribution > 100 billion 3 person mix- support for contrib 1 billion - 100 billion	Evidence / Intelligence	07/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	19/12/2013	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion Suspect check- support for contrib 1 billion- 100 billion	Evidence / Intelligence	07/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	17/10/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	19/12/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape	17/11/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	19/12/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	GBH/Unlawful Wounding	12/09/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person rem - support for contrib 1 million to 1 billion	Evidence	08/12/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder	08/09/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	19/11/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug offences	07/03/2014	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UK M1 3 person mix - support for contribution 100 to 1000	Evidence / Intelligence	07/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery	15/08/2013	Three person mixed DNA profile Suspect check - support for contribution > 100 billion	Intelligence result	07/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Burglary/Enter with intent	28/04/2014	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion 3 person mix profile - support for contrib > 100 billion	Evidence	06/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape	22/10/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contribution 100 to 1000	Evidence	05/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Burglary/Enter with intent	20/08/2013	Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 3 person mix profile - support for contrib > 100 billion	Evidence	05/11/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences	13/01/2014	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	23/10/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Burglary/Enter with intent	10/05/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	23/10/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding	01/08/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion 3 person mixed profile, mixture remaining NCIDD UKP1	Evidence / Unknown Profile	01/10/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery	14/05/2014	3 person mix profile - support for contrib > 100 billion	Evidence	26/09/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder	22/05/2013	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM5	Unknown Profile	26/09/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	UUMV	08/02/2013	Single source DNA profile UKM1 NCIDD Intel Upload - single source partial profile	Unknown Profile	26/08/2016	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	GBH/Unlawful Wounding	23/06/2014	Two person mixed DNA profile 2 person mixed profile - conditioned on	Evidence	04/09/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Assault	23/12/2013	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	28/08/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape	24/06/2014	Two person mixed DNA profile 2 person mixed profile - conditioned on 2 person mix rem - support for contrib 10 000 to 100 000	Evidence	25/08/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	GBH/Unlawful Wounding	24/03/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	22/08/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding	07/02/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	18/08/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	GBH/Unlawful Wounding	07/02/2014	Three person mixed DNA profile 3 person mix - support for contrib 10 000 - 100 000	Evidence	18/08/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Deaths	24/05/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contrib 1 million - 1 billion	Evidence	18/08/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding	24/11/2016	Three person mixed DNA profile Single evidence sample excluded	Evidence	26/04/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences	07/07/2014	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	31/07/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery	23/05/2014	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000 3 person mix - support for contribution 100 to 1000	Evidence	28/07/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Assault	02/06/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	24/07/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder	09/05/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	22/07/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder	05/07/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	21/07/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result

[redacted]	Rape	[redacted]	18/08/2017	Three person mixed DNA profile Excluded from mixed DNA profile	Three person mixed	21/09/2017	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		19/12/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion Suspect check - support for contribution 1000 to 10 000	Evidence	04/07/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		30/05/2014	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	04/07/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Wounding		09/01/2014	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	27/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Wounding		22/11/2013	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion	Evidence	27/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		21/03/2014	Three person mixed DNA profile 2 person mixed profile - conditioned on 3 person mix rem - support for contribution > 100 billion	Evidence	24/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Assault		16/01/2014	Two person mixed DNA profile 2 person mixed profile - conditioned on	Evidence	23/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		29/11/2013	Three person mixed DNA profile 3 person mix - support for contrib 100 000 to 1 million 3 person mix profile - support for contrib > 100 billion	Evidence	04/06/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Assault		23/05/2014	Three person mixed DNA profile 3 person mix - supports non contribution	Evidence	26/05/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		28/11/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on 3 person mix remaining - support for contrib 100 to 1000	Evidence	23/05/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		14/05/2013	Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 3 person mix profile - support for contrib > 100 billion	Evidence	20/05/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		19/08/2013	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion	Evidence	05/05/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		03/02/2014	Three person mixed DNA profile 3 person mixed profile - conditioned on	Evidence	23/04/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV		06/12/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	16/04/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		01/07/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	11/04/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Fire/Arson		04/10/2013	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion	Evidence	21/03/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		20/12/2013	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion	Evidence	18/03/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Deaths		24/05/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	10/03/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Rape		14/11/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	06/03/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		27/06/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	03/03/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Child offences		05/06/2013	Three person mixed DNA profile 3 person mix - low support for contribution	Evidence	21/02/2014	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	GBH/Unlawful Wounding		30/07/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion 3 person mix - support for contribution 100 to 1000 UKM1 3 person mix - support for contrib 100 000 to 1 million	Evidence / Unknown Profile	18/02/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding		27/11/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	20/01/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		23/08/2013	Three person mixed DNA profile 3 person mix - support for contrib 10 000 - 100 000 3 person mix - support for contribution 100 to 1000	Evidence	03/01/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		18/06/2013	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion - Evidence 2 person mix - supports non contribution	Evidence	20/12/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding		29/06/2013	Three person mixed DNA profile NCIDD upload - mixed DNA profile UKM1 NCIDD upload - Intel mixed DNA profile UKP1 Suspect check - support for contribution > 100 billion 2 x 3 person mix - supports non contribution	Intelligence result	20/12/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding		29/06/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	20/12/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding		29/06/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on (Evidence) Multiple supports non contribution / suspect check no match results	Evidence	20/12/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	iberty offences		25/10/2017	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM6	Unknown Profile	19/02/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding		15/10/2013	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000 - Evidence 3 person mix - support for contribution 100 to 1000 - Evidence Suspect check - support for contribution > 100 billion - suspect nomination	Evidence / Intelligence	20/12/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

	Murder		06/06/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on (Deceased) Multiple supports non contribution / suspect check no match results	Evidence	28/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		10/07/2013	Three person mixed DNA profile 3 person mix - support for contrib 10 000 - 100 000	Evidence	25/11/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		03/10/2013	Three person mixed DNA profile 3 person mix - low support for contribution (evidence)	Evidence	18/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	GBH/Unlawful Wounding		05/06/2017	Three person mixed DNA profile No statistical interpretation performed	No statistic interp	03/09/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Deaths		10/04/2013	Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 - Deceased 3 person mix - support for contribution 100 to 1000 - Elimination 3 person mix profile - support for contrib > 100 billion - Elimination	Evidence	12/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Drug offences		10/10/2016	Two person mixed DNA profile No statistical interpretation performed	No statistic interp	21/05/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Deaths		11/04/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Deceased 3 person mix- support for contrib 1 billion - 100 billion - Elimination	Evidence	12/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Robbery		09/08/2013	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM1 Cold link - suspect wanted 3 person mix profile - support for contrib > 100 billion	Intelligence result	11/11/2013	Complex mixed profile unsuitable for interp or comparison	Updated	Complete withdrawal of original result
	Murder		23/08/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Deceased 3 person mix- support for contrib 1 billion - 100 billion - Elimination	Evidence	31/10/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		02/09/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Deceased 3 person mix profile - support for contrib > 100 billion - Elimination	Evidence	31/10/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		10/09/2013	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion - Elimination Mixture - low support for contrib or supports non contrib	Evidence	31/10/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Assault		05/09/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion	Evidence	14/10/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		17/07/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence 3 person mix - support for contrib 100 000 to 1 million - Deceased	Evidence	09/10/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder		17/07/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on - Suspect 3 person mix rem - support for contribution > 100 billion - Deceased	Evidence	09/10/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		11/09/2013	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion	Evidence	11/09/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Weapons offences		29/06/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	16/07/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Wounding		19/04/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	26/06/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery		14/05/2013	Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 3 person mix profile - support for contrib > 100 billion	Evidence	17/06/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result *This result was originally reported as Complex mixed profile unsuitable for interp or comparison on 12/2/13 then was re-reported as mixed in May 13 then Complex again in June 13
	Robbery		29/04/2013	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	13/06/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		02/05/2013	Three person mixed DNA profile 3 person mixed profile - conditioned on - Victim 3 person rem - support for contrib 1 million to 1 billion - Evidence	Evidence	24/05/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)		17/01/2013	Mixed DNA profile. Major component uploaded to NCIDD - UKM3 Mixed profile- complex minor unsuit for interp or compar.	Unknown Profile	04/12/2013	Complex mixed DNA profile. Unable to load to NCIDD DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Steal from Vehicle		08/11/2013	Mixed DNA profile. Major component uploaded to NCIDD - UKM1 Mixed profile, minor component insuff for NCIDD matching - UKP1	Unknown Profile	15/11/2013	Complex mixed DNA profile. Unable to load to NCIDD	Incorrect	Complete withdrawal of original result
	Robbery Offences		20/12/2012	Complex mixed DNA profile - cannot exclude	Evidence	15/11/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

	Robbery Offences	10/04/2012	Complex mixed DNA profile. Unable to load to NCIDD Multiple Suspect check Action - No Match Complex mixed DNA profile - cannot exclude	Evidence	06/11/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	23/08/2013	3 person mix - support for contrib 100 000 to 1 million	Evidence	31/10/2013	3 person mix - support for contribution 100 to 1000	Incorrect	Change in support for contribution level
	Murder (Inc. attempts)	22/08/2013	3 person mix- support for contrib 1 billion - 100 billion	Evidence	31/10/2013	3 person mix - support for contrib 100 000 to 1 million	Incorrect	Change in support for contribution level
	Weapons Offences	17/10/2012	Mixed DNA profile. Major component uploaded to NCIDD - evidence Mixed profile Minor component unsuitable for comparison	Evidence	04/10/2013	Complex mixed DNA profile - cannot exclude - evidence DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Robbery Offences	06/11/2012	Complex mixed DNA profile. Unable to load to NCIDD Complex mixed DNA profile - cannot exclude - elimination	Evidence	25/09/2013	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	01/03/2012	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	04/07/2013	Complex mixed DNA profile - cannot exclude - deceased	Incorrect	Complete withdrawal of original result
	Robbery Offences	12/04/2013	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile - UKM1 3 person mix - support for contribution 1000 to 10 000 - evidence	Evidence / Unknown Profile	02/07/2013	Complex mixed profile unsuitable for interp or comparison DNA profile removed from NCIDD	Updated	Complete withdrawal of original result
	Rape	17/05/2013	Partial DNA profile unsuitable for comparison purposes - Scraping of Side A (P30 Neg)	Partial unsuitable	22/05/2013	Single Source DNA profile - assumed known contributor - Scraping of Side A (P30 Neg) - elimination Possible sub-threshold information - Scraping of Side A (P30 Neg)	Incorrect	Change from unsuitable profile to an interpretable profile
	Burglary/Enter with Intent	23/02/2012	Complex mixed DNA profile - cannot exclude - cig butt 1() - UKM2	Unknown Profile	10/05/2013	Complex mixed profile unsuitable for interp or comparison - cig butt 1()	Incorrect	Complete withdrawal of original result
	Forensic Scene	27/08/2010	Mixed DNA profile, complex minor component cannot exclude - elimination	Evidence	05/04/2013	Mixed profile- complex minor unsuit for interp or compar.	Incorrect	Complete withdrawal of original result
	Forensic Scene	08/10/2010	Complex mixed DNA profile - cannot exclude - deceased Complex mixed DNA profile - cannot exclude - elimination	Evidence	27/03/2013	Mixed profile- complex minor unsuit for interp or compar.	Incorrect	Complete withdrawal of original result
	Wounding	29/10/2012	Mixed profile- complex minor unsuit for interp or compar.	Complex unsuitable	05/03/2013	Mixed DNA profile, complex minor component cannot exclude - elimination Mixed DNA profile, complex minor component cannot exclude - elimination	Incorrect	Complete withdrawal of original result
	Miscellaneous	14/01/2013	Complex mixed DNA profile. Unable to load to NCIDD	Complex unsuitable	22/02/2013	Mixed DNA profile. Major component uploaded to NCIDD - evidence Mixed profile- complex minor unsuit for interp or compar.	Updated/Incorrect	Complete withdrawal of original result
	UUMV	16/08/2012	Mixed DNA profile. Major component uploaded to NCIDD - evidence	Evidence	14/02/2013	Complex mixed DNA profile - cannot exclude - evidence DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Sexual Offences	17/03/2011	Mixed DNA profile. Major component uploaded to NCIDD - UKF1 Mixed profile, complex mixed minor component	Unknown Profile	13/02/2013	Complex mixed DNA profile. Unable to load to NCIDD Suspect check - insufficient information to compare DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Assault	15/04/2011	Partial DNA profile unsuitable for comparison purposes	Partial unsuitable	03/01/2013	Partial DNA profile. Uploaded to NCIDD	Incorrect	Change from unsuitable profile to an interpretable profile
	GBH/Unlawful Wounding	03/11/2014	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	09/12/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - evidence Excluded from mixed DNA profile	Incorrect	Change from unsuitable profile to an interpretable profile
	Property	11/10/2013	Complex mixed DNA profile - cannot exclude - UKM1	Unknown Profile	26/11/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV	15/09/2014	Mixed DNA profile. Major component uploaded to NCIDD - UKM2 Mixed DNA profile, complex minor component cannot exclude - evidence	Evidence / Unknown Profile	11/11/2014	Complex mixed profile unsuitable for interp or comparison DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Assault	07/10/2014	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - evidence	Evidence	28/10/2014	3 person mix - support for contribution 1000 to 10 000 - evidence	Incorrect	Significant change in support for contribution level
	Robbery offences	08/09/2009	Complex mixed DNA profile - cannot exclude - UKM1	Unknown Profile	15/09/2014	Complex mixed DNA profile. Unable to load to NCIDD	Incorrect	Complete withdrawal of original result
	Robbery offences	08/09/2009	Mixed DNA profile, partial major component uploaded to NCIDD - UKM1 Mixed profile Minor component unsuitable for comparison	Unknown Profile	15/09/2014	Complex mixed profile unsuitable for interp or comparison (incorrected 15/09/2014) Complex mixed DNA profile. Unable to load to NCIDD DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Drug Offences	05/03/2014	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	06/08/2014	Two person mixed DNA profile 3 x 2 person mix - supports non contribution 2 person mix profile - support for contrib > 100 billion - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Property offences	17/06/2014	Complex mixed DNA profile - cannot exclude - evidence	Evidence	22/07/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent	29/11/2013	Mixed DNA profile. Major component uploaded to NCIDD - UKM1 Mixed profile, complex mixed minor component	Unknown Profile	11/06/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	25/10/2012	3 x Complex mixed DNA profile - cannot exclude	Evidence	19/05/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery Offences	03/10/2011	Mixed DNA profile. Major component- UKM1 Mixed profile Minor component unsuitable for comparison	Unknown Profile	03/06/2014	Complex mixed profile unsuitable for interp or comparison (Incorrected 29/04/2014) Complex mixed DNA profile - cannot exclude- evidence		Complete withdrawal of original result
	Burglary/Enter with Intent	31/10/2013	Mixed DNA profile. Major component uploaded to NCIDD - UKM2 Mixed profile- complex minor unsuit for interp or compar.	Unknown Profile	11/03/2014	Complex mixed profile unsuitable for interp or comparison DNA profile removed from NCIDD	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent	31/10/2013	Mixed DNA profile. Major component uploaded to NCIDD - UKM1 Mixed profile Minor component unsuitable for comparison	Unknown Profile	27/02/2014	Complex mixed profile unsuitable for interp or comparison	Updated/Incorrect	Complete withdrawal of original result
	UUMV	04/10/2013	Complex mixed DNA profile. Unable to load to NCIDD Complex mixed DNA profile - cannot exclude - evidence	Evidence	11/02/2014	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent	02/07/2015	2 x Complex mixed DNA profile - cannot exclude	Evidence	16/12/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Sexual Offences	07/07/2015	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	20/10/2015	Three person mixed DNA profile 3 person mixed profile - conditioned on - elimination 3 person mix rem - support for contrib 10 000 to 100 000 - evidence	Incorrect	Change from unsuitable profile to an interpretable profile

[redacted]	Wounding	[redacted]	15/09/2015	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	19/10/2015	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		09/02/2015	3 person rem - support for contrib 1 billion-100 billion - elimination	Evidence	18/09/2015	3 person mix rem- support for contrib 100000 to 1 million - elimination	Incorrect	Change in support for contribution level
	Robbery Offences		31/07/2015	Two person mixed DNA profile NCIDD upload - mixed DNA profile - UKF1	Unknown Profile	23/06/2016	(03/09/2015) - This sample has undergone further processing Complex mixed profile unsuitable for interp or comparison (incorrected 03/09/2015) Three person mixed DNA profile 3 person mix - support for contribution 100 to 1000 - evidence	Updated/Incorrect	Multiple changes in interpreation of profile
	Wounding		13/07/2015	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	20/08/2015	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion - elimination Single evidence sample excluded - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		15/10/2014	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	20/05/2015	Three person mixed DNA profile 3 person mixed profile - conditioned on - elimination 3 person mix rem - support for contribution > 100 billion - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Burglary/Enter with Intent		31/03/2015	Partial DNA profile unsuitable for comparison purposes - spin basket for	Partial unsuitable	21/04/2015	Mixed DNA profile. Major component - UKM1 Mixed profile- complex minor unsuit for interp or compar.	Incorrect	Change from unsuitable profile to an interpretable profile
	Burglary/Enter with Intent		31/03/2015	No DNA profile - possible sub-threshold peaks - spin basket for	No DNA	21/04/2015	9 loci DNA profile. Uploaded to NCIDD - UKM1	Incorrect	Change from negative result to full profiler plus profile
	Burglary/Enter with Intent		31/03/2015	No DNA profile - possible sub-threshold peaks - spin basket for	No DNA	21/04/2015	9 loci DNA profile. Uploaded to NCIDD - UKM1	Incorrect	Change from negative result to full profiler plus profile
	UUMV		11/03/2015	No DNA profile - possible sub-threshold peaks - spin basket for	No DNA	21/04/2015	Mixed profile Minor component unsuitable for comparison Mixed DNA profile. Major component - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	UUMV		11/03/2015	Partial DNA profile unsuitable for comparison purposes - spin basket for	Partial unsuitable	21/04/2015	9 loci DNA profile. Uploaded to NCIDD - evidence	Incorrect	Change from profile unsuitable for interp to full profiler plus profile
	Burglary/Enter with Intent		31/03/2015	No DNA profile - possible sub-threshold peaks - spin basket for	No DNA	21/04/2015	9 loci DNA profile- NCIDD- possible sub-threshold peaks - evidence	Incorrect	Change from negative result to full profiler plus profile
	Sexual Offences		18/08/2014	3 person rem - support for contrib 1 million to 1 billion - evidence	Evidence	17/02/2015	3 person mix remaining- support for contrib 1000 to 10000 - evidence	Incorrect	Significant change in support for contribution level
	Wounding		30/11/2013	Two person mixed DNA profile 2 person mixed profile - conditioned on - evidence 2 person mix rem- support for contrib 100000 to 1 million - elimination	Evidence	31/03/2014	(31/03/2014) - This sample has undergone further processing Three person mixed DNA profile 3 person mixed profile - conditioned on - evidece 3 person mix rem - support for contribution > 100 billion - elimination (incorrected 17/2/2015) 3 person rem - support for contrib 1 million to 1 billion - elimination	Incorrect	Multiple changes in interpreation / support for contribution details changed
	Fire/Arson		27/11/2014	Three person mixed DNA profile 3 person mix - supports non contribution - evidence	Evidence	23/01/2015	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV		01/10/2016	Partial DNA profile. Uploaded to NCIDD - UKM1	Unknown Profile	09/12/2016	Complex mixed profile unsuitable for interp or comparison	Updated/Incorrect	Complete withdrawal of original result
	Robbery Offences		16/09/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	18/10/2016	3 person mixed profile - conditioned on - evidence 3 person rem - support for contrib 1 million to 1 billion - elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		02/06/2016	SS DNA profile 9 loci and above LR > 100 billion - evidence	Evidence	25/07/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Sexual Offences		24/07/2014	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	30/05/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on - elimination 3 person mix remaining- support for contrib 1000 to 10000 - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Sexual Offences		24/07/2014	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	30/05/2016	Three person mixed DNA profile 3 person mixed profile - conditioned on - elimination 3 person mix rem- support for contrib 100000 to 1 million - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Steal from Vehicle		08/04/2014	Partial DNA profile. Uploaded to NCIDD - UKM1	Unknown Profile	31/05/2016	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent		14/12/2015	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	13/05/2016	Two person mixed DNA profile 2 person mix - supports non contribution - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Burglary/Enter with Intent		26/08/2015	Mixed DNA profile. Major component uploaded to NCIDD - evidence	Evidence	19/02/2016	Complex mixed profile unsuitable for interp or comparison DNA profile removed from NCIDD	Updated	Complete withdrawal of original result
	Drug Offences		26/02/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	06/12/2017	Three person mixed DNA profile 3 person mix - supports non contribution - evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		13/03/2013	Complex mixed DNA profile - cannot exclude [redacted] Deceased Complex mixed DNA profile - cannot exclude UKF1	Evidence	03/08/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Assault		09/12/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	21/07/2017	Two person mixed DNA profile; 2 person mix profile - support for contrib > 100 billion - Victim; 2 person mix, support for contrib 10 000 - 100 000 - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Assault		12/12/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	21/07/2017	Two person mixed DNA profile; 2 person mix profile - support for contrib > 100 billion - Victim; 2 person mix - support for contribution 1000 to 10 000 - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		07/03/2013	Complex mixed DNA profile - cannot exclude - Deceased	Evidence	20/07/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Weapons Offences		27/06/2017	Mixed profile-no major/minor. INTEL Major loaded to NCIDD UKM1	Unknown Profile	29/06/2017	Complex mixed DNA profile. Unable to load to NCIDD	Incorrect	Complete withdrawal of original result
	UUMV		10/02/2017	Complex mixed DNA profile - cannot exclude - Evidence	Evidence	09/06/2017	Complex mixed DNA profile. Unable to load to NCIDD	Incorrect	Complete withdrawal of original result

	Robbery Offences		23/03/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	31/05/2017	Two person mixed DNA profile; 2 person mix profile - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Sexual Offences		12/01/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	11/05/2017	Two person mixed DNA profile; 2 person mixed profile - conditioned on - Victim; 2 person mix rem - support for contribution > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		19/01/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	03/05/2017	Single Source DNA profile - assumed known contributor - Evidence; Possible sub-threshold information	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		02/08/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	20/04/2017	Two person mixed DNA profile ; 2 person mix profile - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Wounding		01/02/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	05/04/2017	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Evidence; 3 person mix rem - support for contribution > 100 billion - Victim	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		13/12/2016	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	31/03/2017	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Victim; 3 person mix rem - support for contribution > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		24/02/2017	3 person mix - support for contrib 1 million - 1 billion - Victim	Evidence	31/03/2017	3 person mix - support for contribution 100 to 1000 - Victim	Incorrect	Significant change in support for contribution level
	Burglary/Enter with Intent		04/01/2017	Partial DNA profile- NCIDD- possible sub-threshold peaks UKM1	Unknown Profile	15/02/2017	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Assault		21/11/2016	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Victim; 3 person mix remaining- support for contrib 1000 to 10000 - Evidence	Evidence	16/01/2017	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Evidence; 3 person mix rem - support for contribution > 100 billion - Victim	Incorrect	Significant change in support for contribution level
	Rape		24/02/2017	3 person mix - support for contrib 1 million - 1 billion - Victim	Evidence	06/04/2017	3 person mix profile - support for contrib > 100 billion - Victim	Incorrect	Change in support for contribution level
	Rape		08/02/2018	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Victim; 3 Person Mix Rem DNA contrib unsuitable for NCIDD	Evidence	03/12/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Sexual Offences		30/10/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	03/12/2018	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Victim; 3 person mix rem - support for contribution > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		15/01/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	02/11/2018	Three person mixed DNA profile; 3 person mixed profile - conditioned on - Elimination; 3 person rem - support for contrib 1 million to 1 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		02/03/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	30/10/2018	Two person mixed DNA profile; 2 person mixed profile - conditioned on - Evidence; Single evidence sample excluded - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		27/06/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	30/10/2018	Single source DNA profile UKM1; Possible sub-threshold information	Incorrect	Change from unsuitable profile to an interpretable profile
	Sexual Offences		12/09/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination 3 Person Mix Rem DNA contrib unsuitable for NCIDD	Evidence	25/09/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Sexual Offences		12/09/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination 3 Person Mix Rem DNA contrib unsuitable for NCIDD	Evidence	25/09/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent		27/08/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	28/08/2018	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKM1	Incorrect	Change from unsuitable profile to an interpretable profile
	Burglary/Enter with Intent		12/01/2018	Mixed profile-no major/minor. INTEL Major loaded to NCIDD UKF1	Unknown Profile	22/08/2018	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery Offences		21/03/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	09/08/2018	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000 - Evidence 3 person mix profile - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		23/07/2018	3 person mix remaining- support for contrib 1000 to 10000 - Evidence	Evidence	31/07/2018	3 person mix rem- support for contrib 100000 to 1 million - Evidence	Incorrect	Change in support for contribution level
	Traffic Related		11/12/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	27/06/2018	Complex mixed DNA profile - cannot exclude - Evidence	Incorrect	Complete withdrawal of original result
	Rape		30/05/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	26/06/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix rem - support for contribution > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Robbery Offences		07/11/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	01/05/2018	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	GBH/Unlawful Wounding		01/02/2018	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000 - Elimination	Evidence	13/04/2018	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion - Evidence 2 person mix - support for contrib 1 million - 1 billion - Elimination	Incorrect	Significant change in support for contribution level
	Rape		04/01/2018	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix remaining- support for contrib 1000 to 10000 - Elimination	Evidence	05/03/2018	Two person mixed DNA profile 2 person mixed profile - conditioned on - Evidence 2 person mix rem- support for contrib 100000 to 1 million - Elimination	Incorrect	Change in support for contribution level
	Murder (Inc. attempts)		03/08/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	24/01/2018	SS DNA profile 9 loci and above LR > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile

	Murder (Inc. attempts)	17/11/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	24/01/2018	Single source 20 loci DNA profile LR > 100 billion - Deceased	Incorrect	Change from complex unsuitable to a full PP21 profile
	Murder (Inc. attempts)	24/06/2017	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	23/01/2018	SS DNA profile 9 loci and above LR 1 billion- 100 billion - Deceased	Incorrect	Change from unsuitable profile to an interpretable profile
	GBH/Unlawful Wounding	15/11/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	21/11/2019	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Elimination 3 person mix profile - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)	29/10/2019	2 person mix - support for contribution 1000 to 10 000 - Elimination	Evidence	14/11/2019	2 person mix - support for contrib 1 million - 1 billion - Elimination	Incorrect	Change in support for contribution level
	Robbery Offences	10/04/2019	Three person mixed DNA profile No statistical interpretation performed Suspect check Action - No Match - Intel Suspect check - support for contribution > 100 billion - Intel	Intelligence result	22/10/2019	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	31/08/2019	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination 3 person mix remaining - low support for contrib - Evidence	Evidence	02/10/2019	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent	25/02/2019	Three person mixed DNA profile NCIDD upload - mixed DNA profile UKM1	Unknown Profile	29/08/2019	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding	04/06/2019	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile - Intel 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence / Intelligence	29/08/2019	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Drug Offences	29/07/2019	Suspect check - support for contribution > 100 billion - Intel	Intelligence result	02/08/2019	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	25/10/2018	Two person mixed DNA profile 2 person mix - support for contrib 1 million - 1 billion - Evidence 2 person mix profile - support for contrib > 100 billion - Elimination	Evidence	17/05/2019	Three person mixed DNA profile 3 person mix - support for contrib 10 000 - 100 000 - Evidence 3 person mix profile - support for contrib > 100 billion - Elimination	Incorrect	Change in support for contribution level
	Murder (Inc. attempts)	22/01/2019	2 person mix - low support for contribution - Evidence	Evidence	17/05/2019	2 person mix - support for contribution 1000 to 10 000 - Evidence	Incorrect	Change in support for contribution level
	Wounding	08/02/2019	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	10/05/2019	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding	01/02/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	16/04/2019	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)	14/12/2018	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	09/04/2019	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix rem - support for contribution > 100 billion - Deceased	Incorrect	Change from unsuitable profile to an interpretable profile
	Assault	26/10/2013	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	03/04/2019	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Elimination 3 person mix profile - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	GBH/Unlawful Wounding	06/08/2018	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	13/02/2019	Complex mixed profile unsuitable for interp or comparison Quality control failure - results not reportable	Incorrect	Complete withdrawal of original result impacted by a confirmed manufacturer s issue relating to the QIAGEN QIAsymphony instrument at Queensland Health.
	Murder (Inc. attempts)	18/07/2018	Three person mixed DNA profile 3 person mix - support for contrib 10 000 - 100 000 - Elimination	Evidence	07/02/2019	Two person mixed DNA profile 2 person mix- support for contrib 1 billion - 100 billion - Elimination 2 person mix profile - support for contrib > 100 billion - Deceased	Incorrect	Significant change in support for contribution level
	Murder (Inc. attempts)	06/09/2018	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion - Elimination	Evidence	07/02/2019	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Elimination 3 person mix profile - support for contrib > 100 billion - Deceased	Incorrect	Change in support for contribution level
	Sexual Offences	21/07/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	16/10/2020	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix rem - support for contribution > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	GBH/Unlawful Wounding	28/07/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	15/10/2020	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion - Evidence 3 person mix profile - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape	08/07/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	09/10/2020	Single source 20 loci DNA profile LR > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)	07/07/2020	Three person mixed DNA profile 3 person mixed profile - conditioned on - Deceased	Evidence	09/10/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	06/12/2019	Three person mixed DNA profile Single evidence sample excluded - Deceased	Evidence	26/04/2022	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Deceased	Incorrect	Significant change from excluded to >100 billion support for contribution
	Sexual Offences	15/05/2020	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination 3 person rem - support for contrib 1 million to 1 billion - Evidence	Evidence	18/09/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

	Rape	08/06/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	03/09/2020	Mixed DNA profile Mix - support for contrib > 100 billion - Elimination Mix - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape	24/07/2020	Mixed DNA profile Mix - support for contrib > 100 billion - Elimination Mix - support for contrib > 100 billion - Evidence	Evidence	03/09/2020	Complex profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	22/06/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	03/09/2020	Mixed DNA profile Mix - support for contrib > 100 billion - Elimination Mix - Support for contribution 2 to 1 million - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Sexual Offences	02/10/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	24/07/2020	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)	04/12/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	13/07/2020	Mixed DNA profile Assumed contributor - Deceased Mix - NCIDD upload - UKP2	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape	21/03/2020	Two person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKF1 2 person mix profile - support for contrib > 100 billion - Evidence	Evidence	28/05/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	05/05/2020	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination	Evidence	11/05/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	28/05/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	09/04/2020	Two person mixed DNA profile 2 person mix profile - support for contrib > 100 billion - Evidence 2 person mix profile - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)	20/05/2019	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	02/04/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Child Offences	28/11/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	24/03/2020	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	GBH/Unlawful Wounding	17/12/2019	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Elimination	Evidence	13/03/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	15/07/2017	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix rem - support for contrib 10 000 to 100 000 - Deceased	Evidence	09/03/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Murder (Inc. attempts)	15/07/2017	Two person mixed DNA profile 2 person mixed profile - conditioned on - Evidence 2 person rem- support for contrib 1 million to 1 billion - Deceased	Evidence	09/03/2020	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix rem - support for contrib 10 000 to 100 000 - Deceased	Incorrect	Change in support for contribution level
	Rape	25/01/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	03/03/2020	Two person mixed DNA profile 2 person mixed profile - conditioned on - Evidence 2 person mix rem - support for contribution > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Robbery Offences	14/05/2019	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence	Evidence	27/02/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape	30/09/2019	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	25/02/2020	Mixed DNA profile Assumed contributor - Elimination Mix - Support for contribution 2 to 1 million - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Drug Offences	17/08/2019	Three person mixed DNA profile 3 person mix - support for contribution 1000 to 10 000 - Evidence	Evidence	21/02/2020	Complex profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Burglary/Enter with Intent	30/01/2020	Single source DNA profile UKM1	Unknown Profile	10/02/2020	Single source DNA profile UKF1	Incorrect	Incorrect gender originally reported
	Murder (Inc. attempts)	25/07/2019	Three person mixed DNA profile 3 person mixed profile - conditioned on - Evidence 3 person mix rem - support for contribution > 100 billion - Deceased	Evidence	05/02/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery Offences	13/11/2019	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence	Evidence	29/01/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Assault	17/09/2019	Three person mixed DNA profile 3 person mix- support for contrib 1 billion - 100 billion - Evidence	Evidence	22/01/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery Offences	05/11/2019	Mixed DNA profile Mix - NCIDD upload - UKM1	Unknown Profile	15/01/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	GBH/Unlawful Wounding	22/11/2019	Three person mixed DNA profile NCIDD upload - Intel mixed DNA profile UKF1 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence	14/01/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Wounding	25/10/2019	Three person mixed DNA profile 3 person mix - support for contrib 1 million - 1 billion - Evidence 3 person mix profile - support for contrib > 100 billion - Elimination 3 person mix profile - support for contrib > 100 billion - Elimination	Evidence	08/01/2020	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV	16/08/2021	Mixed DNA profile Mix - NCIDD upload	Intelligence result	17/12/2021	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

[redacted]	Murder (Inc. attempts)	[redacted]	13/07/2021	3 person mix remaining - support for contrib 100 to 1000 - Elimination 3 person mix remaining - low support for contrib - Elimination 3 person mix remaining - support for contrib 100 to 1000 - Elimination 3 person mix remaining- support for contrib 1000 to 10000 - Elimination	Evidence	22/11/2021	3 person mix rem - support for contrib 10 000 to 100 000 - Elimination 3 person mix rem - support for contrib 10 000 to 100 000 - Elimination 3 person mix remaining - support for contrib 100 to 1000 - Elimination 3 person mix rem- support for contrib 100000 to 1 million -	Incorrect	Change in support for contribution level
	Murder (Inc. attempts)		13/07/2021	Results Received 13/07/2021 [redacted]	Evidence	22/11/2021	[redacted] ence	Incorrect	Multiple changes in interpretation of profile
	Murder (Inc. attempts)		13/07/2021	[redacted]	Evidence	22/11/2021	3 person mix remaining- support for contrib 1000 to 10000 - Elimination [redacted]	Incorrect	Change in support for contribution level
	Murder (Inc. attempts)		18/05/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	15/11/2021	Mixed DNA profile Assumed contributor - Evidence Mix - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Wounding		26/07/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	09/11/2021	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence Mix - Support for contribution 2 to 1 million - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		16/06/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	22/09/2021	Three person mixed DNA profile 3 person mixed profile - conditioned on - Elimination 3 person mix remaining- support for contrib 1000 to 10000 - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Sexual Offences		08/07/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	07/09/2021	Two person mixed DNA profile 2 person mixed profile - conditioned on - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		29/03/2021	Suspect check Action - No Match - Intel	Negative intelligence result	27/08/2021	Suspect check - support for contribution > 100 billion - Intel	Incorrect	Complete change from negative contribution to > 100 billion contribution
	UUMV		03/08/2021	[redacted]	Unknown Profile	05/08/2021	NCIDD upload - Intel mixed DNA profile UKF1	Incorrect	Incorrect gender originally reported
	Rape		01/06/2021	[redacted] ce	Evidence	14/07/2021	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Wounding		14/12/2020	[redacted] vidence	Evidence	14/07/2021	[redacted]	Incorrect	Incorrect person validated as contributing to profile originally
	GBH/Unlawful Wounding		07/04/2021	[redacted] parison	Complex unsuitable	21/06/2021	Three person mixed DNA profile 3 person mix profile - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		05/05/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	15/06/2021	Two person mixed DNA profile 2 person mixed profile - conditioned on - Elimination 2 person mix rem - support for contribution > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		24/02/2021	Three person mixed DNA profile 3 person mixed profile - conditioned on - Deceased 3 person mix rem- support for contrib 100000 to 1 million - Elimination	Evidence	05/05/2021	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery Offences		07/09/2020	Three person mixed DNA profile Suspect check - support for contribution > 100 billion - Intel NCIDD upload - Intel mixed DNA profile UKF1 3 person mix profile - support for contrib > 100 billion - Evidence	Evidence / Unknown Profile	29/04/2021	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		13/04/2021	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence Mix - support for contrib > 100 billion - Elimination	Evidence	29/04/2021	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Liberty Offences		11/02/2022	2 person mix remaining - low support for contrib - Evidence	Evidence	21/07/2022	2 person mix remaining- support for contrib 1000 to 10000 - Evidence	Incorrect	Change in support for contribution level
	Rape		27/04/2022	Remaining contribution - inconclusive - Evidence	Evidence	05/07/2022	2 person mix rem - support for contrib 10 000 to 100 000 - Evidence	Incorrect	Change in support for contribution level
	Burglary/Enter with Intent		04/06/2022	NCIDD upload - mixed DNA profile UKF1	Unknown Profile	05/07/2022	NCIDD upload - mixed DNA profile UKM1	Incorrect	Incorrect gender originally reported
	Murder (Inc. attempts)		25/08/2021	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence Mix - Support for contribution 1 million to 100 billion - Evidence	Evidence	21/06/2022	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result

[redacted]	Rape	[redacted]	10/01/2022	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	15/06/2022	Mix - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Wounding		24/02/2022	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	07/06/2022	Mix - support for contrib > 100 billion	Incorrect	Change from unsuitable profile to an interpretable profile
	Liberty Offences		07/01/2022	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence Mix - NCIDD upload UKM2 (Resulted in cold link suspect ident)	Evidence / Intelligence	13/05/2022	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Rape		25/02/2022	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	26/04/2022	Mix - NCIDD upload UKM2	Incorrect	Change from unsuitable profile to an interpretable profile
	Sexual Offences		02/12/2021	Mixed DNA profile Assumed contributor - Elimination	Evidence	25/02/2022	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	UUMV		24/05/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	18/02/2022	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence Mix - support for contrib > 100 billion - Evidence Mix - support for contrib > 100 billion - Elimination	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		07/12/2020	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	16/02/2022	Two person mixed DNA profile	Incorrect	Change from unsuitable profile to an interpretable profile
	Murder (Inc. attempts)		02/02/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	16/02/2022	Mixed DNA profile Mix - support for contrib > 100 billion - Evidence	Incorrect	Change from unsuitable profile to an interpretable profile
	UUMV		07/02/2022	NCIDD upload - mixed DNA profile UKM1	Unknown Profile	08/02/2022	NCIDD upload - mixed DNA profile UKF1	Incorrect	Incorrect gender originally reported
	Murder (Inc. attempts)		16/08/2021	Complex mixed profile unsuitable for interp or comparison	Complex unsuitable	04/02/2022	Mixed DNA profile Mix - NCIDD upload UKM1	Incorrect	Change from unsuitable profile to an interpretable profile
	Rape		11/11/2021	Mix - support for contrib > 100 billion - Evidence	Evidence	25/01/2022	Complex mixed profile unsuitable for interp or comparison	Incorrect	Complete withdrawal of original result
	Robbery Offences		18/01/2022	Mix - NCIDD upload UKM1	Unknown Profile	24/01/2022	Mix - NCIDD upload UKF1	Incorrect	Incorrect gender originally reported
	Burglary/Enter with Intent		10/01/2022	NCIDD upload - mixed DNA profile	Unknown Profile	11/01/2022	NCIDD upload - mixed DNA profile	Incorrect	Incorrect gender originally reported

Count of Explanatory notes re change in result	
Explanatory notes re change in result	**Total**
Change from complex unsuitable to a full PP21 profile	1
Change from negative result to full profiler plus profile	3
Change from profile unsuitable for interp to full profiler plus profile	1
Change in support for contribution level	15
Complete change from negative contribution to > 100 billion contribution	1
Complete withdrawal of original result	339
Complete withdrawal of original resultimpacted by a confirmed manufacturer's issue relating to the QIAGEN QIAsymphony instrument at Queensland Health.	1
Incorrect gender originally reported	6
Incorrect person validated as contributing to profile originally	1
Multiple changes in interpreation	1
Multiple changes in interpretation of profile	1
Significant change from excluded to >100 billion support for contribution	1
Significant change in support for contribution level	6
Change from unsuitable profile to an interpretable profile	61
Complete withdrawal of original result*This result was originally reported as Complex mixed profile unsuitable for interp or comparison on 12/2/13 then was re-reported as mixed in May 13 then Complex again in June 13	1
Multiple changes in interpreation / support for contribution details changed	1
Grand Total	**440**

EXHIBIT 11

Analysis of fail to profile DNA person samples by financial year

Financial year	Total number samples processed by financial year (approx)	TOTAL Samples Failed to Profile (FTP) by financial year	% of submitted samples which Failed to Profile (FTP)	TOTAL number of reworks requested	Total number of samples where rework is finalised	Number of profiles obtained as a result of rework	% of Number of profiles obtained as a result of rework
Jan 2001 - June 2001	3000	12	0.40%				
July 2001 - June 2002	18519	140	0.76%				
July 2002 - June 2003	14777	256	1.73%				
July 2003 - June 2004	15980	102	0.64%				
July 2004 - June 2005	14297	38	0.27%				
July 2005 - June 2006	17526	117	0.67%				
July 2006 - June 2007	16301	205	1.26%				
July 2007 - June 2008	15763	434	2.75%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2008 - June 2009	17458	1073	6.15%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2009 - June 2010	16888	1328	7.86%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2010 - June 2011	15198	926	6.09%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2011 - June 2012	14182	771	5.44%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2012 - June 2013	14378	1132	7.87%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2013 - June 2014	16558	1002	6.05%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2014 - June 2015	17184	1106	6.44%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2015 - June 2016	18990	337	1.77%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2016 - June 2017	16229	261	1.61%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2017 - June 2018	16028	216	1.35%	Unable to confirm exact numbers by year, see Legacy FTP reworks tab			
July 2018 - June 2019	15391	148	0.96%	133	133	131	98.50%
July 2019 - June 2020	14611	132	0.90%	95	95	94	98.95%
July 2020 - June 2021	12289	176	1.43%	158	158	157	99.37%
July 2021 - June 2022	11921	216	1.81%	192	181	181	100.00%

	TOTAL number of reworks requested	Number of profiles obtained as a result of rework	% of Number of profiles obtained as a result of rework
Legacy Person samples that originally FTP re-analysed as a part of Ice Project	884	843	95%
Legacy Person samples that originally FTP re-analysed (Insp DNA Approved)	1925	1811	94%

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF DUNCAN MCCARTHY

I, **Duncan McCarthy,** of 200 Roma Street, Brisbane, Queensland 4001 state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

Current Employment

1. I commenced duties as Acting Superintendent of the Queensland Police Service (QPS) Forensic Services Group (FSG) on 25 July 2022. However, I substantively hold the rank of Inspector and am ordinarily the Forensic Manager for South Eastern Region in the QPS).

2. As a Forensic Manager, I am responsible for the standards of the technical examinations conducted by my Scenes of Crime Officers (SOCOs), the correct laboratory authorisations and accreditation of facilities under my leadership. I maintain strong working relationships with the frontline police districts and forensic officers around Queensland and overview examinations conducted for serious crime scenes. I work closely with Criminal Investigators to provide advice on forensic examination results and assist to guide further examinations of sampling needed for QPS investigations.

3. Attached and marked **'Exhibit 2'** is a copy of my CV.

Tertiary Qualifications.

4. I completed a Bachelor of Applied Science, Forensic Investigation, issued by the Canberra Institute of Technology, ACT in 2010.

5. I was awarded a Certificate of Expertise in the Science of Fingerprints by the Australasian Forensic Field Sciences Accreditation Board in 2003.

Courses and/or diplomas

8. I have also completed a Certificate IV in Workplace Training and Assessment in 2010 issued by the QPS, a NATA Technical Assessors Program, delivered by the National Association of Testing Authorities in Brisbane QLD 2012 and a Diploma of Public Safety, Forensic Investigation (Crime Scene Investigation), issued by the Canberra Institute of Technology, ACT in 2006.

Board/Association Appointments

10. In 2018 I was conferred the title of Adjunct Fellow of the University of QLD for my contribution to research in the School of Psychology, this position remains current.

11. During 2018 – 2020 I held a position on the national Board of the Australian Forensic Science Assessment Body. I withdrew from that position on my appointment as an Inspector, Forensic Manager.

12. From 2016 – 2020 I held the position as QPS representative on the National Institute of Forensic Science (NIFS) Scientific Advisory Group for Fingerprint Specialists. I withdrew from that position on my appointment as an Inspector, Forensic Manager.

Employment Chronology

13. I joined the New South Wales Police Force (NSWPF) and commenced recruit training at the Goulburn Police Academy in February 1995. I completed recruit training in August 1995, where I was assigned as a general duties probationary Constable to Parramatta Police Station. My next stations included postings at Windsor, Mt Druitt and Cabramatta Police Stations in general duties and a special operations role. In July 1998, I commenced duties as a Fingerprint Technician in the NSWPF Fingerprint Section. I continued training to achieve fingerprint experts accreditation and commenced duties in Wagga Wagga Crime Scene Section in February 2001. I performed the role of a scenes of crime officer and fingerprint technician and achieved Fingerprint Experts accreditation in 2003.

14. In late 2004, I applied for a position as a Fingerprint Expert, and Sergeant in the QPS. I commenced duties with the QPS Fingerprint Bureau (FPB) in December 2004. Whilst performing duties in the QPS FPB, I conducted comparisons of fingerprints, reviewed identification decisions, conducted examinations developing latent fingerprints, prepared

and presented expert evidence and examined deceased persons to capture fingerprint impressions.

15. I performed duties as a part of Disaster Victim Identification (DVI) operations, including the Boxing Day Tsunami DVI in Thailand in 2004, and the Lockhart River Air crash in 2005. I performed the role of acting quality manager in the QPS FPB and moved into a training officer's role in 2010. During my duties as a training officer and later promotion to Senior Sergeant Training Manager in 2016, I introduced a Diploma of Forensic Investigation qualification with the QPS Academy and later introduced a Graduate Certificate in Forensic Fingerprint Investigation with Griffith University. I was and remain, a partner investigator with the University of QLD School of Psychology on two Australian Research Council linkage grants, researching the expertise that existed in fingerprint examiners.

16. I was promoted to the position of Forensic Manager, South East Region in February 2020. It was at this time that I assumed the responsibilities for the operations, laboratories and accreditation of the Scenes of Crime (SOC) functions of FSG in my assigned region. My manager is the Superintendent, Commander of Forensic Services group, Bruce McNab. I have two Scenes of Crime (SOC) Officer in Charge (OIC) Senior Sergeants that report to me and one Forensic Coordinator (FC) Senior Sergeant that also reports to me.

Forensic Managers

17. Whilst a Forensic Manager (FM) is not required to hold any formal qualifications such as a bachelors or post graduate degree in science, they are required to hold a crime scene examination authorisation or a certification in a recognised forensic discipline such as fingerprint identification. In addition, officers who return to the FSG after a period working in other areas and previously held a crime scene examination authorisation or certification in a recognised forensic discipline would also be qualified to hold the position as a FM.

18. As a FM, I am responsible for the standards of the technical examinations conducted by my Scenes of Crime Officers (SOCOs), the correct laboratory authorisations and accreditation of facilities under my leadership. This includes the first forensic response by SOC team members at crime scenes, where evidence is preserved, examined and collected for criminal investigations. Our laboratories are used to conduct examinations

on exhibit items which cannot be conducted at crime scenes. This includes both fingerprint evidence and biological sampling for DNA. Maintaining accreditation and correct standards in each laboratory ensures the quality and integrity of the results provided to investigators.

19. As a FM, I maintain strong working relationships with the frontline police districts and forensic officers around Queensland and overview examinations conducted for serious crime scenes. This is necessary as the focus and priorities at scenes can change depending upon the information received and external factors such as the weather. I work closely with Criminal Investigators to provide advice on forensic examination results and assist to guide further examinations of sampling needed for QPS investigations. As results can be complex or difficult to interpret, I assist in the understanding of how a result could impact a criminal investigation.

Forensic Coordinators

20. A Forensic Coordinator (FC) assists and reports to their respective FM. FC's are not responsible for managing a team of SOCS's in a work unit. Rather, their primary functions are to provide advice, leadership and coordination of a FSG response at scenes. Whilst the FM also performs part of this role, many scenes are complex and protracted. This role assists in maintaining high standards of practice both in the response to crime scenes, but also in the management of day-to-day business and examinations conducted by SOCOs in FSG.

21. Forensic Coordinators are required to have successfully completed a Scenes of Crime Officer training course or equivalent, but many also hold formal qualifications such as a bachelors or post graduate degrees in science.

22. At present, there are eight Forensic Coordinators in the QPS being:

    (a) Senior Sergeant [redacted] who is responsible for the South East Region and reports to me;

    (b) Senior Sergeant [redacted] who is responsible for the South Brisbane Region and reports to Inspector [redacted];

    (c) Acting Senior Sergeant [redacted] who is responsible for the Southern Region and reports to Inspector [redacted];

(d) Senior Sergeant [redacted] who is responsible for the North Brisbane District Region and reports to Inspector [redacted];

(e) Senior Sergeant [redacted] is responsible for the North Coast Region and reports to Inspector [redacted];

(f) Acting Senior Sergeant [redacted] who is responsible for the Central Region and reports to Acting Inspector [redacted];

(g) Senior Sergeant [redacted] is responsible for the Northern Region and reports to Inspector [redacted]; and

(h) Senior Sergeant [redacted] is responsible for the Far Northern Region and reports to Inspector [redacted].

Scenes of Crime Officers and Scientific Officers

23. The role of a SOCO requires the preservation, recording, collection and examination of items of interest, both at a crime scene, or in a laboratory for forensic evidence. This evidence could be trace DNA, biological samples, fingerprints, shoe impressions or other evidence types. Detailed photographic methods are used to record crime scenes and evidence, appropriate protective equipment and handling methods are employed by SOCOs to avoid contamination and loss of evidence. These skills and methods are used across all crime scene responses from stolen vehicle examinations, up to performing examinations in homicide scenes. SOCOs are authorised to perform crime scene examinations of a broader, or general nature.

24. My experience in the specific nature of the duties performed by Scientific Officers (SOs) is limited. From my knowledge, they perform more specialised and complex examinations in serious crimes and can hold more specific certifications and authorisations in defined forensic disciplines, for example fire scene examination. SOs are also trained and authorised to collect samples from more complex chemical examination methods and can provide more detailed evidence on crime scene reconstruction and blood spatter analysis.

25. As such, SO's perform more complex sampling, examination and interpretation functions than SOCOs. In addition, SOs are not called upon to perform examinations on routine crimes that do not relate to complex investigations, such as stolen vehicles.

Crime categories and priority categories

26. FSG are required to respond to two broad categories of offences being Major Crime Offences and Volume Crime Offences.

27. Major crime offences are serious personal violence offences, including homicide, sexual assault and armed robbery crimes. They are also categorized by the longer possible terms of imprisonment that conviction of these crimes could hold for an accused person.

28. Volume crime offences are those linked to property and lesser violent acts, such as break and enter, vehicle theft and common assault offences.

29. The distinction between these types of offences allows FSG to assign appropriate effort and resources to investigations. This allows for a more detailed and prioritised approach to serious crime and resolutions for aggrieved persons.

30. As to the prioritisation of DNA sampling requests, I personally have only ever worked under two DNA sampling request categories being Priority 1 (P1) sampling requests and Priority 2 (P2) sampling requests.

31. Priority 1 (P1) sampling requests related to exhibits that are prioritised for analysis by Queensland Health Forensic and Scientific Services (QHFSS). From my 2020 to 2021 experience, P1 requests were reserved for major crimes being the most serious offences such as homicides or related crimes. These sampling requests typically concerned either trace DNA swabs, blood or tapelift exhibits. QHFSS usually advised QPS DNA Management Unit (DMU) of a result of P1 sampling requests in approximately 7 days.

32. Priority 2 (P2) sampling requests were routine sample requests without any additional priority placed on their analysis. From my 2020 to2021 experience, P2 requests did not have to be specifically requested and related to all crime types not covered by P1 sampling requests such as volume crime matters.

33. It could be many weeks or months before QHFSS advised QPS DMU of a result of P2 sampling requests

34. As a result of a conversation I had with David Neville, who was the Inspector of the DMU in or about April 2020, I understand that:

(a) P1 sample limits for homicide requests were capped and sent in tranches. A 'first 25' would be determined between the FM or FC and the investigators. Then, further tranches of 25 would be determined based on the samples collected from the crime scene, the circumstances of the investigation and the results of the first 25; and

(b) Request for analysis of additional P2 samples were only sent to QHFSS if approved by the Inspector of the DMU following a recommendation from a FM.

(c) P3 samples for volume crime offences were limited to one trace DNA sample per case.

35. I am unaware of any specific guidelines in relation to DNA processing limits.

36. My personal use of the sampling prioritisation process involved sending a request through the FSG DMU, and their Inspector in charge. I have no personal knowledge of by who or when the system was created, however I understand the need to manage the volumes of DNA sample requests on an analysis process.

37. From anecdotal information, QHFSS DNA has processing capabilities based on limitations of sampling through puts and exceeding these would put additional strain on turn-around times. To my knowledge, expected turn-around times were non defined but were based on the number of samples that were submitted for processing.

38. The process by which I requested additional testing on DNA samples was through direct request with the FSG DMU. I sought advice from the DMU in situations where results were confusing or on samples that perhaps could have returned a result, for example a negative or inconclusive result on a presumed blood sample. This process was through email request and gaining further information via conversations on what could potentially be reworked if a particular result was returned on important exhibits. This was also performed on an ad hoc, case-by-case basis for serious investigations such as active homicides.

QPRIME and the Forensic Register

39. The Forensic Register (FR) was introduced to the QPS in around 2003. It was created by a FSG member at the time, Troy O'Malley. This system created greater visibility of forensic results, allowed for image storage and enabled greater accountability and audit

trails, especially for necessary administrative and technical review processes needed for NATA accreditation.

40. The Queensland Police Records Information Management Exchange (QPRIME) system was introduced, to my knowledge, in 2006. It is the storage location for police reports of crime occurrences, intelligence reports, task generation for document and statement creation and a source of information on many police activities.

41. Whilst the FR and QPRIME are separate systems, I understand software links enable the information between the two systems to automatically synchronise. This enables SOCOs to receive daily taskings from host investigators through QPRIME and upload details of their forensic examination in the FR so as to provide investigators with a summary of their forensic examinations.

42. All members of FSG have an appropriate level of access to the FR. Access to the FR is linked to a defined organizational position number, as assigned by the QPS Human Resources unit. Some members of QPS District Intelligence units have been provided with access to the FR in order to review forensic identification data. This access is required to be supported by a regional FM and training provided in the use of the FR by local FCs or Scenes of Crime Officers in Charge (SOC OIC) prior to being granted access. Each officer's access is defined by the rank they hold, the technical functions they perform and the authorisations they possess. A higher-level manager is needed to approve access levels in conjunction with the Inspector of the Quality Management Section (QMS).

43. In my view, the present limits upon persons who have access to the FR are sufficient and appropriate because they reduce the need for unnecessary reviews to ensure compliance with audit trails and processes needed for NATA accreditation. These limitations also ensure that only a discrete number of people are exposed to sensitive and graphic content.

Provision of photographs to QHFSS

44. The method of photographing and collecting biological samples for SOCOs is governed by procedures maintained by the FSG QMS. Dependent upon the nature of the sample, SOCOs could use a presumptive test for possible blood stains prior to swabbing or use either tape lifts or swabs for trace DNA. This decision is often determined by the nature of the surface the target material is located on and the nature of the sample material.

45. These items are then packaged, sealed and photographed as forensic exhibits, with their unique barcode and added to the FR. Details of the SOCOs examination are then updated in QPRIME and the items are assigned property reference numbers within QPRIME within the relevant QPRIME occurrence.

46. I do not know whether or how such processes may have differed from 2008 onwards when AUSLAB was in operation. I am not aware of process changes influenced by AUSLAB operations.

47. I understand that QHFSS started using the FR in 2017 whilst I was working with the Fingerprint Bureau (FPB) within FSG. I am not, and was not, authorised to collect biological samples. As such, I did not receive and training regarding QHFSS processes at that time.

48. Since performing my role as a Forensic Manager, I am aware that photographs of DNA sample packaging are required by QHFSS and FSG. I am aware that these images were reviewed by members of QHFSS for quality assurance as I had been involved in conversations where SOCOs in my team had been required to correct errors with regard to 'incomplete' or 'insufficient' photography of their packaging. Errors of 'incomplete' or 'insufficient' imaging included instances where corners of an exhibit envelope were not visible in the image.

Crime scenes

49. Police communications will alert frontline police crews to an incident. After initial attendance by these police, investigators will determine whether a forensic response is needed. If a crime scene requires a forensic examination, an on call or rostered duty SOCO will attend the scene.

50. Upon that initial contact to a SOCO, and often after a SOCO has responded on scene, they will make contact with the FC to advise them if the matter is serious and assistance in managing aspects of the scene examination are required.

51. If the crime scene involves a major crime such as a homicide, sexual assault or armed robbery or is likely to require a protracted forensic examination, a FM may be called in to assist the FC. In those situations, a FM will also share some on call duties with FCs to assist with fatigue management. The FM or FC cover the role of making contact with

other FSG specialist services such as Forensic Imaging or SO's. These decisions are made based on the best practice for preserving and recording evidence and in consideration of local factors such as inclement weather.

52. Detectives or investigators will view aspects of the scene, both in person and through the images captured by SOCOs in their examinations. SO's will attend and conduct examinations only in circumstances where their skills are needed over and above the skills of a SOCO. For the interpretation of complex blood spatter, ballistics reconstruction or fire scene examinations, SOs will lead their examination process assisted by SOCOs.

53. A decision is made on whether a SO attends a scene in consultation with the relevant FC or FM at the scene, and the OIC Senior Sergeant of the Major Crime Unit (MCU), who manages the response of SOs state-wide.

54. In my time as a FM, there have only been a small number of occasions where a SO has not attended as expected at scenes. These instances have been due to staff unavailability or situations where a difference of opinion has arisen between an SO and the FC. In those situations, the FM (or FC) and the Inspector of the Scientific Section FSG will decide whether an SO would attend and examine a scene.

55. Once at the scene, an important task is to check the scene cordon and boundaries, based on the circumstances or information about the offence available at that time. This ensures that the integrity of evidence is not lost due to a larger than expected area of interest around a primary or secondary scene. This is done in consultation with the lead criminal investigator assigned to the investigation. SOCOs will continue with the recording of key areas of interest in the scene and an order of examination will be made, usually with Forensic Imaging conducting their scanning of the scene, followed by SOs conducting their recording and sampling.

56. As additional information comes to light from investigators, areas of interest and items of significance are recorded and collected for further examination. An FC will make decisions on the best location for evidence examinations or the collection of items for later sampling. Samples are taken from surfaces and items at the scene where possible and the fingerprint examination of the scene is often conducted after evidence has been sampled and recorded due to the impact of examination methods on items of evidence.

In these circumstances, a FC will make decisions on the best location for evidence examinations or the collection of items for later sampling.

57. The decision to take either a DNA sample or latent fingerprint from an item or surface is often a collaborative one made between the FM/FC, the SO, SOCO and criminal investigators. This decision is based on the most appropriate evidence sought and a sequence will be chosen that allows for both DNA, fingerprints and other sampling to be conducted in a non-destructive manner, that minimises the risk of contamination. At times an FM will assist an FC taking over the scene control duties, and often a SOCO will assume responsibility for examinations once an SO has completed their examinations. For these reasons there are often a number of forensic officers that can make and inform these decisions.

58. Once a biological sample is collected from the scene, it is immediately entered into the FR and QPRIME as an exhibit.

59. SOCOs and SOs will generally be in charge of their own sample transport from the scene to their respective forensic units and property storage locations. The samples are stored in appropriate conditions according to procedure and secured in an approved property point, awaiting transport to QHFSS for analysis. The forensic property points in use within SOCO offices in each FSG location are the responsibility of the respective FMs.

60. Based on my experience in South East Queensland, when a decision is made on each sample's priority for analysis a SOCO from that work unit will sign out the exhibits on the FR and QPRIME and transport the samples in person to QHFSS and sign them into the QFHSS property point.

61. Each exhibit item collected has a unique Forensic Exhibit Number (FEN) barcode label assigned to it. It is also given an QPRIME property reference number and these numbers are clearly displayed on the item packaging, along with a seal that is signed by the collecting officer.

62. The training material that governs the examination of scenes for SOCOs and broader forensic operations are maintained by the Inspector for QMS in the FSG. This program is delivered as a Diploma of Forensic Investigation qualification, with the QPS Academy as the registered training organisation of the qualification. This program delivers the

training needed for SOCOs so they can perform duties in compliance with the following procedures:

(a) CSE 100 'Crime Scene Examination';

(b) CSE 101 'Biological Evidence';

(c) CSE 104 'Fingernail Scrapings';

(d) CSE 111 'Hair and Fibre Detection and Collection';

(e) CSE 115 'Use of Combur Test Strips';

(f) PFS 100 'Quality Manual';

(g) PST 104 'Seminal Fluid Screening and Sampling Protocols'; and

(h) PST 106 'Enhancement of Impression Evidence'.

63. The specific training material that relates to SOs is regulated by the Inspector, Scientific Section FSG and this training program is managed by the Senior Sergeant, Quality Assurance and Training, Major Crime Unit.

Quality Management

64. A technical review is a check to ensure the correct methods were used by a forensic officer in conducting their examinations and in the conclusions they report. This review ensures that the results reported from these examinations can be relied upon to support investigative actions and decisions.

65. A forensic officer with a minimum of the same level of authorisation is needed to complete a technical review. Not all technical reviews need an officer of a higher rank to complete the reviews as the check of the correct methods used is based on the skills of the reviewer involved.

66. Each forensic unit, such as the Fingerprint Bureau (FPB) and the Major Crime Unit (MCU), have different requirements for technical reviews based on the different skills employed. They have specific procedures also managed by the QMS, that regulate these practices.

67. The FSG Quality Manual, document PFS100, is the overarching procedure that defines the processes of review in FSG.

68. For SOCO examinations in major crime cases, all examinations are required to be technically reviewed. For volume crime cases, a dip sample of five (5) examinations are reviewed across a year for fully qualified and authorised SOCOs.

69. All first year SOCO trainees require all their examinations regardless of crime type, to be technically reviewed. In each case where a statement is needed from a SOCO examination, these case files and examinations also require technical review to ensure accuracy.

70. I am not aware of any departure from the procedures and requirements of technical reviews for SOCOs. A technical review is conducted by a qualified SOCO with the same level of authorisation as the SOCO completing the examination under review. No SOCO or FSG officer is to review their own work.

71. Since I commenced in the role of FM for the South East Region in February 2020, my SOC work units have completed 5805 case file technical reviews on the FR.

72. An Administrative (Admin) Review is a check on the detail of the information recorded within an examination summary. All examination summaries, regardless of crime type need an Admin Review completed. For example, this includes the correct related QPRIME reference numbers, the time images were captured at a scene, related exhibit numbers and the correct type of exhibit category.

73. Admin Reviews are routinely completed by appropriately trained SOC office staff members, and SOCOs. No level of authorisation is needed, only training in the process.

74. Since I commenced in the role of FM for the South East Region in February 2020, my SOC work units have completed 21783 case file admin reviews on the FR.

75. A scene assessment is the review of a forensic officer's practical examination skills at scene via observation. An officer with the same level of technical authorisation is needed to observe another officer conduct their examination and make an assessment on the use of required procedures and methods.

76. For SOCOs, a scene assessment is needed every two (2) years.

77. The requirements to undertake scene assessments, or ongoing assessments of competency is contained within the FSG Quality Manual, document PFS100.

78. I am unaware of any departures from the procedures and guidelines related to scene assessments in SOC.

79. Since my commencement as FM for the South East Region in February 2020, all SOCOs within my teams have completed a scene assessment, as a period greater than two (2) years has elapsed. All of these assessments have been conducted according to the requirements of PFS100, and number approximately 52.

80. I am unable to find specific data on the FR in relation to these records.

81. A FM can access the examination records of each SOCO and SO on the FR. If additional review is needed it can be readily accessed at any time. Regular assessments for SOCOs in relation to the collection of DNA or biological samples occur within the same framework as the scene assessment process.

82. I have no specific knowledge of the assessment process for SOs.

Backlogs and background to the priority system

83. My exposure to backlogs in DNA testing has been limited to the period where I commenced duties as the FM for the South East Region. I have been aware that routine processing of DNA samples takes numerous weeks, and when Priority 1 samples were requested for serious crimes, these results were returned in approximately one week.

84. My knowledge of DNA testing thresholds is limited. I am not aware of the nature of the threshold changes to DNA testing in 2018.

85. I have not made enquiries as to the current DNA processing backlog.

Communication between the QPS and QHFSS

86. The only occasion where I have met with QHFSS members has been when I requested a meeting to discuss large scale operations with large volume of samples for DNA testing. During February and March 2020, I contacted Senior Sergeant Ruben Collopen from the QPS DMU to assist in arranging meetings with QHFSS.

87. In early 2020 a meeting I requested involved the sampling needed for Operation [redacted] and related operations [redacted] This meeting took place at QHFSS conference rooms [redacted] Thomas Nurthen from the QHFSS DNA Analysis

team attended the meeting, along with members from QPS Scientific Unit and QPS criminal investigators. I was made aware of the process of micro concentration, and the practice of 'pooling' related samples together in order to increase the volumes of DNA material and meet the necessary processing thresholds. A process of 'quantification and hold' was also discussed where samples were analysed for the amount of DNA material present and a decision then made for further processing based on the volume of cells present. I don't recall the details of what was discussed in terms of the processing threshold needed at that time.

88. I don't recall any minutes being kept of this meeting but I took notes in my official notebook number J 001984 during the meeting. I have noted in these records instances where Thomas Nurthen made contact with me to indicate samples previously noted as 'insufficient DNA' would be recommended further sample amplification. A copy of those notes is attached and marked '**Exhibit 3**'.

89. This is the only occasion where I have called a meeting with QHFSS team members. On other occasions where I needed to discuss DNA sampling submissions, I liaised with the FSG DNA Management Unit (DMU). If any errors have occurred with respect to DNA sampling or results, these issues are communicated through the FSG DMU. Such instances include times where contamination of samples has occurred or results have been returned to FSG personnel who have been nominated as the source of a biological sample.

Issues with "insufficient DNA" results

90. My understanding of the QHFSS quantitation testing stage is that, at this point, analysis is conducted to determine whether there is sufficient DNA in the sample to proceed with further testing. I have gained this knowledge through the activities I have undertaken as part of my role, and meeting I have had with QHFSS, and other discussions had with the FSG DMU. I have never been made aware of values related to 'cut off' amounts and what options existed with these sample results.

91. To my knowledge, the term 'No DNA' described a result where there was no DNA at all detected in a sample.

92. The term 'Insufficient DNA' related to a result where there was not enough DNA present to yield a profile; yet some DNA was found in the sample.

93. Until I had conversations in February and March 2020 with FSG DMU and QHFSS team members, I didn't understand the options available with the 'Insufficient DNA' samples. After conversations in [redacted] 2020, if such a result was returned, I would contact the FSG DMU and discuss what potential existed for further processing. Prior to these dates I was not in a role that had regular interaction with QHFSS DNA results or the need to consider what other options existed with samples.

94. My understanding of concentration or micro concentration of a DNA sample was that it was a method of increasing the level of DNA within a sample to improve the chances of obtaining a profile.

95. After a sample is processed and a profile obtained, the results that I have observed included as described above, a 'single contributor match' with a specific likelihood reporting the match. A 'mixed profile' with two or three defined contributors, has been reported, and 'complex mixed profiles' have been reported with many potential contributors. I have also had sample results return an 'exclusion' result, where a contributor's profile has been eliminated or excluded as a potential source.

96. I am not aware of a date when results reporting or practices for 'Insufficient DNA' changed for the QPS. I have not commenced a process of revisiting DNA results from scene examinations under my supervision as yet. There have been approximately 20 instances since 2020 where I have requested samples be either reworked or concentrated, based on the advice of the FSG DMU team.

Issues with the withdrawal of results

97. I cannot recall a situation where QHFSS has provided a result from a sample that was later withdrawn. I have not received advice from the FSG DMU regarding the withdrawal of results. The potential consequence of a withdrawn result could be extreme. Depending on whatever other evidence might exist in any given case, it has the potential to lead investigators to incorrectly arrest and charge a person unrelated to a crime. A further severe consequence could include the wrongful conviction of an innocent person of a serious offence.

Communication and training

98. I am not aware of any form of training provided by QHFSS as to terminology used in the reporting of their results such as 'no DNA detected' or 'insufficient DNA detected'. All the terms that I came to know were introduced to me through the course of my duties as a FM, through the meeting I held with QHFSS and through conversations with QHFSS team members. The staff from the QPS DMU were also a good source of information to clarify what results and particular wording meant.

99. I am unaware of any QPS training provided to investigators on QHFSS DNA results or terminology. When results have become available, it has been my role, and that of the FC, to let investigators know what their options could be with respect to further DNA processing.

100. I am not aware of any instances where errors or mistakes have occurred with QHFSS processing. I am also unaware as to whether the process of reporting of such errors or mistakes would differ from the ordinary process of reporting results through the FR to QPRIME and sending an email to the relevant investigators.

Communication by the QPS with the ODPP

101. I am unaware of any communication requirements between the QPS and the ODPP in relation to DNA results. I do not know how the QPS communicates with the ODPP about errors or mistakes in the QHFSS laboratory.

Forensic medical examinations

102. SOCOs from my work units are called upon to assist in the collection of samples from forensic medical examinations. With the exception of intimate sample collection, the process for recording, collecting and packaging samples follows the same process as required by procedure CSE 100 Crime Scene Examination and CSE 101 Collection of Biological Evidence.

103. In the case of intimate sample collection, particularly sexual assault victim samples, SOCOs assist a Doctor or approved medical examiner collect these samples.

Property points

104. Property points in QPS stations are designated by the respective Assistant Commissioner of that Region. They can be physical offices staffed by designated property officers or large exhibit facilities or 'drop safes'.

105. Drop safes are secure storage locations that are available for after-hours deposits of exhibits, after they are entered onto QPRIME. FSG and SOCOs do not use Drop Safes for exhibits. FSG maintain our own property points within SOC offices and their hosted facilities.

106. It is my responsibility to oversee the audit processes of the FSG facilities in my area as part of our NATA accreditation requirements. An audit is also completed of our facilities exhibits as a part of the Ethical Standards Command (ESC) inspections program. These audits are independent of each other and take place at different times of the year. They are completed by different teams. A NATA technical audit is conducted by QPS SOCOs at an authorised practitioner level, overviewed by the regional FM. The focus of these audits is the technical examinations and case file details recorded in relation to approved procedures, laboratory equipment and authorised FSG officers.

107. The ESC inspection audit is completed by the FM or delegated FC in the respective region. These audits are not focussed on technical forensic procedural matters. Examples of the focus of this audit process include the correct storage of QPS firearms, operational equipment such as ballistic vests and official notebook retention. A common element of these audits is property, where exhibit holdings from forensic examinations are checked under both inspection programs.

108. As a part of our NATA Technical audit processes, at times some minor issues are raised with the method in which some SOCOs have completed their exhibit entries or packaging. Examples of these issues include an incorrectly transcribed reference number or an incomplete description of the exhibit item. As I overview a regular audit process requiring checks of exhibit holdings, I am able to confirm that instances of non-compliance are infrequent and minor. There have been no failures to regularly monitor and audit FSG property points in my area of responsibility.

Issues raised by QHFSS about collection

109. I have not received information regarding issues on the QPS sample collection for DNA testing. To my knowledge, the processes followed by QPS FSG were heavily informed by the requirements of the QHFSS analysis process to ensure we have minimal instances of contamination and lost evidence.

Sampling consumables

110. I am unaware of the brand name and types of the DNA consumables used by the QPS FSG. I understand that they are recommended by the FSG QMS and my team members that are responsible for ordering DNA consumables comply with these requirements.

111. I am not aware of the historic consumables used by the QPS for DNA sampling between 2015 and 2017.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 13th day of September 2022

..... [redacted] .... [redacted] .....

Duncan McCarthy Witness

JUSTICE OF THE PEACE (QUALIFIED)
QUEENSLAND GOVERNMENT
Reg.No. [redacted]
DEPT. OF JUSTICE & ATTORNEY-GENERAL

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF DUNCAN McCARTHY
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice 2022-00040 - Requirement to give information in a written statement, Duncan McCarthy – dated 19/07/2022
2.	Curriculum Vitae of Duncan McCarthy - undated
3.	Official Police Notebook of Duncan McCarthy, J 001984 pages 84, 87, 98, 99, 115, 116, 198, 199, 240, 241, 242, 243, 244, 246, 247, 248, 250, 263, 264 – dated between 12/11/2019 and 03/06/2020

EXHIBIT 1

Notice number: 2022/ 00040

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Duncan McCarthy

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement prepared either in affidavit form or verified as a statutory declaration under the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Monday 1 August 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 19th day of July 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00040

Schedule of topics for statement

Inspector Duncan McCarthy

Current Employment

1. What is your full name?
2. What is your current rank?
3. What is your current position with the QPS?
4. Outline the job description for your current position.
5. Attach a current CV.

Tertiary Qualifications

6. What are your tertiary qualifications?
7. Where and when did you obtain your tertiary qualifications?

Courses and/or diplomas

8. What courses and/or diplomas have you completed?
9. Where and when did you complete the courses and/or diplomas?

Board/Association Appointments

10. What board positions and/or appointments outside of the QPS have you held?
11. When did you first hold them?
12. When did you cease to hold them?

Employment Chronology

13. When did you first join the NSW Police Force and the QPS?
14. When did you start recruitment training?
15. When did you finish recruitment training?
16. When and where were you first posted/stationed?
17. To what position were you first posted/stationed?
18. Outline your career progression through the NSW Police Force and then the QPS.

19. Outline your current position, your responsibilities, who you report to and the staff that report to you.

Forensic Managers

20. What is the role of a Forensic Manager?

21. What qualifications are required to hold the position of Forensic Manager?

22. Outline the chain of command for each Forensic Manager.

23. How many Forensic Managers are there in Queensland, who are they, what rank are they, and what is their respective geographical jurisdiction/region?

Forensic Coordinators

24. What is the role of a Forensic Coordinator?

25. What qualifications are required to hold the position of a Forensic Coordinator?

26. Outline the chain of command for each Forensic Coordinator.

27. How many Forensic Coordinators are there in Queensland, who are they, what rank are they, and what is their respective geographical jurisdiction/region?

Scenes of Crime Officers and Scientific Officers

28. Explain the role and typical duties of a Scenes of Crime Officer (**SOCO**).

29. Explain the role and typical duties of a Scientific Officer (**SO**).

30. In your explanation, outline the fundamental differences between a SOCO and SO.

Crime categories and priority categories

31. Provide the definitions, and the purposes of the definitions, of *Major Crime* and *Volume Crime*.

32. Outline what the three DNA sample priority categories are, how the priority system works, what the expected turnaround times are, who introduced the system, when it came into operation, why it came into operation, and whether the system is still in operation.

33. Outline the DNA sample submission limits – if any – for *Major Crime* and *Volume Crime*, how the system works, the nature of the system (as a rule, principle, policy, law or guideline), how the system relates to the priority system, when the system was introduced and who introduced the system.

34. Outline the options for further testing and retesting for DNA, and the process by which that is requested and achieved.

QPRIME and the Forensic Register

35. Outline what the Queensland Police Records and Information Management Exchange (**QPRIME**) is, its purpose and how it works. Include when it came into operation and what, if any, use you have for it in your current role.

36. Outline when the Forensic Register (**FR**) was created and implemented by the QPS, what it did when it was first implemented – i.e. when just QPS were using it, and what it does now and how it works. Explain how it interacts with QPRIME.

37. Outline who has access to the FR, and who does not have access to the FR. Provide your opinion as to whether this access is sufficient and appropriate, or if it should be expanded or reduced. Explain how the FR is divided within the QPS (between SOCOs, SOs, Forensic Managers, Forensic Coordinators, Investigators etc…). Explain the interfaces.

Provision of photographs to QHFSS

38. Explain the process/method of collecting and photographing samples of biological material. Include what information is then uploaded to QPRIME and the FR and what is pushed across to the QHFSS FR interface. Include information about how this occurred from around 2008 when AUSLAB was in operation. Explain how you know this information.

39. After QHFSS started using the FR in 2017, identify what instructions, advice, training and/or guidelines you received from the QPS about providing photographs, related to biological samples, to QHFSS via the FR. If you were involved in providing such photographs prior to QHFSS using the FR, please identify what similar instructions, advice, training and/or guidelines you received at that time.

40. Explain whether you understood that QHFSS staff looked at the photographs.

Crime scenes

41. Explain the circumstances in which you are contacted to be involved with managing a crime scene.

42. Explain the process or chain of contact, starting with the first responding officer, that leads to you being contacted about a new crime scene. Explain what steps you will take once you are contacted. Include an explanation of the circumstances in which

you will typically attend the crime scene, and the circumstances in which you will not attend.

43. In what circumstances does a SO attend a crime scene, and in what circumstances do they not attend a crime scene? Include an explanation of who decides whether a SO attends, and at what stage they make that decision.

44. Since you commenced as a Forensic Manager, has there been an occasion or occasions in which no SO has attended a crime scene even though, normally, one or more SOs would attend such a crime scene?

45. Explain what you do once you attend a crime scene, and the role of SOCOs, SOs and the Forensic Coordinator.

46. Who determines what type of forensic samples to test for (eg DNA, fingerprint etc), where to take those samples from, and what method of sampling to use?

47. Once a sample is taken from the scene, who takes possession and/or responsibility for that sample? Who is responsible for transporting the sample away from the scene? In the area you manage, where are the samples first transported to once taken from a crime scene? Who has responsibility for the facility where the samples are then kept?

48. How are the samples then ultimately transported to Queensland Health Forensic and Scientific Services (**QHFSS**)?

49. How are samples of biological material, or pieces of evidence which will be tested for biological material, labelled and identified when collected and stored?

50. Identify all training policies, procedures and manuals that you are aware of that regulate the matters discussed in paragraphs 41 to 49, above.

Quality Management

51. Explain what a technical review is – its purpose and what it involves – and whether there are different types of technical review. Identify who conducts a technical review and the minimum rank a police officer must hold to conduct a technical review.

52. Identify which QPS policies, guidelines or similar documents (if any) concern technical reviews.

53. Outline how often technical reviews are conducted for major crimes, and any further detail about technical reviews specific to major crimes.

54. Outline how often technical reviews are conducted for volume crimes, and any further detail about technical reviews specific to volume crimes.

55. Outline any departures from policies and guidelines you are aware of with respect to how technical reviews are conducted, and who participates and completes a technical review.

56. Provide any data concerning the conduct of technical reviews and aggregate results of technical reviews since commencing in your role as Forensic Manager.

57. Explain what an administrative review is. Provide the same level of information and details about administrative reviews as is requested in relation to technical reviews at paragraphs 51 to 56, above.

58. Explain what a scene assessment is and what it involves. Identify which staff members must be subjected to a scene assessment, and how often scene assessments occur. Identify who conducts a scene assessment and the minimum rank a police officer must hold to conduct a scene assessment.

59. Identify which QPS policies, guidelines or similar documents (if any) concern scene assessments.

60. Outline any departures from policies and guidelines you are aware of with respect to how scene assessments are conducted, who participates and completes a scene assessment, and how often they are conducted.

61. Provide any data concerning the conduct of scene assessments and the aggregate results of scene assessments since your commencement as Forensic Manager.

62. Identify any further type of oversight that the Forensic Manager has over the work of SOCOs and SOs, if any.

63. Outline any training, proficiency testing, education and/or field assessments that regularly occur for SOCOs and SOs in relation to forensic biological sample collection. Who conducts it and how often is it conducted?

Backlogs and background to the priority system

64. Explain what backlogs in DNA testing you have experienced while in the QPS. Detail when the backlogs were, the causes of the backlogs and what was done to resolve the backlogs.

65. Are you aware of a change in thresholds for DNA testing that was implemented in 2018? If yes, explain your understanding of the change.

66. Has the backlog in DNA testing changed since 2018, and what is the length of the backlog currently?

Communication between the QPS and QHFSS

67. Outline how often do you meet with QHFSS representatives in a formal and regular way. What are these meetings called? What is discussed at these meetings? Who attends these meetings? Are minutes kept? Who keeps these minutes? Provide copies of these minutes for the meetings you have attended.

68. How are problems or errors that arise at QHFSS with respect to testing, analysis or results communicated to the you? Provide detail as to what type of matters are raised with you.

69. Provide an example of an issue raised with you.

Issues with "insufficient DNA" results

70. What is your understanding of the QHFSS' process at the quantitation stage of testing, and how do you have this understanding? Detail options for retesting and further testing and any changes in cut-off amounts (including when those changes were made). Explain the terms *No DNA* and *Insufficient DNA* and what options are available when presented with such results. Include how those options are exercised. Also detail you understanding of what concentration/micro-concentration is and when it was used.

71. Explain, broadly, the different types of results that are reported once the full testing occurs – eg full DNA match, mixed match, complex mixed profile etc.

72. Explain if, and how, the practice of QPS has changed regarding results that are reported as *insufficient DNA*. Identify when (month and year) this change was implemented.

73. Are you revisiting any *insufficient DNA* results that were received on or after February 2018 and were not submitted for retesting? If so, advise how are you revisiting those results and which (if any) samples are you submitting for further testing?

Issues with the withdrawal of results

74. Have you experienced a situation whereby QHFSS provide a positive DNA result/profile, and then, upon a request for a statement about that result/profile, QHFSS seek to withdraw the result?

    (a) If yes, please provide full details including when it first started and how many times it has occurred in cases you have been involved.

    (b) If no, please confirm.

75. Have you received any information from the DNA Management Unit about the retraction of results? If yes, attach a copy of the communication.

76. Outline the consequences (or potential consequences) for an investigation where there is a withdrawal of results by QHFSS after first reporting that there was a DNA result/profile.

Communication and training

77. Outline the methods of internal QPS communication surrounding DNA analysis and results. In particular, explain how the terms used (e.g. *No DNA detected* or *Insufficient DNA detected*) and the options available for further testing and/or re-testing are communicated to police officers such as investigators, SOCOs and SOs? How are the investigators, SOCOs and SOs advised and educated about the terms used and the options available to them when receiving such a result? Was any training about the terms used and the options available delivered to other police officers such as investigators, SOCOs and SOs?

78. Have you been advised of any errors or mistakes made in the QHFSS laboratory? How was this information communicated to you and other police officers such as investigators, SOCOs and SOs?

Communication by the QPS with the ODPP

79. How does the QPS communicate with the ODPP about issues raised by the DNA Management Unit or QHFSS about errors or mistakes in the QHFSS laboratory?

Forensic medical examinations

80. Identify the role, if any, you, or your staff, have in collecting, monitoring or dealing with DNA collection and results obtained from forensic medical examinations.

81. Have you observed any reoccurring problems or issues with the collection, processing or provision of DNA results obtained from forensic medical examinations?

82. Explain if DNA samples and/or results obtained from forensic medical examinations are treated any differently to other DNA samples and/or results

Property points

83. Explain the different types of property points at QPS stations. Explain the audit and quality management processes for property points managed by the FSG.

84. Explain your duties with respect to auditing property points in the geographic area which you supervise.

85. Have there been any reoccurring problems, or failures to follow policy, in the management of property points containing biological material in the geographic area which you supervise? If so, provide details.

86. Have there been any failures to regularly audit property points containing biological material in the geographic area which you supervise? If so, provide details.

Issues raised by QHFSS about collection

87. Have any issues been raised with you regarding the QPS' collection of samples for DNA testing, for example that the methods, systems, processes, protocols, guidelines, or standards are not being followed, or that there are systemic problems with the collection processes, systems or methods for the collection of samples for DNA testing? If so, provide details of the communication(s) raising the issue(s). If not, please confirm that there have not been any issues raised.

Sampling consumables

88. What sampling consumables are used by the QPS currently, and since 1 July 2017 (for example, brand and type of swab used, tape etc…)?

89. List the sampling consumables used by the QPS between 2015 and 2017.

EXHIBIT 2

Curriculum Vitae - Duncan McCarthy

Current position:
Inspector, Forensic Manager
South East Region, Forensic Services Group
Queensland Police Service

[redacted]

QUALIFICATIONS AND COURSES

Bachelor of Applied Science, Forensic Investigation, 2010
Canberra Institute of Technology, ACT
Certificate IV in Workplace Training and Assessment, 2010
Queensland Police Service (QPS)
Diploma of Public Safety, Forensic Investigation (Crime Scene Investigation), 2006 Canberra Institute of Technology, ACT
Certificate of Expertise in the Science of Fingerprints, 2003
AFFSAB & NSW Police, Australian Fingerprint Bureau
NATA Technical Assessors Program, 2012
National Association of Testing Authorities, Brisbane QLD

AWARDS

Australian Federal Police Operations Medal, Cawdor Clasp, Operation Cawdor, Thai Tsunami DVI Operation 2005
Queensland Police Commissioners Certificate (Operational) for diligent service in Operation Cawdor, Thai Tsunami DVI Operation 2005
Allan Hodda Memorial Award (research activity award)
Australian and New Zealand Forensic Science Society 2007

PUBLISHED WORKS

Robson S.G, Searston R.A, Edmond G, McCarthy D.J, & Tangen, J.M (2020) An expert – novice comparison of feature choice. *Applied Cognitive Psychology*, 2020; 1-12.

McCarthy D.J. (2014). Sulfosalicylic Acid and Rhodamine 6G as a fixing and Development Solution for the enhancement of Blood Impressions. *Journal of Forensic Identification, 64(4),* 351-374.

Thompson, M. B., Tangen, J. M., & McCarthy D. J. (2013). Human matching performance of genuine crime scene latent fingerprints. *Law and Human Behavior, 38*(1), 84-93.

Thompson, M. B., Tangen, J. M., & McCarthy D. J. (2013). Expertise in fingerprint identification. *Journal of Forensic Sciences, 58*(6), 1519-1530.

McCarthy D.J. (2012). Latent Fingerprint Recovery from Simulated Vehicle-Borne Improvised Explosive Devices. *Journal of Forensic Identification, 62(5),* 488-516.

Tangen, J. M., Thompson, M. B., & McCarthy D. J. (2011). Identifying fingerprint expertise. *Psychological Science*, *22*(8), 995–997.

[redacted]

WORK HISTORY

Current position:
Inspector, Forensic Manager, South Eastern Region
Forensic Services Group

24 February 2020 – Present

Placement history

08/03/2021 – 21/03/2021	A/Supt	Forensic Services Group
24/02/2020 – promotion	Insp	Forensic Manager South East Region
24/06/2019 - 06/09/2019	S/Sgt	Strategy and Performance Officer Operations Support Command
31/01/2019 - 03/03/2019	A/Insp	Forensic Manager Central Region
12/09/2018 - 19/09/2018	A/Insp	Officer in Charge Fingerprint Bureau (numerous occasions in this acting position throughout 2017 – 2018)
March 2018 – 24/02/2020	S/Sgt	Information Management Cell State Police Operations Centre
08/02/2016 – promotion	S/Sgt	Manager, Training and Research Fingerprint Bureau
09/03/2015 - 13/02/2015	A/S/Sgt	Quality Assurance Officer Fingerprint Bureau
21/11/2011 - 16/12/2011	A/S/Sgt	Quality Management Officer Quality Management Unit
29/12/2004 – appointment	Sgt	Fingerprint expert Fingerprint Bureau
07/02/2001 - 22/12/2004	Det S/C	Expert, Crime Scene officer Wagga Wagga Crime Scene Unit - NSWPF
12/07/1998 - 06/02/2001	S/C	Fingerprint technician, Fingerprint Section NSWPF
21/04/1997 - 13/07/1997	Const	Operation Puccini, Cabramatta NSWPF
02/08/1995 - 11/07/1998	Const	General Duties officer, Mt Druitt Police NSWPF

External positions:

National discipline representative on the Australasian Forensic Field Sciences Accreditation Board, 2018 - 2020

QLD Representative on the National Institute of Forensic Science, Fingerprint Scientific Advisory Group, 2017 – 2020

Sessional Academic, Lecturer for both Griffith University (2008 – 2009) and the QLD University of Technology (2015 – 2017).

EXHIBIT 3

12/11/2019

03/06/2020

QUEENSLAND POLICE

OFFICIAL POLICE NOTEBOOK

No. J 001984

07/10
02000193

[redacted]

→ Discuss GC CIB / MOC cases on QPS.
[redacted] Re exhibit exam's
+ request for case prioritization
meeting on exhibits - GC SCI.

1010 [redacted]

1105 Contacted T. Northen @ QHSS on DNA
exam'n / sampling matters for GC
CIB / MOC's case exhibits
→ need to contact Ruben Gallopen
@ DNA QPS on exhibit sampling
→ then request meeting @ QHSS
w/ Tom or alt. venue based
on GC CIB feedback.

- discussed above w/ Belinda @ CMA
SCI → meeting @ QHSS OK
→ arrange after call to Ruben

[redacted]

114

1240 Contacted S/Sgt Collopen Re. case conference for [redacted]
→ Ruben to be involved, add. info. provided
- add sampler / processing on targetted exhibits (TVET next week?) @ QHSS avail;
☐ Thomas Northern
☐ GC SCI (Belinda + Smithy?).
☐ Ruben Collopen
☐ Paul Quin, GC Maxima

- add discussion w/ A/S/Sgts Wilkins + Whitlock on the FR automation of info. needed to complete ID notif for District OIC's / Intel
→ Gary to progress w/ Supt. FSG.

- add. calls + emails Re. GC Case meeting for Opr. [redacted]
→ QHSS, DNA QMS, GC SCI
- Maxima + GC MOCS incl. in proposed meeting emails (1550).

→ [redacted]

0800 [redacted]

×

0945 Attend JTC – QHSS – Case exhibit meetings on Operations [redacted] w/ GCS CIB/ Homicide/ MOCS.
→ QHSS Thomas Nutten / Angela (D. Smith + L. Bettison), SCI.
- discuss. commence 1025 after tour of facility.

→ scraping methods of sampling @ QHSS needs whole item submission; any impact / time concerns with sampling?

OP [redacted]
- Murder / vehicle; POI/ [redacted]
  - Re-work current mixtures
  - Pooling of samples for items

→ items sub. by lexi this date, email to come for Quant. + Hold level analysis - [redacted] (9 from m/v).

OP [redacted]
- Raceway - [redacted]
  → [redacted] extraction poss., also [redacted] + lower threshold; review all.

All Op. FR's to be linked/checked; [redacted]

→ review + link if not on FR link chart already

- numerous discussed/ prioritised exhibit analysis to be listed + summarised by S/C Quinn + email through for review, collate all FR/ QP. (1205).

1300 [redacted]

[redacted]

1245 Contacted by A/Insp. [redacted] NBD/SA after receiving my email requesting assist to progress our case file audit tasks received from QMS

→ [redacted] le informed me that the way this request had been forwarded by QMS was a significant shift & a much greater impost on SOC/FMS than previous process
- assist will still be vital from QMS in [redacted] opinion, [redacted] to contact Insp. Keatinge on the issue to discuss. (1255)

→ 1305 - informed by [redacted] Insp. Keatinge unavail until tomorrow @ earliest, further discussion is needed.

1425 Contacted by Tom Nutter of QHSS Biology, amplification recommended & poss. on ucat test results from [redacted] exhibits.

→ informed Tom I would progress an add. amplification request after contact w/ IO's.

1610 Add. emails from SCI officers involved in case to assist
→ response to Shane Everest
→ email to Russell Jones on intent to amplify sample

☐ check email to Russell Jones + progress approv. to amplify DNA samples.

13/3/20 FRI 0615 - commenced duty @ Coonamble SER FM.
→ reviewed emails + FR of scene attended after hours.

0805 [redacted]

for Op. [redacted] probative value + cost recovery / discuss w/ CIB.

1125 [redacted]

- checked cold emails + requests for LGIN SOC, GCS + Op [redacted] exhibit. examin requests

1410 Contacted A/SSgt Cameron Hardlam, Burleigh CIB
→ discuss priority for GSR + demand based on brief / defence artifacts
- potential for costs, ~~co~~ clearly articulated $800 per sample likely + pooling / sharing of costs (1415)

1420 Contacted D. Potter; re same, GSR samples + related messages from Op. [redacted] (1430)

1430 Contacted Thomas Nurthen, QHSS DNA;
- requests for DNA sampling + pooling of Op. [redacted] exhibits
→ email to come confirming priority CIST

- discussed need to check in again w/ Dean Anderson on his return to ~~f~~ from leave
→ discussed Op. [redacted] brief submission date of [redacted] priority on this date (1445)

16/4/20 THUR 0605- commenced duty, attended PHQ + collected 2x Toughbooks for LGIN + GCS SOC

→ discussion w/ FPB IPU staff, D. Booth on current workloads, demands + arrangements for imaging (0700).

0735 [redacted]

0815

- review of FR's from O/night
→ emails on staffing + good work etc.
[redacted]

0845 Dean Anderson - Burleigh CIB
· reply / call to discuss status of Op. [redacted] DNA sampling requests
- explained briefly pooling ability w/ Tom Nuttlem as planned + next steps
→ Daniel ok in concept, discuss further when back from NSW search. (0850)

0905 [redacted]

- role out of SOC refresher training + paper from Matt Krosch
[redacted]

[redacted]

1110

1115

7/5/20
THUR

→ review of notes + conversations on DNA sampling request for Op. [redacted] from DS Anderson + Tom

Northern recently on pooling / submission of items;
→ Add to items Ident. on pp 196 of diary + related

1040 [redacted]

OP [redacted]
· Rubber Band [redacted] ~~(I)~~ T/L
(X) Cartridge case [redacted] (I)
SEE BELOW → [redacted]
~~Cargo shorts;~~
→ Tape lift from Rubber band; [redacted]
Rubber band (whole item);
(Pool both items + re-test) (?)
(→) GSR sample on [redacted] priority, then look @ [redacted] following this
(1) EMAIL - contact [redacted] (GSR SWABS) @

→ Murder - [redacted]

(2) EMAIL (X) Cartridge case swabs
[redacted] SWAB [redacted] [redacted]
SWAB
"
"
"
- ALL @ QHSS
→ POOL TOGETHER

→ cartridge case, [redacted]
· swabs + whole item
(X) NOT Cartridge case → NON DNA SEINS. Flexam (X)

[redacted] shorts for pooling samples;
- (NXP); [redacted]
FRONT LEFT; (INT)
Q [redacted]
Q
Q
Q
POOL

FRONT RIGHT; (INT)
Q [redacted]
Q
Q
Q
POOL (?)

Rear ~~LEFT~~ RIGHT; (EXT)
[redacted]
POOL

- advice provided by Sgt Rasmussen CMA SCI on terms used + clarified loc. / likely source of samples from items

1330 Returned call from DS Dean Anderson, Burleigh CIB on above [redacted] exhibits
→ explained process above + favourable current QHSS DNA processing times
- Also requested assist to located rubber band original item as this needed for pooling @ QHSS + I can't locate on QP property
→ Dean to provide assist. (1335).

1345 Email to Tom Nottem @ QHSS on DNA sampling for Op. [redacted] exhibits
→ outlined desired processing, follow up from prev conversation + info. from prev pages pooling of items.

1450 [redacted]

1610

8/5/20
FRI [redacted]

0845

- cont'd check on exhibit examin request for Op. [redacted]
→ info. received on transport of rubber band item to QHSS for add DNA processing.

11/5/20
MON

[redacted]

- reviewed email / exhibit list from DSSgt R. Jones + DSC P. Quinn LCS MOCS on Op. [redacted] exhibit examin's.

- Bike track car park Zip Ties [redacted]
[redacted] } POOL ITEMS
→ From swabs or loc. orig. items for cut / sample

- Duct Tape Hospital → [redacted]
[redacted] > Advice from SCI - progress sampling if not completed

- DUFAILLY Clothing → [redacted]
[redacted] → Complex Mixed result from QHSS - Unsuitable
→ advice here from QHSS

- [redacted] → [redacted]
→ numerous FEN, see printout
- advice from QHSS needed

- Duct [redacted]
[redacted] } Poss. POOL of items
→ insuff. only concern, QHSS to advise

- Torn cream clothing (FR above)
→ 3 x person mixed DNA profile
• QHSS advice on ability to subtract 2x persons / further processing

[redacted] Safe - (FR above)
[redacted] > Both noted as having insuf. + complex results
- Further advice / clarification from CIB + QHSS needed.

→ CALL QHSS, Tom Northern to discuss then send email + advise DSSgt R. Jones.

0900 Call to T. Northern, Op. [redacted] exhibits
→ reference sample for CONWAY
• during mid-process @ QHSS
(→) Clarify if Ops. [redacted] are no longer linked

- forward thru content + sample list from Paul Quinn w/ my Q & A plus ideas + work on that
→ looking to progress this week + still good sample turn around (0910).

0925 Contact DSSgt Russell Jones on plan to progress sampling on priority list → copy Russell into my response to Tom @ QHSS

→ Russell clarified that the Ops [redacted] all still linked by same offenders - info for Tom (093).

· add call from T. Northem Re. Op. [redacted] exhibits

→ add interviews + reply email on Op [redacted] exhibits to Tom + Russell (1125).

1135 [redacted]

1150

[redacted]

0740 Call from T. Northern;

- Is statement request from One Statement on both QP's
  → Or ~~the~~ One statement on both / each QP
  → Rubber band currently on [redacted] QP, should be on [redacted]
- Rubber band will be sectioned, quant. on each section + pooled if necessary to get result
  → email back to IO's on above (Sean Anderson). (0745) → 0810.

0830 [redacted]

[redacted]

→ reviews images; clear evidence from ligature skin burn + lividity that deceased has been hanging
- likely then fallen down onto ladder, rope directly under

1915 Contacted Tom @ scene
- Tom has sampled rope, FP rear gate + will complete add FP on interior sure door to negate poss. attendance by others who may have disturbed deceased
→ CIB present + happy with ~~evide~~ events + non suspicious (1925).

18/5/20 MON

[redacted]

0830 Call received from T. Northern, QHSS Biology
→ in ~~[illegible]~~ reply to my email on Op. [redacted] exhibits
- Tom unsure of QPRIME reference numbers compliance for requested testing, could pose issues @ Court when on trial

- further conversation needed on rubber band location + QP
→ located in Land of [redacted] @ scene.

0915 [redacted]

1100

1235 Discussed exhibit + examin / requests on [redacted] murder + [redacted] murders w/ S/C Tomsi CMA SCI
→ sampling requests + stand for discussion / processing prior to meeting w/ DSI Flood WED 20/5/20.

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

I, **Sean Michael LOUGHRAN,** of [redacted] Crime Unit, [redacted] state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

Background

1. I am a Detective Senior Constable presently attached to the [redacted] Crime Unit, [redacted] District Criminal Investigation Branch.

2. In [redacted], I was assigned to [redacted] Criminal Investigation Branch, [redacted]. I was the lead investigator and arresting officer in relation to the rape [redacted] of [redacted]

The rape complaint

3. On [redacted] I was working from 12:00pm till 8:00pm. Shortly after the commencement of this shift I was notified of a rape complaint that had been received by other officers [redacted].

4. [redacted]

5. [redacted]

[redacted]

....

Sean Michael Loughran Witness

PEACE (MAGISTRATES COURT) DEPARTMENT OF JUSTICE QUEENSLAND

The SAIK Procedure

6. Rape investigations that are recent and have no 'historic' element, such as this one, are relatively resource intensive in terms of the need to rapidly gather fresh evidence before it can be compromised or lost.

7. At the time of this investigation [redacted] it was standard procedure to transport sexual assault victims to the Royal Brisbane and Women's Hospital (RBWH) to meet with a forensic medical officer (FMO) to undergo the gathering of forensic medical evidence.

8. [redacted] Detective Senior Constable [redacted] transported her to the RBWH for the purposes of completing SAIK procedures, before returning to [redacted] complete a formal, typed statement.

9. [redacted] GP, [redacted] had also taken various medical samples during his initial medical investigation. These items were seized by police to support the investigation.

10. [redacted]

11. The SAIK was lodged as evidence at [redacted] Station at around 7pm [redacted] The following morning, at around 7am, it was transported b[redacted] to QHFSS for scientific examination.

DNA Results

12. [redacted], a forensic report was added to the QPRIME occurrence in relation to the samples taken by Dr [redacted] This advised that swabs taken by him were negative in relation to locating spermatozoa.

13. [redacted] a Forensic report was added to QPRIME in relation to swabs taken from the underwear by the FMO. These had the same result (negative).

[redacted]

....

Sean Michael Loughran Witness

PEACE (MAGISTRATES COURT) DEPARTMENT OF JUSTICE QLD

14. [redacted], a Forensic report was added to QPRIME in relation to high vaginal swabs taken by the FMO. These swabs indicated the presence of DNA and were uploaded into their system (referred to in the report as NCIDD).

15. Forensic reports continued to flow into QPRIME in this sporadic fashion in relation to evidence obtained from [redacted] and from the crime scene examinations [redacted]

16. Typically, DNA matches generate a 'TASK' attached to the crime report number [redacted] which is then forwarded the 'Case Officer' (me) and appears on their task list. In this way investigators are notified of results received.

17. The final forensic outcome-based report for this investigation was received on QPRIME [redacted]

18. As far as I recall, I have no recollection of being advised that any DNA results had 'changed' in status. Since receiving the request to provide information to this Commission, I have checked the forensic reports for this matter and note that several have added details regarding the 'Result being incorrectly reported'.

19. Those reports contain the same information that I recall during the investigation but now have added text, in red, stating '**Please note: FSS have advised the QPS that the result for this exhibit was incorrectly reported and is no longer valid'.** In addition, the following appears in the summary text field **INCORRECT RESULT**.

20. I have not been advised as to what had changed, other than that the results were incorrect.

21. I don't recall having any direct contact with the DNA Management Unit.

22. I don't recall any contact from QHFSS in relation to these results other than what had been uploaded to the QPRIME occurrence. The only other communications received was during the compilation of the brief of evidence when I sent out 'statement tasks' via QPRIME and subsequently received those statements for adding to the brief.

[redacted]

....

Sean Michael Loughran Witness

[redacted]

Impact of DNA results

23. I was aware, whilst conducting this investigation, that results received from QHFSS indicated the presence of a potential 'third contributor'. The following samples yielded this result:

(a) [redacted] Blood stain [redacted]t - POSSIBLE SUB-THRESHOLD INFORMATION "The presence of possible additional DNA was observed within the DNA profile obtained from this item. This possible DNA was not present at a sufficient level to be used for comparison purposes, as it was below QHFSS standard reporting thresholds. This sub-threshold information did not interfere with the interpretation of the reportable DNA components in the DNA profile obtained from this item"

(b) [redacted] Pillowcase - THREE PERSON MIXED DNA PROFILE

(c) [redacted] fitted sheet - THREE PERSON MIXED DNA PROFILE "This item/sample provided a mixed DNA profile that indicated the presence of DNA from two or three contributors. All of the reference DNA profiles associated with this case have been compared with this DNA profile separately. The statistical interpretation shows that some or all of the donors of the reference DNA profiles associated with this case are excluded as having contributed to this mixed DNA profile.

DNA samples seized by investigators was compared against these complex profiles. [redacted] a previous associate of [redacted] was compared, and his DNA was found to have not been contained within that mix. The report was however marked as 'incorrectly reported and is no longer valid'. Both [redacted] and [redacted] also had their DNA compared against the sample and found to have more likely to have contributed rather than not. Again however, these results were both marked as 'incorrectly reported and is no longer valid'

24. This had a significant impact on the direction of the investigation. [redacted] My thinking at the time was to cover off the possibility that the defendant had drugged [redacted] and raped her or that a third, unknown person had potentially been involved in the sexual assault.

[redacted]

Sean Michael Loughran

[redacted]

Witness

25. The defendant was initially charged with rape. The results suggested there may have been a potential 'third contributor' to the DNA located. That introduced the possibility that another person 'could' have been involved and meant there was sufficient doubt, from an evidentiary standpoint. On that basis, a guilty plea was accepted in relation to charges laid by the Director of Public Prosecutions (DPP) under the Criminal Code: s218(1)(c) Administer Drug etc for purpose of sexual act and s352(1)(a) sexual assault. The 'sexual assault' charge was essentially a substitute for the original 'rape' charge.

26. At the time of the trial the ODPP were in possession of all the investigative material including statements from forensic officers. Though I was overseas at the time, and the matter was being managed [redacted] in my absence, I understand the DPP expressed the view that the more successful outcome would be a plea to the substitute charge (of sexual assault) with the administer drug charge to remain as per the indictment.

Prior police investigation

27. [redacted]

TAKEN AND DECLARED before me at [redacted] in the State of Queensland this 15 day of September 2022

[redacted]

....

Sean Michael Loughran Witness

[redacted]

Commission of Inquiry into Forensic DNA Testing in Queensland

Ph 07 3003 9722 | enquiries@dnainquiry.qld.gov.au | PO Box 12028, George St Qld 4003 | www.dnainquiry.qld.gov.au

EXHIBIT 1

Notice number: 2022/00162

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Sean Loughran, Detective Senior Constable

Of: Queensland Police Service

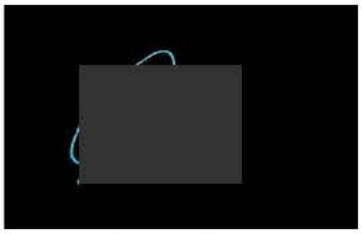
I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5:00pm on 16 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at admin@dnainquiry.qld.gov.au, with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.



12 day of September 2022

Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Commission of Inquiry into Forensic DNA Testing in Queensland

Ph 07 3003 9722 | enquiries@dnainquiry.qld.gov.au | PO Box 12028, George St Qld 4003 | www.dnainquiry.qld.gov.au

Notice number: 2022/00162

Schedule of topics for statement

Sean Loughran, Detective Senior Constable

1. Please explain your role in the investigation of the rape complaint made by [redacted].
2. How did [redacted] complaint first come to the attention of Police?
3. Please explain how [redacted] came to undergo a SAIK.
4. Please explain what you did with the SAIK once she had undergone that testing.
5. Please explain how the results of that testing were first reported to you.
6. Please explain how those results impacted on your investigation.
7. Please explain what the defendant was originally charged with.
8. When did you become aware that there had been a change in the DNA results?
9. What was the change in results?
10. What contact, if any, did you have with the DNA Management Unit and/or the DNA Analysis Unit of Forensic Scientific Services?
11. What, if any, impact did the change of results have on the outcome of this matter?
12. What, if any, contact did you have with the Office of the Director of Public Prosecutions about the DNA evidence in this case?
13. Had the defendant in this case previously been investigated by Police for other, unrelated, sexual offences? If so, please explain your understanding of what occurred in that case, and the basis for that understanding.

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF ASHA LOUANN HAXTON

I, **Asha Louann Haxton,** of 200 Roma Street, Brisbane, Queensland 4001 state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

Current Employment

1. I am a Quality Officer of the rank of Senior Sergeant stationed at the Quality Management Section. I have over 13 years' experience in forensic examinations.

Qualifications and experience

2. I have the following tertiary education qualifications:

   (a) Bachelor of Exercise Science - Griffith University (1999);

   (b) Advanced Diploma of Forensic Investigations - Canberra Institute of Technology (2017);

   (c) Diploma of Forensic Investigations - QPS (2009);

   (d) Cert IV in Training and Assessment - Plenty training (2021).

3. I commenced duty with the Queensland Police Service (QPS) on the 13th of January 2003.

4. I completed my recruit training and was confirmed as a First Year Constable (FYC) on the 30th of July 2004.

5. I completed my FYC training in the Gold Coast District and was transferred to Broadbeach station at the conclusion of my first year, on the 29th of July 2004, for a three year tenure.

6. From February 2007 to November 2007, I undertook a secondment to the Gold Coast Forensic Crash Unit, where I undertook investigations into serious and/or fatal traffic crashes and industrial accidents.

7. On the 30th of July 2008, I was promoted to Senior Constable.

8. On the 25th of August 2008, I commenced working as a Scenes of Crime Officer (SOCO) at the Gold Coast Scenes of Crime (SOC) office, based at Nerang.

9. On the 28th of July 2014, I was promoted to Sergeant, Senior Scenes of Crime Officer, to undertake duties at the Logan Scenes of Crime office.

10. In April 2019, I commenced a secondment period at Training Strategy in Oxley. I was involved in the review of selected Competency Acquisition Program modules.

11. On the 27th of May 2019 I undertook a 3-month expression of interest at the Quality Management Section in Police Headquarters (HQ), undertaking duties relating to policy and procedure in the Forensic Services Group (FSG), as well as an involvement in the auditing processes for the NATA accreditation.

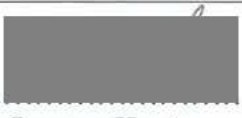
12. I remained at the Quality Management Section from this point, working in the training section, delivering training to Scenes of Crime students and Scenes of Crime Officers.

13. On the 23rd of May 2022, I was promoted to the position of Senior Sergeant, Quality Officer, to undertake the facilitation of the Scenes of Crime training. I am currently undertaking this role.

14. Attached and marked **'Exhibit 2'** is my CV (QP0073).

15. The structure of the Forensic Services Group (FSG) is best explained via the organisational chart.

16. Attached and marked '**Exhibit 3**' is the FSG organisational Chart.



....

Asha Louann Haxton Witness

17. The organisational chart is a visual representation of where each unit in FSG sits. The FSG falls under the Operations Support Command. The FSG comprises several units, undertaking Forensic Support for the QPS.

18. The Superintendent of FSG is the manager of the group. The Superintendent has numerous support staff that report to him/her directly.

19. There are 5 regions in the FSG:

    (a) Central Region;

    (b) Far Northern and Northern regions;

    (c) North Brisbane Regions;

    (d) South Brisbane and Southern Regions;

    (e) South East Regions.

20. Each of these regions has a Forensic Manager (Inspector) and Forensic Coordinator (Senior Sergeant), along with a Senior Sergeant or Sergeant OIC of each section.

21. There are 36 Scenes of Crime Sections, responsible for the examination of volume crime and major crime scenes. All Scenes of Crime officers work within a Scenes of Crime section.

22. From August 2008 through to November 2018, I was part of the Scenes of Crime section of the FSG. Each of these sections fall into one of the above listed regions. The specifics of this are visible in the Organisational Chart marked '**Exhibit 3**'.

23. Further sections falling under FSG include:

    (a) Coronial Support Unit;

    (b) Biometrics Unit;

    (c) Forensic Imaging and Electronic recording sections and Electronic Evidence Unit;

    (d) Quality Management Section;

(e) Scientific Section - There are 4 regional Scientific Sections, in addition to the Brisbane Section. Scientific are responsible for the examination of scenes and exhibits, generally relating to major crime, including homicide and sexual assault. These also placed throughout the regions, however, are managed by an Inspector based within Police HQ.

24. My current role is in the Quality Management Section.

Quality Management Section

25. The structure of the Quality Management Section is currently staffed as follows: -

Inspector Quality Manager- David Keatinge

(a) Senior Sergeant Quality Officer- Audits, Policy and Procedure- Jamie Cook

(i) AO3 Administrative Officer- I am not aware

(b) Senior Sergeant Quality Officer- Training- Asha Haxton

(i) Sergeant Quality Officer- training- Vacant

(c) Principal Research Officer- Matt Krosch

(d) Technical Support Officer (Forensic Register)- [redacted]

(e) AO5 - Team Leader Forensic Reception Centre- [redacted]

(i) AO4- Property Officer- I am not aware

(ii) AO3- Administrative Officer Forensic Reception Centre- I am not aware

(iii) AO3- Administrative Officer Forensic Reception Centre- I am not aware

(iv) AO3- Administrative Officer Forensic Reception Centre- I am not aware.

26. My current role in QMS is the continued development and delivery of the SOC development program. This includes the requirement to meet the standards of the QPS,

and those of the Diploma of Forensic Investigations - under the Registered Training Organisation (RTO) of the QPS.

27. My role description is as follows:

(a) Overview forensic examinations including monitoring of compliance with procedure to ensure the accuracy and reliability of reported results;

(b) Manage and maintain the administrative, financial, strategic planning and quality management activities and processes within the area of responsibility;

(c) Coordinate, monitor and review the education, training and development of staff, participate in performance assessments and ensure subordinates comply with the Service Code of Conduct;

(d) Participate in and/or coordinate multidisciplinary teams involved in ongoing monitoring of forensic services NATA compliance practices (where applicable);

(e) Provide advice including submissions and briefings on administrative and operational activities, relevant legislation, policies, practices and procedures;

(f) Establish and maintain communication channels with internal and external clients and stakeholders and represent the Service on various committees and advisory bodies;

(g) Initiate and promote the development, research and implementation of innovative processes and practices.

28. I report to the Inspector, QMS, currently Inspector David Keatinge. I have one sergeant who is to report to me, however this position is currently vacant.

29. The QMS is tasked with maintaining the quality management system for QPS forensic services, including:

(a) Development and management of forensic technical procedures;

(b) Development and management of administrative procedures associated with forensic services, i.e. case information management and document control;

(c) Ensuring procedures keep in step with scientific advances and reflect world best practice by conducting and managing appropriate research;

(d) Training and developing forensic officers and maintaining training records to meet the Standards of a Registered Training Organisation (2015);

(e) Determining standards for equipment and consumables to be used for forensic purposes;

(f) Ensuring compliance with ISO/IEC 17025 & AS 5388 in consultation with Regional Forensic Managers;

(g) Ensuring that forensic officers maintain competencies and undergo regular competency tests;

(h) Ensuring that the court testimony of forensic officers is regularly assessed;

(i) Coordinating an internal auditing program that monitors compliance with all NATA requirements and maintains accreditation;

(j) Ensuring that all non-compliances and opportunities for improvement are appropriately addressed;

(k) Consulting with regional managers in relation to the quality of forensic services and the technical activities of forensic officers within their regions; and

(l) Providing advice to the Superintendent, Forensic Services Group, in relation to the quality of forensic services and the technical activities of forensic officers within the regions.

QPS Scenes of Crime Officers and Scientific Officers.

30. The role of Scenes of Crime Officers is described in the current position description key accountabilities as follows:

(a) Perform forensic procedures and examinations as authorised by the Superintendent, Forensic Services Group;

(b) Examine incident scenes, attend post mortems, and collect, note and record evidence in various forms (for example photographic recording, development and recording of latent fingerprints, and the collection of physical evidence);

(c) Comply with all requirements of the QPS Forensic Services Quality System, including adherence to forensic procedures and maintenance of a case information management system as approved by the Superintendent, Forensic Services Group;

(d) Be constantly aware of the potential evidentiary value of all aspects of incident scenes;

(e) Appreciate the value of physical and other evidence and how its usefulness in court proceedings relates to the nature of the collections and recording methods used;

(f) Assume responsibility for the maintenance and overview of incident and crime scene integrity by preventing and reducing the potential interference of such scenes by inappropriate actions of other persons;

(g) Conduct follow-up examinations of evidence obtained and prepare documentary and other evidence for use in court proceedings including statements, audio-visual and exhibit presentations;

(h) Liaise with investigative and intelligence personnel outlining activities or crime trends observed and identified during examination of crime and incident scenes within the Division/District/Region;

(i) Set and maintain high standards of performance and conduct at all times, including answering enquiries from the public and members of the Service concerning all matters relating to the Divisional/District/Regional Scenes of Crime activities;

(j) Maintain accurate and timely records of tasks performed within the Division/District/Region by the Scenes of Crime Unit;

(k) Promote and maintain good relations by liaising with and providing advice to members of the community and other police.

31. Business as usual for Scenes of Crime Officers relates to the examination of volume crime offences, as well as some major crime offences. SOCOs are required to triage received requests for service to determine suitability for examination, and to determine time sensitive responses required.

32. SOCOs are also required to assist Scientific officers at major crime scene investigations, generally involving homicide and/or sexual assault.

33. To undertake the role of a Scenes of Crime Officer, officers are required to apply for the training program, and are accepted onto the program if deemed suitable, as positions become available.

34. Scenes of Crime Officers are required to complete a 12 month training package facilitated by QMS, which includes, theoretical and practical training and assessments, in both the workplace and training environment. Upon the successful completion of the Scenes of Crime Development Program, students are awarded the Scenes of Crime Development Program certificate and authorised by the Laboratory Director (Superintendent FSG), to undertake crime scene examinations.

35. Students are also awarded the Diploma of Forensic Investigations, under a Recognition of Prior Learning (RPL) pathway through the QPS as an RTO. The units of study relating to this Diploma RPL are:

(a) Contribute and comply with quality systems (POLFOR017);
(b) Maintain a safe forensic working environment (POLFOR023);
(c) Detect, record and collect forensic evidence (POLFOR024);
(d) Process forensic evidence (POLFOR025);
(e) Prepare and Present forensic Evidence (POLFOR026);
(f) Assess and control incident/crime scene (POLFOR027).

36. The delivered units and subsequent awarding of the qualification is audited through the QPS RTO.

37. All training delivered throughout the program, is developed on the back of the current workplace policy and procedure developed by QMS under the quality system. The training is developed to the ensure techniques taught and assessed meet the requirements of the QPS FSG quality system and is continually updated in line with procedural change.

38. Biological evidence training is delivered over a number of sessions, under varying conditions, with multiple assessment/proficiency requirements.

39. The outline for biological evidence training is attached and marked '**Exhibit 4**'.

40. All assessments relating to the biological evidence training, are contained within the attached assessments marked '**Exhibit 5**'. This exhibit contains the related pages from the Scenes of Crime Development Program assessment workbook. It indicates all requirements of practical assessment for biological evidence. In addition, there are theoretical examinations, which are performed online, via the online platform Microsoft Forms.

41. On conclusion of the 12 month program, students commence the proficiency testing requirements of the quality system as well as the required refresher programs to maintain authorisations.

42. Proficiency tests include-

(a) Participation in internal or external proficiency testing and collaborative trials

Example: <u>After the Fact:</u> After the Fact (AtF) is an online virtual crime scene assessment test for forensic science practitioners. Each designated lab is required to complete the AtF package.

(b) Direct observation of routine work procedures

Example: <u>Scene Assessment (PFS 51)-</u> Completed on a biannual basis. SOCOs are required to attend a scene under assessment from a qualified SOCO (Generally more senior). The scene is required to involve the collection of evidence, but does not specify biological evidence. The SOCO is assessed by the senior member under a number of criteria including:

[redacted]

(c) Evaluation of staff knowledge and understanding

(d) Independent assessment of work undertaken

Example: Technical review of individuals case files

(e) Court testimony monitoring

Example: Completion of court monitoring form, covering the following:

Personal Impression: Voice, Eye Contact, Demeanour, Appearance, Poise

Testimony: Confident, Response to Questions, Technical Knowledge, Clear and Concise, Objectivity, Impartiality, Ability to convey Scientific concepts in understandable terms, performance under cross examination.

(f) Peer review of case files

Files requiring statements are required to be peer reviewed. This includes the statement.

[redacted] [redacted]

....

Asha Louann Haxton Witness

(g) Client feedback

Example: Feedback email sent to involved persons on completion of interaction with FSG members.

43. To maintain authorisation or competence to perform a particular type of test, individual officers must have completed at least one of the above evaluations of their competency each year.

44. Scenes of Crime officers are required to complete a 12-month training package, which includes theoretical and practical training and assessments, in both the workplace and training environment in relation to the collection of biological evidence marked **'Exhibits 4 and 5'.**

45. The training program for Scenes of Crime officers is required to meet the standard for the qualification POL54115. The attainment of this is audited by the QPS under RTO authorization (as per paragraph 26 above).

46. I am not in a position to accurately or comprehensively detail the role and typical duties of a Scientific Officer. Senior Sergeant Letitia Everist holds a better understanding and knowledge of the roles and duties of Scientific Officers.

National Association of Testing Authorities (NATA)

48. I am not in a position to accurately or comprehensively identify each NATA administered standard related to collection, storage and/or testing of biological material. The Quality Manager holds a better understanding and knowledge of these requirements.

49. I am not in a position to accurately or comprehensively explain the frequency and nature of each occasion NATA checks the QPS accreditation of each of the standards. The Quality Manager holds a better understanding and knowledge of these checks.

50. I am not in a position to accurately or comprehensively identify other standards related to the collection, storage and/or testing of biological material. The Quality Manager holds a better understanding and knowledge of these accreditation bodies.

DNA collection

51. During crime scene examination, items are sampled for biological material on a case-by-case basis. Testing for biological material is only conducted when a specific biological material is being targeted.

52. This testing is conducted using presumptive screening methods as outlined in each related presumptive screening procedure:

    (a) CSE115- Combur Strips;
    (b) PST100- TMB test for blood;
    (c) PST101- ABA Card for Semen;
    (d) PST102- Luminol (Blood);
    (e) PST104- Seminal Fluid;
    (f) PST105- Forensic Light Sources;
    (g) PST106- Chemical Enhancement of Impressions.

53. Biological sampling is conducted under the premise of Locards principle-

    '*When two objects come into contact there will always be a transfer of small amounts of material from one to the other*'.

54. Several considerations may be made in relation to the sampling. This includes reference to the operational procedure manual (OPM) and the collection of DNA samples (OPM 2.25.17).

55. Sampling for biological evidence is conducted as per instruction in several procedures, some specific to evidence types-

    (a) CSE100- Crime Scene Examination;
    (b) CSE101- Biological Evidence [redacted];
    (c) Presumptive Screening Procedures (as listed above).

56. Best practice within QPS procedure requires that items be subsampled in situ, or in a designated DNA lab. CSE101 s.5- Samples for submission must be reduced to fit into a microcentrifuge tube (except Acid Phosphatase [redacted]

[redacted] positive areas, condoms, cigarette butts, chewing gum, syringes, sanitary pads and tampons). This process occurs during the subsample procedure.

57. Requirements in relation to the forwarding of whole items to QHFSS are contained within CSE101 s.8.3- '*As a general rule, whole items are not to be submitted to QHFSS.*'

58. The forwarding of these samples to QHFSS is triaged and considered on a case-by-case basis. Instruction in relation to the allowances of such, are contained in CSE101 s.8.

59. I am not in a position to accurately or comprehensively explain the practices in other state or territories within Australia as I am not aware of collection methods within other jurisdictions.

60. I am not aware of any changes to DNA results since the introduction of sub sampling.

61. I am not aware of any departures from policy in relation to biological evidence collection.

62. Biological exhibits and/or samples collected from a crime scene are suitably packaged following CSE101.

63. Samples are photographed, generally prior to departure from a scene.

64. Samples are transported by the Forensic Officer, or other designated officer (Investigating Officer, Criminal Investigation Branch etc) from the scene for lodging within a designated storage facility (Property Point). The recording of this is completed on the Forensic Register entries and QPRIME.

65. Samples are then triaged, and as required, forwarded to QHFSS. This process involves a procedure of checking, as contained in CSE101a- DNA sample quality checklist.

66. Samples can be forwarded in one of two ways-

(a) Postage through registered post (see CSE101. s.8.5);

(b) Hand delivered by QPS personnel (Forensic or otherwise).

67. Receipt of items at QHFSS is documented on the Forensic Register.

68. The Forensic Reception Centre is a designated single point of contact for the various specialist sections within FSG.

69. Officers are able to lodge and collect forensic exhibits, inquire as to the progress of cases and meet with forensic officers all from one location.

70. The Forensic Reception Centre is the central contact point for Forensic Units including Major Crime Unit, Ballistics Unit, Document Examination Unit, Analytical Services Unit, Forensic Imaging section (formerly Photographic Section), Electronic Recording Section and Fingerprint Bureau.

71. My only interaction or involvement with the Forensic Reception Centre relates to the booking of conference rooms and administrative tasks I may require to be completed.

72. Property points vary across the state, depending on location and function.

73. Property points are designated as such, by the OIC of the region or command or district officer.

74. Information in relation to property point types, storage allowances and security requirements is contained within the OPM s.4.8.

75. PFS 100- Quality Manual s.10.3 relates to the storage of exhibits within FSG sections. Internal audits are conducted on an annual basis, with random property selection for audit (QPRIME records v property on hand, packaging requirements met etc.)

76. In addition to this, sections will have local policy in relation to the auditing requirements of the property points, which are generally completed on a monthly basis. This involves the checking QPRIME records with exhibits contained within the FSG property point.

77. QPRIME is the official means of tracking exhibits between property point.

78. There is a formal FSG requirement for FSG property points to be audited annually a part of the QMS audit process.

79. Further requirements in relation to audit are contained within relevant policy (OPM etc.). Requirements vary for the varying storage facilities.

80. Annual ESC audits are conducted on FSG property points.

81. Local policy may require the more regular auditing of property points, however this is at a section or region level and is not audited by QMS.

82. I am not aware of any failures in relation to the auditing of property points.

83. I am not aware of any reoccurring problems or failures to follow policy in the management of the FSG property points.

84. The only issues that QHFSS have raised, that I am aware of, are in relation to the recording of exhibits on the Forensic Register and are not directly related to the specific collection of the items.

85. Details of these issues include: -

    (a) Exhibits being received at QHFSS that are still marked on the Forensic Register as 'no testing required' (NTR). This can occur as a result of initial triage of exhibits, and some items not being sent to QHFSS. If no result is obtained from the primary exhibits, and further testing is requested, subsequent items may be sent. It is at this point the 'NTR' checkbox is, on occasion, not being removed, which creates an inability for QHFSS to see the exhibit register relating. This is resolved by the box being unchecked by a QPS FSG member (Processes are being considered in relation to processes on the Forensic Register to reduce this error).

    (b) Explicit images being attached to exhibits and visible to QHFSS staff. Due to the requirement of substrate images being attached to biological exhibit entries, at times, images of deceased persons may be attached (e.g. A trace DNA sample from the neck of an alleged strangulation). There is an option for these images be marked explicit, which removes the ability for QHFSS to see the image. This is, on occasion, not completed, exposing QHFSS staff to the image.

Technical reviews, Scene assessments, 'Train the Trainer'

86. What comprises a 'Technical review' is explained in PFS 100- Quality Manual s. 13.5-

The technical review examines the process by which conclusions or opinions are reported in individual case records. Working notes and technical information including sampling, examination and testing information are checked against the relevant operational procedures and acceptable forensic practice. A technical review does not involve examination of the actual exhibits or items of interest. The technical reviewer checks that correct procedures are followed and that conclusions reached are supported by observations/results documented in the case file. A technical review does not shift primary responsibility for findings from examiner to reviewer, however the reviewer shares responsibility for any scientific findings they endorse.

87. Further information is contained within this section of the Quality Manual.

88. Technical reviews may not be documented as differing, however the requirements relating to the procedures and/or techniques involved will vary across specialist sections and specialist subject matter.

89. Anyone who conducts a technical review of a case file, must hold the authorisation in all techniques utilised as part of the examination.

90. The QPS policies, guidelines or similar documents that concern technical reviews include: -

(a) PFS 100- Quality Manual;
(b) FPB 100- Case File Procedures;
(c) SOC 100- Case File Procedure;
(d) SCI 116- Case File Management.

91. Technical reviews are conducted on all major crime completed by SOC officers. All technical reviews are recorded on the Forensic Register Case Management system.

92. Any case file that has a statement or report produced must undergo a technical review prior to the release of the statement/report.

93. I am not aware of the review process for other specialist sections.

94. Technical reviews are conducted on volume crime when a statement is produced.

95. Technical reviews may also be conducted on volume crime examinations for scenes of crime development program students, as part of their training and assessment. Students are required to have 10 files per month reviewed, during their training, which will generally include some volume crime offences.

96. I am not aware of any departures from policy or guidelines in relation to how and/or when technical reviews are conducted.

97. Technical reviews are completed by another examiner who is qualified in any of the relevant disciplines being reported on.

98. The number of technical reviews conducted can be drawn down from the Forensic Register.

99. Issues or concerns identified as a result of a technical review, are handled at a station level.

100. Concerns that are at a level meeting the requirements of an Immediate Action or Corrective Action, are to be recorded in Quality Improvement System on the Forensic Register.

101. An administrative review is conducted on all case records to ensure compliance with the relevant case file procedure.

(a) FPB 100- Case File Procedures;
(b) SOC 100- Case File Procedure;
(c) SCI 116- Case File Management.

102. All case records are to be administratively reviewed to ensure compliance with the relevant case file procedure. Any member of the QPS who is authorised to perform forensic procedures is authorised to conduct administrative reviews of case records.

Administration officers may also perform reviews after appropriate instruction and demonstration of competence.

103. A Scene Assessment (PFS 51) is completed on a biannual basis by all SOCOs. SOCOs are required to attend and examine a scene under assessment from a qualified SOCO (generally more senior). The instruction relating to the completion of the Scene Assessment form is as follows:

The following competencies must be assessed by an authorised officer. Once complete, an entry is to be made in the officers Proficiency or Training Record on the Forensic Register depending on the circumstances, and a signed (electronic or physical) copy of this form attached to the record.

104. The SOCO is assessed by the authorised member under a number of criteria including:

[redacted]

105. I am unable to comment on any use of this form by other forensic sections.

106. I am unable to comment on the proficiency testing completed for other forensic sections.

107. I am not aware of any departures from policies and guidelines with respect to scene assessments.

108. Data related to the completion of scenes assessments is contained on the Forensic Register. I do not have the capability to draw down this information.

109. The 'Train the Trainer' program was developed as a result of COVID isolation and budget constraints. Previously, all members of Scenes of Crime attended Police HQ or a designated location to undertake refresher training.

110. As a result of the above, this was removed as a viable option and an alternate was arranged. The 'Train the Trainer' program was developed.

111. Officers attending as the trainers are required to be SOCOs and Forensic Services Training Officers, of any rank. These officers are endorsed by their Officer-In-Charge or Forensic Manager to attend as a participant for a region or section.

112. Officers take part in the refresher program, delivered by Subject Matter Experts and QMS members. They are then given instruction on the refresher program to be delivered on return to their section, the units of study to be presented and are trained in the new techniques being offered.

113. These officers then to return to their given region and/or section and deliver the training to the members in the region.

114. Trainers are given access to presentations, practical assessment sheets and check sheets to complete on the delivery of the training.

115. The training delivered is generally refresher and as such, the majority is not assessed.

116. These refresher programs are run every two years, with the last one delivered in 2020. As a result of COVID and staffing, the next program is under development for 2023.

117. QMS undertakes annual audits of Forensic Laboratories. This relates to both Scientific and SOC sections. These audits are governed by the requirements of NATA accreditation and cover the recording and adherence to procedure during the examination of crime scenes.

118. QMS are responsible for overseeing the adherence to and completion of the requirements of the Quality Improvement System.

Terminology used by QHFSS

119. SOC students are given very little detail in relation to the reported results from QHFSS. This is to prevent the dissemination and/or reporting of incorrect information, due to a misinterpretation of results.

120. CSE 101 [redacted] gives further detail in relation to the reporting of results by Forensic Officers.

121. The options available for further testing are rarely raised from a SOC perspective, however, any queries in relation to DNA analysis results from any members, would be raised through the DNA Management Unit.

Equipment for DNA collection

122. The role of the QMS in the selection and purchase of equipment used in the collection, storage and transportation of biological material is outlined in the PFS 100 Quality Manual, specifically, at s.8.3.1 which states that the Quality Manager is responsible for coordinating the evaluation of equipment suitability and calibration.

123. s.8.3.4 of the Quality Manual states that prior to being used in case work, each new item of equipment must be tested to ensure that it is functioning correctly, is suitable for the purposes of the procedure it will be applied to and provides results within the accuracy requirements of the procedure. This may include testing with known samples. The trial or evaluation of all new types of equipment is to be approved and coordinated by QMS (further information is included in Procedure PFS 131 – Research and Equipment Approval). The results of such evaluations are recorded on Form PFS 80 – Equipment Evaluation Report which is to be retained by the relevant specialist area.

124. This process is overseen and approved by QMS and can be conducted by FSG members from any section through consultation with the Principal Research Officer (QMS). Any changes suggested as a result of research outcomes, are to be made in consultation with QHFSS also (see PFS 131 Research Approval and reporting Policy).

125. Guidelines have been developed in relation to the storage and transportation of exhibits. s.10 of PFS 100 Quality Manual relates to exhibit handling.

126. s.8.3.1 of the Quality Manual states that the Quality Manager is responsible for coordinating the evaluation of equipment suitability and calibration.

127. s.8.4.1 state that the NATA General Equipment Table and NATA Calibration Reference Equipment Table provide guidance on how often equipment should be calibrated or checked. These schedules outline the following:

(a) the nature of the calibration or check;

(b) calibration and check intervals for each instrument; and

(c) performance criteria to be identified.

128. Annual auditing is conducted by QMS to monitor this compliance.

129. Any identified issues in relation to equipment utilised is raised with QMS staff- namely the principal research officer, for actioning.

130. I am not aware of any reoccurring problems or failures to follow policy in the selection, use and maintenance of equipment for the collection, storage and transportation of biological material.

131. Implementation of changes in equipment or procedures relating to the collection of biological material would be considered on a case-by-case basis. It would be dependent on the type of change, and whether training is required as a result.

132. Methods available would be-

(a) Specific training – face to face, train the trainer, online delivery;
(b) Email advice;
(c) Forensic Register notification system.

Forensic Medical Examinations

133. The QMS does not have any involvement in the devising, implementing and/or monitoring practices of Forensic Medical Examinations. These examinations are

conducted by Forensic Medical Officers and QMS does not govern how these are completed.

134. Scenes of Crime officers may assist Forensic Medical officers, on request from the Forensic Medical Officer. Crime scene examination procedures would be followed, if assistance is requested and all examinations would be conducted under the direction of the Forensic Medical Officer.

135. Forensic Medical Examinations are legislatively addressed in OPM (s.2.23- Forensic Procedures) and the PPRA (Chapter 17, Part 2 ss.448-456). I am not personally aware of other legislation and/or policy that may govern the completion of Forensic Medical Examinations.

136. I have no overview of or involvement from a DNA collection quality management perspective regarding the training, policies, methods, systems, or processes surrounding intimate forensic examinations, forensic orders insofar as they relate to the taking of a DNA sample by court order, sexual assault kits or the taking of DNA samples from people charged with indictable offences.

137. Intimate Forensic Examinations are not conducted by FSG officers.

138. Forensic Orders as they relate to the taking of a DNA sample by court order do not specifically have to be undertaken by FSG officers. They can be completed by any qualified person (s 445 PPRA defines who is a qualified person).

139. Sexual Assault kits are not conducted by FSG officers. External packaging is barcoded by FSG for recording on the Forensic Register and transfer to QHFSS.

140. The taking of DNA samples from people charged with indictable offences is not specifically undertaken by FSG officers. They can be completed by any qualified person (s 445 PPRA defines who is a qualified person).

The Forensic Register

141. In my current role at QMS, I utilise the Forensic Register for the following purposes:

(a) I am required to instruct new SOCOs on the use of the Forensic Register and the requirements for the correct recording.

(b) I utilise the Forensic Register for the recording of training assessment and review.

(c) I use the Forensic Register on occasion as a means of communication to students.

(d) I am involved in the continued development of the Forensic Register and the rectifying of identified bugs and enhancement processes.

(e) I use the register for the recording of examinations whilst undertaking my proficiency testing for maintenance of my crime scene examination and latent fingerprint development authorisations.

(f) I occasionally use the register for the checking and recording of Improvement Actions and Corrective Actions on the Quality System.

142. The QMS use the register as a means to maintain/audit the FSG under the Quality system. The Forensic Register allows for the identification and recording of identified issues, and monitors the action taken to resolve such issues. The system allows communication between QMS and FSG sections in relation to these issues, and the action being taken.

143. Internal Audits on the Forensic Register are conducted on an annual basis.

144. External Audits (NATA attendance) are conducted on an 18-month basis. These include a surveillance audit and full re-accreditation audit, which alternate on an 18-month basis.

145. The procedure in PFS101 '*Corrective and Improvement Processes*' relates to the FSG and strives for continuous improvement through a variety of activities outlined in Procedure PFS 100 Quality Manual, which include:

(a) Actively seeking client feedback, both within the QPS and clients external to the QPS;

(b) Management review;

(c) Review of operational procedures;

(d) Risk assessment;

(e) Suggestions from personnel; and

(f) Internal quality assessments.

146. The '*Corrective and Improvement Processes*' are undertaken to eliminate the causes of nonconformities or other undesirable situations.

147. Corrective Action (CA) – Is used to deal with significant matters that require root cause analysis and monitoring to ensure effectiveness of action taken to address issue.

148. Improvement Action (IA) – Is used to deal with minor matters that do not require root cause analysis and can be readily resolved without monitoring.

149. From a training perspective, random audits of case files are conducted for students throughout the initial 12 month program. In addition to this, the review of a crime scene examination assessment is completed, providing specific advice to the individual student.

150. Internal audits are conducted annually at each of the 53 work units within the FSG which are accredited by NATA. External audits are conducted in each of 8 locations every 18 months. Results obtained during any of these audits can be supplied upon request.

151. Any CA or IA issued is recorded on the Forensic register- Compliance- Quality Improvement System.

152. The majority of requirements in relation to individual proficiency testing, and equipment auditing are monitored on the Forensic Register. There is no prompt in relation to this, however there is an audit review process that allows for a quick review on outstanding equipment or personal requirement.

153. All biological evidence consumables are recorded on the Forensic Register. There is a requirement to record batch numbers in relation to the receipt of consumables, and a relating requirement to record specific batch numbers on use of consumables within the exhibit register. This will prompt personnel if a there is an identified issue with the utilised consumable, as well as offering an ability to track the use of consumables.

154. I have very little knowledge in relation to the specifics of the wording of DNA results on the Forensic Register.

155. My only real focus is if an identification has been made.

156. The below diagram is an indication of what is recorded on the Forensic Register in relation to an identification being made. While there is further information contained within the exhibit register itself, it is not something I try to interpret.

Exhibits Collected +

Exhibits Collected	Latents Collected 1	Total Exhibits 2	⋮

[redacted]

157. Other reports maybe mixed profiles or no DNA detected. I do not try and interpret these further.

158. I do not consider or look at DNA results coming back from QHFSS on the Forensic Register on a regular basis in my current role as I am not required to collect biological samples. As a SOCO, this is entirely dependent on the job itself. Major crime is more of a possibility; however I would still not consider it regular. Volume crime even less.

159. I am not aware of any training regarding general QPS officers' understanding and interpreting results of a forensic analysis of biological material.

Sampling consumables and equipment

160. I am not in a position to accurately or comprehensively explain sampling consumables as I do not have access to this information. Inspector Keatinge and Dr Matthew Krosch hold a better understanding and knowledge of these matters.

161. I am not in a position to accurately or comprehensively detail sampling consumables information from 2003 to 2017. Inspector Keatinge and Dr Matthew Krosch hold a better understanding and knowledge of these matters.

162. I am not in a position to accurately or comprehensively explain the role of QMS in the decision as to what consumables and equipment is used for sampling or collecting material. Inspector Keatinge and Dr Matthew Krosch hold a better understanding and knowledge of these matters.

163. I am not in a position to accurately or comprehensively outline the processes, systems and methods for equipment selection and consumables for collection of samples and DNA testing. Inspector Keatinge and Dr Matthew Krosch hold a better understanding and knowledge of these matters.

Other matters

164. I do not hold sufficient knowledge to determine if a Forensic Review occurs, if the QMS would be involved.

Olivia McIntyre

165. I am not in a position to accurately or comprehensively detail Olivia McIntyre's position or role within the QPS. Inspector Keatinge or Inspector Neville would hold a better understanding and knowledge of these matters.

Asha Louann Haxton Witness

Troy O'Malley

166. I am not in a position to accurately or comprehensively detail Troy O'Malley's position or role within the QPS. Inspector Keatinge or Inspector Neville would hold a better understanding and knowledge of these matters.

167. I am not in a position to accurately or comprehensively detail Troy O'Malley's involvement in the development and implementation of the Forensic Register. Inspector Keatinge or Inspector Neville would hold a better understanding and knowledge of these matters.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 18th day of August 2022

[redacted] [redacted]

....

Asha Louann Haxton Witness

JUSTICE OF THE PEACE (QUALIFIED) QUEENSLAND GOVERNMENT Reg.No.: [redacted] DEPT. OF JUSTICE

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF ASHA LOUANN HAXTON

INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice 2022/00028 – Requirement to give information in a written statement
2.	CV (QP0073) of Asha Haxton
3.	Forensic Services Group organisational chart
4.	Biological Evidence Training from the Scenes of Crime Development Program
5.	Biological Training Assessments – Pages from the Scenes of Crime Development Program

EXHIBIT 1

Notice number: 2022/ 00028

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Asha Haxton

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement prepared either in affidavit form or verified as a statutory declaration under the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Friday 29 July 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 15th day of July 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00028

Schedule of topics for statement

Senior Sergeant Asha Haxton

1. State your current rank and position in the QPS.

Qualifications and experience

2. List your post-graduate qualifications, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held.

4. Attach a current CV.

5. Explain the structure of the Forensic Services Group (**FSG**), and where the sections/units you worked in fit into the structure.

Quality Management Unit

6. Explain the structure of the Quality Management Unit and where you fit into that structure.

7. Explain your current role, including what staff you supervise and who you report to. Detail the purpose and functions of the Quality Management Unit (**QMU**).

8. Identify how many people work in the QMU.

9. Detail each of the staff roles within the QMU, and who currently holds those roles.

QPS Scenes of Crime Officers and Scientific Officers

10. Explain the role and typical duties of a Scenes of Crime Officer (**SOCO**). Explain the qualifications (if any) and training required for that role, including refresher programs and all units of study (theory and practical). Identify what organisation or unit conducts the training, and how the training is delivered. Explain what proficiency testing is applied.

11. Outline how, if at all, SOCOs are trained or instructed in policies concerning the collection and sampling of biological material.

12. Explain the role and typical duties of a Scientific Officer. Explain the qualifications (if any) and training required for that role, including refresher programs and all units of study (theory and practical). Identify what organisation or unit conducts the training, and how the training is delivered. Explain what proficiency testing is applied.

13. Outline how, if at all, Scientific Officers are trained or instructed in policies concerning the collection and sampling of biological material.

14. Identify what external standards the training programs for SOCOs and Scientific Officers comply with.

15. Explain what group, sections and/or units within the QPS contain SOCOs and Scientific Officers.

National Association of Testing Authorities (NATA)

16. Identify each NATA administered standard related to the collection, storage and/or testing of biological material for which QPS maintains accreditation. Advise what year each accreditation was initially obtained.

17. Explain the frequency and nature of each occasion NATA checks the QPS accreditation of each of those standards.

18. Identify any other standards related to the collection, storage and/or testing of biological material for which QPS maintains accreditation from a body other than NATA.

DNA collection

19. Explain how, when dealing with a crime scene, items are tested for biological material. Explain in what circumstances physical items suspected to contain DNA are sent to QHFSS, and in what circumstances QPS officers take samples and send a vial with the sample to QHFSS.

20. Identify which QPS policy or policies (if any) regulate the matters in the paragraph immediately above, and which policy or policies regulate the collection of DNA evidence more broadly.

21. Based on your knowledge, explain how the practices described in paragraph 19 compare to the practices in other Australian states and territories. Has the practice of sending a sample in a vial instead of sending the physical item to QHFSS affected the quality of DNA results that are returned?

22. Outline any departures from policy or policies concerning the collection of biological material that have occurred on more than one occasion.

23. Explain how and by who biological materials are transported from a crime scene, and where they are taken to and stored. Explain how and by who biological materials are taken from that storage point and provided to QHFSS.

24. Explain what the Forensic Reception Centre is, and your role with respect to the Forensic Reception Centre.

25. Explain the different types of property points at QPS stations. Explain the audit and quality management processes for property points managed by FSG.

26. Have there been any failures to regularly audit FSG property points? If so, provide details.

27. Have there been any reoccurring problems, or failure to follow policy, in the management of the FSG property points? If so, provide details.

28. Outline what issues or problems, if any, QHFSS have raised with you with respect to the collection of biological material and/or the submission of biological material to QHFSS.

Technical reviews, Scene assessments, 'Train the Trainer'

29. Explain what a technical review is – its purpose and what it involves – and whether there are different types of technical review. Identify who conducts a technical review and the minimum rank a police officer must hold in order to conduct a technical review.

30. Identify which QPS policies, guidelines or similar documents (if any) concern technical reviews.

31. Outline how often technical reviews are conducted for major crimes, and any further detail about technical reviews specific to major crimes.

32. Outline how often technical reviews are conducted for volume crimes, and any further detail about technical reviews specific to volume crimes.

33. Outline any departures from policies and guidelines you are aware of with respect to how technical reviews are conducted, who participates and completes a technical review.

34. Provide any data concerning the conduct of technical reviews and aggregate results of technical reviews since 2003.

35. Explain what an administrative review is. Provide the same level of information and details about administrative reviews as is requested in relation to technical reviews at paragraphs 29 to 34, above.

36. Explain what a scene assessment is and what it involves. Identify which staff members must be subjected to a scene assessment, and how often scene assessments occur. Identify who conducts a scene assessment and the minimum rank a police officer must hold in order to conduct a scene assessment.

37. Identify which QPS policies, guidelines or similar documents (if any) concern scene assessments.

38. Outline any departures from policies and guidelines you are aware of with respect to how scene assessments are conducted, who participates and completes a scene assessment, and how often they are conducted.

39. Provide any data concerning the conduct of scene assessments and the aggregate results of scene assessments since 2003.

40. Explain what the 'Train the Trainer' program is and what it involves. Explain which staff members conduct and which staff members participate in the 'Train the Trainer' program, and how often it occurs.

41. Identify any further type of oversight that the Quality Management Unit has over the work of SOCOs and Scientific Officers.

Terminology used by QHFSS

42. Outline the communication used/training/education provided by the QPS to its SOCOs, SO and investigators regarding the terminology used by QHFSS when reporting results from DNA testing (for example *Insufficient DNA*, *No DNA*, *Mixed Profile* etc...). Are there any policies or guidelines regarding the terms used, definitions and options for further testing or re-working of samples?

Equipment for DNA collection

43. Explain what role the Quality Management Unit has in the selection and purchase of equipment used in the collection, storage and transportation of biological material?

44. Explain what role the Quality Management Unit has in the auditing and/or quality management of the equipment referred to in the paragraph immediately above.

45. Identify any policies, guidelines or similar documents relevant to the matters discussed in the two paragraphs immediately above. Identify any NATA administered standard related to such equipment for which QPS maintains accreditation.

46. Have there been any reoccurring problems, or failures to follow policy, in the selection, use and maintenance of equipment for the collection, storage and transportation of biological material? If so, provide details and any available data about those problems or failures.

47. How are changes in equipment or procedures relating to the collection of biological material implemented in QPS?

Forensic Medical Examinations

48. Identify what role, if any, the Quality Management Unit has in devising, implementing and/or monitoring the practices, policies and procedures related to forensic medical examinations.

49. If the Quality Management Unit does have some role, have there been any reoccurring problems, or failures to follow policy, in the conduct of forensic medical examinations? If so, provide details.

50. Do you have any overview/involvement from a DNA collection quality management perspective regarding the training, policies, methods, systems, or processes surrounding intimate forensic examinations, forensic orders insofar as they relate to the taking of a DNA sample by court order, sexual assault kits or the taking of DNA samples from people charged with indictable offences? If yes, please detail. Attach any relevant policy or guideline covering the topics touching on collecting DNA in such circumstances, including training and auditing.

The Forensic Register

51. Explain the ways in which you use the Forensic Register in your position.

52. Explain the main ways staff in the Quality Management Unit use the Forensic Register.

53. What audits or quality management processes does the Quality Management Unit conduct of data held in the Forensic Register, including the frequency of those audits or quality management processes. Explain what 'Corrective Actions' and 'Improvement Actions' are and what role they play in audit and quality management processes.

54. Where and how are the results of those audits and/or quality management processes stored? Provide any data concerning the results of those audits and/or quality management processes.

55. Does the Forensic Register prompt other staff within QPS to conduct audits or quality management processes in relation to any process or item that is related to the collection of biological materials? If so, provide details. What is your understanding of the terms used by QHFSS to report DNA testing results (eg insufficient DNA, no DNA, complex mixed profile etc...)? Include in your answer the options available for further testing and/or re-working.

56. Do you consider or look at DNA results coming back from QHFSS on the Forensic Register?

57. Is the Quality Management Unit involved in any training for general QPS officers to understand and interpret the results of a forensic analysis of biological material?

Sampling consumables and equipment

58. What sampling consumables are used by the QPS currently, and since 1 July 2017 (for example, brand and type of swab used)?

59. List the sampling consumables used by the QPS between 2003 and 2017.

60. What role – including research – does the Quality Management Unit have in the decision of what consumables and equipment used for the sampling and collecting of biological/forensic material for DNA testing?

61. Outline the processes, systems, and methods for electing what equipment and consumables to use for the collection of samples for DNA testing.

Other matters

62. If a Forensic Review occurs in a particular investigation, is the Quality Management Unit involved in any way in the Forensic Review? If so, outline the nature of that role.

Olivia McIntyre

63. Who is Olivia McIntyre and what position does she hold within the QPS? What role does she perform? What are her responsibilities?

Troy O'Malley

64. Who is Troy O'Malley? What role/position did he occupy within the QPS and when?

65. What involvement did Troy O'Malley have with the development and implementation of the Forensic Register?

EXHIBIT 2

[redacted]

Relevant tertiary course or qualifications (incl. external institutions)			
Course/Qualification	Year commenced	Year completed	Institution
Cert IV Training and Assessment (TAE40116)	**2020**	**2021**	**Plenty training and Assessment**
Advanced Diploma in Forensic investigations (POL64115)	**2018**	**2019**	**Canberra Institute of Technology**
Diploma of Forensic Investigations	**2009**	**Competent**	**QPS**
Diploma of Public Safety (Policing)	**2004**	**Competent**	**QPS**
Bachelor of Exercise Science	**1995**	**1999**	**Griffith University**

5A. Service History – Substantive Placements

Date of induction: **30/07/2003** Current tenure expiration date*: **N/A**

Please provide BRIEF details of your relevant service history. Abbreviate where necessary.
Insert the appropriate period, rank, function and location (latest first) in the corresponding cell.
*This is a mandatory field. If not applicable, please enter 'N/A'.

Period (latest first)	Rank	Function	Location

Classified as OFFICIAL

11/06/2021- Present	**Sgt**	**Quality Officer- Training**	**QMS- HQ**
21/12/2020 – 10/06/2021	**Sgt**	**Senior DNA Management Officer**	**DNA Management- HQ**
28/07/2014 – 20/12/2020	**Sgt**	**Senior Scenes of Crime Officer**	**Logan Scenes of Crime**
25/08/2008 – 27/07/2014	**S/Con**	**Scenes of Crime Officer**	**Gold Coast District Scenes of Crime**
30/07/2008 – 24/08/2008	**S/Con**	**General Duties**	**Broadbeach Station**
30/07/2004 – 29/07/2008	**Con**	**General Duties**	**Broadbeach Station**
30/07/2003 – 29/07/2004	**FYC**	**General Duties**	**Gold Coast District**
13/01/2003 – 29/07/2003	**Recruit**	**Recruit Training**	**Oxley Academy**

5B. Service History – Relieving / Secondment Placements

Please provide BRIEF details of your relieving and secondment where relevant to the key selection criteria. Abbreviate where necessary.

Period (latest first)	Rank	Function	Location
04/12/2021 – 04/01/2022	**S/Sgt**	**Quality Management Officer- Training**	**QMS- HQ**
05/07/2021 – 03/12/2021	**S/Sgt**	**Quality Management Officer- Training**	**QMS- HQ**
09/11/2020 - 18/06/2021	**S/Sgt**	**Quality Management Officer- Training**	**QMS- HQ**
03/10/2020 - 08/11/2020	**Sgt**	**Quality Officer- Training**	**QMS- HQ**
28/09/2020 – 02/10/2020	**S/Sgt**	**Quality Management Officer- Audits**	**QMS- HQ**
29/08/2020 – 27/09/2020	**Sgt**	**Quality Officer- Training**	**QMS - HQ**
17/08/2020 – 28/08/2020	**S/Sgt**	**Quality Management Officer- Audits**	**QMS - HQ**
25/07/2020 – 16/08/2020	**Sgt**	**Quality Officer- Training**	**QMS- HQ**
20/07/2020 – 24/07/2020	**S/Sgt**	**Quality Management Officer- Audits**	**QMS- HQ**
18/07/2020 – 19/07/2020	**Sgt**	**Quality Officer- training**	**QMS- HQ**
11/07/2020 – 17/07/2020	**S/Sgt**	**Quality Officer- Policy and Procedure**	**QMS- HQ**
30/03/2020 – 10/07/2020	**Sgt**	**Quality Officer- training**	**QMS- HQ**
27/05/2019 – 27/03/2020	**S/Sgt**	**Quality Officer- Policy and Procedure**	**QMS - HQ**
27/12/2017 – 23/01/2018	**Sgt OIC**	**Officer in Charge**	**Charleville SOC**
10/04/2017 – 14/04/2017	**S/Sgt OIC**	**Officer in Charge**	**Logan SOC**
08/02/2016 – 04/03/2016	**S/Sgt OIC**	**Officer in Charge**	**Logan SOC**
04/01/2016 – 08/01/2016	**S/Sgt OIC**	**Officer in Charge**	**Logan SOC**

Classified as OFFICIAL

I completed the Scenes of Crime Development Program and was confirmed as a Scenes of crime officer by the Superintendant, Forensic Service Group on the 16th of November 2009. I have also successfully attained the Certificate IV in Training and Assessment.

EXHIBIT 3

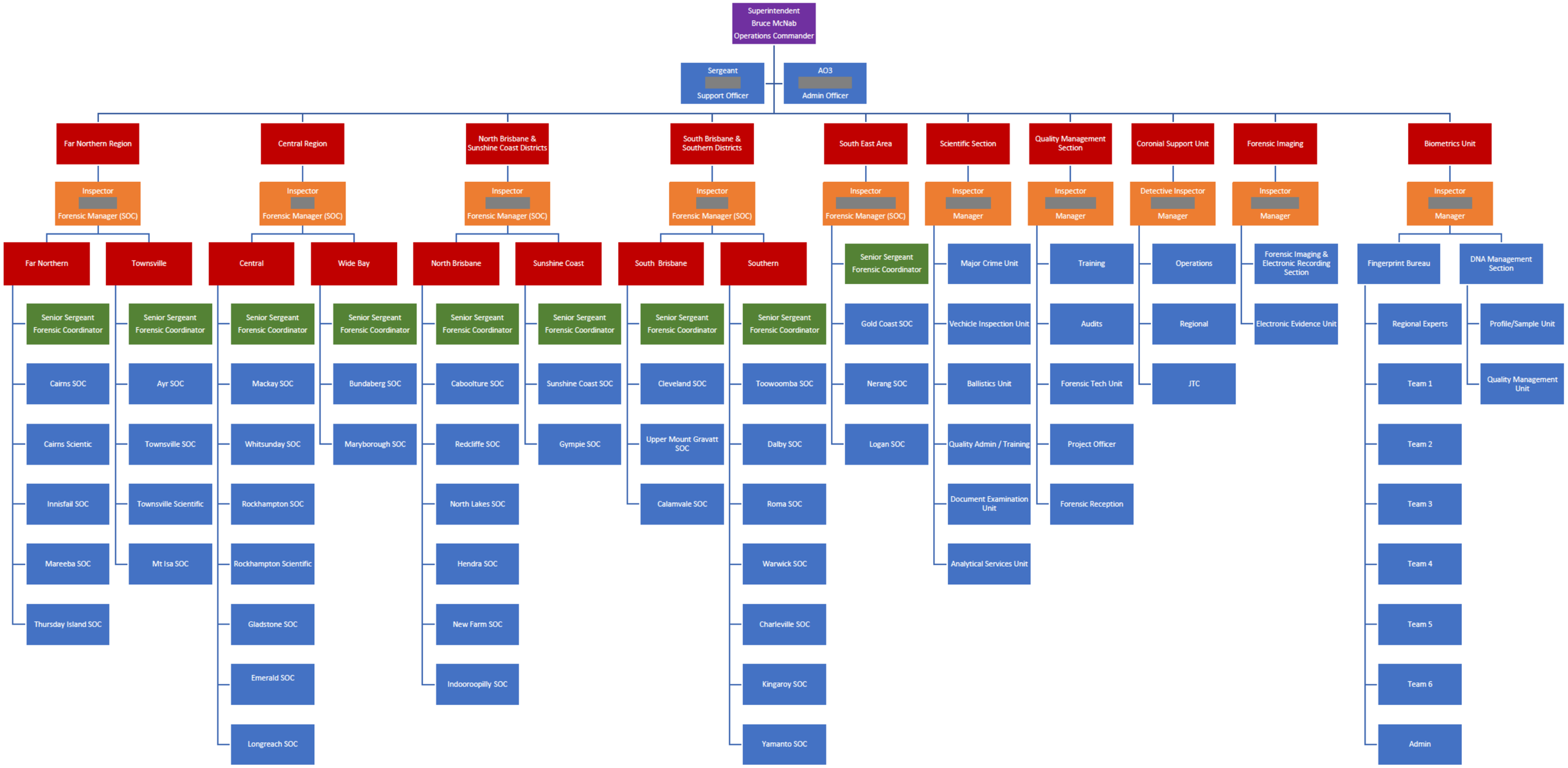

Superintendent
Bruce McNab
Operations Commander
Sergeant
Support Officer
AO3
Admin Officer
Far Northern Region
Inspector
Forensic Manager (SOC)
Far Northern
Townsville
Senior Sergeant
Forensic Coordinator
Senior Sergeant
Forensic Coordinator
Cairns SOC
Cairns Scientic
Innisfail SOC
Mareeba SOC
Thursday Island SOC
Ayr SOC
Townsville SOC
Townsville Scientific
Mt Isa SOC
Central Region
Inspector
Forensic Manager (SOC)
Central
Wide Bay
Senior Sergeant
Forensic Coordinator
Senior Sergeant
Forensic Coordinator
Mackay SOC
Whitsunday SOC
Rockhampton SOC
Rockhampton Scientific
Gladstone SOC
Emerald SOC
Longreach SOC
Bundaberg SOC
Maryborough SOC
North Brisbane & Sunshine Coast Districts
Inspector
Forensic Manager (SOC)
North Brisbane
Sunshine Coast
Senior Sergeant
Forensic Coordinator
Senior Sergeant
Forensic Coordinator
Caboolture SOC
Redcliffe SOC
North Lakes SOC
Hendra SOC
New Farm SOC
Indooroopilly SOC
Sunshine Coast SOC
Gympie SOC
South Brisbane & Southern Districts
Inspector
Forensic Manager (SOC)
South Brisbane
Southern
Senior Sergeant
Forensic Coordinator
Senior Sergeant
Forensic Coordinator
Cleveland SOC
Upper Mount Gravatt SOC
Calamvale SOC
Toowoomba SOC
Dalby SOC
Roma SOC
Warwick SOC
Charleville SOC
Kingaroy SOC
Yamanto SOC
South East Area
Inspector
Forensic Manager (SOC)
Senior Sergeant
Forensic Coordinator
Gold Coast SOC
Nerang SOC
Logan SOC
Scientific Section
Inspector
Manager
Major Crime Unit
Vechicle Inspection Unit
Ballistics Unit
Quality Admin / Training
Document Examination Unit
Analytical Services Unit
Quality Management Section
Inspector
Manager
Training
Audits
Forensic Tech Unit
Project Officer
Forensic Reception
Coronial Support Unit
Detective Inspector
Manager
Operations
Regional
JTC
Forensic Imaging
Inspector
Manager
Forensic Imaging & Electronic Recording Section
Electronic Evidence Unit
Biometrics Unit
Inspector
Manager
Fingerprint Bureau
Regional Experts
Team 1
Team 2
Team 3
Team 4
Team 5
Team 6
Admin
DNA Management Section
Profile/Sample Unit
Quality Management Unit

EXHIBIT 4

EXHIBIT 5

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

ADDENDUM STATEMENT OF DAVID HAROLD NEVILLE

I, **David Harold Neville,** of 200 Roma Street, Brisbane, Queensland state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 207'** is a copy of that notice.

Memorandum of Understanding

1. I recall attending a meeting around August or September 2019 involving Bruce McNab, John Doherty and Cathie Allen where the development of a Memorandum of Understanding (MOU) was discussed. I recall John advising that they planned to develop a generic agreement that included provisions for all the services that Queensland Health Forensic and Scientific Services (QHFSS) deliver to the QPS. He said that there would be a schedule attached for each particular service that included costs and performance criteria. He indicated that they would seek agreement on the content of the MOU before the schedules were completed.

2. On 7 January 2020, the office of Superintendent McNab forwarded a copy of a draft MOU to me and requested that I provide comment. I provided the following comment:

   (a) Does the execution of this MOU preclude us from procuring services from an alternative service provider should the QPS desire to do so due to cost of performance issues. In the past we have explored having a second service provider for business continuity purposes. Would the MOU preclude this?

   (b) Clause 8.3 indicates that QH will cover the cost of travel within 300km for court. Does this mean the QPS will cover any other travel? This is something we currently do not do and we are not funded for it.

[redacted] ..... [redacted] .....
David Harold Neville Witness

(c) Clause 19.1 states the QPS will provide information and reports required under a service schedule. There is no reciprocal requirement for QH. The QPS currently reports nothing to QH so I am not sure what they need this for.

(d) Clause 19.2 requires QH to maintain records of costs and expenses. A request for this type of information from QH was recently declined. This clause should include "and be made available to the QPS upon request".

(e) Clause 8.2 indicates that the fees will be reviewed annually and clause 17 states it takes 6 months to terminate the MOU. If QH increases the fees, are we locked into paying that fee for 6 months before we can opt out?

3. A copy of the draft MOU is attached and marked **'Exhibit 208'**.

4. I have had no further involvement in the development of the MOU. I believe that some further discussions may have occurred involving Bruce McNab, Assistant Commissioner Brian Connors and members of the Queensland Health (QH) Executive. I was not involved in those discussions. I believe that the process stalled because the details of costs and performance criteria were not provided by QHFSS.

Forensic Register

5. The Forensic Register (FR) was developed in-house by Mr Troy O'Malley. Development commenced in 2003. Troy was an Acting Inspector within the Forensic Services Group. Development continued with functionality increasing based on business needs. In about 2005 an interface was developed that enabled the FR to exchange information with AUSLAB which was the case management system used by QHFSS. From this time both QPS and QHFSS shared common barcodes as exhibit identifiers.

6. The QPS provided the FR to police services in other jurisdictions including Tasmania, South Australia and Western Australia. It was provided free of charge on the understanding that QPS would not provide technical support. I understand that Troy was given outside employment approval to work for 'Bdna' who was contracted by some of those other agencies to implement the FR and provide ongoing support.

....

David Harold Neville Witness

7. Between 2015 and 2017 the FR was further developed to include functionality for QH. I believe this work was undertaken by Troy at no cost to QH. The developments included enhancements to facilitate the operations of the QHFSS DNA Laboratory. The DNA Laboratory commenced using the FR in around 2017. From this time QPS and the QHFSS DNA Laboratory shared the FR as a common system.

8. On 16 February 2018, Troy O'Malley separated from the QPS and commenced working for 'Bdna' full time. With the departure of Troy, the ongoing internal support and development of the FR was unsustainable. As a result, the QPS commenced a tender process to outsource support and development of the FR. Bdna was awarded the contract with the intellectual property of the FR being transferred to them as part of the IP agreement executed on 1 October 2020. There is also a ten-year support agreement between Bdna and QPS.

9. The QPS has some capacity to undertake its own data extraction which is limited to the parameters of search fields contained in the same screen. Requests for more extensive data extraction must now be made through Bdna. This may incur a cost depending on the time involved.

10. Under the terms of the support contract, the QPS pays Bdna for the support of both the QPS and QHFSS. The QPS then invoices QHFSS for its share of ongoing support. I believe that QHFSS is free to engage Bdna directly to undertake development including data extraction.

11. The information pertaining to each sample submitted to QHFSS is recorded on the Exhibit Record in the FR. This includes:

    (a) the unique barcode identifier used by both QPS and QHFSS,

    (b) the details of the collecting officer,

    (c) the date of collection,

    (d) the location collected from,

(e) a description of the item,

(f) the person the items relates to (victim, suspect, unknown),

(g) the results of presumptive screening,

(h) information on hazards, and

(i) images of the area sampled.

Sexual assault investigation kits (SAIKs)

12. QH is responsible for the provision and use of SAIKs.

13. QH is responsible for the development of the content of the SAIK. I believe the SAIKs are developed in-house at QHFSS.

14. QH provide the SAIKS to the QPS for distribution to investigating police officers. A store of SAIKs is maintained in each police district.

15. I am not aware of any agreement between QPS and QH in relation to the supply of the kits.

16. I understand that QHFSS provides the kits to the QPS for distribution throughout the state to investigating police officers. When a sexual assault complaint is made, police provide the Forensic Medical Officer (FMO) with the SAIK to facilitate the forensic medical examination. Upon completion of the examination, the SAIK is handed back to the investigating officer who arranges delivery to QHFSS. The relevant parts of the Operational Procedures Manual are attached and marked **'Exhibits 209 and 210'**.

17. To my knowledge, the SAIK currently does not contain equipment for the collection of reference samples from victims. I know that because the QPS has been attempting to get the SAIK modified to include this equipment.

18. I am not aware if the SAIK is the same equipment that is used to collect a sample from an accused person. This is a question that would need to be asked of QH.

19. I first raised a desire to explore the inclusion of reference collection materials in SAIKs on 29 August 2018 when I sent an email to Inspector George Marchesini, Child Trauma and Sexual Crime Unit. This was around the time I raised the issue with Cathie Allen. A copy of the email chain with George is attached and marked **'Exhibit 211'**.

20. On 6 September 2018, I contacted Dr Adam Griffin. At the time he managed the Forensic Medical Officers (FMOs) within QH. I asked about the prospect of the FMO taking a reference sample. He advised this was not something he was interested in pursuing. He advised of a number of risks including relating to contamination and training of FMOs. Dr Griffin gave me the impression that he was opposed to the idea of FMOs taking reference samples. As a result, I sent an email to Cathie and Craig Russell (Acting Executive Director, QHFSS) to advise that I was not pursuing the matter. A copy of that email is attached and marked **'Exhibit 212'**.

21. On 7 September 2018, I sent an email to all Forensic Services Group managers that included some suggested changes to the Operational Procedures Manual to ensure police officers collected reference samples from victims of sexual assaults. Inspector Peter Bushell responded drawing my attention to the 2014 interagency guideline titled, "*Response to Sexual Assault: Queensland Government Interagency Guidelines for Responding to People who have experienced Sexual Assault*". This document was designed to ensure agencies work together in the best interest of the victim. The policy states DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the forensic medical examination. A copy of my email and Peter's response is attached and marked **'Exhibit 213'**.

22. I believe that Superintendent McNab may have followed up the matter based on information provided to him by Peter Bushell. This included raising the matter to Assistant Commissioner Alan McCarthy, Operations Support Command.

23. I understand that on 27 September 2018, Alan McCarthy met with Michael Lok and Craig Russell of QH and the matter of reference samples in SAIKs was discussed. Alan emailed me, requesting advice on the issues pertaining to SAIKs, to which I responded on 28 September 2018. A copy of my response is attached and marked **'Exhibit 214'**.

24. On 7 November 2018, I received an email from Cathie seeking advice as to whether the QPS had told its staff that QHFSS had issued a directive that they would not accept SAIKs without a reference sample. I responded that this was not correct and drew her attention to the 2014 interagency guideline. I advised I would like to work towards complying with that policy. A copy of her email and my response is attached and marked **'Exhibit 215'**.

25. I did not have any other involvement with respect to the inclusion of reference sample equipment in SAIKs until about November 2021 when Superintendent Dale Frieberg sought advice. I provided her the same advice that I had previously provided Alan McCarthy. During November and December 2021, I attended a number of meetings relating to this issue involving Dale Frieberg, Peter Bushell and David Briese of QPS; and Lara Keller, Cathie Allen and Adam Griffin of QH. My understanding is that Adam Griffin continued to oppose the involvement of FMOs in the collection of reference samples and an impasse was reached. As a result, I believe that Dale prepared an Executive Briefing Note to raise the matter for the information of the Womens' Safety Justice Taskforce.

Sexual assault investigation kits – other issues

26. I am not aware of any other issues or problems about SAIKs and/or reference samples.

27. I have not been involved in the development or adoption of any new policies or guidelines other than already discussed. I have had no further involvement with any working group regarding SAIKs or relevant policies relating to them.

28. The only improvement I would like to see with the SAIK is the inclusion of reference sample collection equipment.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 19th day of September 2022

[redacted] ..... [redacted]

David Harold Neville Witness

COMMISSIONER FOR DECLARATIONS
QUEENSLAND GOVERNMENT
Reg.No [redacted]
DEPT. OF JUSTICE & ATTORNEY-GENERAL

[redacted] ..... [redacted] .....

David Harold Neville Witness

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF DAVID HAROLD NEVILLE
INDEX TO EXHIBITS

Exhibit no.	Description
207.	2022/00137 – Requirement to give information in a written statement – dated 06/09/2022
208.	Memorandum of Understanding for Forensic Science Services between Queensland Health and Queensland Police Service – undated and unsigned
209.	Queensland Police Service Operational Procedures Manual, Section 2.6.3 Sexual Officers, pages 163 to 165 – dated 12/09/2022
210.	Queensland Police Service Operational Procedures Manual, Section 2.19.6 Forensic Services Group (FSG), page 255 – dated 12/09/2022
211.	Email chain between David Neville (QPS) and George Marchesini (QPS) – dated 29/08/2018
212.	Email from David Neville (QPS) to Cathie Allen (QHFSS) and Craig Russell (QHFSS) – dated 06/09/2018
213.	Email chain between David Neville (QPS), Peter Bushell (QPS) and Forensic Services Group managers – dated 06/09/2018
214.	Email from David Neville (QPS) to Bruce McNab (QPS) – dated 28/09/2018
215.	Email chain between Cathie Allen (QHFSS) and David Neville (QPS) – dated 07/11/2018

EXHIBIT 207

Notice number: 2022/00137

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: David Neville

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **12.00pm on 19 September 2022** by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 6th day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice number: 2022/00137

Schedule of topics for statement

Inspector David Neville

Queensland Police Service (QPS)

Memorandum of Understanding

1. Explain your involvement in the negotiation of a Memorandum of Understanding between the DNA Unit and the Queensland Police Service for the processing of crime scene samples. Include in your answer your understanding of:
    a. Who is/was involved in any negotiations;
    b. the reasons for any delays in formalising the Memorandum of Understanding.

Forensic Register

2. Explain how the Forensic Register was developed and implemented.
3. Explain how the Forensic Register was procured by the Queensland Police Service.
4. Explain how the Forensic Register was procured by the DNA Analysis Unit.
5. Explain any involvement QPS staff had in the procurement or implementation of the Forensic Register at the DNA Analysis Unit.
6. Explain how the QPS extracts data from the Forensic Register.
7. Explain your understanding of how staff at the DNA Analysis Unit extract data from the Forensic Register.
8. Explain what information or material police upload to the Forensic Register for each sample submitted to FSS for DNA Analysis and where in the Forensic Register that information or material is available.

Sexual assault investigation kits (SAIKs)

9. Identify who, or what organisation, is currently responsible for undertaking forensic medical examinations using sexual assault identification kits (SAIKs).

10. Identify and attach any current QPS policy, procedure or manual regarding the use, distribution and transportation of SAIKs.

11. Who determined the content of the current SAIK model? Who makes the SAIKs? Identify and attach any agreement, policy or memorandum of understanding concerning these matters.

12. Does QPS keep and store SAIKs? If so, where?

13. Who is responsible for providing a SAIK to the person administering a SAIK on a complainant or accused? Who is responsible for transporting a completed SAIK from the place of examination to QHFSS? Identify and attach any policies relevant to these matters. Explain how a SAIK is usually transported from the site of examination to, ultimately, Queensland Health Forensic and Scientific Services (QHFSS)?

14. Are SAIKs used by persons conducting forensic medical examinations on accused persons? Or is some other equipment used? If some other equipment is used, identify that equipment.

15. To your knowledge, does the SAIK contain equipment that is to be used to take a reference sample? Who is currently responsible for taking a reference sample from a person on whom a SAIK is conducted? If it is not the person who administers the SAIK, what equipment is to be used to take a SAIK? Attach any policies, procedures, MOU or emails which you sent or received that outline who is responsible for taking reference samples. Outline any changes in policy or practice on this issue since 2018.

Sexual assault investigation kits – other issues

16. Apart from any matter already discussed in full above, identify if there were are any issues, problems or matters about SAIKs and/or reference sampling that have come to your attention while you have worked in the FSG Quality Management Section, the DNA Management Section and/or the Biometrics Unit? If so, provide details of those matters, who raised them, and when they came to your attention. Include any current or ongoing issues.

17. Explain what actions you have taken, if any, in response to those matters being raised with you? Were you involved in developing or adopting any new policies or guidelines about SAIKs and/or reference sampling? If yes, provide details.

18. Are you currently involved in any working group regarding SAIKs or involved in developing or adopting any new policies or guidelines about SAIKs and/or reference sampling? If yes, provide details.

19. Is there any other change or improvement to the use, content or availability of SAIKs and/or forensic medical examinations that you would like to see occur? If yes, provide details.

EXHIBIT 208

Queensland
Government

MEMORANDUM OF UNDERSTANDING

for

FORENSIC SCIENCE SERVICES

Between

STATE OF QUEENSLAND
acting through Queensland Health

and

STATE OF QUEENSLAND
acting through Queensland Police Service

This **Memorandum of Understanding for Forensic Science Services** is made:

BETWEEN **STATE OF QUEENSLAND acting through Queensland Health** of 41 O'Connell Terrace, Bowen Hills, Queensland 4006

('QH')

AND **STATE OF QUEENSLAND acting through Queensland Police Service** of 200 Roma Street, Brisbane, Queensland 4001

('QPS')

BACKGROUND

A. The Parties wish to ensure the continued safety of the Queensland community through the provision of forensic services.

B. QH performs certain forensic services upon request by QPS.

C. The Parties seek to maximise collaboration to ensure the sustainability, efficiency and effectiveness of the delivery of forensic services.

D. The Parties have entered into this MOU to establish:

a. the arrangements under which QH will provide forensic services and QPS will pay for those services; and
b. the framework by which the parties will collaborate and consult in relation to:
    i. Services which are delivered;
    ii. matters which may effect the delivery of forensic services;
    iii. opportunities to expand the scope forensic services;
    iv. opportunities to collaborate into relation to scientific research.

THE PARTIES AGREE AS FOLLOWS:

1. INTERPRETATION

1.1. In this MOU, the following definitions apply:

'Business Day' means any day other than a Saturday, Sunday or public holiday in Brisbane.

'Confidential Information' means, information of, or supplied by the disclosing party that:

(a) is by its nature confidential;

(b) is designated as confidential; or

(c) the receiving Party knows or ought to know is confidential.

'Fees' means the fees that QPS is required to pay to QH for the supply of Forensic Services under a Service Schedule.

'MOU' means this document and all of its attachments.

'New Material' means all material that is created by a Party for the purpose of this MOU.

'Parties' means QPS and QH.

'Personnel' means a Party's officers, employees, contractors and agents.

'Services' means the forensic science services provided by QH to QPS under a Service Schedule.

'Service Schedule' means a Service Schedule generally in the form of the template in Schedule 2 that is agreed by the parties.

2. TERM

2.1. This MOU will commence on the date it is signed by the last Party and will continue until:

(a) the parties agree in writing to terminate this MOU; or

(b) a party terminates it under clause 17.

2.2. The Parties agree to review the operation and outcomes of this MOU within 60 days after the end of each anniversary of the commencement of this MOU.

3. NATURE OF MOU

3.1. This MOU is not intended to create legal relations between the Parties or create legally enforceable rights and obligations.

3.2. The objective of this MOU is to outline the roles and responsibilities of the Parties in relation to the delivery of the Services.

4. MOU COMMITTEE

4.1. The Parties will establish a MOU Committee.

4.2. The MOU Committee will:

(a) be constituted by persons, of appropriate seniority, qualifications and experience, as agreed between the parties from time to time;

(b) meet at a frequency as agreed between the parties from time to time, though in default of agreement, will meet quarterly;

(c) generally, operate on an informal basis, though may adopt any procedures and processes as agreed between the parties from time to time;

(d) consider any matter relevant to the efficient and effective delivery of forensic services, including but not limited to:

i) operational forecasting;

ii) resource planning;

iii) system risk management;

iv) common systems, practices and process; and

v) any other matter which may have an impact on either Parties' obligations, processes or resources.

5. COOPERATION

5.1. Each Party agrees, in performing its obligations under this MOU, to:

(a) diligently carry out its obligations;

(b) not cause unreasonable delays to the other Party's performance of its obligations;

(c) act reasonably and in good faith in performing its obligations;

(d) manage and mitigate risks that may arise in connection with the performance of its obligations;

(e) notify the other Party of any potential delays of difficulties in performing its obligations as soon as is reasonably possible;

(f) ensure its Personnel have the training and skills to effectively contribute to the performance of the obligations;

(g) ensure that its Personnel involved in performing their obligations meet the performance standards expected of a person usually occupying the position; and

(h) ensure that its Personnel and any other representatives of the Party that are involved in any way with the Services or the Forensic Register comply with all relevant laws.

5.2. Each Party is responsible for providing, at its own cost, any facilities, equipment and support it needs to perform its obligations under this MOU. Any facilities or equipment provided by a Party remains the property of that Party.

5.3. Each Party agrees to provide the other Party with:

(a) such information, assistance, support, advice, Personnel and records as may reasonably be necessary to facilitate the performance of obligations under this MOU; and

(b) such reasonable training as may be necessary to assist in the completion of any necessary tasks under this MOU to the extent that the request for training is reasonable and the Party to which the request is made has resources available.

6. SCIENTIFIC COLLABORATION

6.1. The Parties agree to pursue opportunities to collaborate in matters of mutual benefit to the Parties or benefit to the Queensland community including:

(a) basic and applied evidence-based research; and

(b) the development of research areas and projects including:

i) identification of business improvements, with the aim of eliminating inefficiencies and reduce the cost of the provision of forensic services; and

ii) identification of trends and market influences which support the development of analytical methods, prevention strategies, policies and legislation that inform training and professional practices.

6.2. The Parties will comply with any laws, research ethics requirements, confidentiality and privacy requirements and policies which may apply to any proposed research.

6.3. The Parties may adopt any processes or take any steps reasonably necessary to give effect to scientific collaboration.

7. PERFORMANCE OF SERVICES

7.1. The Parties' intention is for this MOU to set out the framework under which the Services will be delivered, but particular details of the Services will be set out in a Service Schedule.

7.2. QH agrees to deliver Services in accordance with the requirements set out in the Service Schedules that are agreed and signed by both Parties.

7.3. QPS will:

(a) work cooperatively with QH to enable QH to deliver the Services; and

(b) fulfil any obligation placed on it under a Service Schedule.

7.4. QH will perform the Services.

8. FEES AND COSTS

8.1. QPS will pay the Fees to QH for the Services as set out in the relevant Service Schedule.

8.2. Unless otherwise specified in a Service Schedule, the parties agree to review the Fees annually within 60 days after the end of each anniversary of the commencement of this MOU.

8.3. QH will fund the following costs associated with delivery of the Services:

(a) all travel costs and expenses incurred by QH personnel who undertake attendance at court within 300km from Brisbane CBD in connection with performance of Services; and

(b) any other costs specified to be funded by QH in a Service Schedule.

8.4. QPS will pay the Fees to QH monthly in arrears via electronic transfer to an account nominated by QH in writing for Services performed in the previous month.

8.5. QH will submit monthly invoices for the Fees to QPS within 5 Business Days after the end of each calendar month and QPS will make payment within 30 days after receipt of an invoice.

9. GST

9.1. In this clause, words used which have a defined meaning in the GST Law, have the same meaning as in the GST Law unless the context indicates otherwise.

9.2. Unless expressly indicated, the consideration for any supply under or in connection with this MOU is exclusive of any GST.

9.3. To the extent that any supply made under or in connection with this MOU is a taxable supply, the recipient must pay, in addition to the consideration to be provided under this MOU for that supply, unless it expressly includes GST, an amount equal to the amount of that consideration, or its GST exclusive market value, multiplied by the rate at which GST is imposed in respect of the supply. The additional consideration is payable at the same time and in the same manner as the consideration to which it relates.

9.4. The supplier must issue a tax invoice to the recipient of the supply prior to the time of payment of the GST inclusive consideration or at such other time as the Parties agree.

9.5. Where an adjustment event arises under on in connection with this MOU, the supplier must issue to the recipient an adjustment note in accordance with the GST Law within 14 days of becoming aware of the need to make the adjustment. If, as a result of an adjustment event, an additional amount is required to be paid by the recipient this payment will be made subject to an adjustment note being issued by the supplier.

9.6. If either party is entitled under this MOU to be reimbursed or indemnified by the other party for a cost or expense incurred in connection with this MOU, the reimbursement or indemnity payment must not include any GST component of the cost or expense for which an input tax credit may be claimed by the party being reimbursed or indemnified.

10. INSURANCE

10.1. Each party will obtain and maintain such insurances or self-insurance arrangements as it would normally maintain when carrying out the types of activities contemplated by this MOU.

11. PUBLIC SECTOR OVERSIGHT LAWS

11.1. The Parties acknowledge that they are required to comply with applicable laws, including laws relating to the oversight of public sector agencies, including laws relating to audit, financial matters, information privacy, public records, public sector ethics, the public service and the right to, or freedom of, information.

12. INFORMATION PRIVACY & CONFIDENTIALITY

12.1. Each Party will comply with applicable privacy and confidentiality laws, including the *Information Privacy Act 2009* (Qld).

12.2. Each Party will immediately notify the other on becoming aware of any breach of privacy laws in connection with this MOU.

13. CONFIDENTIALITY

13.1. Each Party must not, and must ensure that its Personnel do not, use or disclose the Confidential Information of the other Party without the other Party's consent, other than in accordance with this clause.

13.2. Each Party may disclose the other Party's Confidential Information:

(a) to its Personnel to the extent necessary for the performance of the arrangement, provided that the disclosing Party makes such persons aware that the information is confidential;

(b) if specified or directed by the other Party;

(c) where required by law; or

(d) where this MOU requires disclosure to a third party.

13.3. Each Party must keep the other Party's Confidential Information in a secure location so that no unauthorised person is able to gain access to it.

14. INTELLECTUAL PROPERTY RIGHTS

14.1. Nothing in this MOU affects intellectual property rights in any existing material.

14.2. As between the Parties, any New Material created by a Party in the course of performing its obligations under this MOU will be owned by that Party.

14.3. Each Party grants to the other a non-exclusive, royalty-free licence to use, reproduce, adapt and modify its material for the purposes of Queensland Health complying with its obligations under this MOU.

14.4. This clause is subject to any specific term about intellectual property rights in certain material set out in a Service Schedule.

14.5. The Parties acknowledge that:

(a) the Queensland Government owns the Forensic Register and QPS is the custodian of it; and

(b) QH owns any of its client data that is contained in the Forensic Register.

15. GENERAL PROVISIONS

15.1. This MOU may be varied at any time by a written MOU signed by both Parties. The Parties may vary a schedule to this MOU by signing and dating a substitute schedule or an additional schedule.

15.2. A Party will not by virtue of this MOU be or become an agent or partner of the other Party or a joint venturer with the other and must not represent itself or allow itself to be represented as such.

15.3. Neither Party will assign or subcontract its obligations under this MOU without the prior written consent of the other Party. If a Party is permitted to assign or subcontract its obligations under this MOU, that Party will remain responsible for its obligations under the MOU.

15.4. Each Party will bear its own costs incurred in negotiating and settling the terms of this MOU.

15.5. This MOU may consist of a number of counterparts and, if so, the counterparts taken together constitute one document.

15.6. Any notice or other communication to be given under this MOU must be in writing and may be delivered by hand, pre-paid post, facsimile or e-mail transmission to the other Party at its address set out in Schedule 1 or other persons the Parties notify to each other.

16. RESOLUTION OF DISPUTES

16.1. For the purpose of this clause, a dispute will have arisen when either Party gives notice in writing to that effect to the other Party.

16.2. Where there is a conflict or dispute over any matter relating to this MOU, the Parties will seek to resolve the issue by negotiation initially between the Contact Persons.

16.3. If the dispute is unable to be resolved pursuant to clause 16.2 within 4 weeks of the date of service of the dispute notice, the dispute must be referred to the Parties' chief executives to resolve the complaint.

16.4. Despite the existence of a dispute, the Parties will (unless agreed otherwise in writing) continue to perform their obligations under this MOU.

17. TERMINATION

17.1. Either Party may at any time end this MOU by providing at least 6 months' notice to the other party.

17.2. If this MOU is terminated under clause 17.1 or the Parties agree to end this MOU, then the Parties must collaboratively develop and implement a plan for smoothly transitioning to new arrangements in a way that will minimise the impact on both Parties' business operations.

18. CONTACT OFFICERS

18.1. Each Party will appoint persons as Contact Officers to be the principal point of contact for MOU oversight, finance enquiries and other enquiries between the Parties for the purposes of this MOU.

18.2. At the Commencement Date, the Contact Officers are the individuals specified in Schedule 1.

18.3. A Party may change its nominated Contact Officers by notice to the other party.

19. REPORTING

19.1. QPS will provide to QH the information and reports required under a Service Schedule.

19.2. QH will keep and maintain all records and accounts necessary to provide a complete and detailed record of QH's costs and expenses.

SCHEDULE 1 MOU PARTICULARS

QH Contact Officer	Name: Position: Email: Phone: Address:
QPS Contact Officer	Name: Position: Email: Phone: Address:

SCHEDULE 2 TEMPLATE SERVICE SCHEDULE

Service Schedule

This Service Schedule is made between Queensland Police Service and Queensland Health under the Memorandum of Understanding for Forensic Science Services dated .

Terms defined in the MOU have the same meanings in this Service Schedule.

Description of Services to be provided by QH

Results to be provided by QH

Process for requesting Services

QPS will submit samples for analysis as follows:

Results will be delivered by QH as follows:

Timeframe for delivery of Services

Results will be provided within Business Days of receipt of the request through the Forensic Register

Fees payable for the Services

(a)	$	for up to	
(b)	$	per	for every service that exceeds the cap in (a)
(c)	$	per	for storage of

Fees will be increased on [each anniversary of commencement of this Service Schedule or] as follows:

Service Requirements

Reporting

Special terms

Signed by Queensland Police Service Name of authorised person: Date: Signature:
Signed by Queensland Health Name of authorised person: Date: Signature:

EXECUTION: Signed by the Parties on the dates set out below

SIGNED for and on behalf of

STATE OF QUEENSLAND acting through QUEENSLAND HEALTH, Forensic & Scientific Services

by .....
(full name)

.....
(designation)

who is a duly authorised officer

in the presence of:

.....
(signature of witness)

.....
(print name of witness)

.....
(signature)

.....
(date)

SIGNED for and on behalf of

STATE OF QUENSLAND acting through QUEENSLAND POLICE SERVICES, DNA Management Unit

by .....
(full name)

.....
(designation)

who is a duly authorised officer

in the presence of:

.....
(signature of witness)

.....
(print name of witness)

.....
(signature)

.....
(date)

[redacted]

2.6.3 Sexual offences

CIB and CPIU OIC responsibilities

The OICs of CIBs and CPIUs are responsible for undertaking the role of the sexual violence liaison officer (SVLO) as outlined in the section: 'Sexual violence liaison officer (SVLO) responsibilities' below.

First response officer responsibilities

Where first response officers identify a sexual offence, they should consider contacting the relevant district SVLO to assign an investigating officer in line with local arrangements and the responsibilities of an SVLO contained in this section.

Additional responsibilities of first response officers for sexual offences include:

(i) ensuring the safety and welfare of the victim (see Charter of Victims' Rights of the *Victims of Crime Assistance Act* (VOCAA) and s. 2.12.1: 'Victims of Crime Assistance Act' of this chapter);

(ii) identifying any person to whom the victim may have stated the complaint to following its occurrence, i.e. preliminary complaint and any other possible witnesses;

(iii) obtaining personal particulars from the victim and identifying the offence to be investigated, i.e. rape, sexual assault;

(iv) completing a brief account of the occurrence involving the offence complained of, including location, time, injuries, conversation, indicia, sequence of events, etc.;

(v) obtaining sufficient information which would assist in identifying the suspect(s), including as appropriate:

(a) ascertaining if the suspect(s) is known to the victim or any witnesses;

(b) obtaining an accurate description of the suspect(s);

(c) identifying if any CCTV or security surveillance camera vision is available (see s. 2.4.11: 'Video and photographic evidence recorded during the commission of offences' of this chapter);

(d) obtaining any information which will assist investigators in locating and identifying the suspect(s); and

(e) arranging for a broadcast of suspect(s) where necessary; and

(vi) not asking leading questions of the victim in relation to the complaint.

Investigating officer responsibilities

Additional responsibilities of investigating officers for sexual offences include:

(i) providing an objective account of the investigative process and judicial process to ensure the victim is fully informed of the process;

(ii) discussing with the victim their needs and concerns in relation to the investigative process including whether the victim has any preference in relation to the gender of any officer to be present during the investigation. Preferences should be complied with where possible;

(iii) providing the opportunity for the victim to have a support person present during the various stages of the investigation, including taking the victim's statement (see also s. 7.6: 'Interview with a child or person with an impairment of the mind' of this Manual) and during any medical examinations. A support person may include an employee from a sexual assault support service. Victims should be advised that witnesses or potential witnesses may not act as support persons;

(iv) fully informing the victim of the importance of retaining forensic evidence. However, officers should not discourage victims from washing bodily fluids from the vaginal or anal areas due to the risk of infection from potentially life-threatening diseases such as HIV;

(v) arranging for a medical examination by a forensic medical officer (FMO), doctor or forensic nurse;

(vi) providing the examining medical practitioner with a Sexual Assault Investigation Kit (SAIK);

(vii) taking possession of the completed SAIK and ensuring it is;

(a) allocated a forensic exhibit number;

(b) entered onto the forensic register by a forensic officer; and

(c) delivered to Queensland Health Forensic and Scientific Services (FSS) (see s. 2.19.6: 'Forensic Services Group (FSG)' of this chapter);

(viii) where additional biological evidence is taken from the complainant, only the SAIK is to be delivered to FSS. The biological samples are to be:

(a) retained by the investigating officer whilst awaiting the results of SAIK analysis; and

(b) submitted for analysis, if the analysis fails to identify the offender;

(ix) ensuring a DNA reference sample is collected from the complainant:

(a) at the same time as the SAIK; or

(b) in offences involving oral rape, 48 hours after the time of the offence; and

(c) using a DNA 'Mouth Sample Kit – QPS'; and

(d) completing a:

- QP 0442: 'DNA Sample Particulars Form'; and
- QP 0535B: 'Signed consent for the taking of sample for DNA Analysis from victim/complainant/witness',

(see s. 2.25.6: 'Obtaining samples for DNA analysis from a victim/complainant/witness' of this chapter);

(x) collecting DNA reference samples from witnesses/husband/partners for the purpose of assisting analysts with the interpretation of complex mixed DNA profiles and improving the timeliness of results;

(xii) prior to obtaining a DNA sample:

(a) ensure the victim is fully aware of the procedures involved in the medical examination and discuss the evidentiary benefit to have such examination;

(b) explain to the victim written and signed consent should be given for:

- any clinical or forensic examination;
- the collection of specimens by the doctor;
- the release of any specimens taken or relevant laboratory results; and
- the taking of necessary photographs;

(c) provide the victim the option of having a support worker present during the examination. The examination should be directed to establishing whether the victim had been penetrated to any extent or sexually assaulted. All possible evidence of the commission of the crime should be obtained from the examination of the victim including signs of injury corroborating lack of consent (these signs may consist of bruises, lacerations, scratches, etc. on any part of the body, including the thighs and genital area).

Note: there is no legal requirement for a police officer to be present during a medical or forensic examination. Officers may however advise the victim they or medical staff may request an officer to be present;

(d) be aware of the provisions of s. 93A: 'Statement made before proceeding by child or person with an impairment of the mind' of the *Evidence Act* (EA) which deals with the admissibility of statements by a child or an intellectually-impaired person. Wherever possible, statements in this format should be obtained by officers who have successfully completed an ICARE (Interviewing Children and Recording Evidence) course; and

(e) where possible, obtain photographs of the victim which illustrate any injuries or other evidence;

(xiii) ensuring the victims clothing and underclothing which may assist in the investigation (e.g. bodily fluids such as saliva, semen or blood) are collected as per s. 2.25.20: 'Procedure for items of clothing worn by a complainant' of this chapter;

(xiv) arrange for the examination of the crime scene by forensic personnel as soon as possible, ensuring the scene is not disturbed until the examination is completed. Items such as discarded clothing, bed linen etc. which may provide forensic evidence to support the investigation are collected in accordance with s. 2.25.19: 'Procedure for items left at scenes of crime' of this chapter;

(xv) making, if appropriate, a detailed plan of the scene. Officers trained in accident investigation procedures may be able to assist;

(xvi) obtaining a detailed statement from the victim. In doing so officers should:

(a) consider the provisions of Chapter 6: 'Persons who are vulnerable, disabled or have cultural needs' of this Manual;

(b) consider the provisions of s. 93A of the EA (Admissibility of statements by a child or an intellectually-impaired person). Statements in this format should, where possible, be taken by officers who have completed an ICARE course;

(c) inquire if a support person is required during the interview, e.g. a friend, family member or a community support worker;

(d) ensure if the victim has a disability/impairment, a representative from the appropriate agency or a support person, where available, is present during the interview;

(e) ensure, where the victim is not conversant with the English language, where available, an appropriate interpreter is present (see s. 6.3.7: 'Interpreters' of this Manual);

(f) consider the use of a Queensland Intermediary Scheme (QIS) intermediary to assist witnesses with communication difficulties during the interview process for child sexual offence investigations (see s. 7.6.3: 'Procedures for interviewing a child' of this Manual);

(g) acknowledge the impact of sexual violence can be different for everyone and ensure the victim is comfortable prior to commencing the statement;

(h) create an environment of trust with the victim;

(i) conduct the interview in a private quiet area;

[redacted]

Lodgement of forensic samples for testing

In order to reduce the risk of test results being compromised as a result of forensic samples (e.g. arson debris, blood and firearm residue) being delivered to unsuitable facilities, the following guidelines have been developed:

Sample analysed by Queensland Health Forensic and Scientific Services

Forensic toxicology samples

Samples from post mortem examinations and from living subjects such as vehicle drivers requiring analysis for alcohol, drugs or poisons (toxicology) are to be sent to Forensic Toxicology, Queensland Health Forensic Scientific Services (QHFSS).

In cases where a person has died in hospital after a significant period of survival and where toxicology is forensically relevant, samples taken from the person upon admission to hospital should, where possible, also be sent to Forensic Toxicology.

In the case of suspected poisoning due to cholinesterase inhibitors (e.g. organ phosphorus and carbamate type pesticides) blood samples are to be sent to a hospital pathology laboratory with the capacity to estimate cholinesterase levels (e.g. Royal Brisbane Hospital and Princess Alexandra Hospital).

Histology samples

Samples from post mortem examinations requiring microscopic examination of tissues (histology), including whole organs, are to be sent to Forensic Pathology, QHFSS unless the autopsy is performed by a pathologist other than a QHFSS Pathologist. In such cases histology is normally performed in the pathologist's own laboratory.

Sexual Assault Investigation Kits (SAIK) and seminal stains

The SAIK must be delivered to QHFSS as a matter of priority. Prior to delivery, the investigating officer must attend a scenes of crime office in order have the SAIK barcoded and entered onto the Forensic Register.

Items requiring examination for presence of seminal fluid including clothing from complainants should be collected by a forensic officer wherever possible to prevent contamination and ensure that they are packaged correctly. These items are then returned to investigating police pending the outcome of the SAIK analysis. If the SAIK analysis fails to identify the offender, the remaining items requiring seminal fluid examination are forwarded to a scientific officer.

See also s. 169: 'Preserving evidence at crime scene' of the PPRA.

Crime scene exhibits suspected of yielding DNA (other than seminal stains)

All crime scene exhibits requiring examination for the presence of DNA are to be collected by a forensic officer (scenes of crime or scientific officer). If circumstances prevent this, a forensic officer should be contacted for advice prior to collection. The collected item is to be delivered to a forensic officer for assessment of probative value and sub-sampling if required.

QHFSS will not accept crime scene exhibits (other than swabs or tape lift) submitted for testing for the presence of DNA. These exhibits are to be delivered to a forensic officer for sub-sampling. The subsequent sub-samples are then forwarded to QHFSS.

All crime scene exhibits collected by non-forensic police officers that are to be submitted to QHFSS for DNA testing must be:

(i) recorded as property in QPRIME;

(ii) taken to a forensic officer for a sub-sampling and/or examination; and

(iii) entered on the Forensic Register and barcoded prior to lodgement at QHFSS.

EXHIBIT 211

From: Neville.DavidH[OSC]
Sent: Thursday, 6 September 2018 10:24
To: Marchesini.George[SCC]
Subject: RE: SAIK Kit Review

His reasoning was that it was too invasive to take blood from the victim. Given a swab is taken from the vagina/anus, I would have thought that this was nothing. Anyway, I think I have another solution,

---

From: Marchesini.George[SCC]
Sent: Thursday, 6 September 2018 10:15 AM
To: Neville.DavidH[
Cc: Blanchfield.StephenJ[Clark.DenzilO[SCC]
Subject: RE: SAIK Kit Review

Dave,

I would be interested to know his reasoning and I am sure it will come back to the training required across the HHS's across the state. I wouldn't say this is a lost cause as we are having current discussions with Health as per below email. At the end of the day Health can't be criticising the QPS for delays in obtaining reference samples from victims and then not working with the QPS to develop some options. Additionally, from a trauma-informed practice perspective, it is not the best option to go back to a victim to seek a reference sample when they have already had the medical exam.

This should be viewed from the perspective of developing a victim-centric solution, rather than one that best serves government agencies. It may warrant further discussion at the Interagency Committee that is currently amending the current government response to sexual assault guidelines. I have copied in my Supt and also DI Steve Blanchfield who will soon be taking over my role.

Regards

George

George Marchesini
Acting Detective Superintendent
Child Abuse and Sexual Crime Group
Queensland Police Headquarters, 200 Roma Street, Brisbane Qld 4000
GPO Box 1440 Brisbane Qld 4001

From: Neville.DavidH[OSC]
Sent: Thursday, 6 September 2018 9:49 AM
To: Marchesini.George
Subject: RE: SAIK Kit Review

Hi George, I spoke to Adam and he was adamant that he did not want to take reference samples from the Complainant. As a result I will not be pursuing this process.

David Neville

From: Marchesini.George[SCC]
Sent: Tuesday, 4 September 2018 3:30 PM
To: Neville.DavidH[redacted]
Subject: RE: SAIK Kit Review

Hi Dave, sorry for the delay in response. I have the below contact, who sits on the current Qld Government Interagency Working Group for the Sexual Assault Guidelines. I have spoken with Adam, along with D/Supt Denzil Clark regarding the current issues we are experiencing around the state re the availability of FMEs and FNEs.

Dr Adam Griffin
Director
Clinical Forensic Medicine Unit
Health Services Support Agency
Queensland Health
[redacted]

George Marchesini
Acting Detective Superintendent
Child Abuse and Sexual Crime Group
State Crime Command | Queensland Police Service
[redacted]
GPO Box 1440 Brisbane Qld 4001

From: Neville.DavidH[OSC]
Sent: Friday, 31 August 2018 11:32 AM
To: Marchesini.George[redacted]
Subject: RE: SAIK Kit Review

George,
Years ago Bob Hoskins was in charge of the GMOs. Do you know who it is now and do you have their contact details

Dave

From: Marchesini.George[SCC]
Sent: Thursday, 30 August 2018 10:08 AM
To: Neville.DavidH[redacted]
Cc: Colless.FabianG[redacted]
Subject: RE: SAIK Kit Review

Hi Dave,

Firstly thanks for the email for the promotion – not quite official yet. Jumping from the frypan into the fire, so to speak!!!

It might be easier if you are able to give me a call as there are a many moving parts and stakeholders involved in this. Our involvement in the SAIK kits is really one of ensuring there is a supply available for the regional investigators. My understanding is that Qld Health are the main stakeholder in regards to the kits. The bigger issue though is the complexity in negotiating with Qld Health as their organisational structure is such that the Health and Hospital Services (16 in Qld) are very autonomous due to the legislation (Hospital and Health Boards Act 2011). Denzil Clarke and I have had some issues in trying to engage senior representatives in Qld Health to discuss current issues involving FMEs and FNEs.

The main issue with any change will be influencing Qld Health and also how this will flow on to training of the FMEs and FNEs and in a large proportion of cases around the state, the GPs and hospital doctors that also conduct the examinations when FMEs and FNEs are not available.

Give me a call to further discuss as it may be the case we have a representative from our unit also attend the meeting with you. We also sit on the Interagency Working Group that oversees the current government response protocols for responding to sexual assault.

Talk soon

Regards

George

George Marchesini
Detective Inspector | Operations Manager
Child Trauma and Sexual Crime Unit | **Child Abuse and Sexual Crime Group**
[redacted]

From: Neville.DavidH[OSC]
Sent: Wednesday, 29 August 2018 9:14 AM
To: Marchesini.George[redacted]
Subject: SAIK Kit Reveiw

Supt
Firstly, congratulations on your promotion. I am told that you have the SAIKs under your portfolio. There is a significant issue with the SAIKs in that the investigators continually fail to get a reference sample from the victim. This causes delays in the testing. Often the sample is not able to be taken at the same time as the SAIK due to oral sexual activity.

From what I can determine, the complainant consents to the examination so there are no police powers exercised. As a result it may be possible for the medical practitioner to take the DNA reference sample at the same time. The medical practitioner could simply prick the finger of the complainant to collect a small sample of blood on a FTA card. This would prevent any issues with oral sex contamination of oral samples. In this way all required samples are received at once. The reference sample could only be used within the case to filter out the complainant's DNA, it would never be uploaded to NCIDD.

I have a meeting with Queensland Health on 28 September and I was wanting to raise this as a possibility. Do you have any thoughts on this? Has this ever been raised as a possibility with the GMOs?

Regards

David Neville
Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE
[redacted]

Address **GPO Box 1440 Brisbane 4001**

[redacted] EXHIBIT 212

From: Neville.DavidH[OSC]
Sent: Thursday, 6 September 2018 10:15
To: Cathie Allen; Craig Russell
Cc: Frieberg.DaleJ[OSC]; Adam_Griffin[redacted] Marchesini.George[SCC]
Subject: Reference Samples / SAIK

Hi Cathie and Craig,
I previously indicated that I wished to raise the idea of a reference sample being included in the SAIK. I had a conversation with Adam Griffin this morning and he was adamant that this was not the best way forward for a number of reasons. Given these discussions, I will not be pursuing this avenue.

Because this is still am important issue that seems to be problematic, I reviewed the current policy to see what measures we can implement to get investigators to comply with our procedures that require them to take the reference sample. The procedures require the investigators to take the SAIK to a SOC officer to be barcoded and placed on the FR before it is sent to FSS. Another solution may be that the SOC officer only enters the SAIK on the FR if a reference sample has been taken. This should prompt the investigators to take the sample. I will look into how feasible this is, but I think it might work.

David Neville
Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE

[redacted]
Address GPO Box 1440 Brisbane 4001

EXHIBIT 213

From: Bushell.PeterA[OSC]
Sent: Friday, 7 September 2018 09:01
To: Baker.PaulL[OSC]; Neville.DavidH[OSC]; Arthy.LloydF[OSC]; Stewart.DonnaM[OSC]; Stanley.AndrewR[OSC]; Freeman.AdrianH[OSC]; Van Panhuis.Arthur[OSC]; Brock.AdrianC[OSC]; Smith.GregS[OSC]; McKay.DonniP[OSC]
Cc: Crick.BillW[OSC]; Cook.JamieB[OSC]; Collopen.RubenB[OSC]; Simpfendorfer.GerardM[OSC]; Frieberg.DaleJ[OSC]
Subject: RE: SOC Officers to check if Reference Samples have been taken before a SAIK is entered on QPRIME

Gents,

The OPM's have only recently been changed to include the below.

2.6.3 Sexual Offences
Procedure
Additional responsibilities of first response officers for sexual offences include:
vii) ensuring a DNA reference sample is collected from the complainant:

a) At the same time of the SAIK; or
b) in offences involving oral rape, 48hrs after the time of the offence.

So this wasn't in the OPM's originally and some investigators thought that the GMO did the reference sample or others were building rapport with the complainants and simply forgot. So the OPM's reflect that the reference sample is now to be taken by the investigating officer at the time of the SAIK. So in theory this should reduce the amount being submitted without a reference sample as this has just been modified.

I can't see this being a forensic issue as the OPM's state that it should be taken at the time of the SAIK.

Ideally, why couldn't you design the SAIK to include the reference sample on the outside of the kit (similar to below). That way it prompts the I/O to include the reference sample as part of the SAIK. This way, they are delivered at the same time, which is attached but external to the kit. It can easily be separated and prompts the I/O that hey something's missing and forensic officers can see whether it's been taken or not.

The whole SAIK thing is a drama believe me and yes we are the only state in Australia where the investigating officer takes the reference sample. In all other states the GMO takes the sample as part of the SAIK – one procedure obviously best for the victim. Actually the other states couldn't believe that a rape victim was subject to the SAIK and then police have to take a reference sample after it – they thought it was the most bizarre thing they heard.

In a nutshell, there is a memorandum of understanding between agencies which highlight best practice as the taking of the reference sample as part of the forensic medical examination, that is by the nurse or doctor.

We hit a hurdle as the forensic director says no not his problem even though there is an interagency guideline for responding to sexual assaults signed by the Police Commissioner, Dept of Health, Dept of Justice & Dept of Communities. Pointless having the document really as why would you expose a victim to procedures which could easily be covered by the GMO, I thought that was the idea of an interagency agreement.

Hope this helps a little….

Bushy

From: Baker.PaulL[OSC]
Sent: Friday, 7 September 2018 8:05 AM
To: Neville.DavidH[Arthy.LloydF[Stewart.DonnaM[Stanley.AndrewR[OSC] ; Freeman.AdrianH[Van Panhuis.Arthur ; Brock.AdrianC[OSC] ; Smith.GregS[McKay.DonniP[OSC]
Cc: Crick.BillW[Cook.JamieB Collopen.RubenB[; Simpfendorfer.GerardM[OSC] Bushell.PeterA[Frieberg.DaleJ[
Subject: RE: SOC Officers to check if Reference Samples have been taken before a SAIK is entered on QPRIME

Yes Lloyd, Bushy has been asking this for some considerable time now…. for RS to be taken at same time as SAIK.. the biggest issue for me and Bushy is concern for the complainant, generally having to make another appointment with police for the RS to be taken when clearly the best time is at the time of the SAIK – it seems ludicrous that it is not done then – (another swab as part of the SAIK kit) and I guess some investigators would naturally think it would be done at that time.

Interestingly and from memory so don't hold me to this but Bushy will know…. when this was first mooted with QH it didn't seem too difficult a task.. then other people at QH were involved and it became difficult. What about the complainant in all this?

Cheers PB

Paul Baker
Forensic Coordinator
South Brisbane District
Forensic Services Group

From: Neville.DavidH[OSC]
Sent: Friday, 7 September 2018 05:42
To: Arthy.LloydF[>; Stewart.DonnaM[OSC] ; Stanley.AndrewR[Baker.PaulL[Freeman.AdrianH[; Van Panhuis.Arthur ; Brock.AdrianC[OSC] Smith.GregS ; McKay.DonniP[OSC]

Cc: Crick.BillW[Cook.JamieB
Collopen.RubenB[; Simpfendorfer.GerardM[OSC]
Subject: Re: SOC Officers to check if Reference Samples have been taken before a SAIK is entered on QPRIME

I tried this and they declined.

Get Outlook for iOS

From: Arthy.LloydF[OSC]
Sent: Friday, September 7, 2018 5:41:35 AM
To: Neville.DavidH[OSC]; Stewart.DonnaM[OSC]; Stanley.AndrewR[OSC]; Baker.PaulL[OSC]; Freeman.AdrianH[OSC]; Van Panhuis.Arthur[OSC]; Brock.AdrianC[OSC]; Smith.GregS[OSC]; McKay.DonniP[OSC]
Cc: Crick.BillW[OSC]; Cook.JamieB[OSC]; Collopen.RubenB[OSC]; Simpfendorfer.GerardM[OSC]
Subject: RE: SOC Officers to check if Reference Samples have been taken before a SAIK is entered on QPRIME

Of course another way to achieve your aim might be to get QHealth to include a reference sample kit within all SAIK kits.

Lloyd
****

From: Neville.DavidH[OSC]
Sent: Thursday, 6 September 2018 1:08 PM
To: Stewart.DonnaM[Stanley.AndrewR[OSC]
Baker.PaulL[; Freeman.AdrianH[OSC]
; Van Panhuis.Arthur[
Brock.AdrianC[; Arthy.LloydF[
Smith.GregS[; McKay.DonniP
Cc: Crick.BillW[>; Cook.JamieB[OSC] ;
Collopen.RubenB[>; Simpfendorfer.GerardM[OSC]
Subject: SOC Officers to check if Reference Samples have been taken before a SAIK is entered on QPRIME

Dear Forensic Managers,
There continues to be issues with investigators failing to collect reference samples from rape victims. One way to make them do it is to only enter the SAIK on the FR if a reference sample has been taken. I was hoping to amend CSE101 Biological evidence as per below to include a check to ensure a reference sample has been taken. Does anyone see any risk or object to this, or have a better alternative.

8.6 Sexual Assault Investigation Kits (SAIK)

8.6.1 Investigating police in possession of a SAIK will require the kit to be allocated a forensic exhibit number and entered as an exhibit on the Forensic Register by a forensic officer.

8.6.2 The forensic officer is to ensure that a reference DNA sample has been collected from the complainant. This is recorded on QPRIME as an "Ident/fingerprint" report against the complainant. To view the report open the "Involvements" tab and select the complainant's name. The "Ident/fingerprint report" will be included under the "Occ events/reports" tab. If there is no reference sample, the forensic officer is to advise the investigator that the SAIK cannot be processed until the refence sample has been collected and no further action is required on the part of the forensic officer.

8.6.3 The forensic officer should not open the kit, or label anything inside it. The outside of the SAIK is labelled with the forensic exhibit number.

8.6.4 The forensic officer will enter the SAIK onto the Forensic Register as an exhibit to allow the tracking of the SAIK. It is not necessary to add an examination summary for this process.

8.6.5 In cases where other biological evidence is taken as well as a SAIK, only the SAIK is to be delivered to QHFSS Forensic Biology, generally by the investigating officer or a delivery officer. The biological samples are to be retained by the Investigating Officer until it is determined that either:

1. the SAIK has returned a positive result, in which case it will typically not be necessary to examine the additional biological evidence, or
2. the SAIK has returned a negative result and further information may be adduced from the biological evidence.

David Neville
Inspector
DNA Management Unit | Forensic Services Group
Operations Support Command
QUEENSLAND POLICE SERVICE

[redacted]
Address GPO Box 1440 Brisbane 4001

EXHIBIT 214

From: Neville.DavidH[OSC]
Sent: Friday, 28 September 2018 12:15
To: McNab.BruceJ[OSC]
Cc: Simpfendorfer.GerardM[OSC]; Collopen.RubenB[OSC]
Subject: RE: Qld Health Follow up - SAIK
Attachments: 28092018102808-0001.pdf; VPARL2006-10No301.pdf

Dear Supt,

Please find the following dot points on the SAIK matter.

- The Sexual Assault Investigation Kit (SAIK) is produced by QHFSS and used by Forensic Medical Examiners (FMEs) when examining rape victims. It is used to collect the offender's DNA, which is usually present as semen. It includes vaginal and/or anal swabs plus other components.
- The swabs from the SAIK generally return a mixed DNA profile consisting of the offender's DNA and the victim's DNA. As a result, a reference DNA sample is required from the victim so their DNA can be filtered from the mixed profile.
- The SAIK currently does not include materials to collect a reference sample from the victim. The current practice is for police to collect a reference sample from the victim at another time. Police request the victim to sign a consent form and give them a mouth swab which they use to sample themselves with.
- Because the SAIK and reference samples are collected separately, the majority of SAIKs are received at QHFSS without any reference sample causing delays in the analysis. The delays in the provision of the reference sample has been repeatedly raised as an issue by QHFSS.
- QPS investigators are tasked with taking a statement from the victim which is often very traumatic as they have to recount the details of the crime. There is concern that asking the victim to consent to a second forensic examination to collect a reference sample of DNA only adds to the victim's stress at this time.
- This practice does not comply with Queensland Government policy issued in 2014 titled, "*Response to Sexual Assault: Queensland Government Interagency Guidelines for Responding to People who have experienced Sexual Assault*." This document was designed to ensure agencies work together in the best interest of the victim. The policy states,

  Victim DNA reference samples
  DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the FME (forensic medical examination)
  (A copy of the guideline is attached).
- The solution to this problem is to include materials within the SAIK for the collection of a reference sample from the victim during the forensic medical examination. This is what occurs in all other states and is deemed best practice as per the guidelines.
- There is no legal impediment to collection of the refence sample by the FME. The sample is taken by consent and not by some police power.
- QPS has made repeated requests to QHFSS to alter their practice and kits so that a reference sample is taken during the forensic medical examination. In 2016 Dr Gary Hall, Acting Chief Medical Officer, and Ms Debbie Whelan, Acting Managing Scientist, both agreed that this would be best practice. However, support for these changes was later withdrawn by Dr Adam Griffin and Ms Cathie Allen who are the relative incumbents of those positions. They have subsequently declined repeated request to change the practice to comply with the Queensland Government Guidelines and what is considered as best practice nationally. The reasons for declining the requests are as follows:
  - The victim may have been assaulted orally which could result in the offender's DNA contaminating the reference sample.
    - QPS Comment: The other jurisdictions collect a sample of blood by pricking the victim's finger to prevent this contamination issue.
  - Taking a sample of blood is too invasive on the victim.

        - QPS Comment: The victim has their vagina and/or anus swabbed, the collection of blood would seem to be unobtrusive in comparison. It is also common practice for QH to take blood from the victim to test for STD in any case.
    - There is a chance that the reference sample could contaminate the other samples.
        - QPS Comment: The other jurisdictions manage this risk by appropriate packaging of samples. In any case, all of the samples taken from the victim are going to be contaminated with the victim's DNA because they were taken from intimate areas of the victim.
    - It would be difficult to train FMEs outside of the metropolitan areas due to variation in the line control arrangements.
        - QPS Comment: It is critical that the medical examination of rape victims is closely regulated by procedures, training and compliance monitoring. Poor practice in forensic medical examination led to the 2008 wrongful conviction of Mr Farah Jama in Victoria. The parliamentary enquiry into this affair recommended strict processes to be adopted within that state to prevent repetition. Queensland FMEs should be regulated in such a manner to prevent this type of miscarriage of justice. If so, methodology should be able to be effectively modified to conform with contemporary views on best practice.

David Neville

From: McNab.BruceJ[OSC]
Sent: Thursday, 27 September 2018 7:16 PM
To: Neville.DavidH[
Subject: Fwd: Qld Health Follow up

Hey Dave,

Here is an update from the boss.

When you get back if you could have a squizz at the info Michael was looking for and contact him direct.

Let me know how it goes.

Take care.

Bruce McNAB BM
Superintendent 7417
Operations Commander
Forensic Services Group
Qld Police Service

From: McCarthy.AllanE[OSC]
Sent: Thursday, September 27, 2018 4:00:32 PM
To: McNab.BruceJ[OSC]
Subject: Qld Health Follow up

Bruce,

I met with Michel Lok (and Craig Russell) from Qld Health this afternoon and discussed the listed issues with them.

All matters raised were discussed positively.

Outcomes as follows:

- Bar codes – commitment given that they will work with Dave Neville to ensure we have necessary number of 9 digit codes to continue.

- AO6 payment arrangements – assurances provided that the full 12 month contract/funding is there and will be maintained. They agree to provided payment quarterly – it remains an admin matter for them. They understand the sensitivity around Tims' position and agree that he needs to be provided job security with certainty over funding.

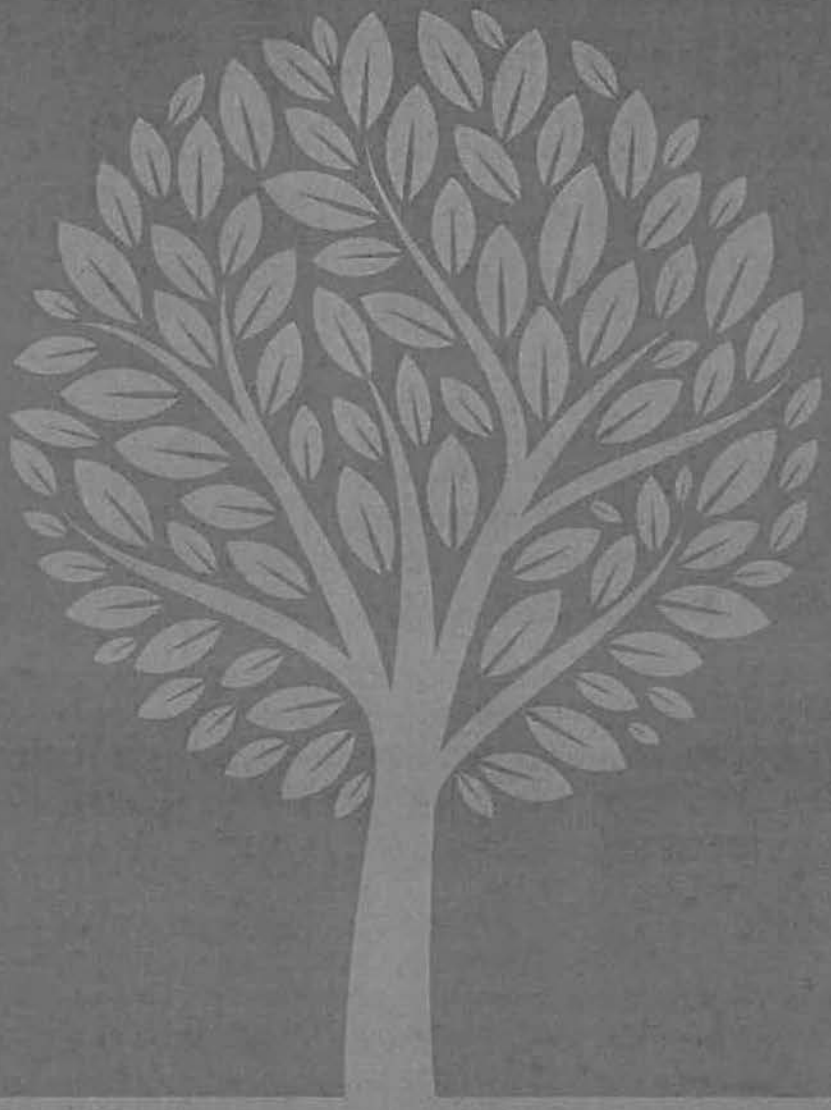
- QAO re DNA audit – will remain in contact with us, and they appreciate the possible issues and risks involved – similarly with DNA turn-around times. Will remain in contact to work towards better TAT.

- STRMix problems with rescinded results – they immediately understood the ramifications and risks involved and happy to look at amending the process. Please arrange for Dave to liaise with Craig Russell asap on this one.

- SAIK and victim reference sample – they were unaware of the issue, but very happy to follow up. They requested that Dave liaise and explain some of the detail (in plain, non-expert terms) and the problems that arise. I gave them the explanation I had, but I think it will be better for Dave to follow up with some more detail – in a detailed email to me that I can forward to Michel - who has direct control over the CMO.

Regards,

Allan McCarthy
Assistant Commissioner
Operations Support Command
Queensland Police Service
[redacted]



Response to sexual assault

Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault

Queensland Government

APPENDIX A: Contact list from interstate inquiries:

New South Wales Police
PHQ Major Crime Unit
Detective Tim RYAN
[redacted]

Victoria Police
Sexual Assault Unit
Detective Sophie LEETE
[redacted]

Tasmania Police
Forensic Services
Alastair WATSON
[redacted]
Detective Krista DENNIS
[redacted]

South Australia Police
PHQ Major Crime Unit
Detective Bernie FARRINGTON
[redacted]
YARROW PLACE – Rape and Sexual Assault Service
[redacted]

Western Australia Police.
Sexual Assault Unit
Officer in Charge John MOTTOLINI
[redacted]

Northern Territory Police
Major Crime Unit
Detective Glenn LEAFE
[redacted]

These guidelines have been developed through a strong collaborative approach by a Government Interagency Working Group including representatives from:

- **Queensland Police Service**
- **Department of Justice and Attorney-General**
  - *Office of the Director of Public Prosecutions*
  - *Queensland Courts*
  - *Victim Assist Queensland*
  - *Youth Justice Conferencing*
- **Department of Communities, Child Safety and Disability Services**
- **Queensland Health**
  - *Aboriginal and Torres Strait Islander Health Unit*
  - *Clinical Forensic Medicine Unit*
  - *Child Advocacy Service*
  - *Royal Brisbane and Women's Hospital Department of Social Work Services (Sexual Assault Service)*

The Strategic Policy Priority Areas, System Policy and Performance Division of Queensland Health were consulted during this process.

The guidelines are intended to outline key principles and a best practice framework for working with people who have experienced sexual assault. This includes children and young people who have been sexually abused or sexually assaulted.

The term victim is used throughout the document where there is reference to specific legislation and where the person is either a male or female who has experienced sexual assault. The term sexual assault is used throughout the document and includes those assaults where rape and/or sexual abuse has taken place or is alleged to have taken place.

Mr Ian Maynard
Director-General
Department of Health

Mr Michael Hogan
Director-General
Department of Communities, Child Safety and Disability Services

Mr Ian Stewart
Commissioner of Police
Queensland Police Service

Mr John Sosso
Director-General
Department of Justice and Attorney-General

June 2014

Contents

Preface ... 3
Glossary ... 4

Section 1
Introduction ... 5
Governance ... 5
Sexual assault ... 5
Responses to victims ... 5
Children and young people ... 6

Section 2
Principles of the Interagency Guidelines ... 7
Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism ... 7
Fair and dignified treatment ... 7
Privacy of victim ... 7
Information about services ... 7
Information about investigation of the offender ... 7
Information about prosecution of the offender ... 7
Victim to be advised on their role as a witness ... 7
Minimal exposure to and contact with the offender ... 8
Victim Impact Statement ... 8
Information about the convicted offender ... 8
Making a complaint ... 8

Section 3
The Roles of Key Government Agencies ... 9
Queensland Police Service ... 9
Queensland Health ... 9
Department of Justice and Attorney-General ... 10
Office of the Director of Public Prosecutions ... 10
Victim Assist Queensland ... 10
Youth Justice Conferencing ... 10
Queensland Courts ... 11
Department of Communities, Child Safety and Disability Services ... 11
Non-government organisations ... 11

Section 4
Interagency Approach ... 12
Teamwork ... 12
Confidentiality ... 12
Training ... 12
Information provision ... 12
Referrals ... 12
Feedback ... 13
Access, availability and promotion of services ... 13
Gender of service providers ... 13
Diverse needs ... 13
Aboriginal and Torres Strait Islander people ... 13
Communication ... 13
People with a disability ... 13
People from culturally and linguistically diverse backgrounds ... 14
Translating and interpreting services ... 14

Section 5
Interagency Procedures ... 15
Crisis intervention ... 15
Initial report to police ... 15
Initial report to a health facility ... 15
Medical examination and treatment ... 15
Referral to the local sexual assault team ... 16
Notifying the police ... 16
Victim attending with police ... 16
Initial contact ... 16
Forensic medical examinations ... 16
Forensic medical examinations and informed consent for people aged 14 years and above ... 16
Forensic medical examinations and informed consent for people under 14 years of age ... 17
Chain of evidence ... 17
Timing and nature of the forensic medical examination ... 18
Presence of police and support person at medical and forensic examinations ... 18
Consent to release information and evidence ... 18
Access to health records ... 18
Drug facilitated sexual assault ... 18
Victim DNA reference samples ... 18
Support person during the police interview ... 18
Discontinuance of police action before a proceeding has commenced ... 19
Domestic Violence Protection Orders ... 19
Follow-up and registration on the Victims Register ... 19

Conclusion ... 20

Preface

The guidelines are designed to promote whole-of-government interagency cooperation and service coordination with an aim to improve governmental responses to victims of sexual assault. The need for enhanced coordination and cooperation has long been recognised and resulted in the development of the *2001 Queensland Government Interagency Guidelines for responding to adult victims of sexual assault.*

The 2013 guidelines aim to facilitate best practice, quality service and support to people who have experienced sexual assault.

Legislation relevant to and defining sexual assault includes but is not limited to:

- *Aboriginal and Torres Strait Islander Peoples Recognition Act 2013*
- *Child Protection Act 1999*
- *Criminal Code Act 1899*
- *Criminal Law (Sexual Offences) Act 1978*
- *Domestic and Family Violence Protection Act 2012*
- *Evidence Act 1977*
- *Health Act 1937 & associated regulations*
- *Hospital and Health Boards Act 2011*
- *Mental Health Act 2000*
- *Police Powers and Responsibilities Act 2000*
- *Public Health Act 2005*
- *Victims of Crime Assistance Act 2009*

Policy referred to includes but is not limited to:

- Queensland Government Language Services Policy
- Queensland Health Protocol for conducting child sexual assault examinations

The guidelines should be read in conjunction with internal agency procedures such as the Office of the Director of Public Prosecutions Guidelines and the Queensland Police Service Operational Procedures Manual. In addition to legislation, policies and procedures, the Queensland Government joins with governments around Australia in the implementation of the National Plan to Reduce Violence against Women and their Children 2010-2022.

Each government agency has a complementary and essential role in ensuring that people have access to effective, timely and appropriate information, support, care and treatment following a sexual assault.

Given the nature of the crime, sexual assault is an area of legal and social complexity. The guidelines are designed to help government officers and agencies work together in the best interests of the person who has been sexually assaulted through better understanding one another's roles and responsibilities.

The Queensland Government encourages reporting of criminal activity and prosecution of offender(s) where possible.

Glossary

CPA	*Child Protection Act 1999*
DCCSDS	Department of Communities, Child Safety and Disability Services
DFVPA	*Domestic and Family Violence Protection Act 2012*
EA	*Evidence Act 1977*
FME	Forensic Medical Examination
FMO	Forensic Medical Officer
FNE	Forensic Nurse Examiner
ODPP	Office of the Director of Public Prosecutions
QH	Queensland Health
QPS	Queensland Police Service
SAIK	Sexual Assault Investigation Kit
Victim Assist	Victim Assist Queensland
YJC	Youth Justice Conferencing

Section 1 Introduction

Governance

The government agencies responsible for delivering a service to victims of sexual assault, in accordance with relevant legislation, whole-of-government policy and internal departmental procedures, are responsible for the ongoing governance of this document. The guidelines are underpinned by each government agency's own internal policies and procedures which they are obligated to adhere to. Each government agency has a formal complaints mechanism which is accessible to members of the public.

The Government Interagency Working Group will meet bi-annually to review the guidelines and consider matters of particular concern for people impacted by sexual assault and to consider the impact of any legislative change.

Sexual assault

Sexual assault is a crime of violence. It is a humiliating and degrading experience. It has an emotional, physical, financial and social cost, not only to those directly affected, but also for the community as a whole.

The number of reported sexual offences against women aged 15 or over in Queensland in 2011/2012 was 2035 compared with 227 against males.[1]

Major Australian studies indicate that only 11-25 per cent of sexual assaults are reported to the police and that most offenders are known to the victim.[2] People who experience sexual assault may feel a range of emotions including shock, fear, guilt, shame, depression and an inability to trust others. The social stigma attached to sexual assault can heighten these feelings and increase the trauma experienced. It is imperative that when disclosing or reporting a sexual assault, people receive an effective, professional and appropriate response from the agencies to which they report.

Community education can encourage family and friends to respond supportively and appropriately to a disclosure of sexual assault. However, in order to assist their recovery, victims may also need access to a range of personal support services including counselling, medical services and assistance to report the crime to the police.

The information provided in the guidelines is intended to provide a strategic overview to support the development of policies and procedures at a local level. Local level procedures will differ according to the nature of the service system in each area. It is also intended to contribute to improving service responses to victims.

Responses to victims

Following disclosure of a sexual assault, the following needs of the victim should be addressed:

- immediate safety needs
- immediate health needs
- options for pursuing justice
- ongoing emotional needs for longer term wellbeing.

In order to avoid secondary traumatisation and mitigate the risk of negative, long term outcomes, government responses to sexual assault must be both sensitive and effective. These responses therefore need to take into account the diversity of victims, including their cultural and linguistic background, disability, sexual orientation, age and geographical location. In addition to assisting recovery, more sensitive and effective responses may also lead to an increase in reporting rates.

This, in turn, can lead to a more accurate understanding of the prevalence of sexual assault, inform community education and awareness approaches, and result in improved prevention strategies.

1 Queensland Police Service (2012) Statistical Review 2011-2012 Brisbane
2 Australian Bureau of Statistics (1996) Women's Safety Survey, Cat.no. 4218.0 (unpublished data) as cited in Office of Women's Policy (1999) A Social and Economic Profile of Women in Queensland 1999 Brisbane; Australian Bureau of Statistics (1996) Victims of Crime Survey

Children and young people

It should be noted that the *Child Protection Act 1999* (CPA) is relevant where there are concerns that a child has been sexually abused and where a child does not have a parent able and willing to protect them from the abuse. The main principle for administering the CPA is that the safety, wellbeing and best interests of a child are paramount. Section 159B of the CPA imposes a responsibility on particular service providers to assess and meet the protection and care needs of children and provide collaborative and coordinated support to their families.

The definition of harm in the CPA includes harm resulting from sexual abuse or exploitation. A child is defined in the CPA as an individual less than 18 years of age. Where the child or young person is under the age of 16, their parent or guardian should be consulted where possible and appropriate. Whilst certain circumstances may not make this possible, the child or young person should have access to a support person throughout the response.

The safety and protection of children and young people who are sexually assaulted is a high priority. When disclosing a sexual assault, young people should be encouraged to access services so that they are aware of their options in terms of support, assistance, treatment and prevention.

When working with a young person who reports a sexual assault, personnel from the Queensland Police Service, Department of Communities, Child Safety and Disability Services (DCCSDS) and Queensland Health (QH) are required to follow the statutory requirements under the CPA and the *Public Health Act 2005* relevant to their position.

Where the child or young person is subject to an order granting custody or guardianship of the child, the Chief Executive, Child Safety, DCCSDS, must be notified regarding the report of a sexual assault.

Confidentiality cannot be guaranteed where a child or young person is believed to be in need of protection from harm. To work in the best interest of that child or young person, information may need to be exchanged between departments. It is best practice for the child or young person to be advised that a report to the DCCSDS and the police may take place. Certain circumstances may not make this possible.

Section 2
Principles of the Interagency Guidelines

Government responses to sexual assault are framed by the following overarching principles:

- All agencies will focus on the safety, physical and psychological needs of the victim
- The victim's right to privacy and confidentiality will be respected at all times unless disclosure is required by another law
- Comprehensive information about all processes and options will be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location
- The victim's informed decision will be respected at every stage of the process
- The victim's sense of personal control will be supported and encouraged
- All relevant agencies will work collaboratively to respond to sexual assault, to provide clear, up to date and comprehensive information about other agencies and services and will facilitate access to appropriate agencies and services on request
- All agencies will ensure documentation and records are prepared in accordance with individual agency requirements and respect confidentiality, privacy, security and choice.

Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism

Government responses are also framed by the legislated responsibilities defined in the Fundamental Principles of Justice for Victims of Crime (Principles of Justice) in Queensland, set out in Chapter 2 of the *Victims of Crime Assistance Act 2009*.

If a victim feels they have been treated unfairly or without respect by a Queensland Government officer, they have the right to complain to the government agency responsible for the conduct of the officer or to Victim Assist Queensland (Victim Assist).

As a guide, the following is a summarised version of the Principles of Justice:

Fair and dignified treatment

The victim must be treated fairly and shown dignity, respect, compassion and courtesy. The government entity must take in to account and be responsive to the particular needs of the victim relating to the victim's age, sex, race, cultural identity, impairment, sexuality or religion.

Privacy of victim

A person's personal information, including their address and phone number, can only be disclosed with consent or as authorised by the law.

Information about services

The victim must be given timely information about relevant services available to them, including welfare, health, counselling, legal help and financial assistance.

Information about investigation of the offender

If the victim asks, they should be given information about the investigation of the offender where possible. Information given to a victim may include the progress of the investigation and the name of the person charged.

Information about prosecution of the offender

If asked by the victim, the prosecuting agency is to give the victim details about the crime committed against them, including when the victim may attend a court proceeding, notice of a decision to change a charge, or notice of the outcome of a court proceeding.

Victim to be advised on their role as a witness

A victim, who is to be a witness for the prosecution in the trial for the crime committed against them, is to be informed by the prosecuting agency about the trial process and their role as a witness.

Minimal exposure to and contact with the offender

As much as possible, relevant agencies present at court are to ensure the victim has minimal contact with or exposure to the offender during court proceedings or in the court building.

Victim Impact Statement

During sentencing of the offender, the victim has the right to give details of the impact and harm caused to the victim by the offence, to the prosecutor as an impact statement. Victims can access information about completing a victim impact statement by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Guide to Making a Victim Impact Statement* at *www.justice.qld.gov.au.*

Information about the convicted offender

A victim can apply to be registered on the Victims Register. If the offender is then convicted and imprisoned, the victim will be provided with this information on request. This includes information on the sentence, an escape from custody, or day of release. To be included on the Victims Register call 1800 098 098.

Making a complaint

If a victim of crime feels a government agency, person or persons within the agency have engaged in conduct that is not consistent with the Principles of Justice, they have the right to make a complaint. Victims can access information about making a complaint by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Complaint Form* at *www.justice.qld.gov.au.*

Government agencies are obligated to have a formal complaints management system, and the Queensland Government is committed to having these systems available and acted upon in accordance with the Principles of Justice.

Section 3
The Roles of Key Government Agencies

Queensland Police Service

The Queensland Police Service (QPS) has three main functions in relation to sexual assault cases including:

1. Investigate complaints of sexual assault and establish whether an offence of sexual assault has been committed.
2. Protect victims of sexual assault.
3. Identify, apprehend and prosecute offenders.

In carrying out this role, the police should:

- observe QPS Operational Procedures Manual
- observe QPS local procedures or instructions
- observe legislative requirements
- observe the Fundamental Principles of Justice for Victims of Crime
- provide victims with information regarding the investigation and prosecution
- provide protection to victims at immediate risk of sexual assault
- provide victims with information about support services

Queensland Health

In responding to sexual assault, the role of QH is to provide medical care, forensic medical examinations (FME), sexual health assistance and information and support. These responses are provided by public hospitals, the Clinical Forensic Medicine Unit and may include specialist sexual assault teams. The extent and nature of this care varies across hospital and health services in accordance with local procedures and resources.

Assistance and care in the acute phase includes:

- medical treatment
- collection and documentation of medico-legal evidence where appropriate
- sexual health information and treatment
- information about rights as a victim of crime
- information about reporting to police and legal processes
- support and information extended to support networks.

In addition, QH provides education and training to government and non-government agencies, with an aim to broaden community knowledge, improve responses and prevent sexual violence as outlined in the National Plan to Reduce Violence against Women and their Children 2010 – 2022.

Department of Justice and Attorney-General

The Office of the Director of Public Prosecutions (ODPP), Victim Assist Queensland (Victim Assist), Youth Justice Conferencing (YJC) and the Queensland Courts all fall within the responsibilities of the Department of Justice and Attorney-General. The following provides an overview of each of these separate agencies.

Office of the Director of Public Prosecutions

The ODPP represents the Crown in criminal proceedings against persons accused of committing serious criminal offences including sexual assault. The criminal proceedings include:

- the committal hearing, before a Magistrate in Brisbane Central, Ipswich and Southport Magistrates Courts. In other centres, this hearing is conducted by prosecutors within the police
- trials before a judge alone or a judge and jury
- sentencing hearing before a judge
- any appeals arising from the trial or sentence.

In addition to prosecuting matters in court, the ODPP is responsible for:

- assisting victims by providing information about the progress of a prosecution, the victim's role as a witness, and how the victim can inform the court of the impact of the crime by providing a victim impact statement
- giving victims reasons for decisions made in relation to proceedings which directly affect them
- taking into account the wishes of a victim who does not wish to proceed with a prosecution for any reason
- providing information about the availability of other resources and processes that may assist victims
- requesting that the court give sexual assault matters appropriate priority
- ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building
- liaising with other relevant agencies to ensure that the victim and family members understand the legal and procedural issues which may impact them.

In carrying out the role of the ODPP, all officers are obliged to comply with the Director's Guideline No. 25 as at 2013 http://www.justice.qld.gov.au/_data/assets/pdf_file/0015/16701/Directors-guidelines.pdf. This aims to ensure that the Principles of Justice, as set out in the *Victims of Crime Assistance Act 2009* are complied with.

Victim Assist Queensland

Victim Assist provides access to specialised support services and financial assistance for victims of personal acts of violence including sexual assault.

Financial assistance may be available to victims of sexual assault to help them pay for the cost of goods and services that have arisen, or will arise as a consequence of the assault.

This includes medical and dental expenses, and expenses associated with improving safety or relocation from their current location in order to escape the offender.

Victim Assist also provides information, referrals and support (which may include court support) to victims, and assistance in making a victim impact statement if the victim chooses to make one.

Youth Justice Conferencing

If the offender is a young person, there may be alternative processes to the matter being dealt with by a court. The purpose of YJC is to hold the young offender accountable for their actions and to come to an agreement on what they will do to attempt to make reparation for the harm caused. To safeguard the victim, additional procedures are adopted before a conference for a sexual assault can occur. These include referring the victim to a counselling service as well as compulsory attendance of the juvenile offender in a specialist treatment service.

Queensland Courts

Queensland Courts afford victims of sexual offences, affected child witnesses and special witnesses protections when proceeding through court. These are detailed in the *Evidence Act 1977* (EA) and the *Criminal Law (Sexual Offences) Act 1978*.

Section 21A of the EA provides protections for special witnesses and affected child witnesses. The court can declare a person a special witness by hearing evidence (if the witness does not automatically fall into the special category, such as where the witness is a child or the person has a mental impairment). When the court hears evidence from these special witnesses, there are a range of options to assist the witness. These include ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building. Where the witness is an affected child witness, there are further protections in place.

For further information refer to the Supreme Court Bench Book: *http://www.courts.qld.gov.au/information-for-lawyers/benchbooks-and-ucpr-bulletin/supreme-and-district-courts-benchbook.*

Department of Communities, Child Safety and Disability Services

The Department of Communities, Child Safety and Disability Services allocates funding to non-government organisations to assist people, predominantly women, who have experienced sexual assault, in accessing necessary services and support needed to rebuild their lives as quickly as possible. These sexual assault services offer flexible, holistic and ongoing personal support including advocacy and sexual assault counselling (including crisis counselling), in a culturally appropriate and safe environment.

The range of support provided by these services includes:

- provision of information, advice and referral
- needs assessment and development of case/service plans
- individual advocacy
- sexual assault counselling for victims and survivors of sexual assault
- community education.

For more information about access to sexual assault services in local areas, contact the Sexual Assault Helpline on 1800 010 120.

Child Safety Services is the Queensland Government agency for child protection and adoption services. The department is dedicated to protecting children and young people from harm or who are at risk of harm, and whose parents cannot provide adequate care or protection for them.

Non-government organisations

It is acknowledged that a number of government departments provide grant funding to non-government organisations to deliver a range of specialist sexual assault services. Local procedures and service agreements in relation to services provided by these organisations should be adhered to.

Section 4
Interagency approach

Given the often violent and complex nature of sexual assault, an interagency approach is essential. The Queensland Police Service (QPS), Queensland Health (QH), the Department of Justice and Attorney-General (DJAG) and the Department of Communities, Child Safety and Disability Services (DCCSDS), each have a different but fundamental role in responding to sexual assault. Each of these agencies should assist each other in understanding and supporting their role and be familiar with, and sensitive to, their differing and complementary roles. An interagency approach provides opportunities to discuss and address issues of mutual concern across departments.

Teamwork

Quality of care depends on partnership between these different agencies. Each agency should establish local procedures to facilitate improved liaison and coordination between services. These procedures should include systems for information sharing and conflict resolution.

Confidentiality

Confidentiality, privacy of information and security of records is imperative when working with people who have experienced sexual assault. It is a fundamental principle in treating victims with dignity and respect.

Access to and disclosure of personal information regarding the assault will conform to legal requirements and be limited to people directly involved in the case. Except where legal obligations exist, information will not be released without the prior consent of the person involved. This includes names and identifying information.

Training

Joint training can contribute to achieving interagency objectives and allow those working in the field to understand how best practice is achieved. Training and orientation should be ongoing and could include input from relevant local services.

Information provision

Police officers, doctors, social workers, health workers and legal officers, should provide people with relevant information which may include written material. This information should be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location.

People should be made aware of, and be given an opportunity to discuss and consider the implications of proceeding with medical, investigative and legal processes so that they can make informed decisions. These decisions must be respected. It should be noted however that the decision whether or not an investigation should proceed rests primarily with the police.

Referrals

Relevant referral procedures and guidelines between police and health services should be observed.

Staff of government agencies should be familiar with local specialist services and actively support people who have experienced sexual assault to access appropriate supports available in their community. In addition, relevant health, welfare and legal services likely to be accessed by victims will need to develop local strategies and procedures to ensure that referral processes are appropriate and coordinated. These services should also be aware of the admission procedures and location of the nearest health facility and police station.

Feedback

Quality of care is essential in ensuring that people are referred to the appropriate service. QPS, QH, DJAG and DCCSDS should ensure that local interagency links and procedures operate in a coordinated manner. Mechanisms for giving feedback about service delivery should also be in place and observed.

Access, availability and promotion of services

People who have experienced a sexual assault may need encouragement to use medical, counselling, police and legal services. Local procedures should ensure that services are accessible and coordinated. This includes the use of written information and community education materials.

Gender of service providers

Following a sexual assault, the person may feel uncomfortable talking with personnel of the opposite sex. If a preference for female or male personnel is expressed, all reasonable steps to accommodate this preference should be taken.

Diverse needs

Procedures need to be flexible in order to respond to diverse needs; including culture, language, gender, disability, religion, sexuality and geographical location. Furthermore, it is important to understand how these needs impact access to and utilisation of appropriate services.

All agencies should ensure that procedures and facilities provide access to appropriate services for Aboriginal and Torres Strait Islander people, people of non-English speaking backgrounds, children and young people and people with disabilities, including physical disabilities.

Aboriginal and Torres Strait Islander people

Service provision should reflect the cultural needs of Aboriginal and Torres Strait Islander people. Agencies should have a referral mechanism to facilitate access to culturally appropriate information for Aboriginal and Torres Strait Islander people. Where there is consent and it is appropriate to do so, Aboriginal and Torres Strait Islander liaison workers may be offered to assist people during the process.

Communication

The Queensland Government recognises that a significant number of people may require interpreter services, as well as culturally appropriate support in order to adequately disclose and report a sexual assault, and make informed decisions about the support and options available to them.

People with a disability

Services and agencies should facilitate access to appropriate support workers and interpreters for people with a disability. Disability includes intellectual, physical, sensory, psychiatric or neurological impairment, or a combination of these, resulting in a substantial reduction in the person's capacity to make informed decisions or communicate. With the person's consent, and when it is safe and appropriate to do so, services should also consult with relevant people involved in that person's life such as carers, guardians and specialist agencies or departments.

People from culturally and linguistically diverse backgrounds

Service provision should be responsive to, and respect the cultural, religious and language needs of the person who has experienced sexual assault. Where communication in English is difficult or where requested, accredited interpreters and cultural support workers should be used to assist in both eliciting information from, and providing information to the person who has experienced sexual assault. This supports client safety and enables informed decision making about health care, investigative and legal processes for both the client and agency.

Translating and interpreter services

All reasonable steps will be taken by government agencies and funded non-government organisations providing sexual assault responses, to ensure fair and equitable access to interpreting and translating services that are responsive and high quality.

All reasonable steps should be taken to make an accredited interpreter available in all situations where an interpreter and/or translator is required, unless there are extenuating circumstances that genuinely prevent an interpreter from being used. This may include, for example, a medical emergency or where a language group or community is very small and confidentiality is a concern for the client, or where there is no interpreter available for that language group. All agencies will take into consideration the wishes of the person who have been impacted by the sexual assault in relation to the use of an interpreter.

Each government agency is required to observe its own policies and procedures in relation to the use of interpreters. These internal procedures should align with the *Queensland Government Language Services Policy.*

Section 5
Interagency procedures

Regardless of where sexual assault is first reported, the first priority is to ensure the safety and welfare of the person reporting. Prompt referral to the designated specialist service should take place.

Crisis intervention

The purpose of intervention by a designated sexual assault response worker is to:

- provide immediate assistance, stabilisation and emotional support to assist the person to return to their level of functioning before the crisis
- assist the person to process their perception of the stressor
- provide information about the options available, as well as the procedures of the local health facility
- provide an opportunity for the person to express their concerns and feelings
- offer practical support, including contacting family members or support persons where appropriate
- talk to family members or support persons (if present) about how best to support the victim
- co-ordinate the interagency response and facilitate patient care and treatment along the sexual assault pathway
- provide information in relation to available community support resources.

The sexual assault worker will advise the victim of their right to access medical advice and treatment including sexual health treatment. If information or clarification about police procedures is requested, the sexual assault worker will, with the victim's consent, arrange for police to provide this information.

During any phase of this process, a support person can be present. The support person should not adversely influence the process.

Initial report to police

Police receiving a report of a sexual assault will act on the information received. The police should inform the victim of relevant decisions made and where necessary, obtain the victim's consent.

Initial report to a health facility

Health facilities, such as hospitals, are often the first place where a person will disclose a sexual assault. When this happens, nursing and medical staff will assess the general medical condition of the person and administer immediate medical treatment if required. Assessment of a person's need and urgent medical intervention will always be the first priority.

Medical examination and treatment

A general, non-forensic medical examination may be conducted by a medical professional with the aim to:

- reassure victims about their physical welfare, including giving information on, and providing treatments to reduce the risks of pregnancy and sexually transmitted infections
- assess, treat and document injuries
- provide advice and referral options for follow up medical care.

A medical examination should include sexual health intervention as described in *Queensland Sexual Health Clinical Management Guidelines of 2010 section 6: http://www.health.qld.gov.au/sexhealth/documents/cm_guidelines06.pdf.*

Unconscious patients who are admitted to hospital with a suspicion of sexual assault will be assessed and treated as medical emergencies.

Referral to the local sexual assault team

Health staff must follow local procedures in the management of sexual assault. All efforts should be made to contact the designated sexual assault team and where there is no specialist team, crisis intervention and support will be delivered by health staff present. A referral for follow-up support and care should be made as soon as possible.

Notifying the police

The sexual assault worker should discuss available reporting options with the person. If the victim requests to speak to police, it is the role of the sexual assault team or other designated staff member, to notify the police as soon as possible to ensure all evidence including the crime scene can be secured. Notification and initial reporting to police does not mean an investigation will automatically take place.

Where police are operating under time constraints, they should inform health staff. Working together to meet time constraints will directly impact the quality of the outcome for the victim.

Victim attending with police

Where victims arrive at the health facility with police, procedures outlined in referral to the local sexual assault team above should still be followed by health staff.

Initial contact

It is the sexual assault worker's role to coordinate an immediate response; offer practical and emotional support, assess the person's immediate physical and emotional safety and recognise the potentially traumatic nature of the assault.

Medical assessment will be conducted in accordance with local procedures.

Forensic medical examinations

Doctors or nurses conducting forensic examinations must follow local procedures in the management of sexual assault.

The forensic examination consists of obtaining a history as to the nature of the assault in order to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic evidence as it relates to the alleged sexual assault.

Forensic medical examinations and informed consent for people aged 14 years and above

Informed consent reflects a legal and moral principle whereby the victim has the right to decide what is appropriate for them. This includes the right to accept or to decline a forensic examination and to change that decision.

In order for a patient to exercise this right, they require access to information that is relevant to them. An explanation about the nature of the forensic examination must be given by the forensic medial officer (FMO) or forensic nurse examiner (FNE) and police also need to inform the victim about police investigation processes.

The victim should be made aware that they may withdraw their consent at any time to any particular procedure, or any aspect of the examination. However after the examination is complete, an investigation by police may continue to progress.

It should be noted that the decision to have a forensic examination is a health care matter and therefore legislation and policy around informed decision-making in health care applies in this circumstance. For more information on decision-making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

It is the responsibility of the medical and forensic staff to assess capacity to consent. Where a person lacks capacity, it is appropriate to identify a capable adult to act on the patient's behalf. Please refer to section 2.2 of the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

If at any point there is a possibility that the capable adult identified is the offender, it is in the best interests of the patient for an Adult Guardian to be appointed in accordance with the *Powers of Attorney Act 1998* and the *Guardianship and Administration Act 2000*.

Where possible the examination will be carried out using the Sexual Assault Investigation Kit (SAIK).

Forensic medical examinations and informed consent for people under 14 years of age

Paediatric patients are generally those aged less than 14 years of age. It is usual practice for the child to be transferred to the hospital's child protection area for an examination, even if they have had initial treatment in an adult emergency setting. Emergency medical treatment for any child should be undertaken by the Department of Emergency Medicine prior to a forensic medical assessment.

Paediatric forensic medical assessments are undertaken by paediatricians. This will be done by the Child Protection Advisor on call (or similar) or the general paediatrician on call.

All examinations conducted on children should be consistent with Queensland Health's Hospital and Health Services Health Service Directive: Protocol for conducting child sexual assault examinations: *http://www.health.qld.gov.au/directives/docs/ptl/qh-hsdptl-029-11.pdf*. All paediatric FMEs should also adhere to legislation and policy around informed decision-making in health care. For more information on decision –making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf*

Chain of evidence

The chain of evidence and the need for 'contemporaneous recollection of facts' to aid an investigation is essential. The chain of evidence involves not only the examination of the victim, but also includes the geographic location where the assault occurred, the identification and interview of witnesses and identification of relevant additional evidence. Evidence collected needs to be stored and transported in approved and standardised ways as outlined in police procedures to ensure the utility in a court proceeding. This further emphasises the importance of police involvement prior to an examination being conducted.

Storage and transportation issues need to be considered when undertaking an examination as the inability to safely and correctly store and transport evidence may damage the evidence or make it inadmissible in court in the later stage of an investigation and prosecution.

The doctor or nurse conducting the forensic examination should discuss the case with the police before the forensic examination takes place. This is to ensure that:

- all necessary evidence is collected
- a re-examination is prevented
- unusual evidence is not overlooked.

Timing and nature of the forensic medical examination

In determining the timing and nature of the FME a number of factors will be considered. These include the time since the assault, the physical and emotional state of the victim and their account of the assault.

This process, particularly if it involves an internal gynaecological or anal examination, can be distressing and the examination may need to be delayed or discontinued on account of the victim's physical and emotional state.

Presence of police and support person at medical and forensic examinations

Regardless of age, a person is entitled to have a support person present during the medical and forensic examination. This may include a friend or family member, a nurse, health care worker or sexual assault worker, who is not a potential witness.

There is no legal requirement for a police officer to be present during the medical and FME. However, if a victim requests the presence of police, this police officer is to be the same gender as the victim.

A police officer must be present to receive all evidence collected during a forensic examination immediately after the procedure to maintain continuity of the evidence for any potential court proceeding.

Consent to release information and evidence

The doctor or nurse conducting the FME will not release the SAIK to police without the signed consent of the victim or the capable adult acting on their behalf.

Access to health records

Health records, including counselling notes, are confidential. However, patients should be notified that any records can be subject to a subpoena or other court-related mechanisms.

Drug facilitated sexual assault

Where the administration of drugs in the sexual assault is suspected, testing to maximise the chances of detecting these substances should be administered in a timely fashion. However, the decision to test remains a clinical one which is made by the FMO or FNE.

Victim DNA reference samples

DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the FME.

Support person during the police interview

Police should inform victims that they may be accompanied by a support person while their statement is being taken. However, the victim must be advised that:

- the support person may not participate in the interview
- the support person may not directly or indirectly influence the interview
- a potential witness may not act as a support person.

Discontinuance of police action before a proceeding has commenced

Where the victim does not wish to proceed with further police action, police should:

- make clear that following the withdrawal of the complaint no further police action will be taken
- attempt to obtain a signed withdrawal of complaint
- inform the adult victim (18 years and over, only) of the online *Adult Sexual Assault Resource (http://www.police.qld.gov.au/programs/adultassault/)* package that provides alternative reporting options

If a proceeding has commenced, the victim's wishes will be taken into account when deciding if the matter will continue.

Domestic Violence Protection Orders

Sexual assault is one form of domestic and family violence. Where the sexual assault has occurred within an intimate personal relationship (marriage, engagement, couple), family relationship or an informal care relationship, the victim should be informed of their option to seek protection under the *Domestic and Family Violence Protection Act 2012*. In situations where domestic violence has occurred and where protection is needed to prevent further violence, a domestic violence order can be applied for by the victim, by police on behalf of the victim or by another person authorised by the victim. This is done through the Magistrates Court.

Where appropriate, victims should also be referred to a specialist domestic violence service for support and assistance, for example DVConnect Womensline Ph. 1800 811 811 and DVConnect Mensline Ph. 1800 600 636.

Follow-up and registration on the Victims Register

After the trial and/or sentence, the victim will have the opportunity to talk to the case lawyer about the outcome of the case and the sentence imposed, if any. This opportunity may arise immediately after the trial and/or sentence concludes or at a later time by telephone.

If the offender is imprisoned or placed under the supervision of Queensland Corrective Services, the victim may register their details on the Victims Register which is administered by Queensland Corrective Services. A victim and/or their family or nominee can register to be kept informed about the offender's imprisonment, movement between locations and proposed parole dates. They will also be given the opportunity to make submissions to parole boards when offenders apply.

Where the offender is a young person, the Victim Information Register may be utilised. This register is administered by Youth Justice within the Department of Justice and Attorney-General. A victim and/or their family or nominee can register to be kept informed about the young person's detention, movement between locations and supervised release dates.

If the offender appeals against their conviction and/or sentence or the Attorney-General appeals against the leniency of the sentence, the victim will be kept informed about the progress and outcome of the appeal and any consequential matters arising from the appeal.

Key stakeholders at the local level should maintain current referral information on appropriate support and other community services available. Localised referral pathways and protocols should be developed between key service providers to ensure timely referral pathways for those in need of support.

Conclusion

The government agencies acknowledged in this document (QPS, QH, DJAG and DCCSDS) have committed to the principles, roles, approaches and procedures articulated in the guidelines. This commitment aims to ensure that individuals who have experienced sexual assault are provided with timely, high quality and coordinated service delivery responses appropriate to their needs and appropriate to the role played by departmental officers.

Key service providers are encouraged to use this document as a framework to develop local level arrangements and protocols to ensure best practice, quality service and support to people who have experienced sexual assault.

The government agencies responsible for the development of the guidelines would like to thank all key government and non-government stakeholders who kindly contributed their knowledge and expertise.

For information or comments please contact:
Queensland Government Interagency Working Group Responding to Sexual Assault
Tel: 1300 546 587 **Email:** victimslinkup@justice.qld.gov.au

REPORT

INQUIRY INTO THE CIRCUMSTANCES THAT LED TO THE CONVICTION OF MR FARAH ABDULKADIR JAMA

THE HONOURABLE F H R VINCENT, AO QC

Ordered to be printed

VICTORIAN GOVERNMENT
PRINTER
May 2010

PP No 301, Session 2006-10

INQUIRY INTO THE CIRCUMSTANCES SURROUNDING THE WRONGFUL CONVICTION OF FARAH ABDULKADIR JAMA

29 March 2010

Ms Penny Armytage
Secretary, Department of Justice
121 Exhibition Street Melbourne

Dear Ms Armytage,

In accordance with the instructions contained in my letter of appointment of 15 December 2009, I herewith present my Report of the Inquiry that I have conducted into a number of matters relating to the wrongful conviction in the County Court at Melbourne, on 21 July 2008, of Farah Abdulkadir Jama for the crime of rape.

Yours sincerely,

The Hon. F.H.R. Vincent AO, QC

Table of Contents

TABLE OF CONTENTS **5**

ACKNOWLEDGEMENTS 6
TERMS OF REFERENCE 7
THE APPROACH AND METHODOLOGY OF INQUIRY 9

THE BACKGROUND **13**

THE INVESTIGATION CONCERNING M **14**

The Circumstances *14*
The DNA Evidence *18*
The Police Response *24*
The Interpretation and Use of the Scientific Opinion *28*
The Decision To Proceed *30*
The Prosecution Approach *32*
The Defence Position *38*
The Trial Judge's Directions *39*
The Consciousness Of Guilt Direction *44*
The Appeal *45*
"Can an offender be safely convicted only on DNA evidence? *45*

THE AFTERMATH AND RECOMMENDATIONS **48**

The test samples-- VIFM and the CCUs *48*
The Police Role in Transport and Storage of Forensic Materials *52*
The Victoria Police Forensic Services Department Role *53*
Criminal Investigation and DNA evidence *55*
The OPP and the Prosecution Process *55*

ATTACHMENT A **57**

ATTACHMENT B **73**

ATTACHMENT C **78**

Acknowledgements

I wish to express my deep appreciation of the considerable assistance provided to me by Dr Bob Hoskins, Dr James Robertson, and Dr Lesley Shone, all of whom gave very generously of their time and considerable expertise. The contribution made by Harley Dannatt, a very able final year law student from Victoria University, to the necessary legal research was also extremely valuable.

All of the agencies and individuals involved in the matter were deeply concerned about what had happened in this case and all had initiated an examination of their roles and structures prior to the Inquiry. All were extremely open and helpful in their responses to matters raised by me and provided me with the maximum level of assistance.

Terms of Reference

For the purposes of establishing the circumstances surrounding Mr. Farah Jama's conviction, you are requested to inquire, consider and report on the following aspects of the case:

1. The integrity and continuity of the forensic evidence in relation to the investigation of Mr Jama.

2. In relation to the possible contamination of the forensic samples, and taking into account Victorian Institute of Forensic Medicine, the [Victoria Police Forensic Services Department] (VPFSD) and current relevant standards and processes:
    - The integrity of the forensic medical procedures adopted when any of the samples pertaining to Mr Jama were taken.
    - The integrity of the processes, procedures and protocols followed (or not) when the samples were transported, analysed and interpreted at all stages of the investigation.

3. Whether the processes, procedures and protocols utilized in the collection, transport, analysis and interpretation of the forensic samples in this matter were sufficient to minimise the risk of contamination.

4. In relation to the matching of the forensic sample (s) with Mr Jama's profile on Victoria Police's DNA database (s) :
    - On what basis was Mr Jama's profile initially uploaded and then retained on the DNA database?
    - How and at what stage of the first investigation was the match made for the purposes of the second investigation?
    - If relevant, what are the issues in relation to the validity of the match that was made that resulted in Mr Jama being charged?
    - With particular reference to the current legislative regime, how should Mr Jama's profile have been handled once the first complaint had been withdrawn given the timing of the second investigation?

5. In relation to the forensic evidence and the apparent presence of biological material from Mr Jama taken from the same FMO in the same hospital examination facility approximately 24 hours prior to the alleged victim in the case upon which he was convicted being examined:
    - When was this first apparent to each relevant agency?
    - What was done with this knowledge by each relevant agency?

6. In relation to the conduct of the *committal hearing*, how and when the relevant agencies detailed below fulfilled their respective responsibilities in respect of the forensic evidence.

7. In relation to the conduct of the *trial*, how and when the relevant agencies

detailed below fulfilled their respective responsibilities in respect of the forensic evidence.

8. In relation to the conduct of the *appeal*, how and when the relevant agencies detailed below fulfilled their respective responsibilities in respect of the forensic evidence.

9. What improvements or legislative amendments might be made to improve the standard and integrity of forensic evidence provided to the criminal justice system as a result of this inquiry into the conviction of Mr. Jama.

10. What improvements might be made to the communication between and within relevant agencies in criminal prosecutions involving forensic evidence.

In undertaking this inquiry, you are requested in particular to consider the role of, and consult with, the Victorian Institute of Forensic Medicine, Victoria Police (including the VPFSD) and the Director, Solicitor and Office of Public Prosecutions, and the Northern Centre Against Sexual Assault.

You are requested to provide a status report of your findings by 26 February 2010, and the final report by 31 March 2010.

The Approach and Methodology of Inquiry

The inquiry was initiated when it became apparent that there had been a miscarriage of justice, resulting in the wrongful conviction and imprisonment of a young Somali man, Farah Abdulkadir Jama, for the crime of rape.

Not only was the evidence against him ultimately revealed as inherently unreliable but, it came to be recognized, the likelihood that he had committed the offence alleged was, at the risk of understatement, remote and found to have been perpetrated in circumstances where it seemed to be highly improbable that there was any crime at all.

The consequences of his prosecution and conviction in such circumstances are obviously serious from the viewpoints not only of all the individuals and agencies directly involved but the community generally and raise important questions concerning the operation of our criminal justice system and, in particular, in cases involving scientific expertise and DNA evidence.

In addition to the stress and anxiety to which Mr Jama and his family were undoubtedly subjected as the matter proceeded through its various stages, it must be borne in mind that a finding that he had committed a crime of the most serious kind was made against him and that he was required to undergo approximately 15 months imprisonment, as an innocent person, before the conviction was set aside and a verdict of acquittal entered by the Court of Appeal.

Looked at from the perspective of the alleged victim of a rape and, in more than one sense, actual victim of the process, to whom I will hereafter refer as M, the situation must have been and is likely to continue to be extraordinarily distressful. She was informed and accepted that she had been raped whilst unconscious. Her victim impact statement provides some indication of the suffering that she experienced as a result. After a lengthy legal process, she was then told that it was highly unlikely that the person she had been led to believe was her assailant was guilty of offending against her and, further, that there was a very high level of probability that no assault had actually been perpetrated upon her at all. Presumably, she experienced some relief from that knowledge, but then had to come to terms with very different information and a dramatically altered personal situation. Although I gained the strong impression when speaking with her that she appeared to be handling the situation extremely well, it must have been, and almost clearly still is, very difficult for her.

The case against Mr Jama had been mounted and pursued on the basis of a single piece of evidence; namely, the presence on a slide and a swab, collected in the course of a forensic medical examination at the Crisis Care Unit operated by and under the control of the Northern Centre Against Sexual Assault (NCASA) at the Austin Hospital, of DNA that could, in the opinion of scientists, to an extraordinarily high level of mathematical probability, be attributed to him.

M had been taken this unit and examined by a Forensic Medical Officer (FMO) from the Victorian Institute of Forensic Medicine (VIFM), after she was found unconscious in a toilet cubicle in a nightclub in Doncaster and with no recollection of how she came to be the cubicle or in that condition.

Notwithstanding that there was nothing apart from that evidence that could be seen to inculpate him in any respect, or could even provide the foundation for suspicion, reasonably held or otherwise, that he may have committed the offence alleged against him and, very importantly, where all of the known circumstances indicated otherwise, the questions relating to the possible unreliability of this evidence were not properly addressed until long after his conviction.

When it was finally realised that that the tested swab and slide were collected in the same unit as forensic samples secured from another woman, who, it was undisputed, had had sexual contact with Mr Jama, and by the same doctor, it was immediately appreciated that they may have been contaminated and that the verdict had to be set aside. The whole case was then reconsidered.

Clearly, in conducting an inquiry into this matter within the Terms of Reference given to me, it was necessary to attempt to ascertain how this sorry stage of affairs developed. This raised a variety of questions including:

- How and when the swab and the slide may have been contaminated.
- How was it that the possible sources of contamination were not recognised by any of those involved in the various processes between the commencement of the investigation and Mr Jama's conviction.
- How did it come about that Mr Jama was convicted in the absence of any other circumstantial evidence and where the known facts strongly indicated that the crime alleged was almost certainly not committed by anyone
- Was this an isolated incident that was highly unlikely to occur again, or did it point to some underlying systemic problems. If so, what should be done to address them.

Accordingly, I considered it important to examine all of the available files with the assistance of recognised independent experts, consult with and interview a number of persons concerning the processes and procedures employed in obtaining the evidence with a view to identifying the possible points at which contamination may have occurred, and, after consultation with the various agencies involved, make recommendations directed to ensuring, as far as possible, the integrity of the forensic process and thereby avoid or minimise the risk of such occurrences.

But as I have indicated, the issues raised by this matter were not confined to those processes. This was, as will be readily appreciated, a quite unusual case. One notable and highly uncommon feature which it possessed was that that the DNA evidence

provided the only foundation for concluding that a crime had been committed at all, and then constituted the only means of identifying the perpetrator. M had not consented to intercourse and, in consequence, if the evidence was accepted as establishing that it had taken place, it also characterised the crime as rape and, as a practical proposition, identified the person responsible.

In other words, the DNA evidence was, like Ozymandias' broken statue in the poem by Shelley, found isolated in a vast desert. And like the inscription on the statue's pedestal, everything around it belied the truth of its assertion. The statue, of course, would be seen by any reasonably perceptive observer, and viewed in its surroundings, as a shattered monument to an arrogance that now mocked itself. By contrast, The DNA evidence appears to have been viewed as possessing an almost mystical infallibility that enabled its surroundings to be disregarded. The outcome was, in the circumstances, patently absurd.

It became clear that the DNA evidence was perceived as so powerful by all involved in the case that none of the filters upon which our system of criminal justice depends to minimise the risk of a miscarriage of justice, operated effectively at any stage until a matter of weeks, before Mr Jama's appeal was expected to be heard.

There were several questions to be addressed at this level, requiring the examination of Victoria Police and Office of Public Prosecutions files, the transcripts of the committal hearing, pre-trial directions hearings, the trial, including the opening and closing addresses of both counsel and the judge's charge to the jury.

A number of interviews were conducted with persons who played a part in these processes with a view to gaining an appreciation of their perception and understanding of the issues presented by the case generally.

DNA evidence can obviously be of considerable value in the investigation and prosecution of serious crime, assisting in the identification of perpetrators and exclusion on occasions of the innocent from suspicion. However, it requires little thought to appreciate that it presents a number of serious challenges and dangers, if its character and limitations are not properly understood and appropriate measures taken to ensure that it would be safe to have regard to it and then properly used, as this case demonstrates.

After following this history of the proceedings against the unfortunate Mr Jama from their origins through to their disastrous conclusion with his conviction, I have been left with the deep impression that at virtually every point, and by almost everyone involved, it was handled with so little insight into the issues which it presented that no need was seen to explore further or conduct research into them. This was particularly so in the case of those involved in the legal processes. There were ample warning signs along the way that suggested that something was amiss, but they were simply not read.

In this report, I have pointed to a number of deficiencies that emerged and have advanced suggestions for improvements. I have not attempted, however, save on one or two occasions, to be specific concerning techniques of implementation or the

allocation of responsibility for them between the various agencies and stakeholders involved. To do so would have necessitated a far broader exploration of their respective areas of operation and inter agency relationships than was possible within the ambit of this Inquiry. What I have done, hopefully, is to identify the nature of the issues and the type of changes that I consider need to be made.

Rather than structure the report directly on the basis of the Terms of Reference, it appeared to me that the issues would be more easily addressed and their relationships more apparent if I dealt with them as they as the emerged from the history of the investigation and the legal proceedings. Accordingly, I have approached them in that fashion. Individuals have not been named in order to protect their privacy.

The Background

Farah Abdulkadir Jama was, on 21 July 2008, convicted on his trial in the County Court at Melbourne of the commission of rape, for which he was subsequently sentenced to imprisonment for a term of 6 years in respect of which a non parole period of 4 years was fixed.

Shortly put, it was alleged against him that he engaged, without her consent, in the penile/vaginal penetration of M, a woman aged 48 years, in a night club at Doncaster, on 15 July 2006.

M had been found unconscious in a toilet cubicle, locked from the inside, at about 10.50 pm. She had entered the club at approximately 10:20 pm and recalled speaking to some people, purchasing two glasses of Frangelico, a well known liqueur, and lighting a cigarette at a table, but nothing thereafter.

She was of the view that the alcohol that she had consumed, in and before she entered the club on that evening, could not account for her condition and was understandably concerned about what may have happened. It occurred to her that she could have been surreptitiously given a drug of some kind and then sexually assaulted.

When she raised this possibility with the doctor who attended her at the Austin Hospital to which she was taken from the nightclub, the police, the Northern Centre Against Sexual Assault (NCASA) and a doctor on call that weekend for the Victorian Institute of Forensic Medicine (VIFM), were contacted.

The doctor conducted a physical examination of M, at 10.50 on the following morning, in a Crisis Care Unit, located in the Emergency Department at the hospital, but under the control of NCASA and took swabs from within the vagina of M and prepared slides that were subsequently conveyed for analysis at the Victoria Police Forensic Services Department (VPFSD) at Macleod. The doctor had, as mentioned, , in the same location and only approximately 28 hours previously, coincidentally taken forensic samples from another woman [B], who had, in fact, engaged in sexual activity with Mr Jama. There were no charges laid in respect of the earlier incident.

The Investigation Concerning M

The Circumstances

Apart from those who came across M in the toilet cubicle and attended to her afterwards, there were no witnesses as to what had occurred and nothing, save perhaps the degree to which she was observed to be incapacitated when found, to indicate that anything of a criminal character may have been involved. The circumstances under which she came to be in the cubicle were simply unknown and it certainly did not follow that something untoward must have happened.

Although, as I have mentioned, M did not consider that her state could be explained by the amount of alcohol that she had consumed, and therefore suspected that she may have been drugged, there was nothing, other than the presence of prescribed medication and alcohol, detected on subsequent toxicological investigation.

This did not exclude the possibility that some drug had been administered to her as one of those commonly used for this purpose, broadly known as GHB or Fantasy, is, by reason of its composition and the speed at which it metabolises in the body, difficult to detect within even a few hours on subsequent routine testing. On the other hand, the absence of any such finding means that there was no direct evidence of a drug being administered and the conclusion that it must or may have been would then be an inference drawn from the circumstances and the observations made by and of the person said to be possibly so affected.

I note that in the trial however, there was evidence adduced by the prosecution concerning GHB, pointing out its effects and the speed with which it can be metabolised by the body and thereby quickly become undetectable. This may well have been regarded by the jury as an invitation to speculate about the possible use of that substance and could have operated unfairly to Mr Jama in the circumstances. I also note that, despite the admission of this evidence, the Judge when sentencing recognized that he could not have regard to it.

In this case, M, had consumed some alcohol in the couple of hours before she was found and had taken a prescribed dose of Tegretol earlier in the day. She stated in her evidence that she had been taking this particular medication since 1994 and that it was her understanding and experience that it was safe to do so in conjunction of alcohol, provided that she kept within what she described as 'the limitation'. What that term encompassed was not explored by either counsel or explained by M herself. Whether she inadvertently exceeded it on this occasion must, of course, remain a matter of conjecture, although M remains confident that that was not the case.

The police member dealing with the matter recorded in their note of a conversation with M, conducted at the Austin Hospital shortly after 08:20 on the following morning, 'arrived at about 21:30 hours and sat in car having a few drinks, (sister in

law) drove to the location. M had 3 approx. 3 x shots from bottle of Frangelico she bought from home'.

The examining doctor recorded a history of 'a few drinks of Frangelico' which were described by M as larger than normal standard measures. She then gave a history of 2 further drinks inside the nightclub and told the investigating police member that she felt 'a bit drunk at this stage'.

In a statement taken from M by another police member, on 26 July 2006, she said that the drinks that she had in the car "were probably one and a half to twice the normal amount". She also told the police member that she had been intoxicated on only about three occasions in her life, but this time it felt "different".

Whilst the precise level of alcohol in her system when she was in the nightclub is unknown, what is clear, on the basis of M's evidence in the trial, is that she had consumed a minimum of 2 larger than standard and, at least, one, but possibly two, presumably standard drinks, of Frangelico within a time period of a little over an hour and in the presence of her medication.

A blood alcohol test taken at the Austin Hospital at approximately 12.50 am, that is, about 2 hours after she was found, indicated the presence of .13%, a not insignificant amount and one which may well have affected her.

It is well recognised that the effect of a given amount of alcohol upon an individual can vary significantly and may be influenced by a variety of factors, including the quantity consumed, the person's tolerance to alcohol, his or her state of health, level of tiredness and, of possible relevance in this case, the ingestion of various drugs, including Tegretol. In other words, whilst it is possible that M may have been given an undetected drug, there are explanations for her physical state at the time found and subsequently that do not involve the inadvertent taking of some surreptitiously administered substance.

Dr Dimitri Gerostamoulos, the Chief Toxicologist and Manager of the Toxicology Laboratory at VIFM, in the course of cross examination in the trial, gave evidence on this aspect, but the matter was left largely in the air.

> "[Defence Counsel, Is it possible that if a person takes Tegretol with an amount of alcohol, it can cause blackouts in certain instances? Yes, it can.
> Can it also cause periods of unconsciousness? Yes, and that depends on the volume of alcohol consumed, as well as the dose of Carbamazepine or Tegretol."

The prosecutor did not pursue this aspect in re examination.

With respect to the circumstances under which a drug may have been put into her drink, where, when and by whom this could have been done was also problematic.

M stated that, on entering the club, she purchased a drink which she then took to a lounge area equipped with couches. She was alone and sat there, smoking and sipping her drink for "perhaps ten maybe fifteen minutes", after which she walked around the club "for a little bit". She said that she had a brief conversation lasting "probably a couple of minutes" with a man she encountered, but she was not interested in talking to him and moved on. After wandering around again, for "a little bit", M returned to the bar and purchased another drink. She was unsure of her movements thereafter but thought that she may have walked around a little more until she made her way to a nearby table to light a cigarette. After placing her handbag and the glass she was carrying on the table, she extracted her cigarettes and lighter and commenced smoking. Whilst there, she spoke, for possibly 5 minutes, with two males of European extraction. During that time, her glass, she said, would have been on the table or in her hand. She was not certain that she drank from it at any stage. If she had not, then the only known occasion on which a drug may have been put into her glass could be excluded. Her next recollection was becoming conscious, lying on a floor.

Significantly, M stated that she did not speak to any 'black men' during that evening. To her knowledge, she had not seen Mr Jama, who, it should be pointed out ,was a thin, dark skinned 19 year old of African appearance, on that or any other occasion. However, in order to place something in her drink, he would, of necessity, have had to have been in very close proximity to her and at a time when her consciousness was not clouded by the administration of a drug. On the basis of her description, it would seem unlikely that an approach could have been made in the ten to fifteen minutes that she was sitting alone or when engaged in her conversations. The substance would also have had to act very quickly within the time frame set out above, and so effectively that she lost consciousness before she became aware of her assailant's presence.

Given that M had been in the night club for only about thirty minutes before being found and making full allowance for the possibility of significant inaccuracies in her estimates of time, the period within which all the activities involved in the alleged rape would have had to occur would be very brief indeed. The activities associated with the rape itself after she lost consciousness would, given M's prior movements and conversations, have had to have been undertaken, it seems, in a very few minutes.

All of her movements, conversations, the possible administration of a substance, the movement of her by her assailant to the place where the offence was committed and then possibly back to the toilet cubicle, would all have had to occur within that half hour period - a highly unlikely series of events, in my opinion.

The evidence indicated that DNA attributed to Mr Jama was found on only one of the two swabs taken from the endocervical region. None was detected on two other swabs taken from within the high vagina and there was nothing found on the clothing of M and specifically no semen elsewhere. The amount on the swab was remarkably small in the context of a penile/ vaginal rape, with only one intact sperm and fifteen heads being observed.

When sentencing Mr Jama, the trial judge said

> "Counsel rightly argued that there was no evidence of planning of this crime on your part. That is true, but it is more than outweighed by the fact that you took advantage of the situation as presented to you by the unwell state that the complainant was later found in. You raped her when she was in a most vulnerable state. You obviously saw her and sized up the situation as she presented to you. Instead of assisting her and making sure of her safety, you raped her for your own immediate and short-lived sexual gratification. The jury cannot have viewed the facts in any other way. That is what makes your crime so bad; and it is what makes the suffering of the complainant so lasting. She was sexually violated by a man she did not know and could never recognize.
>
> .....
>
> There is no evidence that you administered an illicit substance to the complainant, and you have not been charged with such an offence. I have sentenced you on the basis that you took advantage of the complainant and raped her when she was indisposed, and at her most vulnerable state, for whatever reason."

The problems inherent in that scenario hardly require recitation and can be seen to reflect the obvious difficulties encountered by the trial judge in formulating a factual foundation for sentencing in accordance with legal principle, the evidence given in the trial and the jury verdict.

There was no evidence, apart from that provided by the DNA, that Mr Jama had ever attended the nightclub which was promoted as an over 28's venue and located in a suburb approximately 15 kilometres from his home. On its face, it would seem to be an unlikely place for him to go, as a young person with no known or likely cultural or other links to the area or the venue, and presumably alone, on a Saturday night.

Regrettably, the surveillance camera located at the entrance of the club on that night did not record all of the comings and goings of patrons. There are gaps between 8pm and 9.30pm and 11pm and 11.30pm. If he was there, he must have entered and left at periods for which, and remarkably fortuitously for him, there were no camera records.

What is apparent from my viewing of the camera surveillance record is that almost all, if not all, of those attending the club would have easily fallen within the targeted age group. I noted no dark skinned young male of his apparent age group entering or leaving through the public entrance during the periods covered. Members of the nightclub staff to whom a folder of photographs containing a depiction of Mr Jama was shown did not recall ever having seen him in the premises.

Naturally, the police pursued this aspect, but no link could be found. Examination of fingerprints from the toilet cubicle did not provide any evidence of his presence and subsequent investigation revealed no record of telephone calls, police checks, field contacts, parking infringement notices, traffic camera fines or any other indication that he had ever had contact with that area, or, specifically, the nightclub.

The DNA Evidence

The VIFM doctor conducted an examination of B at 3.50 am. on 15 July, 2006 at the CASA unit at the Austin Hospital. The doctor did not enter the unit again until they attended M at 10. 50 am. on the following day, that is, approximately 30 hours later.

The doctor informed me that it was their practice to shower and change their clothing immediately upon returning home after completing the relevant duties. I have no hesitation in accepting that the doctor would have done so on this occasion. I also accept that the doctor showered and changed their clothing at least twice between the two examinations.

The possibility that the DNA of Mr Jama was transferred directly to M, either from the doctor's clothing or through the doctor's personal physical contact with the two women in the course of examination, is, I have concluded, extremely remote.

In a statement, dated 21 December 2009, the doctor said that, by July 2006, they had been conducting genital (including speculum) examinations of female patients for over eight years and described the practices they adopted in sexual assault examinations:

1. While the subject is redressing I wash my hands and don clean gloves so that I can prepare and label the specimens.

2. On the metal bedside trolley, in corresponding sequence. I dab the swabs on slides, then shorten and replace the top of the swab into the sheath. The samples are then sealed and labelled with patient stickers/date/doctor details. I then cut the corners off the swab sheaths for airing, and all samples are placed into specimen bags which are then sealed with patient stickers and cover- I ask the subject to undress (behind the curtain for privacy) and change into a clean hospital gown, and the clothes are dropped by the subject into paper specimen bags for evidence if required.

3. I ask the subject to sit atop a "bluey" (where available, a disposable, multiply, hospital issue underlay sheet), which is placed on the bed sheet. A second bed sheet is provided for the subject to cover herself.

4. I then prepare the swabs and slides that I will be using by laying out on the metal bedside trolley beside the bed the exact number of new swabs and slides I will need and labelling them (with the pencil provided on the trolley) according to the anatomical location to be swabbed.

5. I then perform a general physical examination (routine head-to- toe examination for signs of injury or foreign material), following which photographs are taken and forensic evidence is collected if required.

6. Prior to performing a genital–anal examination, I wash my hands and don clean gloves.

7. A sterilized/new speculum is obtained (I open the packaging but leave the speculum on the bed inside the packaging until I am ready to use it).

8. I then ask the subject to position herself as instructed for the genital-anal examination.

9. I inspect the external genital region.

10. To perform the internal genital examination, I part the labia with the gloved fingers of my left hand and with my gloved right hand; remove the speculum from its packaging by grasping the handle only. I then use my gloved right hand to insert the speculum bill into the vagina. When I have visualized the cervix, I lock the speculum in position and use my gloved left hand to hold the new swab sheaths.

11. In order of labelled samples, I open the swab top and insert the swab for sampling with my gloved right hand, then replace the swab top into the swab sheath.

12. When all the swabs have been taken I place them on the trolley, before removing and discarding the speculum. I then remove and discard my gloves.

13. On the metal bedside trolley, in corresponding sequence, I dab the swabs on slides, then shorten and replace the top of the swab into the sheath. The samples are then sealed and labelled with patient stickers/date/doctor details. I then cut the corners off the swab sheaths for airing, and all samples are placed into specimen bags which are then sealed with patient stickers and cover-signed as a method of tamper-proofing.

14. I clean up the residual items on the metal bedside trolley (e.g. plastic corners/wooden pieces etc.) and dispose of all the remaining items. I then remove and discard my gloves.

15. At the completion of the interview, I hand the samples over to police who countersign the forensic samples documentation.

Concerning the two relevant examinations, the doctor stated,

> "With specific reference to the collection of forensic specimens from [B], five bags of clothing were collected. Four oral swabs and corresponding slides were collected for spermatozoa. A skin swab of her right breast was collected for foreign DNA (saliva) and a vaginal swab and an anal swab were collected for foreign DNA, in view of the allegations of digital penetration. A portion of hair that appeared matted with a "sticky substance" was cut with

> scissors that were provided on the examination trolley, following which the collected hair specimen was placed into a yellow screw-top plastic specimen container. I did not swab the hair for semen, as I believed at the time that swab and slide specimens of the hair were unnecessary, given that I was able to collect the hair directly for the laboratory to conduct further sampling on."
>
> "The forensic samples that were collected during my examination of [M] were: 1bag containing black pants, 2 x high vaginal swabs and slides for spermatozoa, 2 x endocervical swabs and slides for spermatozoa, and 1 x buccal swab for a comparison DNA sample."

Police and laboratory records are entirely consistent with these descriptions of the number of specimens obtained, their labelling and what was ascertained on analysis. I considered the possibility of mislabelling, but it would seem that that could only occur, if there was an extra swab and slide obtained at the time of the first examination which were then missed and then later mistakenly included in the materials collected in the course of the second. This would involve significant departures by the doctor from their normal practices on each occasion. I have no reason to suspect that anything of that kind may have happened, or that the doctor did not follow their ordinary course when conducting these examinations and obtaining the forensic samples.

There are no standard procedures laid down for or adopted by doctors across the country when conducting forensic examinations of female subjects and the collection of samples for subsequent testing. In some States, what is done is influenced by the use of sealed kits containing a number of necessary items, check lists and so forth. These kits are not used in Victoria where doctors perform the examinations with swabs, slides and other equipment obtained from a trolley in the examination room that has been pre stocked in accordance with VIFM requirements.

In its response to the inquiry, VIFM stated that the doctor's description of their practices accorded with the standards adopted by the Institute in 2006 and there was nothing to suggest that the doctor had deviated from them in any respect.

Associate Professor Bob Hoskins, the State Director of Queensland Health's Clinical Forensic Medicine Unit, said that the stated procedures were designed to minimise the risk of contamination through the examining doctor's actions and widely adopted at the time.

Similar views were expressed by Dr. Lesley Shone, Sexual Assault Medicine Clinician, Yarrow Place Rape and Sexual Assault Service in South Australia and by Dr James Robertson, National Manager Forensic and Data Services, Australian Federal Police.

All however considered that the taking of these measures could prove to be of no avail, if the environment, and, in particular, the equipment and furnishings in the examination room were contaminated from previous use.

They disapproved of the Victorian practice of using swabs, slides and other from a pre stocked trolley in the examination room and advocated the adoption of the packaged sexual assault examination kits employed in many places elsewhere. This, they said, would reduce the possibility of contamination from that source, at least.

Each expressed the opinion that, although it was generally the position that reliance was placed upon the cleaning of examination rooms carried out by hospital or other staff, this was inappropriate when taking samples for DNA testing. They stated that the central purpose of hospital cleaning is to maintain adequate levels of infection control and only in a very few locations and for specific purposes, would it be directed to the avoidance of DNA contamination. They emphasised that minute quantities can be spread throughout the examination room and the area in which it is located as for example, people move about or when the person is being examined or removing her clothing. Trolley surfaces upon which particles could settle presented a problem in this regard and should be carefully decontaminated before and after each examination. Professor Hoskins said that, even if this is done, clean paper from the kit should be placed on the trolley top before swabs and slides or other items are taken out. Control swabbing should be performed before and after use. This represents an application of Locard's principle that "every contact leaves a trace".

What then of the possibility of environmental contamination of the later collected samples at the CCU in this case?

The CCU in which the examinations were conducted and the two sets of specimens collected is one of nineteen operated and controlled by fifteen independent CASA groups in Victoria. Nine are physically attached to and function under the auspices of public hospitals, with the remainder being operated as stand alone community based agencies governed by a committee of management.

A recent Survey of Crisis Care Units carried out by the Department of Justice Sexual Assault Steering Committee, which involved unit managers, reported that the CCUs operated under a variety of arrangements with the hospitals or other organisations in whose premises they are located, varying from formal signed protocols to relatively casual arrangements.

The units perform some very important functions. Among them is the provision of a supportive environment within which the sometimes badly injured and very frequently severely traumatised victims of sexual assault can be counselled and provided with information to enable them to make properly informed and appropriate decisions. Those located in the Melbourne metropolitan area are relatively widely distributed in order to facilitate access by victims and to minimise the additional distress that is likely to be occasioned by travel and delay. The units are also used for the purposes of forensic medical examination and the collection of what may become evidentiary material from victims.

The one located at the Austin Hospital consists of four rooms, including an examination room, and is situated in the Emergency Department. Under the arrangements in place at the time of the examinations in 2006, these rooms were supposed to be cleaned immediately after use by hospital staff, although, it would appear, this was not always done.

With respect to the equipment in the examination room, the disposable items would be placed into a bin for later removal. The trolley on which equipment was laid out would probably not be cleaned after use and some of the items would not be cleaned at all, for example, the trolley top and scissors. Linen would always be changed by hospital staff after a physical or forensic examination, but it was not always removed immediately from the examination room.

As far as I have been able to ascertain, there was no log book or other record kept that would enable a check to be made as to whether any cleaning was carried out during the weekend in question and I consider that there is a strong possibility that it had not been.

I have already drawn attention to the views of three experts with respect to the kind of cleaning required to ensure that, as far as reasonably practicable, the environment within which the samples are collected is uncontaminated by foreign DNA. Having taken the opportunity to visit the unit concerned with Professor Hoskins and the manager, it is apparent that, even if the room had been cleaned in accordance with the arrangements then in place, a problem could still have risen due to the inadequacy of the form of cleaning involved, the overall set up of the unit, including the presence of a pre stocked trolley and the areas that would not have been touched at all.

As it does not appear that any record was kept indicating when or by whom the rooms were cleaned and what, if any, steps were taken to ensure that the examination room, in particular, was at an appropriate standard for physical or forensic examinations to be conducted, there is a strong possibility that the environment, within which M was examined, was contaminated by DNA left after the examination of B.

Dealing with the causes of possible contamination of the samples from the environment, VIFM in its response to the inquiry, put the position

> "*VIFM* considers three possibilities of contamination at the Austin Hospital may be described as follows:
>
> 1. Mr. Jama's DNA deposited on [B] contaminated areas of the hospital where she was present. The seminal material on her hair would have been drying into a crusty material and would have been very prone to flaking off with any movement. Any part of the pathway between entering the hospital and the point at which she showered and washed here hair would have been prone to be contaminated.
>
> Certain of the above areas would also have been occupied by [M] when she was seen at the hospital. In particular common areas of the CCU such as the couch and chair in the counselling room are

routinely occupied by all patients seen there and are not cleaned routinely. Other common occupied areas include the examination room and the bathroom.

It is possible that [M] became contaminated with material from [B] and that this material could have found its way into the collection pathway of the endocervical swab. The amount of material that would have been required is microscopic and would not have been visible to the naked eye.

2. It is possible that flakes of seminal residue from [B's] hair contaminated work surfaces/equipment that were used in the subsequent examination of [M] and the collection of evidence from her. This includes the trolley surface on which the slides for collection of evidence from [M] were placed and from where they could have been contaminated. A microscopic piece of material could have landed on the slide at the time that [B] was examined, and remained there until the [M] examination, when part of it could have been transferred to the swab when the swab was dabbed on to the glass.

3. The same scissors might have been used to cut the hair sample from [B] and, without having been cleaned, to cut the swab sheath on the swab that had been used to collect the endocervical swab from [M]. Seminal residue on the scissors could have found its way into the swab sheath when this occurred.

In relation to the third possibility above, the scissors do not come into contact with the slide and they are used only on the swab after the slide has been made from the swab. Therefore, the likelihood of the scissors being the source of contamination in this scenario is remote.

Whilst the above scenarios describe the potential for contamination, the possibilities are limited by the fact that Mr. Jama's sperm was found on the slide and Mr. Jama's DNA was found in the combined swab analysis. If the sperm was indeed that of Mr. Jama and not someone else's, then it follows that either:

- The swab was contaminated and transferred semen as it touched the slide, or
- The slide was contaminated and transferred semen/DNA when the swab touched it.

VIFM considers that the forensic examination itself is unlikely to be directly the cause of the contamination. If the contamination occurred during the forensic medical examination, it is most likely to be caused by secondary deposit of the extraneous DNA from the first complainant on or around the second complainant, the equipment or the furnishings

> such that it may have been further transferred to the doctor or the equipment us contaminating the endocervical swab/slide."

I have concluded that the possibility that there was transference of a microscopic amount of material containing the DNA of Mr Jama from B to a swab and slide obtained in the examination of M as a consequence of the presence and examination of the two women in an environment where that might easily have occurred is quite high.

Precisely how it may have happened cannot be determined as the deposition of the minute quantity of material involved could have occurred in a number of ways. It is possible to speculate about the probability of transference through various mechanisms, but ultimately pointless to do so.

The Police Response

When a report was sent to the police from the laboratory police that a DNA match had been made between material taken from M and the profile of Mr Jama obtained in relation to another investigation, he was interviewed on 12 November 2006. He denied any knowledge of the incident, asserted that he had not heard of the nightclub and claimed that he had never been to the Doncaster area at any time.

Conscious of the lack of supporting evidence of any kind, the investigating police member queried the possibility that there may have been some contamination of the sample upon which the investigation depended at some stage after it arrived at the laboratory.

When asked, in the course of the Inquiry, about the reason for this query, the member stated that there seemed to be no realistic scenario available as to when and where a rape could have been committed and there was nothing to connect Mr Jama with the area or the nightclub. The possibility that it may have taken place in the toilet cubicle in which M was found was discounted for a number of reasons, and the backstage area of the club, which was, the only other possible location, was considered to be almost as unlikely.

Accordingly a memorandum was forwarded to the police member's superior, referring to the other investigation and pointing out that it seemed likely that the samples would have arrived at the laboratory in close proximity to each other.

This query was conveyed to the Manager of Biological Examination Division of the Forensic Biology Division of Victoria Police, expressed as follows;

> "On 24th November while you were at Doncaster CIU obtaining a buccal swab from a rape suspect, I discussed with you an offender identified through a DNA sample allegedly responsible for a rape in Doncaster. Briefly, he has denied all knowledge and the victim has little or no recollection of the night. The report from [the investigating member] is

> forwarded for attention and any results will assist me in recommending any charges.
>
> In the current climate I need to be able to discount the possibility of cross contamination. Perhaps a report is all that is required. I have every faith in the process but no doubt the subject will be raised at any subsequent trial so we may as well be armed with suitable answers to the inevitable questions.
>
> If this request is not your area of responsibility, can you forward to the appropriate person."

A response was then received from a Case Manager in the Biological Examination Branch, stating,

> "In my opinion I do not think contamination between the two cases could have occurred as items from the two cases and the relevant reference samples were examined at different times, at different areas and by different people. Also the DNA processes were done at different times such that the samples were not processed together in the same batch.
>
> If you need a report and any clarification, please do not hesitate to contact me."

This was a crucial statement in the history of the case and was repeated in different terms on several occasions afterwards. It effectively set the stage for all that followed.

No request for clarification was made of this seemingly comprehensive rejection of the existence of any risk or for a full report encompassing all the items tested. This should have been provided as a matter of course.

The investigating police member, when interviewed, said that it never contemplated that, if there was contamination, it may have happened at any other location than the testing laboratory. The member knew that the samples were taken to widely separated police stations and was generally familiar with the procedures for the taking of forensic samples.

The files relating to the other investigation, but that the focus of attention when doing so was on what might be learned about Mr Jama and the likelihood of his offending in the manner under consideration. Had the name of the examining doctor been seen, it would have possessed no significance to at the time.

It is apparent from the terms in which the opinion is expressed and the matters to which reference that it was addressing only the possibility of contamination at the laboratory, as the query was directed to what may have happened there, and that the scientist did not turn their mind to the question whether it could have occurred at

some other point. It is reasonable to assume that had the scientist done so, this limitation upon the opinion would have been expressed in the response and drawn the issue to the attention of the police, or VIFM.

The statement was also incomplete, in that the case notes from the laboratory indicate that another person in the examined the swabs and slides from B on bench 9 at 11.40 am on 17 July and the swabs and slides obtained from M at 12.05 pm on 21 July. A table attached to the response to the query, which has been set out above, makes no reference to any examination of the B samples on 17 July, nor was it mentioned subsequently.

When asked about this, the case manager said that this examination, but it was not mentioned it as no profile matching that of Mr Jama was obtained from the samples tested at that time and considered that the fact of common location and tester could not have presented a potential for contamination.

Given the time interval between the testing of the two sets of samples and the handling and cleaning protocols in place at the time and the reasonable assumption that there was compliance with them, I accept that it is extremely unlikely that contamination occurred at this stage. Under the protocols,

- Each scientist has their own kit or set of equipment and these are not transferred.

- The biology division has a stringent cleaning regime in place using hypochlorite to remove and destroy residual DNA from work surfaces. Additionally items are placed on disposable paper and not directly on to the bench surface. Gloves etc are routinely changed throughout the examination and specifically between handling different items or instruments.

- Instruments are used once and either discarded (in the case of disposable scalpels) or are subjected to extensive cleaning using hypochlorite, ethanol and autoclaving. In this case, the scientist used disposable scalpels.

- The biology division environmentally monitors the laboratory which involves the taking of swabs from surfaces, equipment etc and subjecting them to DNA profiling. Any DNA detected is compared to both staff profiles and those samples on the DNA database.

Noting that in the VIFM response to the Inquiry, reference was made in the laboratory case notes that the same person was recorded as receiving the two sets of items and as acting as case manager, I inquired into the matter and was informed that

> "The process of receiving exhibits from FEMU in 2006 was that the items would be issued to the case manager .... but upon their arrival in the biology wing, the paraprofessional would take control. Thus the latter would open the items,

> describe the contents, perform testing, sample for DNA (if applicable), re-seal the exhibit bags and return them FEMU.
> .....
> [The case manager] was not involved in the examination of either case .....
> As part of the review process on cases worked on by paraprofessionals, the case manager must satisfy themselves that everything required to be done was done and was done according to relevant procedures and methods. The verification of the case notes is achieved via the case manager initialling the case notes"

Whilst it is conceivable that there was some DNA on the swab or slide that was not detected in the testing process or which was present on associated covers or containers, the likelihood that it found its way on to the materials tested four days later can I think, be reasonably regarded as remote.

The hair sample was tested, on 19 July, on bench 1 which is located 25 metres away from bench 9 and is further separated by walls and other infrastructure. This would also be an unlikely source of contamination of the material tested on the 21 July. I am satisfied that there is no substance to the VIFM concerns.

Nevertheless, for the response to contain no reference to the fact of common location and a common tester for some of the samples was inappropriate. Insofar as the presence and degree of a risk of contamination in any given case could be matters of opinion that could be reasonably disputed, an accurate statement of the circumstances relating to each of the items tested and the reasoning underpinning the opinion should have been given.

In the present case, and at minimum, the limitations upon the opinion given should have been specifically expressed and in a full report from the outset. That, of itself, may have prompted a broader inquiry and contact with VIFM and the doctor concerned.

Further, had there been procedures and protocols in place that would, as a matter of course, have been triggered by the raising of the query, which included the tracing of the tested materials back to their sources, the connection between the two matters would, in all likelihood, have been seen, the possible sources of contamination identified and almost certainly Mr Jama would never have been prosecuted or put on trial. This, perhaps overly confident, assertion is based upon the fact that once it was realized that the connection existed, the miscarriage of justice was immediately recognised.

This has been indicated by the Director of VIFM to be a matter of real concern to the Institute which only became aware of the existence of a problem over three years later. He said that had the matter been drawn to their attention at the time of the initial query, it would have been immediately addressed and the whole situation that subsequently developed would have been avoided.

Having no justification for rejecting the statement of the VIFM doctor as to the practices normally adopted and compliance with them, or the advice given to me concerning the handling of the materials at the laboratory, I am of opinion that the contamination that I am satisfied must have occurred, was almost certainly the consequence of environmental factors.

The Interpretation and Use of the Scientific Opinion

Examples of the manner in which the opinion, expressed without its limitations being made clear, was interpreted and used can be can be found in several passages in the trial transcript.

At one point, the prosecutor, who presumably wanted to dispel any doubts that members of the jury might harbour concerning the reliability of the DNA evidence, adduced evidence from the scientist called on this aspect about the quality control procedures employed at the laboratory. The prosecutor then asked,

> "We are not talking about generalities, we are talking about the particular case that you might be giving evidence about in any situation?....In relation to this case there no any-or there was no evidence of any contamination occurring."

Significantly, a little later, the jury enquired as to whether there were any statistics relating to detected incidents of contamination.

The prosecutor then asked

> "...In this case, let's forget other cases was there any evidence of contamination using the controls you've described?--No there was no evidence of any contamination in this case"

In their final address, the prosecutor submitted;

> "There was no suggestion in this case of any lapse or error, including contamination type error about which the laboratory has got techniques that reveal such a thing if it happens..."

It must have been obvious to the VPFSD scientist that this evidence would be seen to exclude any possibility of contamination. However, the questions put by counsel were answered and there was no suggestion at any stage that a problem may have arisen at any earlier point. As I commented earlier, I do not think that that possibility had ever been considered as the situation appeared to have been approached entirely through the prism of the Forensic Science Centre and its role as it was understood .

The responsibility resting upon the participants in a criminal trial dependent upon scientific evidence was the subject of attention in the report of the Royal

Commissioner conducting the inquiry into the case of Edward Charles Splatt in South Australia in 1984. He expressed the view that

> "a very serious obligation lies not only on the scientist who gives evidence but on the representatives of the legal system who are responsible for the conduct of the trial.
>
> -The vital obligation which lies upon the testifying scientists is that they will spell out to the jury, in non ambiguous and precisely clear terms, the degree of weight and substance and significance which is or ought or ought properly to be attached to the scientific tests an analyses and examinations as to which they depose; and specifically the nature and degree of any limitations or provisos which are properly appended thereto.
>
> -And the critical responsibility which rests upon the legal persons is to ask such detailed and probing questions of the scientists as are most likely to elicit the type of evidence just mentioned.
>
> Of course, in that context of question and answer, the primary responsibility must always remain with the scientist; because it is [that person] (my alteration) who should know the nature and scope of [their] scientific analysis and the limitations and exceptions properly attachable to the results which [he or she] achieves.
>
> Accordingly, in my view, it is not properly open to a scientist, on a later occasion when [their] trial evidence is being reassessed, to say, for example; "I answered correctly such questions as I was asked. If I had been asked other and more relevant questions I would also have answered them correctly. It is not my fault that the correct questions were not asked of me".

If there is a failure on either side in respect to the exercise of that responsibility which I have just discussed it is the jury (and ultimately the particular accused) which suffers; in that it (the jury) is inadequately informed as to essential matters upon which its ultimate verdict must depend; it being the tribunal of fact which must give the ultimate decision"

I would add that these obligations must be recognised not only at the trial and by the legal representatives and the judge who has responsibilities in this area as well, but at all stages of the investigative and legal processes.

In this case, the defence did not challenge any of the prosecutor's assertions concerning the absence of any risk of contamination whatever as they were operating on the same assumptions. The trial judge was not alerted to the existence of any

problem and, in consequence, the jury arrived at their verdict on the basis of a fundamental misconception.

The Decision To Proceed

Although troubled by the lack of any other evidence connecting Mr Jama with the venue and still unable to develop a realistic scenario or theory of how, when and where a rape could have been perpetrated, the police member handling the matter prepared a brief of evidence in which it was pointed out that a criminal prosecution would be heavily, if not entirely, dependent upon the DNA evidence.

Approval was however given to proceed.

The brief was then forwarded to the Office of Public Prosecutions (OPP) for consideration.

The Deputy Commissioner for Crime of Victoria Police, Sir Ken Jones, informed me in the course of discussion that, as a result of greater familiarity in the UK with the issues and risks surrounding DNA evidence, it was not by itself considered a sufficient foundation upon which to base a prosecution. He was confident that it would not have been authorised in a case such as the present one, where there was no other evidence of any kind to establish that a crime had been committed and, if it had, anything whatever apart from the DNA evidence that even suggested that Mr Jama may have been the perpetrator.

Sir Ken was of the view that DNA matching was very valuable to police for intelligence and evidentiary purposes, but, when used as evidence, had to be seen as one part of a circumstantial case and not as the entirety of it. He said that Mr Jama's case highlighted the need to increase the level of understanding of investigators in Victoria Police of the issues arising from this type of evidence and indicated that steps were being taken to address this.

He also expressed concern that, as a result of exaggerated claims and expectations that reflect the "CSI effect", which are then debunked, its real value may be seriously diminished. This, he said, appears to be occurring in the United States where there have been a number of examples of the misuse of such evidence.

Dr Robertson strongly endorsed this approach. He said that it was vitally important that the proper role of forensic science within the criminal justice system is understood by other investigators, those involved in the legal processes and, of course, the scientists themselves. In the case of DNA evidence, its function must not be regarded as simply to produce a "number' to be applied uncritically. Like all other evidence, he said, whether or not it can be seen to be reliable and probative in the determination of disputed issues of fact involves consideration of a range of factors. However, the very nature and perceived probative value of this type of evidence requires that extreme care is taken at every stage from the collection, handling, testing of the materials and the interpretation of the results.

The importance of appropriate investigation to address the possibility of contamination, in particular, before DNA evidence is relied upon was also the subject of submission by VIFM.

> "Whether or not there has been contamination in a particular case is most often a question of opinion/judgement following investigation, not a fact. The assurance that there has or has not been a contamination is part of the overall investigation of the case. To a limited extend this occurred in this case with exploration of the possibility of contamination within the forensic laboratory. This explanation was initiated by the investigator. There is no particular "test" for contamination
>
> One way to explain what is involved in establishing whether or not there has been contamination is to consider the following:
>
> In an alleged sexual assault, one of the aims of taking the forensic samples is to detect foreign (i.e. another person's) DNA on the complainant. One of the risks of the forensic uses of DNA evidence in cases where the identity of the suspect is in dispute or unknown is: how does one distinguish between a true finding of foreign DNA (ie. swabbing detected presence of an individual who may be connected with the case) and inadvertent contamination (ie. contamination with DNA extraneous to the material being swabbed). One distinguishes between a true finding and inadvertent contamination by:
>
> An evaluation of the circumstances of the alleged sexual assault; and
>
> By relying on the overall (low) probability of inadvertent contamination having occurred bearing in mind
>
> - The total circumstances and procedures of the collection of the specimens
> - The environment in which the specimens are collected
> - The procedures of the forensic science laboratory
>
> "Locard's principle that every contact leaves a trace allows for the transfer of microscopic amounts of DNA/semen being feasible, although a complex set of events needs to occur to result in contamination. A combination of events might include a woman with DNA/semen on her person externally, (eg: on her hands, clothing or hair) coming into contact with

> furnishings, equipment and her environment in such a way as to transfer some of that DNA/semen. A second person then comes into direct contact with that contaminated environment and is themselves contaminated.
>
> In circumstances where DNA/semen is on the person externally (i.e. on the hair, outer clothing or hands), the possible opportunities for contamination are greater than when DNA/semen is deposited internally (vagina, anus) or under clothing (breasts, buttocks etc.)"

From the perspective of the police members directly involved, who clearly had limited knowledge of the problems presented by this kind of evidence and did not recognize the limitations within which the scientific opinion was expressed, they had made the appropriate enquiries and had received assurances that, in the present case, it was both compelling and entirely reliable.

The Prosecution Approach

Allegations of sexual offending are dealt with by a specialist unit within the OPP. After an initial assessment is made of the nature and complexity of the case, solicitors are allocated to handle it.

On this occasion, the initial assessment contained the observation that it was unusual in that "the case appears 100% reliant upon the DNA matching" and appeared to be the first time that the initiation of proceedings was being considered in the absence of any other evidence whatever.

Those handling the matter were well aware that, if the matter went to trial, the prosecution case would be constituted entirely upon the DNA evidence. In consequence, further checks were made in relation to the laboratory processes which confirmed the earlier findings and the assurance that there was no reasonable likelihood that contamination had occurred was effectively repeated.

On this aspect, there is nothing in the files, or was conveyed to me in the course of the Inquiry, that indicated that there was any appreciation on the part of involved of the possibility that contamination of the samples could have occurred other than at the testing laboratory.

It is clear however that no problem was perceived in proceeding on DNA evidence alone. Although directed attention to the issue of contamination, there can be little doubt that the prosecution was more concerned about a quite separate problem.

In a Memorandum, dated 19 September 2007, to the barrister appearing for the prosecution at the committal hearing, he was instructed,

> **"Issue(s) at Committal:**
> There is no other evidence that implicates the defendant other than the DNA evidence. The difficulty the prosecution will have is how to lead this evidence without disclosing that the defendant was arrested in relation to another rape that occurred the night before the current offence, for which he was profiled."

What was fundamentally important in the observation in the initial assessment was not only that the case was dependent on DNA evidence, but that it was the only occasion of which he was aware on which a prosecution was contemplated in the absence of any other evidence whatsoever.

As I have earlier mentioned, a single piece of evidence, based upon statistical probability of a match between the DNA profile of Mr Jama and DNA on material collected in the course of the forensic examination was to be used to establish both the commission of a crime at all and the identity of the perpetrator. The fact that it was seen as possibly unprecedented within the OPP, should, in my opinion, have prompted some investigation of the experience of the courts in cases of that kind or in which issues with respect to DNA evidence and probability reasoning were considered.

Those dealing with the matter obviously regarded the DNA evidence as reliable on the basis of the opinion that they had received. It is, I think, reasonable to infer that the limitations to that opinion were obviously not detected, and the evidence regarded as sufficient to justify the further progressing of the matter, although the features militating against the commission of a crime at all and Mr Jama's possible guilt of it were powerful.

- He was a 19 year old student of Somali origin living in Preston and studying year 12 VCE. He had no prior convictions, no known connection with the Doncaster area, claimed that he did not drink alcohol and had never been seen in the nightclub in question which was promoted as an over 28's venue. At face value, there would seem to be little, if anything, to attract a person of his age group and what is known of his social connections to such a place. Nothing was suggested as to why he might have gone there. As a broad proposition, I suspect that a nightclub catering to substantially older people would be anything but attractive to such a young person and that one of its attractions to the targeted group is that they can interact more comfortably with persons of their general age group.

- As a thin dark skin teenager of African appearance, it would be surprising if his presence was not noted by someone, including M, in that setting.

- As a potential predator looking for a victim, he could hardly anticipate that he would not be observed in that situation, or that the person chosen would not remember him or would lose consciousness so quickly and completely that she would have no recollection of him or his actions at all.

- If, on the other hand, he acted opportunistically, as the judge found when passing sentence, he would have had to observe the degree of vulnerability of his victim for at least long enough to assure himself that she was on her own, identify a location in which he could rape her, move her to it, commit the offence and then escape; all within a very short period of time.

- It would also have to be accepted that he entered and left the premises at times at which fortuitously for him the video surveillance camera at this entrance was not operating.

- The time frame within which the events related to the alleged rape would have had to occur was so short that it is improbable that they happened.

- There was DNA located on only one of the four swabs taken from within the vagina, only one complete sperm found and nothing on her clothing including the long black pants M was wearing.

- How he, a young dark skinned man could have moved a heavy and, at least, semiconscious woman in her late 40s a substantial distance across the nightclub without attracting attention is difficult to see. The only evidence bearing upon this scenario was that two male security staff members experienced a problem in moving her from the toilet cubicle to the back stage area; at times, dragging her across the floor. To attempt to move M in these circumstances , apart from the challenges in accomplishing the task, Mr Jama would have had to be a very self contained and calculating predator with a very high degree of personal confidence. Setting to one side the issue of admissible evidence, there was nothing whatever in his background that could be seen in any way to support that view.

- There was no prosecution scenario or theory ever developed concerning the circumstances under which the alleged rape was committed:

    - If it took place in the cubicle, Mr Jama had to take his victim there undetected, commit the offence, possibly pull up the slacks that M was wearing, as this was the state in which they were found when she was located, climb over the top of the cubicle, for the door was locked from the inside, and make his escape, again undetected. It is hardly necessary to draw attention to the improbabilities involved in this scenario, or to emphasise the risk to which Mr Jama would have placed himself by raping his victim in that location, At any moment, for example, women could have entered the area and detected him in the act, or seen him entering with his unconscious or semi conscious victim, or climbing over the top of the cubicle or leaving. The possibility that M was raped in the toilet cubicle was understandably rejected out of hand by the police member directly handling the investigation.

    - Where else a rape may have been committed was never indicated, nor was any possible location identified. The prosecution case simply bypassed this

aspect. In this context, I have earlier pointed to the difficulties that the judge encountered in his fact finding concerning the circumstances in which the rape may have occurred, when he was passing sentence. Bearing in mind that there were approximately 800 people in the venue at various stages on that night, wherever it could have been perpetrated, the risk of detection accepted by a potential rapist would almost certainly be very high.

- There was no evidence that Mr Jama had any access to the drug GHB in the course of the trial, or any other drug capable of inducing unconsciousness in the way suggested. In this regard, it is important to bear in mind, as earlier mentioned, that there were other explanations for M's state when found, including an unexpected reaction to the combination of medication and alcohol that she had taken.

- It emerged from the investigation of the other incident that Mr Jama had not taken the opportunity to engage in penile vaginal sex with a young woman less than 24 hours earlier. When questioned about that matter, he provided a version of events that was, in large measure, later accepted by the woman concerned. Yet, according to the prosecution, he was prepared to act in a most extraordinarily predatory fashion, by, either, surreptitiously drugging a woman in her late 40's and raping her or, opportunistically, attacking her upon observing that she was severely incapacitated.

Although the DNA evidence had become available because of the investigation of Mr Jama's possible involvement in the commission of a separate offence of a sexual character very shortly prior to the night in question, no attempt was made until well after the trial by the prosecution to secure detailed information concerning that matter or to investigate what had taken place.

At the very least, the fact that he had come to police notice for his possible commission of sex offences against two women in widely separated parts of Melbourne within a period of 24 hours, of itself, should have attracted attention to the full circumstances of each occasion.

The apparent dismissal of the other investigation as irrelevant to the matter in hand is also difficult to understand in a situation where there was no scenario ever developed as to how, when and where Mr Jama could have perpetrated the crime alleged against him.

The material gathered in relation to it may have been useful for any one of a number of purposes, including, what might be learned about Mr Jama himself, and, as it ultimately transpired, the likelihood that he may have committed the offence in the circumstances alleged, when, on the previous night, he had not availed himself of the opportunity to engage in consensual penile intercourse with an apparently enthusiastic young woman.

Had the earlier matter been adequately explored, presumably the fact that the samples were obtained from the two women at a common location and by a common forensic

medical officer would have been observed. That may well have alerted those conducting the case to the existence of a potential problem.

The reasoning of those dealing with the matter at the OPP seems to have been there was no justification for doubting the general reliability of the version of M which was consistent with the findings made upon the examinations conducted at the Austin Hospital, her condition when found at the nightclub and what was known of her movements prior to that time. The presence of spermatozoa constituted strong evidence that sexual intercourse had taken place to which she clearly had not consented, and probably after she had been rendered incapacitated by a 'spiked' drink. DNA had been located in the samples taken from her that could in turn be attributed to Mr Jama. They were satisfied that there had been no contamination of the tested sample. It followed that the question of his guilt should be put before a jury, although there was otherwise no evidence incriminating him and no scenario developed as to the circumstances of the offence itself.

This was the basis upon which the trial was conducted as, the prosecutor, made clear in his final address to the jury. The prosecutor submitted that they need not be concerned with such matters as when and where the rape of M could have taken place or the absence of any other evidence inculpating Mr Jama because the DNA evidence established his guilt. After asserting that the evidence of the scientist was "rock solid" and that they could act upon it "safely and beyond a reasonable doubt", it was argued;

> "If you are satisfied about that evidence there's no question, you may think, that the penetration was without [M's] consent and that the accused was aware that she was not consenting, or might not be consenting. Now, of course, it doesn't matter how or why she came to be unconscious. For example, whether her drink was spiked, or whether she'd had too much alcohol , or that there was a question of the mixture of alcohol with medication, or any combination of those possibilities it does not matter how or why she came to be unconscious.
>
> If you're satisfied beyond a reasonable doubt that the accused man penetrated her vagina with his penis without her consent while aware that she was not consenting , or might not be consenting, then he is guilty of the crime of rape. How ever she came to be incapable of consenting, or incapable of freely agreeing, how ever that came about doesn't matter. If you're satisfied that he penetrated her vagina and did so without her consent then he is guilty of the crime of rape. Nor do you need to make any finding or come to any conclusion about where exactly at the premises, for instance, the rape occurred and, for example, it's not necessarily and it's (not) a necessary part of the prosecution case that it happened in the toilets. It may have happened in the toilets. It may have happened somewhere else but you don't have to draw any conclusion or make any finding about that and you don't

> have to be temporary sleuths to work out where it did happen. The reason why you don't have to make any finding about that or draw any conclusion about that because the prosecution does not have to prove every fact in the case for you to be entitled to convict an accused person. The prosecution doesn't have to prove every fact but what the prosecution has to prove otherwise it would in any case – forget this case, in any case there's always lots of facts that rear their heads and it would be impossible to prove every fact we'd be here forever; in any case, not this case. It's futile and it's not necessary. The law doesn't require it."

Both conceptually and operationally, our legal system is being required to accommodate and respond to awe inspiring and almost magical developments in human knowledge and technologies concerning which, for most part, those involved have little or no knowledge or experience. In the present case, the obviously unreserved acceptance of the reliability of the DNA evidence appears to have so confined thought that it enabled all involved to leap over a veritable mountain of improbabilities and unexplained aspects that, objectively considered, could be seen to block the path to conviction

As far as I have been able to determine, it was not until the issues presented by this case came to the fore that the particular care with which DNA evidence must be approached was seriously considered. It was recognized that issues of contamination could arise but clear that it was thought that once they had been resolved there was no problem in using it directly as powerful proof of guilt.

As I have earlier mentioned, there was reference in the course of preparation of the matter to the possible difficulties that could be encountered in explaining to the jury how the police came to be in possession of Mr Jama's DNA profile without introducing the earlier investigation or creating an atmosphere of suspicion that would compromise the conduct of a fair trial.

This was, as it transpired, a matter of legitimate concern, as the jury enquired as to how it came about that the police were in possession of Mr Jama's DNA profile. The trial judge informed them that there was no evidence on that aspect, which was irrelevant to their deliberations. It is difficult to put to one side the thought that, notwithstanding his instructions, concerning the adequacy of which I have some reservations in any event, the jury may have harboured suspicions about Mr Jama on that basis. It could be seen as akin to an indication that an individual had prior convictions that they were not to know about.

The prosecution approach was, of course, determined to a large extent by the very important concession clearly made by the defence in the course of pre trial proceedings, that no issue of contamination arose and by the assurances that had been received from the laboratory.

I am acutely conscious that it is easy to be critical, given the advantage of hindsight, of actions taken or not taken, decisions made or approaches adopted in the absence of

later acquired knowledge. For a number of reasons, including the costs and limitation of resources involved and sheer work pressures, our investigative, prosecution and trial processes are of necessity directed to those matters repeatedly referred to by appellate courts as "the real issues" presented by a case. However, this was, from the outset, a rare case with a number of very curious features and warning signs, the significance of which were not understood.

The Defence Position

Mr Jama's counsel, in his address to the jury at the trial, argued that they could not be satisfied beyond reasonable doubt that M, who had no recollection of any assault upon her, had, in fact, been raped. In support of this argument, attention was drawn to a number of the features earlier listed. As mentioned, the prosecution did not attempt to respond at this level and simply relied on the overwhelming power of the DNA evidence.

In any event, counsel contended, the evidence was insufficient to support the conclusion that Mr Jama was the perpetrator. Counsel pointed to the circumstances in which the rape was alleged to have been committed, the fact that Mr Jama had no prior convictions and was to be regarded as a person of good character, the absence of evidence of any connection between Mr Jama, the Doncaster area and the nightclub or any evidence that a person fitting his description was even seen in there on that night.

Reliance was also placed upon evidence adduced from members of Mr Jama's family that he was at home at the time with his family members as his father was believed to be gravely ill. A friend of Farah Jama, said that he was present and tried to interest him in enrolling at Latrobe University.

Judging from the trial transcript, all of the alibi witnesses fared badly under cross examination, particularly, Mr Jama's young friend, who, had earlier told the police that he was at his own home at that time. Mr Jama, who did not give evidence, had told the police that he had not seen any of his friends on that night

With respect to these witnesses, the prosecutor, in their address, submitted

> "Now you've heard some alibi witnesses called only yesterday, two members of the family and, I suppose you could say, a loyal friend.... You might think [he]was roped in to give some semblance of non family type evidence.....you might think that the evidence this alibi evidence all of the witnesses taken together was a pretty artificial, synthetic contrived sort of account, evidence cobbled together not to be trusted".

The defence counsel presented a quite different perspective of them

> "..let me suggest this to you that in relation to the cross examination of those witnesses in relation to the alibi you

> might have thought that it was easy sport for my learned friend to cross examine these people. It's a matter for you to see how you judge them but obviously they appeared, I suggest, to be relatively simple people. They were people without guile of any sort. They could not even work out what the relevance was of certain things."

Whichever of these views may be taken of the alibi witnesses, it is perhaps not surprising that their evidence had no positive impact on the verdict and may well have operated to his disadvantage in the minds of some jury members.

The defence were confronted with what they perceived as reliable evidence that a surprisingly small amount of sperm on the swab in the context of an alleged penile vaginal rape, consisting of one intact spermatozoa and fifteen sperm heads, was obtained from within the body of M. Accepting that it was there, they questioned whether she may have had intercourse at some time shortly before that night, but this possibility was removed when she said that she had not been sexually active in that way for some considerable time.

Mr Jama's legal representatives obviously had no knowledge that the two sets of tested materials were obtained by the same doctor and at the same location. It can be safely assumed that, if they had been aware of the connection, this aspect would have been pursued well before the trial. Again, I observe that no request was made to the OPP to secure access to the file relating to the earlier incident and which may well have alerted them to the existence of a problem.

Against that background, the defence argued that a real question then arose with respect to the interpretation of the test results. They contended that, as Mr Jama was not present in the night club at any stage, he had mistakenly been involved, when it must have been the DNA of an unknown third person. I do not need to set out the technical argument advanced to support this claim. No expert witness to support the defence contentions was called and, through their verdict, the jury can be seen to have rejected this possibility.

Again, in common with the prosecution, no reference was made by the defence to the concerns expressed by judges in other jurisdictions over a number of years with regard to the dangers of relying on statistical probabilities in the determination of guilt and the specific problems that can arise in cases involving such calculations based upon DNA testing. No mention was made of them in the directions hearings prior to the trial or in the trial itself. The attention of the trial judge was not drawn to them at any stage. It would seem that their level of understanding was akin to that of the prosecution.

The Trial Judge's Directions

Although there have been a number of cases before Victorian courts in which issues relating to DNA evidence, including the question of the possibility of contamination, have arisen for consideration, I think that it is fair to state that, generally speaking, the

amount of experience by judges and legal practitioners alike concerning them is quite limited. Not many matters have been contested and, so far as I am aware, none have possessed the features of the present matter.

There can be no doubt that the introduction of this form of circumstantial evidence of the involvement of an accused person in the commission of the offence charged has posed substantial challenges for our system of trial by jury. What meaning can sensibly be ascribed, separate from an assessment of statistical probability, to the concept of proof beyond reasonable doubt is difficult to discern, when, as in the present case, a jury is informed that on the basis of "rock solid" evidence, using the Australian Caucasian population sample data it was 800 billion times more likely that the sample originated from the accused than from an unknown person taken at random. The range, it was said, within which the calculation was made was between 1 in 45 billion and 1 in 14 trillion. The same comparison, when made by reference to the Somali population database produced a calculation of 1 in 89 billion with a range of 4.7 billion and 1.6 trillion. In other words, it would appear to be necessary to search well beyond this planet and conceivably this galaxy to find a match.

The relationship between the concept of proof beyond reasonable doubt and a statistical probability of guilt of the order involved here is, to put it mildly, problematic. If the science and the methodology underpinning these calculations are valid, the evidence is of an extraordinarily powerful character and, realistically, what jury would require more.

In my experience, juries regularly encounter great difficulty with the standard of proof in a criminal trial not involving issues and probabilities assessments of this kind and often ask for assistance. The judge then informs them cannot be provided other than that" beyond reasonable doubt" is a common English language expression that means what it conveys. Although compelled by authority to answer in that fashion, I have, when doing so, always regarded the required response to a sensible question concerning the standard of proof as ridiculous. The jury had requested assistance because they were uncertain as to what substantively the standard was or how the concept of proof beyond reasonable doubt would apply in the case that they had to determine. They would then be effectively told, "Work it out for yourselves because I am not allowed to help you".

Not long ago when sitting as a member of the Victorian Court of Appeal I had occasion to consider a trial judge's response to a question from the jury to the effect – regarding proof beyond reasonable doubt, would 70 – 80% satisfaction be sufficient? The judge replied that he was not permitted by law to attempt to define the term "beyond reasonable doubt" and could not do more than repeat his general direction on that aspect. The court in that matter indicated that, although His Honour was correct in declining to define the term, he should have made clear to the jury that a doubt reasonably held was not to be put to one side by reason of an assessment of that kind. Only a moment's thought concerning the relative ratios involved in the two cases is required to see the nature of the challenges presented.

In *R v GK* [2001] NSWCCA 413, Mason P accepted the force of a comment made by the trial judge in the course of discussion with counsel concerning the practical realities in the case before him,

> "I think that there is a very considerable risk that the jury notwithstanding any blandishments on my part may take the practical position of a punter and say that this is not just a mere certainty but an absolute certainty"

In this context, I observe that the probability or likelihood ratio given by the VPFSD scientist in November 2009 in relation to a retesting performed during that year in preparation of the appeal was expressed as follows;

> "Using Australian Caucasian population sample data, the Likelihood Ratio is one hundred and fifty million (150,000,000) (with arrange of fourteen million (14,000,000) to one billion seven hundred million (1,700, 000,000)……..
>
> Using Somalian population sample data……The likelihood Ratio is 17 million (17,000,000) (with a range of one million six hundred thousand (1,600,000) to one hundred and eighty million (180,000.000)".

The later calculations were made, I have been informed, in the course of a review conducted into DNA evidence in the period after the trial and reflect a more conservative interim approach being adopted.

I understand that, as a consequence of the review, a third calculation formula will be employed that is likely to produce a different ratio somewhere between them.

The amazing variations in the ranges within which the separate likelihood ratios were determined and the changes in the ratios in such a short period could hardly engender confidence in the use of such statistical techniques in evidence. I wonder what would have been the response of the jury in the present case had they been told that, on one basis, the likelihood ratio was in the order of 99% less than it was on the other. At least, on the latter formulation, it would no longer be necessary be seek beyond the solar system for a possible match. They may have been far less inclined to accept that the evidence was "rock solid".

There are a number of reported and easily accessible unreported cases in which the courts in several countries during the last twenty five years have grappled with the problem of the value and use of evidence of statistical probability, calculated by reference to esoteric concepts of science and mathematics that they have, to a large extent, accepted on faith, deferring to the seeming expertise of scientific witnesses.

They have been concerned about their ability to ensure that verdicts are based upon the standard of proof beyond reasonable doubt by reference to the totality of the

circumstances and not some impenetrable notion of statistical probability or likelihood ratio that may ultimately be seen to rest on arbitrary assumptions. Evidence of that kind is inherently dangerous as the changes to the formula set out above, and which have been made within a matter of a very few years, make abundantly clear.

I wish to emphasise that this does not mean that the presence of the DNA of a suspect at a crime scene or upon associated items or the body of a victim is not extremely valuable both as an investigative tool and, when appropriately used, as evidence in a criminal trial. It has been so accepted and employed for quite a long time. But it must be carefully used and placed into proper perspective and understood that a calculation of statistical likelihood provides a dangerous basis for conviction, if it is upon that alone that proof beyond reasonable rests.

Hampel J, almost 20 years ago remarked in one of the relatively few Victorian cases dealing with DNA evidence - *R v Lucas* [1992] 2 VR 109- that "caution must be exercised as the scientific appearance of expert evidence may be overwhelming".

In R v GK, Mason P expressed his agreement with the extra- judicial statement of Hodgson J (*Probability and Proof of Fact in Legal Reasoning* (1995) 69 ALJ at 736) that

> "Decision making generally involves a global assessment of a whole complex array of matters which cannot be given individual numeric expression.

In the Queensland case of *R v Fletcher* (1998) 2 QR 437, the Court of Appeal set out the direction of the trial judge which makes this point quite well,

> "The DNA matching, if proved beyond reasonable doubt, does not prove that the accused is the offender. The evidence only fails to prove that he is not the offender. The only inference which can be drawn from a match proved beyond reasonable doubt, together with the evidence of the occurrence in the community, assuming you accept the percentage occurrences, which is not here challenged, is that it was possible that he was the person who had sexual intercourse with the deceased, such that the matter then could not be proved beyond reasonable doubt on its own, so that, if there is only DNA evidence and nothing else which you accept, you cannot convict the accused. If you accept that there has been a match and no mismatch shown on any one locus which would exclude the accused, you can use the probability of this match, in accordance with the random occurrence in the community, as another item of circumstantial evidence, along with all of the other evidence in the case which you accept, in deciding whether or not, at the end of your deliberations, you are satisfied beyond reasonable doubt of the guilt of the accused. You consider

> carefully all of the evidence in conjunction and not individually."

It was observed in the Court of Criminal Appeal in England in *R v Doheny and Adams* [1997] 1 Cr APP R 369 –

> "As the art of [DNA] analysis progresses....the stage may be reached when a match will be so comprehensive that it will be possible to construct a DNA profile that is unique and which proves the guilt of the defendant without any other evidence. So far as we are aware that stage has not yet been reached."(at 373)".

It certainly does not appear that, in that respect, the situation is any different at the present time. Arguably, the advances in technology which have enabled DNA to be extracted from infinitesimally small amounts of material and the application of Locard's principle, have increased the potential for the wrongful involvement of a person, whose DNA is detected, in the suspected commission of a criminal offence. The importance to be attributed to ensuring that the collection, transport, testing and analysis processes are maintained at the highest level could almost be said to increase in inverse proportion to the size of the particles involved as the smaller they are, the more easily they can be transferred.

It follows that, before evidence of such seeming strength is placed before a jury, the greatest possible care must be taken to ensure that its limitations are understood and that it is safe to rely upon it. There is such danger in the uncritical acceptance of what I have earlier called the mystical infallibility attributed to it, the methods employed to collect it and the interpretation given to the findings by experts whose opinions can often only be challenged by other experts in arcane discourse that its reliability must be the subject of the most careful scrutiny.

This gives rise to important responsibilities that must be addressed at each level of our forensic processes, a number of which can be seen to be demonstrated in the present case.

So far, Australian courts have been extremely reluctant to engage in the testing of the admissibility of DNA evidence and its possible exclusion by reason of its unduly prejudicial effect through the use of *voir dire* procedures under which the judge determines these questions, leaving it to the jury to struggle with the problem and with little assistance in dealing with it. That is, in my view, most unsatisfactory and should be addressed.

As I have emphasized, the courts of a number of jurisdictions have pointed out that it is fallacious simply to convert a statistical probability that an individual might be guilty of the offence charged into a finding that he was and dangerous to rely on DNA evidence alone.

Phillips LJ in *R v Doheny and Adams* described the fallacy

> "Only one person in a million will have a DNA profile which matches that of the crime stain.
>
> The defendant has a DNA profile which matches the crime stain.
>
> Ergo there is a million to one probability that the defendant left the crime stain and is guilty of the crime."

It is, to say the least, unfortunate that neither this nor any of the other expressions of concern in the courts or in the literature, some of which I have mentioned, were brought to the attention of the trial judge. If they had been, or if the trial judge had possessed greater experience in this area than can be inferred from my reading of the trial transcript, it is, I think, reasonable to assume that a number of questions would have been asked, consideration given to whether the matter should proceed at all, and, if the trial continued, appropriate directions would have been given to the jury. The fact that the DNA evidence, like Ozymandias' statue, was at odds with all around it could not have been so easily bypassed.

At the very least, the provision of clear instructions to the jury as to the proper use and limitations of DNA evidence is required. The charge in the present case was devoid of any reference to these considerations.

The Consciousness Of Guilt Direction

The trial judge's charge in this case was otherwise conventional in both form and content, save in one respect, which the prosecution conceded at the appeal, would have required the setting aside of the verdict in any event.

When interviewed by the police, Mr Jama was asked whether he went to nightclubs and responded that he did not. His friend, in the course of cross examination, said that he had been with him at one called Chasers and another called Monsoon. However, he denied that they had ever gone to the Doncaster area together. He said that he had no knowledge of the existence of that part of the metropolitan area until after and because of the laying of charges. Significantly, in the present context, he was not asked at that stage when it was that Mr Jama and he attended nightclubs together. In re-examination, on being asked to recall the approximate dates of these attendances, he said that he thought that they went to the clubs after Mr Jama finished school and early in 2007.

Contrary to the submissions of both the Prosecutor and Defence Counsel that the trial judge should not do so, the trial judge instructed the jury that Mr Jama's denial that he had gone to night clubs could be used as evidence of his consciousness of guilt of the rape of M. This is clearly not the occasion for an attempted exegesis on the principles governing the use of evidence in this way and sufficient, I think, to state that the Crown concession in the appeal was in my opinion properly made. In other words, the evidence was incapable of supporting the inference of Mr Jama's guilt for several reasons.

Whether the Judge's error affected the outcome of the trial cannot be determined. If the jury did regard Mr Jama's denial of night club attendances as encompassing the night of 15 July, 2006 and as indicating concern about being at one in Doncaster because he was trying to distance himself from his commission of the rape of M, then it may well have done so and dispelled any doubts about the reliability of the only other incriminating evidence before them, namely the DNA match.

At a lesser level, this innocuous evidence may have been used by the jury as indicative of a lack of credibility of both Mr Jama and his friend and perhaps the possession of greater worldly experience and social sophistication on Mr Jama's part that could only have operated to his forensic disadvantage. As a practical proposition however, I doubt that it affected the verdict whichever way it was perceived.

The Appeal

There is no need to detail the course of the matter as it proceeded to the Court of Appeal. New solicitors, who were engaged on Mr Jama's behalf, focused on the possibility of contamination, but still in the context of the procedures adopted at the testing laboratory. Further tests were conducted, one by an independent laboratory which was unable to replicate the findings and another at the Forensic Science Centre itself which confirmed them to their satisfaction.

The first indication in the files or the court proceedings that there had been judicial consideration of the question whether a case could be mounted on DNA evidence alone appears in a Memorandum of an Associate Crown Prosecutor in preparation of the appeal in which the following appears:

"Can an offender be safely convicted only on DNA evidence?

Whilst there is no absolute bar to a conviction based solely on DNA evidence, the better view is that a conviction should only be returned where there is DNA evidence and at least one other item of evidence present which is consistent with the guilt of the offender.

This issue was first raised in the decision of the New South Wales Court of Criminal Appeal in *R v Green*, unreported, 26/3/1991 and then in *R v Pantoja* (1996) 88A Crim R 554.

In *Green*, the Court did not doubt the admissibility or reliability of DNA evidence in general. However, the Court went on to observe in respect of DNA evidence –

> "That evidence being admitted, it became incumbent upon the trial judge to tell the jury that the evidence, if accepted, meant that the Appellant could not be excluded and that, therefore, it was possible that he was the person responsible for the semen stains. That was the highest the Crown

> claimed it could use the evidence. It would follow that it would have to have been made clear to the jury that the "matching" results could not, in the absence of other evidence, prove beyond reasonable doubt that the Appellant was the person responsible for the semen stains".

In *Pantoja,* the evidence linking the offender to a sexual assault was a DNA match. In addition, there was also evidence of a disputed confession from the offender as to having engaged in sexual intercourse with the victim.

In dealing with the probative force of DNA evidence, Hunt CJ stated –

> "The significance of a match between the blood type or DNA of the offender and the suspect (or accused person) must be clearly explained to the jury: that (as is said earlier) it establishes no more than the accused could be the offender…" (at 564)

Abbadee J stated that a direction in the terms expressed in *Green* was a necessary requirement in any jury trial where the crown relied upon disputed DNA evidence. His Honour stated -

> "First, the jury was required to be told that it had to be satisfied (beyond reasonable doubt) that there was a match between the two profiles. If they concluded that there was a match, then it would then have to be made clear to the jury that the only inference they could draw from such matching was that the Appellant could not be excluded, and that therefore it was possible that he was responsible for the semen stains. Further, it would also need to have been made clear to the jury that the matching results could not in the absence of other evidence, prove beyond reasonable doubt that the Appellant was the person responsible for the stains." (at 583 – 4)

The decision in *Pantoja* was cited with approval and followed in *R v Fletcher* [1998] 2 QD R 437 (Queensland), *Latcha v R* (1998) 127 NTR1 (Northern Territory) and *R v Karger* (2001) 83 SASR 1 (South Australia)."

The absence of any indication in the OPP files prior to this memorandum that there had been any legal research undertaken in what were recognized at the outset to be not only simply unusual circumstances, but involved a situation that had not previously been encountered at all, was both surprising and disappointing.

VIFM was notified of the link between the two cases, on 25 November 2009, for the first time as a result of investigation undertaken within the OPP in preparation of the appeal and commenced their own inquiries. The possibility of contamination was recognized and the hearing of the case was expedited.

The Director of VIFM in an affidavit on 4 December 2009 put the Institute's position as follows,

> "While the interpretation and utilization of the results in this case were not within the control of the VIFM, I would like to advise that it is possible that processes VIFM relied upon may have resulted in contamination of swabs taken during the examination of the alleged victim in this case".

It is apparent that those words were carefully chosen but, like the initial expression of opinion by the VPFSD scientist concerning the possibility of contamination, they did not make clear to a person who was unfamiliar with the "processes VIFM relied upon" that there may have been some other source of contamination than the involvement of the same doctor.

The focus was placed on the fact that the same doctor examined the two women, with, perhaps, through the mention of transferability on to surfaces, an oblique reference to the potential for it to have occurred otherwise than through that contact. In my view, this produced a measure of inadvertent unfairness to the doctor concerned.

When the matter came before the Court, the Crown accepted that there had been a miscarriage of justice and that a verdict of not guilty should be entered.

The Aftermath and Recommendations.

It is almost incredible that, in consequence of a minute particle, so small that it was invisible to the naked eye, being released into to the environment and then by some mechanism settling on a swab, slide or trolley surface, a chain of events could be started that culminated in the conviction of an individual for a crime that had never been committed by him or anyone else, created immense personal distress for many people and exposed a number of deficiencies in our criminal justice system. But that, I believe, is what happened.

The test samples-- VIFM and the CCUs

VIFM presented a substantial submission to the Inquiry, which sets out in detail its response to what has happened and provides much useful information concerning the conduct of forensic medical examinations and the collection of samples for testing generally. I found it to be quite helpful and have included it with this report. It is apparent that a considerable amount of thought and work has been put into the issues which have been thrown up by Mr Jama's case.

Although asserting that its standards of practice in 2006 accorded with those adopted internationally at the time, VIFM stated that, since Mr Jama's case, there have been meetings with a number of Australian leaders in sexual assault examinations. In consequence,

> "many of these leaders have met with the various local stakeholders and revisited their policies and procedures with respect to conducting the forensic medical examination and the collection of evidence. Examples of altered practice include: limitations being placed on entry to the examination rooms to authorized personnel, implementing cleaning policies in the facilities where the examinations take place and redesigning rape kits accordingly....Notwithstanding VIFM alignment with relevant standards in 2006, there are a number of VIFM forensic medical examination processes and practices however, that are not in line with National and International Standards at present. They include the following:
>
> - VIFM had introduced a list of items required on a trolley which was stocked by CASA members after each examination. It is no longer considered best practice to have a pre stocked trolley.
>
> - We cut the ends off swabs to allow air drying. Recent practice has changed to exclude this process.

- In all jurisdictions excluding Victoria, the use of a prepacked DNA free rape kit is used.

At present, FMO are not responsible for cleaning and the furnishings and room prior to the forensic medical examination."

RECOMMENDATION 1:

Insofar as VIFM's current practices do not accord with current National and International practices, the outstanding matters should be addressed as soon as practicable.

Until this case, VIFM accepted the undertaking of examinations and, in particular, the collection of samples for DNA analysis in less than satisfactory conditions as the FMOs were simply called to locations operated by and under the control of others. This meant that they were not involved in the decontamination and cleaning regimes and relied on the VIFM procedures to minimize the risk of contamination. This case made it apparent that, on occasions, this could prove to be inadequate.

As I have pointed out, I have grave doubts that there was any cleaning of the unit at all during the twenty eight hours between the two examinations. If any was carried out, it was highly unlikely to have been directed to DNA decontamination control. The trolley top, scissors and other items left on it would not have been cleaned and, I suspect, neither would have been the moveable light above the bed.

The unit was being at that time used for forensic examinations approximately once each week with significant variations in time intervals. It was quite uncommon for two examinations to be conducted there in the one weekend, as happened on this occasion. The maintenance of appropriate cleaning regimes to accommodate such relatively infrequent and unpredictable usage and the special requirements for DNA collection would undoubtedly constitute a problem for all concerned. I think that it is unlikely that, in any event, it would feature high on the list of priorities of any busy hospital emergency department.

The CCUs have been established to satisfy a number of related needs which are by no means incompatible. However, great care must be taken if they are to be performed in the same location. An environment that is essentially designed and furnished to reduce stress and create a sense of personal safety may look very different from one which is intended to be clinically sterile and with minimal risk of DNA contamination occurring and the latter may need to have quite different entry and cleaning arrangements in place.

It is trite to say that, if a CCU is to be used for the purpose of forensic examination and the taking of samples for the purpose of DNA testing, it must be fit for such use. That was clearly not the position with respect to the one in which the samples were collected from B and M. On the basis of the recent survey, it would seem that a

similar situation would exist in a number of the others, although I wish to make clear I have not explore this aspect.

Interim measures to address the risk of environmental contamination in the units have been developed by VIFM and are currently under consideration by an inter agency working group which includes VIFM, the CASAs, Victoria Forensic Paediatric Medical Services, Victoria Police, and representatives of the Departments of Health, Human Services and Justice. [Attachment A]

In the short term, the proposed regime in conjunction with changes that VIFM is making to its own procedures would appear to be adequate. A similar set of proposals has been helpfully provided to me by Associate Professor Hoskins which is also attached. [Attachment B]

It must be borne in mind however that they are only interim measures and that a more satisfactory set of arrangements will need to be developed.

I appreciate that the issue of who is to have responsibility for the maintenance of an appropriate sterile environment at locations for the collection of samples will be of some difficulty for the various agencies and stakeholders, but one which cannot be avoided.

RECOMMENDATION 2:

That the current discussions with respect to the interim measures proposed by VIFM should be vigorously pursued and the agreed changes put into effect as soon as practicable.

As the attached table shows, [Attachment C] as a practical necessity, forensic medical examinations may need to be conducted in a variety of locations, including prisons, police stations and residential care units as well as VIFM and hospital and medical centres, and sometimes in fraught and complex circumstances where the collection of samples constitutes only one of the matters to which attention must be given and, at that stage, by no means the most important.

The FMO cannot assume, as I have pointed out, that even when the examination is conducted within a hospital, appropriate cleaning for DNA collection purposes will have been carried out or that the environment may not have been contaminated subsequently.

It follows that, if samples are to be taken for this purpose, the FMO will have to accept responsibility for ensuring that all working services are decontaminated, both before and after the examination. This should be monitored through the use of control swabs.

In order to further reduce the risk of environmental contamination, the necessary items for the examination should be available in a sealed kit, with all unused items being discarded.

RECOMMENDATION 3:

That the use of sexual assault examination kits should be adopted as soon as possible and the FMOs accept responsibility for ensuring that trolley tops and working surfaces are cleaned before and after use.

There are currently six units catering for adults in the Melbourne Metropolitan area in which forensic examinations are seldom conducted more than once or twice per week. That is a large number of units by international standards for our population and requirements. There are four, for example, in London and they are specifically designed and staffed for this purpose.

I am acutely mindful of the importance of minimising the distress already being experienced by victims at such times by avoiding delay and the need to travel substantial distances for forensic examination and recognize that the units are widely dispersed for this very reason.

Victoria Police have informed me that they are currently working with relevant stakeholders on a whole of government approach towards a victim centric model that supports the victim locally and creates higher probability of dealing with the same counsellor throughout the process. There is obvious great sense in this approach.

The issue with respect to forensic examinations is by no means a simple one. Northern CASA made the powerful point in their response that the greater the level of support that is provided to victims and the less protracted and complicated are the processes to which they are subjected; the more likely it is that they will be prepared to undergo forensic examination. However, there is little point in conducting such examinations and collecting intimate samples for the purpose of obtaining DNA evidence, if the evidence is subsequently perceived to be of little or no value.

In this case, not only was the failure of the process productive of a miscarriage of justice for the person accused but the creation of much unnecessary suffering for M. At all stages, it must be remembered that this is a very different type of evidence from that normally adduced and requires special measures to be undertaken before it can be safely used.

It is, it seems to me, impractical to attempt to adequately staff, clean and maintain, for this particular purpose, six adult units in the Melbourne metropolitan area and suggest that two located within hospitals where access to other specialist services would be more easily secured would be sufficient. This could involve the use of some of the units presently being operated principally for counselling and other support purposes. The specialist units would, under this scheme, have a role in the training of FMOs and counsellors and act as a resource for those working in regional areas.

RECOMMENDATION 4

That consideration be given to the establishment of a smaller number of specifically designed and staffed units for the purpose of conducting such procedures.

The Police Role in Transport and Storage of Forensic Materials

The investigations into the separate complaints were undertaken by police units from different areas. There was no evidence of common contact by any police member with B and M and I am satisfied that it was extremely unlikely to have occurred.

The samples were handed to different police members and many hours apart. They were transported in different cars to widely separated police stations, Diamond Creek and Doncaster respectively. The possibility of contamination through police contact either with the two women or their handling or transportation of the samples can therefore be confidently discounted.

Consequently, in the context and time frame within which this inquiry was conducted, and which, in any event, was focussed on the issues that emerged from the case of Mr Jama, it was not necessary to direct attention to the procedures adopted by police members to avoid accidental contamination of crime scenes or materials collected in other situations.

Accordingly, this aspect has not been pursued. Obviously without suggesting that those in place currently are deficient, but with some doubts about the extent of knowledge of DNA issues possessed by investigators generally , I recommend that a review of police procedure be undertaken to ensure that the risk of environmental contamination through the activities of the investigators themselves is kept to a minimum.

RECOMMENDATION 5:

That a review of the procedures for the collection, transportation and storage of materials be conducted by Victoria Police, encompassing also the training of police members concerning the issues involved and the precautions to be taken.

The Victoria Police Forensic Services Department Role

I have earlier emphasized the impact upon the history of this matter made by the statements and evidence of the scientist. There is no need to expatiate further on this aspect.

Before DNA evidence can be used with reasonable confidence in its reliability as either an investigative tool or as evidence in court, the testing processes employed and the foundation upon which the resultant findings rest must be transparent and expressed in a fashion that admits of no reasonable possibility of misunderstanding of the precise findings made.

Dr James Robertson, the National Manager of Forensic and Data Centres of the Australian Federal Police, in my discussions with him, emphasized the importance he attributed to those engaged in the forensic science aspects of an investigation to remain conscious of the fact that their activities constitute only a part of a broader inquiry and that, insofar as the information in their possession enables them to do so, to relate their activities and findings to the other information available about the events in question. In this case, he said, there was only a minute amount of material on one swab and an associated slide. Nothing was found anywhere else, including M's clothing. The laboratory had been provided with the memorandum of the investigating police member which indicated that there was no other evidence. This, in Dr Robertson's opinion, "should have rung alarm bells' and prompted a call for further investigation rather than what he viewed as a regrettably too narrow response.

The point made by Dr Robertson is, I consider, an important one. This is not to suggest that the laboratory was under some obligation to intrude into or monitor the activities of the other agencies involved. For a number of obvious and excellent reasons, it is vital for the integrity of the system of justice upon which our society depends, that the forensic scientists and those responsible for the other parts of an investigation operate within their designated areas and maintain an appropriate professional distance and independence of each other. Neither does it mean, however, that they isolate themselves. In this case where, on the basis of the experience of Dr Robertson, "alarm bells" should have been ringing, their reverberations should have been heard by the other agencies involved.

I recognise that there could be some sensitive privacy issues that would need to be carefully addressed under this proposed approach.

RECOMMENDATION 6:

In cases where DNA testing is carried out for forensic purposes, a full report be provided as a matter of course to the investigating police members and, where VIFM is involved, to them, setting out,

1. **The history of the samples as known to the laboratory, both before and after their arrival.**
2. **A statement identifying all items examined, when where and by whom the examination was performed and indicating the findings, whether or not a DNA profile is obtained.**
3. **A clear statement setting out the basis upon which any opinion rests and limitations within which it is expressed.**

Common sense indicates that, where an issue of possible contamination arises, there should be some procedures that enable the question to be answered at each point in the process of collection, transport, storage and testing of the materials involved. Each of the relevant agencies can only be fairly held accountable for the integrity of their own operations and the quality of their own work, but they do and must interact effectively in the interests of the proper administration of justice.

RECOMMENDATION 7:

Arrangements should be developed by VIFM, VPFSD and Victoria Police so that in any case where a question concerning possible contamination can be seen to arise, all relevant agencies and, where proceedings have been instituted, the defence are notified.

There are separate issues relating to the data base itself where there is reliance upon that source for a DNA match. It was not constructed in a way that automatically picked up the existence of links between the collecting of the two sets of samples. Had the link been noted at the laboratory, it would undoubtedly have been explored or VIFM notified.

For completeness, I should advert to the Term of Reference which raises the query as to whether the DNA profile was lawfully on the database at the time of the match with the sample related to M. On examination, it was immediately obvious that no problem existed. The samples were collected within 28 hours of each other and at time that the match was made, approximately three months later, both investigations were still on foot. As there was no breach of the legislative provisions involved that I have detected, I have not addressed the legislative scheme which is outside the ambit of this report.

RECOMMENDATION 8:

Attention will need to be given to the possibility of reconfiguration of the data base to enable the existence of links between the collection and testing of samples to be detected.

This might require some legislative change.

Criminal Investigation and DNA evidence

In this case, the decision to proceed to prosecution was based entirely on the acceptance of the DNA evidence and with, it appears, only the most limited understanding of the proper use of such evidence. Statistical probability appears to have been converted to a prima facie case, although there was awareness of the absence of any scenario or evidence otherwise inculpating Mr Jama and without appreciating the problems involved.

I do not consider that the relevant police officer could be legitimately criticised for a lack of knowledge that was shared by virtually everyone else involved in the investigative and legal process. The point to be made is that is extremely unfortunate that all were so poorly informed and that there is a need to improve drastically this situation if evidence of this kind is to be used. Sir Ken Jones, the Deputy Commissioner for Crime, and the Director of Legal Services, of Victoria Police, have indicated to me that this deficiency has been recognised and was being addressed.

I have been informed that in light of this case and other issues, Victoria Police is currently developing a comprehensive "DNA Prosecutions Policy" that will minimise the risks associated with the use of this evidence.

RECOMMENDATION 9:

That police training in this area be reviewed with a view to developing a greater level of understanding of investigators with respect to the use of DNA evidence for both intelligence gathering and evidentiary purposes, and particularly in cases where there is minimal corroborative evidence to support proposed or pending charges.

The OPP and the Prosecution Process

In common with the police investigators, there was, as I have pointed out, no indication of any appreciation of the particular care that was required in dealing with a case dependent on DNA evidence or its proper probative use. Perhaps the most disappointing feature which emerged from the examination of the OPP files and the transcripts of the court proceedings is the total absence of any indication that any legal

research had been conducted, bearing in mind that the circumstances of Mr Jama's case had not previously been encountered in this jurisdiction.

Since this matter came to his attention, the DPP has issued a directive requiring that all cases wholly or principally dependent upon DNA evidence are to be referred to him for consideration. Whilst this is clearly a sensible move, it does not address the problem of limited understanding of the issues and what is involved in the adequate preparation of such cases by members of the OPP staff generally

RECOMMENDATION 10:

That the Judicial College of Victoria, the Law Institute of Victoria and the Victorian Bar Council be approached to conduct courses to instruct legal practitioners and members of the judiciary involved in areas where DNA evidence is used with respect to nature and appropriate use.

Attachment A

REPORT OF VIFM EXPERT WORKING GROUP ON THE CONVICTION OF MR FARAH JAMA
Interim Recommendations

Date 19th JANUARY 2010

---

1. PURPOSE

1.1 To advise of the potential risk of the contamination of forensic specimens in sexual assault cases

1.2 To research and explore national and international processes to
   a) reduce the risk of contamination of forensic samples in sexual assault cases; and
   b) reduce the risk of a miscarriage of justice from contaminated forensic samples in sexual assault cases in the future

1.3 To recommend short term solutions

2. BACKGROUND

2.1 Under section 66(2) of the *VIFM Act 1985*, VIFM has the function to ensure the provision of clinical forensic medical services to the police force of Victoria and government bodies.

2.2 In December 2009, the Court of Appeal in Victoria overturned the conviction for rape by Mr Farah Jama. One of the issues at appeal was the possibility of contamination of a forensic specimen with Mr Jama's DNA.

2.3 On December 24th 2009, VIFM received the Draft Crisis Care Unit (CCU) Audit Report[1] commissioned by the Department of Justice.

2.4 Informed by both the Jama case and the CCU Audit report, VIFM has been considering the implications of the conviction of Mr Farah Jama for its own practices and for the operation of VIFM medical staff in providing sexual assault services in Victoria.

2.5 A working group of VIFM clinical forensic medical, nursing, scientific and legal experts was convened and has been meeting since early December 2009 to

[1] This report is based on surveys of CCU managers. Most of the CCUs are hospital based but the units (Multi Disciplinary Units – MDUs) at Frankston and Mildura are not attached to a hospital.

consider the implications of the JAMA case, more recently in the light of the Draft CCU Audit report.

2.6 In developing the findings and recommendations, the VIFM working group has referenced national and international practices (see Attachment 1).

3. FINDINGS

3.1 Forensic Medical practice

3.1.1 VIFM has established standard procedures for the clinical forensic medical examination of complainants in sexual assault cases since 1995. These standards were updated in 2003 and 2008, and reflected relevant standards elsewhere.

3.1.2 In relation to the collection of the forensic evidence relied upon for the conviction of Mr JAMA, and on the basis of the forensic doctor's statement, there is no evidence that the doctor involved deviated from the applicable standard practice or procedure.

3.1.3 Over time standards change and VIFM is currently reviewing national and international practices to inform the next iteration of the VIFM standards manual.

3.2 Circumstances of the JAMA case

3.2.1 Transferring of microscopic amounts of DNA/semen is feasible although a complex set of events needs to occur to allow for contamination. A combination of events might include a woman with DNA/semen on her person externally, (eg: on her hands, clothing or hair) coming into contact with furnishings, equipment and her environment in such a way as to transfer some of that DNA/semen. A second person then comes into direct contact with that contaminated environment and is themselves contaminated.

3.2.2 In circumstances where DNA/semen is on the person externally (i.e. on the hair, outer clothes or hands), the possible opportunities for contamination increase.

3.2.3 In the Jama case, a woman has entered the Austin Hospital with a visible seminal deposit on her external person (hair). Transfer of this deposit to the samples taken from the second woman thirty hours later may have occurred in a combination of ways at any point from entry to the hospital, during the forensic medical examination (see Attachment 2 – Potential For Contamination In Sexual Assault Examinations), to the point of analysis and report at the forensic laboratory (VIFM acknowledges that Victoria Police Forensic Sciences Department has excluded the latter two possibilities to its own satisfaction). It is

theoretically possible for contamination to occur prior to entry to the hospital but this does not appear to be possible in this case.

3.2.4 This report has been written on the basis of possible contamination at the Austin Hospital.

3.3 VIFM reliance on other agencies

3.3.1 The majority of sexual assault forensic medical examinations are conducted in Melbourne, the rest being conducted in regional Victoria.

3.3.2 Almost all sexual assault examinations in Melbourne are undertaken at metropolitan Crisis Care Units (CCU)[2].

3.3.3 VIFM is a key service provider and a partner with the Victorian Forensic Paediatric Medical Service in the delivery of forensic medical examinations on children and young people throughout Victoria, the majority at the Royal Children's Hospital and Monash Medical Centre.

3.3.4 VIFM conducts its forensic medical examinations (FME) on the assumption that the standards for the cleaning of Crisis Care Units have been set, implemented and are monitored.

3.3.5 VIFM notes that the Draft CCU Audit Report shows significant deficiencies in the cleaning of the CCU facilities in Victoria, and notably at the Austin Hospital.

4. INTERIM RECOMMENDATIONS

The following recommendations will reduce the risk of contamination but not necessarily remove it completely. They are intended to be implemented immediately or as soon as practicable. They will be reviewed in the light of the Report of the Vincent Inquiry. The interim recommendations relate to the provision of forensic medical services by health care professionals from both VIFM and VFPMS. All recommendations are based on the References listed in Attachment 1 of this report.

Recommendation	Rationale	Timeframe
Physical facilities in all CCU		
1. Furnishings, in particular chairs/couches, to be made	In some CCU's (including that at the Austin Hospital), couches are	Immediately/ As soon as

[2] Exceptions to this include, for example, patients admitted to hospital for injuries associated with the assault whereby the examination will be conducted in the emergency or other medical ward

Recommendation	Rationale	Timeframe
of impermeable material that can be easily wiped clean.	covered with fabric which cannot be easily cleaned. Patients[3] sitting on these surfaces may leave behind traces of DNA/semen from their external person thereby risking contamination of another case.	practicable
2. Ensure a dedicated bench/trolley space is available to collect and process specimens.	If the bench/trolley space is crowded with equipment or utilised for other clinical purposes (e.g. suturing) there is a risk of contaminating specimens upon collection and processing.	Immediately/ As soon as practicable
3. Lockable cupboards/drawers to be provided for storing all equipment and disposable items	Storing of items away from the clinical workspace reduces the risk of contamination with foreign DNA and in association with Recommendation 14 below, assures the examiner that the items for each case have not been exposed to a previous sexual assault examination and are selected from clean storage.	Immediately/ As soon as practicable
4. Make appropriate hand-washing facilities and soap dispensers available within the examination room.	Some of the CCU examination rooms do not have non-touch taps and basins and one CCU does not have hand-washing facilities within the room at all. Turning taps on and off with hands and leaving the room to use a basin are both practices which increase the risk of contamination. Availability of taps as close as possible to the examination couch reduces the risk of contamination and improves hygiene.	Medium term to allow for facilities rebuild
Cleaning of the facility		
5. Strictly ensure CCU facility is cleaned after	Current cleaning processes have been identified as suboptimal.	Immediately/ As soon as

[3] VIFM acknowledges the terminology 'patient' may be interchanged with 'victim/survivor'

Recommendation	Rationale	Timeframe
every sexual assault related examination in accordance with *VIFM Interim Standards 2010 - Cleaning of CCU* (see Attachment 3).	The furniture will now be of a type which can be cleaned, and this must occur. Cleaning the facility after each sexual assault examination will reduce the presence of residual DNA remaining thus reducing the risk of contamination between cases.	practicable
6. Make appropriate cleaning products available within each CCU in accordance with *VIFM Interim Standards 2010 - Cleaning products required for Forensic Medical Examinations* (see Attachment 4).	Current cleaning processes fail to meet national/international standards in that bleach is rarely if ever used. If the appropriate cleaning solutions are not used, there is a risk that cleaning efforts will not eliminate residual DNA between cases, thereby increasing the risk of contamination.	Immediately/ As soon as practicable
7. In addition to 5 above, strictly ensure standard daily and weekly room cleaning regime according to standard hospital policy of cleaning clinical examination rooms (where sterile procedures may take place) and surrounding facilities.	If rooms are not cleaned to strict standards by appropriately trained personnel there is a risk that cleaning efforts do not reduce the risk of contamination in the facility	Immediately/ As soon as practicable
8. Implement, maintain and regularly audit a log book to record the cleaning of the CCU.	Without such a log, and its audit, confidence in the cleanliness of the facility will not be maintained. Such a log, and records of its audit, may be required for accreditation of the facility and/or in court proceedings to satisfy the court about the cleanliness of the facility.	Immediately/ As soon as practicable

Recommendation	Rationale	Timeframe
Access arrangements to the CCU facility		
9. Limit access to the examination room to patients, health care practitioners[4] performing the examination and hospital designated cleaners	The examination room should not be used for any other purpose eg: hospital clinics or Emergency Department patients or staff because of the risk of introducing biological material with DNA and therefore contaminating forensic evidence.	Immediately/ As soon as practicable
10. Implement, maintain and audit the proper use of a log book to record all persons who enter the examination room.	A log book is required to record adherence with the above standard. A log book and its audit records may be required for accreditation purposes and/or in court to satisfy the court about the cleanliness of the facility.	Immediately/ As soon as practicable
11. Suspected perpetrators or other persons are not to be examined in the CCU	Reduces the risk of contamination of the patient by the suspect or other persons	Immediately/ As soon as practicable
Equipment and materials		
12. Store all equipment for a forensic medical examination in locked drawers or cupboards.	Storing of items away from the clinical workspace reduces the risk of contaminating them with foreign DNA and, in association with Recommendation 14 below, assures the examiner that the items have not been exposed to a previous sexual assault and have been selected from clean storage	Immediately/ As soon as practicable
13. Health care practitioners are responsible for selecting the appropriate equipment and disposable supplies used to conduct the examination so as to	The forensic medical examination is a medical procedure. The equipment and supplies need to be specified by VIFM.	Immediately/ As soon as practicable

[4] Health care practitioner for the purposes of this document refers to forensic physicians, forensic medical officers and forensic nurse examiners. Health care practitioners are employed/contracted by VIFM to provide forensic medical services throughout Victoria.

Recommendation	Rationale	Timeframe
reduce the risk of contamination. The equipment and disposable supplies should be standard across the CCUs.		
14. The health care practitioner will select the appropriate equipment from the stores within the CCU and place them on the trolley. No items are to be removed from the trolley and placed back in the store	Placing unused items back into the stores will increase the risk of contaminating future cases as the unused items may have become contaminated with foreign DNA.	Immediately/ As soon as practicable
15. Stocks of clean gloves to be made available in three sizes	Gloves place a barrier between the health care professional's DNA and the patient thus avoiding possible contamination. They also provide a barrier between carriage of DNA from one patient to another	Immediately/ As soon as practicable
16. Sterile packs and gowns to be made available within the CCU	Gowns place a barrier between the health care professional's DNA and the patient thus avoiding possible contamination. They also provide a barrier between carriage of DNA from one patient/environment to another	Immediately/ As soon as practicable
17. VIFM staff[5] to be responsible for monitoring stocks in the locked cupboards and sourcing equipment and materials. Equipment and materials should be made available according to appendix 3 – *Equipment and materials required for FME – VIFM Interim Standards 2010*	Limiting the people that enter the room and people who open the specimens cupboard/drawer will further reduce the risk of contamination	Immediately/ As soon as practicable

[5] VIFM staff regularly visit the CCUs and will monitor stocks and arrange for replacements.

Recommendation	Rationale	Timeframe
18. The layout of the facilities at CCUs to be redesigned and redeveloped to bring them up to current national and international best practice models.	Poor layout of the facility impacts on the risk of contamination between cases. For example, if a bathroom is in a thoroughfare or utilised by a number of persons (patient, support people, health practitioners, police etc) it increases the risk of contamination. In this scenario, a bathroom should be an extension of the examination room and only accessible by the patient.	Medium term/ As soon as practicable

ATTACHMENT 1

REFERENCES

All references are available from VIFM upon request

1. Interim DNA Sample Site Cleaning Protocol *(CFMU SER 24 Dec 2009) (Qld)*
2. Yarrow Place Medical Suite Cleaning Protocol (SA)
3. Faculty of Forensic and Legal Medicine – Operational procedures and equipment for medical rooms in police stations and victim examination suites (UK)
4. Faculty of Forensic and Legal Medicine – Recommended Equipment for Obtaining Forensic Samples from Complainants and Suspects (UK)
5. Faculty of Forensic and Legal Medicine – Guidelines for the collection of forensic specimens from complainants and suspects (UK)
6. Recommendations for Regional Sexual Assault Referral Centres – Report of a Department of Health Working Group (UK)
7. Goulburn Valley Health Safe Practice and Environment Function Manual
8. Sexual Assault Referral Centres: Developing Good Practice and Maximising Potentials, Home Office Research UK
9. National Adult Sexual Assault Medical Committee – Best practice guidelines 1998
10. St Mary's Division Sexual Assault Referral Centre (SARC) Operational Policy (UK)
11. Doctors for Sexual Abuse Care – Sexual assault manual (New Zealand)
12. Forensic and Medical Sexual Assault Clinicians Australia
13. Forensic and Medical Sexual Assault Clinicians ACT
14. A National Protocol for Sexual Assault Medical Forensic Examinations Adults/Adolescents (USA)
15. Guidelines for medico-legal care of victims of sexual violence - **World** Health Organization. Dept. of Gender and Women's Health.
16. Service specification for services providing care to adults in Wales who have been sexually assaulted – National Public Health Service for Wales
17. Service: The Haven (Sexual assault and rape centre) (UK)
18. Central Manchester University Hospitals Decontamination Policy (UK)

ATTACHMENT 2

POTENTIAL FOR CONTAMINATION IN SEXUAL ASSAULT EXAMINATIONS

1. DNA (deoxyribonucleic acid) is the genetic blueprint of a human being and is unique to every individual. It involves two strands bound together (double helix) and is organised into long structures called chromosomes. DNA is only visible under electron microscopes and is therefore analysed and 'read' or 'profiled' by scientific processes. In order to conclude the identity of a person from whom DNA has been shed and subsequently profiled, there needs to be comparison of this profile with the profile of a reference sample (i.e. a sample of DNA from a known source).

2. The ejaculate of a male consists of seminal fluid (secretions from glands and the seminal vesicles) and in most men sperm[6]. A sperm count of more than 20 million per ejaculation is considered normal. As a male achieves orgasm, the ejaculate is expelled and sperm is deposited along with the seminal fluid. An intact sperm consists of a head and a tail and is normally mobile when deposited. However over time, the tails disintegrate and when seminal fluid is examined under a slide, sperm can then appear as either intact sperm or sperm heads without tails. When viewed with a microscope, sperm heads without tails can be confused with other things such as nuclei of other cells.

3. Seminal fluid is visible to the naked eye for a short time after it is expelled from the male. It does however, change consistency and transparency and can be difficult or impossible to identify as time progresses. In some circumstances, semen can be seen with the assistance of special lights and luminescent sprays. This practice is not conducted on sexual assault victims or in examination facilities (i.e.: Crisis Care Units) and is only used at crime scenes and in examining evidence.

4. Sperm and seminal fluid contains DNA that can provide a male individual's DNA profile when scientifically analysed. It is distinguished from the female by part of the profile which reflects the nature of the sex chromosomes (XX, XY) and the reference sample of DNA provided from the patient.

5. Locard's principle states that 'every contact leaves a trace'. Theoretically, as any body part of one individual comes into contact with another person or object in the environment, there is the potential for the transfer of DNA.

6. The premise, upon which forensic samples are taken in a sexual assault case, is that the male individual's semen/sperm is deposited on the victim and thus the collection of the appropriate forensic sample(s) may assist in the identification of the male using DNA profiling technologies.

7. Sampling for DNA/sperm occurs in the following ways:

Genital area (vagina, anus, endocervix)	High vaginal swabs and corresponding slides* Low vaginal swabs and corresponding slides Endocervical swab and corresponding slides
Genital area (penis)	Wet skin swab and corresponding slide followed by a dry skin swab and corresponding slide
General body surface (i.e. abdomen, arm)	Wet skin swab and corresponding slide Followed by a dry skin swab and corresponding slide
Oral cavity	Oral swab and corresponding slide
Hair	Cut clump of hair from relevant site and place in appropriate container/envelope
***In order to identify sperm, every swab that is taken is dabbed in the centre of a corresponding slide immediately before the swab is placed back in its sheath. This is to assist the lab in identifying the presence**	

[6] Sperm may be absent from ejaculate in the following circumstances: drug/medication effects, azoospermia (medical condition of no sperm), oligospermia (medical condition of low sperm count), post-vasectomy, trauma, etc.

of sperm through the microscope prior to DNA analysis.

8. The definition of 'to contaminate' is: 'to make impure by contact or mixture' (Shorter OED). In relation to DNA contamination, the word is often used to refer to the presence of DNA, which is extraneous, being added to the material which is being sampled.

9. The word contamination is often used to describe the following scenarios:
   a. The health care professional's DNA found on the patient's forensic sample
   b. An individual's DNA present in a sample that has otherwise been shown to have no relation to that person
   c. The inadvertent pollution of minuscule amounts of DNA between cases

   (The inadvertent swapping of forensic specimens between cases could produce results mimicking contamination)

10. Contamination of forensic samples taken from complainants in sexual assault cases is possible at the following points in time:
    a. Errors or intersections prior to the examination of victims – meaning that the victim herself is contaminated and this is reflected in the samples which are taken
    b. Errors or intersections during the presentation of victim(s) – i.e. within the CCU environment, during the forensic medical examination
    c. Errors or intersections within the chain of custody post examination and pre laboratory
    d. Errors or intersection within the laboratory at the point of receipt of specimens, processing, analysis and/or entering or transferring data into the system.

11. Whether or not there has been contamination in a particular case is most often a question of opinion/judgement, not of fact. The assurance that there has or has not been a contamination is part of the overall investigation of the case. There is no particular 'test' for contamination.

12. In a sexual assault, one of the aims of taking the forensic samples is indeed to detect **contamination of the complainant** by the offender's biological material bearing the offender's DNA. This indicates one of the risks of the forensic uses of DNA evidence in cases where the identity of the suspect is in dispute: how does one distinguish between the detection of true contamination (i.e. contamination of the complainant, the contamination the swabbing is intended to detect) and inadvertent contamination (i.e. contamination with DNA extraneous to the material being swabbed). One distinguishes between true and inadvertent contamination by:

    a. An evaluation of the circumstances of the sexual assault; and
    b. By relying on the overall (low) probability of inadvertent contamination having occurred bearing in mind:
       i. The total circumstances and procedures of the collection of the specimens
       ii. The environment in which the specimens are collected
       iii. The procedures of the forensic science laboratory

13. Published experience of contamination of forensic specimens in sexual assault cases is limited especially with direct reference to contamination by semen. Therefore there is little in the way of an evidence base to assist in analysing the likelihood of DNA/sperm transfer within CCU type facilities. Most experience with contamination of forensic specimens is with DNA contamination in the laboratory, which can be thought of as involving extremely microscopic quantities of material.

14. It is accepted that every contact leaves a trace and thus the transfer of microscopic amounts of DNA/semen is feasible although a complex set of events needs to occur to result in contamination. A combination of events might include a woman with DNA/semen on her person externally, (eg: on her hands, clothing or hair) coming into contact with furnishings, equipment and her environment in such a way as to transfer some of that DNA/semen. A second person then comes into direct contact with that contaminated environment and is themselves contaminated.

15. In circumstances where DNA/semen is on the person externally (i.e. on the hair, outer clothes or hands), the possible opportunities for contamination is greater than when DNA/semen is deposited internally (vagina, anus) or under clothing (breasts, buttocks etc).

16. In order to reduce the risk of contamination of forensic samples in sexual assault cases in the facility where the forensic medical examination is undertaken, the following principles need to be adhered to:

a. Appropriate facility design that minimises the risk of patient, health care practitioner and environmental exposure to contamination (i.e.: a facility having a logical flow through the CCU from point of entry through to the examination and/or bathroom and then to the exit. (This is a consideration for the medium to longer term)
b. Limit the access to the space designed for forensic medical examinations so that the likelihood that extraneous DNA is present is reduced and if the potential for contamination is realised the contaminating individual(s) may be identified.
c. Adequate decontamination/cleaning techniques can destroy DNA/sperm and therefore reduce the risk of extraneous DNA being transferred to future cases.
d. Equipment should be clean and separate from exposure to people and the environment
e. Maintenance of strict security of the samples and well documented chain of custody

17. The VIFM Expert Working Group on the conviction of Mr Farah Jama has been exploring possible scenarios for contamination with direct reference to the specifics of the Jama case. In that case there was large amount of semen in the hair of complainant 1[7], some of which (a microscopic amount, smaller than a speck of dust) was found on a swab taken from complainant 2, who was examined in the same facility some thirty hours later.

18. At this stage it is not possible to conclude the mechanism by which contamination may have occurred, nor the point at which the contamination occurred.

[7] The women who were examined are referred to as complainants. This terminology is used even though the second woman examined was in fact not a complainant until she too believed she had been sexually assaulted following the results of the forensic samples being made available.

ATTACHMENT 3

EQUIPMENT AND MATERIALS REQUIRED

Gown
- Unisex
- Not transparent
- Loose short sleeves
- Non-shedding
- Soft
- Different sizes

1. Gloves
   - Sterile
   - Powder free
   - Non-latex
   - Various sizes
2. Drop Sheets
   - Sterile white paper sheets
   - Approximately 90cm^2
3. Swabs
   - Sterile standard swab – no transport medium
   - Fine tipped (endocervical) sterile swabs
4. Slides
   - Glass slides with frosted end
   - Slide covers
5. Blood
   - Alcohol-free skin cleansing tissue
   - Cotton wool balls
   - 19G, 21G and 23G needles
   - 2ml, 5ml and 10ml syringes
   - Hospital pathology blood tubes and laminated guide to their use/identification
6. Urine
   - Sterile urine containers
7. Lubricant
   - Single use sachets of Lubricating Jelly
8. Specula and Proctoscopes
   - Small, medium and large sterile disposable specula
   - Sterile disposable proctoscopes
9. Packaging
   - Envelopes – letter and A4 size
   - Brown paper bags – medium size
   - Patient clothing bags
10. Other
    - 5ml sterile water
    - Bandaids
    - Sterile gauze squares
    - Disposable or sterile forceps
    - Alcohol cleansing swabs
    - STI testing swabs/kits
    - VIFM toxicology kits
    - Tourniquet*
    - Disposable tape measures
    - Urine pregnancy tests
    - Medications (as directed)
    - Blueys
    - Emesis bags
    - Masks
    - Basic dressing packs
    - Chlorhexidine antiseptic single use vials
    - Disposable or sterilised scissors
11. Medications
    - Emergency contraception packs
    - Paracetamol
    - Paracetamol + codeine
    - Hepatitis B Vaccine adult dose
12. Office
    - Small pencils – disposable
    - Medical certificates
    - Hospital letterhead
    - Pencil sharpener*
    - Sexual assault proformas
    - Hospital pathology/radiology requests
    - Hospital pharmacy request forms
    - Stapler and spare staples*
    - Adhesive tape
    - Patient identification labels
13. Room
    - Microshield ® hand wash
    - Cleaning bleach – Det-Sol 500
    - Mixing jug
    - Chux or other wipes
    - Sphygmomanometer*
    - Stethoscope*
    - Auroscope*
    - Light source*
    - Clean and clear bench space
    - Sharps container
    - Biological waste bin
    - Rubbish bin

All stocks should be stored in secure, clean cupboards for selection by the Health Care Practitioner on the basis of the individual case that presents for a forensic medical examination. Equipment that has been selected for a case and not used will be disposed of at the conclusion of the examination. At no time should anyone replace the items back into the stocks.

* These items are non-disposable and will be cleaned at the conclusion of the examination after they have been used.

ATTACHMENT 4

CCU CLEANING RESPONSIBILITY MATRIX
VIFM Interim Standards 2010

WHEN	WHERE	RESPONSIBILITY	ACCOUNTABILITY	STANDARD
Before each case	Examination room	Health care practitioner	***SEXUAL ASSAULT EXAMINATION PROCEDURE VIFM Interim Standards 2010*** Complete Technical checklist	***SEXUAL ASSAULT EXAMINATION PROCEDURE VIFM Interim Standards 2010***
	Other CCU space (couches, cups, kitchenettes, counselling rooms, waiting area etc)	Hospital designated cleaner	Cleaning log book	As per Hospital standards for cleaning of a clinical room
After each case	Examination room	Health care practitioner	***SEXUAL ASSAULT EXAMINATION PROCEDURE VIFM Interim Standards 2010*** Complete Technical checklist	***SEXUAL ASSAULT EXAMINATION PROCEDURE VIFM Interim Standards 2010***
	Other CCU space (couches, cups, kitchenettes, counselling rooms, waiting area etc)	Hospital designated cleaner	Cleaning log book	As per Hospital standards for cleaning of a clinical room
Daily	Examination room – i.e. phone, floors, light sources, examination tables etc	Hospital designated cleaner	Cleaning log book	As per Hospital standards for cleaning of a clinical room
Weekly	Examination room – i.e. computer, desk, chair etc	Hospital designated cleaner	Cleaning log book	As per hospital standards for cleaning of a clinical room

ATTACHMENT 5

CLEANING PRODUCTS REQUIRED FOR FME VIFM Interim Standards 2010

1. Hand-washing
    - Microshield ®

2. Equipment
    - Det-Sol 5000 Hospital Grade Disinfectant 5000ppm, 20g sachets
    - Det-Sol 500 Hospital Grade Disinfectant 500ppm, 6g sachets

3. Room cleaning
    - As per hospital clinical area cleaning protocols

ATTACHMENT 6

SEXUAL ASSAULT EXAMINATION PROCEDURE
VIFM Interim Standards 2010

Health care practitioners will follow the below procedure when conducting a forensic medical examination. The technical checklist will be filled in at the conclusion of every case.

Procedure	Technical Checklist
1. Check hospital cleaning log book for status	☐
2. Wearing gloves and a mask and using Det-Sol 5000 cleaning fluid and a disposable wipe • Clean examination table • Clean patient chair • Clean bench/trolley top • Wipe your pen	☐ ☐ ☐ ☐
3. Linen • Cover examination table with 2 clean sheets • Cover pillow with new pillow case • Obtain clean blanket or sheet to cover patient • Place a bluey/sterile pack down to designate specimen collection space	☐ ☐ ☐ ☐
4. Bring patient into clinical examination room to commence the examination by taking a history	☐
5. Glove and gown (mask is up to the discretion of the health care practitioner) to select equipment	☐
6. Select from the secure storage cupboard a range of items that you may use in conducting the forensic medical examination. If during the examination you require more items than you initially select, you must remove your personal protective gown and gloves before returning to the locked drawers/cupboards. Wash hands and retrieve the items, put on a new gown and glove before recommencing the examination.	☐
7. After selection of equipment (whilst still gloved and gowned) commence the physical examination	☐
8. Separate new clean gloves should be used for each of the following components of the FME ○ Body examination ○ Genital examination ○ Collection of specimens that may leave residue on gloves (i.e. blood, semen on body, paint, debris etc) ○ Processing of specimens including cutting of swabs ○ Selecting more equipment from the secure storage cupboard	☐ ☐ ☐ ☐ ☐
9. Swabs • Swabs should be 'cut' with disposable scissors midway along the shaft of the tube	☐
10. Dispose of all items that you selected and didn't use at the time of this examination. They should be disposed of in either the rubbish bin or sharps container.	☐
11. Ensure there are no specimens or equipment left at the conclusion of the examination	☐
12. Remove bed linen and place in linen basket	☐
13. Using Det-Sol 500 cleaning fluid and a disposable wipe • Clean examination table • Clean patient chair • Clean bench/trolley top • Wipe down any other non-disposable equipment you have used – phone, light source, sphygmomanometer, auroscope (i.e. any items as designated by the * in Attachment 3).	☐ ☐ ☐ ☐
CASE NAME: **TECHNICAL CHECKLIST COMPLETED BY:** **SIGNED AND DATED:**	

Under no circumstances should a forensic medical examination be conducted if the facilities or equipment are compromised in any way.

Attachment B

Associate Professor Bob Hoskin's List of Changes considered necessary

The following is a list of the changes I think are necessary. I've attempted to give a rationale for each and am happy to discuss any of them. In some instances the purpose of the proposed change is other than to reduce the risk of DNA contamination: as there is likely to be a process of significant change it makes sense to incorporate other changes that have merit at the same time.

The order of the changes has no significance.

	Recommendation	Reason
1[8]	Develop a national uniform protocol for the collection of forensic specimens by medical/ nursing staff (samplers).	Practices diverge within and between jurisdictions. There is only one best way of doing things and there is greater likelihood of conformity with a national standard, especially with itinerant practitioners. This could be referred to the Australasian Association of Forensic Physicians in association with FAMSACA to develop.
2	ALL equipment[9] used should be certified DNA-free and be drawn from a sealed single use kit.	Common use supplies and the retention of unused equipment from existing kits magnifies the opportunity for contamination. Current equipment is sterile but not uniformly certified DNA-free.
3	Access to examination facilities, to the extent it is possible to do so, should be restricted to staff who have a bona fide reason to be there with access logs used.	Unauthorised staff access is a double whammy – not only do they risk contaminating the environment, they are more likely to do so out of unfamiliarity with protocols.
4	Examination suites should carry a warning that unauthorised access may result in a person's DNA being identified in a criminal investigation.	Hospital staff, especially doctors, aren't terribly good at following rules.

[8] The only reason not to do this would be if different laboratory practices require different inputs.
[9] Swabs, scissors, labels, tapes, speculums etc. Gloves, which come in individually sealed packets are the only item where it may make sense to have separate.

5	All medical, nursing, counselling and cleaning staff who have bona fide access should be strongly encouraged to lodge their DNA profile on the laboratory (as opposed to national) register.	This allows detection of inadvertent DNA contamination by the people most likely to do so. Limiting this to the laboratory register protects the individual's privacy.
6	Swabs used should have polyester tips and plastic or metal stems.	Currently, medium-free bacteriology swabs are used. They are cotton-tipped with wooden stems. Cotton does not yield DNA as readily as synthetic fibre and wood inhibits the PCR reaction.
7a	Trolleys used during the examination to be cleaned according to laboratory protocol prior to every examination (probably by the person doing the examination).	This ensures that any "stray" DNA that may have found its way onto the trolley is removed.
7b[10]	The surface of the trolley is to be covered by a certified DNA-free drop-sheet immediately prior to the examination.	This ensures that any "stray" DNA that may have found its way onto the trolley is inaccessible.
8	Prior to opening and setting up equipment a control swab should be taken from the surface of the trolley or drop-sheet.	This control swab need not be routinely analysed but it provides an opportunity to confirm that the working surface was DNA-free if there is a subsequent need to do so.
9	Slides should be made at the laboratory rather than by the sampler.	Slide quality varies from practitioner to practitioner whereas it is a part of routine laboratory practice. As important, it also creates an opportunity for handling errors during which contamination may occur.
10	Swabs to be re-sheathed immediately after collection.	The practice of allowing them to air dry creates an opportunity for handling errors during which contamination may occur.

[10] 7a and 7b are alternative approaches to the same goal.

11	The practice of cutting corners from sheaths should be eliminated.	The evidence that this could possibly add value is scant and theoretical. It is completely unnecessary when swabs are correctly stored (frozen) and/or opened by the laboratory in a timely manner. Conversely, the possibility that there may be cross-contamination between multiple swabs in a single bag following this practice is completely untested.
12	Samplers should put on fresh pair of gloves[11] prior to moving to a new part of the body to collect a DNA sample[12].	It is important to prevent transfer of DNA from one body part to another, especially where doing so may change the nature of the offence to whose proof it may contribute.
13	Each kit to contain sufficient swabs to cater for 95% of examinations.	This means extra kits will need to be "broken into" only rarely. The number of swabs needed to achieve this can be established by asking the labs.
14	Equipment kits to contain barcodes which are applied to each specimen.	This ensures that samples that are truly related to the same examination can be identified as such and that if there is mixing of kits it can be identified.
15	A checklist to be developed for use by the sampler at the conclusion of each examination.	This serves as an aide memoire for all of the steps in the protocol and is useful given that the sampler's alertness cannot be guaranteed.
16	Once all the crime scene samples have been labelled, barcoded and sealed any residual equipment is to be disposed of.	This prevents equipment that may have been contaminated during the examination from being involved in subsequent examinations.
17	Once the trolley is clear it is to be cleaned according to laboratory protocol after every examination (probably by the person doing the examination).	This ensures that any contamination that may have occurred during the examination is cleaned away.

[11] Sealed surgical gloves as noted above.
[12] In the majority of examinations this would require only one change of gloves during an examination.

18	After cleaning a control swab should be taken from the surface of the trolley.	This control swab need not be routinely analysed but it provides an opportunity to confirm that the working surface was DNA-free at the end of the examination if there is a subsequent need to do so.
19	Any item needed during the examination that cannot be rendered non-touch or certified DNA-free should be cleaned and swabbed in the same manner as the trolley surface.	Items such as flexible lamps, tap handles and light switches may provide opportunities for between-case contamination.
20	Examination couches to be impermeable material that can withstand cleaning by bleach and alcohol as per laboratory protocol[13].	This allows couches to be cleaned to the requisite standard.
21	Suspects are never to be examined in the same facility as complainants.	Makes it very hard to answer the question "is it possible?".
22	Where a sampler conducts more than one examination without the benefit of a shower or thorough wash of any exposed clothing or skin they should don a disposable all-in-one suit for subsequent examinations.	Prevents sampler cross-contamination.
23	A national minimum standard be developed for the construction, layout, equipment level and operation of sexual assault examination suites be developed (AAFP & FAMSACA).	I'd be surprised if this is achievable in all locations in the context of competitive funding but at least we'll have something that should be achievable in metro areas and it will allow the identification of shortfalls elsewhere, especially where they may compromise evidence.

[13] Not sure that control swabs are necessary. Generally the couch would be covered with a sheet and/or a bluey. Probably we should move to a certified DNA-free dropsheet for couches, too.

24	These recommendations be reviewed and refined by colleagues from around the country through the AAFP and FAMSACA.	I don't have a monopoly on good ideas.
25	Collegiate review of the final products.	As well as ensuring that it is comprehensive and has buy-in this will also ensure that things that are currently done well have not been eliminated by the process of change.

Attachment C

FORENSIC MEDICAL EXAMINATIONS IN SEXUAL ASSAULT CASES VICTORIA

The tables below represent the number of forensic medical examinations conducted in adult (18 years and over) sexual assault patients in Victoria for the period of January 2007 until February 2010 by location.

There are 6 metropolitan Melbourne Crisis Care Units in which forensic medical examinations are conducted; Austin Hospital, Monash Medical Centre, Maroondah Hospital, Royal Women's Hospital, Sunshine Hospital, and the Frankston Multidisciplinary Centre.

Metro Sexual Assault Examination Summary Table
Year and CCU Location

Metropolitan Melbourne CCU Location	**2007**	**2008**	**2009**	**2010**[14]	**Total**
Maroondah Hospital (CASA East)	1	26	37	5	**69**
Austin Hospital (CASA North)	46	39	24	6	**115**
Monash Medical Centre (CASA South East)	163	137	129	18	**447**
Sunshine Hospital (CASA West)	49	46	51	9	**155**
Royal Women's Hospital (CASA House)	78	71	82	11	**242**
Frankston Multidisciplinary Centre (PENSAC)	2	16	7	0	**25**
Yearly Totals	**339**	**335**	**330**	**49**	**1053**

The number of forensic medical examinations conducted on adults in the metropolitan Melbourne region does not appear to have changed over the last three years. The apparent decrease in forensic medical examinations conducted at the Monash Medical Centre (163 (2007) – 129 (2009)) might be explained by the dispersion of cases to either the Frankston Multidisciplinary Centre or the Maroondah CCU facility both of which gained momentum early 2008. The existence of a Gippsland Forensic Nurse Examiner Network may also account for some of the decrease in cases seen at Monash Medical Centre as they may be examined locally at Latrobe Regional Hospital.

[14] The numbers of forensic medical examinations tabled in 2010 are not truly representative of the numbers of forensic medical examinations conducted to date as the data has not been entered in all cases.

There are a number of other locations in which forensic medical examinations are conducted in the metropolitan Melbourne region. This is not a regular occurrence but rather, provided on an individual case by case basis. The numbers are tabled below:

Metro Sexual Assault Examination Summary Table Year and non-CCU Location					
Metropolitan Melbourne non-CCU Location	**2007**	**2008**	**2009**	**2010**	**Total**
Hospital other	13	8	10	2	**33**
Medical centre	1	2			**3**
Prison	1	2		2	**5**
Police Station	3	11	12	2	**28**
VIFM	3	4	10	3	**20**
Residential Care Unit	2	1	1	0	**4**
Yearly Totals	**23**	**28**	**33**	**9**	**93**

The field 'hospital other' refers to FME conducted at a Melbourne hospital other than one housing the above listed CCU. In these circumstances, the examiner is requested to see patients admitted to the Emergency department, Intensive Care Unit or Medical ward at a Melbourne hospital – for example the Royal Melbourne Hospital or the Alfred Trauma Centre.

Where sexual assault forensic medical examinations are noted at the locations of 'police station' or 'VIFM' these refer to examinations of alleged offenders or opinion cases respectively.

The total number of forensic medical examinations conducted in metropolitan Melbourne is as follows:

Metro Sexual Assault Examination Summary Table TOTAL FME					
Metropolitan Melbourne	**2007**	**2008**	**2009**	**2010**	**Total**
Yearly Totals	362	363	363	58	1146

Forensic Medical Examinations of adults are conducted by Forensic Medical Officers and Forensic Nurse Examiners in Regional and Rural locations in Victoria. The term non-hospital in the main refers to medical centres in which doctors practice and therefore conduct a forensic medical examination during the course of their day. Most of the hospitals noted below are designated as facilities in which forensic medical examinations occur (i.e. there is an MOU between VIFM and the hospital or a designated CCU). There may be errors of interpretation regarding the terms hospital/non-hospital at some of the regional locations below (eg Bannockburn). The following table represents the locations in which FME were conducted during the timeframe of January 2007 to February 2010:

Regional Sexual Assault Examination Summary Table Year and Location									
	2007		2008		2009		2010		Region Total
Region	Hospital	Non	Hospital	Non	Hospital	Non	Hospital	Non	
Bairnsdale	4		10		5	1			20
Ballarat	14		10		18			1	43
Bannockburn	2		3		2				7
Bendigo	10		10		16	1	1		38
Camperdown					1				1
Castlemaine							1		1
Corio				1					1
Geelong	10		14	1	18	1			44
Gippsland	1								1
Gisborne								1	1
Goulburn					1				1
Horsham	3		3						6
Kerang			2						2
Kyneton						1			1
Lilydale		2							2
Mildura	8		9		10	1	2		30
Mt Hotham			1						1
Portland			1						1
Sale	3		1		3				7
Shepparton	7		4		6				17
Swan hill	3		3		1				7
Traralgon			5		15				20
Wangaratta	4		5		3				12
Warragul					1				1
Warnambool	5		7		3		1		16
Werribee			1	1					2
Wodonga	1		4						5
	75	2	93	3	103	5	5	2	
Yearly Totals	77		96		108		7		288

Whilst forensic medical examinations are conducted on the children and young people (i.e. 17 years old and under) in some of the above locations, they have not been included in the numbers for the purpose of this exercise. An account of the numbers and locations of FME conducted in this age group should be sought from the Victorian Forensic Paediatric Medical Service.

EXHIBIT 215

From: Neville.DavidH[OSC]
Sent: Thursday, 8 November 2018 08:45
To: Cathie Allen
Cc: Craig.Russell
Subject: RE: Reference Samples and SAIKs
Attachments: 28092018102808-0001.pdf

Hi Cathie
This seems to be misconstrued a bit. The QPS has a policy that all SAIKs are to be checked, bar coded and entered onto the FR by a SOC officer. The investigating officer has to attend a SOC office for this to occur. Recently we have instructed our SOC officers not to process the SAIK unless a reference sample has been collected. The reason for this is to try and eliminate instances where IO's fail to obtain a reference sample. This is an internal policy established to try and overcome issue with SAIKs (i.e. the lack of reference samples). It has not been sold as a directive from QHFSS.

My preference would still be that reference samples are collected at the same time as the SAIK. This is what occurs in other states. The current practice does not comply with Queensland Government policy issued in 2014 titled, "*Response to Sexual Assault: Queensland Government Interagency Guidelines for Responding to People who have experienced Sexual Assault*." This document was designed to ensure agencies work together in the best interest of the victim. The policy states,

> ***Victim DNA reference samples***
> ***DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the FME (forensic medical examination)***
> (A copy of the guideline is attached).

The QPS would like to work towards compliance with the guideline and hope to have discussions moving forward on this matter in the near future.

Regards

David

From: Cathie Allen
Sent: Wednesday, 7 November 2018 5:15 PM
To: Neville.DavidH[
Cc: Craig Russell
Subject: Reference Samples and SAIKs

Hi David

Our Scientific Services Liaison Unit (SSLU) at FSS have been contacted by a police officer from the Gold Coast regarding reference samples and Sexual Assault Investigation Kits (SAIK). The officer has advised that a directive has been issued from QHFSS to the QPS stating that a SAIK will not be accepted for testing unless a reference sample has been taken from the complainant.

Are you able to advise if the QPS have disseminated something with respect to reference samples and SAIKs or advise the context that this may have come from.

Cheers
Cathie

Cathie Allen
Managing Scientist

Police Services Stream, Forensic & Scientific Services
Health Support Queensland, Queensland Health

[redacted]

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

****

This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.

Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.

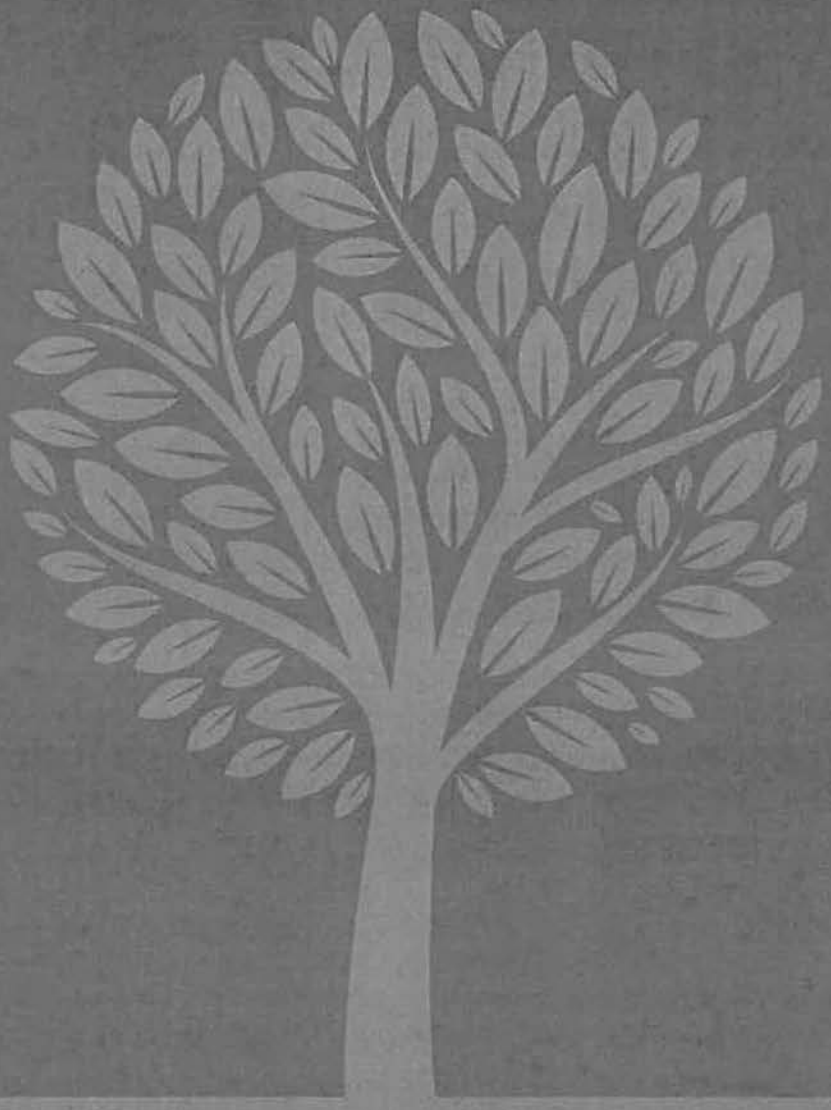
If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia +61 1800 198 175 or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

Although Queensland Health takes all reasonable steps to ensure this email does not contain malicious software, Queensland Health does not accept responsibility for the consequences if any person's computer inadvertently suffers any disruption to services, loss of information, harm or is infected with a virus, other malicious computer programme or code that may occur as a consequence of receiving this email.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

****



Response to sexual assault

Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault

Queensland Government

APPENDIX A: Contact list from interstate inquiries:

New South Wales Police
PHQ Major Crime Unit
Detective Tim RYAN
[redacted]

Victoria Police
Sexual Assault Unit
Detective Sophie LEETE
[redacted]

Tasmania Police
Forensic Services
Alastair WATSON
[redacted]
Detective Krista DENNIS
[redacted]

South Australia Police
PHQ Major Crime Unit
Detective Bernie FARRINGTON
[redacted]
YARROW PLACE – Rape and Sexual Assault Service
[redacted]

Western Australia Police.
Sexual Assault Unit
Officer in Charge John MOTTOLINI
[redacted]

Northern Territory Police
Major Crime Unit
Detective Glenn LEAFE
[redacted]

These guidelines have been developed through a strong collaborative approach by a Government Interagency Working Group including representatives from:

- **Queensland Police Service**
- **Department of Justice and Attorney-General**
  - *Office of the Director of Public Prosecutions*
  - *Queensland Courts*
  - *Victim Assist Queensland*
  - *Youth Justice Conferencing*
- **Department of Communities, Child Safety and Disability Services**
- **Queensland Health**
  - *Aboriginal and Torres Strait Islander Health Unit*
  - *Clinical Forensic Medicine Unit*
  - *Child Advocacy Service*
  - *Royal Brisbane and Women's Hospital Department of Social Work Services (Sexual Assault Service)*

The Strategic Policy Priority Areas, System Policy and Performance Division of Queensland Health were consulted during this process.

The guidelines are intended to outline key principles and a best practice framework for working with people who have experienced sexual assault. This includes children and young people who have been sexually abused or sexually assaulted.

The term victim is used throughout the document where there is reference to specific legislation and where the person is either a male or female who has experienced sexual assault. The term sexual assault is used throughout the document and includes those assaults where rape and/or sexual abuse has taken place or is alleged to have taken place.

Mr Ian Maynard
Director-General
Department of Health

Mr Michael Hogan
Director-General
Department of Communities, Child Safety and Disability Services

Mr Ian Stewart
Commissioner of Police
Queensland Police Service

Mr John Sosso
Director-General
Department of Justice and Attorney-General

June 2014

Contents

Preface ... 3
Glossary ... 4

Section 1
Introduction ... 5
Governance ... 5
Sexual assault ... 5
Responses to victims ... 5
Children and young people ... 6

Section 2
Principles of the Interagency Guidelines ... 7
Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism ... 7
Fair and dignified treatment ... 7
Privacy of victim ... 7
Information about services ... 7
Information about investigation of the offender ... 7
Information about prosecution of the offender ... 7
Victim to be advised on their role as a witness ... 7
Minimal exposure to and contact with the offender ... 8
Victim Impact Statement ... 8
Information about the convicted offender ... 8
Making a complaint ... 8

Section 3
The Roles of Key Government Agencies ... 9
Queensland Police Service ... 9
Queensland Health ... 9
Department of Justice and Attorney-General ... 10
Office of the Director of Public Prosecutions ... 10
Victim Assist Queensland ... 10
Youth Justice Conferencing ... 10
Queensland Courts ... 11
Department of Communities, Child Safety and Disability Services ... 11
Non-government organisations ... 11

Section 4
Interagency Approach ... 12
Teamwork ... 12
Confidentiality ... 12
Training ... 12
Information provision ... 12
Referrals ... 12
Feedback ... 13
Access, availability and promotion of services ... 13
Gender of service providers ... 13
Diverse needs ... 13
Aboriginal and Torres Strait Islander people ... 13
Communication ... 13
People with a disability ... 13
People from culturally and linguistically diverse backgrounds ... 14
Translating and interpreting services ... 14

Section 5
Interagency Procedures ... 15
Crisis intervention ... 15
Initial report to police ... 15
Initial report to a health facility ... 15
Medical examination and treatment ... 15
Referral to the local sexual assault team ... 16
Notifying the police ... 16
Victim attending with police ... 16
Initial contact ... 16
Forensic medical examinations ... 16
Forensic medical examinations and informed consent for people aged 14 years and above ... 16
Forensic medical examinations and informed consent for people under 14 years of age ... 17
Chain of evidence ... 17
Timing and nature of the forensic medical examination ... 18
Presence of police and support person at medical and forensic examinations ... 18
Consent to release information and evidence ... 18
Access to health records ... 18
Drug facilitated sexual assault ... 18
Victim DNA reference samples ... 18
Support person during the police interview ... 18
Discontinuance of police action before a proceeding has commenced ... 19
Domestic Violence Protection Orders ... 19
Follow-up and registration on the Victims Register ... 19

Conclusion ... 20

Preface

The guidelines are designed to promote whole-of-government interagency cooperation and service coordination with an aim to improve governmental responses to victims of sexual assault. The need for enhanced coordination and cooperation has long been recognised and resulted in the development of the *2001 Queensland Government Interagency Guidelines for responding to adult victims of sexual assault.*

The 2013 guidelines aim to facilitate best practice, quality service and support to people who have experienced sexual assault.

Legislation relevant to and defining sexual assault includes but is not limited to:

- *Aboriginal and Torres Strait Islander Peoples Recognition Act 2013*
- *Child Protection Act 1999*
- *Criminal Code Act 1899*
- *Criminal Law (Sexual Offences) Act 1978*
- *Domestic and Family Violence Protection Act 2012*
- *Evidence Act 1977*
- *Health Act 1937 & associated regulations*
- *Hospital and Health Boards Act 2011*
- *Mental Health Act 2000*
- *Police Powers and Responsibilities Act 2000*
- *Public Health Act 2005*
- *Victims of Crime Assistance Act 2009*

Policy referred to includes but is not limited to:

- Queensland Government Language Services Policy
- Queensland Health Protocol for conducting child sexual assault examinations

The guidelines should be read in conjunction with internal agency procedures such as the Office of the Director of Public Prosecutions Guidelines and the Queensland Police Service Operational Procedures Manual. In addition to legislation, policies and procedures, the Queensland Government joins with governments around Australia in the implementation of the National Plan to Reduce Violence against Women and their Children 2010-2022.

Each government agency has a complementary and essential role in ensuring that people have access to effective, timely and appropriate information, support, care and treatment following a sexual assault.

Given the nature of the crime, sexual assault is an area of legal and social complexity. The guidelines are designed to help government officers and agencies work together in the best interests of the person who has been sexually assaulted through better understanding one another's roles and responsibilities.

The Queensland Government encourages reporting of criminal activity and prosecution of offender(s) where possible.

Glossary

CPA	*Child Protection Act 1999*
DCCSDS	Department of Communities, Child Safety and Disability Services
DFVPA	*Domestic and Family Violence Protection Act 2012*
EA	*Evidence Act 1977*
FME	Forensic Medical Examination
FMO	Forensic Medical Officer
FNE	Forensic Nurse Examiner
ODPP	Office of the Director of Public Prosecutions
QH	Queensland Health
QPS	Queensland Police Service
SAIK	Sexual Assault Investigation Kit
Victim Assist	Victim Assist Queensland
YJC	Youth Justice Conferencing

Section 1 Introduction

Governance

The government agencies responsible for delivering a service to victims of sexual assault, in accordance with relevant legislation, whole-of-government policy and internal departmental procedures, are responsible for the ongoing governance of this document. The guidelines are underpinned by each government agency's own internal policies and procedures which they are obligated to adhere to. Each government agency has a formal complaints mechanism which is accessible to members of the public.

The Government Interagency Working Group will meet bi-annually to review the guidelines and consider matters of particular concern for people impacted by sexual assault and to consider the impact of any legislative change.

Sexual assault

Sexual assault is a crime of violence. It is a humiliating and degrading experience. It has an emotional, physical, financial and social cost, not only to those directly affected, but also for the community as a whole.

The number of reported sexual offences against women aged 15 or over in Queensland in 2011/2012 was 2035 compared with 227 against males.[1]

Major Australian studies indicate that only 11-25 per cent of sexual assaults are reported to the police and that most offenders are known to the victim.[2] People who experience sexual assault may feel a range of emotions including shock, fear, guilt, shame, depression and an inability to trust others. The social stigma attached to sexual assault can heighten these feelings and increase the trauma experienced. It is imperative that when disclosing or reporting a sexual assault, people receive an effective, professional and appropriate response from the agencies to which they report.

Community education can encourage family and friends to respond supportively and appropriately to a disclosure of sexual assault. However, in order to assist their recovery, victims may also need access to a range of personal support services including counselling, medical services and assistance to report the crime to the police.

The information provided in the guidelines is intended to provide a strategic overview to support the development of policies and procedures at a local level. Local level procedures will differ according to the nature of the service system in each area. It is also intended to contribute to improving service responses to victims.

Responses to victims

Following disclosure of a sexual assault, the following needs of the victim should be addressed:

- immediate safety needs
- immediate health needs
- options for pursuing justice
- ongoing emotional needs for longer term wellbeing.

In order to avoid secondary traumatisation and mitigate the risk of negative, long term outcomes, government responses to sexual assault must be both sensitive and effective. These responses therefore need to take into account the diversity of victims, including their cultural and linguistic background, disability, sexual orientation, age and geographical location. In addition to assisting recovery, more sensitive and effective responses may also lead to an increase in reporting rates.

This, in turn, can lead to a more accurate understanding of the prevalence of sexual assault, inform community education and awareness approaches, and result in improved prevention strategies.

1 Queensland Police Service (2012) Statistical Review 2011-2012 Brisbane
2 Australian Bureau of Statistics (1996) Women's Safety Survey, Cat.no. 4218.0 (unpublished data) as cited in Office of Women's Policy (1999) A Social and Economic Profile of Women in Queensland 1999 Brisbane; Australian Bureau of Statistics (1996) Victims of Crime Survey

Children and young people

It should be noted that the *Child Protection Act 1999* (CPA) is relevant where there are concerns that a child has been sexually abused and where a child does not have a parent able and willing to protect them from the abuse. The main principle for administering the CPA is that the safety, wellbeing and best interests of a child are paramount. Section 159B of the CPA imposes a responsibility on particular service providers to assess and meet the protection and care needs of children and provide collaborative and coordinated support to their families.

The definition of harm in the CPA includes harm resulting from sexual abuse or exploitation. A child is defined in the CPA as an individual less than 18 years of age. Where the child or young person is under the age of 16, their parent or guardian should be consulted where possible and appropriate. Whilst certain circumstances may not make this possible, the child or young person should have access to a support person throughout the response.

The safety and protection of children and young people who are sexually assaulted is a high priority. When disclosing a sexual assault, young people should be encouraged to access services so that they are aware of their options in terms of support, assistance, treatment and prevention.

When working with a young person who reports a sexual assault, personnel from the Queensland Police Service, Department of Communities, Child Safety and Disability Services (DCCSDS) and Queensland Health (QH) are required to follow the statutory requirements under the CPA and the *Public Health Act 2005* relevant to their position.

Where the child or young person is subject to an order granting custody or guardianship of the child, the Chief Executive, Child Safety, DCCSDS, must be notified regarding the report of a sexual assault.

Confidentiality cannot be guaranteed where a child or young person is believed to be in need of protection from harm. To work in the best interest of that child or young person, information may need to be exchanged between departments. It is best practice for the child or young person to be advised that a report to the DCCSDS and the police may take place. Certain circumstances may not make this possible.

Section 2
Principles of the Interagency Guidelines

Government responses to sexual assault are framed by the following overarching principles:

- All agencies will focus on the safety, physical and psychological needs of the victim
- The victim's right to privacy and confidentiality will be respected at all times unless disclosure is required by another law
- Comprehensive information about all processes and options will be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location
- The victim's informed decision will be respected at every stage of the process
- The victim's sense of personal control will be supported and encouraged
- All relevant agencies will work collaboratively to respond to sexual assault, to provide clear, up to date and comprehensive information about other agencies and services and will facilitate access to appropriate agencies and services on request
- All agencies will ensure documentation and records are prepared in accordance with individual agency requirements and respect confidentiality, privacy, security and choice.

Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism

Government responses are also framed by the legislated responsibilities defined in the Fundamental Principles of Justice for Victims of Crime (Principles of Justice) in Queensland, set out in Chapter 2 of the *Victims of Crime Assistance Act 2009*.

If a victim feels they have been treated unfairly or without respect by a Queensland Government officer, they have the right to complain to the government agency responsible for the conduct of the officer or to Victim Assist Queensland (Victim Assist).

As a guide, the following is a summarised version of the Principles of Justice:

Fair and dignified treatment

The victim must be treated fairly and shown dignity, respect, compassion and courtesy. The government entity must take in to account and be responsive to the particular needs of the victim relating to the victim's age, sex, race, cultural identity, impairment, sexuality or religion.

Privacy of victim

A person's personal information, including their address and phone number, can only be disclosed with consent or as authorised by the law.

Information about services

The victim must be given timely information about relevant services available to them, including welfare, health, counselling, legal help and financial assistance.

Information about investigation of the offender

If the victim asks, they should be given information about the investigation of the offender where possible. Information given to a victim may include the progress of the investigation and the name of the person charged.

Information about prosecution of the offender

If asked by the victim, the prosecuting agency is to give the victim details about the crime committed against them, including when the victim may attend a court proceeding, notice of a decision to change a charge, or notice of the outcome of a court proceeding.

Victim to be advised on their role as a witness

A victim, who is to be a witness for the prosecution in the trial for the crime committed against them, is to be informed by the prosecuting agency about the trial process and their role as a witness.

Minimal exposure to and contact with the offender

As much as possible, relevant agencies present at court are to ensure the victim has minimal contact with or exposure to the offender during court proceedings or in the court building.

Victim Impact Statement

During sentencing of the offender, the victim has the right to give details of the impact and harm caused to the victim by the offence, to the prosecutor as an impact statement. Victims can access information about completing a victim impact statement by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Guide to Making a Victim Impact Statement* at *www.justice.qld.gov.au.*

Information about the convicted offender

A victim can apply to be registered on the Victims Register. If the offender is then convicted and imprisoned, the victim will be provided with this information on request. This includes information on the sentence, an escape from custody, or day of release. To be included on the Victims Register call 1800 098 098.

Making a complaint

If a victim of crime feels a government agency, person or persons within the agency have engaged in conduct that is not consistent with the Principles of Justice, they have the right to make a complaint. Victims can access information about making a complaint by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Complaint Form* at *www.justice.qld.gov.au.*

Government agencies are obligated to have a formal complaints management system, and the Queensland Government is committed to having these systems available and acted upon in accordance with the Principles of Justice.

Section 3
The Roles of Key Government Agencies

Queensland Police Service

The Queensland Police Service (QPS) has three main functions in relation to sexual assault cases including:

1. Investigate complaints of sexual assault and establish whether an offence of sexual assault has been committed.
2. Protect victims of sexual assault.
3. Identify, apprehend and prosecute offenders.

In carrying out this role, the police should:

- observe QPS Operational Procedures Manual
- observe QPS local procedures or instructions
- observe legislative requirements
- observe the Fundamental Principles of Justice for Victims of Crime
- provide victims with information regarding the investigation and prosecution
- provide protection to victims at immediate risk of sexual assault
- provide victims with information about support services

Queensland Health

In responding to sexual assault, the role of QH is to provide medical care, forensic medical examinations (FME), sexual health assistance and information and support. These responses are provided by public hospitals, the Clinical Forensic Medicine Unit and may include specialist sexual assault teams. The extent and nature of this care varies across hospital and health services in accordance with local procedures and resources.

Assistance and care in the acute phase includes:

- medical treatment
- collection and documentation of medico-legal evidence where appropriate
- sexual health information and treatment
- information about rights as a victim of crime
- information about reporting to police and legal processes
- support and information extended to support networks.

In addition, QH provides education and training to government and non-government agencies, with an aim to broaden community knowledge, improve responses and prevent sexual violence as outlined in the National Plan to Reduce Violence against Women and their Children 2010 – 2022.

Department of Justice and Attorney-General

The Office of the Director of Public Prosecutions (ODPP), Victim Assist Queensland (Victim Assist), Youth Justice Conferencing (YJC) and the Queensland Courts all fall within the responsibilities of the Department of Justice and Attorney-General. The following provides an overview of each of these separate agencies.

Office of the Director of Public Prosecutions

The ODPP represents the Crown in criminal proceedings against persons accused of committing serious criminal offences including sexual assault. The criminal proceedings include:

- the committal hearing, before a Magistrate in Brisbane Central, Ipswich and Southport Magistrates Courts. In other centres, this hearing is conducted by prosecutors within the police
- trials before a judge alone or a judge and jury
- sentencing hearing before a judge
- any appeals arising from the trial or sentence.

In addition to prosecuting matters in court, the ODPP is responsible for:

- assisting victims by providing information about the progress of a prosecution, the victim's role as a witness, and how the victim can inform the court of the impact of the crime by providing a victim impact statement
- giving victims reasons for decisions made in relation to proceedings which directly affect them
- taking into account the wishes of a victim who does not wish to proceed with a prosecution for any reason
- providing information about the availability of other resources and processes that may assist victims
- requesting that the court give sexual assault matters appropriate priority
- ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building
- liaising with other relevant agencies to ensure that the victim and family members understand the legal and procedural issues which may impact them.

In carrying out the role of the ODPP, all officers are obliged to comply with the Director's Guideline No. 25 as at 2013 http://www.justice.qld.gov.au/__data/assets/pdf_file/0015/16701/Directors-guidelines.pdf. This aims to ensure that the Principles of Justice, as set out in the *Victims of Crime Assistance Act 2009* are complied with.

Victim Assist Queensland

Victim Assist provides access to specialised support services and financial assistance for victims of personal acts of violence including sexual assault.

Financial assistance may be available to victims of sexual assault to help them pay for the cost of goods and services that have arisen, or will arise as a consequence of the assault.

This includes medical and dental expenses, and expenses associated with improving safety or relocation from their current location in order to escape the offender.

Victim Assist also provides information, referrals and support (which may include court support) to victims, and assistance in making a victim impact statement if the victim chooses to make one.

Youth Justice Conferencing

If the offender is a young person, there may be alternative processes to the matter being dealt with by a court. The purpose of YJC is to hold the young offender accountable for their actions and to come to an agreement on what they will do to attempt to make reparation for the harm caused. To safeguard the victim, additional procedures are adopted before a conference for a sexual assault can occur. These include referring the victim to a counselling service as well as compulsory attendance of the juvenile offender in a specialist treatment service.

Queensland Courts

Queensland Courts afford victims of sexual offences, affected child witnesses and special witnesses protections when proceeding through court. These are detailed in the *Evidence Act 1977* (EA) and the *Criminal Law (Sexual Offences) Act 1978*.

Section 21A of the EA provides protections for special witnesses and affected child witnesses. The court can declare a person a special witness by hearing evidence (if the witness does not automatically fall into the special category, such as where the witness is a child or the person has a mental impairment). When the court hears evidence from these special witnesses, there are a range of options to assist the witness. These include ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building. Where the witness is an affected child witness, there are further protections in place.

For further information refer to the Supreme Court Bench Book: *http://www.courts.qld.gov.au/information-for-lawyers/benchbooks-and-ucpr-bulletin/supreme-and-district-courts-benchbook.*

Department of Communities, Child Safety and Disability Services

The Department of Communities, Child Safety and Disability Services allocates funding to non-government organisations to assist people, predominantly women, who have experienced sexual assault, in accessing necessary services and support needed to rebuild their lives as quickly as possible. These sexual assault services offer flexible, holistic and ongoing personal support including advocacy and sexual assault counselling (including crisis counselling), in a culturally appropriate and safe environment.

The range of support provided by these services includes:

- provision of information, advice and referral
- needs assessment and development of case/service plans
- individual advocacy
- sexual assault counselling for victims and survivors of sexual assault
- community education.

For more information about access to sexual assault services in local areas, contact the Sexual Assault Helpline on 1800 010 120.

Child Safety Services is the Queensland Government agency for child protection and adoption services. The department is dedicated to protecting children and young people from harm or who are at risk of harm, and whose parents cannot provide adequate care or protection for them.

Non-government organisations

It is acknowledged that a number of government departments provide grant funding to non-government organisations to deliver a range of specialist sexual assault services. Local procedures and service agreements in relation to services provided by these organisations should be adhered to.

Section 4
Interagency approach

Given the often violent and complex nature of sexual assault, an interagency approach is essential. The Queensland Police Service (QPS), Queensland Health (QH), the Department of Justice and Attorney-General (DJAG) and the Department of Communities, Child Safety and Disability Services (DCCSDS), each have a different but fundamental role in responding to sexual assault. Each of these agencies should assist each other in understanding and supporting their role and be familiar with, and sensitive to, their differing and complementary roles. An interagency approach provides opportunities to discuss and address issues of mutual concern across departments.

Teamwork

Quality of care depends on partnership between these different agencies. Each agency should establish local procedures to facilitate improved liaison and coordination between services. These procedures should include systems for information sharing and conflict resolution.

Confidentiality

Confidentiality, privacy of information and security of records is imperative when working with people who have experienced sexual assault. It is a fundamental principle in treating victims with dignity and respect.

Access to and disclosure of personal information regarding the assault will conform to legal requirements and be limited to people directly involved in the case. Except where legal obligations exist, information will not be released without the prior consent of the person involved. This includes names and identifying information.

Training

Joint training can contribute to achieving interagency objectives and allow those working in the field to understand how best practice is achieved. Training and orientation should be ongoing and could include input from relevant local services.

Information provision

Police officers, doctors, social workers, health workers and legal officers, should provide people with relevant information which may include written material. This information should be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location.

People should be made aware of, and be given an opportunity to discuss and consider the implications of proceeding with medical, investigative and legal processes so that they can make informed decisions. These decisions must be respected. It should be noted however that the decision whether or not an investigation should proceed rests primarily with the police.

Referrals

Relevant referral procedures and guidelines between police and health services should be observed.

Staff of government agencies should be familiar with local specialist services and actively support people who have experienced sexual assault to access appropriate supports available in their community. In addition, relevant health, welfare and legal services likely to be accessed by victims will need to develop local strategies and procedures to ensure that referral processes are appropriate and coordinated. These services should also be aware of the admission procedures and location of the nearest health facility and police station.

Feedback

Quality of care is essential in ensuring that people are referred to the appropriate service. QPS, QH, DJAG and DCCSDS should ensure that local interagency links and procedures operate in a coordinated manner. Mechanisms for giving feedback about service delivery should also be in place and observed.

Access, availability and promotion of services

People who have experienced a sexual assault may need encouragement to use medical, counselling, police and legal services. Local procedures should ensure that services are accessible and coordinated. This includes the use of written information and community education materials.

Gender of service providers

Following a sexual assault, the person may feel uncomfortable talking with personnel of the opposite sex. If a preference for female or male personnel is expressed, all reasonable steps to accommodate this preference should be taken.

Diverse needs

Procedures need to be flexible in order to respond to diverse needs; including culture, language, gender, disability, religion, sexuality and geographical location. Furthermore, it is important to understand how these needs impact access to and utilisation of appropriate services.

All agencies should ensure that procedures and facilities provide access to appropriate services for Aboriginal and Torres Strait Islander people, people of non-English speaking backgrounds, children and young people and people with disabilities, including physical disabilities.

Aboriginal and Torres Strait Islander people

Service provision should reflect the cultural needs of Aboriginal and Torres Strait Islander people. Agencies should have a referral mechanism to facilitate access to culturally appropriate information for Aboriginal and Torres Strait Islander people. Where there is consent and it is appropriate to do so, Aboriginal and Torres Strait Islander liaison workers may be offered to assist people during the process.

Communication

The Queensland Government recognises that a significant number of people may require interpreter services, as well as culturally appropriate support in order to adequately disclose and report a sexual assault, and make informed decisions about the support and options available to them.

People with a disability

Services and agencies should facilitate access to appropriate support workers and interpreters for people with a disability. Disability includes intellectual, physical, sensory, psychiatric or neurological impairment, or a combination of these, resulting in a substantial reduction in the person's capacity to make informed decisions or communicate. With the person's consent, and when it is safe and appropriate to do so, services should also consult with relevant people involved in that person's life such as carers, guardians and specialist agencies or departments.

People from culturally and linguistically diverse backgrounds

Service provision should be responsive to, and respect the cultural, religious and language needs of the person who has experienced sexual assault. Where communication in English is difficult or where requested, accredited interpreters and cultural support workers should be used to assist in both eliciting information from, and providing information to the person who has experienced sexual assault. This supports client safety and enables informed decision making about health care, investigative and legal processes for both the client and agency.

Translating and interpreter services

All reasonable steps will be taken by government agencies and funded non-government organisations providing sexual assault responses, to ensure fair and equitable access to interpreting and translating services that are responsive and high quality.

All reasonable steps should be taken to make an accredited interpreter available in all situations where an interpreter and/or translator is required, unless there are extenuating circumstances that genuinely prevent an interpreter from being used. This may include, for example, a medical emergency or where a language group or community is very small and confidentiality is a concern for the client, or where there is no interpreter available for that language group. All agencies will take into consideration the wishes of the person who have been impacted by the sexual assault in relation to the use of an interpreter.

Each government agency is required to observe its own policies and procedures in relation to the use of interpreters. These internal procedures should align with the *Queensland Government Language Services Policy.*

Section 5
Interagency procedures

Regardless of where sexual assault is first reported, the first priority is to ensure the safety and welfare of the person reporting. Prompt referral to the designated specialist service should take place.

Crisis intervention

The purpose of intervention by a designated sexual assault response worker is to:

- provide immediate assistance, stabilisation and emotional support to assist the person to return to their level of functioning before the crisis
- assist the person to process their perception of the stressor
- provide information about the options available, as well as the procedures of the local health facility
- provide an opportunity for the person to express their concerns and feelings
- offer practical support, including contacting family members or support persons where appropriate
- talk to family members or support persons (if present) about how best to support the victim
- co-ordinate the interagency response and facilitate patient care and treatment along the sexual assault pathway
- provide information in relation to available community support resources.

The sexual assault worker will advise the victim of their right to access medical advice and treatment including sexual health treatment. If information or clarification about police procedures is requested, the sexual assault worker will, with the victim's consent, arrange for police to provide this information.

During any phase of this process, a support person can be present. The support person should not adversely influence the process.

Initial report to police

Police receiving a report of a sexual assault will act on the information received. The police should inform the victim of relevant decisions made and where necessary, obtain the victim's consent.

Initial report to a health facility

Health facilities, such as hospitals, are often the first place where a person will disclose a sexual assault. When this happens, nursing and medical staff will assess the general medical condition of the person and administer immediate medical treatment if required. Assessment of a person's need and urgent medical intervention will always be the first priority.

Medical examination and treatment

A general, non-forensic medical examination may be conducted by a medical professional with the aim to:

- reassure victims about their physical welfare, including giving information on, and providing treatments to reduce the risks of pregnancy and sexually transmitted infections
- assess, treat and document injuries
- provide advice and referral options for follow up medical care.

A medical examination should include sexual health intervention as described in *Queensland Sexual Health Clinical Management Guidelines of 2010 section 6: http://www.health.qld.gov.au/sexhealth/documents/cm_guidelines06.pdf.*

Unconscious patients who are admitted to hospital with a suspicion of sexual assault will be assessed and treated as medical emergencies.

Referral to the local sexual assault team

Health staff must follow local procedures in the management of sexual assault. All efforts should be made to contact the designated sexual assault team and where there is no specialist team, crisis intervention and support will be delivered by health staff present. A referral for follow-up support and care should be made as soon as possible.

Notifying the police

The sexual assault worker should discuss available reporting options with the person. If the victim requests to speak to police, it is the role of the sexual assault team or other designated staff member, to notify the police as soon as possible to ensure all evidence including the crime scene can be secured. Notification and initial reporting to police does not mean an investigation will automatically take place.

Where police are operating under time constraints, they should inform health staff. Working together to meet time constraints will directly impact the quality of the outcome for the victim.

Victim attending with police

Where victims arrive at the health facility with police, procedures outlined in referral to the local sexual assault team above should still be followed by health staff.

Initial contact

It is the sexual assault worker's role to coordinate an immediate response; offer practical and emotional support, assess the person's immediate physical and emotional safety and recognise the potentially traumatic nature of the assault.

Medical assessment will be conducted in accordance with local procedures.

Forensic medical examinations

Doctors or nurses conducting forensic examinations must follow local procedures in the management of sexual assault.

The forensic examination consists of obtaining a history as to the nature of the assault in order to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic evidence as it relates to the alleged sexual assault.

Forensic medical examinations and informed consent for people aged 14 years and above

Informed consent reflects a legal and moral principle whereby the victim has the right to decide what is appropriate for them. This includes the right to accept or to decline a forensic examination and to change that decision.

In order for a patient to exercise this right, they require access to information that is relevant to them. An explanation about the nature of the forensic examination must be given by the forensic medial officer (FMO) or forensic nurse examiner (FNE) and police also need to inform the victim about police investigation processes.

The victim should be made aware that they may withdraw their consent at any time to any particular procedure, or any aspect of the examination. However after the examination is complete, an investigation by police may continue to progress.

It should be noted that the decision to have a forensic examination is a health care matter and therefore legislation and policy around informed decision-making in health care applies in this circumstance. For more information on decision-making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

It is the responsibility of the medical and forensic staff to assess capacity to consent. Where a person lacks capacity, it is appropriate to identify a capable adult to act on the patient's behalf. Please refer to section 2.2 of the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

If at any point there is a possibility that the capable adult identified is the offender, it is in the best interests of the patient for an Adult Guardian to be appointed in accordance with the *Powers of Attorney Act 1998* and the *Guardianship and Administration Act 2000.*

Where possible the examination will be carried out using the Sexual Assault Investigation Kit (SAIK).

Forensic medical examinations and informed consent for people under 14 years of age

Paediatric patients are generally those aged less than 14 years of age. It is usual practice for the child to be transferred to the hospital's child protection area for an examination, even if they have had initial treatment in an adult emergency setting. Emergency medical treatment for any child should be undertaken by the Department of Emergency Medicine prior to a forensic medical assessment.

Paediatric forensic medical assessments are undertaken by paediatricians. This will be done by the Child Protection Advisor on call (or similar) or the general paediatrician on call.

All examinations conducted on children should be consistent with Queensland Health's Hospital and Health Services Health Service Directive: Protocol for conducting child sexual assault examinations: *http://www.health.qld.gov.au/directives/docs/ptl/qh-hsdptl-029-11.pdf*. All paediatric FMEs should also adhere to legislation and policy around informed decision-making in health care. For more information on decision –making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf*

Chain of evidence

The chain of evidence and the need for 'contemporaneous recollection of facts' to aid an investigation is essential. The chain of evidence involves not only the examination of the victim, but also includes the geographic location where the assault occurred, the identification and interview of witnesses and identification of relevant additional evidence. Evidence collected needs to be stored and transported in approved and standardised ways as outlined in police procedures to ensure the utility in a court proceeding. This further emphasises the importance of police involvement prior to an examination being conducted.

Storage and transportation issues need to be considered when undertaking an examination as the inability to safely and correctly store and transport evidence may damage the evidence or make it inadmissible in court in the later stage of an investigation and prosecution.

The doctor or nurse conducting the forensic examination should discuss the case with the police before the forensic examination takes place. This is to ensure that:

- all necessary evidence is collected
- a re-examination is prevented
- unusual evidence is not overlooked.

Timing and nature of the forensic medical examination

In determining the timing and nature of the FME a number of factors will be considered. These include the time since the assault, the physical and emotional state of the victim and their account of the assault.

This process, particularly if it involves an internal gynaecological or anal examination, can be distressing and the examination may need to be delayed or discontinued on account of the victim's physical and emotional state.

Presence of police and support person at medical and forensic examinations

Regardless of age, a person is entitled to have a support person present during the medical and forensic examination. This may include a friend or family member, a nurse, health care worker or sexual assault worker, who is not a potential witness.

There is no legal requirement for a police officer to be present during the medical and FME. However, if a victim requests the presence of police, this police officer is to be the same gender as the victim.

A police officer must be present to receive all evidence collected during a forensic examination immediately after the procedure to maintain continuity of the evidence for any potential court proceeding.

Consent to release information and evidence

The doctor or nurse conducting the FME will not release the SAIK to police without the signed consent of the victim or the capable adult acting on their behalf.

Access to health records

Health records, including counselling notes, are confidential. However, patients should be notified that any records can be subject to a subpoena or other court-related mechanisms.

Drug facilitated sexual assault

Where the administration of drugs in the sexual assault is suspected, testing to maximise the chances of detecting these substances should be administered in a timely fashion. However, the decision to test remains a clinical one which is made by the FMO or FNE.

Victim DNA reference samples

DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the FME.

Support person during the police interview

Police should inform victims that they may be accompanied by a support person while their statement is being taken. However, the victim must be advised that:

- the support person may not participate in the interview
- the support person may not directly or indirectly influence the interview
- a potential witness may not act as a support person.

Discontinuance of police action before a proceeding has commenced

Where the victim does not wish to proceed with further police action, police should:

- make clear that following the withdrawal of the complaint no further police action will be taken
- attempt to obtain a signed withdrawal of complaint
- inform the adult victim (18 years and over, only) of the online *Adult Sexual Assault Resource (http://www.police.qld.gov.au/programs/adultassault/)* package that provides alternative reporting options

If a proceeding has commenced, the victim's wishes will be taken into account when deciding if the matter will continue.

Domestic Violence Protection Orders

Sexual assault is one form of domestic and family violence. Where the sexual assault has occurred within an intimate personal relationship (marriage, engagement, couple), family relationship or an informal care relationship, the victim should be informed of their option to seek protection under the *Domestic and Family Violence Protection Act 2012*. In situations where domestic violence has occurred and where protection is needed to prevent further violence, a domestic violence order can be applied for by the victim, by police on behalf of the victim or by another person authorised by the victim. This is done through the Magistrates Court.

Where appropriate, victims should also be referred to a specialist domestic violence service for support and assistance, for example DVConnect Womensline Ph. 1800 811 811 and DVConnect Mensline Ph. 1800 600 636.

Follow-up and registration on the Victims Register

After the trial and/or sentence, the victim will have the opportunity to talk to the case lawyer about the outcome of the case and the sentence imposed, if any. This opportunity may arise immediately after the trial and/or sentence concludes or at a later time by telephone.

If the offender is imprisoned or placed under the supervision of Queensland Corrective Services, the victim may register their details on the Victims Register which is administered by Queensland Corrective Services. A victim and/or their family or nominee can register to be kept informed about the offender's imprisonment, movement between locations and proposed parole dates. They will also be given the opportunity to make submissions to parole boards when offenders apply.

Where the offender is a young person, the Victim Information Register may be utilised. This register is administered by Youth Justice within the Department of Justice and Attorney-General. A victim and/or their family or nominee can register to be kept informed about the young person's detention, movement between locations and supervised release dates.

If the offender appeals against their conviction and/or sentence or the Attorney-General appeals against the leniency of the sentence, the victim will be kept informed about the progress and outcome of the appeal and any consequential matters arising from the appeal.

Key stakeholders at the local level should maintain current referral information on appropriate support and other community services available. Localised referral pathways and protocols should be developed between key service providers to ensure timely referral pathways for those in need of support.

Conclusion

The government agencies acknowledged in this document (QPS, QH, DJAG and DCCSDS) have committed to the principles, roles, approaches and procedures articulated in the guidelines. This commitment aims to ensure that individuals who have experienced sexual assault are provided with timely, high quality and coordinated service delivery responses appropriate to their needs and appropriate to the role played by departmental officers.

Key service providers are encouraged to use this document as a framework to develop local level arrangements and protocols to ensure best practice, quality service and support to people who have experienced sexual assault.

The government agencies responsible for the development of the guidelines would like to thank all key government and non-government stakeholders who kindly contributed their knowledge and expertise.

For information or comments please contact:
Queensland Government Interagency Working Group Responding to Sexual Assault
Tel: 1300 546 587 **Email:** victimslinkup@justice.qld.gov.au

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF DAVID BARRY BRIESE

I, **David Barry Briese**, of 200 Roma Street, Brisbane, Queensland, 4000 state as follows:

The following statement is provided in response to notices I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedules attached to those notices. Attached and marked **'Exhibit 1'** is a copy of each notice.

Background

1. My current position within the Queensland Police Service is Detective Inspector of Crime Services, Ipswich Police District.

Experience and position

2. I have a Master of Leadership and Management, which I completed in 2020 from Charles Sturt University.

3. I was sworn into the Queensland Police Service on 4 December 1998. After initially working in uniform in 1999 and 2000, in March 2001 I commenced a plain clothes career at Toowoomba Criminal Investigation Branch. In 2005 I obtained my Detective classification. I have worked at Toowoomba Criminal Investigation Branch, Toowoomba Juvenile Aid Bureau, Yeppoon Criminal Investigation Branch, St George Criminal Investigation Branch as the Officer in Charge, Wide Bay Tactical Crime Squad as the Officer in Charge and Maryborough Criminal Investigation Branch as the Officer in Charge. In 2017 I was promoted to the rank of the Detective Inspector of Ipswich Crime Services. Since then, along with performing the roles of that position, I have also performed approximately 14 months as the Detective Superintendent, Regional Crime Coordinator of the Southern Region and 6 months as the Detective Inspector at the Child Trauma and Sexual Crimes Unit at the Crime and Intelligence Command.

4. I am not appointed to any boards or committees.

[redacted]

David Barry Briese

[redacted]

Witness

JUSTICE OF THE PEACE (QUALIFIED) Reg.No. [redacted] DEPT. OF JUSTICE & ATTORNEY GENERAL

5. My CV is attached and marked as **'Exhibit 2'.**

6. As the Detective Inspector of the Ipswich District, I am responsible for the overview and management of all major criminal and child protection investigations. This involves providing advice to operational Detectives, overviewing task and operational management, approving covert and overt investigative strategies and reporting of outcomes through correspondence to the District Officer, Ipswich District. I also manage all human resource matters within the crime group including vacancies, sick and recreational leave, discipline matters and conduct media releases.

7. The Ipswich District encompasses the following geographical area: Ipswich, Goodna, Springfield, Yamanto, Karana Downs, Marburg, Rosewood, Harrisville, Lowood, Toogoolawah, Esk, Boonah and Kalbar.

8. The crime units that I manage include the Criminal Investigation Branch, the Child Protection Investigation Unit, the Suspected Child Abuse and Neglect Unit, the Child Protection Offender Registry, the School Based Policing Unit, the Tactical Crime Squad, the Crime Management Unit, the Tactician unit and District Intelligence Unit.

Forensic medical examinations

9. I am not aware of and have not been involved in any matter in which a witness has undergone a forensic medical examination. The QPS involvement in forensic medical examinations of complainants is in general terms and based on my experience and knowledge, as follows: upon receiving a sexual offence complaint from a victim and after conducting an assessment taking into account offence details including, importantly, the timing of the offence, an officer will offer the victim a Sexual Assault Investigation Kit (SAIK) examination, to be performed by an appropriately trained health professional at a hospital. If the victim agrees and provides their consent, they attend hospital with an investigator and undergo the procedure. In the Ipswich District, the officer takes the SAIK with them to the hospital. The SAIK is obtained from the Criminal Investigation Branch office at Yamanto or Springfield and handed to the health practitioner by the investigator. The health practitioner opens the SAIK and completes all medical procedures and associated paperwork as required, then re-seals the SAIK and hands it back to the investigator. The investigator then returns to their police station and lodges the SAIK in the property fridge. At the investigator's first

availability, they will complete a QP00127 'Submission of Articles for Forensic Examination' with the assistance of a Scenes of Crime Officer, who provides them with a Forensic Number. The SAIK is then transported to QHFSS for examination.

10. From 2001 until 2012 I was an operational Detective in Toowoomba, Yamanto, Rockhampton and St George and was involved in this process with both children and adult victims. As I understand it, the process has not changed, apart from the fact that property is now lodged via QPRIME and results are returned via QPRIME where, until approximately, 2007 property, including SAIKs, were lodged using a written exhibit book and results were returned via letter from QHFSS.

11. The QPS involvement in forensic medical examinations of suspects and accused persons is, in general terms and based on my experience and knowledge, as follows: in respect to child offenders, a Forensic Procedure Order must be obtained from the Children's Court Magistrate. In respect to adult offenders and suspects, a Forensic Procedure Order can be consented to by the person. That consent may be withdrawn at any time prior to the procedure being completed). If it is not consented to, then a Forensic Procedure Order must be applied for from the Magistrates Court. In any case, the alleged offender t is transported to a hospital where an appropriately trained medical officer conducts the forensic procedure.

12. As regards the equipment used, as far as I am aware a SAIK (obtained from a CIB office) is the equipment most commonly used to perform the forensic procedure. Where only blood is to be obtained, I understand a Road Safety Unit blood kit may be used. Once the forensic procedure is completed, the kit is returned to the investigator for lodging in the property fridge and then, at the first available opportunity, a QP00127 is completed, and the kit delivered to QHFSS for forensic examination.

13. To my knowledge, the only difference in processes between when I was actively involved in investigating offences and now is the exhibit lodging via QPRIME and notification system as explained in the paragraphs above.

Sexual Violence Strategy

14. A copy of the *Queensland Police Service (QPS) Sexual Violence Response Strategy 2021-2023* is attached and marked **'Exhibit 3'.**

[redacted]

David Barry Briese

[redacted]

Witness

[redacted]

15. The *QPS Sexual Violence Response Strategy* was developed as a result of several drivers for change, including: the Royal Commission into Institutional Abuse (the Royal Commission) conducted between 2013 to 2017, the Queensland Government's Sexual Violence Prevention Framework released in 2019, the 2020 ABC News report '*Rough Justice*', on-going investigations by the Women's Safety and Justice Taskforce since March 2021, and release of several papers including '*Hear her Voice*'.

16. The QPS Sexual Violence Response Strategy provides a framework to address the findings of previous and current inquiries to ensure continuous improvement in QPS responses to victims of sexual violence. It aims to enhance the Service's capacity to prevent, disrupt, respond and investigate sexual violence, put victims first and hold perpetrators accountable. The Vision underpinning the Strategy is a victim-centric, trauma-informed sexual violence response that protects the community, strengthens public confidence, and contributes to Queensland and National integrated action plans.

17. In October 2020, I commenced my role as a member on the Sexual Violence Prevention Working Group. The Working Group was chaired by the Detective Inspector of the Child Trauma and Sexual Crime Group. The Working Group was established as a result of / in response to a recommendation of the Royal Commission to continue to prepare and deliver victim-centric, trauma informed training to all staff.

18. On 24 August 2021, I was seconded to the Child Trauma and Sexual Crimes Unit as the Detective Inspector. Whilst seconded to that role I led the Sexual Violence Prevention Working Group and worked alongside others to finalise the completion of the *QPS Sexual Violence Response Strategy*. I was the chair of that Working Group between August and December 2021.

19. The *QPS Sexual Violence Response Strategy* was released in October 2021 to coincide with the Sexual Violence Prevention Month.

20. Debbie Jones (Manager) and Bridgette Allen of the of Policy and Programs Unit Child Abuse & Sexual Crime Group, Detective Acting Superintendent Mark White, Child Abuse and Sexual Crime Group, and Detective Inspector Steve Blanchfield of the Child Trauma and Sexual Crimes Group were involved with developing the Strategy. I am aware that members of the Department of Justice and Attorney-General (DJAG), the Office of the Director of Public Prosecutions (ODPP) and Queensland Health (QH)

[redacted] ..... [redacted]

David Barry Briese Witness

JUSTICE OF THE PEACE (QUALIFIED) Reg.No. [redacted] DEPT. OF JUSTICE & ATTORNEY-GENERAL

were involved in assisting with the provision of information and advice in the completion of the Strategy. However, I cannot recall who, in particular, from each of those agencies was involved.

Ipswich Sexual Assault Network

21. The Ipswich Sexual Assault Network (ISAN) was formed in December 2021 in response and having regard to the *QPS Sexual Violence Response Strategy*.

22. The ISAN provides relevant agencies and stakeholders with the opportunity to identify new, and build upon and enhance existing, relationships with a view to improving local service delivery to victims of sexual violence. It also provides a platform to educate and raise awareness of relevant issues amongst partner agencies and within the QPS.

23. Core members of ISAN are identified below. Where a core member is unavailable, due to other commitments, a proxy attends in their place. Core members are: Detective Inspector David Briese; Detective Senior Sergeant [redacted] Ipswich Criminal Investigation Branch; the Officer in Charge of the Ipswich Child Protection Unit (Detective S/Sgt currently vacant); Detective Senior Sergeant [redacted], the Ipswich Suspected Child Abuse and Neglect team; [redacted] Ipswich Domestic Violence Action Centre and Support of Sexual Assault Victims (also the secretariat); [redacted] Director of Social Work at Ipswich Base Hospital; [redacted] Director of Health Information Management at Ipswich Base Hospital; [redacted] Director of Nursing including the Sexual Assault Nurse Examiner (SANE) program at Ipswich Base Hospital; [redacted] Legal Counsel at Ipswich Base Hospital; Sgt [redacted], Officer in Charge of the Ipswich Domestic Violence Unit; [redacted] manager of the Ipswich Police High Risk DV Team; [redacted] Principal Crown Prosecutor of Ipswich ODPP; [redacted] Ipswich ODPP; [redacted] Manager of West Moreton Child Safety Intake and Assessment Team; [redacted] District Manager Ipswich Community Corrections; [redacted] Principal Advisor Queensland Education; and [redacted] Regional Manager of Ipswich Integrated Family and Youth Service. There have also been invited members who attend a specific meeting based on identification

[redacted]

David Barry Briese

[redacted]

Witness

JUSTICE OF THE PEACE (QUALIFIED) Reg.No.: [redacted] DEPT. OF JUSTICE & ATTORNEY-GENERAL

of issues by any of the core members. Thus far, this includes members of Respect Inc., Bravehearts and the Women's Legal Service.

24. I co-chair the group with Detective Senior Sergeant [redacted].

25. Minutes for the January 2022, February 2022, March 2022, April 2022, May 2022, July 2022, and August 2022 meetings are attached and marked **'Exhibit 4'**. Minutes are not available for the June 2022 meeting due to the absence of the secretariat.

26. While the ISAN is in its infancy, I believe it is working well.

27. While ISAN meetings are held each month, parties have been able to draw upon the existence of the network to engage in on-going communication with other participants, enabling the timely sharing of information and advice out of session. For example, at times SANEs are unavailable at Ipswich Hospital. When that occurs, [redacted] or [redacted] advises the ISAN QPS members of that fact. That allows us to make timely, alternative arrangements to attend other hospitals for examinations which is very helpful in terms of keeping victims informed, as well as progressing investigations.

28. In my view, the challenge for the region, in future, will be ensuring appropriately trained nurses are always available to deliver this important service.

Sexual Assault investigation kits (SAIKs)

29. As set out above, I took up the role of Detective Inspector, Operations Manager of the Child Trauma and Sexual Crimes Unit. It sits within the Child Abuse and Sexual Crime Group, Crime and Intelligence Command, Police Headquarters on 24 August 2021.

30. On 7 September 2021, I first met with Dr Adam Griffin at the Queensland Health Office located at 51 Herschel Street, Brisbane. Detective Acting Superintendent Mark White and Policy and Programs Unit Manager, Debbie Jones, were present at that meeting. From my recollection, Jackie Thompson, SANE State Manager, also attended, along with two other doctors referred to by Dr Griffin as 'Forensic Physicians'. I cannot recall their names. This meeting was organized prior to my commencement at the Child Trauma and Sexual Crimes Group. The meeting was arranged to discuss issues surrounding the completion of SAIK examinations of sexual violence victims around the State. My recollection is that the meeting was cordial and there was consensus amongst those present re: the importance of ensuring victims were being examined at

the nearest available hospital, to ease their trauma and to assist police investigators. We agreed to come back on 6 October 2021 to identify and discuss any issues uncovered in the meantime. As I was new to the role the process, of arranging the meetings and preparing relevant information for consideration, was led by Detective Acting Superintendent Mark White and Debbie Jones. I do not have any minutes from this meeting.

31. The 6 October 2021 meeting was held for the purpose of continuing the discussion of issues canvassed at the 7 September 2021 meeting. The meeting was conducted via the Teams platform. I do not know who organized it. I do not have any minutes from this meeting. In relation to the meeting, I recall:

(a) In attendance was Detective Acting Superintendent Mark White, Debbie Jones, Bridgette Allen, myself, Dr Griffin and Jackie Thompson.

(b) The discussion centred on follow up items from the previous meeting. That is, issues experienced across the State in terms of medical staff at hospitals being unable or unwilling to conduct forensic medical examinations on sexual violence victims. I am aware that, at the time, Bridgette Allen was keeping a spreadsheet of issues identified by Investigators across the State in relation to forensic medical examinations. Bridgette or Debbie Jones presented the issues to Dr Griffin, who agreed to follow up on them.

(c) Following the meeting, on 8 October 2021, I sent an e-mail to all District Officers and Crime Coordinators within the State updating them on our on-going discussions with QH regarding the process for the forensic examination of sexual assault victims. That email is attached and marked **'Exhibit 5'**.

32. On 26 October 2021, Superintendent Dale Frieberg arranged a Teams meeting with me to discuss my role as the Detective Inspector, Child Trauma and Sexual Crime Group and to invite me to participate in a working group she wanted to establish regarding the issue of SAIK examinations. From that conversation I understood that the Forensics Unit, over which Superintendent Frieberg and previously Superintendent Bruce McNab sat, had experienced issues with respect to obtaining DNA elimination samples for victims of sexual crimes and the refusal, by Dr Adam Griffin, to comply with the *Response to Sexual Assault – Interagency Guidelines for Responding to People who*

have Experienced Sexual Assault ('the Response to Sexual Assault Guideline'). No-one else was involved in that discussion. I have no notes of that discussion.

33. I was due to attend a meeting with Dr Griffin on 9 November 2021, prior to the commencement of the Working Group. I advised Superintendent Frieberg of that arrangement and that I intended, at that time, to raise with Dr Griffin the issues I had just discussed with Superintendent Frieberg. I forwarded Superintendent Frieberg the e-mail I sent out to District Officers and Crime Coordinators on 8 October 2021.

34. On the 27th of October 2021, Debbie Jones and I attended the Queensland State Library where, at the invitation of Jackie Thompson, we presented to the Sexual Assault and Forensic Nurse Conference. We presented on the soon to be released QPS Sexual Violence Response Strategy and the role of the QPS Sexual Violence Liaison Officer. I recall there were numerous persons present in the conference room, as well as a number of people attending on-line. Dr Griffin was present, but I did not have the opportunity to catch up with him personally. For that reason, I sent him an e-mail later that day referring to the issue - of medical staff not obtaining the DNA elimination sample - and requesting a time to speak with him about it. A copy of that email is attached and marked **'Exhibit 6'**.

35. I did not receive a response from Dr Griffin.

36. On 9 November 2021, a QPS/QH catch-up meeting was held. It was conducted in the same manner (via Teams Platform) as the meetings held on 7 September 2021 and 6 October 2021. I do not have any minutes from this meeting.

    (a) I do not recall who was at this meeting apart from Dr Griffin, Debbie Jones and myself.

    (b) I raised the issue of the Response to Sexual Assault Guideline (in terms of collection of the victim DNA reference elimination sample) and questioned Dr Griffin as to why this was not being routinely done by QH. I recall Dr Griffin responded that:

        (i) he believed there could be an issue with cross contamination from saliva and semen in the victim's mouth that would prevent a buccal swab from being taken at the time of the SAIK;

[redacted]

David Barry Briese

[redacted]

Witness

OF THE PEACE (QUALIFIED) Reg.No [redacted] DEPT. OF JUSTICE & ATTORNEY GENERAL

(ii) even though another person's saliva only takes 8-10hrs to disappear - from a DNA perspective – from the inside of a victim's mouth, he did not want to have different processes for his staff for the taking of DNA depending on whether or not the victim may have mouth DNA contamination;

(iii) the current process - of police obtaining the reference sample a few days later - meant there was zero chance of contamination and thus was his preferred process; and

(iv) he was concerned about the possible contamination of samples if a reference sample were to be placed in the same SAIK for analysis.

(c) Following the meeting I sent an e-mail to Dale Frieberg and to Debbie Jones advising them of the outcome of that discussion and the explanation provided by Dr Griffin as to why Forensic Medical Officers were not complying with the Response to Sexual Assault Guideline. See attached and marked **'Exhibit 7'**.

(d) On 18 November 2021, at the request of Superintendent Frieberg, I attended a meeting at Police Headquarters with Superintendent Frieberg, Inspector David Neville, Inspector Peter Bushell, Assistant Commissioner Kath Innes and Assistant Commissioner David French. The purpose of this meeting was to discuss, as a group, the matters raised by Dr Griffin in conversation with me and concerns apparently expressed by the Acting Executive Director of QH Forensic and Scientific Services (FSS), Lara Keller, in respect of Dr Griffin's position in relation to medical officers obtaining DNA reference samples from victims. I was not a part of any discussions with Ms Keller, at that stage. The concern she was said to have had in relation to Dr Griffin was conveyed to me by Superintendent Frieberg during this meeting. Superintendent Frieberg also requested through both A/C's that a Ministerial Briefing Note (MBN) be completed for A/C French for the information and consideration of Deputy Commissioner Tracy Linford. I was not involved in preparing or completing the MBN.

(e) It was decided that Superintendent Frieberg would meet with Lara Keller on 24 November 2021 to discuss the issues relating to QH's non-compliance with the

[redacted] .....

David Barry Briese

[redacted] .....

Witness

[redacted]

Response to Sexual Assault Guideline. I understood that was with a view to attempting to change the (existing) process engaged in by QH.

37. As a result of the meeting on 18 November 2021, I provided a briefing note via e-mail to my immediate manager, Detective Acting Superintendent Mark White. It advised of the outcomes of the meeting and actions under consideration going forward. The briefing note was provided for his information and consideration of briefing senior management (i.e. Chief Superintendent and/or Assistant Commissioner, Crime and Intelligence Command). A copy is attached and marked **'Exhibit 8'**.

38. I did not attend a meeting on 2 December 2021. On 7 December 2021, Superintendent Frieberg arranged a meeting under the auspices of the newly formed 'Sexual Assault Investigation Kit' (SAIK) Working Group. This group included members of the QPS Forensics Command including Superintendent Frieberg, Inspector Neville, Inspector Bushell and Sergeant Carolyn Hoffman, as well as members of QH including Ms Keller, Cathie Allen, Justin Howes, Jacqui Thomson and Kirsten Scott. Dr Griffin was an apology for that meeting.

    (a) The group discussed the Response to Sexual Assault Guidelines and the on-going responsibility of collecting reference samples from sexual assault victims. I recall Jacqui Thompson indicated that she could not see a reason why the reference sample could not be obtained at the same time as the completion of the SAIK. There was also discussion by QH in terms of training required, packaging issues and exhibit management. I recall that Inspector David Neville gave an assurance that the QPS would outlay any costs associated with changes in packaging to facilitate a reference sample being included and assuring non-cross contamination. The minutes of this meeting are attached and marked **'Exhibit 9'**.

    (b) Cathie Allen, on behalf of QH, agreed to research costs and bring back that information to the working group. QH and QPS were each to research proposed workflow models for a new DNA reference sample procedure and provide those to the working group for consideration and further discussion. The group agreed to re-convene on 15 December 2021.

39. In relation to the 15 December 2021 meeting:

(a) It was arranged by the SAIK working group chair Superintendent Frieberg.

(b) I attended the 15 December 2021 meeting via the Teams Platform. From my recollection the following people were also present: Superintendent Frieberg, Inspector Neville, Inspector Bushell, Sergeant Hoffman and Senior Sergeant Nicole Townsend, as well as members of QH including Ms Keller, Cathie Allen, Justin Howes, Jacqui Thomson, Kirsten Scott and Dr Griffin.

(c) Further discussion was held in terms of the SAIKs and the issue of obtaining of reference samples from sexual assault victims. It was at this time I recall Dr Griffin challenged the group. He appeared to not believe that the taking of a reference sample in the days after the initial SAIK could be a traumatic experience for a victim. He further stated the guidelines were made in error. Dr Griffin also suggested that to change the current practice (of police obtaining the sample) was an attempt at cost-shifting to QH by QPS. On several occasions Inspector Bushell, Inspector Neville and myself referred to the fact that the Guideline stated that a reference sample was to be obtained by the medical practitioner at the same time as performing the SAIK examination. Dr Griffin admitted he was the co-author of the Guideline. At this point I challenged Dr Griffin's assertion that QPS was attempting a cost shifting exercise. Rather, the intent was to make the process more victim centric. Dr Griffin raised concerns around the medical training to obtain DNA reference samples. He repeated that the Guideline contained a typographical error (that had not been noticed or challenged for seven years). Dr Griffin reiterated the view that there should not be any change to the existing process as QPS could not provide any evidence in support of the suggestion that attendance by police upon a victim, at a later point in time to carry out a further procedure, could be traumatic for that individual. The minutes of that meeting are attached and marked **'Exhibit 10'.**

(d) It was decided that Superintendent Frieberg would raise QPS' concerns through our senior executive management. We believed that, despite all parties previously agreeing to research and implement a change to process in line with the 2014 guideline, Dr Griffin did not seem willing to agree to this. As the

[redacted] .....

David Barry Briese

[redacted] .....

Witness

JUSTICE OF THE PEACE (QUALIF... Reg [redacted] DEPT. OF JUSTICE & ATTORNEY-GE...

Senior Forensic Medical Officer for the State, his support was vital. I am not aware of any further meetings being held as a result of that disagreement.

40. On 20 December 2021, I provided an update to the briefing note that I had provided on 22 November 2021. As I recall Detective Acting Superintendent White was away at the time, so I forwarded the brief to Chief Superintendent Colin Briggs, Assistant Commissioner Innes and Superintendent Frieberg. A copy of that updated briefing note is attached and marked **'Exhibit 11'**.

41. I completed my secondment on the 23rd of December 2021.

Other issues

42. In my opinion, there is no doubt that the SAIK procedure and everyday medical practice are more invasive than the process for obtaining a DNA reference (mouth) sample. However, from a trauma-informed and victim-centric perspective, and in accordance with the National and State strategies and responses to victims of sexual violence highlighted through the Women's Safety and Justice Taskforce reports, the State Government's Sexual Violence Prevention Framework, recommendations of the Royal Commission and the ABC report, I believe that we should be exploring and welcoming any opportunity to limit the performance of any further invasive medical examination of an already traumatized victim. This is also reflected in the Women's Taskforce 'Hear her voice' report 2, volume 1, recommendations 32 and 40.

43. I do not have any experience with the just in case kits, but I think they are a good initiative as long as someone is appropriately following up with the victim as part of that process.

44. I think the current SAIK model, as set out in the Guideline, is good as long as we have appropriately trained investigators and appropriately trained medical examiners readily available, in the nearest location to a victim, so that the procedure can be performed in timely manner.

45. As far as I am concerned the ongoing issue that exists in relation to SAIKs is the fact that investigators and scenes of crime officers are required to attend with the victim or request the victim to attend a police station within seven days after the SAIK examination to have a DNA reference sample obtained.

[redacted] .....

David Barry Briese

[redacted] .....

Witness

JUSTICE OF THE PEACE (QUALIFIED) DEPT. OF JUSTICE Reg.No. [redacted]

Results

46. Given my role I am not required to use QPRIME on a frequent basis, nor do I have recent experience receiving results in the conduct of investigations. While I understand all results received would be available in QPRIME, my understanding - from speaking with investigators - is that when a positive DNA match is made as a result of a SAIK examination, a QPRIME task is sent from QHFSS to the investigating officer via the police district Crime Manager. I do not know whether a task is sent to the investigating officer if no DNA match is detected.

47. My understanding of the result 'No DNA detected' (or similar) is that this means no DNA has been detected as a result of the examination. I believe this is in respect to both the victim and any possible offender. I cannot recall the last investigation in which I may have received a result of this time. Prior to the establishment of the Commission of Inquiry, I was unaware it was possible to obtain a partial or full profile from a sample which initially returned the result 'no DNA detected' and could request FSS conduct further testing.

48. My understanding of the result 'DNA insufficient for further processing' (or similar) is that some type of DNA was obtained but it was insufficient to match it to a profile of any sort. Prior to the establishment of the Commission of Inquiry, I was unaware it was possible to obtain a partial or full profile from a sample which initially returned the result 'DNA insufficient for further processing' and could request FSS conduct further testing.

49. I don't recall receiving any other kinds of results during my investigations.

[redacted] .....

David Barry Briese

[redacted]

Witness

JUSTICE OF THE PEACE (QUALIFIED) Reg No.: [redacted] DEPT. OF JUSTICE & ATTORNEY-GENERAL

50. As regards the provision of DNA results of an examination to a complainant, I have no recent experience in this and nor do I recall same. Speaking with investigators from my area, I understand they may advise the victim of a positive DNA match in the course of conversations during investigations, but not as a matter of priority or policy. Where no DNA match is obtained and the matter involves an unknown offender, then investigators would, as a matter of course, advise the victim, not to affect or influence a victim's decision but to keep them updated as to the investigation.

TAKEN AND DECLARED before me at TOOWOOMBA in the State of Queensland this 22nd day of September 2022

[redacted] .....

David Barry Briese

[redacted] .....

Witness

JP THE PEACE (QUALIFIED)
Reg.No. [redacted]
DEPT. OF JUSTICE & ATTORNEY-GENERAL

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF DAVID BARRY BRIESE
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice number 2022/00160 and 2022/00193 – Requirement to give information in a written statement – dated 09/09/2022 and 16/09/2022
2.	CV of David Barry Briese - undated
3.	Queensland Police Services Sexual Violence Response Strategy 2021 – 2023, Crime and Intelligence Command
4.	Ipswich Sexual Assault Network Meeting Minutes – January 2022, February 2022, March 2022, April 2022, May 2022, July 2022 and August 2022
5.	Email from David Briese (QPS) to QPS District Officers and Crime Coordinators – dated 08/10/2021
6.	Email from David Briese (QPS) to Adam Griffin (QH) – dated 27/10/2021
7.	Email from David Briese (QPS) to Dale Frieberg (QH) – dated 09/11/2021
8.	Email from David Briese (QPS) to Mark White (QPS) – dated 22/11/2021
9.	Sexual Assault Investigation Kit (SAIK) Working Group Minutes – dated 07/12/2021
10.	Sexual Assault Investigation Kit (SAIK) Working Group Transcript/Minutes – dated 15/12/2021
11.	Email from David Briese (QPS) to Assistant Commissioner Crime Intelligence Command (QPS) – dated 20/12/2021

EXHIBIT 1

Notice number: 2022/00160

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: David Briese

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Wednesday 21 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 9th day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/

Schedule of topics for statement

Detective Inspector David Briese

1. State your full name, current position/title and place of work.

Experience and position

2. List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained (if any).

3. Detail your work history.

4. Identify any appointments to any boards and/or committees.

5. Attach a current CV.

6. Identify the duties/responsibilities of your position. Include a description of the geographical area you oversee, and identify who you report to and how many persons report to you.

Forensic medical examinations

7. Explain, to your knowledge, the involvement of the Queensland Police Service (**QPS**) officers in the performance of forensic medical examinations on complainants and witnesses. Detail the process of QPS involvement, from the point of initial contact with the complainant/witness, up until the point at which samples of biological material are submitted to Queensland Health Forensic and Scientific Services. Identify, *inter alia*, where these examinations take place.

8. Identify at which points in your career you investigated sexual offences and were involved directly in the processes described in the paragraph immediately above.

9. Describe how current processes, of the type described in paragraph 7, above, are different to the processes you followed when you were investigating sexual offences?

10. Explain, to your knowledge, the involvement of QPS officers in the performance of forensic medical examinations on suspects and accused persons. Detail the process from the point at which an officer decides a sample should be taken, up until the point at which samples of biological material are submitted to Queensland Health Forensic and Scientific Services. Identify, at the least, where these examinations take place.

11. Describe how current processes, of the type described in the paragraph immediately above, are different to the processes you followed when you were investigating sexual offences?

Sexual Violence Strategy

12. What is the 'Sexual Violence Strategy'? Attach a copy of the Strategy.

13. Detail the full background to the development of, and your involvement with, the Sexual Violence Strategy. Provide specific timeframes of events if possible.

14. Identify who else was involved with developing, preparing and/or implementing the strategy. Explain the role of those persons. In addition, include the involvement of any groups or organisations.

15. If not already discussed in responding to a question above, explain what the Ipswich Sexual Assault Network is, including:

    (a) when and how it was formed;

    (b) who is a member; and

    (c) your role on the network.

16. Attach copies of minutes from each of the meetings of the working group.

17. What impact, if any, has the Ipswich Sexual Assault Network had on the availability and quality of forensic medical examinations for sexual assault complainants in the Ipswich area? Identify any other challenges or issues which exist in conducting forensic medical examinations that the Ipswich Sexual Assault Network has not been able to overcome or improve.

Sexual Assault investigation kits (SAIKs)

18. In about July or August 2021, identify if you commenced a new position, and, if so, what the position was.

19. Identify the problems or issues with sexual assault investigation kits that led to you meeting with Dr Adam Griffin in the second half of 2021? When did you first meet with him in the second half of 2021?

20. In relation to the meeting you had on about 7 September 2021, identify:

    (a) who organised the meeting and for what reason (provide as much background as necessary);

    (b) who attended the meeting;

(c) what was discussed at the meeting; and

(d) what actions followed from the meeting.

21. In relation to the meeting you had on about 6 October 2021, identify:

(a) who organised the meeting and for what reason (provide as much background as necessary);

(b) who attended the meeting;

(c) what was discussed at the meeting; and

(d) what actions followed from the meeting.

22. In relation to contact you had with Dale Frieberg on or about 26 October 2021, identify:

(a) who initiated the contact and for what reason;

(b) whether anyone else was involved in your discussion/contact with Dale Frieberg, and if so, who;

(c) what was discussed; and

(d) what actions followed from the contact.

23. Attach a copy of any notes of, or emails related to, your contact with Dale Frieberg on or about 26 October 2021.

24. In relation to the meeting you had on about 9 November 2021, identify:

(a) who organised the meeting and for what reason (provide as much background as necessary);

(b) who attended the meeting;

(c) what was discussed at the meeting; and

(d) what actions followed from the meeting.

25. In relation to the meeting you had on about 18 November 2021, identify:

(a) who organised the meeting and for what reason (provide as much background as necessary);

(b) who attended the meeting;

(c) what was discussed at the meeting; and

(d) what decisions were made at, and what actions followed from, the meeting.

26. Explain the content of, and the reason for, the briefing you gave on 22 November 2021. Identify who the briefing was made to.

27. In relation to the meeting you had on about 2 December 2021, identify:

    (a) who organised the meeting and for what reason (provide as much background as necessary);

    (b) who attended the meeting;

    (c) what was discussed at the meeting; and

    (d) what decisions were made at, and what actions followed from, the meeting.

28. In relation to the meeting you had on about 15 December 2021, identify:

    (a) who organised the meeting and for what reason (provide as much background as necessary);

    (b) who attended the meeting;

    (c) what was discussed at the meeting; and

    (d) what decisions were made at, and what actions followed from, the meeting.

29. Attach the minutes of each of the meetings referred to above.

30. Identify how you concluded your involvement with this issue. Identify and attach any briefing note (or similar) you prepared or finalised after 15 December 2021 related to the meetings or SAIKs. Who was that note/document provided to, if anyone?

31. When did you finish in the position you held in the second half of 2021?

Other issues

32. Identify and detail any of your concerns with, or criticisms of, the current Queensland SAIK model, the just-in-case kits or the current processes for collecting biological material for forensic DNA testing in sexual assault matters (if not already discussed). Attach any supporting documents.

33. What problems or issues related to SAIKs, or the collection of biological evidence in sexual matters, continue in the Ipswich area?

Notice number: 2022/00193

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: David Briese

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Wednesday 21 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 16th day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/

Schedule of topics for statement

Detective Inspector David Briese

Responses to the following questions should be provided as part of the statement you provide in response to Notice 2022/00160.

Results

1. Are you, or the investigating officers you supervise, notified when the samples from a forensic medical examination have been tested, and are you/your investigating officers notified of the results? If yes, explain how you are notified.

2. What is your understanding of the result '*No DNA detected*' (or similar)? If you have not seen this result-type before, confirm same.

3. What is your understanding of the result '*DNA insufficient for further processing*' (or similar)? If you have not seen this result-type before, confirm same.

4. What other type of results do you recall receiving? What is your understanding of those results?

5. Are the DNA results of the examination passed onto the complainant/witness? If yes, in your experience, does this have an effect on the complainant's decision to proceed with a criminal complaint? If so, explain how.

EXHIBIT 2

[redacted]

4. Qualifications

Please list any internal, tertiary or other courses undertaken or currently being attempted (latest first).
Insert the appropriate course, year(s) and results (if applicable) in the corresponding cell.
I certify that I have completed the qualification requirements (where applicable) for appointment to the applied for position. ☒

[redacted]

Relevant tertiary course or qualifications (incl. external institutions)

Course/Qualification	Year commenced	Year completed	Institution
Master in Leadership and Management (Policing and Security)	**2017**	**2020**	**Charles Sturt University**
Bachelor of Education	**1996**	**1998**	**University of Southern Queensland**

5A. Service History – Substantive Placements

Date of induction: **04/12/1998** Current tenure expiration date*: **N/A**

Please provide BRIEF details of your relevant service history. Abbreviate where necessary.
Insert the appropriate period, rank, function and location (latest first) in the corresponding cell.
*This is a mandatory field. If not applicable, please enter 'N/A'.

Period (latest first)	Rank	Function	Location
29/01/2018-present	**Detective Inspector**	**Crime Inspector**	**Ipswich District**
04/05/2016-01/12/2017	**Detective S/Sgt**	**Officer in Charge**	**Maryborough CIB**
01/10/2012-01/05/2016	**S/Sgt**	**Officer in Charge**	**Wide Bay Burnett TCS**
25/09/2008-30/09/2012	**Detective Sgt**	**Officer in Charge**	**St George CIB**
05/03/2007-24/09/2008	**DSC**	**Investigator**	**Toowoomba CIB**
06/02/2004-04/03/2007	**PCC**	**Investigator**	**Yeppoon CIB**
13/11/2001-05/02/2004	**PCC**	**Investigator**	**Toowoomba CIB**
24/12/1999-12/11/2001	**Constable**	**General Duties**	**Toowoomba**
05/12/1998-24/12/1999	**FYC**	**First Year Constable**	**Gold Coast District**

5B. Service History – Relieving / Secondment Placements

Please provide BRIEF details of your relieving and secondment where relevant to the key selection criteria. Abbreviate where necessary.

Period (latest first)	Rank	Function	Location
14/05/2022-30/05/2022	Supt	District Officer	Darling Downs District
25/12/2021-10/01/2022	Det Supt	Regional Crime and Intelligence Coordinator	Brisbane Region
24/08/2021-24/12/2021	Det Insp	Operations Manager, Child Abuse and Sexual Crime Unit	Crime and Intelligence Command
01/07/2020-04/07/2021	Det Supt	Regional Crime Coordinator	Southern Region
30/11/2020-22/12/2020	Det Supt	Regional Crime Coordinator	Southern Region
06/07/2020-28/07/2020	Det Supt	Regional Crime Coordinator	Southern Region
06/06/2020-16/06/2020	Det Supt	Regional Crime Coordinator	Southern Region
06/03/2017-07/04/2017	Inspector	Maryborough PG	Maryborough
31/01/2017-19/02/2017	Inspector	Bundaberg PG	Bundaberg
03/01/2017-24/01/2017	Det Insp	Crime and Support Services Inspector	Wide Bay Burnett
07/11/2016-01/12/2017	Det Insp	Crime and Support Services Inspector	Wide Bay Burnett
20/06/2016-07/10/2016	Inspector	Bundaberg PG	Bundaberg
06/06/2016-19/06/2016	Det Insp	Crime and Support Services Inspector	Wide Bay Burnett
01/06/2015-05/02/2016	Det Insp	Crime and Support Services Inspector	Wide Bay Burnett
08/11/2014-23/11/2014	Det Insp	Crime and Support Services Inspector	Wide Bay Burnett
17/04/2014-30/05/2014	Inspector	Gympie PG	Gympie
17/02/2014-28/03/2014	Inspector	Maryborough PG	Maryborough
23/09/2013-29/11/2013	Inspector	Maryborough PG	Maryborough
08/07/2013-13/09/2013	Det Insp	Crime and Support Services Inspector	Wide Bay Burnett
23/02/2013-12/05/2013	Inspector	Maryborough District	Maryborough
20/02/2012-14/04/2012	S/Sgt	Officer in Charge	St George
01/08/2011-23/09/2011	S/Sgt	Officer in Charge	St George
28/03/2011-22/04/2011	Sgt	Support Officer to District Officer	Roma
25/06/2010-16/07/2010	S/Sgt	Officer in Charge	St George
08/03/2008-21/03/2008	Det Sgt	Team Leader	Toowoomba CIB
05/01/2008-01/02/2008	Det Sgt	Team Leader	Toowoomba CIB
28/07/2007-10/08/2007	Det Sgt	Team Leader	Toowoomba CIB

28/07/2007-10/08/2007	Det Sgt	Team Leader	Toowoomba CPIU
23/06/2007-06/07/2007	Det Sgt	Team Leader	Toowoomba CIB
05/08/2006-26/01/2007	Det Sgt	Officer in Charge	Yeppoon CIB
02/01/2006-31/03/2006	PC Sgt	Officer in Charge	Yeppoon CIB
18/04/2005-13/05/2005	PC Sgt	Officer in Charge	Yeppoon CIB
04/02/2005-18/02/2005	PC Sgt	Officer in Charge	Yeppoon CIB
14/08/2004-26/08/2004	PC Sgt	Officer in Charge	Yeppoon CIB

[redacted]

Appli

[redacted]

[redacted]

[redacted]

OFFICIAL

EXHIBIT 3

QPS SEXUAL VIOLENCE RESPONSE STRATEGY 2021–2023

Crime and Intelligence Command

TABLE OF CONTENTS

INTRODUCTION 2
Scope of the Strategy 2
Drivers for Change 2
QPS Sexual Violence Response Strategy 2021-2023 5
Actions to Date 5
Relationship to State and National Priorities and Plans 7
QPS Capability Owner 8
Strategy Development 9
DEFINING SEXUAL VIOLENCE 10
SEXUAL VIOLENCE PREVALENCE 11
COLLABORATIVE MULTIAGENCY RESPONSE 12
Our role in the system 12
PRINCIPLES UNDERPINNING OUR APPROACH 13
STRATEGIES AND ACTIONS 14
1. Advance Our People 15
2. Enhance Our Response 17
3. Empower Our Community 19
4. Maximise Our Relationships 21
TIMELINE 23
CONCLUSION 24
REFERENCES 25

INTRODUCTION

The Queensland Police Service (QPS) commitment to deliver a victim-centric, trauma-informed response to sexual violence will protect our community, strengthen public confidence and build on Queensland and National responses to reduce sexual violence. This *Sexual Violence Response Strategy 2021-2023* aims to enhance the Service's capacity to prevent, disrupt, respond and investigate sexual violence, put victims first and hold perpetrators accountable. It is important to note the *Purpose, Vision, Priorities/Objectives* and *Underlying Principles* relate to this Strategy only.

Purpose	Vision
Together we prevent, disrupt, respond to and investigate sexual violence by putting victims first and holding perpetrators accountable.	A victim-centric, trauma-informed sexual violence response that protects the community, strengthens public confidence, and contributes to Queensland and National integrated action plans.

The QPS has set four strategic priorities to achieve its vision:

1. **Advance Our People** towards applying a victim-centric, trauma-informed approach when responding to sexual violence.
2. **Enhance Our Response** by improving our capability to prevent, disrupt, respond to and investigate sexual violence in Queensland.
3. **Empower Our Community** and reduce community harm through proactive engagement and education, and promoting access to victim support services.
4. **Maximise Our Partnerships** with government and non-government agencies, and academia to achieve our vision.

Scope of the Strategy

This strategy relates to sexual violence involving victims over the age of consent (16 years of age or older). Refer to page 9 for our working definition of sexual violence.

Drivers for Change

The QPS recognises the importance of its response to victims of sexual violence. Police assume a critical role for victims during a highly traumatic time and within an unfamiliar criminal justice system. Recent reporting revealed a perception within some sectors of our community that police and the justice system are not

uniformly meeting the needs of victims. The QPS has heard these community concerns and is committed to improving its response to victims of sexual violence:

Royal Commission – The Royal Commission into Institutional Responses to Child Sexual Abuse (Royal Commission) gathered research, explored case studies, interviewed survivors and experts in the areas of prevention, support, investigation and prosecution. The Criminal Justice Report, published in August 2017, identified inadequacies in institutional (including police and justice system) responses to victims, such as[1]:

- lack of empathy for victims;
- failing to adequately address their needs in a trauma informed way; and
- victims feeling disempowered during investigation and prosecution processes.

Sexual Violence Prevention Framework – In October 2019 the then Minister for Child Safety, Youth and Women, and the Minister for Prevention of Domestic and Family Violence published the *Prevent. Support. Believe. Queensland's Framework to address Sexual Violence* (the Framework).[2] The Framework establishes priorities for action that guide the Queensland Government's approach to preventing and responding to sexual violence. The Framework identified three priority areas: Prevention; Support and Healing; and Accountability and Justice.

The QPS has responsibility for three action items from Priority Three (Accountability and Justice) under the Framework:

- To develop an online reporting form to provide an alternate avenue for victims of sexual assault to report to police;
- To provide victim-centric and trauma-informed training to all police officers; and
- To conduct a pilot program of a dedicated Sexual Violence Liaison Officer (SVLO) within the Townsville District, and to conduct a comprehensive evaluation to determine the feasibility of the model and resourcing needs for expansion across all districts. Logan District was also added as a trial site during implementation.

Media – On 28 January 2020, ABC News published a report outlining its analysis of sexual assaults reported to police in Australia between 2008 and 2017.[3] It was generally critical of the national policing response to sexual assault. The findings for Queensland included:

- In 2018, 40% of sexual assault reports were either unfounded or withdrawn;
- In 2018 Queensland recorded the highest rate of reports withdrawn across Australian jurisdictions (33%;) and
- The Gold Coast City Council area recorded 44% of reports withdrawn.

Office of Health Ombudsman – On 5 June 2020, correspondence was received from the Office of the Health Ombudsman (OHO) raising concerns about the quality of some police investigations into health practitioners accused of sexual offences. The OHO identified two recurrent and related concerns associated with these police investigations:

- Inconsistency in police decision-making whether to prosecute; and
- Victims being discouraged from pursuing a prosecution.

The OHO infers both issues arise from a mistaken belief by some police there is a limited prospect of a successful prosecution based on the uncorroborated testimony of an otherwise credible victim; and, if the practitioner was found guilty, there is a limited likelihood of a sentence of imprisonment being imposed.

The Women's Safety and Justice Taskforce – On 11 March 2021, the Queensland Government announced a wide-ranging review into the experiences of women and girls with the criminal justice system, both as victims and offenders. The Women's Safety and Justice Taskforce (the Taskforce) was established to undertake the review. In June 2021, the Taskforce released its second discussion paper seeking community feedback about women's and girls' experiences with the criminal justice system regarding sexual violence.[4] The Taskforce specifically references recognising and responding to trauma, including trauma-informed care and practice. Further, the Taskforce indicated they will examine several other themes in the discussion paper including:

- Community understanding of sexual offences and barriers to reporting;

- Community attitudes to sexual violence against women and girls;
- Police response, investigation and charging of sexual offences;
- Legal and court processes for sexual offences;
- Drivers behind women and girls in the criminal justice system and their engagement with police and the legal system; and
- Women and girls experience of imprisonment and release into the community.

Findings and recommendations from the Taskforce may impact the criminal justice system broadly and the QPS specifically, informing responses to women and girls who are victims of sexual violence or who are accused of crimes.

QPS Sexual Violence Response Strategy 2021-2023

The *QPS Sexual Violence Response Strategy 2021-2023* (the Strategy) provides a framework to address the findings of previous and current inquiries to ensure continuous improvement in QPS responses to victims of sexual violence. The Strategy complements the work of the Royal Commission, Taskforce and the Queensland Government Framework while focussing on the role and responsibilities of police to prevent, disrupt, respond to and investigate sexual violence.

Actions to Date

These recent drivers of change reflect comparable insights revealed by the 2003 Crime and Misconduct Commission report *Seeking Justice: An Inquiry into how sexual offences are handled by the Queensland criminal justice system*[5] (Seeking Justice). As a result of the report, the QPS initiated significant changes in how it responded to sexual violence.

Included in these reforms was improved investigator training to better understand the impacts of sexual violence and enhance investigator responses. The Understanding Sex Crimes Course was created and delivered to all investigators across the then Juvenile Aid Bureau (now Child Protection and Investigation Units - CPIU) and Criminal Investigation Branches (CIB). At the time, this was a standalone course with limited resourcing to reach future investigators, frontline

sworn officers and/or staff members who are potentially the first QPS representatives to have interaction with victims of sexual violence.

In response to the Seeking Justice report, the QPS and the Office of the Director of Public Prosecutions (ODPP) also formed the Failed Sexual Offence Prosecutions Steering Committee and associated Working Group which included in their terms of reference an assessment of failed sexual offence prosecutions and whether systemic issues existed in the investigation and prosecution of sexual offences. The Steering Committee and Working Group continues to meet as required. To date, no systemic issues have been identified. Practice issues have been identified and action taken to address them.

In 2016, after identifying a need to extend the work started by the Understanding Sex Crimes Course, the QPS commenced delivering the Investigating Sexual Assault – Corroborating and Understanding Relationship Evidence (ISACURE) course to investigators. This course includes presenters with lived experiences, professionals in the field of trauma and supporting victims, and practical training in interviewing victims of sexual violence. ISACURE continues to be delivered to investigators from around the State and has been independently evaluated as improving the police response to sexual violence.

Since 2019, the QPS has continued to build its suite of initiatives to respond to sexual violence including:

- Developed and implemented an online sexual assault reporting form to provide an alternate reporting avenue for victims of sexual violence. This finalised one of the actions under the Sexual Violence Prevention Framework as well as meeting Royal Commission recommendations;
- Conducted a trial of a dedicated Sexual Violence Liaison Officer (SVLO) in Townsville and Logan Districts, in accordance with action 3.2.1 of the Framework;
- Completed a comprehensive evaluation of the SVLO trial with recommendations for enhancing the QPS response to victims of sexual violence, in accordance with action 3.2.1 of the Framework;
- Commenced development and delivery of a QPS state-wide, sustainable, victim-centric and trauma-informed training program in partnership with

the University of Queensland, in accordance with Royal Commission recommendations; and

- Established a Sexual Violence Prevention Working Group to lead and inform the Service-wide response to sexual violence.

While the Service has responded to previous calls for reform of its response to sexual violence, the QPS recognises that sustaining and building improvements requires a coordinated response. This Strategy represents the mechanism through which the Service will harness and coordinate activity to deliver, and continually improve, its professional, victim-centric and trauma informed responses to victims of sexual violence. The Detective Superintendent, Child Abuse and Sexual Crime Group (CASCG), Crime and Intelligence Command (CIC) will assume the role of capability owner for the Strategy to coordinate fit for purpose, agile and flexible strategies supported by clear actionable tasks implemented across the State. This role includes consistent messaging about the Service's commitment to professional, victim-centric and trauma informed responses to sexual violence.

Relationship to State and National Priorities and Plans

The QPS *Sexual Violence Response Strategy 2021-2023* aligns with a broad range of State and National reforms, frameworks, action plans and strategies currently being implemented across Australian jurisdictions (see Figure 1).

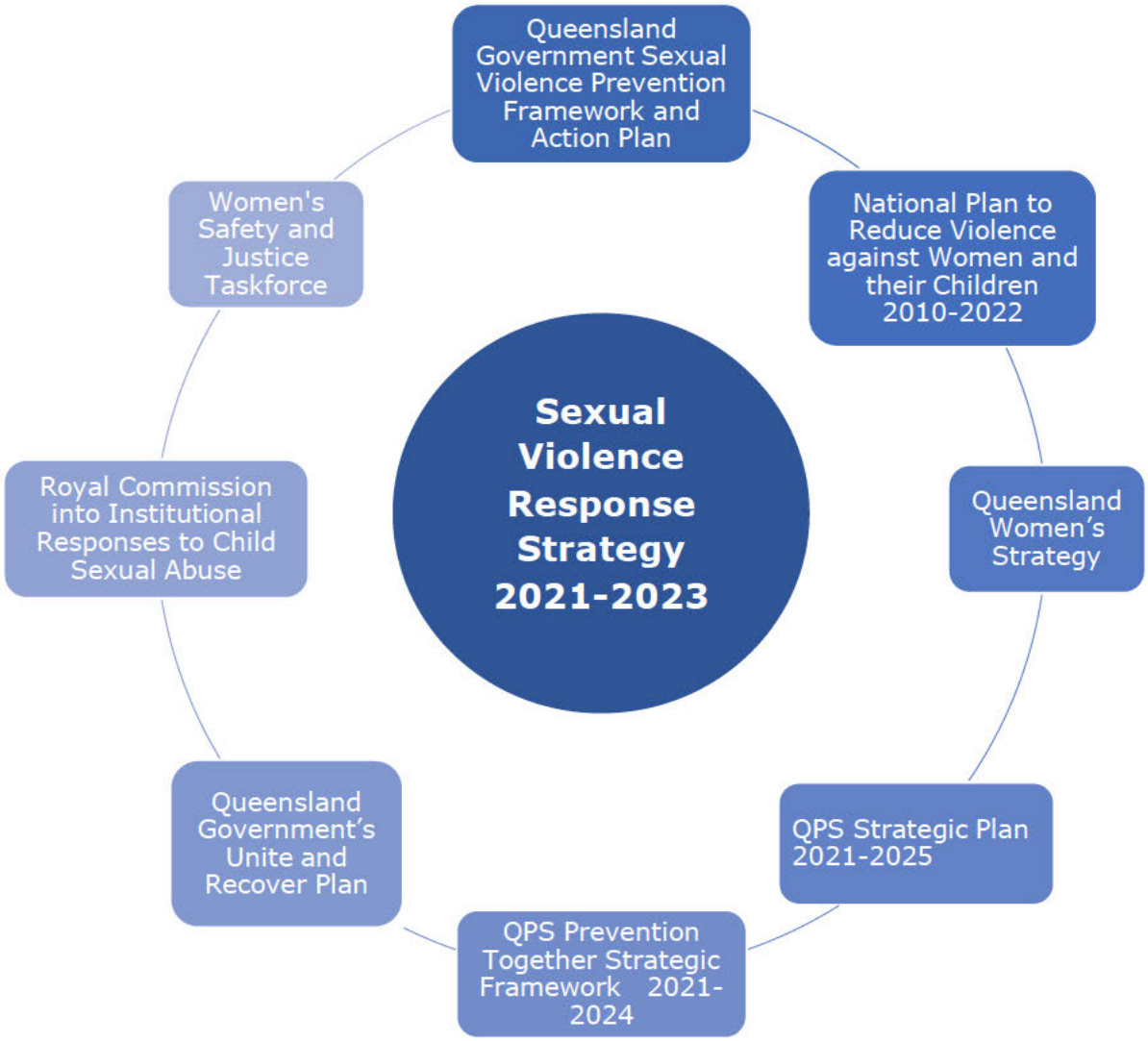


Figure 1. State and National priorities/plans

QPS Capability Owner

The Child Abuse and Sexual Crime Group (CASCG) is a specialist group within the Crime and Intelligence Command (CIC). The CASCG aims to protect children and the community by identifying, responding to and preventing physical and sexual offending. The Sexual Crime Unit, CASCG is responsible for responding to serious or complex cases of serial rape, sexual assault and online sex crimes against adult victims, and providing specialist investigative assistance to regions.

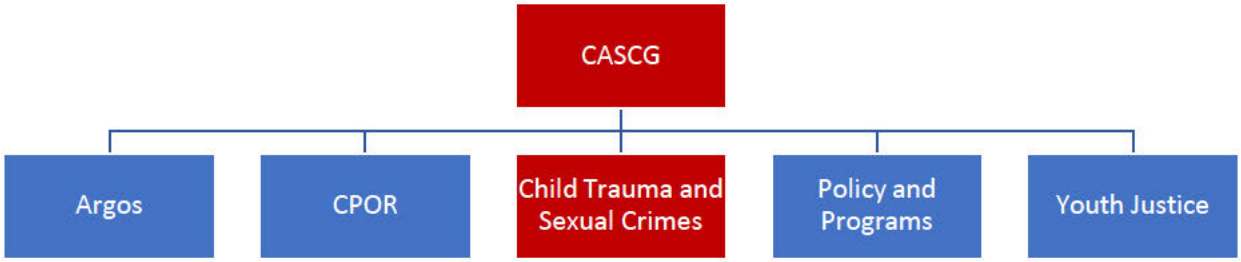


Figure 2. CASCG Organisational Chart

In June 2021, following CIC's Commissioner's Performance Review, CASCG assumed responsibility for the Service's sexual violence capability. This role includes, but is not limited to, coordinating specialist sexual violence advice, training, intelligence and best-practice investigations state-wide, and managing the implementation and monitoring of this Strategy.

Strategy Development

The objectives, strategies and action items that comprise the Strategy were developed in consultation with subject matter specialists from Commands, Regional/District representatives, and a rapid review of internal and external sources. This includes sexual violence strategic plans from other National and international jurisdictions, Queensland and national frameworks, internal evaluations and research evidence.

DEFINING SEXUAL VIOLENCE

Sexual Violence is defined as any unwanted sexual behaviour towards another person and encompasses a range of offence types.[6] The scope of this strategy is sexual violence relating to victims over the age of consent (16 years of age or older), and encompasses the following offence types:

- **Sexual assault**[7] refers to any unwanted sexual act that is forced on a person without their consent – including where intimidation, physical force, or coercion are involved. Sexual assault includes rape and attempted rape, as well as unwanted sexual touching or groping, or being forced to perform a sexual act on another person. Rape is a term used when sexual penetration is involved.
- **Youth sexual violence and abuse**[8] is defined as sexual contact between persons where either the perpetrator or the victim is under 18 years of age and where that contact is non-consensual. Such contact is non-consensual if either person is under 16 years of age (out of scope) or lacks the capacity to consent, or if a situation of imbalance of power exists, and if there is the presence of a threat or coercion to either person.
- **Technology-facilitated sexual violence**[9] is a range of behaviours where digital technologies are used to facilitate both virtual and face-to-face sexually based harms. This can include unwanted sexting, cyberstalking using mobile phones and social media technology, harassing and repetitive text messages or phone calls of a sexual nature, using technology to record sexual activity without consent, creating fake sexual images or videos, and sharing sexual images or video without consent of those involved, often called image-based abuse.
- **Intimate partner sexual violence**[10] refers to the perpetration of sexual acts without consent in intimate relationships (including by cohabiting and non-cohabiting partners, boyfriends/girlfriends, spouses or dates). It may involve physical force or psychological/emotional coercion, unwanted sexual acts, or tactics used to control decisions around reproduction. Intimate partner sexual violence often occurs alongside other forms of domestic and family violence, and puts a victim at much higher risk of being killed.[11]

SEXUAL VIOLENCE PREVALENCE

NATIONAL

27,505

Sexual assault victims in FY2019/20. This equates to 107 victims per 100,000 population[1]

5% Average yearly increase in victims since FY2014/15

4 in 5 of victims are female[2]

1 in 3 sexual assaults are domestic or family violence related (intimate partner sexual violence)[3]

Significantly under-reported
A FY2019/20 survey estimates **62,700** adults experienced sexual assault. Only **30%** reported the most recent incident to police[4]

67% sexual assaults occur in residential locations[5]

Note: There is no nationally consistent method of capturing sexual violence. Therefore these statistics focus on 'sexual assault'.

QUEENSLAND

6,870

Sexual violence related offences* involving victims 16 years and over in 2020[6]

16% Increase compared to 2017 (n=5,908)

4 in 5 of victims are female[9]

96% of offenders are male[10]

35% **withdrawn or unfounded** in 2020 — One of the highest proportions across Australian jurisdictions[7]

Rape myths, Negative attitudes by police are some of the key hurdles that stop victims feeling believed and supported[8]

Population groups at a higher risk of experiencing sexual violence[11]:
- First Nations people
- People with disability
- LBTIQ+ people
- People from CALD backgrounds
- Sex workers
- People in the custodial system

*Includes all offence codes under 'sexual offences' except online report – sexual assault, indecent treatment of children, and unlawful carnal knowledge.

^ includes rape and attempted rape complaints

1 Australian Bureau of Statistics – Victims of Sexual Assault Australia ABS Recorded Crime Victims 2019 -20
2 Australian Bureau of Statistics – Victims of Sexual Assault Australia ABS Recorded Crime Victims 2019 -20
3 Australian Bureau of Statistics – Victims of Sexual Assault Australia ABS Recorded Crime Report 2019.
4 https://www abs.gov.au/statistics/people/crimeand-justice/crime-victimisation-australia/2019-20#sexual-assault
5 Australian Bureau of Statistics – Victims of Sexual Assault Australia ABS Recorded Crime Report 2019.
6 Queensland Police Service. Sexual Offences data extract [10 June 2021]
7 Queensland Police Service. Sexual Offences data extract [10 June 2021]; https://www.abc net.au/news/202601-28/how-police-are-failing-survivors-of-sexual-assault/11871364
8 Scott, R., Douglas, H., & Goss, C. (2017). Prosecution of Rape and Sexual Assault in Queensland: Report on a Pilot Study
9 Queensland Police Service. Sexual Offences data extract. Time period: CY2017-2020. [10 June 2021]
10 Queensland Government Statisticians Office – Crime Report 2019
11 Prevent. Support. Believe. Queensland's Framework to address Sexual Violence

COLLABORATIVE MULTIAGENCY RESPONSE

Due to the often complex nature of sexual violence offences, integrated multi-agency responses are imperative.[12] A broad range of government and non-government agencies assume key roles in responding to sexual violence, including the Queensland Police Service, Queensland Health, the Department of Justice and Attorney-General, Department of Communities, Disability Services and Seniors, Department of Children, Youth Justice and Multicultural Affairs, and non-government organisations who deliver specialist sexual assault support services.[13] While each agency has their own role within the system, effective inter-agency partnerships will enable the delivery of a holistic response that supports victims through the criminal justice process, from their first point of contact, to investigation, prosecution and beyond.[14]

Our role in the system

The QPS assumes a unique and important role within the multi-agency response, including:

- **Identify** – Provide avenues for victims to report sexual violence;
- **Investigate** – Investigate allegations, identify the suspect/offender, gather evidence;
- **Protect** – Protect the victim from further harm;
- **Prosecute** – Prosecute the offender;
- **Support** – Support the victim through the investigation and court process, refer victim to appropriate external support services, keep the victim informed, provide safety advice as appropriate;
- **Educate** – Deliver community education and awareness campaigns, as well as inform and promote partner agency information and education campaigns;
- **Prevent** – Leverage intelligence and research to promote primary, secondary and tertiary prevention messages and strategies to promote community safety; and
- **Disrupt** – Develop targeted strategies to interrupt facilitators of crime and/or patterns in offending to promote the safety of identifiable populations in defined situations and/or at risk of victimisation.

PRINCIPLES UNDERPINNING OUR APPROACH

The principles underpinning this strategy align with the QPS purpose, "*Together we prevent, disrupt, respond and investigate*" (see Figure 3 below).

Prevent Work together to reduce harm, trauma and crime to enhance community safety.	**Disrupt** In collaboration, conduct intelligence-led, early intervention activities to reduce crime opportunities that harm our community
Respond Provide timely and coordinated interventions to address real or perceived issues to protect our community.	**Investigate** Objectively and impartially examine and analyse an event or crime to achieve a just outcome in service of our community.

Figure 3. Principles underpinning our approach

Translation of these principles is informed by the following practice orientation:

- **Victim-centric –** prioritisation of victim needs using methods designed to reduce ongoing trauma.[15]
- **Trauma-informed –** a strengths-based framework grounded in an understanding of and responsiveness to the impact of trauma, emphasising physical, psychological, and emotional safety for everyone; and one that creates opportunities for victims to build a sense of control and empowerment.[16]
- **Evidence-informed –** approaches that combine researched/evaluated interventions to guide, inform and build on responses and services for victims.[17]
- **Consideration of human rights –** respect, protect and promote the human rights of individuals in alignment with the *Human Rights Act 2019*.[18]

STRATEGIES AND ACTIONS

Purpose	Vision
Together we prevent, disrupt, respond to and investigate sexual violence by putting victims first and holding perpetrators accountable.	A victim-centric, trauma-informed sexual violence response that protects the community, strengthens public confidence, and contributes to Queensland and National integrated action plans.

The Queensland Police Service has established four interconnected strategic priorities to achieve this purpose and vision:

Advance Our People	Enhance Our Response	Empower Our Community	Maximise Our Relationships
Advance our workforce towards applying a victim-centric, trauma-informed approach when responding to sexual violence.	Improve our capability to prevent, disrupt, respond to and investigate sexual violence in Queensland.	Empower the Queensland community and reduce community harm through proactive engagement and education, and promoting access to victim support services.	Maximise partnerships with government and non-government agencies, and academia to achieve our vision.

Priorities, Strategies, Action Plan & Success Measures

The strategies, action items, and success measures underpinning each objective/priority area are outlined in the following section (refer to Appendix A for this information presented in a table format).

1. Advance Our People

Advance our workforce towards applying a victim-centric, trauma-informed approach when responding to sexual violence.

Advancing the Service's workforce towards applying a victim-centric, trauma-informed approach[19] when responding to sexual violence represents a key priority and aligns with the QPS' *Prevention Together Strategic Framework 2021-2024*, as well as national and international best-practice. The Queensland Government Sexual Violence Prevention Framework identified the need for the broader justice system, including police, to improve responses to victims.[20] This starts with the first point of contact with a victim through to the investigation and prosecution processes. A key opportunity exists for the QPS to enhance the training of members when interacting with victims, conducting sexual violence related investigations and responding to vulnerable victims. This also includes addressing any perceived beliefs about prospects for successful prosecution for sexual violence offences.[21] Advancing the Service towards a victim-centric, trauma-informed response to sexual violence will enhance our response to victims, break down barriers to reporting,[22] and address concerns regarding withdrawn and unfounded complaints.[23] This strategic priority will be achieved through the following strategies.

We Aim To

1.1. Drive cultural change regarding sexual violence responses through leadership and victim-centric, trauma informed practices.

1.2. Develop, implement and evaluate specialist sexual violence training that is consistent with best-practice and evidence informed.

1.3. Continually review and benchmark sexual violence training needs of QPS members to remain current with evidence-informed responses and State/National frameworks.

1.4. Promote strategies consistent with the QPS Our People Matter Strategy to support the wellbeing of our members responding to sexual violence.

What Success Looks Like

- ✓ An increase in frontline QPS members completing victim-centric, trauma-informed training.
- ✓ An increase in frontline QPS members applying a victim-centric, trauma-informed approach in responding to sexual violence.
- ✓ An increase in investigative skills for responding to sexual violence.

- ✓ QPS members responding to sexual violence are supported.

Action Plan

The following section details actions the QPS has already progressed, as well the next steps to be taken in order to realise this strategic priority. The following action items align to the strategies detailed in this section.

In progress

- ✓ Continue to drive cultural change through the QPS Sexual Violence Working Group.
- ✓ Drive change through the QPS and ODPP Failed Sexual Offence Prosecutions Steering Committee and Working Groups.
- ✓ Continue delivering ISACURE training to investigators across the State.

Next Steps

- ☐ Develop internal communication products and resources to increase awareness of QPS members in relation to our response to sexual violence.
- ☐ Support District Officers to drive cultural change within their areas.
- ☐ Deliver mandatory trauma-informed, victim-centric training to all frontline QPS members.
- ☐ Evaluate mandatory trauma-informed, victim-centric training at each phase (2021-2022), to inform enhancements as required.
- ☐ Engage with the Safety & Wellbeing Group (OCC) to promote wellbeing initiatives for QPS members responding to sexual violence.

2. Enhance Our Response

Enhance our capability to prevent, disrupt, respond to and investigate sexual violence in Queensland.

Delivering consistent professional responses to sexual violence across the State will be achieved by designating the Detective Superintendent, CASCG as the Service's capability owner for sexual violence. This capability will enable central coordination of the Service's professional and evidence-informed response to sexual violence; support QPS members to build and apply their responses to sexual violence; promote victim-centric trauma-informed practice; and expand innovative QPS-led victim support models. The QPS is committed to enhancing its data capture of sexual violence offences to build its evidence base, inform insight and foresight of sexual violence issues, and produce evidence-based and intelligence-based responses to sexual violence. Enhancing our capability to prevent, disrupt, respond to and investigate sexual violence will be realised through the following strategies.

We Aim To

2.1 Designate the CASCG as the organisation's capability owner for specialist sexual violence advice, training, intelligence and investigations.

2.2 Expand the Sexual Violence Liaison Officer (SVLO) capability or other innovative victim support models across QPS regions.

2.3 Provide leadership and support to areas undergoing thematic Sexual Violence Commissioner Performance Reviews, and future Business Unit Reviews.

2.4 Develop and continually review organisational capabilities and processes to enhance service delivery and support QPS members responding to sexual violence.

2.5 Establish consistent and high quality data recording practices for sexual violence occurrences to support decision making and evaluate service delivery.

2.6 Utilise research and intelligence to inform prevention, disruption, response and investigation by QPS.

What Success Looks Like

- ✓ Designation of CASCG as the QPS capability owner for specialist sexual violence advice, training, intelligence and investigations.
- ✓ An improvement in understanding of, and ability to effectively respond to, sexual violence.
- ✓ The expansion of the SVLO or other innovative victim support model across QPS regions.
- ✓ QPS members have access to current data to inform decision making and investigative responses.
- ✓ Commissioners Performance Reviews and Business Unit Reviews drive continuous improvement across the Service.

Action Plan

The following section details the actions that the QPS has already progressed, as well the next steps to be taken in order to realise this strategic priority. The following action items align to the strategies detailed in this section.

In progress

- ✓ Designate CASCG as capability owner for the organisation's sexual violence response.
- ✓ Establish a SVLO implementation plan across QPS regions.

Next Steps

- ☐ CASCG to engage with and support Regions participating in thematic Sexual Violence Commissioner Performance Reviews, and future Business Unit Reviews.
- ☐ Develop a dashboard to assist Districts in monitoring sexual violence reports and outcomes.
- ☐ Review data relating to sexual violence offences to gauge progress of the Strategy.
- ☐ Review data capture of sexual violence offences, including finalisations; internet-facilitated offences; and national data recording consistencies.
- ☐ Develop evaluation framework for the Sexual Violence Response Strategy 2021-2023.
- ☐ Evaluate the Sexual Violence Response Strategy 2021-23.
- ☐ Develop the next Sexual Violence Response Strategy.
- ☐ Engage with Commissioner's Performance Review Unit to develop thematic reviews on sexual violence.

3. Empower Our Community

Empower the Queensland community and reduce community harm through proactive engagement and education, and promoting access to victim support services.

The Queensland Framework highlights the important role the community assumes in preventing sexual violence, particularly in changing attitudes that enable the behaviour.[24] This includes perceptions of gender equality, tolerance of aggression and violence, and treating sex and sexual violence as taboo and secret.[25] Empowering the community represents a key opportunity for the QPS, in partnership with key stakeholders, to develop and implement prevention strategies tailored towards keeping communities safe, and reducing harm and victimisation; awareness of our role in responding to sexual violence; and options for reporting offences.[26] This strategic priority will be realised through the following strategies.

We Aim To

3.1 Increase community awareness of the QPS role as part of an integrated system response to sexual violence.

3.2 Support tailored strategic and evidence-informed prevention activities for diverse population groups in collaboration with government and non-government agency partners.

3.3 Increase awareness of identified and anonymous reporting avenues, and alternative justice options.

What Success Looks Like

- ✓ An increase in reporting of sexual violence in Queensland through identified and anonymous avenues.
- ✓ An increase in victim satisfaction with the QPS.
- ✓ A reduction in revictimisation, particularly those at higher risk of experiencing sexual violence, including First Nations people, people with disability, LBGTIQ+ communities, CALD communities, sex workers, and people in custody.
- ✓ An increase in community engagement and education activities.

Action Plan

The following section details the actions that the QPS has already progressed, as well the next steps to be taken in order to realise this strategic priority. The following action items align to the strategies detailed in this section.

In progress

- ✓ Implement the sexual violence prevention communication strategy (see appendix C).
- ✓ Engage with stakeholders to provide information about reporting options, sexual violence prevention and personal safety.

Next Steps

- ☐ Enhance profile during Sexual Violence Awareness Month (October) in collaboration with partner agencies.
- ☐ Community engagement with the CALD community, vulnerable persons (including people with disabilities, mental health and the elderly) and sex workers.

4. Maximise Our Relationships

Maximise partnerships with government and non-government agencies, and academia to achieve our vision.

Responding to sexual violence requires a holistic approach involving multi-agency collaboration.[27] The effective response to sexual violence involves leveraging the expertise of a range of government and non-government agencies in relation to community prevention, providing support to victims, investigating reported offences and prosecuting offenders.[28] Research evidence indicates an integrated system response facilitates shared knowledge and communication of a victim's context and needs.[29] To assist the QPS in carrying out its role within an integrated response (i.e. supporting victims and holding perpetrators to account), the QPS will maximise relationships with relevant stakeholders by undertaking the following strategies:

We Aim To

4.1 Maintain our relationships with:
- government and non-government agencies to discuss and address issues regarding responses to sexual violence.
- internal, State, and national working groups to remain current with sexual violence responses and emerging issues
- universities and other research institutions to drive innovative research and development of evidence-based responses
- national and international law enforcement partners to enhance cross-jurisdictional response capabilities.

4.2 Enhance collaboration and integration with partner agencies to provide specialist support to victims and offender, including through police referrals.

What Success Looks Like

- ✓ A more holistic response to sexual violence.
- ✓ Promotion and implementation of multi-agency models across QPS regions as a result of effective relationships (e.g. Sexual Assault Response Team).
- ✓ An improvement in responses to victims through the investigation and prosecution processes as a result of maximising partnerships with the Office of the Director of Public Prosecutions.

Action Plan

The following section details the actions that the QPS has already progressed, as well the next steps to be taken in order to realise this strategic priority. The following action items align to the strategies detailed in this section.

In progress

- ✓ Maintain stakeholder engagement through State and national Working Group meetings.
- ✓ Engage with academia to conduct research to better understand sexual violence, inform development of models, and evaluate projects.
- ✓ Continue engagement with ANZPAA in relation to national sexual violence responses and other vulnerable person action plans.

TIMELINE

The successful delivery of the *QPS Sexual Violence Response Strategy 2021-2023* will involve a phased approach. The following timeline presents short, medium and long-term action items that will be implemented across the four strategic priorities.

Next Steps

- Evaluate mandatory victim-centric, trauma-informed training.
- CASCG to engage with and support regions participating in thematic Sexual Violence Commissioner Performance Reviews, and future Business Reviews.
- Review data relating to sexual violence offences to gauge progress of the Strategy
- Engage with academia to conduct research to better understand sexual violence, inform development of models, and evaluate projects
- Develop the next Sexual Violence Response Strategy.

2021 - 22 (short term)

In Progress

- Designate the CASCG as the QPS capability owner for sexual violence response.
- Drive cultural change through the QPS Sexual Violence Working Group.
- Establish a SVLO implementation plan across QPS regions.
- Continue delivering ISACURE training to investigators across the state.
- Implement the sexual violence prevention communication strategy.
- Drive change through the Failed Sexual Offence Prosecutions Steering Committee and Working Group.
- Continue engagement with State/National working groups, academia and ANZPAA.
- Engage with stakeholders to provide information about reporting options, sexual violence prevention and personal safety.

Next Steps

- Develop internal communication products and resources to increase awareness of the QPS' sexual violence response.
- Support District Officers to drive cultural change within their areas.
- Deliver mandatory victim-centric, trauma-informed training to all frontline QPS members (multiple phases 2021-2022).
- Develop a dashboard to assist Districts in monitoring sexual violence reports and outcomes.
- Enhance profile during Sexual Violence Awareness Month in collaboration with partner agencies (October 2021).
- Community engagement with CALD community, vulnerable persons (including those with disabilities, mental health and the elderly) and sex workers.
- Engage with Safety & Wellbeing Group (OCC) to promote wellbeing initiatives for QPS members responding to sexual violence.
- Develop an evaluation framework for the Strategy.
- Engage with Commissioner's Performance Review Unit to develop thematic reviews on sexual violence.

2022 – 23 (medium term)

2023 – 24 (long term)

Next Steps

- Review data capture of sexual violence offences, including finalisations, internet-facilitated offences, and national data recording consistencies.
- Evaluate the Sexual Violence Response Strategy 2021 – 2023.

CONCLUSION

The importance of responding effectively to sexual violence within our community cannot be overstated. The lasting impact, trauma and devastation of this crime is well-established – for victims, their families and communities. The *QPS Sexual Violence Response Strategic Plan 2021-2023* will enhance the organisation's collective capacity to prevent, disrupt, respond to, and investigate sexual violence. The four strategic priorities/objectives and their relevant strategies in this document establish a coordinated framework for the QPS to advance improvements in the way it responds to victims of sexual violence. Importantly, the QPS cannot address sexual violence in isolation; other government and non-government agencies, and the community share this responsibility. This document also serves as a platform for working in collaboration to address this complex crime and protect the Queensland community.

REFERENCES

[1] https://www.childabuseroyalcommission.gov.au/media-releases/report-criminal-justice-released
[2] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[3] ABC News. (2020). Rough justice: How police are failing survivors of sexual assault. Retrieved from https://www.abc.net.au/news/2020-01-28/how-police-are-failing-survivors-of-sexual-assault/11871364?nw=0
https://www.womenstaskforce.qld.gov.au/__data/assets/pdf_file/0005/687614/wsjt-discussion-paper-2-final.pdf
[4] https://www.womenstaskforce.qld.gov.au/__data/assets/pdf_file/0005/687614/wsjt-discussion-paper-2-final.pdf
[5] https://www.ccc.qld.gov.au/publications/seeking-justice-inquiry-how-sexual-offences-are-handled-queensland-criminal-justice
[6] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[7] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[8] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[9] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[10] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[11] Queensland Government. (2014). Response to sexual assault: Interagency guidelines for responding to people who have experienced sexual assault; Australia's National Research Organisation for Women's Safety. 2019. *Intimate partner sexual violence: research synthesis*. 2nd Ed. ANROWS Insights. 08/2019
[12] ANROWS. (2015). Meta-evaluation of existing interagency partnerships, collaboration, coordination and/or integrated interventions and service response to violence against women: State of knowledge paper. Retrieved from https://www.anrows.org.au/wp-content/uploads/2019/02/Integrated-Responses-Meta-Evaluation-Landscapes-State-of-knowledge-Issue-Eleven.pdf
[13] Queensland Government. (2014). Response to sexual assault: Interagency guidelines for responding to people who have experienced sexual assault.
[14] Queensland Government. (2014). Response to sexual assault: Interagency guidelines for responding to people who have experienced sexual assault.
[15] https://communitysafety.vic.gov.au/putting-victims-first/
[16] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[17] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[18] https://www.qld.gov.au/law/your-rights/human-rights
[19] Quadara, A., (2015). Implementing trauma-informed systems of care in health settings: The WITH study. State of knowledge paper. Sydney: ANROWS
[20] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[21] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence; Queensland Police Service Sexual Violence Prevention Working Group. Terms of Reference; Royal Commission into Institutional Responses to Child Sexual Abuse.
[22] Scott, R., Douglas, H., & Goss, C. (2017). Prosecution of Rape and Sexual Assault in Queensland: Report on a Pilot Study.
[23] ABC News. (2020). Rough justice: How police are failing survivors of sexual assault. Retrieved from https://www.abc.net.au/news/2020-01-28/how-police-are-failing-survivors-of-sexual-assault/11871364?nw=0
[24] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[25] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[26] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence.
[27] Queensland Government. (2019). Prevent. Support. Believe. Queensland's Framework to address Sexual Violence; Australian Government. (2010). National Plan to Reduce Violence Against Women and their Children.
[28] Queensland Government. (2014). Response to sexual assault: Interagency guidelines for responding to people who have experienced sexual assault.
[29] ANROWS. (2015). Meta-evaluation of existing interagency partnerships, collaboration, coordination and/or integrated interventions and service response to violence against women: State of knowledge paper.

EXHIBIT 4

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

EXHIBIT 5

From: Briese.DavidB[CIC]
To: White.MarkG[CIC]; Detective Inspectors ALL; CRIME COORD ALL QPS; D/O Capricornia; D/O Far North Assistant; D/O Sunshine Coast; D/O Gold Coast; D/O South Brisbane; D/O Ipswich; D/O Logan; D/O North Brisbane; D/O Mackay; D/O Moreton; D/O South West; D/O Far North; D/O Darling Downs; D/O Wide Bay Burnett; D/O Mt Isa; D/O Townsville
Cc: Blanchfield.StephenJ[SR]; Clark.DenzilO[HQ]; Jones.DebbieM[CIC]; Allen.Bridgette[CIC]
Subject: Issues experienced with Sexual Assault Forensic Procedures
Date: Friday, 8 October 2021 09:34:00
Attachments: image002.jpg

Good morning colleagues,

The Child Abuse and Sexual Crime Group (CASCG) continues ongoing discussions with the Department of Health regarding the provision of forensic examinations of sexual assault victims by Hospital and Health Services. As recently as this week, Det Supt Mark White, Debbie Jones and Bridgette Allen from the Policy and Programs Unit and I met with the Senior Forensic Physician and Director at Queensland Health Dr Adam Griffen and Forensic and Scientific Services Assistant Director of Nursing Jacqui Thomsen.

All matters of concern provided by your areas have been provided to the Department of Health and they have stated they will provide advice back as to why those issues occurred, and are committed to getting this process right.

While I believe that as a result of this continued communication we will see improvement, I also am under no illusion that we will continue to see problems in respect to refusals to conduct sexual assault examinations on both adult and child victims and/or directions to transport our victims to other hospitals.

CASCG is committed to assisting Qld Health get this process right – to ensure that our victims are treated in a timely and dignified manner, and to assist our investigators to obtain the evidence required. In this respect, I ask that you continue to provide any instances that we can provide formal representation of to our colleagues at Qld Health.

Furthermore, could you please ensure your investigators are aware that Forensic Physicians (GMO's) are on call 24/7 for the entire state and Qld Health have assured us that these Doctors will do everything to assist you on ground when you run into a difficult situation. They will provide information and advice to the medical staff you are dealing with and attempt to ensure they conduct the examinations as required. This also has the added bonus of it being recorded and accountable to Qld Health in real time. Should an investigator wish to make contact with the on-call forensic physician they only need to make contact with Police Communications who will then provide access to the on-call number.

Should you have any further queries or concerns, please do hesitate to contact me.

Thanks,

David

David Briese

Detective Inspector
Child Trauma and Sexual Crime Unit
Child Abuse & Sexual Crime Group
Crime and Intelligence Command
[redacted]

[redacted]

EXHIBIT 6

From: Briese.DavidB[CIC]
Sent: Wednesday, 27 October 2021 11:52
To: Adam[redacted]
Subject: DNA reference samples

Hi Adam,

I was hoping to catch up with you today at morning tea but I got inundated with questions from some of the SANE's 😊…

Would like to discuss the issue of your medical staff taking DNA reference samples when doing SAIK's when possible please. I understand this has been raised before by Brice McNab with yourself and your predecessor John Dougherty and there has been some issues raised.

We are keen to get this process imbedded for a number of reasons, the main one being this incorporates the victim-centric approach we are trying to take (both of our departments). At present, as well as having to undertake the highly intrusive (but necessary) sexual assault examination, we are then required at a later time to re-attend with the victim to get them to conduct another intrusive (and necessary) procedure that no doubt brings back memories of the SAIK which I believe obtaining the reference sample at the same time as the SAIK would avoid.

Also, while I am new to this position, I understand from talking to my colleagues in the Forensic area, that this is a process that takes place in all other jurisdictions within Australia, except for Queensland currently.

Could you let me know your thoughts? I'm happy to work with you to get this up and running and will advance through my senior management once we have discussed.

Dave

David Briese
Detective Inspector
Child Trauma and Sexual Crime Unit
Child Abuse & Sexual Crime Group
Crime and Intelligence Command
[redacted]

Sexual violence is never acceptable.
Information and support is available online.
Sexual Violence Awareness Month
www.qld.gov.au/svamonth

Queensland Government

EXHIBIT 7

[redacted]

From: Briese.DavidB[CIC]
Sent: Tuesday, 9 November 2021 09:39
To: Frieberg.DaleJ[OSC]
Cc: Jones.DebbieM[CIC]
Subject: FW: DNA reference samples

Hi Dale.

Deb Jones and I met with Adam Griffen about QHealth issues in the sexual crimes space.

In respect to the DNA sample issue. Dr Griffen provided the following advice:

- That he believes there is an issue with cross contamination from saliva and semen in the victims mouth that would prevent a buckle swab from being taken at the time of the SAIK;
- That even though another persons saliva only takes 8-10hrs to disappear from a DNA sense inside a victims mouth, he does not want to have different processes for his staff of taking DNA depending on whether they may have mouth DNA contamination – he wants one process for uniformity;
- He stated that with the current process of police obtaining the sample a few days later, it means that there is zero chance of contamination by that stage and thus this is his preferred process;
- He is also concerned about the possible contamination of samples if placed into the same SAIK kit for analysis.
- While he provided his opinion, he nominated Cathie Allen, Chief DNA Scientist with QHealth as the expert in this matter.

As you and Bruce are aware, and as per the above, he appears reluctant to change the current process.

Dave

David Briese
Detective Inspector
Child Trauma and Sexual Crime Unit
Child Abuse & Sexual Crime Group
Crime and Intelligence Command
[redacted]

Sexual violence is never acceptable.
Information and support is available online.
Sexual Violence Awareness Month
www.qld.gov.au/svamonth
Queensland Government

From: Briese.DavidB[CIC]
Sent: Wednesday, 27 October 2021 11:52
To: [redacted]
Subject: DNA reference samples

Hi Adam,

I was hoping to catch up with you today at morning tea but I got inundated with questions from some of the SANE's 😊…

Would like to discuss the issue of your medical staff taking DNA reference samples when doing SAIK's when possible please. I understand this has been raised before by Brice McNab with yourself and your predecessor John Dougherty and there has been some issues raised.

We are keen to get this process imbedded for a number of reasons, the main one being this incorporates the victim-centric approach we are trying to take (both of our departments). At present, as well as having to undertake the highly intrusive (but necessary) sexual assault examination, we are then required at a later time to re-attend with the victim to get them to conduct another intrusive (and necessary) procedure that no doubt brings back memories of the SAIK which I believe obtaining the reference sample at the same time as the SAIK would avoid.

Also, while I am new to this position, I understand from talking to my colleagues in the Forensic area, that this is a process that takes place in all other jurisdictions within Australia, except for Queensland currently.

Could you let me know your thoughts? I'm happy to work with you to get this up and running and will advance through my senior management once we have discussed.

Dave

David Briese
Detective Inspector
Child Trauma and Sexual Crime Unit
Child Abuse & Sexual Crime Group
Crime and Intelligence Command
[redacted]

Sexual violence is never acceptable.
Information and support is available online.
Sexual Violence Awareness Month
www.qld.gov.au/svamonth

Queensland Government

EXHIBIT 8

From: Briese.DavidB[CIC]
Sent: Monday, 22 November 2021 10:00
To: White.MarkG[CIC]
Subject: Queensland Health - obtaining of DNA samples during SAIK examinations

Hey mate, as promised from meetings held last week.

GROUP – Child Abuse and Sexual Crimes Group.

DATE – 22/11/2021.

DESCRIPTION OF EVENT – Inquiries with Queensland Health (QHealth) in respect to refusal to obtain DNA comparison samples during conducting of Sexual Assault Investigations Kits (SAIK's) by QHealth medical practitioners.

CURRENT SITUATION / ACTIONS

- On 9 November 2021, during monthly discussions with QHealth Chief Government Medical Officer Dr Adam Griffen, it was queried by Detective Inspector David Briese as to why the process of obtaining a SAIK examination does not include the obtaining of a DNA comparative sample (by way of a buckle/mouth swab) during the procedure. Also present at this meeting was Debbie Jones, AO8 of Policy and Programs Unit, QPS.
- At present, this QHealth refuse to obtain this and police must re-attend with the victim in the days following the SAIK test to obtain the sample.
- It was raised by Det Insp Briese that Queensland is the only jurisdiction in Australia that operates in this way (information obtained from Superintendent Dale Frieberg of Forensics Unit) and further that obtaining the sample at the same time as the SAIK examination appeared to be less intrusive of the victim and therefore more victim-centric and in line with the '*Prevent, Support, Believe. Queensland Framework to Address Sexual Violence*'.
- Dr Griffen provided several reasons as to his belief as to why it didn't occur in Queensland including:
    - That he believes there may be an issue with cross contamination from saliva and semen in the victims mouth that would prevent a buckle swab from being taken at the time of the SAIK;
    - That even though another person's saliva only takes 8-10hrs to disappear from a DNA sense inside a victims mouth, he does not want to have different processes for his staff of taking DNA depending on whether they may have mouth DNA contamination – he wants one process for uniformity;
    - He stated that with the current process of police obtaining the sample a few days later, it means that there is zero chance of contamination by that stage and thus this is his preferred process;
    - He is also concerned about the possible contamination of samples if placed into the same SAIK kit for analysis.
    - He does not believe that a re-attendance to the victim by police and obtaining of the buckle swab would increase or add to the trauma being experienced by a sexual assault victim.
- Det Insp Briese subsequently provided this information to the Forensics Unit, and on 18 November 2021 Det Insp Briese attended a meeting with Superintendent Dale Freiburg, Inspector David Neville and Acting Inspector Peter Bushel of Forensics Capability. At the request of Supt Freiburg, this meeting was also attended by Acting Assistant Commissioner David French and Assistant Commissioner Kath Innes.
- Forensics Capability officers outlined that they believed the issues raised by Griffen were baseless and further that they had discussions with Lara Keller, Acting Executive Director of Forensic and Scientific Services, QHealth, who is Dr Griffen's direct supervisor and who has informed Supt Frieberg that she

disagrees with Dr Griffen and intends on implementing a procedure where the DNA comparison sample is obtained by QHealth Medical Practitioners at the same time as the SAIK.

- However, in the meantime, Supt Frieberg has requested that a Ministerial Briefing Note be completed (by her staff) and provided via Act A/C French (and for information of A/C Innes) to Deputy Commissioner Linford for executive noting and assistance if required. This is currently being completed.
- A further meeting is to be held on 24 November 2021, as organized by Supt Frieberg with her staff (as provided above) and Act A/C French to inform and complete the MBN and of which Det Insp Briese has received an invite for.

INTENDED ACTIONS

- Detective Inspector Briese to attend meeting on 24 November 2021 and update afterwards.

MEDIA ISSUES

- Nil.

OTHER MATTERS OF NOTE

- Nil.

David Briese
Detective Inspector
Child Trauma and Sexual Crime Unit
Child Abuse & Sexual Crime Group
Crime and Intelligence Command
[redacted]

Sexual violence is never acceptable.
Information and support is available online.
Sexual Violence Awareness Month
www.qld.gov.au/svamonth
Queensland Government

EXHIBIT 9

QUEENSLAND POLICE SERVICE

SAIK Working Group

MINUTES/AGENDA

Meeting Date: 07/12/2021
Location: Office of Superintendent, Forensic Services Group, [redacted] PHQ and Microsoft Teams
Time: 10:30am – 11:30am
Chair: Superintendent Dale Frieberg
Attendees:

Inspector David Neville, FSG (DN)
Acting Inspector Peter Bushell, FSG (PB)
Inspector David Briese, CIC (DB)
Sergeant Carolyn Hoffman, FSG (CH)
Acting E/Director Lara Keller, QLD Health (LK)
Cathie Allen, QLD Health (CA)
Justin Howes, QLD Health (JH)
Jacqui Thomson, QLD Health (JT)
Kirsten Scott, QLD Health (KS)

Apologies

Senior Sergeant Nicole Townsend, FSG
Inspector Duncan McCarthy, FSG
Dr Adam Griffin, QLD Health
Sergeant Fabian Colless, CIC

	Item	Responsible	Action Items
1.0	**Welcome and Apologies**		
1.1	Opening and Welcome	Chair	
1.2	Apologies • Inspector Duncan McCarthy, FSG • Senior Sergeant Nicole Townsend, FSG • Dr Adam Griffin, QLD Health	Chair	
2.0	**General Business**		
2.1	**Qld Government Interagency Guidelines** *Compliance with the 2014 Qld Government Interagency Guidelines* *PB* – Seeking compliance in line with Qld Government Interagency Guidelines *DN* – Discussion on obstacles to compliance and suggestions on how to overcome obstacles	All	*LK* - to follow up with Dr Adam Griffin on: • date his committee met • the status of the document • is there a review required? • Deadline for feedback • any Action items from this meeting committee
2.2	**Responsibility of collecting reference samples** *The reference sample to be taken on behalf of the victim by medical personnel during the Forensic Medical Examination (FME) so that the victim is only exposed to the one invasive procedure* All agreed that swabs are to be completed by a health professional *JT* – No issue with reference sample collection at the same time	All	ALL - Educate, communicate this process to all involved

QUEENSLAND POLICE SERVICE

SAIK Working Group

2.3	**SAIK and Reference Sample procedures – explanation to victim.** *The explanation of the SAIK and the reference sample to be conducted by support services/counsellors to alleviate two separate explanations of procedures* *DN* – Discussion on barriers to sampling – if QH wanted to return to blood sampling in SAIKs QPS doesn't need to handle them anymore *CA* – Buccal cell samples are preferred by QH to FTA. Blood has to be handled manually however there are only approx. 2.5% annually.	All	JT - Training program to be updated for new process integration
2.4	**Packaging of the SAIK/reference sample** *Packaging of the SAIK/reference sample would be best held with Health – similar to NSW where the reference sample is attached but separate to the kit – similar to an invoice on a package. Alleviates contamination as not in the one package and ensures both samples remain together.* *CA* - Current external packaging does not support the decided combination of FTA and SAIK. Obstacle with storage at QH end where one is stored in freezer and the other sample stored at room temperature *DN* - QPS will provide the budget for the 700 x FTA's and there should be no extra cost to QH above current processes.	All	CH – provide budget estimate for 700 x FTA production CA and PB – To follow up as to what this looks like in NSW (dual kit) and bring back an example to the next meeting. JH – Follow up provide information on who takes follow up second sample at the later time?
2.5	**The management of the exhibit (SAIK/reference sample)** *The management of the exhibit would be best discussed by Health and Insp Neville. Do QPS need to be involved? Can this go direct from the examination to analysis? Similar to the Just in Case Kits managed by Health. If QPS don't get involved, then this has the ability to expedite the analysis by days and days.* *CA* – How does the kit/continuity get transported to QH?	All	ALL– Each unit to bring a current and proposed flow chart to next meeting of the procedure so that the committee can discuss and see where to make changes. DN – Will provide QPS
3.0	**Other Business**		

QUEENSLAND POLICE SERVICE

SAIK Working Group

3.1	CA – suggested a review of the Sex Kit and costings.	All	QPS – add to next working group meeting agenda
4.0	**Meeting Finalisation**		
4.1	Next Meeting – 15/12/2021 11am		
4.2	Close		

EXHIBIT 10

Transcription SAIK Working Group at 11 am on 15.12.2021

Meeting Date: 15/12/2021
Location: Office of Superintendent, Forensic Services Group, [redacted] PHQ and Microsoft Teams
Time: 11:00am – 12:00pm
Chair: Superintendent Dale Frieberg
Invitees:

Inspector David Neville, FSG (DN)
Acting Inspector Peter Bushell, FSG (PB)
Inspector David Briese, CIC (DB)
Sergeant Carolyn Hoffman, FSG (CH)
Paula Brisotto, QH (PBO)
Dr Adam Griffin, QLD Health (AG)
Senior Sergeant Nicole Townsend, FSG (NT)
Acting E/Director Lara Keller, QLD Health (LK)
Cathie Allen, QLD Health (CA)
Justin Howes, QLD Health (JH)
Jacqui Thomson, QLD Health (JT)
Kirsten Scott, QLD Health (KS)
Sergeant Fabian Colless, CIC (FC)
Supt Dale Frieberg APM (DF)

Apologies
Inspector Duncan McCarthy, FSG

DF – *I guess Dave can just join us when he is available, so thank you everyone, again for joining us to discuss further the SAIK kits and how we are going to look to do business moving forward. First of all, I know that there was probably a little bit of contention over the minutes from the last meeting so I have made the decision just to leave the comments as they are, as they came in, obviously different people have different recollections about what was said or not said, so I will go around the room and if anyone wants to make any comment about that then we'll certainly make note of it and if there is any clarification we need to go through then we'll do that but, I have just made the executive decision that in order to make sure the minutes are correct moving forward that we will record them electronically and we will provide you with a copy of those, or I can provide them to Lara to distribute.*

LK – *thank you*

DF – *So if everyone is happy with that*

LK – *thank you yeh*

DF – *So apologies from our end, from Duncan McCarthy and we've been able to have Nicole Townsend join us on this occasion, it was good that she could make it, she couldn't make the last*

meeting. I think Sgt Fabian COLLESS, he's online, that's great. So I guess Lara, do you want us to to go through each of those items for discussion from the last meeting or do we just want to have a general discussion about those?

LK – *So I guess from our perspective, you know we did have some amendments to the minutes, but I do note that they were added on, so they kind of read as differing views on the same topic in some areas. I do note though that you had said that we would discuss at the next meeting and for each agency to put forward their position and I also note on the agenda for today that there is the opportunity to document that so, you know, I guess, moving forward, this is probably our preferred approach, to document each sides position and minute that.*

DF – Ok. *So we may as well just start with the first which is the 2.1. I don't think that there was anything really contentious in that agenda item from the last occasion, so, are we all in agreeance with that actually staying the same as it reads? (All agreed) Yep. Ok, 2.2 the responsibility for collecting reference samples so just a discussion I suppose on the completion, obviously something like this will be a work in progress and I know that there are some differing views about whose responsibility that is. I guess again from the last meeting the conversation around doing what's right I guess for the victim in the circumstances so we can alleviate some of the trauma for them moving forward. Does anyone want to make any comment about that? (Pause) Nope, ok. The SAIK and reference-*

LK – *Sorry, Adam has got his hand up*

DF – *Oh.*

AG – *Sorry about that. I was just trying to work out where the complaint came from?*

DF – *There's no complaint, it's been something that we've identified from the Queensland Police Service around the need for, in accordance with the guidelines, that are currently in place, just to make sure that we are victim centric and that we try and you know for their purposes, not have*

Transcription SAIK Working Group at 11 am on 15.12.2021

Police, you know, 7 days later, knock on the door to take a reference sample. So, there wasn't any particular complaint, but I might let Peter talk.

PB – *No, there wasn't a complaint Doctor. I think what realistically what we want to do is honour the guidelines from our perspective. In relation to taking the reference sample as part of the forensic medical examination and in that way we can condense two procedures into the one, and also it alleviates the fact that Police have to explain the process of the reference sample, and whilst QH staff explain the process of the SAIK so we can combine the two explanations together so to reduce the exposure for the victim.*

AG – Ok. *So, it's not a complaint and there has been no victim issues but this reference sampling which you do which is routine across the state and several hundred times a week is now a traumatic experience?*

PB – *Like I said Doctor, we just wanted to conform with respect to the guidelines, those guidelines were-*

AG – *So the guidelines are actually in error. I mean, it's not actually a requirement to be done and certainly there is no pathway so if we were to look at it from a global perspective the training and delivery of DNA reference sampling is standard Police procedure for anything including and beyond sexual assault. So this is an addition to a pathway that currently isn't in existence and in essence the backup of it seems to be that there is a concern that Police are traumatizing people. So I can't actually see it, we don't have a measurable there, we haven't got a viewpoint problem where it is an issue because otherwise you are still collecting a reference sampling across the board for various victims for various crimes then you are traumatizing them, I don't see that –*

PB – *I don't think we are necessarily traumatizing them, what we're doing is we're trying to reduce the fact that victims are not exposed to two actual processes that it would be a better way moving forward in conjunction with other states, now last week we were all in agreeance that that would rest with the forensic nurses or medical practitioners –*

Transcription SAIK Working Group at 11 am on 15.12.2021

AG – *Apologies, I wasn't at the meeting and I wasn't necessarily aware that that had been agreement. The actual basis of reference sampling as a standard, I am not particularly interested in what other states are doing, I am probably interested in just doing it properly. And are we comparing other geographically challenged states or are we just comparing states that are centrally located and centrally managed.*

PB – *I think both*

DN – *yeh*

AG – *So WA obviously there is a mixture isn't there?*

PB – *There is, yes.*

AG – *yeh, and so the really the part that we're talking about here is the development of something new that Police are concerned that they maybe traumatising a patient.*

DN – *Isn't just returning to the pathway that we used to have, my understanding was that prior to sometime in the 2000's it was a process and we've changed it now to police taking it, and yes Police do take DNA from people as a matter of course, our preference wouldn't be to take DNA from victims and to limit that. Obviously from offenders, yes we do for obvious reasons because we're exercising a police power but when you're a victim of a sexual assault and all of a sudden you have authorities taking your DNA from you as well it comes a lot more stressed with police taking dna from you then medicos because there is concern on how police will use that. And we don't exercise any powers to take it at that time. So, it is victim centric making sure that the person who potentially is very traumatized because sexual assault is unlike other offences and to make sure that it is done in a way that minimises any additional stress on the victim, so that's all we're seeking.*

Transcription SAIK Working Group at 11 am on 15.12.2021

AG – *Yep, so we have come up with some communication strategies if that's an issue but primarily you talk that it was a historic issue and its historic now and Police were actually analysing reference samples and it was separately packaged and sent with the older documentation, so you've got that was certainly a clear issue. I guess we've got to look at it from a practical perspective here too. We have people who are currently trained who are quite effectively performing the work and there has been no issue or complaint directly from it but more that there is a perceived issue. The perceived issue comes with a management issue to train and change pathways and add to kits which all add up to a very large expense both immediately and ongoing. I think with all honesty I think this has to be fleshed out as a much more policy document before we actually even start talking about it in this way and what I don't have in front of me is a policy document, what I have in front of me is an agenda and it actually looks more like a cost shifting agenda at the moment then it does a service centric agenda so you would probably be best if we looked at this more broadly as a significant policy change and we can reflect on those various issues and (inaudible) and consult out as well to support groups that are providing support to victims. If the expense there has to be shifted across from QPS to health then the way* that that expense will come *across is not going to be very friendly to QPS and you can appreciate the time and training it takes to train a clinician is significantly more expensive because you're already doing it within QPS, you're already training because you're already going to have to collect (inaudible) and so in essence it's quite a large expense that we're doing it and I don't necessarily think there is going to be a path forward by discussing this as a concept alone when there is actually quite a few layers to what is involved. At the moment we are close to training approximately 200 or more people we would have to bring back to retrain to explain the process of reference sampling and that's an expensive process and its one where we got to try and achieve 100% across the board. If we're going to look at what was going to work for the laboratory processes as well I will very much let Cathie speak to these but again we're going to need a discrete process I would suggest to ensure that there is no risk to contaminating or ruining the sample. And I think that that would really the victim centric approach is actually making sure that there is the one procedure that they go through is uninterrupted and unlikely to lead to an error so it has to be a discrete process. So there is a few issues here. I don't see this as a straight forward thing as it's being expressed at all, because we have an existing body of examiners which are already trained in the collection of DNA. Yeh, sorry, Dave has his hand up.*

DN – *So back to your point about your policy the reason we're at this point is that there is a policy and I don't agree it is in error. It's pretty clear in the policy that there is a recommendation that the sample be taken by the medical examiner at the time of the examination and it is for that reason we*

try and limit the trauma to the victim. We're not trying to shift costs back to QLD Health (QH) in fact the testing, we're in agreement that we would continue to pay for the person testing and we've even gone to the extent that whatever the consumables are, we're happy to provide those to QH for the preparation of the kits, and in terms of the training of medical experts, the collection of the reference sample is not a difficult process, it's quite straight forward and I don't envisage you would need to bring staff to have face to face training to provide that. And in terms of the potential contamination of it there is a much higher risk contaminating the crime scene samples taken from the intimate areas then there is of the reference sample and you will know straight away from the reference sample if it is contaminated because there will be more than one profile and as far as the buccal swab potentially contaminating all of the samples, the crime scene samples, everyone of those sample I would expect to have the victims DNA in it anyway because of where they were taken from, so that is how perspective on it. So, yeh. And just the policy that was referred to was something that was signed by all the parties in 2014 or something so –

AG – *Yeh, so, co-author of them, I am fully aware of the (inaudible) –*

DB – *So, Adam if you're the co-author of them, and I've just joined in but I, Dave Neville probably put it the best way and in a lot better way then I was about to because I got to be honest, when you say this thing is just a cost shifting exercise I am quite offended by that because it certainly isn't, it's trying to get you guys, as in health, to do what you signed back in 2014 and like you're supposed to be doing, to make sure that we're being victim centric here. So if you're saying that you're the co-author, why hasn't that been done, why isn't it being done and why are there so many blockers as you've just outlined to you doing it, because mate, policies there-*

AG – *But (inaudible)*

DB – *Hang on, hang on, woah, woah, Policies there, we're taking on a number of the costs already, and the training is minimal if required. We're talking about doctors and experienced nurses who examine all parts of the body but you're saying that there's going to be this massive training required for everyone because they have to stick a buccal swab in a victims mouth at the same time as they're undergoing other examinations. None of that adds up to me, I'm not a doctor, I don't pretend to be,*

but to me its not a shift, not a cost shifting exercise from our side it's a duty shifting exercise on your side. So back to my original question is, why is it that back in 2014 you co-authored this document but it hasn't been done?

AG – *yes, it is a typographical area, so it should say "not" because there was no actual capacity within the kit to do so. And that was the reason for it being there. So not sure when it changed from "not" but obviously it got overlooked as it went through and that's why it actually hasn't been in place or wasn't in place then. The only time it was in place was back in the very old kits and that had the separate document and things were actually going through to the Police DNA laboratory for analysis, which is of course, some decades ago. Though the actual capacity capability of the kit wasn't there so whilst it's based that we do want to actually create and make sure its there. I agree there is capability of people to collect reference samples but no, to suggest it doesn't have to be training is naïve. The actual packaging is separate utility of it and also when you can't collect it and if you are going to collect it and use FTA paperwork which I understand is the preferred process well that's the difference (inaudible) it is quite discrete so it's possible… it's naïve to think that no training is to be required.*

DB – *No, I'm not saying no training is be required-*

AG – *Yeh*

DB – *I'm not saying no training will be required because if coppers can learn in one day then medical practitioners who do this for a living can learn within an hour or two I would imagine.*

AG – *we are not going to get everybody together in one day (inaudible) Jacqui, sorry, you got your hand up?*

JT – *Sorry, I understand that the policy document, the guideline that we're referring to was created in 2014 and we're some 6 years down the track, I'm imagining (inaudible) not sure what the review for such a document, do we know what the time frame is for a review?*

Transcription SAIK Working Group at 11 am on 15.12.2021

AG – *Thanks Jacqui, yeh it is actually currently under review. We have about 12 months because we're pending the integration of the paediatric component from the Royal Commission. That's actually the main stay of what's stopping a review going forward. I have not heard from where that is, but that seems to be the main stop so it's going to be a uniform document that basically adult and paediatric response.*

CH – *If the FTA sampling is part of what's causing the hesitation that's just our agreement to work in with the lab preference because it's my understanding the buccal cells are the labs preference for a reference sample. Whereas, as you're aware it used to be blood tube but the FTA card for the buccal cells was just, so long as we get a victim reference sample we don't mind how that's done, the FTA cards which is what we were discussing here was just us working in with the lab preference. So, if you're saying for your doctors and nurses that it would be easier to take a blood sample and that would not require all the testing that you're suggesting then perhaps the blood is the way to go. But obviously that causes a problem at the lab.*

AG – *No, why would do we want to go stick needles in people if we're not sticking needles in them so that's possibly more of a point. No, I just think at the moment we're looking, like, I would like some more flesh before we're actually informing our policy and process and to spend money on this sort of thing and we need to actually look at how it's being done and make sure that it's an appropriate expenditure of funds and efforts. At this stage this is not emergent and as far as I can see we're not responding to a particular issue we're not changing the police training who will continue to understand how to collect DNA. We're looking at implementing a different process across kits both historic and before they actually go out now and a look at the training behind it. A substantial effort is actually going to be required from a small group of clinicians to train the larger body. I do have some hesitation in seeing it and really looking at how its supposed to be a harm, but so at the moment if we're looking at the policy document saying that this is the argument the policy document doesn't reflect the practice unfortunately and it's an unfortunate typographical error and if it's the basis for the policy-*

DN – *(inaudible) from our perspective –*

Transcription SAIK Working Group at 11 am on 15.12.2021

DB – *How about reflect the policy? How about reflect it and actually see its go nothing to do with you're saying its going to be so much more work for you, its more work for us too, yeh it reduces the time that we have to go three days later and do this but we need to put kits together, we need to assist with that, we've been working on it for some time now as a working party to come up with the best way to do this for us and for health but you know what. This isn't about health and it's not about the cost, its about the victim and what it seems to me is that for yourself Adam its about Health, its not about the victim, the victim comes second and you know I could say with all due respect that's how it seems to me. We are trying to make it better and more victim centric, you are creating barriers as to why we can't.*

AG – *That's not necessarily the case at all. Because what we have, you've described something as a notion, you've described something as (inaudible) –*

DB – *It's not a notion mate, it's done in every other state bar QLD and possibly one other. It's not a notion. It's something that you signed off on and is done in other areas.*

AG – *We've discussed that already. What we're actually looking to is the impetus for changing a process that has yet not received any complaints or concerns, that the police engagement is traumatic. It is something that is obviously something that must occur in other situations when you're collecting DNA from individuals (inaudible)*

DF – *I really don't –*

DB – *we take DNA off (inaudible)*

DF – *Dave, I really don't think, we're not getting anywhere having this discussion but I guess the things is that at the end of the day, there is a very big spotlight on sexual assaults, domestic violence and so on and so forth in relation to females and victims at this particular time, so I'm just thinking it look, I really don't think at this particular time we're moving forward at all I'm mindful we've all got members who are involved in the Women's Safety and Justice Taskforce. I think that this will become*

something that will be - Something that the light, the spotlight will be shone on at some particular stage in relation to the sexual assault of victims and the taking of DNA. So if we need to go back and we need to have further discussions in our own agencies about the position I am happy to raise it up to my AC and Deputy and maybe the discussions should be happening at a higher level.

AG – *Agree*

PB – *I completely agree. I cannot see how that would not be best practice moving forward into the future, in line with other states, in line with the guideline itself, I am at a loss. I completely agree with the Supt it can get addressed up our Commissioner has a very invested interest in it, along with her Deputies and Assistant Commissioners. So I agree with the Supt, we should raise that up.*

NT – *I don't think something needs to be complaint driven to show that it's traumatic either. I'm miffed about that, you know, the victims wouldn't have a process of making a complaint about the process anyway, I think its just a given that being dealt with twice is going to be more traumatic, I think anyone can see that.*

DF – *Alright, well look, I think, look we'll certainly take on board what you've said Doctor and we'll share that around, I really don't think we're progressing any further, obviously you've got a certain view in relation to this and I think there needs to be certain consultation perhaps from our level, at a higher level, so I'll take what you've said on board and I will raise it up to my AC and maybe they can have some conversations with Lara (Lara Keller) in the first instance and we can go from there.*

ALL – **All Agreed**

DF – *the time is 11:31 and we'll cease the meeting there. Thank you everyone for joining in today and I guess if you've got anything that you do wish to raise up to Lara, by all means please do that and we'll do that on our side and we'll take it up to a higher level to have those discussions on how we move forward.*

Transcription SAIK Working Group at 11 am on 15.12.2021

PB – *Thank you*

DF – *Thank you*

DB – *Thanks Super*

----------*MEETING RECORDING ENDED*----------

ACTION ITEM

QLD Health - Raise up any concerns/issues regarding the SAIK and the meeting on 15.12.2021

QPS – Raise up issues/concerns discussed and suggestions on a way to move forward with AC and Deputy.

Next meeting TBA

EXHIBIT 11

From: Briese.DavidB[CIC]
Sent: Monday, 20 December 2021 15:18
To: A/C Crime Intelligence Command
Cc: Briggs.ColinJ[HQ]; Frieberg.DaleJ[OSC]
Subject: Issues with SAIK testing - Queensland Health
Attachments: qld-govt-guidelines-for-responding-to-sexual-assualt.pdf

GROUP – Child Abuse and Sexual Crimes Unit (CTU).

DATE – 20 December 2021

DESCRIPTION OF EVENT – **Working party formed to address non-compliance of policy by Queensland Health to obtain buckle (mouth) swabs from sexual assault victims at the time of sexual assault examinations**.

CURRENT SITUATION / ACTIONS

- On 27 October 2021 I attended the State Library with AO8 Debbie Jones, where we presented to Queensland Health Forensic Nurses and Medical practitioners on the role of the Sexual Violence Liaison Officers and the Sexual Violence Prevention Strategy.

- Dr Adam Griffen, Chief Government Medical Officer was also in attendance and following the presentation I raised issue with him regarding the 2014 Government Interagency Working Group policy document *Response to Sexual Assault – Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault*, the purpose of which was to prevent unnecessary trauma being caused to victims including during subsequent forensic medical examinations. Within the guidelines, it is recommended that victim DNA reference samples, usually a mouth swab (on occasion a blood sample) should be taken routinely as part of the forensic medical examination.

- Co-signatories on the policy were senior representatives from Queensland Health, Queensland Police Service, Department of Justice and Attorney-General, and Department of Communities, Child Safety and Disability Services.

- This was raised as the actual situation across all Queensland Health facilities is to conduct the examination without a health practitioner obtaining the sample at the same time, with the requirement that police then re-attend with the victim within the following week (approximately) to obtain that sample.

- It was also raised that Queensland appeared to be the only jurisdiction in Australia that operates in this way and further that obtaining the sample at the same time as the SAIK examination appeared to be less intrusive of the victim and therefore more victim-centric and in line with the '*Prevent, Support, Believe. Queensland Framework to Address Sexual Violence*'.

- Dr Griffen at that time provided several reasons as to his belief as to why it didn't occur in Queensland including:
    - That he believes there may be an issue with cross contamination from saliva and semen in the victims mouth that would prevent a buckle swab from being taken at the time of the SAIK;
    - That even though another person's saliva only takes 8-10hrs to disappear from a DNA sense inside a victims mouth, he does not want to have different processes for his staff of taking DNA depending on whether they may have mouth DNA contamination – he wants one process for uniformity;

- He stated that with the current process of police obtaining the sample a few days later, it means that there is zero chance of contamination by that stage and thus this is his preferred process;
- He is also concerned about the possible contamination of samples if placed into the same SAIK kit for analysis;
- He does not believe that a re-attendance to the victim by police and obtaining of the buckle swab would increase or add to the trauma being experienced by a sexual assault victim.

- A working party was formed by members of the Forensics Unit, including Superintendent Dale Frieberg, Inspector David Neville and Acting Inspector Peter Bushel, Detective Inspector David Briese of the Child Trauma and Sex Crimes Unit, and members of Queensland Health including Acting Executive Director of Forensic and Scientific Services, Queensland health and Dr Griffen.

- On 15 December 2021 this working group met (Chair Supt Frieberg). During the meeting Dr Griffen again repeated a number of his concerns as per above but also added:
    - That the 2014 policy, which he stated he was a co-author on, included a typographical error in respect to the obtaining of the mouth swab at the same time as the sexual assault examination;
    - That he believed it would be difficult and labour intensive to train medical practitioners in the taking of the mouth swab;
    - That unless actual complaints had been made by victims of sexual assault in respect to the mouth swab being obtained days later by police, he did not see a reason as to why the existing process should change.

- On 20 December 2021 Queensland Police members of this working party met with Assistant Commissioner Kath Innes, Crime and Intelligence Command and Acting Assistant Commissioner David French, Operational Support Command where this matter was discussed and a decision made to complete and advance an Executive Briefing Note with the aim to have the current policy reviewed and the process of obtaining mouth swabs from victims of sexual assaults brought in line with other jurisdictions across Australia and ensure any examination process is victim-centric.

INTENDED ACTIONS

- EBN to be completed and advanced.

MEDIA ISSUES

- Nil at this point.

OTHER MATTERS OF NOTE

- Margaret McMurdo Domestic Violence and Justice report is due for completion and report in early to mid 2022.

David Briese
Detective Inspector
Child Trauma and Sexual Crime Unit
Child Abuse & Sexual Crime Group
Crime and Intelligence Command
[redacted]

Sexual violence is never acceptable.

Information and support is available online.

Sexual Violence Awareness Month
www.qld.gov.au/svamonth

QPS.0160.0001.0097

Response to sexual assault

Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault

Queensland Government

These guidelines have been developed through a strong collaborative approach by a Government Interagency Working Group including representatives from:

- **Queensland Police Service**
- **Department of Justice and Attorney-General**
  - *Office of the Director of Public Prosecutions*
  - *Queensland Courts*
  - *Victim Assist Queensland*
  - *Youth Justice Conferencing*
- **Department of Communities, Child Safety and Disability Services**
- **Queensland Health**
  - *Aboriginal and Torres Strait Islander Health Unit*
  - *Clinical Forensic Medicine Unit*
  - *Child Advocacy Service*
  - *Royal Brisbane and Women's Hospital Department of Social Work Services (Sexual Assault Service)*

The Strategic Policy Priority Areas, System Policy and Performance Division of Queensland Health were consulted during this process.

The guidelines are intended to outline key principles and a best practice framework for working with people who have experienced sexual assault. This includes children and young people who have been sexually abused or sexually assaulted.

The term victim is used throughout the document where there is reference to specific legislation and where the person is either a male or female who has experienced sexual assault. The term sexual assault is used throughout the document and includes those assaults where rape and/or sexual abuse has taken place or is alleged to have taken place.

Mr Ian Maynard
Director-General
Department of Health

Mr Michael Hogan
Director-General
Department of Communities, Child Safety and Disability Services

Mr Ian Stewart
Commissioner of Police
Queensland Police Service

Mr John Sosso
Director-General
Department of Justice and Attorney-General

June 2014

Contents

Preface 3
Glossary 4

Section 1

Introduction 5
Governance 5
Sexual assault 5
Responses to victims 5
Children and young people 6

Section 2

Principles of the Interagency Guidelines 7
Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism 7
Fair and dignified treatment 7
Privacy of victim 7
Information about services 7
Information about investigation of the offender 7
Information about prosecution of the offender 7
Victim to be advised on their role as a witness 7
Minimal exposure to and contact with the offender 8
Victim Impact Statement 8
Information about the convicted offender 8
Making a complaint 8

Section 3

The Roles of Key Government Agencies 9
Queensland Police Service 9
Queensland Health 9
Department of Justice and Attorney-General 10
Office of the Director of Public Prosecutions 10
Victim Assist Queensland 10
Youth Justice Conferencing 10
Queensland Courts 11
Department of Communities, Child Safety and Disability Services 11
Non-government organisations 11

Section 4

Interagency Approach 12
Teamwork 12
Confidentiality 12
Training 12
Information provision 12
Referrals 12
Feedback 13
Access, availability and promotion of services 13
Gender of service providers 13
Diverse needs 13
Aboriginal and Torres Strait Islander people 13
Communication 13
People with a disability 13
People from culturally and linguistically diverse backgrounds 14
Translating and interpreting services 14

Section 5

Interagency Procedures 15
Crisis intervention 15
Initial report to police 15
Initial report to a health facility 15
Medical examination and treatment 15
Referral to the local sexual assault team 16
Notifying the police 16
Victim attending with police 16
Initial contact 16
Forensic medical examinations 16
Forensic medical examinations and informed consent for people aged 14 years and above 16
Forensic medical examinations and informed consent for people under 14 years of age 17
Chain of evidence 17
Timing and nature of the forensic medical examination 18
Presence of police and support person at medical and forensic examinations 18
Consent to release information and evidence 18
Access to health records 18
Drug facilitated sexual assault 18
Victim DNA reference samples 18
Support person during the police interview 18
Discontinuance of police action before a proceeding has commenced 19
Domestic Violence Protection Orders 19
Follow-up and registration on the Victims Register 19

Conclusion 20

Preface

The guidelines are designed to promote whole-of-government interagency cooperation and service coordination with an aim to improve governmental responses to victims of sexual assault. The need for enhanced coordination and cooperation has long been recognised and resulted in the development of the *2001 Queensland Government Interagency Guidelines for responding to adult victims of sexual assault.*

The 2013 guidelines aim to facilitate best practice, quality service and support to people who have experienced sexual assault.

Legislation relevant to and defining sexual assault includes but is not limited to:

- *Aboriginal and Torres Strait Islander Peoples Recognition Act 2013*
- *Child Protection Act 1999*
- *Criminal Code Act 1899*
- *Criminal Law (Sexual Offences) Act 1978*
- *Domestic and Family Violence Protection Act 2012*
- *Evidence Act 1977*
- *Health Act 1937 & associated regulations*
- *Hospital and Health Boards Act 2011*
- *Mental Health Act 2000*
- *Police Powers and Responsibilities Act 2000*
- *Public Health Act 2005*
- *Victims of Crime Assistance Act 2009*

Policy referred to includes but is not limited to:

- Queensland Government Language Services Policy
- Queensland Health Protocol for conducting child sexual assault examinations

The guidelines should be read in conjunction with internal agency procedures such as the Office of the Director of Public Prosecutions Guidelines and the Queensland Police Service Operational Procedures Manual. In addition to legislation, policies and procedures, the Queensland Government joins with governments around Australia in the implementation of the National Plan to Reduce Violence against Women and their Children 2010-2022.

Each government agency has a complementary and essential role in ensuring that people have access to effective, timely and appropriate information, support, care and treatment following a sexual assault.

Given the nature of the crime, sexual assault is an area of legal and social complexity. The guidelines are designed to help government officers and agencies work together in the best interests of the person who has been sexually assaulted through better understanding one another's roles and responsibilities.

The Queensland Government encourages reporting of criminal activity and prosecution of offender(s) where possible.

Glossary

CPA	*Child Protection Act 1999*
DCCSDS	Department of Communities, Child Safety and Disability Services
DFVPA	*Domestic and Family Violence Protection Act 2012*
EA	*Evidence Act 1977*
FME	Forensic Medical Examination
FMO	Forensic Medical Officer
FNE	Forensic Nurse Examiner
ODPP	Office of the Director of Public Prosecutions
QH	Queensland Health
QPS	Queensland Police Service
SAIK	Sexual Assault Investigation Kit
Victim Assist	Victim Assist Queensland
YJC	Youth Justice Conferencing

Section 1 Introduction

Governance

The government agencies responsible for delivering a service to victims of sexual assault, in accordance with relevant legislation, whole-of-government policy and internal departmental procedures, are responsible for the ongoing governance of this document. The guidelines are underpinned by each government agency's own internal policies and procedures which they are obligated to adhere to. Each government agency has a formal complaints mechanism which is accessible to members of the public.

The Government Interagency Working Group will meet bi-annually to review the guidelines and consider matters of particular concern for people impacted by sexual assault and to consider the impact of any legislative change.

Sexual assault

Sexual assault is a crime of violence. It is a humiliating and degrading experience. It has an emotional, physical, financial and social cost, not only to those directly affected, but also for the community as a whole.

The number of reported sexual offences against women aged 15 or over in Queensland in 2011/2012 was 2035 compared with 227 against males.[1]

Major Australian studies indicate that only 11-25 per cent of sexual assaults are reported to the police and that most offenders are known to the victim.[2] People who experience sexual assault may feel a range of emotions including shock, fear, guilt, shame, depression and an inability to trust others. The social stigma attached to sexual assault can heighten these feelings and increase the trauma experienced. It is imperative that when disclosing or reporting a sexual assault, people receive an effective, professional and appropriate response from the agencies to which they report.

Community education can encourage family and friends to respond supportively and appropriately to a disclosure of sexual assault. However, in order to assist their recovery, victims may also need access to a range of personal support services including counselling, medical services and assistance to report the crime to the police.

The information provided in the guidelines is intended to provide a strategic overview to support the development of policies and procedures at a local level. Local level procedures will differ according to the nature of the service system in each area. It is also intended to contribute to improving service responses to victims.

Responses to victims

Following disclosure of a sexual assault, the following needs of the victim should be addressed:

- immediate safety needs
- immediate health needs
- options for pursuing justice
- ongoing emotional needs for longer term wellbeing.

In order to avoid secondary traumatisation and mitigate the risk of negative, long term outcomes, government responses to sexual assault must be both sensitive and effective. These responses therefore need to take into account the diversity of victims, including their cultural and linguistic background, disability, sexual orientation, age and geographical location. In addition to assisting recovery, more sensitive and effective responses may also lead to an increase in reporting rates.

This, in turn, can lead to a more accurate understanding of the prevalence of sexual assault, inform community education and awareness approaches, and result in improved prevention strategies.

1 Queensland Police Service (2012) Statistical Review 2011-2012 Brisbane
2 Australian Bureau of Statistics (1996) Women's Safety Survey, Cat.no. 4218.0 (unpublished data) as cited in Office of Women's Policy (1999) A Social and Economic Profile of Women in Queensland 1999 Brisbane; Australian Bureau of Statistics (1996) Victims of Crime Survey

Children and young people

It should be noted that the *Child Protection Act 1999* (CPA) is relevant where there are concerns that a child has been sexually abused and where a child does not have a parent able and willing to protect them from the abuse. The main principle for administering the CPA is that the safety, wellbeing and best interests of a child are paramount. Section 159B of the CPA imposes a responsibility on particular service providers to assess and meet the protection and care needs of children and provide collaborative and coordinated support to their families.

The definition of harm in the CPA includes harm resulting from sexual abuse or exploitation. A child is defined in the CPA as an individual less than 18 years of age. Where the child or young person is under the age of 16, their parent or guardian should be consulted where possible and appropriate. Whilst certain circumstances may not make this possible, the child or young person should have access to a support person throughout the response.

The safety and protection of children and young people who are sexually assaulted is a high priority. When disclosing a sexual assault, young people should be encouraged to access services so that they are aware of their options in terms of support, assistance, treatment and prevention.

When working with a young person who reports a sexual assault, personnel from the Queensland Police Service, Department of Communities, Child Safety and Disability Services (DCCSDS) and Queensland Health (QH) are required to follow the statutory requirements under the CPA and the *Public Health Act 2005* relevant to their position.

Where the child or young person is subject to an order granting custody or guardianship of the child, the Chief Executive, Child Safety, DCCSDS, must be notified regarding the report of a sexual assault.

Confidentiality cannot be guaranteed where a child or young person is believed to be in need of protection from harm. To work in the best interest of that child or young person, information may need to be exchanged between departments. It is best practice for the child or young person to be advised that a report to the DCCSDS and the police may take place. Certain circumstances may not make this possible.

Section 2
Principles of the Interagency Guidelines

Government responses to sexual assault are framed by the following overarching principles:

- All agencies will focus on the safety, physical and psychological needs of the victim
- The victim's right to privacy and confidentiality will be respected at all times unless disclosure is required by another law
- Comprehensive information about all processes and options will be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location
- The victim's informed decision will be respected at every stage of the process
- The victim's sense of personal control will be supported and encouraged
- All relevant agencies will work collaboratively to respond to sexual assault, to provide clear, up to date and comprehensive information about other agencies and services and will facilitate access to appropriate agencies and services on request
- All agencies will ensure documentation and records are prepared in accordance with individual agency requirements and respect confidentiality, privacy, security and choice.

Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism

Government responses are also framed by the legislated responsibilities defined in the Fundamental Principles of Justice for Victims of Crime (Principles of Justice) in Queensland, set out in Chapter 2 of the *Victims of Crime Assistance Act 2009*.

If a victim feels they have been treated unfairly or without respect by a Queensland Government officer, they have the right to complain to the government agency responsible for the conduct of the officer or to Victim Assist Queensland (Victim Assist).

As a guide, the following is a summarised version of the Principles of Justice:

Fair and dignified treatment

The victim must be treated fairly and shown dignity, respect, compassion and courtesy. The government entity must take in to account and be responsive to the particular needs of the victim relating to the victim's age, sex, race, cultural identity, impairment, sexuality or religion.

Privacy of victim

A person's personal information, including their address and phone number, can only be disclosed with consent or as authorised by the law.

Information about services

The victim must be given timely information about relevant services available to them, including welfare, health, counselling, legal help and financial assistance.

Information about investigation of the offender

If the victim asks, they should be given information about the investigation of the offender where possible. Information given to a victim may include the progress of the investigation and the name of the person charged.

Information about prosecution of the offender

If asked by the victim, the prosecuting agency is to give the victim details about the crime committed against them, including when the victim may attend a court proceeding, notice of a decision to change a charge, or notice of the outcome of a court proceeding.

Victim to be advised on their role as a witness

A victim, who is to be a witness for the prosecution in the trial for the crime committed against them, is to be informed by the prosecuting agency about the trial process and their role as a witness.

Minimal exposure to and contact with the offender

As much as possible, relevant agencies present at court are to ensure the victim has minimal contact with or exposure to the offender during court proceedings or in the court building.

Victim Impact Statement

During sentencing of the offender, the victim has the right to give details of the impact and harm caused to the victim by the offence, to the prosecutor as an impact statement. Victims can access information about completing a victim impact statement by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Guide to Making a Victim Impact Statement* at *www.justice.qld.gov.au.*

Information about the convicted offender

A victim can apply to be registered on the Victims Register. If the offender is then convicted and imprisoned, the victim will be provided with this information on request. This includes information on the sentence, an escape from custody, or day of release. To be included on the Victims Register call 1800 098 098.

Making a complaint

If a victim of crime feels a government agency, person or persons within the agency have engaged in conduct that is not consistent with the Principles of Justice, they have the right to make a complaint. Victims can access information about making a complaint by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Complaint Form* at *www.justice.qld.gov.au.*

Government agencies are obligated to have a formal complaints management system, and the Queensland Government is committed to having these systems available and acted upon in accordance with the Principles of Justice.

Section 3
The Roles of Key Government Agencies

Queensland Police Service

The Queensland Police Service (QPS) has three main functions in relation to sexual assault cases including:

1. Investigate complaints of sexual assault and establish whether an offence of sexual assault has been committed.
2. Protect victims of sexual assault.
3. Identify, apprehend and prosecute offenders.

In carrying out this role, the police should:

- observe QPS Operational Procedures Manual
- observe QPS local procedures or instructions
- observe legislative requirements
- observe the Fundamental Principles of Justice for Victims of Crime
- provide victims with information regarding the investigation and prosecution
- provide protection to victims at immediate risk of sexual assault
- provide victims with information about support services

Queensland Health

In responding to sexual assault, the role of QH is to provide medical care, forensic medical examinations (FME), sexual health assistance and information and support. These responses are provided by public hospitals, the Clinical Forensic Medicine Unit and may include specialist sexual assault teams. The extent and nature of this care varies across hospital and health services in accordance with local procedures and resources.

Assistance and care in the acute phase includes:

- medical treatment
- collection and documentation of medico-legal evidence where appropriate
- sexual health information and treatment
- information about rights as a victim of crime
- information about reporting to police and legal processes
- support and information extended to support networks.

In addition, QH provides education and training to government and non-government agencies, with an aim to broaden community knowledge, improve responses and prevent sexual violence as outlined in the National Plan to Reduce Violence against Women and their Children 2010 – 2022.

Department of Justice and Attorney-General

The Office of the Director of Public Prosecutions (ODPP), Victim Assist Queensland (Victim Assist), Youth Justice Conferencing (YJC) and the Queensland Courts all fall within the responsibilities of the Department of Justice and Attorney-General. The following provides an overview of each of these separate agencies.

Office of the Director of Public Prosecutions

The ODPP represents the Crown in criminal proceedings against persons accused of committing serious criminal offences including sexual assault. The criminal proceedings include:

- the committal hearing, before a Magistrate in Brisbane Central, Ipswich and Southport Magistrates Courts. In other centres, this hearing is conducted by prosecutors within the police
- trials before a judge alone or a judge and jury
- sentencing hearing before a judge
- any appeals arising from the trial or sentence.

In addition to prosecuting matters in court, the ODPP is responsible for:

- assisting victims by providing information about the progress of a prosecution, the victim's role as a witness, and how the victim can inform the court of the impact of the crime by providing a victim impact statement
- giving victims reasons for decisions made in relation to proceedings which directly affect them
- taking into account the wishes of a victim who does not wish to proceed with a prosecution for any reason
- providing information about the availability of other resources and processes that may assist victims
- requesting that the court give sexual assault matters appropriate priority
- ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building
- liaising with other relevant agencies to ensure that the victim and family members understand the legal and procedural issues which may impact them.

In carrying out the role of the ODPP, all officers are obliged to comply with the Director's Guideline No. 25 as at 2013 *http://www.justice.qld.gov.au/__data/assets/pdf_file/0015/16701/Directors-guidelines.pdf.* This aims to ensure that the Principles of Justice, as set out in the *Victims of Crime Assistance Act 2009* are complied with.

Victim Assist Queensland

Victim Assist provides access to specialised support services and financial assistance for victims of personal acts of violence including sexual assault.

Financial assistance may be available to victims of sexual assault to help them pay for the cost of goods and services that have arisen, or will arise as a consequence of the assault.

This includes medical and dental expenses, and expenses associated with improving safety or relocation from their current location in order to escape the offender.

Victim Assist also provides information, referrals and support (which may include court support) to victims, and assistance in making a victim impact statement if the victim chooses to make one.

Youth Justice Conferencing

If the offender is a young person, there may be alternative processes to the matter being dealt with by a court. The purpose of YJC is to hold the young offender accountable for their actions and to come to an agreement on what they will do to attempt to make reparation for the harm caused. To safeguard the victim, additional procedures are adopted before a conference for a sexual assault can occur. These include referring the victim to a counselling service as well as compulsory attendance of the juvenile offender in a specialist treatment service.

Queensland Courts

Queensland Courts afford victims of sexual offences, affected child witnesses and special witnesses protections when proceeding through court. These are detailed in the *Evidence Act 1977* (EA) and the *Criminal Law (Sexual Offences) Act 1978*.

Section 21A of the EA provides protections for special witnesses and affected child witnesses. The court can declare a person a special witness by hearing evidence (if the witness does not automatically fall into the special category, such as where the witness is a child or the person has a mental impairment). When the court hears evidence from these special witnesses, there are a range of options to assist the witness. These include ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building. Where the witness is an affected child witness, there are further protections in place.

For further information refer to the Supreme Court Bench Book: *http://www.courts.qld.gov.au/information-for-lawyers/benchbooks-and-ucpr-bulletin/supreme-and-district-courts-benchbook.*

Department of Communities, Child Safety and Disability Services

The Department of Communities, Child Safety and Disability Services allocates funding to non-government organisations to assist people, predominantly women, who have experienced sexual assault, in accessing necessary services and support needed to rebuild their lives as quickly as possible. These sexual assault services offer flexible, holistic and ongoing personal support including advocacy and sexual assault counselling (including crisis counselling), in a culturally appropriate and safe environment.

The range of support provided by these services includes:

- provision of information, advice and referral
- needs assessment and development of case/service plans
- individual advocacy
- sexual assault counselling for victims and survivors of sexual assault
- community education.

For more information about access to sexual assault services in local areas, contact the Sexual Assault Helpline on 1800 010 120.

Child Safety Services is the Queensland Government agency for child protection and adoption services. The department is dedicated to protecting children and young people from harm or who are at risk of harm, and whose parents cannot provide adequate care or protection for them.

Non-government organisations

It is acknowledged that a number of government departments provide grant funding to non-government organisations to deliver a range of specialist sexual assault services. Local procedures and service agreements in relation to services provided by these organisations should be adhered to.

Section 4
Interagency approach

Given the often violent and complex nature of sexual assault, an interagency approach is essential. The Queensland Police Service (QPS), Queensland Health (QH), the Department of Justice and Attorney-General (DJAG) and the Department of Communities, Child Safety and Disability Services (DCCSDS), each have a different but fundamental role in responding to sexual assault. Each of these agencies should assist each other in understanding and supporting their role and be familiar with, and sensitive to, their differing and complementary roles. An interagency approach provides opportunities to discuss and address issues of mutual concern across departments.

Teamwork

Quality of care depends on partnership between these different agencies. Each agency should establish local procedures to facilitate improved liaison and coordination between services. These procedures should include systems for information sharing and conflict resolution.

Confidentiality

Confidentiality, privacy of information and security of records is imperative when working with people who have experienced sexual assault. It is a fundamental principle in treating victims with dignity and respect.

Access to and disclosure of personal information regarding the assault will conform to legal requirements and be limited to people directly involved in the case. Except where legal obligations exist, information will not be released without the prior consent of the person involved. This includes names and identifying information.

Training

Joint training can contribute to achieving interagency objectives and allow those working in the field to understand how best practice is achieved. Training and orientation should be ongoing and could include input from relevant local services.

Information provision

Police officers, doctors, social workers, health workers and legal officers, should provide people with relevant information which may include written material. This information should be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location.

People should be made aware of, and be given an opportunity to discuss and consider the implications of proceeding with medical, investigative and legal processes so that they can make informed decisions. These decisions must be respected. It should be noted however that the decision whether or not an investigation should proceed rests primarily with the police.

Referrals

Relevant referral procedures and guidelines between police and health services should be observed.

Staff of government agencies should be familiar with local specialist services and actively support people who have experienced sexual assault to access appropriate supports available in their community. In addition, relevant health, welfare and legal services likely to be accessed by victims will need to develop local strategies and procedures to ensure that referral processes are appropriate and coordinated. These services should also be aware of the admission procedures and location of the nearest health facility and police station.

Feedback

Quality of care is essential in ensuring that people are referred to the appropriate service. QPS, QH, DJAG and DCCSDS should ensure that local interagency links and procedures operate in a coordinated manner. Mechanisms for giving feedback about service delivery should also be in place and observed.

Access, availability and promotion of services

People who have experienced a sexual assault may need encouragement to use medical, counselling, police and legal services. Local procedures should ensure that services are accessible and coordinated. This includes the use of written information and community education materials.

Gender of service providers

Following a sexual assault, the person may feel uncomfortable talking with personnel of the opposite sex. If a preference for female or male personnel is expressed, all reasonable steps to accommodate this preference should be taken.

Diverse needs

Procedures need to be flexible in order to respond to diverse needs; including culture, language, gender, disability, religion, sexuality and geographical location. Furthermore, it is important to understand how these needs impact access to and utilisation of appropriate services.

All agencies should ensure that procedures and facilities provide access to appropriate services for Aboriginal and Torres Strait Islander people, people of non-English speaking backgrounds, children and young people and people with disabilities, including physical disabilities.

Aboriginal and Torres Strait Islander people

Service provision should reflect the cultural needs of Aboriginal and Torres Strait Islander people. Agencies should have a referral mechanism to facilitate access to culturally appropriate information for Aboriginal and Torres Strait Islander people. Where there is consent and it is appropriate to do so, Aboriginal and Torres Strait Islander liaison workers may be offered to assist people during the process.

Communication

The Queensland Government recognises that a significant number of people may require interpreter services, as well as culturally appropriate support in order to adequately disclose and report a sexual assault, and make informed decisions about the support and options available to them.

People with a disability

Services and agencies should facilitate access to appropriate support workers and interpreters for people with a disability. Disability includes intellectual, physical, sensory, psychiatric or neurological impairment, or a combination of these, resulting in a substantial reduction in the person's capacity to make informed decisions or communicate. With the person's consent, and when it is safe and appropriate to do so, services should also consult with relevant people involved in that person's life such as carers, guardians and specialist agencies or departments.

People from culturally and linguistically diverse backgrounds

Service provision should be responsive to, and respect the cultural, religious and language needs of the person who has experienced sexual assault. Where communication in English is difficult or where requested, accredited interpreters and cultural support workers should be used to assist in both eliciting information from, and providing information to the person who has experienced sexual assault. This supports client safety and enables informed decision making about health care, investigative and legal processes for both the client and agency.

Translating and interpreter services

All reasonable steps will be taken by government agencies and funded non-government organisations providing sexual assault responses, to ensure fair and equitable access to interpreting and translating services that are responsive and high quality.

All reasonable steps should be taken to make an accredited interpreter available in all situations where an interpreter and/or translator is required, unless there are extenuating circumstances that genuinely prevent an interpreter from being used. This may include, for example, a medical emergency or where a language group or community is very small and confidentiality is a concern for the client, or where there is no interpreter available for that language group. All agencies will take into consideration the wishes of the person who have been impacted by the sexual assault in relation to the use of an interpreter.

Each government agency is required to observe its own policies and procedures in relation to the use of interpreters. These internal procedures should align with the *Queensland Government Language Services Policy.*

Section 5
Interagency procedures

Regardless of where sexual assault is first reported, the first priority is to ensure the safety and welfare of the person reporting. Prompt referral to the designated specialist service should take place.

Crisis intervention

The purpose of intervention by a designated sexual assault response worker is to:

- provide immediate assistance, stabilisation and emotional support to assist the person to return to their level of functioning before the crisis
- assist the person to process their perception of the stressor
- provide information about the options available, as well as the procedures of the local health facility
- provide an opportunity for the person to express their concerns and feelings
- offer practical support, including contacting family members or support persons where appropriate
- talk to family members or support persons (if present) about how best to support the victim
- co-ordinate the interagency response and facilitate patient care and treatment along the sexual assault pathway
- provide information in relation to available community support resources.

The sexual assault worker will advise the victim of their right to access medical advice and treatment including sexual health treatment. If information or clarification about police procedures is requested, the sexual assault worker will, with the victim's consent, arrange for police to provide this information.

During any phase of this process, a support person can be present. The support person should not adversely influence the process.

Initial report to police

Police receiving a report of a sexual assault will act on the information received. The police should inform the victim of relevant decisions made and where necessary, obtain the victim's consent.

Initial report to a health facility

Health facilities, such as hospitals, are often the first place where a person will disclose a sexual assault. When this happens, nursing and medical staff will assess the general medical condition of the person and administer immediate medical treatment if required. Assessment of a person's need and urgent medical intervention will always be the first priority.

Medical examination and treatment

A general, non-forensic medical examination may be conducted by a medical professional with the aim to:

- reassure victims about their physical welfare, including giving information on, and providing treatments to reduce the risks of pregnancy and sexually transmitted infections
- assess, treat and document injuries
- provide advice and referral options for follow up medical care.

A medical examination should include sexual health intervention as described in *Queensland Sexual Health Clinical Management Guidelines of 2010 section 6: http://www.health.qld.gov.au/sexhealth/documents/cm_guidelines06.pdf.*

Unconscious patients who are admitted to hospital with a suspicion of sexual assault will be assessed and treated as medical emergencies.

Referral to the local sexual assault team

Health staff must follow local procedures in the management of sexual assault. All efforts should be made to contact the designated sexual assault team and where there is no specialist team, crisis intervention and support will be delivered by health staff present. A referral for follow-up support and care should be made as soon as possible.

Notifying the police

The sexual assault worker should discuss available reporting options with the person. If the victim requests to speak to police, it is the role of the sexual assault team or other designated staff member, to notify the police as soon as possible to ensure all evidence including the crime scene can be secured. Notification and initial reporting to police does not mean an investigation will automatically take place.

Where police are operating under time constraints, they should inform health staff. Working together to meet time constraints will directly impact the quality of the outcome for the victim.

Victim attending with police

Where victims arrive at the health facility with police, procedures outlined in referral to the local sexual assault team above should still be followed by health staff.

Initial contact

It is the sexual assault worker's role to coordinate an immediate response; offer practical and emotional support, assess the person's immediate physical and emotional safety and recognise the potentially traumatic nature of the assault.

Medical assessment will be conducted in accordance with local procedures.

Forensic medical examinations

Doctors or nurses conducting forensic examinations must follow local procedures in the management of sexual assault.

The forensic examination consists of obtaining a history as to the nature of the assault in order to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic evidence as it relates to the alleged sexual assault.

Forensic medical examinations and informed consent for people aged 14 years and above

Informed consent reflects a legal and moral principle whereby the victim has the right to decide what is appropriate for them. This includes the right to accept or to decline a forensic examination and to change that decision.

In order for a patient to exercise this right, they require access to information that is relevant to them. An explanation about the nature of the forensic examination must be given by the forensic medial officer (FMO) or forensic nurse examiner (FNE) and police also need to inform the victim about police investigation processes.

The victim should be made aware that they may withdraw their consent at any time to any particular procedure, or any aspect of the examination. However after the examination is complete, an investigation by police may continue to progress.

It should be noted that the decision to have a forensic examination is a health care matter and therefore legislation and policy around informed decision-making in health care applies in this circumstance. For more information on decision-making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

It is the responsibility of the medical and forensic staff to assess capacity to consent. Where a person lacks capacity, it is appropriate to identify a capable adult to act on the patient's behalf. Please refer to section 2.2 of the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

If at any point there is a possibility that the capable adult identified is the offender, it is in the best interests of the patient for an Adult Guardian to be appointed in accordance with the *Powers of Attorney Act 1998* and the *Guardianship and Administration Act 2000*.

Where possible the examination will be carried out using the Sexual Assault Investigation Kit (SAIK).

Forensic medical examinations and informed consent for people under 14 years of age

Paediatric patients are generally those aged less than 14 years of age. It is usual practice for the child to be transferred to the hospital's child protection area for an examination, even if they have had initial treatment in an adult emergency setting. Emergency medical treatment for any child should be undertaken by the Department of Emergency Medicine prior to a forensic medical assessment.

Paediatric forensic medical assessments are undertaken by paediatricians. This will be done by the Child Protection Advisor on call (or similar) or the general paediatrician on call.

All examinations conducted on children should be consistent with Queensland Health's Hospital and Health Services Health Service Directive: Protocol for conducting child sexual assault examinations: *http://www.health.qld.gov.au/directives/docs/ptl/qh-hsdptl-029-11.pdf*. All paediatric FMEs should also adhere to legislation and policy around informed decision-making in health care. For more information on decision –making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf*

Chain of evidence

The chain of evidence and the need for 'contemporaneous recollection of facts' to aid an investigation is essential. The chain of evidence involves not only the examination of the victim, but also includes the geographic location where the assault occurred, the identification and interview of witnesses and identification of relevant additional evidence. Evidence collected needs to be stored and transported in approved and standardised ways as outlined in police procedures to ensure the utility in a court proceeding. This further emphasises the importance of police involvement prior to an examination being conducted.

Storage and transportation issues need to be considered when undertaking an examination as the inability to safely and correctly store and transport evidence may damage the evidence or make it inadmissible in court in the later stage of an investigation and prosecution.

The doctor or nurse conducting the forensic examination should discuss the case with the police before the forensic examination takes place. This is to ensure that:

- all necessary evidence is collected
- a re-examination is prevented
- unusual evidence is not overlooked.

Timing and nature of the forensic medical examination

In determining the timing and nature of the FME a number of factors will be considered. These include the time since the assault, the physical and emotional state of the victim and their account of the assault.

This process, particularly if it involves an internal gynaecological or anal examination, can be distressing and the examination may need to be delayed or discontinued on account of the victim's physical and emotional state.

Presence of police and support person at medical and forensic examinations

Regardless of age, a person is entitled to have a support person present during the medical and forensic examination. This may include a friend or family member, a nurse, health care worker or sexual assault worker, who is not a potential witness.

There is no legal requirement for a police officer to be present during the medical and FME. However, if a victim requests the presence of police, this police officer is to be the same gender as the victim.

A police officer must be present to receive all evidence collected during a forensic examination immediately after the procedure to maintain continuity of the evidence for any potential court proceeding.

Consent to release information and evidence

The doctor or nurse conducting the FME will not release the SAIK to police without the signed consent of the victim or the capable adult acting on their behalf.

Access to health records

Health records, including counselling notes, are confidential. However, patients should be notified that any records can be subject to a subpoena or other court-related mechanisms.

Drug facilitated sexual assault

Where the administration of drugs in the sexual assault is suspected, testing to maximise the chances of detecting these substances should be administered in a timely fashion. However, the decision to test remains a clinical one which is made by the FMO or FNE.

Victim DNA reference samples

DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the FME.

Support person during the police interview

Police should inform victims that they may be accompanied by a support person while their statement is being taken. However, the victim must be advised that:

- the support person may not participate in the interview
- the support person may not directly or indirectly influence the interview
- a potential witness may not act as a support person.

Discontinuance of police action before a proceeding has commenced

Where the victim does not wish to proceed with further police action, police should:

- make clear that following the withdrawal of the complaint no further police action will be taken
- attempt to obtain a signed withdrawal of complaint
- inform the adult victim (18 years and over, only) of the online *Adult Sexual Assault Resource (http://www.police.qld.gov.au/programs/adultassault/)* package that provides alternative reporting options

If a proceeding has commenced, the victim's wishes will be taken into account when deciding if the matter will continue.

Domestic Violence Protection Orders

Sexual assault is one form of domestic and family violence. Where the sexual assault has occurred within an intimate personal relationship (marriage, engagement, couple), family relationship or an informal care relationship, the victim should be informed of their option to seek protection under the *Domestic and Family Violence Protection Act 2012*. In situations where domestic violence has occurred and where protection is needed to prevent further violence, a domestic violence order can be applied for by the victim, by police on behalf of the victim or by another person authorised by the victim. This is done through the Magistrates Court.

Where appropriate, victims should also be referred to a specialist domestic violence service for support and assistance, for example DVConnect Womensline Ph. 1800 811 811 and DVConnect Mensline Ph. 1800 600 636.

Follow-up and registration on the Victims Register

After the trial and/or sentence, the victim will have the opportunity to talk to the case lawyer about the outcome of the case and the sentence imposed, if any. This opportunity may arise immediately after the trial and/or sentence concludes or at a later time by telephone.

If the offender is imprisoned or placed under the supervision of Queensland Corrective Services, the victim may register their details on the Victims Register which is administered by Queensland Corrective Services. A victim and/or their family or nominee can register to be kept informed about the offender's imprisonment, movement between locations and proposed parole dates. They will also be given the opportunity to make submissions to parole boards when offenders apply.

Where the offender is a young person, the Victim Information Register may be utilised. This register is administered by Youth Justice within the Department of Justice and Attorney-General. A victim and/or their family or nominee can register to be kept informed about the young person's detention, movement between locations and supervised release dates.

If the offender appeals against their conviction and/or sentence or the Attorney-General appeals against the leniency of the sentence, the victim will be kept informed about the progress and outcome of the appeal and any consequential matters arising from the appeal.

Key stakeholders at the local level should maintain current referral information on appropriate support and other community services available. Localised referral pathways and protocols should be developed between key service providers to ensure timely referral pathways for those in need of support.

Conclusion

The government agencies acknowledged in this document (QPS, QH, DJAG and DCCSDS) have committed to the principles, roles, approaches and procedures articulated in the guidelines. This commitment aims to ensure that individuals who have experienced sexual assault are provided with timely, high quality and coordinated service delivery responses appropriate to their needs and appropriate to the role played by departmental officers.

Key service providers are encouraged to use this document as a framework to develop local level arrangements and protocols to ensure best practice, quality service and support to people who have experienced sexual assault.

The government agencies responsible for the development of the guidelines would like to thank all key government and non-government stakeholders who kindly contributed their knowledge and expertise.

For information or comments please contact:
Queensland Government Interagency Working Group Responding to Sexual Assault
Tel: 1300 546 587 **Email:** victimslinkup@justice.qld.gov.au

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF BRENDAN PATRICK FRANCIS BLYTH

I, Detective Sergeant **Brendan Patrick Francis BLYTH,** of the Logan District Criminal Investigation Branch state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

Experience and current position

1. I currently hold a Diploma of Justice having graduated from the Yeronga Institute of Tafe in 2001.

2. I was sworn into the Queensland Police Service ("QPS") in July 2004 after having commenced at the Queensland Police Service Academy in January 2004.

   (a) From July 2004 until December 2008, I performed General Duties policing within the Wynnum District of the Metropolitan South Region (now known as the Bayside District in the Brisbane Region).

   (b) My General Duties tenure included an 18-month secondment to the Wynnum District Response Team which was a quasi-plain clothes / investigative role.

   (c) On 1 December 2008, I commenced a tenure at the Dutton Park Criminal Investigation Branch as a Plain Clothes Constable. In July 2009 I attained the rank of Senior Constable.

   (d) In July 2012, after successful completion of the Detective Training Program, I attained the designation of Detective. The successful completion of this program also awarded me an Advanced Diploma of Public Safety (Police Investigation).

(e) I remained at the Dutton Park Criminal Investigation Branch before being promoted to Detective Sergeant (Senior Investigator) with the Logan Criminal Investigation Branch in October 2017. From January 2019 until present, I have completed various relieving periods as a Detective Acting Senior Sergeant. This has included periods as the Officer in Charge of the Logan District CIB.

(f) Overall, I have over 18 years of sworn service within the QPS with nearly 14 years being in plain clothes and 10 as an appointed Detective.

3. I do not have a current CV.

4. My current substantive role is Detective Sergeant – Senior Investigator. The duties and responsibilities of this role are extensive and varied. This includes day to day supervision of junior staff (both appointed and non-appointed Detectives), overseeing their investigations and court paperwork as well as providing advice as required. At any one time I can be managing up to 20 staff as well as maintaining my own workload and managing more complex and protracted investigations.

(a) The Logan District is vast both geographically (covers 3,173sq km) and demographically with over 215 cultures represented. I report directly to two (2) Detective Senior Sergeants and have twenty (20) staff who report directly to me. I share the responsibility of staff management with two other detective Sergeants.

(b) As a Detective Sergeant, I am required to investigative a wide variety of crime that is either perpetrated by adults or committed against adults. These crimes included homicide, sexual violence offences, assault, armed robbery, fraud, drug trafficking, weapons offences and property crime (burglary, car theft etc).

Forensic medical examinations of complainants and witnesses

5. I am not aware of and have not been involved in any matter in which a witness has undergone a forensic medical examination.

6. Forensic medical examinations are commonplace in investigative work. In response to any reported crime, being forensically aware is important. This includes being provided with a detailed briefing by first response police and then attending the scene and

speaking with complainants and witnesses. I will often consult with a local Scenes of Crime Officer ("SOCO") around the most appropriate and best actions to secure forensic evidence. This is very relevant with the transferrable nature of DNA evidence. In the case of a sexual violence offences where there is alleged penetration, I will consult with the Forensic Medical Officer ("FMO").

(a) The offences I would primarily consider organising a forensic medical examination for are those involving sexual violence, in particular where penetration is alleged. Other offences include offences of violence such as robbery or assault where there is alleged physical contact.

(b) I can get notified of an incident requiring my involvement from police communications, general duties, the district duty officer, the hospital and through a CIB shift supervisor. On occasion, a person may attend a front counter however these offences may have occurred several days or more prior. I can also be tasked directly through QPRIME however, in my experience, the need for any forensic examination is generally gone by this stage.

(c) The nature of the forensic examination generally dictates where it will be conducted. For a sexual violence investigation where a sexual assault investigation kit ("SAIK") is to be used, this will usually occur in a secure room at the Logan Community Hospital. In this instance, the hospital is informed when police attend as the person needs be triaged through emergency before any examinations are conducted. Generally, there is no advance warning provided. Other less invasive examinations can be conducted at the scene, a police station or watchhouse. Sometimes a particular property item such as clothing will be seized from a scene, packaged as directed by Scenes of crime and then subject to an examination (if required) in a laboratory at a later stage.

(d) A person can be transported a number of ways to the location where a forensic examination is to be conducted. Sometimes QAS or police will conduct the transport and other times the person will self-present to the hospital. If a person is to be transported to a location other than the hospital, police often conduct the transport and if required, will be forensically aware by having the person in an evidence (zoot) suit or wearing gloves in the case of nail scrapings.

(e) There is a stock of SAIKs stored at each CIB office in the Logan District. In addition, there is generally a stock of SAIKs in the secure room at the hospital where the examination will take place. The SAIKs are stored on shelving in a general use storage room / section in each office. The SAIK provides all the required equipment for that type of investigation. For other forensic medical examinations such as penile swabs, nail scrapings etc, these kits are maintained by both the local Scenes of Crime. I believe that the Forensic Medical Officer ("FMO") also has a stock.

(f) If the FMO doesn't have a SAIK, an investigator will directly provide one to them. For a SAIK or other intimate procedure, an FMO is required to undertake this kind of examination. For a less intimate procedure such as nail scrapings, this can be conducted by a local SOCO. The waiting time for a complainant can vary depending on circumstances that include where the FMO is travelling from, time of day / night and the workload at the hospital (to have them triaged). Often the wait is several hours, sometimes longer for a complainant at a hospital. The information generally conveyed to a medical practitioner prior to an examination is based upon what the complainant and any witnesses have disclosed. This may include times that alleged offending occurred, location, nature of relationship with suspect and injuries.

(g) Once a SAIK is completed, all vials and packages are sealed and labelled by the FMO before being returned into a tamper proof bag and being provided to the investigator. The Investigator then takes the SAIK back to their local station, creates an electronic barcode and lodges the SAIK in a secure room as per policy (OPM 4.2.4) and storage instruction (temperature-controlled) that appears on the front of the SAIK. The SAIK is then electronically signed out in QPRIME by the investigator, provided to local Scenes of Crime where it is photographed and provided with a barcode from the Forensic Register. The SAIK is then transported to Queensland Health Forensic Scientific Services ("FSS') and lodged for analysis. Ultimately, the responsibility for this process lies with the Investigator but can be undertaken by any police officer. A copy of the relevant part of the OPM is attached and marked **'Exhibit 2'.**

Brendan Patrick Francis Blyth Witness

7. The circumstances in which a complainant / witness will be placed in a protective suit include when it can be identified that they have had direct contact with an offender and that there might be forensic evidence on their clothing or on their person. This is generally gathered from versions provided, CCTV etc. It would most commonly be deployed in cases where the complainant and alleged offender were unknown to one another.

8. Clothing will be collected from a suspect in circumstances where it is identified that there is contact (DNA), some sort of fluid (blood) or an aspect that needs corroboration (damage to clothing, description – not DNA related). The clothing will generally be collected by the Investigating Officer and placed as separate items into paper bags. On occasion, depending on the nature of the investigation (homicide), Scenes of Crime or Scientific may undertake the removal of the clothing.

9. I am unsure of the ordering process for a SAIK, but believe it is undertaken by the station administration officer, as required. I believe the supplier for the SAIK is Tamper-Evident.

10. When received by the QPS, a SAIK is fully compiled. The content is contained in the unsealed and open tamper proof bag and include 5 dry swab collection containers, a QLD Government sexual assault toxicology form (in a snap lock bag) and a drop sheet with relevant instructions (in a snap lock bag). If the sexual assault is within 72 hours, a blood and urine kit is also required.

11. There are often delays in transporting a SAIK to FSS. These often revolve around the availability of the Investigator (days off after incident, night shift, other investigations). This is where it is important for the Investigator to brief other members to assist. I am unable to provide a proportion of cases where it takes longer than two weeks for the samples to reach FSS. In some instances, a complaint might be withdrawn the next day or a complainant cannot be found and without a statement, the matter may not be progressed, especially if a DNA reference sample has not been obtained from the complainant. I am not aware of any particularly long delays regarding the transportation of a SAIK to FSS.

12. A DNA reference sample is taken by the Investigator by way of consent. This should be taken immediately after the SAIK or when a statement is being provided. In cases of sexual assault, where a SAIK is to be submitted, a reference sample is always taken.

[redacted]

Brendan Patrick Francis Blyth Witness

In other non-sexual assault investigations, a reference sample will be considered and taken if the analysis is likely to show the complainant's DNA (blood at a scene, on clothing or known physical contact with the suspect). A reference sample is generally taken at a police station.

13. The Operational Procedure Manual ("OPM") specifically s2.6.3 and s2.25.6 govern the procedure and policy to be undertaken in respect to the collection of SAIKs and reference samples. This a direct order for investigators to comply with. A copy of the relevant parts of the OPM are attached and marked **'Exhibit 3' and 'Exhibit 4'.**

14. Personally, I am involved in approximately 8-12 instances each year that require the administration of a SAIK. Within the last 12 months, due to my relieving as an ADSS, this has been significantly less.

15. The processes outlined above have always been the same. The SAIK was previously sealed, but I cannot recall when this changed over. I believe that, in the past, there was a male and female SAIK. Now the SAIK is universal.

16. I cannot comment on cases involving children under 14 as I have not worked in this area. I am aware that a specialist FMO for children would undertake any relevant procedures.

Forensic medical examinations of suspects/accused persons

17. The forensic medical examination of a suspect/accused person is far less common than that of a complainant. This is generally because the suspect is seldom in custody at an early enough stage for an examination of this nature to be of value.

18. A forensic medical examination of a suspect / accused person will be considered in circumstances where the alleged offence has been recently committed (generally within 72 hours, sometimes up to one week). Advice will often be sought from the FMO in this instance to identify if there is any evidential value in the examination. This could also include if the complainant and suspect are known to each other and previously engaged in a consensual act prior to an alleged offence.

19. The necessary authority is found under the PPRA, chapter 17. The investigator or police officer may apply to a Magistrate for an intimate, non-intimate forensic procedure order

or both. Some examinations can also be done with consent however for an intimate examination, my preference is to always have an order.

20. A forensic medical examination of an accused person / suspect is generally undertaken at a police station or watch house. I have previously taken an accused to the FMO office in Brisbane City and to the Gold Coast Hospital for this purpose.

21. The examination must be conducted by a 'qualified person'. For an intimate / non-intimate forensic procedure, a qualified person is a Doctor (FMO) or forensic nurse. To undertake this examination, the FMO is contacted on the listed landline during hours and the on-call mobile outside of hours.

22. For an intimate procedure, a standard SAIK is used as I believe they are now universal. The FMO is briefed on the known circumstances which assists in making the correct decision surrounding the examination required.

23. I am yet to have a person refuse to cooperate with a court order but have had a situation where initial consent was revoked when the examination was further explained, and an order was then sought, approved and complied with. There is power to use force against an individual s517(4) of the PPRA which could be considered to exercise this power / order.

24. If a forensic medical examination of a suspect is successfully completed, samples are provided to the Investigator and lodged at a local property point in compliance with policy. Much like a SAIK for the complainant, if the samples need to go to FSS, they are photographed and given a forensic barcode and transported to FSS for analysis.

25. There can be delays in transporting forensic samples to FSS. These often revolve around the availability of the Investigator (days off after incident, night shift, other investigations). This is where it is important for the Investigator to brief other members to assist. I cannot provide a proportion of cases where it takes longer than two weeks for the samples to reach FSS.

26. A DNA reference sample from the suspect / accused is taken by the Investigator. If proceedings are commenced, the reference sample is taken during the charging process (generally at a watch house, recorded on DVD) or if no charges have been preferred by way of consent. If there is no charge forthcoming and no consent, a court order can be applied for.

[redacted]

Brendan Patrick Francis Blyth Witness

27. The OPM, s2.25.4 outlines the taking of DNA samples for when proceedings have been commenced. Consent should always be considered first where a proceeding has not been commenced but failing that, an order can be sought. A copy of the relevant part of the OPM is attached and marked **'Exhibit 5'.**

28. I do not have recent experience with forensic medical examinations of suspects and have been involved in less than ten forensic medical examinations of that kind in my entire career. This is due to the reasons outlined above and most commonly, not having a suspect in custody in time.

29. To my knowledge, the processes have not changed significantly in this space since I commenced work in plain clothes.

Results

30. When an identification has been made from a forensic medical examination, the Investigator is tasked from the DNA unit on QPRIME. Generally, this is an FYI (For Your Information) task attached to the relevant occurrence under investigation. To my knowledge an Investigator is not directly notified by a task if there is no DNA identification. When a DNA result is returned from FSS (either an identification or non-identification) the DNA sample management unit create an electronic forensic supplementary report outlining this. If an Investigator was waiting for a DNA analysis result, they would generally hold the file on their electronic work list and would become aware when they reviewed the file. A review would generally occur every 28 days as that is when the bring up date is set to become overdue.

31. My understanding of 'no DNA detected' is that an item was sub sampled by SOC and that the analysis of the sample failed to produce DNA sufficient for comparison on the database or to the reference samples. Prior to the establishment of the Commission of Inquiry, I was unaware it was possible to obtain a partial or full profile from a sample which initially returned the result 'no DNA detected' and that an investigator could request FSS conduct further testing.

32. My understanding of 'DNA insufficient for further processing' is that a DNA sample was obtained but is to complex (multiple contributors) to isolate into a sample that can be matched to a reference or interpreted further. Prior to the establishment of the

Commission of Inquiry, I was unaware it was possible to obtain a partial or full profile from a sample which initially returned the result 'DNA insufficient for further processing' and that an investigator could request FSS conduct further testing.

33. I have seen mixed profile results which can sometimes be separated into contributors and sometimes not.

34. In some investigations, DNA results are provided to the complainant. Generally, these are not used and should not be used as the catalyst to proceed with a criminal complaint. Perhaps a complainant might want vindication of an allegation and the DNA result might provide this, even if the complaint is not current. I have mentioned to complainant's previously that DNA was located and matched but not said who to.

Other issues

35. Sub sampling does occur in our local area, generally by SOC in a class 2 laboratory (I believe that it what it is called). There is a class 2 lab here at Logan SOC.

36. Generally, FMO's / medical practitioners are very helpful and willing to assist. Often, they are travelling from the Gold Coast at odd hours. Sometimes there are lengthy discussions regarding the requirement for an examination but ultimately, if the Investigator wants a SAIK undertaken, it will be done. As outlined previously, we can call the office during business hours and each fortnight. In addition, the on-call roster with mobile numbers is emailed to police.

37. The current SAIK model, as outlined in OPM 2.6.3, is straight forward, and I am yet to have any issue with it.

38. While I do not have much experience with the just in case kits, I think they are a good idea. I am only aware of one Just in Case referral. In that case, the complainant attended the hospital and prior to this exam, decided to make a formal complaint so I attended and took possession as per normal procedure.

39. In relation to current processes for collecting biological material for forensic DNA testing, sub samples from clothing and bedding will generally not be sent for DNA analysis until the SAIK has returned a result. This can be frustrating and can hinder an investigation as often decisions need to be made in a timely manner. The need to have

these sub samples analysed needs to be a case-by-case basis but it does seem somewhat restricted.

40. The current turnaround to get a result is over 12 weeks. It can cause a complainant angst as sometimes police are waiting on this result to progress the investigation.

[redacted]

TAKEN AND DECLARED before me at [redacted] in the State of Queensland this ~~22nd~~ 23rd day of September 2022

[redacted]

Brendan Patrick Francis Blyth Witness

[redacted]

[redacted]

Brendan Patrick Francis Blyth Witness

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF BRENDAN PATRICK FRANCIS BLYTH
INDEX TO EXHIBITS

Exhibit no.	Description
1.	2022/00187 – Requirement to give information in a written statement – dated 14/09/2022
2.	Queensland Police Service – Operational Procedures Manual, Section 4.2.4 – Lodging property – dated 12/09/2022
3.	Queensland Police Service – Operational Procedures Manual, Section 2.6.3 – Sexual Offences – dated 12/09/2022
4.	Queensland Police Service – Operational Procedures Manual, Section 2.25.6 – Obtaining samples for DNA analysis from a victim/complainant/witness – dated 12/09/2022
5.	Queensland Police Service – Operational Procedures Manual, Section 2.25.4 – DNA samples when proceedings started against an adult – dated 12/09/2022

EXHIBIT 1

Notice number: 2022/ 00187

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Brendan Blyth

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Thursday 22 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 14th day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00187

Schedule of topics for statement

Detective Sergeant Brendan Blyth

1. State your full name, current position/title and place of work.

Experience and current position

2. List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained (if any).

3. Detail your work history.

4. Attach a current CV.

5. Identify the duties/responsibilities of your position.

   (a) Include a description of the geographical area you work in, and identify who you report to and who (if anyone) reports to you.

   (b) Include a description of what types of crime you investigate.

Forensic medical examinations of complainants and witnesses

6. Detail your involvement in the conduct of forensic medical examinations on complainants and witnesses, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

   (a) Identify the types of alleged offences for which you would consider organising a forensic medical examination.

   (b) Identify the different ways you become notified of a person making a complaint about an offence for which you would consider a forensic medical examination appropriate.

   (c) Identify where the forensic medical examinations are conducted, and, if this includes a hospital, identify what area/rooms in a hospital are typically used. What advance contact is made with hospitals/other locations when you are intending to bring a complainant there.

   (d) Explain how the complainant is transported to the place where the forensic medical examination will be conducted, and who transports them.

(e) Identify who supplies the sexual assault investigation kit (**SAIK**) for the examination. Where are SAIKs stored? Identify if any other equipment is used in the examination, and if yes, identify who provides that equipment.

(f) Explain what happens at the location of the forensic medical examination, including who the SAIKs are provided to. Who conducts the examination (and identify if this varies between locations within your area of operation)? Include an explanation of how long a complainant typically waits at a hospital/other location for the examination to be conducted. Explain what information you typically convey to medical practitioners conducting the examination.

(g) Once the forensic medical examination is completed, what happens to the SAIK? Explain the process from when the medical practitioner finishes the examination to when the SAIK is delivered to Queensland Health Forensic and Scientific Services (**FSS**). Identify any property points at which SAIKs are stored, and the method(s) of transportation. Identify who is in charge of seeing that the SAIK is transported successfully.

7. Explain the circumstances in which you place the complainant/witness in a protective suit (that is, a suit or covering that is intended to protect the evidential integrity of samples that may be collected from the complainant/the clothing they are wearing).

8. Explain the circumstances in which clothing that an accused is wearing will be collected for potential submission for forensic DNA testing. In those circumstances, at what point and in what location is the clothing collected from the complainant? Is the clothing collected by an investigating officer, scenes of crime officer, medical practitioner or someone else?

9. Who supplies SAIKs to the QPS stations in the area in which you work? Who is responsible for placing orders for SAIKs?

10. Describe the appearance of a SAIK when it is received by QPS. Is it already fully compiled/put together, or do QPS stations in your area receive individual components of the SAIK and put them together? If the latter, identify whose role it is to put the SAIKs together.

11. In your experience, once a forensic medical examination is completed, how long does it typically take for the SAIK to reach FSS for forensic testing? As part of your answer, addressing the following.

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for a SAIK to reach FSS after it has been administered.

(c) Describe any instances where there have been particularly long delays.

12. Identify who takes a reference sample from the complainant/witness? Explain when and in what circumstances that reference sample is typically taken.

13. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

14. Provide an estimate of the number of cases each year that you are involved with investigating which also involve the administration of a SAIK.

15. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

16. If any of the processes detailed above vary in the case of child complainants/witnesses, including those aged under 14, identify and explain those differences.

Forensic medical examinations of suspects/accused persons

17. Detail your involvement in the conduct of forensic medical examinations on suspects and accused persons, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

(a) Identify the circumstances leading up to the taking of intimate samples from an accused person, including any necessary authority that must first be obtained.

(b) Identify where the forensic medical examinations are conducted.

(c) Who conducts the examination (and identify if this varies between intimate and non-intimate examinations)? How are they contacted/organised to attend?

(d) What equipment do they use – is it a SAIK? If it is a SAIK, who supplies the SAIK?

(e) Explain what happens at the location of the forensic medical examination, including who the SAIKs/equipment are provided to. Explain what information is typically conveyed to medical practitioners conducting the examination.

(f) What happens if the accused person refuses to consent or cooperate with the examination, even if a court order has been obtained authorising the examination/procedure?

(g) Once the forensic medical examination is completed, what happens to the SAIK/samples? Explain the process from when the medical practitioner finishes the examination to when the samples are delivered to FSS. Identify any property points at which the samples are stored, and the method(s) of transportation.

18. In your experience, once a forensic medical examination is completed, how long does it typically take for the samples to reach FSS for testing? As part of your answer, address:

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for the samples to reach FSS after the examination has been conducted?

19. Identify who takes a reference sample from the accused? Explain when and in what circumstances the reference sample is typically taken.

20. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

21. Provide an estimate of how many cases per year you are involved with investigating that involve a forensic medical examination (or similar) of an accused.

22. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

Results

23. Are you notified when the samples from a forensic medical examination have been tested, and are you notified of the results? If yes, explain how you are notified.

24. What is your understanding of the result '*No DNA detected*' (or similar)? If you have not seen this result-type before, confirm same.

25. What is your understanding of the result '*DNA insufficient for further processing*' (or similar)? If you have not seen this result-type before, confirm same.

26. What other type of results do you recall receiving? What is your understanding of those results?

27. Are the DNA results of the examination passed onto the complainant/witness? If yes, in your experience, does this have an effect on the complainant's decision to proceed with a criminal complaint? If so, explain how.

Other issues

28. Does sub-sampling of items suspected to contain biological material occur within your area, or does that occur at a QPS laboratory elsewhere?

29. If not already discussed above, outline any difficulties you have had in finding medical practitioners available and/or willing to conduct forensic medical examinations? If yes, provide details, including what you had to do to find a suitable medical practitioner.

30. Identify and detail any of your concerns with, or criticisms of, the current Queensland SAIK model, the just-in-case kits or the current processes for collecting biological material for forensic DNA testing in sexual assault matters (if not already discussed). Attach any supporting documents.

EXHIBIT 2

4.2.4 Lodging property

Where members are required to lodge property they should after issuing a property receipt:

(i) generate a QP 0760: 'Property Receipt' from the QPRIME entry, if not already complete;

(ii) if possible and safe place the property in a suitable property bag;

(a) seal the bag;

(b) enter the following information on the bag:

- the officer's name, rank, registered number and station;
- the date and time of taking possession of the property;
- for property that consists wholly or partly of drug matter a full and complete description of the drug matter; and

(c) sign and date the seals

(d) if applicable:

- the name and address of the person from whom the property was taken; and
- invite the person from whom the property was taken to sign the bag at an appropriate position on the bag; and

(iii) if the property:

(a) is too large to fit into a property bag; or

(b) possesses features that would make storage in a property bag undesirable and unsafe,

seek advice from the officer in charge of the property point on the most suitable method of containing or wrapping the property; and

(iv) hand the property to the relevant property officer or lodge the property at a property point in accordance with local procedures.

EXHIBIT 3

2.6.3 Sexual offences

CIB and CPIU OIC responsibilities

The OICs of CIBs and CPIUs are responsible for undertaking the role of the sexual violence liaison officer (SVLO) as outlined in the section: 'Sexual violence liaison officer (SVLO) responsibilities' below.

First response officer responsibilities

Where first response officers identify a sexual offence, they should consider contacting the relevant district SVLO to assign an investigating officer in line with local arrangements and the responsibilities of an SVLO contained in this section.

Additional responsibilities of first response officers for sexual offences include:

(i) ensuring the safety and welfare of the victim (see Charter of Victims' Rights of the *Victims of Crime Assistance Act* (VOCAA) and s. 2.12.1: 'Victims of Crime Assistance Act' of this chapter);

(ii) identifying any person to whom the victim may have stated the complaint to following its occurrence, i.e. preliminary complaint and any other possible witnesses;

(iii) obtaining personal particulars from the victim and identifying the offence to be investigated, i.e. rape, sexual assault;

(iv) completing a brief account of the occurrence involving the offence complained of, including location, time, injuries, conversation, indicia, sequence of events, etc.;

(v) obtaining sufficient information which would assist in identifying the suspect(s), including as appropriate:

(a) ascertaining if the suspect(s) is known to the victim or any witnesses;

(b) obtaining an accurate description of the suspect(s);

(c) identifying if any CCTV or security surveillance camera vision is available (see s. 2.4.11: 'Video and photographic evidence recorded during the commission of offences' of this chapter);

(d) obtaining any information which will assist investigators in locating and identifying the suspect(s); and

(e) arranging for a broadcast of suspect(s) where necessary; and

(vi) not asking leading questions of the victim in relation to the complaint.

Investigating officer responsibilities

Additional responsibilities of investigating officers for sexual offences include:

(i) providing an objective account of the investigative process and judicial process to ensure the victim is fully informed of the process;

(ii) discussing with the victim their needs and concerns in relation to the investigative process including whether the victim has any preference in relation to the gender of any officer to be present during the investigation. Preferences should be complied with where possible;

(iii) providing the opportunity for the victim to have a support person present during the various stages of the investigation, including taking the victim's statement (see also s. 7.6: 'Interview with a child or person with an impairment of the mind' of this Manual) and during any medical examinations. A support person may include an employee from a sexual assault support service. Victims should be advised that witnesses or potential witnesses may not act as support persons;

(iv) fully informing the victim of the importance of retaining forensic evidence. However, officers should not discourage victims from washing bodily fluids from the vaginal or anal areas due to the risk of infection from potentially life-threatening diseases such as HIV;

(v) arranging for a medical examination by a forensic medical officer (FMO), doctor or forensic nurse;

(vi) providing the examining medical practitioner with a Sexual Assault Investigation Kit (SAIK);

(vii) taking possession of the completed SAIK and ensuring it is;

(a) allocated a forensic exhibit number;

(b) entered onto the forensic register by a forensic officer; and

(c) delivered to Queensland Health Forensic and Scientific Services (FSS) (see s. 2.19.6: 'Forensic Services Group (FSG)' of this chapter);

(viii) where additional biological evidence is taken from the complainant, only the SAIK is to be delivered to FSS. The biological samples are to be:

(a) retained by the investigating officer whilst awaiting the results of SAIK analysis; and

(b) submitted for analysis, if the analysis fails to identify the offender;

(ix) ensuring a DNA reference sample is collected from the complainant:

(a) at the same time as the SAIK; or

(b) in offences involving oral rape, 48 hours after the time of the offence; and

(c) using a DNA 'Mouth Sample Kit – QPS'; and

(d) completing a:

- QP 0442: 'DNA Sample Particulars Form'; and
- QP 0535B: 'Signed consent for the taking of sample for DNA Analysis from victim/complainant/witness',

(see s. 2.25.6: 'Obtaining samples for DNA analysis from a victim/complainant/witness' of this chapter);

(x) collecting DNA reference samples from witnesses/husband/partners for the purpose of assisting analysts with the interpretation of complex mixed DNA profiles and improving the timeliness of results;

(xii) prior to obtaining a DNA sample:

(a) ensure the victim is fully aware of the procedures involved in the medical examination and discuss the evidentiary benefit to have such examination;

(b) explain to the victim written and signed consent should be given for:

- any clinical or forensic examination;
- the collection of specimens by the doctor;
- the release of any specimens taken or relevant laboratory results; and
- the taking of necessary photographs;

(c) provide the victim the option of having a support worker present during the examination. The examination should be directed to establishing whether the victim had been penetrated to any extent or sexually assaulted. All possible evidence of the commission of the crime should be obtained from the examination of the victim including signs of injury corroborating lack of consent (these signs may consist of bruises, lacerations, scratches, etc. on any part of the body, including the thighs and genital area).

Note: there is no legal requirement for a police officer to be present during a medical or forensic examination. Officers may however advise the victim they or medical staff may request an officer to be present;

(d) be aware of the provisions of s. 93A: 'Statement made before proceeding by child or person with an impairment of the mind' of the *Evidence Act* (EA) which deals with the admissibility of statements by a child or an intellectually-impaired person. Wherever possible, statements in this format should be obtained by officers who have successfully completed an ICARE (Interviewing Children and Recording Evidence) course; and

(e) where possible, obtain photographs of the victim which illustrate any injuries or other evidence;

(xiii) ensuring the victims clothing and underclothing which may assist in the investigation (e.g. bodily fluids such as saliva, semen or blood) are collected as per s. 2.25.20: 'Procedure for items of clothing worn by a complainant' of this chapter;

(xiv) arrange for the examination of the crime scene by forensic personnel as soon as possible, ensuring the scene is not disturbed until the examination is completed. Items such as discarded clothing, bed linen etc. which may provide forensic evidence to support the investigation are collected in accordance with s. 2.25.19: 'Procedure for items left at scenes of crime' of this chapter;

(xv) making, if appropriate, a detailed plan of the scene. Officers trained in accident investigation procedures may be able to assist;

(xvi) obtaining a detailed statement from the victim. In doing so officers should:

(a) consider the provisions of Chapter 6: 'Persons who are vulnerable, disabled or have cultural needs' of this Manual;

(b) consider the provisions of s. 93A of the EA (Admissibility of statements by a child or an intellectually-impaired person). Statements in this format should, where possible, be taken by officers who have completed an ICARE course;

(c) inquire if a support person is required during the interview, e.g. a friend, family member or a community support worker;

(d) ensure if the victim has a disability/impairment, a representative from the appropriate agency or a support person, where available, is present during the interview;

(e) ensure, where the victim is not conversant with the English language, where available, an appropriate interpreter is present (see s. 6.3.7: 'Interpreters' of this Manual);

(f) consider the use of a Queensland Intermediary Scheme (QIS) intermediary to assist witnesses with communication difficulties during the interview process for child sexual offence investigations (see s. 7.6.3: 'Procedures for interviewing a child' of this Manual);

(g) acknowledge the impact of sexual violence can be different for everyone and ensure the victim is comfortable prior to commencing the statement;

(h) create an environment of trust with the victim;

(i) conduct the interview in a private quiet area;

(j) inform the victim of the investigative processes which will take place;

(k) advise the victim of the format of the interview and how it will be conducted;

(l) answer and clarify any questions asked by the victim;

(m) take care when interviewing the victim. The investigating officer is to be mindful the victim may subconsciously try to fill in gaps in memories and become suggestible when answering questions;

(n) record accurately the victim's responses;

(o) ensure the statement is signed by the victim in accordance with the *Justices Act* or *Oaths Act* provisions;

(p) keep all transcripts secured and together;

(q) ensure a copy of the statement is given to the victim;

(r) advise the victim that if the matter proceeds to court, the legal representative for the defence will be receiving a copy of the statement; and

(s) advise the victim that if the matter proceeds to court, they may be afforded rights granted to a special witness, e.g. the pre-recording of evidence, see s. 21A: 'Evidence of special witnesses' of the EA;

(xvii) keeping the victim fully informed on what is happening throughout the investigation;

(xviii) comply with the Charter of Victims' Rights of the VOCAA (see s. 2.12: 'Victims of crime' of this chapter);

(xix) if necessary, arranging for photographs to be taken of the crime scene, any exhibits, and photographs of any injuries received by the victim;

(xx) collating, labelling and securing all exhibits in accordance with the provisions of Chapter 4: 'Property' of this Manual;

(xxi) maintaining a log of events to assist in the management of the investigation;

(xxii) obtaining statements from any possible witnesses;

(xxiii) obtaining a statement of preliminary complaint without asking leading questions;

(xxiv) if the identity of the suspect is not known, arranging a Comfit and ensure the completed Comfit is attached to the relevant QPRIME occurrence (see s. 2.11.8: 'Comfit identification (Computer Generated Images)' of this chapter);

(xxv) if the identity of the suspect is known, locating and interviewing as necessary;

(xxvi) conducting any necessary searches to obtain any evidence from the suspect or from any other place;

(xxvii) once a statement has been taken from the complainant, forwarding a notification task within the relevant QPRIME occurrence to the Child Abuse and Sexual Crime Group, Crime and Intelligence Command for intelligence purposes; and

(xxviii) offering a Police Referral for support services and financial assistance. Victims Assist Queensland can assist with providing counselling, medical costs, security to place of residence, clothing and bedding.

Sexual violence liaison officer (SVLO) responsibilities

Additional responsibilities of the OIC of CIBs and CPIUs include undertaking the role of SVLO. This responsibility relates to Service responses to victims over the age of consent (16 years or older) and includes historical sexual offence matters.

Where a sexual violence offence is reported to the Service, the SVLO is to ensure:

(i) the first point of contact for the victim is with an appropriately trained investigator following initial advice of a reported sexual violence offence. This process is to be established by the SVLO based on local resourcing arrangements;

(ii) all interactions between police and victims are recorded in the QPRIME Occurrence Enquiry Log (OEL). The SVLO should monitor occurrence OELs to ensure all contact is recorded;

(iii) that at all stages throughout the investigation, and where operationally practical and appropriate, the victim is afforded the opportunity to have a support person present during all in-person contact with an investigating officer;

(iv) during the initial reporting of a sexual violence offence, the discussions around the proposed investigation process focus on ensuring the victim can access the justice process. Any undue emphasis on negative aspects of the process or to withdraw is unacceptable. This does not prevent an investigating officer from providing an honest and transparent account of the investigation and judicial processes, with the aim of ensuring the victim can make an informed decision;

(v) a referral to an appropriate support service is offered to all sexual violence victims;

(vi) where a matter cannot be progressed to prosecution, advice is provided in person to the victim by the investigating officer (where practicable);

(vii) a withdrawal of complaint is not formally progressed from the victim within 14 days from the date the offence is reported to the Service unless there are extenuating circumstances. If a withdrawal of complaint is to be obtained within 14 days, it should only occur following consultation and approval by the SVLO;

(viii) additional support and referrals are offered to a victim who insists on withdrawing within the first 48 hours after making a complaint;

(ix) all withdrawals of complaints relating to sexual violence offences are electronically recorded. Any recording is to cover the entirety of the interaction with the victim not just the completion of the withdrawal of complaint documentation;

(x) a monthly review of withdrawal of complaints is conducted with an entry made on the OEL in QPRIME;

(xi) a random audit of sexual offence investigations within the associated district is conducted for the purpose of quality assurance;

(xii) a local escalation process is established to ensure the SVLO is the first point of contact should a victim or sexual assault support service employee wish to raise an issue/s concerning the response provided by the investigator and/or the Service; and

(xiii) relationships with the local sexual assault support services are built and maintained and information is shared between agencies to improve the response to victims.

Where appropriate the SVLO can delegate some of the above responsibilities to appropriately trained officers.

Regional crime coordinator responsibilities

ORDER

In cases of rape, serious or complex sexual assaults the regional crime coordinator is to notify the Detective Inspector, Child Abuse and Sexual Crime Group, Crime and Intelligence Command, forthwith.

Drug facilitated sexual assaults

First response officers and investigating officers are to always consider the possibility of drugs being used to facilitate the commission of sexual assaults. In cases where it is suspected drugs may have been used, officers are to:

(i) ensure appropriate testing is conducted at the crime scene to maximise the chances of detecting these substances. The government medical officer or doctor conducting the examination is to be advised, so the appropriate blood and/or urine samples are correctly obtained. The decision to test for these remains a clinical one which is made by the victim in consultation with the doctor;

(ii) advise the victim of the need to examine the clothes they were wearing when both the drug was administered, and the sexual assault occurred. These clothes may contain traces of the drug used by the offender, which may provide corroboration of the victim's allegations. Items seized are to be placed separately into appropriate exhibit bags, to avoid cross transfer of evidence;

(iii) take care when interviewing the victim. The investigating officer is to be mindful the victim may subconsciously try to fill in gaps in memories and become suggestible when answering questions; and

(iv) consider locating potential witnesses in relation to these crime scenes.

Crime scenes may include the premises where the drug may have been administered to the victim or where it has been stored and/or prepared by the suspect.

Officers should search crime scenes for:

(i) possible drugs that may have been administered, including prescription medication;

(ii) devices used to administer the drug, syringes, eye droppers etc.;

(iii) receptacles and packaging used to store the drug;

(iv) in the case where the crime scene is a licensed premise, any CCTV footage; and

(v) any property of the victim the suspect may be in possession of.

Response to Sexual Assault Guidelines

Guidelines for responding to adult victims of sexual assault are available on the Child Abuse and Sexual Crime Group 'Resources' web page on the Service Intranet.

Officers are to:

(i) refer to the 'Response to Sexual Assault' Guidelines when dealing with victims of rape and sexual assault; and

(ii) ensure information, including local support agencies, is made available to victims of rape and sexual assault. Queensland Health maintain a list of support agencies on their 'Sexual Assault' webpage.

Online sexual assault reporting for adults

Adult members of the public may report a sexual assault online through the QPS Internet (https://www.police.qld.gov.au/units/victims-of-crime/support-for-victims-of-crime/adult-sexual-assault).

Victims may use the online sexual assault reporting form to report a sexual assault to police as an alternative way to making a report at a station or over the phone.

If a victim wishes to report a sexual assault, but does not want to make a formal complaint or they want to remain anonymous, the Alternative Reporting Option form located on the QPS Internet can be used.

Adult Sexual Assault Resource package

The Adult Sexual Assault Resource package is an on-line resource that provides alternative reporting options as well as detailed information relating to adult sexual assault. The package is available on the Service internet website and has been designed to be used by members of the Service, victims, sexual assault support counsellors, government and non-government service providers as well as members of the public. The package includes information on:

(i) making a complaint of sexual assault;

(ii) the investigative and court processes;

(iii) alternative reporting options; and

(iv) appropriate support services.

The Adult Sexual Assault Resource package is managed by Child Abuse and Sexual Crime Group, CIC.

Witness Intermediaries

Officers in the Brisbane and Cairns District and Supreme Court jurisdictions who are investigating allegations of child sexual offences and have prosecution witnesses who may have communication difficulties should consider the services of the QIS pilot program. For policy in relation to QIS eligibility and requesting process see s. 7.6.3 of this Manual.

Intermediaries can assess a witness with communication difficulties to advise police on the best way to interview the witness and ensure that the witness understands police questions and police understand the witness's answers.

EXHIBIT 4

2.25.6 Obtaining samples for DNA analysis from a victim/complainant/witness

POLICY

The provisions of Chapter 17: 'Forensic procedures' of the PPRA relating to obtaining forensic procedure consent and forensic procedure orders generally do not apply to persons who may be:

(i) a victim of crime;

(ii) a complainant; or

(iii) a witness to whom s. 448: 'What pt 2 provides' of the PPRA does not apply.

Where a victim/complainant or relevant witness consents to the taking of a sample for DNA analysis, officers are to:

(i) explain the procedure that will be performed to obtain a sample (i.e. mouth swab, hair sample, blood sample or medical examination);

(ii) advise the person they may limit the use of their sample for use in a particular investigation;

(iii) provide the person with a QP 0535A: 'Statement of Explanation for the Taking of a Sample for DNA Analysis from a Victim/Complainant/Witness' (available on QPRIME);

(iv) ensure three copies of the QP 0535B: 'Signed Consent for the Taking of a Sample for DNA Analysis from a Victim/Complainant/Witness' (available on QPRIME) are signed by:

(a) where the person is an adult and is not a person with impaired capacity, by the adult;

(b) where the person is a child at least 14 years, by the child and a support person;

(c) where the person is a child under 14 years, by the parent/guardian of the child and, if appropriate, by the child

(d) where the person is a person with impaired capacity, by the person and a parent/guardian/support person.

For the following distribution:

(a) a copy of consent form to the victim/complainant/witness;

(b) a copy of the signed consent form to the DNA unit with the DNA sample; and

(c) retain a copy for the investigation file.

EXHIBIT 5

2.25.4 DNA samples when proceedings started against an adult

POLICY

When an officer starts or continues a proceeding against an adult for an indictable offence by arrest, or starts a proceedings by notice to appear or complaint and summons the officer is to obtain a DNA sample from the person under the provisions of s. 481: 'Taking DNA sample if proceeding started or continued against an adult by arrest, notice to appear or complaint and summons etc.' of the PPRA at the time the person is arrested or served with a notice to appear or complaint and summons unless:

(i) a permanent DNA record already exists in relation to the relevant person; and

(ii) the DNA sample will not be required for evidence in relation to the current indictable offence.

(See s. 2.25.2: 'When DNA samples may be taken' of this chapter.)

When obtaining a DNA sample from an adult under s. 481 of the PPRA, the officer is to also obtain the persons fingerprints to ensure the accurate identification of the person. This is necessary for the purpose of recording the person's DNA profile as a permanent DNA profile on the DNA database.

Where an officer intends to obtain a DNA sample from an adult under s. 481 of the PPRA the officer is to detain the person for the time reasonably necessary to take a DNA sample from the person. If necessary, the person may be taken to a police station or police establishment, hospital or another place the sampler considers appropriate in the circumstances for the purpose of obtaining the DNA sample.

Where a DNA sample has not been taken from a person at the time of arrest and an officer later becomes satisfied performing a forensic procedure on a person suspected of committing an indictable offence may provide evidence of the commission of the offence, (e.g. taking a DNA sample) the officer is to make an application for a forensic procedure order under s. 458: 'Application for forensic procedure order' of the PPRA (see s. 2.23.2: 'Forensic procedure orders' of this chapter). (Note – s. 484: 'Taking DNA sample from adult before court' of the PPRA is a discretionary power of the court to make an order for the taking of a DNA sample and does not provide an avenue for an officer to make an application for a court order under that section.)

PROCEDURE

Where a prosecutor is presenting a matter and the court satisfies itself that it is reasonably necessary to order the taking of a DNA sample for DNA analysis from a person under s. 484: 'Taking DNA sample from adult before court' or s. 485: 'Taking DNA sample after finding of guilt' of the PPRA, the prosecutor should:

(i) inquire when and where a DNA sampler will be available to take the DNA sample;

(ii) make submissions to the court on whether, in light of the person's antecedents/criminal history and the availability of a DNA sampler, it would be more appropriate to order either the:

(a) detention of the defendant to enable a DNA sampler to take a DNA sample for DNA analysis; or

(b) defendant to report to a police officer at a stated police station or police establishment within 7 days, to enable a DNA sampler to take a DNA sample for DNA analysis; and

(iii) ensure a copy of any order made by the court is provided to either:

(a) the officer detaining the person; or

(b) the officer in charge of the police station or police establishment where the person is to report;

to enable a DNA sample to be taken for DNA analysis as appropriate. The officer taking the DNA sample is also to initiate a QPS IDP/DNA Attendance Notice task workflow from the occurrence.

POLICY

Where a court has ordered the detention of a person to enable a DNA sampler to take a DNA sample for DNA analysis, officers in charge of stations/establishments are to ensure a DNA sample is taken upon the request of a prosecutor.

Where a court has ordered a person attend a nominated police station or police establishment for a DNA sample to be taken from an adult before that court, the officer in charge of the nominated station or establishment is to ensure that the sample is taken and an appropriate entry made in QPRIME that the sample was taken by issue of a court order. If a QPS IDP/DNA Attendance Notice Task Workflow has not been started, then this is to be initiated and completed.

An officer taking a DNA sample from an adult ordered to attend a nominated police station or police establishment by a court so that a DNA sample can be taken from that person, is to require that person to state their full name and address an evidence of the correctness of thereof by producing personal identification pursuant to s. 40: 'Person may be required to state name and address' of the PPRA, and is to ensure, as far as is practicable, that the person named in the order is the person attending. The copy of the court order is to be filed at the establishment where the DNA sample was taken.

Where a person contravenes an order made under s. 484: 'Taking DNA sample from adult before court' or s. 485: 'Taking DNA sample after finding of guilt' of the PPRA, the officer in charge of the nominated station or establishment is to assign the matter to an appropriate officer for further investigation, and where appropriate for the commencement of proceedings against the person under s. 484(3) or s. 485(3) of the PPRA.

Where a person is attending or has attended to have a forensic procedure conducted is not the person named in the order, and the person is still present, the officer responsible for conducting the forensic procedure is to investigate with a view to commencing a prosecution under s. 790: 'Offence to assault or obstruct a police officer' of the PPRA and any other relevant offences and report the QPRIME occurrence through Policelink (see s. 1.11: 'QPRIME – Policelink entered occurrences' of this Manual).

In cases where the person attended to have a forensic procedure conducted is later found not to be the person named in the order, the officer who originally applied for the order is to investigate with a view to commencing a prosecution against s. 790: 'Offence to assault or obstruct a police officer' of the PPRA and any other relevant offences and report the QPRIME occurrence through Policelink (see s. 1.11 of this Manual).

Additionally, a copy of the order is to be filed with the station copy of the occurrence report or Court Brief (QP9) submitted in relation to the offence against s. 790 of the PPRA. The original order is to be returned to the investigating officer for inclusion in the brief of evidence.

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF MARTIN KENNETH FORREST

I, **Martin Kenneth Forrest,** of 42 Queen Street, Roma state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

Experience and current position

1. I am a Detective Sergeant and currently performing duties as the Officer in Charge ("OIC") of the Roma Criminal Investigation Branch, Queensland Police Service ("QPS").

2. I do not have a current CV. Prior to joining QPS, I was a qualified Electrical Mechanical Tradesman and Contractor. I worked in various locations throughout Queensland and the Northern Territory. I worked for various private and government organisations and also operated my own electrical contracting business.

3. In February 2008, I commenced working with the QPS at the Brisbane Academy and completed my first year of policing at Gympie Police Station.

4. In 2010, I worked in General Duties at the Murgon Police Station before obtaining a position in Murgon Child Protection and Investigation Unit ("CPIU"), Gympie District Detectives.

5. From 2011 to 2014, I was in the Murgon CPIU before obtaining a position as Detective Senior Constable, Officer in Charge, Roma CPIU in 2014. I worked here from 2014 to 2016.

6. In 2016, I was promoted to Detective Sergeant at Roma Criminal Investigation Branch. I have remained in this position since 2016 and my current duties are as follows:

   (a) Investigating serious crime in the Roma Patrol, South West District and supplying on call 24 hour investigative response to the Patrol.

   (b) Supervising and training of one Investigator at Roma CIB ("CIB") and supervision of one Investigator at Roma CPIU.

   (c) Providing assistance to general duties and other specialist units in the area.

   (d) Working with two other Detectives from St George CIB, Roma Patrol and further assisting detectives from Charleville and Western Downs Patrols in the South West District to provide investigative and policing services to the community of the South West District.

   (e) The Roma Patrol comprises of over 100,000 square kilometres and includes 13 police divisions covering from the New South Wales border to the south, to Carnarvon Gorge/Taroom in the North. Dulacca to the East and Mungallala/Bollon in the West.

   (f) Investigations conducted by Roma Detectives include serious offences against the person (including but not limited to homicides, serious assaults, armed robberies, etc), sexual crime (including but not limited to rape, indecent treatment, sexual assaults, etc), serious domestic violence offences (including but not limited to strangulation, deprivation of liberty, torture, etc), property offences (including but not limited to burglary, enter premises, unlawful use of a motor vehicle, stealing, etc), drug offences, fraud, cyber crime offences and public order offences.

   (g) Roma Detectives also assist the number of one and two officer stations in the area as well as officers at bigger centres with policing public events and general daily policing tasks.

Martin Kenneth Forrest Witness

Forensic medical examinations of complainants and witnesses.

7. Throughout my duties, I have and will continue to utilise forensic medical examinations including:

   (a) For investigations of a sexual nature, for both adults and children, offences of rape, indecent treatment, sexual assault, etc I consider a forensic medical examination, particularly a Sexual Assault Investigation Kit ("SAIK"). Consideration for when to conduct a SAIK is subject to a number of factors, including if the person is willing to participate in the examination or not, if it will interfere with urgent medical attention needed by the persons and the circumstances of the assault and time frame since the assault.

   (b) I am notified of these investigations through a number of ways. These include being called to a location by police communications or other officer, where an offence has just occurred or is occurring, if an offence is reported to the counter of a police station by a victim or concerned informant (for recent and historical events), by receiving a child protection notification - an online report or an intelligence report via police computer systems that outlines an incident and possible criminal offence criminal offence or a notification or phone call from an external stakeholder such as a hospital, school, child safety or doctor's office.

   (c) To conduct forensic medical examinations on complainants, we try to use a local hospital service as close to the location of the complainant, as possible (for example, Roma, Mitchell, Taroom, St George Hospitals). The facilities and rooms used at the hospital will depend on the provider and what is available at the time however we always prefer a private room that is enclosed by solid walls to provide privacy and confidentiality for the victim and collection of evidence.

   (d) When attending a hospital to conduct a SAIK examination, we usually speak with a supervising nurse and doctor on duty and explain the circumstances and process of the examination. The complainant is also given an opportunity to speak privately with the nurse and doctor.

(e) If the complainant is not at the hospital, I will attend their location (on being notified of the matter) and transport the complainant in a police vehicle to the local hospital. Unless they specifically wish to take their own vehicle, then I would follow them from their location to the hospital. I am aware of DNA and forensic cross examination and am mindful of which police vehicle I use to transport complainants and/or suspects.

(f) If the complainant is located at several 100kms from me I will arrange for a local officer to transport the complainant to a local hospital and commence the forensic examination whilst I am travelling to their location.

(g) SAIKs are kept in our vehicles and at the police stations. We have heat sealed bags (investigative kits) ready to go, and to provide to stations, so they can commence processes associated with the SAIK examination prior to our arrival, if suitable. The heat sealed bags contain a SAIK (consisting of the paperwork and test tubes and drop sheet), and some additional equipment that may be required by officers investigating the complaint, namely: a number of paper and plastic evidence collection bags, gloves, a blue protective (zip) suit, evidence tape and a crime scene log. The kits can be used for any major crime.

(h) The usual process of a SAIK examination is that a Detective and Scenes of Crime Officer will attend the local hospital with the complainant. The two Scenes of Crime Officers in Roma Patrol are female, so it provides a male and female officer in most circumstances. The Detective will speak with the Doctor and Nurse on duty and explain the process. If the Doctor has any questions we would try to explain or put them in touch with another Doctor who has completed the process. I am aware that there is now an on-call number that the Doctor can call and obtain information. This process works well. The complainant is usually in a private room whilst this occurs and then the Doctor and Nurse are introduced to the complainant and the process is explained. The Doctor and Nurse are given private time with the complainant. The complainant can have a support person/s with them if they wish.

(i) After the private time, the Doctor is usually provided the SAIK kit, evidence bags and they supply their own gloves. The Scenes of Crime Officers take

general (non-intimate) photographs if required. The Doctor performs the SAIK examination in private (complainant undresses on the drop sheet and places on hospital or other personal clothing) the Doctor passes out of the room each piece of clothing in a separate paper bag, the Doctor or receiving officer writes on the outside of the bag what is in there and the receiving officer seals it with evidence tape.

(j) The Doctor then performs the intimate examinations in private and utilises the SAIK test tubes and attached documents to record their observations and conversations. These are provided to the Detective or Scenes of Crime Officer after the examination and subsequently lodged at the local station property point. The Scenes of Crime Officer makes a forensic register entry and Detectives make entries on police computer systems.

(k) The time taken to complete this SAIK examination can vary however, it is treated with priority. The complainant might wait 20 to 30 minutes at the hospital for the Doctor and then the assessment and process can take approximately 60 to 90 minutes. The complainant is usually in a private room. As most of the rural hospitals only have minimal Doctors working or on call, occasionally they may have to wait longer for Doctors and or Nurses to attend the hospital or prioritise a life threating emergency. In my experience, the local Nurses do everything they can to make the complainant comfortable in a private room if there is a wait for the Doctor. Police and medical staff also usually recommend a complainant completes a sexual health screen by blood test and this is conducted by the Nurse or Doctor after the SAIK and does not involve police.

(l) At the completion of the examination, the SAIK is transported and lodged at the local police property point by the Detective or Scenes of Crime Officer. The local officer then arranges a transportation of the SAIK to Brisbane, Forensic and Scientific Services ("FSS") for analysis.

(m) Transportation is conducted when required by officers either on a special trip or in conjunction with other trips (eg attending training or meetings, regular property transports, etc). The Officer in Charge of the Station where the SAIK

is lodged is responsible for arranging transport of the SAIK to Brisbane. Detectives and Scenes of Crime Officers overview to ensure it is completed in a timely manner or assist with the transport when required.

8. I do not recall ever placing a complainant in a protective suit. It may be necessary to prevent cross contamination however, it would only be needed if the complainant is willing and it is necessary to do so.

9. Clothing is regularly collected from suspects, either by seizure at time or arrest or during the execution of a crime scene warrant or search warrant. If clothing is seized, it is lodged in paper bags with evidence tape. Clothing from suspects are usually seized by detectives and scenes of crime officers at the earliest opportunity in the investigation.

10. SAIKS are ordered by administration officers at my request. This occurs when I am aware that there is low stock or if the dates on the SAIK test tubes are near out of date or out of date. SAIKs are ordered from the Child Abuse and Sexual Crimes Group at Police Headquarters.

11. The SAIKS come in a tamper proof bag containing a drop sheet, documents of notes and instructions and test tubes.

12. As discussed at paragraph 7(g), the SAIK, along with a number of other items, is placed in a heat-sealed bag for storage in police vehicles and stations to form an investigative kit. The heat-sealed bag (investigative kit) contains, the SAIK, paper and plastic evidence bags, evidence tape, gloves, a protective (zip) suit and a crime scene log. These kits can be used for any serious crime investigations. These investigative kits have been put together by Detectives and Scenes of Crime Officers at different times.

13. Once the SAIK is obtained and lodged, we strive to have it tested as soon as possible. I speak with the Officer in Charge of the Station and the Property Officer, and they then arrange it to be transported to Brisbane. Depending on staff and vehicle availability, it can take anywhere from one day to one week, sometimes up to two weeks for it to arrive to the FSS.

    (a) Delays in transportation can be experienced, however, they are rare. The delays may be caused by natural weather events or disasters, lack of staff or vehicles

to travel the 1,200km round trip, or giving priority to life threating or serious matters.

(b) I believe a small proportion of cases take longer than two weeks, circumstances where they might occur is due to distance. An example of this is if the complainant attends Roma, the offence occurred somewhere else, and the investigating officer is in another region in Queensland and consultation is ongoing with them as they are the lead investigators.

(c) I can only think of one occasion in which the above scenario has caused a delay to transport the SAIK.

14. Reference DNA samples are usually taken by the Investigating Officer if they are required. They might be taken to rule out or identify complainant DNA, they would be taken by mouth swab and with documented and verbal consent of the complainant. This would include the complaints consent to limit the DNA to this investigation or for use in the database.

15. Serious Crime Investigations including SAIK's, Forensic Examinations and DNA are covered in the Operation Procedure Manuals ("OPM's"), in particular Chapter 2 'Investigative process'.

16. In relation to number of offences in the Roma Patrol, in 2020 there were 25 offences of rape, sexual assault and indecent treatment investigated. In 2021, there were 20 investigated. In 2022, there have been 14 investigations to date. A SAIK would have been considered for each of these matters. However, one might not have been utilised in a number of the investigations due to unwilling complainants or historical offences being reported some time after the incident occurred.

17. I believe the process has improved. Previously I have had issues with having to transport complainants long distances to conduct SAIK examinations and have had issues with getting Doctors or forensic Nurses to conduct the examinations. However, this has not been the case in the Roma Patrol in the last few years and I believe personal relationships with Doctors at local hospitals as well as the access to the on call number for Doctors to provide advice and obtain guidance have made a big difference.

18. The exception to the above is still children under 14 years of age. The closest consistent examination site for young complainants is Toowoomba hospital which is about 400kms east of Roma. In the last few years Roma Patrol has not had many investigations that would require a SAIK however the current process is for the complainant to travel to Toowoomba alone or with police, at their preference, and conduct the examination. I always get a local Doctor to conduct a welfare examination of the child before transporting them to Toowoomba. Sometimes there may be some initial resistance, by the Doctor, to being involved. However, I have not experienced a Doctor refuse to conduct one. .

Forensic medical examinations of suspects/accused persons

19. I have obtained Forensic Procedure Orders and have arranged for forensic medical examination of suspects and accused persons in my duties at Murgon CPIU. This has not been as frequent in my duties at Roma CIB, mainly due to distances and remoteness leading to offenders not being located until a lengthy period of time after offences have occurred.

    (a) The normal process is to ask for consent of the suspect, then the forensic order application is made, the order for the intimate forensic procedure is obtained from an on-call Magistrate, the doctor is contacted, and the process is explained. The Doctor attends the station either by his own accord or a police officer picks them up. The suspect is explained the order and introduced to the Doctor who is provided any equipment they require; the scenes of crime officer obtains any non-intimate examinations required first and I am aware the doctor can conduct a non-intimate examination if required. The Doctor then conducts the intimate examinations, if the suspect is non-compliant, at the Doctor's request, there is ability for police to restrain the suspect to assist the Doctor during the procedure. I am aware that the order allows the suspect to speak to a lawyer and support person and have them present during the procedure.

    (b) In my experience, intimate Forensic Procedures Orders have been obtained from an on-call Magistrate after making an application. The purpose of the

Forensic Procedures Order is to conduct intimate and non-intimate examinations of the suspect to obtain evidence of the commission of an offence, for example to obtain swabs from a suspect, with the intent to locate DNA from the complainant on the suspects body (eg penis, fingernails, etc). Or to examine the suspects body and/or intimate parts for identifying features or injuries captured on camera during the offending or described by the complainant.

(c) At the time of obtaining the Forensic Procedure Order from a Magistrate the suspect has usually been under arrest for the offence and has been transported to a police facility. The suspect is typically transported wearing a blue protective (zip) suit to prevent cross contamination.

(d) I am aware that applications for forensic procedures orders can occur when the suspect in not in custody and after serving the suspect with the application for the order, and the order being made the suspect is required to attend a location and comply with the order.

(e) The forensic procedure order examinations I have been involved in usually occur in a private room at a police facility and a doctor from the local hospital attended to conduct the examination. I believe that on one occasion I have transported a suspect to a local hospital as the doctor could not leave the hospital unattended.

(f) I have only ever used local government Doctors from local hospitals for intimate examinations. Contact with local Doctors is made by phoning them or driving to the local hospital and speaking with them in person. The equipment used are test tubes from a SAIK at the station or medical test tubes supplied by the Doctor. In my experience, it is common for the Doctor to use the test tubes from a SAIK . I recall only one occasion where a Doctor used medical test tubes he had brought with him. This was because the SAIK test tubes were out of date.

(g) The obtained samples and Doctors' details, notes, etc are provided to Detectives and Scenes of Crime Officers who lodge the property and note the forensic register/police computer systems. The Doctor is taken back to the hospital and

the samples are sent for examination at Forensic Services, Brisbane when appropriate, (e.g., not at the same time as the SAIK, next available property run).

(h) If the suspect refuses to consent or cooperate and threatens or attempts to cause harm to the Doctor, police restrain the suspect while the Doctor completes the examination. In most cases, I find the suspect is aggressive towards police rather than the Doctor.

(i) The lodged samples are held in a similar manner to the SAIK. They are stored at a station property point until they can be transported to Brisbane. If a SAIK and Forensic Procedure Order were to be conducted in the same town I would lodge one there and the other back at Roma or another station to prevent them being in the same property refrigerator and an accusation of cross contamination. Consideration would be given to utilising different Doctors, Investigators, attending police, etc for the SAIK and Forensic Procedure Order to prevent any allegation of cross contamination.

20. It has been sometime since I have obtained a Forensic Procedure Order but the process, delays, etc for transport is similar to a SAIK. The Officer in Charge of the local station is responsible for the transport with oversight from the Detective and Scenes of Crime Officer. The samples are transported at the first available opportunity and a special trip would be made for the 1,200km return journey if required.

21. Reference DNA samples are taken from the suspect by either consent, court order or at time of charging. Typically, the DNA reference sample is taken with identifying particulars at the time of charging the suspect. If there is insufficient basis to charge at the time and the suspect does not consent, then an application for a court order to obtain DNA from a suspect would be made to the local Magistrate. If approved, a DNA mouth swab would be taken at the approved time and date. If the suspect provides consent, both oral and written on the appropriate forms (with a lawyer or support person present, if they wish), then a DNA sample could be taken at that time.

JUSTICE OF THE PEACE (MAGISTRATES COURT)

[redacted]

Martin Kenneth Forrest Witness

22. DNA is usually taken from the suspect by mouth swab by the arresting officer or an assisting investigator. In my experience, consideration is given to recent interaction with the complainant by that officer.

23. Serious Crime Investigations involving SAIKS, Forensic Examinations and DNA are covered in the OPM's, in particular Chapter 2 'Investigative process'. The *Police Powers and Responsibilities Act 2000* (PPRA) covers Forensic Examinations.

24. I have not had any cases recently that involved a forensic procedure order being obtained. DNA is regularly obtained at the time of charging suspects or by consent or court order. For example, if a SAIK has been obtained or clothing/bedding seized and a suspect sample is required for comparison.

25. There is no difference in the process I would follow now to previous postings.

Results

26. I am notified when samples have been tested. This occurs via police computer systems and I view results on QPRIME myself, a crime manager contacts me to inform me that there is something to review on an open case or a Scenes of Crime Officer contacts me and notifies me of a result.

27. The results are often under a number of headings and have several different sub-results. The QPRIME record has details explaining the results in the paragraph under the results. I regularly check my understanding of the results with Scenes of Crime Officers and also check if I can conduct any further investigations or comparisons, or if further tests could be conducted, in relation to the results.

28. To my understanding the result *'No DNA detected'* means that the swab or item tested has not provided any identifiable DNA. I have reviewed one of my files on QPRIME to refresh my memory and the actual wording is similar to *'No DNA profile' meaning DNA was not obtained from the item/sample due to, but not limited to: no DNA present, poor quality of the DNA, insufficient quantity or DNA or inhibition of the DNA.*

Martin Kenneth Forrest Witness

29. If I receive a result of 'No DNA detected' and the evidence is crucial for the case, meaning that there is not an amount of overwhelming evidence, I would contact my local Scenes of Crime Officer, DNA Management Unit or my supervisor for advice. I would ask if there was opportunity to retest or conduct any further testing such as direct comparison testing to another sample. Ultimately, I will follow the advice of the experts in the field. Nothing has changed in my process at any point.

30. To my understanding the result *'DNA insufficient for further processing'* means that the swab or item tested has some DNA present, but there is insufficient DNA in the sample for further processing (eg comparison with the database). I have reviewed one of my files on QPRIME to refresh my memory and the actual wording is similar to *'DNA Insufficient for further processing' the item sample was submitted for DNA analysis. Low Levels of DNA were detected in this sample and it was not submitted for further DNA profile. Please contact DNA Management Section if this sample is requested to be assessed for further processing. Further processing could include concentration of the low levels of DNA obtained, pooling with other samples (where appropriate), resampling of the parent item (where appropriate), or a combination of processes.*

31. If I receive a result of 'DNA insufficient for further processing' and the matter is crucial for the case, meaning that there is not an amount of overwhelming evidence, I would contact my local Scenes of Crime Officer, DNA Management Unit or my supervisor for advice. I would ask if there was opportunity to retest or conduct any further testing such as direct comparison testing to another sample. Ultimately, I will follow the advice of the experts in the field. Nothing has changed in my process at any point.

32. Other types I recall seeing include DNA matches and DNA mixed profiles.

33. To my understanding a DNA match is a very high likelihood that the DNA located on a swab or item tested, matches the DNA of a person on record in the database or a person who a DNA sample has been taken from for specific comparison (either suspect, complainant or witness). I have reviewed some of my QPRIME files/cases to refresh my memory and the actual wording is *'Person DNA Scene Link'* the results could include:

(a) *'Partial DNA Profile'* indicating a partial DNA profile match to an identified person's sample.

(b) *'9 Loci DNA Profile'* – indicating a full 9 loci DNA profile matches the DNA profile obtained from an identified person.

(c) *'Interim result – partial profile undergoing rework'* – indicating a partial DNA match to an identified person's sample however it is not a final result, and the sample is still being tested.

(d) *'Partial DNA profile. Insufficient for NCIDD Matching'* indicating there was partial DNA match to an identified persons sample however not enough to load to the database.

(e) *'9 Loci DNA profile – possible sub-threshold peaks'* indicating there was full match to a identified persons sample however there is possible presence of additional DNA at very low thresholds.

34. To my understanding, a DNA mixed profile means that the swab or item tested contains mixed profile DNA from multiple persons. I have reviewed some of my QPRIME files/cases to refresh my memory and the actual wording is *'Person DNA Scene Link'* the results could include:

(a) *'Mixed Profile, Minor Comp 3 of 18'* – indicating mixed DNA profiles, with the minor DNA profile very limited match to an identified person sample.

(b) *'Complex mixed DNA profile – cannot exclude'* indicating a mixed profile that could not be separated in distinct contributors and the identified person's sample could not be excluded as being a possible contributor.

(c) *'Mixed DNA Profile' 'Major Component'* indicating the DNA from identified person's sample has matched as the major contributor to a mixed DNA sample from a swab/item.

(d) *'Mixed profile' 'remain profile after cond – insuff NCIDD'* indicating a mixed DNA sample, not enough to local to the database but enough to partially match to an identified person's sample. .

(e) *'DNA ident' 'victim match' '3 person mixed profile' – 'conditioned on'* indicating the presence of three contributors and based on provided information the victims sample is assumed to have contributed to the mixed profile. For action – all relevant DNA reference samples must be collected and submitted to DNA section as a matter of priority.

35. I do not pass on DNA results or any investigative strategy to complainants or witnesses as it has the potential to influence witnesses and disrupt court proceedings. However, I would be willing to pass this information on after discussion with a prosecutor and senior officer if there was some particular benefit to the welfare or safety of a complainant or witness.

36. I do not recall experiencing, or discussing, a matter where a DNA result is the reason a complainant makes or proceeds with a complaint or does not. If a complaint is made by the victim, then police investigate it with every possible tool and process available to them to come to a conclusion, which may result in the decision to charge someone or not charge someone, as there may be insufficient evidence at the time to charge someone.

Other Issues

37. I believe that sampling of seized property can occur in the Roma Scenes of Crime Office. They have a dedicated area including an office, photography room and sterile laboratory for testing and examining. I believe that a Scenes of Crime Officer is able to assess items such as clothing and bedding to obtain samples or cut out specific areas for further testing.

38. In my recent experience, we have been able to find medical practitioners who are willing and able to conduct forensic medical examinations. This process is enhanced by personal relationships and the on-call number for Doctors to provide advice and seek guidance. Obtaining statements for Doctors to attend court was more difficult in the past, however, the Southwest Hospital Service, Queensland Health now has a dedicated email address for all medical records and statement requests, and they are being

JUSTICE OF THE PEACE (MAGISTRATES COURT)

Martin Kenneth Forrest ..... Witness .....

supplied promptly and fully. This service has removed any issues I previously encountered.

39. I am aware of the 'Just-in-case' kits but do not recall ever being involved in a case with one, collecting one or having any specific involvement with one. I do not have any concerns with the SAIK model or current processes for collecting biological material for forensic DNA testing in sexual assault matters.

TAKEN AND DECLARED before me at Roma in the State of Queensland this 23rd day of September 2022

[redacted]

Martin Kenneth Forrest Witness

[redacted]

Martin Kenneth Forrest Witness

EXHIBIT 1

Notice number: 2022/ 00188

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Martin Forrest

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00pm Thursday 22 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted], with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 14 day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00188

Schedule of topics for statement

Detective Sergeant Martin Forrester

1. State your full name, current position/title and place of work.

Experience and current position

2. List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained (if any).

3. Detail your work history.

4. Attach a current CV.

5. Identify the duties/responsibilities of your position.

   (a) Include a description of the geographical area you work in, and identify who you report to and who (if anyone) reports to you.

   (b) Include a description of what types of crime you investigate.

Forensic medical examinations of complainants and witnesses

6. Detail your involvement in the conduct of forensic medical examinations on complainants and witnesses, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

   (a) Identify the types of alleged offences for which you would consider organising a forensic medical examination.

   (b) Identify the different ways you become notified of a person making a complaint about an offence for which you would consider a forensic medical examination appropriate.

   (c) Identify where the forensic medical examinations are conducted, and, if this includes a hospital, identify what area/rooms in a hospital are typically used. What advance contact is made with hospitals/other locations when you are intending to bring a complainant there.

   (d) Explain how the complainant is transported to the place where the forensic medical examination will be conducted, and who transports them.

(e) Identify who supplies the sexual assault investigation kit (**SAIK**) for the examination. Where are SAIKs stored? Identify if any other equipment is used in the examination, and if yes, identify who provides that equipment.

(f) Explain what happens at the location of the forensic medical examination, including who the SAIKs are provided to. Who conducts the examination (and identify if this varies between locations within your area of operation)? Include an explanation of how long a complainant typically waits at a hospital/other location for the examination to be conducted. Explain what information you typically convey to medical practitioners conducting the examination.

(g) Once the forensic medical examination is completed, what happens to the SAIK? Explain the process from when the medical practitioner finishes the examination to when the SAIK is delivered to Queensland Health Forensic and Scientific Services (**FSS**). Identify any property points at which SAIKs are stored, and the method(s) of transportation. Identify who is in charge of seeing that the SAIK is transported successfully.

7. Explain the circumstances in which you place the complainant/witness in a protective suit (that is, a suit or covering that is intended to protect the evidential integrity of samples that may be collected from the complainant/the clothing they are wearing).

8. Explain the circumstances in which clothing that an accused is wearing will be collected for potential submission for forensic DNA testing. In those circumstances, at what point and in what location is the clothing collected from the complainant? Is the clothing collected by an investigating officer, scenes of crime officer, medical practitioner or someone else?

9. Who supplies SAIKs to the QPS stations in the area in which you work? Who is responsible for placing orders for SAIKs?

10. Describe the appearance of a SAIK when it is received by QPS. Is it already fully compiled/put together, or do QPS stations in your area receive individual components of the SAIK and put them together? If the latter, identify whose role it is to put the SAIKs together.

11. In your experience, once a forensic medical examination is completed, how long does it typically take for the SAIK to reach FSS for forensic testing? As part of your answer, addressing the following.

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for a SAIK to reach FSS after it has been administered.

(c) Describe any instances where there have been particularly long delays.

12. Identify who takes a reference sample from the complainant/witness? Explain when and in what circumstances that reference sample is typically taken.

13. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

14. Provide an estimate of the number of cases each year that you are involved with investigating which also involve the administration of a SAIK.

15. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

16. If any of the processes detailed above vary in the case of child complainants/witnesses, including those aged under 14, identify and explain those differences.

Forensic medical examinations of suspects/accused persons

17. Detail your involvement in the conduct of forensic medical examinations on suspects and accused persons, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

(a) Identify the circumstances leading up to the taking of intimate samples from an accused person, including any necessary authority that must first be obtained.

(b) Identify where the forensic medical examinations are conducted.

(c) Who conducts the examination (and identify if this varies between intimate and non-intimate examinations)? How are they contacted/organised to attend?

(d) What equipment do they use – is it a SAIK? If it is a SAIK, who supplies the SAIK?

(e) Explain what happens at the location of the forensic medical examination, including who the SAIKs/equipment are provided to. Explain what information is typically conveyed to medical practitioners conducting the examination.

(f) What happens if the accused person refuses to consent or cooperate with the examination, even if a court order has been obtained authorising the examination/procedure?

(g) Once the forensic medical examination is completed, what happens to the SAIK/samples? Explain the process from when the medical practitioner finishes the examination to when the samples are delivered to FSS. Identify any property points at which the samples are stored, and the method(s) of transportation.

18. In your experience, once a forensic medical examination is completed, how long does it typically take for the samples to reach FSS for testing? As part of your answer, address:

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for the samples to reach FSS after the examination has been conducted?

19. Identify who takes a reference sample from the accused? Explain when and in what circumstances the reference sample is typically taken.

20. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

21. Provide an estimate of how many cases per year you are involved with investigating that involve a forensic medical examination (or similar) of an accused.

22. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

Results

23. Are you notified when the samples from a forensic medical examination have been tested, and are you notified of the results? If yes, explain how you are notified.

24. What is your understanding of the result '*No DNA detected*' (or similar)? If you have not seen this result-type before, confirm same.

25. What is your understanding of the result '*DNA insufficient for further processing*' (or similar)? If you have not seen this result-type before, confirm same.

26. What other type of results do you recall receiving? What is your understanding of those results?

27. Are the DNA results of the examination passed onto the complainant/witness? If yes, in your experience, does this have an effect on the complainant's decision to proceed with a criminal complaint? If so, explain how.

Other issues

28. Does sub-sampling of items suspected to contain biological material occur within your area, or does that occur at a QPS laboratory elsewhere?

29. If not already discussed above, outline any difficulties you have had in finding medical practitioners available and/or willing to conduct forensic medical examinations? If yes, provide details, including what you had to do to find a suitable medical practitioner.

30. Identify and detail any of your concerns with, or criticisms of, the current Queensland SAIK model, the just-in-case kits or the current processes for collecting biological material for forensic DNA testing in sexual assault matters (if not already discussed). Attach any supporting documents.

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF MARTIN KENNETH FORREST

I, **Martin Kenneth Forrest,** of 42 Queen Street, Roma state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

Experience and current position

1. I am a Detective Sergeant and currently performing duties as the Officer in Charge ("OIC") of the Roma Criminal Investigation Branch, Queensland Police Service ("QPS").

2. I do not have a current CV. Prior to joining QPS, I was a qualified Electrical Mechanical Tradesman and Contractor. I worked in various locations throughout Queensland and the Northern Territory. I worked for various private and government organisations and also operated my own electrical contracting business.

3. In February 2008, I commenced working with the QPS at the Brisbane Academy and completed my first year of policing at Gympie Police Station.

4. In 2010, I worked in General Duties at the Murgon Police Station before obtaining a position in Murgon Child Protection and Investigation Unit ("CPIU"), Gympie District Detectives.

5. From 2011 to 2014, I was in the Murgon CPIU before obtaining a position as Detective Senior Constable, Officer in Charge, Roma CPIU in 2014. I worked here from 2014 to 2016.

6. In 2016, I was promoted to Detective Sergeant at Roma Criminal Investigation Branch. I have remained in this position since 2016 and my current duties are as follows:

   (a) Investigating serious crime in the Roma Patrol, South West District and supplying on call 24 hour investigative response to the Patrol.

   (b) Supervising and training of one Investigator at Roma CIB ("CIB") and supervision of one Investigator at Roma CPIU.

   (c) Providing assistance to general duties and other specialist units in the area.

   (d) Working with two other Detectives from St George CIB, Roma Patrol and further assisting detectives from Charleville and Western Downs Patrols in the South West District to provide investigative and policing services to the community of the South West District.

   (e) The Roma Patrol comprises of over 100,000 square kilometres and includes 13 police divisions covering from the New South Wales border to the south, to Carnarvon Gorge/Taroom in the North. Dulacca to the East and Mungallala/Bollon in the West.

   (f) Investigations conducted by Roma Detectives include serious offences against the person (including but not limited to homicides, serious assaults, armed robberies, etc), sexual crime (including but not limited to rape, indecent treatment, sexual assaults, etc), serious domestic violence offences (including but not limited to strangulation, deprivation of liberty, torture, etc), property offences (including but not limited to burglary, enter premises, unlawful use of a motor vehicle, stealing, etc), drug offences, fraud, cyber crime offences and public order offences.

   (g) Roma Detectives also assist the number of one and two officer stations in the area as well as officers at bigger centres with policing public events and general daily policing tasks.

Martin Kenneth Forrest Witness

Forensic medical examinations of complainants and witnesses.

7. Throughout my duties, I have and will continue to utilise forensic medical examinations including:

   (a) For investigations of a sexual nature, for both adults and children, offences of rape, indecent treatment, sexual assault, etc I consider a forensic medical examination, particularly a Sexual Assault Investigation Kit ("SAIK"). Consideration for when to conduct a SAIK is subject to a number of factors, including if the person is willing to participate in the examination or not, if it will interfere with urgent medical attention needed by the persons and the circumstances of the assault and time frame since the assault.

   (b) I am notified of these investigations through a number of ways. These include being called to a location by police communications or other officer, where an offence has just occurred or is occurring, if an offence is reported to the counter of a police station by a victim or concerned informant (for recent and historical events), by receiving a child protection notification - an online report or an intelligence report via police computer systems that outlines an incident and possible criminal offence criminal offence or a notification or phone call from an external stakeholder such as a hospital, school, child safety or doctor's office.

   (c) To conduct forensic medical examinations on complainants, we try to use a local hospital service as close to the location of the complainant, as possible (for example, Roma, Mitchell, Taroom, St George Hospitals). The facilities and rooms used at the hospital will depend on the provider and what is available at the time however we always prefer a private room that is enclosed by solid walls to provide privacy and confidentiality for the victim and collection of evidence.

   (d) When attending a hospital to conduct a SAIK examination, we usually speak with a supervising nurse and doctor on duty and explain the circumstances and process of the examination. The complainant is also given an opportunity to speak privately with the nurse and doctor.

(e) If the complainant is not at the hospital, I will attend their location (on being notified of the matter) and transport the complainant in a police vehicle to the local hospital. Unless they specifically wish to take their own vehicle, then I would follow them from their location to the hospital. I am aware of DNA and forensic cross examination and am mindful of which police vehicle I use to transport complainants and/or suspects.

(f) If the complainant is located at several 100kms from me I will arrange for a local officer to transport the complainant to a local hospital and commence the forensic examination whilst I am travelling to their location.

(g) SAIKs are kept in our vehicles and at the police stations. We have heat sealed bags (investigative kits) ready to go, and to provide to stations, so they can commence processes associated with the SAIK examination prior to our arrival, if suitable. The heat sealed bags contain a SAIK (consisting of the paperwork and test tubes and drop sheet), and some additional equipment that may be required by officers investigating the complaint, namely: a number of paper and plastic evidence collection bags, gloves, a blue protective (zip) suit, evidence tape and a crime scene log. The kits can be used for any major crime.

(h) The usual process of a SAIK examination is that a Detective and Scenes of Crime Officer will attend the local hospital with the complainant. The two Scenes of Crime Officers in Roma Patrol are female, so it provides a male and female officer in most circumstances. The Detective will speak with the Doctor and Nurse on duty and explain the process. If the Doctor has any questions we would try to explain or put them in touch with another Doctor who has completed the process. I am aware that there is now an on-call number that the Doctor can call and obtain information. This process works well. The complainant is usually in a private room whilst this occurs and then the Doctor and Nurse are introduced to the complainant and the process is explained. The Doctor and Nurse are given private time with the complainant. The complainant can have a support person/s with them if they wish.

(i) After the private time, the Doctor is usually provided the SAIK kit, evidence bags and they supply their own gloves. The Scenes of Crime Officers take

general (non-intimate) photographs if required. The Doctor performs the SAIK examination in private (complainant undresses on the drop sheet and places on hospital or other personal clothing) the Doctor passes out of the room each piece of clothing in a separate paper bag, the Doctor or receiving officer writes on the outside of the bag what is in there and the receiving officer seals it with evidence tape.

(j) The Doctor then performs the intimate examinations in private and utilises the SAIK test tubes and attached documents to record their observations and conversations. These are provided to the Detective or Scenes of Crime Officer after the examination and subsequently lodged at the local station property point. The Scenes of Crime Officer makes a forensic register entry and Detectives make entries on police computer systems.

(k) The time taken to complete this SAIK examination can vary however, it is treated with priority. The complainant might wait 20 to 30 minutes at the hospital for the Doctor and then the assessment and process can take approximately 60 to 90 minutes. The complainant is usually in a private room. As most of the rural hospitals only have minimal Doctors working or on call, occasionally they may have to wait longer for Doctors and or Nurses to attend the hospital or prioritise a life threating emergency. In my experience, the local Nurses do everything they can to make the complainant comfortable in a private room if there is a wait for the Doctor. Police and medical staff also usually recommend a complainant completes a sexual health screen by blood test and this is conducted by the Nurse or Doctor after the SAIK and does not involve police.

(l) At the completion of the examination, the SAIK is transported and lodged at the local police property point by the Detective or Scenes of Crime Officer. The local officer then arranges a transportation of the SAIK to Brisbane, Forensic and Scientific Services ("FSS") for analysis.

(m) Transportation is conducted when required by officers either on a special trip or in conjunction with other trips (eg attending training or meetings, regular property transports, etc). The Officer in Charge of the Station where the SAIK

is lodged is responsible for arranging transport of the SAIK to Brisbane. Detectives and Scenes of Crime Officers overview to ensure it is completed in a timely manner or assist with the transport when required.

8. I do not recall ever placing a complainant in a protective suit. It may be necessary to prevent cross contamination however, it would only be needed if the complainant is willing and it is necessary to do so.

9. Clothing is regularly collected from suspects, either by seizure at time or arrest or during the execution of a crime scene warrant or search warrant. If clothing is seized, it is lodged in paper bags with evidence tape. Clothing from suspects are usually seized by detectives and scenes of crime officers at the earliest opportunity in the investigation.

10. SAIKS are ordered by administration officers at my request. This occurs when I am aware that there is low stock or if the dates on the SAIK test tubes are near out of date or out of date. SAIKs are ordered from the Child Abuse and Sexual Crimes Group at Police Headquarters.

11. The SAIKS come in a tamper proof bag containing a drop sheet, documents of notes and instructions and test tubes.

12. As discussed at paragraph 7(g), the SAIK, along with a number of other items, is placed in a heat-sealed bag for storage in police vehicles and stations to form an investigative kit. The heat-sealed bag (investigative kit) contains, the SAIK, paper and plastic evidence bags, evidence tape, gloves, a protective (zip) suit and a crime scene log. These kits can be used for any serious crime investigations. These investigative kits have been put together by Detectives and Scenes of Crime Officers at different times.

13. Once the SAIK is obtained and lodged, we strive to have it tested as soon as possible. I speak with the Officer in Charge of the Station and the Property Officer, and they then arrange it to be transported to Brisbane. Depending on staff and vehicle availability, it can take anywhere from one day to one week, sometimes up to two weeks for it to arrive to the FSS.

    (a) Delays in transportation can be experienced, however, they are rare. The delays may be caused by natural weather events or disasters, lack of staff or vehicles

to travel the 1,200km round trip, or giving priority to life threating or serious matters.

(b) I believe a small proportion of cases take longer than two weeks, circumstances where they might occur is due to distance. An example of this is if the complainant attends Roma, the offence occurred somewhere else, and the investigating officer is in another region in Queensland and consultation is ongoing with them as they are the lead investigators.

(c) I can only think of one occasion in which the above scenario has caused a delay to transport the SAIK.

14. Reference DNA samples are usually taken by the Investigating Officer if they are required. They might be taken to rule out or identify complainant DNA, they would be taken by mouth swab and with documented and verbal consent of the complainant. This would include the complaints consent to limit the DNA to this investigation or for use in the database.

15. Serious Crime Investigations including SAIK's, Forensic Examinations and DNA are covered in the Operation Procedure Manuals ("OPM's"), in particular Chapter 2 'Investigative process'.

16. In relation to number of offences in the Roma Patrol, in 2020 there were 25 offences of rape, sexual assault and indecent treatment investigated. In 2021, there were 20 investigated. In 2022, there have been 14 investigations to date. A SAIK would have been considered for each of these matters. However, one might not have been utilised in a number of the investigations due to unwilling complainants or historical offences being reported some time after the incident occurred.

17. I believe the process has improved. Previously I have had issues with having to transport complainants long distances to conduct SAIK examinations and have had issues with getting Doctors or forensic Nurses to conduct the examinations. However, this has not been the case in the Roma Patrol in the last few years and I believe personal relationships with Doctors at local hospitals as well as the access to the on call number for Doctors to provide advice and obtain guidance have made a big difference.

18. The exception to the above is still children under 14 years of age. The closest consistent examination site for young complainants is Toowoomba hospital which is about 400kms east of Roma. In the last few years Roma Patrol has not had many investigations that would require a SAIK however the current process is for the complainant to travel to Toowoomba alone or with police, at their preference, and conduct the examination. I always get a local Doctor to conduct a welfare examination of the child before transporting them to Toowoomba. Sometimes there may be some initial resistance, by the Doctor, to being involved. However, I have not experienced a Doctor refuse to conduct one. .

Forensic medical examinations of suspects/accused persons

19. I have obtained Forensic Procedure Orders and have arranged for forensic medical examination of suspects and accused persons in my duties at Murgon CPIU. This has not been as frequent in my duties at Roma CIB, mainly due to distances and remoteness leading to offenders not being located until a lengthy period of time after offences have occurred.

    (a) The normal process is to ask for consent of the suspect, then the forensic order application is made, the order for the intimate forensic procedure is obtained from an on-call Magistrate, the doctor is contacted, and the process is explained. The Doctor attends the station either by his own accord or a police officer picks them up. The suspect is explained the order and introduced to the Doctor who is provided any equipment they require; the scenes of crime officer obtains any non-intimate examinations required first and I am aware the doctor can conduct a non-intimate examination if required. The Doctor then conducts the intimate examinations, if the suspect is non-compliant, at the Doctor's request, there is ability for police to restrain the suspect to assist the Doctor during the procedure. I am aware that the order allows the suspect to speak to a lawyer and support person and have them present during the procedure.

    (b) In my experience, intimate Forensic Procedures Orders have been obtained from an on-call Magistrate after making an application. The purpose of the

Forensic Procedures Order is to conduct intimate and non-intimate examinations of the suspect to obtain evidence of the commission of an offence, for example to obtain swabs from a suspect, with the intent to locate DNA from the complainant on the suspects body (eg penis, fingernails, etc). Or to examine the suspects body and/or intimate parts for identifying features or injuries captured on camera during the offending or described by the complainant.

(c) At the time of obtaining the Forensic Procedure Order from a Magistrate the suspect has usually been under arrest for the offence and has been transported to a police facility. The suspect is typically transported wearing a blue protective (zip) suit to prevent cross contamination.

(d) I am aware that applications for forensic procedures orders can occur when the suspect in not in custody and after serving the suspect with the application for the order, and the order being made the suspect is required to attend a location and comply with the order.

(e) The forensic procedure order examinations I have been involved in usually occur in a private room at a police facility and a doctor from the local hospital attended to conduct the examination. I believe that on one occasion I have transported a suspect to a local hospital as the doctor could not leave the hospital unattended.

(f) I have only ever used local government Doctors from local hospitals for intimate examinations. Contact with local Doctors is made by phoning them or driving to the local hospital and speaking with them in person. The equipment used are test tubes from a SAIK at the station or medical test tubes supplied by the Doctor. In my experience, it is common for the Doctor to use the test tubes from a SAIK . I recall only one occasion where a Doctor used medical test tubes he had brought with him. This was because the SAIK test tubes were out of date.

(g) The obtained samples and Doctors' details, notes, etc are provided to Detectives and Scenes of Crime Officers who lodge the property and note the forensic register/police computer systems. The Doctor is taken back to the hospital and

the samples are sent for examination at Forensic Services, Brisbane when appropriate, (e.g., not at the same time as the SAIK, next available property run).

(h) If the suspect refuses to consent or cooperate and threatens or attempts to cause harm to the Doctor, police restrain the suspect while the Doctor completes the examination. In most cases, I find the suspect is aggressive towards police rather than the Doctor.

(i) The lodged samples are held in a similar manner to the SAIK. They are stored at a station property point until they can be transported to Brisbane. If a SAIK and Forensic Procedure Order were to be conducted in the same town I would lodge one there and the other back at Roma or another station to prevent them being in the same property refrigerator and an accusation of cross contamination. Consideration would be given to utilising different Doctors, Investigators, attending police, etc for the SAIK and Forensic Procedure Order to prevent any allegation of cross contamination.

20. It has been sometime since I have obtained a Forensic Procedure Order but the process, delays, etc for transport is similar to a SAIK. The Officer in Charge of the local station is responsible for the transport with oversight from the Detective and Scenes of Crime Officer. The samples are transported at the first available opportunity and a special trip would be made for the 1,200km return journey if required.

21. Reference DNA samples are taken from the suspect by either consent, court order or at time of charging. Typically, the DNA reference sample is taken with identifying particulars at the time of charging the suspect. If there is insufficient basis to charge at the time and the suspect does not consent, then an application for a court order to obtain DNA from a suspect would be made to the local Magistrate. If approved, a DNA mouth swab would be taken at the approved time and date. If the suspect provides consent, both oral and written on the appropriate forms (with a lawyer or support person present, if they wish), then a DNA sample could be taken at that time.

JUSTICE OF THE PEACE (MAGISTRATES COURT)

[redacted]

Martin Kenneth Forrest Witness

22. DNA is usually taken from the suspect by mouth swab by the arresting officer or an assisting investigator. In my experience, consideration is given to recent interaction with the complainant by that officer.

23. Serious Crime Investigations involving SAIKS, Forensic Examinations and DNA are covered in the OPM's, in particular Chapter 2 'Investigative process'. The *Police Powers and Responsibilities Act 2000* (PPRA) covers Forensic Examinations.

24. I have not had any cases recently that involved a forensic procedure order being obtained. DNA is regularly obtained at the time of charging suspects or by consent or court order. For example, if a SAIK has been obtained or clothing/bedding seized and a suspect sample is required for comparison.

25. There is no difference in the process I would follow now to previous postings.

Results

26. I am notified when samples have been tested. This occurs via police computer systems and I view results on QPRIME myself, a crime manager contacts me to inform me that there is something to review on an open case or a Scenes of Crime Officer contacts me and notifies me of a result.

27. The results are often under a number of headings and have several different sub-results. The QPRIME record has details explaining the results in the paragraph under the results. I regularly check my understanding of the results with Scenes of Crime Officers and also check if I can conduct any further investigations or comparisons, or if further tests could be conducted, in relation to the results.

28. To my understanding the result *'No DNA detected'* means that the swab or item tested has not provided any identifiable DNA. I have reviewed one of my files on QPRIME to refresh my memory and the actual wording is similar to *'No DNA profile' meaning DNA was not obtained from the item/sample due to, but not limited to: no DNA present, poor quality of the DNA, insufficient quantity or DNA or inhibition of the DNA.*

Martin Kenneth Forrest Witness

29. If I receive a result of 'No DNA detected' and the evidence is crucial for the case, meaning that there is not an amount of overwhelming evidence, I would contact my local Scenes of Crime Officer, DNA Management Unit or my supervisor for advice. I would ask if there was opportunity to retest or conduct any further testing such as direct comparison testing to another sample. Ultimately, I will follow the advice of the experts in the field. Nothing has changed in my process at any point.

30. To my understanding the result *'DNA insufficient for further processing'* means that the swab or item tested has some DNA present, but there is insufficient DNA in the sample for further processing (eg comparison with the database). I have reviewed one of my files on QPRIME to refresh my memory and the actual wording is similar to *'DNA Insufficient for further processing' the item sample was submitted for DNA analysis. Low Levels of DNA were detected in this sample and it was not submitted for further DNA profile. Please contact DNA Management Section if this sample is requested to be assessed for further processing. Further processing could include concentration of the low levels of DNA obtained, pooling with other samples (where appropriate), resampling of the parent item (where appropriate), or a combination of processes.*

31. If I receive a result of 'DNA insufficient for further processing' and the matter is crucial for the case, meaning that there is not an amount of overwhelming evidence, I would contact my local Scenes of Crime Officer, DNA Management Unit or my supervisor for advice. I would ask if there was opportunity to retest or conduct any further testing such as direct comparison testing to another sample. Ultimately, I will follow the advice of the experts in the field. Nothing has changed in my process at any point.

32. Other types I recall seeing include DNA matches and DNA mixed profiles.

33. To my understanding a DNA match is a very high likelihood that the DNA located on a swab or item tested, matches the DNA of a person on record in the database or a person who a DNA sample has been taken from for specific comparison (either suspect, complainant or witness). I have reviewed some of my QPRIME files/cases to refresh my memory and the actual wording is *'Person DNA Scene Link'* the results could include:

(a) *'Partial DNA Profile'* indicating a partial DNA profile match to an identified person's sample.

(b) *'9 Loci DNA Profile'* – indicating a full 9 loci DNA profile matches the DNA profile obtained from an identified person.

(c) *'Interim result – partial profile undergoing rework'* – indicating a partial DNA match to an identified person's sample however it is not a final result, and the sample is still being tested.

(d) *'Partial DNA profile. Insufficient for NCIDD Matching'* indicating there was partial DNA match to an identified persons sample however not enough to load to the database.

(e) *'9 Loci DNA profile – possible sub-threshold peaks'* indicating there was full match to a identified persons sample however there is possible presence of additional DNA at very low thresholds.

34. To my understanding, a DNA mixed profile means that the swab or item tested contains mixed profile DNA from multiple persons. I have reviewed some of my QPRIME files/cases to refresh my memory and the actual wording is *'Person DNA Scene Link'* the results could include:

(a) *'Mixed Profile, Minor Comp 3 of 18'* – indicating mixed DNA profiles, with the minor DNA profile very limited match to an identified person sample.

(b) *'Complex mixed DNA profile – cannot exclude'* indicating a mixed profile that could not be separated in distinct contributors and the identified person's sample could not be excluded as being a possible contributor.

(c) *'Mixed DNA Profile' 'Major Component'* indicating the DNA from identified person's sample has matched as the major contributor to a mixed DNA sample from a swab/item.

(d) *'Mixed profile' 'remain profile after cond – insuff NCIDD'* indicating a mixed DNA sample, not enough to local to the database but enough to partially match to an identified person's sample. .

(e) *'DNA ident' 'victim match' '3 person mixed profile' – 'conditioned on'* indicating the presence of three contributors and based on provided information the victims sample is assumed to have contributed to the mixed profile. For action – all relevant DNA reference samples must be collected and submitted to DNA section as a matter of priority.

35. I do not pass on DNA results or any investigative strategy to complainants or witnesses as it has the potential to influence witnesses and disrupt court proceedings. However, I would be willing to pass this information on after discussion with a prosecutor and senior officer if there was some particular benefit to the welfare or safety of a complainant or witness.

36. I do not recall experiencing, or discussing, a matter where a DNA result is the reason a complainant makes or proceeds with a complaint or does not. If a complaint is made by the victim, then police investigate it with every possible tool and process available to them to come to a conclusion, which may result in the decision to charge someone or not charge someone, as there may be insufficient evidence at the time to charge someone.

Other Issues

37. I believe that sampling of seized property can occur in the Roma Scenes of Crime Office. They have a dedicated area including an office, photography room and sterile laboratory for testing and examining. I believe that a Scenes of Crime Officer is able to assess items such as clothing and bedding to obtain samples or cut out specific areas for further testing.

38. In my recent experience, we have been able to find medical practitioners who are willing and able to conduct forensic medical examinations. This process is enhanced by personal relationships and the on-call number for Doctors to provide advice and seek guidance. Obtaining statements for Doctors to attend court was more difficult in the past, however, the Southwest Hospital Service, Queensland Health now has a dedicated email address for all medical records and statement requests, and they are being

JUSTICE OF THE PEACE (MAGISTRATES COURT)

Martin Kenneth Forrest ..... Witness .....

supplied promptly and fully. This service has removed any issues I previously encountered.

39. I am aware of the 'Just-in-case' kits but do not recall ever being involved in a case with one, collecting one or having any specific involvement with one. I do not have any concerns with the SAIK model or current processes for collecting biological material for forensic DNA testing in sexual assault matters.

TAKEN AND DECLARED before me at Roma in the State of Queensland this 23rd day of September 2022

[redacted]

Martin Kenneth Forrest Witness

[redacted]

Martin Kenneth Forrest Witness

EXHIBIT 1

Notice number: 2022/ 00188

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Martin Forrest

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00pm Thursday 22 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted], with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 14 day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00188

Schedule of topics for statement

Detective Sergeant Martin Forrester

1. State your full name, current position/title and place of work.

Experience and current position

2. List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained (if any).

3. Detail your work history.

4. Attach a current CV.

5. Identify the duties/responsibilities of your position.

   (a) Include a description of the geographical area you work in, and identify who you report to and who (if anyone) reports to you.

   (b) Include a description of what types of crime you investigate.

Forensic medical examinations of complainants and witnesses

6. Detail your involvement in the conduct of forensic medical examinations on complainants and witnesses, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

   (a) Identify the types of alleged offences for which you would consider organising a forensic medical examination.

   (b) Identify the different ways you become notified of a person making a complaint about an offence for which you would consider a forensic medical examination appropriate.

   (c) Identify where the forensic medical examinations are conducted, and, if this includes a hospital, identify what area/rooms in a hospital are typically used. What advance contact is made with hospitals/other locations when you are intending to bring a complainant there.

   (d) Explain how the complainant is transported to the place where the forensic medical examination will be conducted, and who transports them.

(e) Identify who supplies the sexual assault investigation kit (**SAIK**) for the examination. Where are SAIKs stored? Identify if any other equipment is used in the examination, and if yes, identify who provides that equipment.

(f) Explain what happens at the location of the forensic medical examination, including who the SAIKs are provided to. Who conducts the examination (and identify if this varies between locations within your area of operation)? Include an explanation of how long a complainant typically waits at a hospital/other location for the examination to be conducted. Explain what information you typically convey to medical practitioners conducting the examination.

(g) Once the forensic medical examination is completed, what happens to the SAIK? Explain the process from when the medical practitioner finishes the examination to when the SAIK is delivered to Queensland Health Forensic and Scientific Services (**FSS**). Identify any property points at which SAIKs are stored, and the method(s) of transportation. Identify who is in charge of seeing that the SAIK is transported successfully.

7. Explain the circumstances in which you place the complainant/witness in a protective suit (that is, a suit or covering that is intended to protect the evidential integrity of samples that may be collected from the complainant/the clothing they are wearing).

8. Explain the circumstances in which clothing that an accused is wearing will be collected for potential submission for forensic DNA testing. In those circumstances, at what point and in what location is the clothing collected from the complainant? Is the clothing collected by an investigating officer, scenes of crime officer, medical practitioner or someone else?

9. Who supplies SAIKs to the QPS stations in the area in which you work? Who is responsible for placing orders for SAIKs?

10. Describe the appearance of a SAIK when it is received by QPS. Is it already fully compiled/put together, or do QPS stations in your area receive individual components of the SAIK and put them together? If the latter, identify whose role it is to put the SAIKs together.

11. In your experience, once a forensic medical examination is completed, how long does it typically take for the SAIK to reach FSS for forensic testing? As part of your answer, addressing the following.

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for a SAIK to reach FSS after it has been administered.

(c) Describe any instances where there have been particularly long delays.

12. Identify who takes a reference sample from the complainant/witness? Explain when and in what circumstances that reference sample is typically taken.

13. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

14. Provide an estimate of the number of cases each year that you are involved with investigating which also involve the administration of a SAIK.

15. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

16. If any of the processes detailed above vary in the case of child complainants/witnesses, including those aged under 14, identify and explain those differences.

Forensic medical examinations of suspects/accused persons

17. Detail your involvement in the conduct of forensic medical examinations on suspects and accused persons, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

(a) Identify the circumstances leading up to the taking of intimate samples from an accused person, including any necessary authority that must first be obtained.

(b) Identify where the forensic medical examinations are conducted.

(c) Who conducts the examination (and identify if this varies between intimate and non-intimate examinations)? How are they contacted/organised to attend?

(d) What equipment do they use – is it a SAIK? If it is a SAIK, who supplies the SAIK?

(e) Explain what happens at the location of the forensic medical examination, including who the SAIKs/equipment are provided to. Explain what information is typically conveyed to medical practitioners conducting the examination.

(f) What happens if the accused person refuses to consent or cooperate with the examination, even if a court order has been obtained authorising the examination/procedure?

(g) Once the forensic medical examination is completed, what happens to the SAIK/samples? Explain the process from when the medical practitioner finishes the examination to when the samples are delivered to FSS. Identify any property points at which the samples are stored, and the method(s) of transportation.

18. In your experience, once a forensic medical examination is completed, how long does it typically take for the samples to reach FSS for testing? As part of your answer, address:

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for the samples to reach FSS after the examination has been conducted?

19. Identify who takes a reference sample from the accused? Explain when and in what circumstances the reference sample is typically taken.

20. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

21. Provide an estimate of how many cases per year you are involved with investigating that involve a forensic medical examination (or similar) of an accused.

22. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

Results

23. Are you notified when the samples from a forensic medical examination have been tested, and are you notified of the results? If yes, explain how you are notified.

24. What is your understanding of the result '*No DNA detected*' (or similar)? If you have not seen this result-type before, confirm same.

25. What is your understanding of the result '*DNA insufficient for further processing*' (or similar)? If you have not seen this result-type before, confirm same.

26. What other type of results do you recall receiving? What is your understanding of those results?

27. Are the DNA results of the examination passed onto the complainant/witness? If yes, in your experience, does this have an effect on the complainant's decision to proceed with a criminal complaint? If so, explain how.

Other issues

28. Does sub-sampling of items suspected to contain biological material occur within your area, or does that occur at a QPS laboratory elsewhere?

29. If not already discussed above, outline any difficulties you have had in finding medical practitioners available and/or willing to conduct forensic medical examinations? If yes, provide details, including what you had to do to find a suitable medical practitioner.

30. Identify and detail any of your concerns with, or criticisms of, the current Queensland SAIK model, the just-in-case kits or the current processes for collecting biological material for forensic DNA testing in sexual assault matters (if not already discussed). Attach any supporting documents.

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF DYLAN PETER BROOK

I, **Dylan Peter Brook,** of 35 Egerton Street, Emerald, Queensland state as follows:

The following statement is provided in response to notices I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to the notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

1. I am currently an Acting Senior Sergeant of Police, Officer in Charge, Emerald Police Station. My substantive position is a Detective Sergeant, Officer in Charge, Emerald Criminal Investigation Branch.

Experience and current position

2. I hold a Bachelor of Arts in Criminology & Criminal Justice from Griffith University (2003), Diploma of Public Safety (Qld Police 2004), Advanced Diploma in Public Safety Investigations (Qld Police 2010) & Post Graduate Certificate in Leadership and management from Charles Sturt University (Policing and security) (2020).

3. I was sworn into the Queensland Police Service on 30 July 2003. I was transferred as a first year Constable (FYC) to the Gympie Police Station where I completed my training year. In 2004, I was confirmed as a Constable of Police and transferred to Deception Bay Police Station where I performed General Duties. In 2006, I was transferred to the Redcliffe District Tactical Crime Squad (now Moreton District Tactical Crime Squad) where I was tasked in a support role to the Redcliffe District. In 2007, I was appointed as a plain clothes Constable to the Brisbane City Criminal Investigation Branch. During this time, I completed Detective training and served until 2013 as a Detective Senior Constable. In 2013, I was promoted to the rank of Detective Sergeant, Senior Investigator, Officer in Charge of the Emerald Criminal Investigation Branch. In this position I was responsible for the establishment & maintaining proactive policing activities as it related to crime prevention, supervision and conduct of criminal investigations. In 2016, I was seconded to the Crime and Corruption Commission

(CCC) for a period of 10 months where I performed duties in the Organised Crime Group before transferring to the Internal Investigation Group (IIG), Ethical Standards Command (ESC). During my service at IIG, ESC I was tasked to primarily investigate internal misconduct matters and criminal matters involving serving members of the QPS, as well as death in custody and police operations at the direction of the State Coroner. I performed duties at ESC from 2017 until 2020. In 2020, I reapplied and was appointed as the Senior Investigator, Officer in Charge of the Emerald Criminal Investigation Branch where I currently perform duties.

4. I do not have a current CV.

5. I am responsible for establishing and maintaining proactive policing activities for crime prevention and the supervision and conduct of all major criminal investigations within the Emerald, Springsure, Anakie, Capella and Tieri Police Divisions. My geographical area of responsibility encompasses and extends from the police division of Springsure, south of Emerald, West to Anakie and northwest to Tieri. The total estimated population for the area of responsibility is 17,041 persons.

6. The Emerald CIB is manned by three staff, with a Detective Sergeant (OIC), and two Detective Senior Constables who report to the OIC. As the OIC I report to the Detective Inspector, Capricornia Crime Services. The current substantive Detective Inspector is Darrin Shadlow.

7. I am responsible for the establishment and maintaining proactive policing activities as it relates to crime prevention, supervision and conduct of criminal investigations. The Emerald CIB is responsible for coordinating and responding to criminal complaints relating to property crime (burglary, theft of motor vehicles), offences against the person (serious assaults, GBH, AOBH, attempt murder), serious drug offences (drug trafficking) and sexual offences (rape, indecent assaults). As there are no dedicated child protection officers between Rockhampton and the Northern Territory boarder, investigators are also responsible for all child protection and juvenile justice matters including child deaths, historical and current child abuse complaints, child harm notification and Child Protection and Offender Registry (CPOR) offenders and offences.

[redacted] .... [redacted]

Dylan Peter Brook Witness

Forensic medical examinations of complainants and witnesses

8. In relation to question 6 of the Schedule to the Notice:

(a) Whether a forensic medical examination is arranged is determined on a case-by-case basis. However, generally, a forensic medical examination is always considered for the following offences:

(i) Rape;

(ii) Attempted rape (penetration unknown);

(iii) Indecent treatment.

(b) There are various ways I may be notified of a complaint about an offence for which I would consider a forensic medical examination appropriate. These include being notified by general duties staff attending a complainant's residential address, a complaint may be received at the front counter of a police station, a person may make a complaint via policelink (online or telephone) with a QPRIME task sent advising me of a complaint, or I can be notified by a counsellor, schoolteacher or care giver via phone or in person.

(c) In Brisbane, between 2007 and 2013, a complainant would be initially seen at the Emergency Department of the Royal Brisbane and Women's Hospital (RBWH) and then moved to a dedicated sexual assault clinic with counsellors and medical practitioners to complete the SAIK examination. Direct contact was usually made with the sexual assault clinic and arrangements made for this to occur. Investigators would phone the clinic in advance to advise them that a complainant would be attending for a forensic examination

(d) In Emerald, from 2020 to present day, contact is made with the Emergency Department of Emerald hospital and the SAIK procedure is conducted in a private room within the Emergency Department. Phone contact is made by the investigator or general duties officer with the Emergency department and advice provided that a complainant will be attending with police.

(e) How the complainant is transported to the place where the forensic medical examination will be conducted, and who transports them, is determined in a victim-centric way, on a case-by-case basis. On some occasions, if a rape is

reported immediately, and other injuries have occurred that require treatment, then Queensland Ambulance will attend the scene, provide initial medical treatment and transport the complainant to hospital for treatment before any forensic examination takes place. On other occasions arrangements can be made for investigators to transport the complainant or they might choose to make their own way to the hospital.

(f) If the rape is historical or the victim attends the police station and it is deemed appropriate to conduct a forensic medical examination (using a SAIK), the victim may be transported by police or may travel to the hospital in their own vehicle with family.

(g) In my experience, a SAIK is supplied by the QPS / Investigator to the hospital. The SAIKs are stored on an equipment shelf with the Emerald Criminal Investigation Branch office. To my recollection this was the same process at the Brisbane City CIB.

(h) QPS blood kits are also provided by investigators to medical staff for the purpose of obtaining a blood sample for toxicology purposes.

(i) With respect to the process of the forensic examination at hospital, in my experience, in Brisbane – between 2007 and 2013 – investigators attend with the victim at the dedicated sexual assault clinic within the RBWH. A SAIK procedure was completed by the medical staff at the clinic and the completed SAIK was provided to the Investigator. During this time, the victim was provided with opportunities to speak with counsellors. At no time was I present in the room during the actual procedure. Investigators would remain outside in the clinic in a dedicated waiting area.

(j) From memory, there were minimal delays during this process. I cannot recall having to wait for very long periods of time for the procedure to be completed. The victim would not be required to wait long to see medical staff and a counsellor. I would estimate, on average, between 30 minutes to one hour. However, I can recall waiting for between one to two hours for the process to be completed.

[redacted] .....

Dylan Peter Brook

..... [redacted] .....

Witness

JUSTICE OF THE PEACE
QUALIFIED

(k) In my experience in Emerald – from 2013 to 2016 - SAIK procedures were generally refused by the Emerald Hospital and not conducted. Investigators had to make arrangements to have complainants transported to the Rockhampton Hospital, a 3½ hour drive away. Dependent upon the circumstances, investigators had to make arrangements to transport the complainants in police vehicles, arrange transport via QAS or otherwise they would travel in private vehicles.

(l) In Emerald, from 2020 to present day, the SAIK is provided to the doctor that has been tasked to complete the SAIK by the investigator.

(m) The doctor is allocated by the Emerald hospital and may be a doctor on duty or may be required to be re-called to duty dependent on the time and workload of the hospital.

(n) Generally, a brief introduction of the complainant to the doctor is completed including name of the victim and reason for attendance i.e., vaginal rape, digital rape. This is dependent on the attending doctor and victim at the time and their wishes, including whether the discussion is to occur privately or in the presence of the victim.

(o) I have never remained in the examination room during the SAIK procedure.

(p) I am aware that on occasions, dependent upon the doctor completing the procedure and victims wishes; the female investigator at Emerald CIB has remained and been present during SAIK procedures.

(q) I am also aware, dependent upon the doctor's experience in completing a SAIK, the female investigator has been asked to remain and assist the doctor in completing the associated documentation for the doctor during the SAIK process.

(r) Dependent upon the Emerald hospital workload, a complainant and investigator can wait for a number of hours (1-3hrs) for the SAIK process to be completed. Delays can be experienced as a result of doctors having to be re-called to duty, other medical emergencies taking priority and doctors having to case manage a high number of patients within the Emergency Department.

[redacted] .....

Dylan Peter Brook

..... [redacted]

Witness

JUSTICE OF THE PEACE QUALIFIED

(s) When delays are experienced, investigators remain with the victims and, on some occasions, that time is used to obtain a victim statement. This is typically done on a laptop computer, with the discussion always occurring in a private setting.

(t) In my experience in both Brisbane and Emerald, the SAIK is handed directly to the investigator by the Doctor to lodge.

(u) The investigator is required to create the SAIK as an exhibit on QPRIME. An individual property tag is allocated and the SAIK is lodged at the station property point. The investigator is also required to complete a QP127, submission of articles for forensic examination.

(v) Dependent upon the circumstances of the complaint (current or historical), a Scenes of Crime Officer (SOCO) may be present, and a verbal request made by the investigator for the SAIK to be added to the forensic register.

(w) If the SOCO is not present, the investigator sends a QPRIME task to the property officer at Emerald for the SAIK to be transported on the next property run to the Rockhampton Police Station. The amount of property for transfer from Emerald to Rockhampton is monitored by the Emerald property officer. Emerald will regularly transfer property to Rockhampton, on average every 2-3 weeks depending upon the amount of property for transfer. Sometimes, this can occur more frequently, e.g. weekly, if staff are travelling to Rockhampton.

The property officer in consultation with the investigator, will make arrangements to ensure the SAIK has been added to the forensic register by the SOCO prior to transport. Once a task is sent, it is the responsibility of the property officer to ensure the SAIK is sent to Rockhampton via property transfer which occurs via road.

(x) It is the responsibility of the investigator to monitor and review the QPRIME occurrence every 28 days to ensure and follow up the exhibits have been transported as requested and no administrative errors occur. A review of all occurrences is also completed by the OIC every 28 days and if any follow up is required, this will be completed by the OIC or another investigator.

(y) Once at Rockhampton Police Station property point, the SAIK is transported via a property transfer to QHFSS, Brisbane. The original QPRIME task is sent by the property officer Emerald, to Rockhampton property office for this to occur. I am aware that property transfers from Rockhampton to Brisbane are ad-hoc and undertaken by road.

9. A determination is made to place a complainant in a protective suit based on the known particulars of the investigation at the time and the way in which it is reported. If it is a historical matter then generally there is no value in seizing clothing or obtaining samples from a victim due to the passage of time which, as I understand things, impacts on the presence of DNA. Hence, there would be no need to place a complainant in a protective suit.

10. If a victim presents at the police station and has showered or washed their clothing, again there is likely no forensic value in seizing clothing or obtaining samples from a victim and no need to place them in a protective suit.

11. If the circumstances involve timely reporting and police attendance at a crime scene with a victim, consideration is given by the investigator in consultation with the scenes of crime officer to seizing the clothing and placing the victim in a protective suit.

12. If a SOCO is available, they will attend and seize the clothing directly from the complainant for examination. If they are unable to attend, direction is provided to the investigators on how to seize clothing i.e., the victim removes clothing and places them directly into brown paper bags taken from an evidence collection kit for examination. The brown paper bags are sealed by the investigator with exhibit tape, and seals signed for continuity. Investigators will wear disposable gloves and a mask to minimise any potential issues for contamination.

13. The clothing is then transported by the investigators where the same property lodgment procedure is completed as outlined above. A forensic officer will ensure the clothing is packaged correctly and added to the forensic register in consultation with the investigator. Investigators do not have access to the forensic register and this is utilized by SOC and scientific staff only.

14. Whether or not an accused's clothing is collected for potential submission for DNA testing is dependent upon the circumstances outlined above in paragraphs 9 to 11. I

have never had a medical practitioner seize clothing. This has always been completed by an attending officer, investigator or scenes of crime officer.

15. The complainant's clothing can be collected in various ways. In some circumstances for example, a victim may identify clothing worn at the time of the offence but has been removed and discarded in a laundry of a home. If a SOC officer is available, they will attend and seize the clothing from the victim. If not, in my experience between 2007-2016, an investigator would seize the clothing, requesting the victim place the clothing in a brown paper bag, sealing it with exhibit tape and signing the seals. The victim is always requested to handle the clothing to reduce likelihood of cross-contamination. Since 2020, Emerald CIB has evidence collection kits & trace DNA kits provided by SOC that enable an investigator or general duties officer to seize clothing to minimise the loss or contamination of DNA if SOC is not available. Gloves, face mask, brown paper bags, exhibit labels and evidence tape are contained within the kit. The victim is always requested to place the clothing in the bag to minimise cross contamination. If, for example, the complainant is wearing the same clothing that they had on during the alleged offence, and if underwear is to be seized, it is removed by the victim and handed to an investigator during the SAIK process with a drop sheet placed to capture any additional forensic evidence.

16. SAIK are ordered through the Child Abuse and Sexual Crime Group, QPS. The OIC of Emerald CIB is responsible for monitoring the numbers of SAIKs available and ordering the same. There is a limit of 15 to be ordered at any one time.

17. The SAIK is provided as a kit. All relevant material is contained within the kit provided. No additional input is required by an investigator or SOCO once the kit is received because it is already compiled before it arrives.

18. In relation to question 11 of the Schedule to the Notice regarding the time typically taken for a SAIK to reach QHFSS for testing:

    (a) In my experience, once a forensic medical examination is completed, I expect it would generally take approximately one month for a SAIK to reach Brisbane for testing. The majority of SAIKs from Emerald do not reach Brisbane within 2 weeks.

[redacted] .... [redacted]

Dylan Peter Brook Witness [redacted]

JUSTICE OF THE PEACE QUALIFIED

(b) I am aware of a rape complaint where an investigator from Brisbane was relieving in Emerald and transported the SAIK personally to Brisbane on her return flight. This allowed a timely examination of the SAIK on this occasion. This occurs very rarely in my experience.

(c) Whether there are delays in the transportation of SAIKs is dependent upon the circumstances. Generally a property run from Emerald to Rockhampton will occur regularly every couple of weeks. As I understand things, there have been some noted delays in property transport from Rockhampton to QHFSS that has resulted in delays of testing.

(d) I am aware of one SAIK that remained in Rockhampton for approximately four months pending a property transfer [redacted] This SAIK was completed [redacted] and transferred from Emerald to Rockhampton [redacted]. It was recorded as received by the Rockhampton property office [redacted] March 2022 and marked for future transfer to Brisbane. The delay in SAIK examination was identified as part of a regular review of sexual offences by the OIC and case officer. Follow up with the case officer was conducted with the property office at Rockhampton and they advised it had not been transported as a property run was yet to be completed during that time. The victim was provided with updates by the case officer and OIC in March 2022 and May 2022. The SAIK was marked as transferred from Rockhampton to Brisbane on 18 August 2022. I am unaware why a property run had not been completed prior to this time. This is an anomaly and the longest delay I am aware of.

(e) I am not personally aware of any other significant delays; however, I have been advised by Emerald Scenes of Crime that they do have regular delays on exhibit transport from Rockhampton to Brisbane. I am unable to provide any further details on this.

19. Generally, a reference DNA sample is taken from the complainant at the time of providing a victim statement. A reference sample is taken by the investigator. The timing of taking the sample is determined on a case-by-case basis, dependent upon the timings of a forensic examination or statement. Generally, a sample is taken within 48 hours after the forensic examination and a statement has been obtained, depending on

the welfare of the complainant. The sample is added to QPRIME as an exhibit, a property tag allocated, and the sample forwarded via registered mail to QHSS by the property officer. A task is sent by the investigator to the Emerald property officer requesting it be forwarded for examination.

20. I am aware that OPM 2.6.3 refers to procedures in relation to Sexual offences.

21. I would estimate that the Emerald CIB investigates 20-25 sexual offences in a year. Of those, about 5-10 offences require the administration of a SAIK.

22. The processes in Emerald differ from those I observed in my previous experiences in Brisbane. As an investigator at the Brisbane City CIB, the SAIK would be transported directly by the investigator and lodged at QHFSS for analysis. This was due to the close proximity of QHFSS to Brisbane City.

23. I am aware that SAIKs were previously transported by air from Emerald to Brisbane on a direct property run by a police officer. This process no longer occurs.

24. In relation to child complainants, there is no capacity at Emerald Hospital for Children to be examined. All child related sex offences require children to be transported to the Rockhampton Base Hospital where they are seen by a paediatric doctor.

25. Investigators are required to contact the child protection liaison officer (clinical nurse) at Rockhampton Base Hospital who co-ordinates with police to have a child examined. This is the local process in place which has occurred over a number of years in consultation with the Emerald Hospital and Rockhampton Hospital.

26. Arrangements are then made to have the child transported to Rockhampton. As previously outlined, this will be in consultation with the child's parents / next of kin and may require police, QAS or family transport.

Forensic medical examinations of suspects/accused persons

27. In relation to question 17 of the Schedule to the Notice:

    (a) I have minimal experience in forensic medical examinations where intimate samples are obtained from suspects. Generally, evidence DNA mouth swabs are taken for analysis by the investigator. The property management processes for the evidence DNA samples are the same for victim samples, as outlined previously above.

(b) I have previously been involved in the application process to a magistrate for an intimate forensic procedure order to be completed on a suspect for a historical child sex offence (photographs of penis only; no samples). Once the order was granted, the suspect was detained in accordance with the order and transported by the investigator and scenes of crime officer to the Emerald Hospital for photos to be obtained. A doctor was present in accordance with requirements of the order and photographs obtained. This was arranged by the investigator with the hospital directly.

(c) I understand that intimate forensic procedures, such as the one discussed above, are conducted in a private room at the Emerald Hospital.

(d) While I am aware of the process, generally, given my limited experience with the forensic medical examination of suspects, I'm unsure who usually conducts the intimate exam. Based on the circumstances of the investigations (i.e. historical rapes, attempted rapes with no penetration, suspects not located until a number of months after the nominated offences) no orders have been applied for in Emerald since 2020.

(e) Speaking generally, if a suspect is required to be transported to the hospital, this would be completed by the police. In doing so, consideration would be given, by investigators, to cross-contamination by investigators so it would be the case that the suspect was not transported in a police vehicle that the complainant may have been in.

(f) Arrangements to conduct the procedures would be the same for a victim, the investigator would be required to contact the Emerald Hospital Emergency Department and provide advice on the need for the examination.

(g) I have had no direct involvement in the use of SAIKs for the purpose of obtaining samples from suspects. However, as stated above, in Emerald SAIKs would be provided to the Doctor by the investigator.

(h) On the occasion where the suspect was required to undergo a forensic medical examination for the purpose of obtaining intimate photographs, the doctor was provided with a briefing on the requirements of the order and the necessity for his attendance.

[redacted] .....

Dylan Peter Brook

..... [redacted]

Witness

[redacted]

QUALIFIED

(i) I was present for an intimate forensic examination, pursuant to a forensic procedure order, at the Brisbane City Watchhouse in approximately 2012. I am aware the suspect in that matter refused to co-operate and was required to be restrained whilst the order was executed, and a sample obtained by the doctor. The suspect in question was a serial rapist.

(j) I am unable to comment from direct experience on what happens to the SAIKs and samples following a suspect's forensic examination as I have never personally been required to process or obtain SAIK samples from a suspect. I am aware from speaking with other investigators and SOCOs the SAIK from a suspect is lodged and processed in the same way as a SAIK obtained from a victim.

(k) I am also unable to comment on delays in transportation and whether or not such samples take longer than two weeks to reach FSS.

28. An evidentiary DNA reference sample is generally taken by the dedicated watchhouse officer at the time of charging the suspect along with fingerprints and photographs. Dependent upon staff resourcing, a sample may be taken by the investigating officer.

29. I am aware that OPM 2.6.3 refers to procedures in relation to Sexual offences. Chapter 17 of the *Police Powers and Responsibilities Act 2000* refers to forensic procedures.

30. Yearly, there are very few cases in Emerald where a forensic examination is conducted on an accused. As detailed above, I can only recall one since I returned to Emerald in 2020.

31. The processes followed have been the same in each of my postings.

Results

32. Generally, a task will be received via QPRIME advising of any DNA results or matches and a supplementary report is completed outlining the results of the testing.

33. My understanding of 'No DNA detected' is that no DNA was detected and no further action could be taken in relation to that DNA sample.

34. My understanding of 'DNA insufficient for processing' is that there is insufficient DNA for testing, however there is some capacity for it to be re-worked for further analysis if a task is sent to the DNA Management Unit. I am aware of this process after consulting

[redacted] ..... [redacted] .....

Dylan Peter Brook Witness [redacted]

QUALIFIED

with a scenes of crime officer (SOCO) during investigations where these results have been received. I became aware of this after receiving some results for a property investigation upon my return to operational criminal investigations at Emerald in 2020. I had cause to consult with the SOCO regarding the investigation and they provided advice in relation to this.

35. Other common results are mixed profile, which outlines mixed contributors to the DNA sample processed, however explanation is usually given that a contributor (victim or suspect) is more likely than not to have contributed.

36. Generally, results of DNA testing are passed on to complainants for sexually based offences as there is a necessity to ensure that they are fully informed. I am aware that some victims' willingness to proceed with a complaint may be based on the results of SAIKs. This is the case for the victim in [redacted]

Other issues

37. I am not aware of the sub-sampling process.

38. Between 2013 and 2016 there were significant issues in obtaining assistance from the Emerald Hospital in relation to medical practitioners completing a SAIK. Contact would be made with the hospital and investigators would be advised that there were no doctors available, trained or willing to complete the SAIK process. Investigators would be directed to make contact themselves with the Rockhampton Hospital. I am aware that numerous attempts were made by Dr Karen Quinn, who was appointed for a period of time as a government medical officer, to rectify this through training, however it was not resolved prior to my transfer in 2016.

39. During this time, investigators would be required to transport victims to Rockhampton via road in police vehicles, QAS or private vehicles.

40. I believe the lack of assistance may have been as a result of no training or a staffing issue within the hospital.

[redacted] .....

Dylan Peter Brook

..... [redacted]

Witness

41. I am aware that [redacted] an investigator was required to enact Ryans Rule'. with the hospital after being advised that an [redacted] rape victim could not be examined at the Emerald hospital. The investigator was advised they had no doctor available and they would have to travel to Rockhampton. After consultation with the medical staff and reference made to Ryan's rule, a doctor was recalled to duty and performed the examination.

42. Since that time, there have been no issues with doctors performing SAIKs at the hospital and the medical staff do a wonderful job assisting QPS and victims with the investigation process given the remote location and staffing levels at the hospital.

43. I have no particular concerns with the SAIK model or current processes, but I believe consistent training, in the use of SAIKs, would be of benefit to investigators and medical staff. I have no experience with Just in Case Kits.

TAKEN AND DECLARED before me at EMERALD in the State of Queensland this 23rd day of September 2022

..... [redacted] .... [redacted]

Dylan Peter Brook Witness

ATTORNEY-GENERALS DEPARTMENT Reg No [redacted] QUALIFIED

EXHIBIT 1

Notice number: 2022/ 00190

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Dylan Brook

Of: Queensland Police Service

I, Walter Sofronoff QC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Thursday 22 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted], with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 14th day of September 2022

[redacted]

Walter Sofronoff QC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/ 00190

Schedule of topics for statement

Detective Sergeant Dylan Brook

1. State your full name, current position/title and place of work.

Experience and current position

2. List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained (if any).

3. Detail your work history.

4. Attach a current CV.

5. Identify the duties/responsibilities of your position.

   (a) Include a description of the geographical area you work in, and identify who you report to and who (if anyone) reports to you.

   (b) Include a description of what types of crime you investigate.

Forensic medical examinations of complainants and witnesses

6. Detail your involvement in the conduct of forensic medical examinations on complainants and witnesses, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

   (a) Identify the types of alleged offences for which you would consider organising a forensic medical examination.

   (b) Identify the different ways you become notified of a person making a complaint about an offence for which you would consider a forensic medical examination appropriate.

   (c) Identify where the forensic medical examinations are conducted, and, if this includes a hospital, identify what area/rooms in a hospital are typically used. What advance contact is made with hospitals/other locations when you are intending to bring a complainant there.

   (d) Explain how the complainant is transported to the place where the forensic medical examination will be conducted, and who transports them.

(e) Identify who supplies the sexual assault investigation kit (**SAIK**) for the examination. Where are SAIKs stored? Identify if any other equipment is used in the examination, and if yes, identify who provides that equipment.

(f) Explain what happens at the location of the forensic medical examination, including who the SAIKs are provided to. Who conducts the examination (and identify if this varies between locations within your area of operation)? Include an explanation of how long a complainant typically waits at a hospital/other location for the examination to be conducted. Explain what information you typically convey to medical practitioners conducting the examination.

(g) Once the forensic medical examination is completed, what happens to the SAIK? Explain the process from when the medical practitioner finishes the examination to when the SAIK is delivered to Queensland Health Forensic and Scientific Services (**FSS**). Identify any property points at which SAIKs are stored, and the method(s) of transportation. Identify who is in charge of seeing that the SAIK is transported successfully.

7. Explain the circumstances in which you place the complainant/witness in a protective suit (that is, a suit or covering that is intended to protect the evidential integrity of samples that may be collected from the complainant/the clothing they are wearing).

8. Explain the circumstances in which clothing that an accused is wearing will be collected for potential submission for forensic DNA testing. In those circumstances, at what point and in what location is the clothing collected from the complainant? Is the clothing collected by an investigating officer, scenes of crime officer, medical practitioner or someone else?

9. Who supplies SAIKs to the QPS stations in the area in which you work? Who is responsible for placing orders for SAIKs?

10. Describe the appearance of a SAIK when it is received by QPS. Is it already fully compiled/put together, or do QPS stations in your area receive individual components of the SAIK and put them together? If the latter, identify whose role it is to put the SAIKs together.

11. In your experience, once a forensic medical examination is completed, how long does it typically take for the SAIK to reach FSS for forensic testing? As part of your answer, addressing the following.

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for a SAIK to reach FSS after it has been administered.

(c) Describe any instances where there have been particularly long delays.

(d) Explain what delays were experienced in transporting a SAIK in the matter of [redacted] he likely reasons for those delays, and whether similar delays have been experienced in other matters.

12. Identify who takes a reference sample from the complainant/witness? Explain when and in what circumstances that reference sample is typically taken.

13. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

14. Provide an estimate of the number of cases each year that you are involved with investigating which also involve the administration of a SAIK.

15. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

16. If any of the processes detailed above vary in the case of child complainants/witnesses, including those aged under 14, identify and explain those differences.

Forensic medical examinations of suspects/accused persons

17. Detail your involvement in the conduct of forensic medical examinations on suspects and accused persons, including your involvement in the lead-up to the forensic examination and the steps taken after the forensic examination. As part of your answer, address the following:

(a) Identify the circumstances leading up to the taking of intimate samples from an accused person, including any necessary authority that must first be obtained.

(b) Identify where the forensic medical examinations are conducted.

(c) Who conducts the examination (and identify if this varies between intimate and non-intimate examinations)? How are they contacted/organised to attend?

(d) What equipment do they use – is it a SAIK? If it is a SAIK, who supplies the SAIK?

(e) Explain what happens at the location of the forensic medical examination, including who the SAIKs/equipment are provided to. Explain what information is typically conveyed to medical practitioners conducting the examination.

(f) What happens if the accused person refuses to consent or cooperate with the examination, even if a court order has been obtained authorising the examination/procedure?

(g) Once the forensic medical examination is completed, what happens to the SAIK/samples? Explain the process from when the medical practitioner finishes the examination to when the samples are delivered to FSS. Identify any property points at which the samples are stored, and the method(s) of transportation.

18. In your experience, once a forensic medical examination is completed, how long does it typically take for the samples to reach FSS for testing? As part of your answer, address:

(a) Whether delays in transportation are sometimes experienced, and the causes for those delays.

(b) In your experience, in what proportion of cases does it take longer than two weeks for the samples to reach FSS after the examination has been conducted?

19. Identify who takes a reference sample from the accused? Explain when and in what circumstances the reference sample is typically taken.

20. Identify what QPS policies or manuals, if any, guide the above actions/decisions.

21. Provide an estimate of how many cases per year you are involved with investigating that involve a forensic medical examination (or similar) of an accused.

22. If any of the processes detailed above are different to processes you followed in your previous positions or postings, identify those differences, and explain how processes have since changed.

Results

23. Are you notified when the samples from a forensic medical examination have been tested, and are you notified of the results? If yes, explain how you are notified.

24. What is your understanding of the result '*No DNA detected*' (or similar)? If you have not seen this result-type before, confirm same.

25. What is your understanding of the result '*DNA insufficient for further processing*' (or similar)? If you have not seen this result-type before, confirm same.

26. What other type of results do you recall receiving? What is your understanding of those results?

27. Are the DNA results of the examination passed onto the complainant/witness? If yes, in your experience, does this have an effect on the complainant's decision to proceed with a criminal complaint? If so, explain how.

Other issues

28. Does sub-sampling of items suspected to contain biological material occur within your area, or does that occur at a QPS laboratory elsewhere?

29. If not already discussed above, outline any difficulties you have had in finding medical practitioners available and/or willing to conduct forensic medical examinations? If yes, provide details, including what you had to do to find a suitable medical practitioner.

30. Identify and detail any of your concerns with, or criticisms of, the current Queensland SAIK model, the just-in-case kits or the current processes for collecting biological material for forensic DNA testing in sexual assault matters (if not already discussed). Attach any supporting documents.

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF ADRIAN ROBB

I, **Adrian Robb,** of Queensland Police Service Academy, 72 Rudd Street Oxley state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

1. I am a Senior Sergeant of Police currently attached to Education and Training Services, People Capability Command. In my current role, I am the Officer in Charge of Training Quality.

Qualifications and experience.

2. I hold a Graduate Certificate in Business (Public Sector Management) which was awarded by the Queensland University of Technology in 2015.

3. My work history since commencing in the QPS includes:

   (a) I graduated from the Queensland Police Service Academy as a Constable in August 1995 and was transferred to Rockhampton where I performed general duties.

   (b) In early 2000, I transferred to Gin Gin police station where I continued to perform general duties.

   (c) In January 2002 I was promoted to Senior Constable and transferred to Monto Police Station where I continued to perform general duties.

(d) In November 2003 I was promoted to the rank of Sergeant and subsequently took up duties at the Queensland Police Service Academy in February 2004 within the Education and Training Support Program.

(e) In December 2006, I was promoted to the rank of Senior Sergeant, Coordinator within the Education and Training Support Program. As coordinator, part of my responsibilities involved overseeing the operations of the QPS Registered Training Organisation (QPS RTO).

(f) Since 2006, I have performed various periods of relieving both at level (Senior Sergeant) and at higher duties (Acting Inspector) in a variety of roles within the QPS.

4. Since joining the QPS, I have completed the following nationally recognised vocational qualifications:

(a) PUA50200 Diploma of Public Safety (Policing) (2003);

(b) BSZ40198 Certificate IV in Assessment and Workplace Training (2004);

(c) BSB41407 Certificate IV in Occupational Health and Safety (2013);

(d) TAE40110 Certificate IV in Training and Assessment (2011); and

(e) TAE40116 Certificate IV in Training and Assessment (2019).

5. I do not have a current CV.

Your role and functions

6. As the Officer in Charge of Training Quality, I am responsible for the day-to-day coordination of the following functions on behalf of Education and Training Services:

(a) Recruit Training Curriculum Currency;

(b) Trainer and Assessor Support and Development;

(c) QPS Course Registration within the Learning Management System;

(d) QPS Registered Training Organisation (RTO) Administration;

(e) Flexible Training Product currency and maintenance;

(f) QPS Pay Point Progression Support; and

(g) Educational Evaluation.

7. Attached and marked '**Exhibit 2**' is a copy of the current organisational structure for Training Quality.

8. My position reports to the Manager, Education and Training Services. The substantive occupant of this position is Inspector [redacted] however the position is currently being filled by Acting Inspector [redacted]

9. As outlined in Exhibit 2, the organisational structure, the following sections and section coordinators report to me:

(a) Senior Sergeant [redacted] Course Registration and Product Currency;

(b) AO6 [redacted] Educational Evaluation and Facilitator Development;

(c) Acting PO4 [redacted] Recruit Training Curriculum Currency; and

(d) AO3 [redacted], Pay Point Progression Support.

10. An RTO is an organisation that is approved by the Australian Skills Quality Authority (ASQA) to deliver nationally recognised training in the vocational education and training sector in accordance with the *Standards for Registered Training Organisations (RTOs) 2015* (Cth). To become an RTO, an organisation must make application through the regulator, ASQA, and once approved, the registration as an RTO can be for a period of up to 7 years. To maintain status as an RTO, the organisation must continue to meet the requirements of the *Standards for Registered Training Organisations (RTOs) 2015* (Cth) throughout the duration of its registration.

11. The QPS is a RTO and as such can award nationally recognised qualifications and statements of attainment for training products which it is registered to deliver and/or assess.

12. As an enterprise RTO, that is an RTO that primarily delivers training to its own staff, the QPS largely awards nationally recognised training products via a recognition of prior learning (RPL) pathway. This skills recognition process, or recognition of prior learning process, focusses on the breadth and depth of knowledge and skills acquired by employees as they progress through a range of job related training and development activities as part of their employment. Upon acquiring the relevant knowledge, skills and abilities, through organisational and job-related learnings, the employee may then become eligible to enrol and be awarded a nationally recognized qualification.

13. QPS training programs and products are developed, managed, and reviewed to meet organisational and job role requirements. Programs or products, which provide evidence towards the awarding of nationally recognised training products, fall within the scope of the QPS RTO quality assurance system. My role as Officer in Charge, Training Quality includes the maintenance, implementation and review of the QPS RTO Quality Management System. The Quality Management System includes the QPS RTO Quality Manual and a variety of quality assurance procedures which assist the QPS in maintaining its compliance with the *Standards for Registered Training Organisations (RTOs) 2015* (Cth).

14. The foundational qualification awarded to police officers is the Diploma of Policing. Eligibility to enrol in the diploma is subject to an officer having successfully completed the requirements of the 18-month Initial Services Program. The Initial Services Program comprises the six month Recruit Training Program at the Queensland Police Service Academy and the 12 month First Year Constable Program.

15. Once an officer has satisfied the enrolment eligibility criteria for the Diploma of Policing, they are then enrolled and awarded the qualification via an RPL assessment process. The Diploma of Policing recognises the knowledge, skills and attributes required by a confirmed constable who is able to work independently with little or no supervision. Subsequent policing qualifications awarded by the QPS RTO build upon the foundation knowledge and skills recognised by the Diploma of Policing. In most cases, these qualifications are also awarded via an RPL assessment process using evidence drawn from the relevant QPS training program or programs.

16. The relevant policies, procedures and or guidelines for the QPS RTO are contained in the Quality Manual and QPS Quality Assurance Procedures.

    (a) Attached and marked '**Exhibit 3**' is a copy of the QPS RTO Quality Manual v10.2.

    (b) Attached and marked '**Exhibit 4**' are copies of the QPS RTO Quality Assurance Procedures.

QPS Scenes of Crime Officers (SOCOs) and Scientific Officers

17. The training of QPS Scenes of Crime Officers (SOCOs) is provided through the QPS Scenes of Crime Development Program. This organisational training program is managed and delivered by the QPS Forensic Services Group.

18. The QPS RTO is registered to deliver the POL54115 Diploma of Forensic Investigation. Enrolment in the Diploma of Forensic Investigation is only available to QPS police officers who have successfully completed the Scenes of Crime Development Program or equivalent as determined by the course coordinator and are currently performing scenes of crime duties. The qualification is offered via a Recognition of Prior Learning (RPL) pathway with the evidence relied upon by the qualified assessor being drawn primarily from the QPS Scenes of Crime Development Program or from the workplace for existing officers performing duties as fulltime Scenes of Crime Officers.

19. All assessment decisions for the awarding of the POL54115 Diploma of Forensic Investigation are made by an approved QPS RTO assessor. The approved assessor for the POL54115 Diploma of Forensic Investigation is currently Senior Sergeant Asha Haxton. Part of my role is to validate assessment processes and judgements to ensure that the evidence gathered for QPS employees completing, for example, the Scenes of Crime Development Program, meets the unit of competency requirements for the Diploma of Forensic Investigation.

20. In relation to the training for Scientific Officers (SOs), I do not hold sufficient knowledge or understanding in relation to this matter. Training of SOs Scientific Officers is external to the QPS RTO processes. I have no role in obtaining external

recognition or nationally recognised accreditation for SO training. I understand that SOs are required to obtain a tertiary level qualification.

21. Once a SOCO has obtained the POL54115 Diploma of Forensic Investigation, they do not require further or refresher training which falls with the scope of the QPS RTO. The Diploma of Forensic Investigation is the only qualification that the QPS RTO is currently eligible to award for this particular specialist area.

22. The procedure and guidelines for the POL54115 Diploma of Forensic Investigation are contained in the assessment strategy. Attached and marked '**Exhibit 5**' is a copy of the Assessment Strategy for POL54115 Diploma of Forensic Investigation.

Other matters

23. In accordance with the *Standards for Registered Training Organisations (RTOs) 2015* (Cth), RTOs are required to implement a plan for ongoing systematic validation of assessment practices and judgements that includes each training product on the RTO's scope of registration. To give effect to this requirement, each training product is to be validated at least once every five years, with at least 50% of products validated within the first three years of each five-year cycle.

24. As Officer in Charge of Training Quality, I am responsible for developing and updating the QPS RTO Assessment Validation Schedule to ensure the requirements of the Standards are met.

25. The POL54115 Diploma of Forensic Investigation was added to the QPS RTO scope of registration on 30 October 2015. Since that time, the qualification has been the subject of internal audit and assessment validation conducted by Training Quality staff on three separate occasions namely November 2015, November 2018 and April 2022. Attached and marked '**Exhibit 6**' is a copy of the QPS RTO Assessment Validation Schedule v8.

26. The QPS RTO has not undergone an external site audit by a vocational education and training regulator since 2011. This audit was conducted as part of an RTO re-registration application.

27. My role in relation to the internal audits is outlined in QPSRTO 007 Systematic Validation of Assessment Practices and Judgements v6.0, Section 5.2 Coordinator, Training Quality. Attached and marked '**Exhibit 7**' is a copy of the QPSRTO 007 Systematic Validation of Assessment Practices and Judgements v6.0.

28. I have previously been involved in external QPS RTO re-registration application site audits in 2006 and 2011. My role in these audits was to liaise with the external auditors and provide the relevant evidence they sought in order to determine the application.

29. I conducted the most recent audit of POL54115 Diploma of Forensic Investigation in April 2022. On this occasion, the units of competency from the qualification that were validated were POLFOR025 Process Forensic Evidence, and POLFOR027 Assess and control incident/crime scene.

30. The student records of eight QPS officers who had previously completed the Scenes of Crime Development Program and had subsequently been awarded the POL54115 Diploma of Forensic Investigation were examined during the audit and assessment validation activity.

31. The validation involved the review of assessment records held within the Ignite Learning Management System for the Scenes of Crime Development Program. In addition to the online review, the assessment records for the nominated participants were retrieved and subsequently underwent validation.

32. The audit and assessment validation activity identified minimal issues with the assessment processes and practices. The assessment resources were of a high standard and the administrative practices ensure consistent and quality outcomes. The relevant documents to this audit were the Delivery Unit Assessment Validation Table for POL54115 Diploma of Forensic Investigation, Systems Improvement Plan for POL54115 Diploma of Forensic Investigation, and POL54115 Assessment Validation Report.

    (a) Attached and marked '**Exhibit 8**' is a copy of the Delivery Unit Assessment Validation Table for POL54115 Diploma of Forensic Investigation.

(b) Attached and marked '**Exhibit 9**' is a copy of the Systems Improvement Plan for POL54115 Diploma of Forensic Investigation.

(c) Attached and marked '**Exhibit 10**' is a copy of the POL54115 Assessment Validation Report.

(d) Attached and marked '**Exhibit 11**' is a copy of the finalised Systems Improvement Plan for POL54115 Diploma of Forensic Investigation.

33. I am not aware of any other issues, problems or areas of improvement in the training program for SOCOs. I am not aware of any issues, problems or areas of improvement in the training programs for SOs or any other police officer that might collect samples for DNA testing.

TAKEN AND DECLARED before me at Oxley in the State of Queensland this 12th day of October 2022

..... [redacted] .... [redacted]

Adrian Robb Witness

..... [redacted] .... [redacted]

Adrian Robb Witness

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF ADRIAN ROBB
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice number 2022/00242 - Requirement to give information in a written statement – dated 04/10/2022
2.	Organisational structure for Training Quality (as at October 2022).
3.	QPS Registered Training Organisation Quality Manual v10.2 - dated 16/09/2022
4.	QPS Registered Training Organisation Quality Assurance Procedures – various
5.	Assessment Strategy for POL54115 Diploma of Forensic Investigation v2 – 05/11/2021
6.	QPS Registered Training Organisation Assessment Validation Schedule v8 - undated
7.	QPS Registered Training Organisation 007 Systematic Validation of Assessment Practices and Judgements v6.0 - undated
8.	Delivery Unit Assessment Validation Table for POL54115 Diploma of Forensic Investigation v7 - undated
9.	Systems Improvement Plan for POL54115 Diploma of Forensic Investigation v1.2 - dated August 2018
10.	Report under Senior Sergeant Adrian Robb titled 'Internal Audit and Assessment Validation of POL54115 Diploma of Forensic Investigation - dated 16/06/2022
11.	Systems Improvement Plan for POL54115 Diploma of Forensic Investigation v 1.2 - dated 07/07/2022

EXHIBIT 1

Notice number: 2022/00242

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Adrian Robb

Of: Queensland Police Service

I, Walter Sofronoff KC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **12 noon Wednesday 12 October 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 4th day of October 2022

[redacted]

Walter Sofronoff KC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/242

Schedule of topics for statement

Adrian Robb

1. State your current rank and position in the Queensland Police Service (**QPS**).

Qualifications and experience

2. List any tertiary qualifications you hold, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held.

4. Identify any courses or diplomas you have completed since joining the QPS.

5. Attach a current CV.

Your role and functions

6. State the duties of your current position. Identify what unit you work in, the functions of that unit, and where you sit within that unit. If there is a document outlining the role or duties of your position, identify and attach that document.

7. Identify the person or people (name, rank and position) who you report to.

8. Identify the person or people (name, rank and position), if any, who report to you.

9. If not already explained in response to questions above, explain what a Registered Training Organisation (**RTO**) is, and whether the QPS is an RTO or whether particular units within the QPS are RTOs. If the QPS (or a unit within the QPS) is a RTO, explain what is done to achieve and maintain that RTO status. Explain your role, if any, in achieving and maintaining that status.

10. Provide an overview of the process for a police officer or trainee police officer to obtain external/nationally recognised accreditation for a course or training program they complete with the QPS. Describe the entire process from the point at which they first enrol in or commence the QPS course/training, up until the person receives the external/nationally recognised accreditation.

11. Identify and attach all policies, procedures or guidelines documents relevant to your answers to questions 6 to 10.

QPS Scenes of Crime Officers (SOCOs) and Scientific Officers

12. Explain the qualifications (if any) and training required for the role of a Scenes of Crime Officer (**SOCO**). Identify what organisation or unit conducts any such training.

13. Explain what external recognition or nationally recognised accreditation are received by SOCOs who complete such training. What is your role, if any, in obtaining that external recognition or nationally recognised accreditation.

14. Explain the qualifications (if any) and training required for the role of a Scientific Officer (**SO**). Identify what organisation or unit conducts any such training.

15. Explain what external recognition or nationally recognised accreditation are received by SOs who complete such training. What is your role, if any, in obtaining that external recognition or nationally recognised accreditation.

16. Identify if any further or refresher training programs for SOCOs or SOs are eligible for external/nationally-recognised accreditation.

17. Identify and attach all policies, procedures or guidelines documents relevant to your answers to question 12 to 16.

Other matters

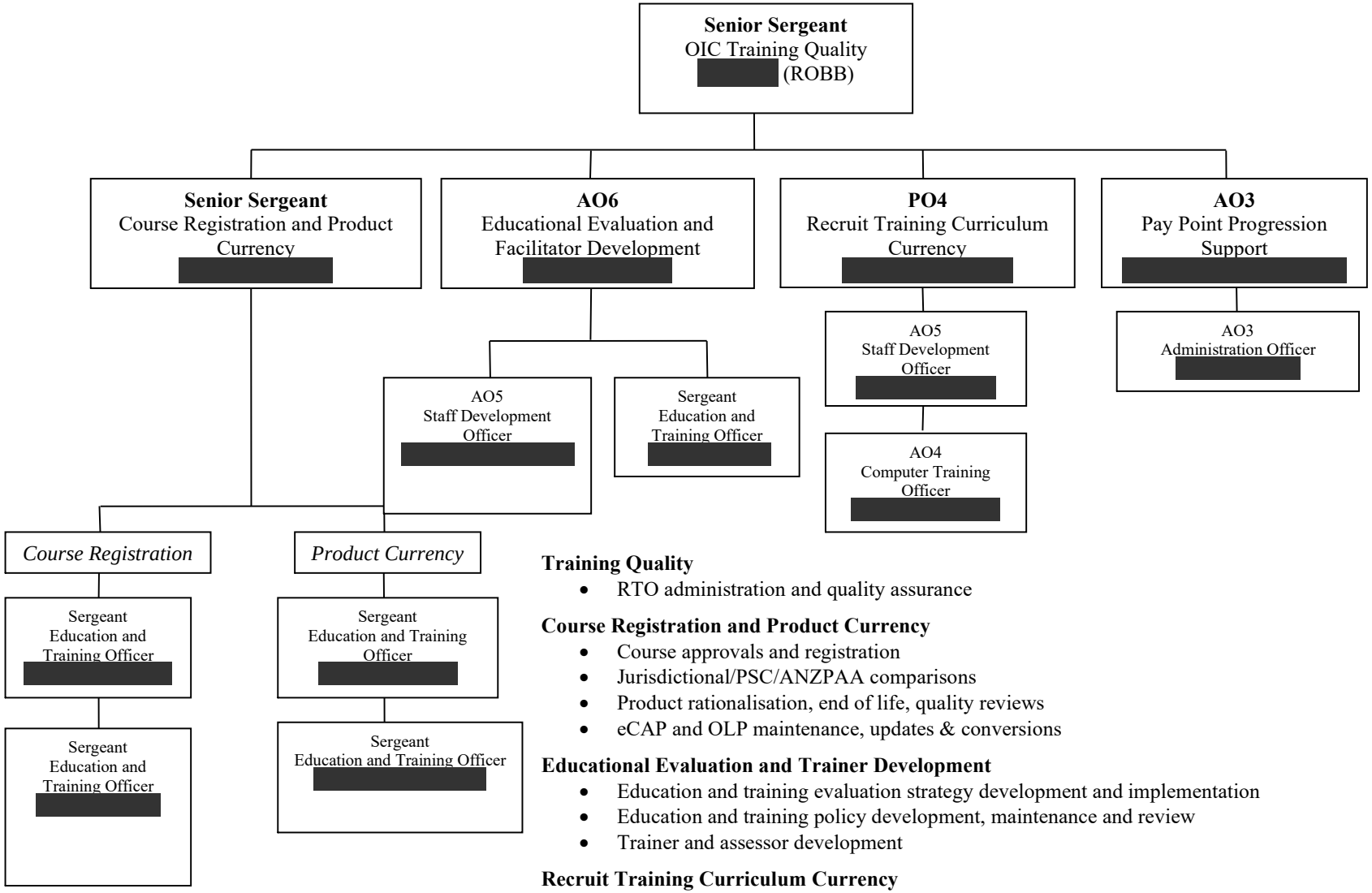
18. Are external or internal audits conducted in respect of training programs delivered by the QPS as part of its RTO function, including the SOCO training program? If yes, how often do they occur and what do they involve?

19. What is your role in each of such external and internal audits?

20. Identify any issues, problems or areas of improvement in the training programs for SOCOs, SOs or any other police officer that might collect samples for DNA testing. Include any such issues you believe exist, or you have been made aware of. Identify and attach any documents as necessary.

EXHIBIT 2

EDUCATION AND TRAINING SERVICES
Training Quality Structure
(as at October 2022)



Training Quality
- RTO administration and quality assurance

Course Registration and Product Currency
- Course approvals and registration
- Jurisdictional/PSC/ANZPAA comparisons
- Product rationalisation, end of life, quality reviews
- eCAP and OLP maintenance, updates & conversions

Educational Evaluation and Trainer Development
- Education and training evaluation strategy development and implementation
- Education and training policy development, maintenance and review
- Trainer and assessor development

Recruit Training Curriculum Currency
- Development, maintenance and review of Recruit Training Program curriculum

Pay Point Progression Support
- Receipt and processing of PPP applications
- Receipt and processing of S/Con progression applications
- Submission preparation and administrative support to the Pay Point Progression Review Committee (PPPRC).

EXHIBIT 3

QUEENSLAND POLICE SERVICE

REGISTERED TRAINING ORGANISATION

Registration Number 1549

Quality Manual

RTO Chief Executive Officer/Manager: Manager, Education and Training Services

RTO Management Contact: Officer in Charge, Training Quality

Date of Issue: 16 September 2022

Table of contents

Preface 7

Organisation Registration Details 8

Quality Policy 9

VET Quality Framework 11

Standards for Registered Training Organisations (RTOs) 2015 14

Standard 1 – The RTO's training and assessment strategies and practices are responsive to industry and learner needs and meet the requirements of training packages and VET accredited courses. 14

Clause 1.1 – Implement a comprehensive training and assessment strategy 14

Clause 1.2 15

Clause 1.3 15

Clause 1.4 17

Industry relevance 17

Clause 1.5 17

Clause 1.6 18

Learner Support 18

Clause 1.7 18

Assessment 19

Clause 1.8 19

Clause 1.9 21

Clause 1.10 22

Clause 1.11 23

Clause 1.12 23

Trainers and assessors 25

Clause 1.13 25

Clause 1.14 26

Clause 1.15 26

Clause 1.16 ..... *26*

Individuals working under the supervision of a trainer *26*

Clause 1.17 ..... *26*

Clause 1.18 ..... *27*

Clause 1.19 ..... *27*

Clause 1.20 ..... *27*

Delivery of the training and assessment qualifications for trainers and assessors *27*

Clause 1.21 to 1.25 - Not applicable to the QPSRTO *27*

Transition of training products *28*

Clause 1.26 ..... *28*

Clause 1.27 ..... *29*

Standard 2 – The operations of the RTO are quality assured. 29

Clause 2.1 – Implement quality assurance strategies *29*

Clause 2.2 ..... *34*

Clause 2.3 ..... *35*

Clause 2.4 ..... *35*

Standard 3 –The RTO issues, maintains and accepts AQF certification documentation in accordance with these Standards and provides access to learner records..... 36

Clause 3.1 ..... *36*

Clause 3.3 ..... *37*

Clause 3.4 ..... *38*

Clause 3.5 ..... *38*

Clause 3.6 – Participate in the Student Identifier scheme (QPS Exempt) *38*

Standard 4 – Accurate and accessible information about an RTO, its services and performance is available to inform prospective and current learners and clients..... 39

Clause 4.1 – Provide accurate information to learners about services and qualifications *39*

Standard 5 – Each learner is properly informed and protected..... 40

Clause 5.1 ..... *40*

Clause 5.2 ..... *40*

Clause 5.3 ..... *41*

Clause 5.4 ..... *42*

Standard 6 – Complaints and appeals are recorded, acknowledged and dealt with fairly, efficiently and effectively. 42

Clause 6.1 ..... *42*

Clause 6.2 ..... *42*

Clause 6.3 ..... *42*

Clause 6.4 ..... *43*

Clause 6.6 – Not applicable to QPS *44*

Standard 7 –The RTO has effective governance and administration arrangements in place. 44

Clause 7.1 ..... *44*

Clause 7.2 ..... *44*

Clause 7.3 ..... *44*

Clause 7.4 ..... *44*

Clause 7.5 ..... *44*

Standard 8 – The RTO cooperates with the VET Regulator and is legally compliant at all times. 49

Clause 8.2 ..... *49*

Clause 8.3 ..... *49*

Clause 8.4 ..... *49*

Clause 8.5 ..... *50*

Clause 8.6 ..... *50*

Definitions *52*

Appendix 2 (Schedules from the Standards for RTOs 2015) 63

Table 1.8-1: Principles of Assessment *63*

Table 1.8-2: Rules of Evidence *64*

Schedule 1 ..... *65*

Schedule 2 ..... *67*

Schedule 3 ..... *68*

Schedule 4 ..... *69*

Schedule 5 ..... *70*

Preface

In order for the Queensland Police Service (QPS) Registered Training Organisation (RTO) to maintain its position as a quality provider of education and training services, it is essential that we consistently meet or exceed our customer's requirements and expectations for quality, performance, timeliness, and cost of the products and services we provide.

This manual defines the RTO policies that reflect the requirements for quality assurance in design, development, production, delivery and review of vocational education and training. Implementation of these policies ensures that we consistently meet the quality and performance requirements of our customers in compliance with national standards and other regulations.

Through the provision of quality education and training we make a strong commitment to continuous improvement in all areas of the QPS. It is the responsibility of every employee to adhere to the defined processes of their job, to initiate action to prevent occurrence of nonconformity and to strive for continuous improvement.

I fully support the provision of this manual and active participation of all personnel in its implementation within all QPS vocational education and training programs.

Inspector Mark Harvey
Manager, Education and Training Services
People Capability Command

Organisation Registration Details

Legal Identity

Queensland Police Service.

Registration Number

1549

State of Registration

Queensland

Registration

Initial Registration: 1 January 1998
Last Registration: 14 December 2016
Expires: 13 December 2023

Management Representative

Manager, Education and Training Services
People Capability Command
[redacted]

Day-to-day and Registration Contact

Officer in Charge, Training Quality
Education and Training Services
[redacted]

Quality Policy

Quality Policy

The Queensland Police Service Registered Training Organisation (QPSRTO) provides quality products and services that meet or exceed our client's requirements.

Commitment to Quality

The QPSRTO is committed to providing a quality service to all client's by understanding their education and training needs to achieve quality outcomes.

The following actions are taken to ensure that all personnel understand the commitment to quality:

a) All staff involved in vocational education and training undertake the QPSRTO induction and have access to QPSRTO Quality Management System.

Quality Statement

The QPSRTO adheres to the teaching and learning principles outlined in the QPS Education and Training Best Practice Framework including:

a) The desire to achieve excellence in the provision of products and services that meet or exceed client expectations.
b) A commitment to continuous improvement.
c) Using qualified and skilled staff and appropriate resources to design, develop and improve quality training products.
d) Identifying accountability and ownership of activities and processes.
e) Using appropriately qualified and skilled staff to identify, define, analyse and review quality processes and systems.
f) Using a team based approach to develop and maintain quality products and services.
g) Ensuring QPSRTO processes and practices conform to relevant legislation, regulations, quality standards and ethical practices.

Scope of the Quality Management System

The scope of the QPSRTO Quality Management System includes all personnel who are responsible for the development, planning, delivery, assessment, evaluation and maintenance of QPS education and training products and services that lead to an AQF qualification or VET accredited course outcome.

The scope of the QPSRTO registration is the authorisation to deliver, assess and issue formal certification of qualifications or accredited courses that are recognised within the Australian Qualifications Framework.

Accreditation and Registration Body

The Australian Skills Quality Authority (ASQA) is the national regulator for Australia's vocational education and training sector.

ASQA regulates courses and training providers to ensure nationally approved quality standards are met.

Products and services

The primary source of training products awarded to QPSRTO clients reside within the disciplines of policing and public safety. To achieve the intended objectives within these disciplines, QPSRTO activities are underpinned by the following key elements:

a) Training Projects that provide meaningful specifications for education and training product design and services that are researched and developed to enhance adult learning and the requirements of organisational policies or contractual objectives as governed by the VET Quality Framework.

b) Training Products that provide quality education and training materials that meet or exceed the learning outcomes required by clients and achieve the requirements of a Training Product or accredited course recognised within the Australian Qualifications Framework.

c) Training Services that define the management of training in which resources are identified, defined, managed, reviewed and delivered in compliance with quality standards, organisational policies and the quality system.

d) Delivery and Assessment that provides quality education and training that enhances adult learning experiences and achieves organisational vocational requirements and formal recognition of acquired knowledge and skills within the Australian Qualifications Framework.

e) Certification that formally recognises a client's attainment in the form of a qualification or a statement of attainment for a training product or accredited course that conforms to the requirements of the Australian Qualifications Framework.

Quality System Standards

The QPSRTO Quality System conforms to the requirements of:

a) relevant legislation; and
b) National Vocational Education and Training Regulator Act 2011; and
c) Standards for Registered Training Organisations (RTOs) 2015; and
d) Financial Viability Risk Assessment Requirements 2021; and
e) Data Provision Requirements 2020; and
f) Work Health and Safety Act 2011 (Qld); and
g) Work Health and Safety Regulation 2011 (Qld); and
h) Privacy Act 1988 (Cth); and
i) Queensland Information Privacy Act 2009; and
j) Copyright Act 1968 (Cth); and
k) Australian Qualification Framework, and
l) AVETMIS Standard for VET Providers; and
m) Queensland Government Information Standards; and
n) QPS Education and Training Best Practice Framework: and
o) directives of the Commissioner of Police; and
p) QPS Code of Conduct; and
q) QPS Information Management Manual.

The RTO provides and maintains a documented quality management system and quality records, which assures that training products and services conform to organisational and RTO registration requirements.

VET Quality Framework

The VET Quality Framework consists of:

- Standards for Registered Training Organisations (RTOs) 2015
- Fit and Proper Person Requirements 2011
- Financial Viability Risk Assessment Requirements 2021
- Data Provision Requirements 2020
- Australian Qualifications Framework

Note: The requirements of the VET Quality Framework are recorded in the shaded sections throughout this Quality Manual.

National Vocational Education and Training Regulator Act 2011

Subdivision B—Conditions of registration

21 Complying with conditions

An NVR registered training organisation must:

a) comply with the conditions set out in sections 22 to 28; and
b) comply with any conditions imposed on the organisation's registration under subsection 29(1).

Note: Failure to comply with a condition of registration is a contravention of a civil penalty provision, see section 111.

22 Condition—compliance with the VET Quality Framework

1) An NVR registered training organisation must comply with the Standards for NVR Registered Training Organisations.
   (1A) An NVR registered training organisation must comply with Quality Standards
2) An NVR registered training organisation must comply with the Australian Qualifications Framework.
3) An NVR registered training organisation must comply with the Data Provision Requirements.

22A Condition—commitment and capability to deliver quality vocational education and training

An NVR registered training organisation must demonstrate a commitment, and the capability, to deliver quality vocational education and training.

23 Condition—satisfying Fit and Proper Person Requirements

An NVR registered training organisation must satisfy the Fit and Proper Person Requirements.

24 Condition—satisfying the Financial Viability Risk Assessment Requirements

An NVR registered training organisation must satisfy the Financial Viability Risk Assessment Requirements.

24A Condition – complying with student assistance laws

(1) An NVR registered training organisation that is a VET provider within the meaning of the *Higher Education Support Act 2003* must comply with that Act.

(2) An NVR registered training organisation that is an approved course provider within the meaning of the *VET Student Loans Act 2016* must comply with:

(a) the *VET Student Loans Act 2016*; and

(b) any Act or instrument to the extent that it is included in the definition of ***this Act*** in the *VET Student Loans Act 2016*.

25 Condition—notifying National VET Regulator of material changes

1) An NVR registered training organisation must notify the National VET Regulator, in writing, if:
   (a) an event occurs that would significantly affect the organisation's ability to comply with the VET Quality Framework; or
   (b) the name or contact details of an executive officer or high managerial agent of the organisation change; or
   (c) there are, or are likely to be, other substantial changes to the operations of the organisation.
(2) The notice must be given to the National VET Regulator as soon as practicable after the NVR registered training organisation becomes aware of a matter mentioned in subsection (1).

26 Condition—other information etc. must be provided

(1) An NVR registered training organisation must give the National VET Regulator such information as the Regulator requests, by notice in writing, for the purposes of this Act, so long as the organisation is capable of complying with the request.
(2) A notice under subsection (1) must specify the period within which, and the manner in which, the information requested is to be given.

Production of documents

(3) An NVR registered training organisation must produce to the National VET Regulator such documents as the Regulator requests, by notice in writing, for the purposes of this Act, so long as the organisation is capable of complying with the request.
(4) A notice under subsection (3) must specify the period within which, and the manner in which, the documents are to be produced.

26A Copies of documents

The National VET Regulator may:
(a) inspect a document produced under subsection 26(3); and
(b) make and retain copies of, or take and retain extracts from, such a document.

26B National VET Regulator may retain documents

1) The National VET Regulator may take, and retain for as long as is necessary, possession of a document produced under subsection 26(3).
2) The person otherwise entitled to possession of the document is entitled to be supplied, as soon as practicable, with a copy certified by the National VET Regulator to be a true copy.
3) The certified copy must be received in all courts and tribunals as evidence as if it were the original.
4) Until a certified copy is supplied, the National VET Regulator must, at such times and places as the Regulator thinks appropriate, permit the person otherwise entitled to possession of the document, or a person authorised by that person, to inspect and make copies of, or take extracts from, the document.

27 Condition—cooperation

An NVR registered training organisation must cooperate with the National VET Regulator, at least to the extent that:
(a) it is necessary for the Regulator to perform its functions; or
(b) it is necessary to facilitate the Regulator's performance of the Regulators functions.

28 Condition—compliance with directions given by the National VET Regulator

(1) An NVR registered training organisation must comply with any general directions given by the National VET Regulator, in writing, to organisations on the way in which the VET Quality Framework or other conditions of this Subdivision are to be complied with.
(2) The National VET Regulator must publish a general direction on the Regulator's website.
(3) A general direction under subsection (1) is a legislative instrument.

(4) Despite anything in section 44 of the Legislation Act 2003 , section 42 (disallowance) of that Act applies to a general direction.
(5) Despite anything in section 54 of the Legislation Act 2003 , Part 4 of Chapter 3 (sunsetting) of that Act applies to a general direction.

29 Other conditions
(1) The National VET Regulator may impose other conditions on an NVR registered training organisation's registration. Such conditions need not be imposed at the time of registration.
(2) The National VET Regulator may vary a condition imposed under subsection (1).

30 National VET Regulator to notify NVR registered training organisation of change in conditions of registration
1) The National VET Regulator must, within 30 days of deciding to impose or vary a condition on an NVR registered training organisation's registration, notify the organisation, in writing, of:
   a) the decision; and
   b) the reasons for the decision; and
   c) the period for which the condition is imposed.

Note: Details of conditions imposed on an NVR registered training organisation's registration are included on the National Register, see section 216.

2) The period for which the condition is imposed:
   a) may be a period specified in the notice; or
   b) may be a period ascertained in accordance with the notice.
3) The National VET Regulator must, within 30 days of deciding to remove a condition on an NVR registered training organisation's registration, notify the organisation, in writing, of:
   a) the decision; and
   b) the reasons for the decision.

Note: Details of conditions imposed on an NVR registered training organisation's registration are included on the National Register: see section 216.

Standards for Registered Training Organisations (RTOs) 2015

Standard 1 – The RTO's training and assessment strategies and practices are responsive to industry and learner needs and meet the requirements of training packages and VET accredited courses.

Clause 1.1 – Implement a comprehensive training and assessment strategy

The RTO's training and assessment strategies and practices, including the amount of training they provide, are consistent with the requirements of training packages and VET accredited courses and enable each learner to meet the requirements for each unit of competency or module in which they are enrolled.

Source: Standards for Registered Training Organisations (RTOs) 2015

As an enterprise RTO, the Queensland Police Service (QPS) primarily awards nationally recognised training products via a recognition of prior learning (RPL) pathway. This skills recognition process focusses on the breadth and depth of knowledge and skills acquired by employees as they progress through a range of formal and non-formal learning as part of their employment. Organisational training programs and products are developed, managed and reviewed in accordance with the QPS Education and Training Best Practice Framework. Programs or products which provide evidence towards the awarding of nationally recognised training products fall within the scope of the QPSRTO quality assurance system.

The QPS Training Quality section has developed a training and assessment, and an assessment only, strategy template for use within the delivery units providing nationally recognised training outcomes. Each delivery unit is required to develop a strategy which meets the requirements of the relevant training product and aligns to the respective job role requirements. The strategies are developed by the Course Coordinator in accordance with quality assurance procedure QPSRTO 028 *Industry Relevance of Training Assessment and Delivery.*

Examples of industry input in the development of the strategies can include, but is not limited to:

- QPS as the employer;
- Representation of delivery unit staff on committees involved in the review of the Public Safety Training Package;
- Liaison with counterparts in other Australasian Policing jurisdictions including the Australian and New Zealand Policing Advisory Agency (ANZPAA).

While delivery units are encouraged to use the QPS template for training and assessment/assessment only strategies, delivery units can also use existing documentation and resources which contain the required information. Examples of this can include staff matrices, assessment mapping documentation, trainer/assessor guides, website information and course joining instructions.

Training and/or assessment staff are provided access to the relevant qualification or accredited course strategy during induction. Strategies are also made available to eligible prospective participants in electronic format via the QPS intranet site unless the release of the strategy to persons other than those directly involved with the delivery, assessment or administration of the training product, would compromise the safety or security of the policing sector.

Strategies are considered as a 'living' document and are reviewed as part of an ongoing continuous improvement processes. Evidence of industry engagement and the systematic use of the outcomes of that

engagement are to be maintained in accordance with quality assurance procedure QPSRTO 028 *Industry Relevance of Training Assessment and Delivery*.

Evidence of industry engagement and the outcomes will be reviewed during the internal validation of Training Product/s, conducted by the Training Quality section.

Clause 1.2

For the purposes of Clause 1.1, the RTO determines the amount of training they provide to each learner with regard to:

a) the existing skills, knowledge and the experience of the learner;
b) the mode of delivery; and
c) where a full qualification is not being delivered, the number of units and/or modules being delivered as a proportion of the full qualification.

Source: Standards for Registered Training Organisations (RTOs) 2015

As an enterprise RTO, the primary learners undertaking training with the QPSRTO are employees of the organisation. The QPSRTO ensures that job role requirements and the management of organisational risk continue to be a significant driver when it comes to determining the mode of delivery and amount of training that each learner is required to undertake. As the relevant QPS organisational training programs and workplace experience form the basis from which RPL evidence is drawn, the majority of information provided to participants regarding the programs themselves is made available through the relevant delivery unit websites or hardcopy documentation.

The amount of training to be undertaken by employees will be determined by organisational program and job role requirements. In some instances, the evidentiary requirements to satisfy nationally recognised training products may extend beyond those set by QPS program/course requirements. In practice, this means that participants may successfully complete the training program and be approved to undertake specialist roles/functions on behalf of the Commissioner of Police however may have to provide further evidence (in most cases actual workplace evidence) in order to successfully achieve a nationally recognised outcome.

The Diploma of Policing is the foundation qualification awarded to police officers within the QPS and is awarded via RPL on successful completion of the 18-month Initial Services Program. The Diploma of Policing recognises the knowledge, skills and attributes required by a confirmed constable who is able to work independently with little or no supervision. The Initial Services Program comprises of the Recruit Training Program and the First Year Constable Program. Subsequent policing qualifications awarded by the QPSRTO build upon the foundation knowledge and skills recognised by the Diploma of Policing.

Clause 1.3

The RTO has, for all of its scope of registration, and consistent with its training and assessment strategies, sufficient:

a) trainers and assessors to deliver the training and assessment;
b) educational and support services to meet the needs of the learner cohort/s undertaking the training and assessment;
c) learning resources to enable learners to meet the requirements for each unit of competency, and which are accessible to the learner regardless of location or mode of delivery; and

d) facilities, whether physical or virtual, and equipment to accommodate and support the number of learners undertaking the training and assessment.

Source: Standards for Registered Training Organisations (RTOs) 2015

Staff

The QPSRTO utilises employees capable of meeting the technical, skill and educational requirements of the QPSRTOs scope of registration and operations.

The QPS is an enterprise RTO responsible for the training and assessment and professional development of its own staff. The trainers and/or assessors for QPS training programs are predominately recruited from these staff.

Training personnel involved in training and/or assessment of Training Products are required to provide evidence of vocational experience in a Staff Profile document and provide copies of relevant qualifications, experience and/or industry skills. These are verified through the QPS staff training records or the QPS staff selection process as outlined in the Human Resource policies and the public service Directive No 15/13 Recruitment and Selection. This requirement is monitored during internal validation of the delivery units by the Training Quality section.

The QPSRTO ensures that personnel involved in training and/or assessment of Training Product/s, undertake an induction, in accordance with *QPSRTO 026 Staff Induction,* which provides information about how they are to undertake their assigned duties and activities responsibly, safely, efficiently and effectively.

The information provided on the QPSRTO induction in Ignite (LMS) includes:

a) the quality manual, and
b) legislation that impacts on their duties, and
c) the VET Quality Framework, and
d) relevant quality assurance procedures.

The information provided in a training program induction includes:

a) an overview of the course learning and assessment strategy; and
b) an outline of the qualification or accredited course competency requirements, and
c) the course learning and assessment materials, and
d) local operating procedures that govern how tasks and activities are to be performed, and
e) any supervisory arrangements relating to trainers and/or assessors.

The RTO's policies and procedures are documented on the QPS Intranet site for all staff to access.

Training policy

The QPSRTO views training and development of personnel as an essential management responsibility that is vital to achieving the missions and future requirements of the QPS. The QPSRTO is committed to providing relevant training and development opportunities to optimise personnel effectiveness in an environment of changing standards, technologies and mission requirements in accordance with *QPSRTO 015 Management of Staff Training*.

Delivery units are responsible for ensuring staff maintain vocational currency and staff are responsible for the recording of professional development in their Staff Profile document. Professional development activities may be identified through the annual staff performance appraisal. Trainers/assessors are monitored via the annual performance appraisal process, the internal validation of the delivery units and through the review of client feedback data.

Staff are provided current information on VET through delivery unit network meetings and receipt of VET emails/information that are directed to the delivery units via the Training Quality section. Full records of training and development are maintained as quality records in accordance with the QPS Records Retention and Disposal Schedule.

Facilities and equipment
Facilities and equipment are determined and reviewed by senior management of the Queensland Police Service in accordance with responsibilities outlined in the QPS Operational Procedures Manual. Senior Management decisions relating to facilities and equipment are informed through the experiences of trainers, assessors and the relevant training managers. Purchases are made in accordance with the Administration Manual, Section 3 Procurement and Contracts.

Training materials
Training materials are developed by each delivery unit to meet the requirements of the Queensland Police Service training programs and the respective training product on the QPSRTO scope of registration. Each delivery unit is responsible for the development and review of its training materials in consultation with industry as per the requirements of the Standards for Registered Training Organisations (RTOs) 2015 and QPSRTO 028 *Industry Relevance of Training Assessment and Delivery.*

Student Support
Course coordinators are responsible for determining the types of educational and support services that are available for participants. Details of the support services available, specific to the individual delivery unit, are to be outlined in the Assessment Strategy or relevant QPS program website/s and documentation.

For further information:
Refer to Clause 1.7 - Support Learners and Clause 1.8 - Assessment Materials.

Clause 1.4
The RTO meets all requirements specified in the relevant training package or VET accredited course.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 1.1

Industry relevance

Clause 1.5
The RTO's training and assessment practices are relevant to the needs of industry and informed by industry engagement.

Source: Standards for Registered Training Organisations (RTOs) 2015

As an enterprise RTO, the QPS is committed to ensuring that training and assessment practices meet the needs of the organisation and the individual. Training and assessment practices must meet job role requirements in order to ensure that organisational outcomes are achieved. Each delivery unit is responsible for the development and review of its training materials in consultation with industry as per the requirements of the Standards for Registered Training Organisations (RTOs) 2015 and *QPSRTO 028 Industry Relevance of Training Assessment and Delivery.*

The Executive Manager of the People Capability Command is the Assistant Commissioner, People Capability Command. All curriculum development conducted within the QPS is to be approved by the Assistant Commissioner, People Capability Command or their delegate. This ensures that there is a consistent and coordinated approach to meeting the strategic education, training and development needs of the QPS and its members.

The QPS Education and Training Sub-Committee (ETSC) provides strategic oversight of curriculum development, maintenance and review within the organisation. The role of the ETSC is supported by the QPS Education and Training Best Practice Framework which is comprised of the QPS Learning Product Development Process and the QPS Learning Development and Assessment Guide.

The engagement of subject matter and workplace specialists when designing, developing and reviewing training and assessment practices is critical in order to ensure the relevancy of the practices. In most instances, subject matter experts and workplace specialists bring with them knowledge of current best practice and are well placed to assist in determining whether individual performance and organisational objectives will be met by the training and assessment practices.

The QPS conducts wider industry engagement with a variety of external stakeholders including other Australasian policing jurisdictions as well as the Australia and New Zealand Policing Advisory Agency (ANZPAA).

The QPS is an enterprise RTO responsible for the training and assessment and professional development of its own staff. The trainers and/or assessors for QPS training programs are predominately recruited from these staff. In addition to meeting the requirements of the Standards for Registered Training Organisations (RTOs) 2015, the selection of trainers and/or assessors is based on the possession and maintenance of their industry currency. For a large number of Training Products, QPSRTO trainers and/or assessors perform not only RTO related activities but fulfill operational police duties directly related to the Training Product they are associated with.

Clause 1.6

The RTO implements a range of strategies for industry engagement and systematically uses the outcome of that industry engagement to ensure the industry relevance of:

a) it's training and assessment strategies, practices and resources; and
b) the current industry skills of its trainers and assessors.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 1.5

Learner Support

Clause 1.7

The RTO determines the support needs of individual learners and provides access to the educational and support services necessary for the individual learner to meet the requirements of the training product as specified in training packages or VET accredited courses.

Source: Standards for Registered Training Organisations (RTOs) 2015

Educational and Support Services
As an enterprise RTO, the support and welfare of QPS employees including those undertaking training and development is paramount. The recruiting process for police officers includes the completion of psychometric assessments by applicants. This testing not only assesses the individual's suitability to become a police officer but also ensures that they possess the minimum language, literacy and numeracy levels required to complete the Recruit Training Program.

The QPS uses the Wonderlic Assessment to conduct the initial measurement of an applicant's abilities against established criteria for police officers. The test involves a variety of sections which have been designed to examine different skills including:

- English Language – Spelling, Grammar, and Vocabulary
- English Comprehension
- Memory
- Judgment and Reasoning skills
- Observation
- Logic
- Computation

A large proportion of the QPSRTO academic support, for both police officers and staff members, is provided by QPS trainers and assessors involved with the associated training programs. The relevant course coordinators are responsible for determining the types of educational and support services that are available for participants based on the nature and complexity of the training being undertaken. Details of the support services available, specific to the individual delivery unit, are to be outlined in the Assessment Strategy or relevant QPS program website/s and documentation.

Assessment

Clause 1.8

The RTO implements an assessment system that ensures that assessment (including recognition of prior learning):

a) complies with the assessment requirements of the relevant training package or VET accredited course; and
b) is conducted in accordance with the Principles of Assessment contained in Table 1.8-1 and the Rules of Evidence contained in Table 1.8-2.

Source: Standards for Registered Training Organisations (RTOs) 2015

Recognition of Prior Learning
Refer to Clause 1.12.

Assessment materials
The QPSRTO is committed to providing assessment that meets the requirements of the endorsed components of Training Packages or the outcomes specified in a VET accredited course, within its scope of registration. The QPSRTO encourages the use of a range of assessment practices and modes designed to accommodate the diversity of its participants and its courses that are consistent, fair and transparent and achieve the competency outcomes of an AQF qualification or VET accredited course. QPSRTO assessors are qualified and have appropriate vocational experience with access to the necessary resources to undertake assessments of participants in accordance with the assessment requirements of an on-scope AQF qualification or VET accredited course.

The QPSRTO ensures equity in assessment and applies reasonable adjustments to the assessment process or context that meet the individual needs of a participant with a disability, but do not change the competency outcomes of an AQF qualification or VET accredited course.

The QPSRTO places a high priority on providing prompt, informative and constructive feedback to participants on their completed assessment items.

All participants in an AQF qualification or VET accredited course being assessed by the QPSRTO assessor are provided with a fair and reasonable opportunity to appeal an assessment decision.

The QPSRTO maintains the responsibility for the final assessment of each participant in a qualification or course.

Each assessment item completed by a participant in an AQF qualification or VET accredited course is maintained as quality records and retained in compliance with QPS policies and the *Records Retention and Disposal Schedule* and *QPSRTO014 Recordkeeping (Assessment)* procedure.

The final summative assessment result for each unit of competency undertaken by a participant is accurately captured within an approved electronic learning management system in an inviolate and accessible format that are retained in conformance with the VET Quality Framework and policy requirements of the National VET Regulator.

Systematic Validation of Assessment Practices and Judgements

The QPS is committed to the quality of the curriculum and assures assessments are valid, reliable, flexible and fair and achieve a meaningful and transferable credential. Internal audit of delivery units and the validation of assessment practices and judgement is undertaken in accordance with quality assurance procedure *QPSRTO 007 Systematic Validation of Assessment Practices and Judgements.*

Consistent and reliable interpretations ensure that participant assessments conducted in a variety of settings will be fair and reliable and maintain the integrity of the curriculum and the requirements of a qualification or accredited course.

A statistically valid sample of a participant's completed work is validated to ensure that a consistent and reliable interpretation of assessment is performed by assessors to the requirements of the endorsed components of Training Packages or the outcomes specified in accredited courses.

The Course Coordinator is responsible for ensuring that assessors apply the assessment criteria and standards consistently. All training programs moderate their assessment processes, procedures, instructions and instruments at regular intervals as determined appropriate and desirable.

Each delivery unit's process for maintaining industry relevance through engagement and the systematic use of industry engagement outcomes are documented in the relevant training and assessment strategy.

A record of moderation activities are maintained as quality records and retained in compliance with QPS policies and the *Records Retention and Disposal Schedule*.

Clause 1.9

The RTO implements a plan for ongoing systematic validation of assessment practices and judgements that includes for each training product on the RTO's scope of registration:

a) when assessment validation will occur;
b) which training products will be the focus of the validation;
c) who will lead and participate in validation activities; and
d) how the outcomes of these activities will be documented and acted upon.

Source: Standards for Registered Training Organisations (RTOs) 2015

Validation

Validation of assessment practices and judgements is conducted in accordance with quality assurance procedure *QPSRTO 007 Systematic Validation of Assessment Practices and Judgements.* The intended method for validation of training assessment and training delivery must be documented in the Training and Assessment Strategy. The actual conduct of validation of training assessment and training delivery must be consistent with what is documented in the Training and Assessment Strategy.

Benchmarks established must be reviewed, compared and evaluated to ensure consistency in assessment and compliance with industry best practice. All of the assessment tools must be considered when conducting the validation of assessment.

Evidence that validation has been performed consistently with the Training and Assessment Strategy must be retained by delivery units for presentation during an internal or external audit. Should changes to the training assessment and training delivery be identified through the validation process, these should be documented in the Training and Assessment Strategy and how they will be implemented.

When undertaking industry engagement activities, relevant internal and external stakeholders and/or industry experts who are noted in the Training and Assessment Strategy must be consulted.

Systematic Validation of Assessment Practices and Judgements

In relation to each training product on the QPSRTO scope of registration, the annual Systematic Validation of Assessment Practices and Judgements Schedule will identify the following:

- proposed dates for the assessment validation and audit activity;
- the nominated technical representative (if known) to be involved in the validation of assessment tools and practices;
- the nominated technical representative (if known) to be involved in the validation of assessment decisions;

The timing of the Systematic Validation of Assessment Practices and Judgements activity for each training product will be determined whilst taking into consideration of a variety of factors including, but not limited to:

- the outcomes of previous internal audits and assessment validation activities;
- changes to qualification requirements due to training package amendments;
- change of course coordinator and/or training and assessment staff; and
- number of annual enrolments and completions.

All personnel involved in the management, coordination, administration or support of training programs or quality management systems cooperate with personnel assigned to audit training services and systems.

There are two audit schedules developed, one includes all qualifications and accredited courses within the QPS's scope of registration and the other includes the schedule of audit for the RTO's management system.

The QPS ensures that appropriately qualified and experienced personnel independent of the operation being audited conduct the internal audit.

The QPS ensures internal auditors have access to personnel, facilities, resources and information systems to assess the level of compliance with the requirements stated to apply in scope of internal audits.

Scope of internal audits
An internal audit of the delivery of a qualification or accredited course includes an assessment of the level of compliance with the requirements of the RTO's quality system and the VET Quality Framework. If the delivery of a qualification or accredited course is subject to a contractual agreement, the internal audit includes an assessment of the level of compliance with the conditions of that agreement. An internal audit of the management and administration of the RTO includes an assessment of the level of compliance with:

- the conditions of registration; and
- the requirements of any current contractual agreement, and
- the requirements of the RTO's quality system.

Training Quality captures, maintains and reviews completed internal audit tables, internal audit reports and system improvement plans as quality records as outlined in *QPSRTO 007 Systematic Validation of Assessment Practices and Judgements* and *QPSRTO 008 Quality Management System Audit.*

Continuous Improvement
The QPS acts on opportunities for improvement identified by any means to continually improve its products, services and quality systems.
The QPS identifies opportunities for improvement by regularly monitoring the quality of the organisations training products, services and quality systems by:

- Conducting internal audits and assessment validation for delivery in accordance with *QPSRTO 007 Systematic Validation of Assessment Practices and Judgements.*
- Conducting internal audits of the QPSRTO Quality Management System in accordance *QPSRTO 008 Quality Management System Audit.*
- Collecting and analysing participant evaluations in accordance with *QPSRTO011 RTO Evaluation Policy.*
- Engaging with industry to obtain feedback, recording any improvements identified through these meetings in the Continuous Improvement Register and actioning.
- Recording and reviewing complaints and appeals in accordance with *QPSRTO018 Complaints and Appeals.*
- Attending staff meetings to obtain suggestions, recording any improvements identified through these meetings/suggestions in the Continuous Improvement Register and actioning.

Clause 1.10

For the purposes of Clause 1.9, each training product is validated at least once every five years, with at least 50% of products validated within the first three years of each five year cycle, taking into account the relative risks of all of the training products on the RTO's scope of registration, including those risks identified by the VET Regulator.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPSRTO undertakes systematic validation of assessment practices and judgements of training product/s delivered by, or on behalf of, the organisation. All training product/s on the QPSRTO scope of registration undergoes Systematic Validation of Assessment Practices and Judgements activities as per the

approved schedule in order to ensure a systematic and continuous improvement approach to the products and services provided. This occurs in accordance with *QPSRTO 007 Systematic Validation of Assessment Practices and Judgements.*

Additional internal audits or assessment validation activities may be conducted at any time by Training Quality based on factors including, but not limited to:

- changes to qualification requirements due to training package amendments;
- change of course coordinator;
- significant changes to training and/or assessment staff;
- participant complaints or appeals;
- contract or licensing requirements.

Clause 1.11

For the purposes of Clause 1.9, systematic validation of an RTO's assessment practices and judgements is undertaken by one or more persons who are not directly involved in the particular instance of delivery and assessment of the training product being validated, and who collectively have:

a) vocational competencies and current industry skills relevant to the assessment being validated;
b) current knowledge and skills in vocational teaching and learning; and
c) the training and assessment credential specified in Item 2, or Item 5 of Schedule 1.

Industry experts may be involved in validation to ensure there is the combination of expertise set out above.

Source: Standards for Registered Training Organisations (RTOs) 2015

The annual QPSRTO internal audits and assessment validation activities are led and managed by Training Quality (TQ). TQ is independent of delivery units and has a direct reporting line to the Chief Executive Officer. This ensures a separation of roles and supports the organisations commitment to the ongoing delivery and assessment of quality training.

TQ lead auditors possess current knowledge and skill in vocational teaching and learning and must hold a relevant training and assessment qualification. In some instances, the TQ lead auditor may also possess vocational competencies and current industry skills however a suitably qualified technical representative/s is still to be involved in assessment validation activities led by TQ in accordance with *QPSRTO 007 Systematic Validation of Assessment Practices and Judgements.*

Course coordinators are responsible for:

- nominating a suitably qualified technical representative/s to take part in the validation of assessment practices who was not directly involved in the particular instance of the delivery and assessment of the training product being validated;
- nominating a suitably qualified technical representative/s to take part in the validation of assessment judgements who was not directly involved in the particular instance of the delivery and assessment of the training product being validated;

The details of persons involved in assessment validation activities are to be recorded in the QPSRTO 007 F01 Delivery Unit Systematic Validation of Assessment Practices and Judgements table.

Clause 1.12

The RTO offers recognition of prior learning to individual learners.

Source: Standards for Registered Training Organisations (RTOs) 2015

As an enterprise RTO, the Queensland Police Service (QPS) primarily awards nationally recognised training products via a recognition of prior learning (RPL) pathway. This skills recognition process focusses on the breadth and depth of knowledge and skills acquired by employees as they progress through a range of formal and non-formal learning as part of their employment. Organisational training programs and products are developed, managed and reviewed in accordance with the QPS Education and Training Policies. Programs or products which provide evidence towards the awarding of nationally recognised training products fall within the scope of the QPSRTO quality assurance system.

The QPS offers all participants, eligible to enrol in a nationally recognised training product, with the opportunity to be assessed through an RPL process upon enrolment in the relevant training product (refer to *QPSRTO010 Recognition of Prior Learning* procedure).

The QPS is committed to providing adequate information and support to participants who elect to engage in an RPL assessment process for nationally recognised training products (on scope) where RPL is available. The information available to participants prior to enrolment for each AQF qualification or accredited course, where RPL is available, provides clear and practical advice on gathering sufficient, quality evidence for assessment through an RPL process.

As an enterprise RTO, the QPS has an overriding duty to ensure all staff are adequately trained to perform their delegated duties and fulfil job role requirements as determined by the organisation. Whilst the opportunity to apply for RPL will be offered to individual learners at the time of enrolling in a qualification, training product short course or unit/s of competency, participants may still be required to complete all or part of the organisations training program which provides evidence towards the training product outcome.

Each Training Program and Delivery Unit is responsible for determining the level of risk associated with the job role and what influence the awarding of RPL to a learner has on the requirement for that learner to complete all or part of the QPS training program. Where the awarding of RPL for all or part of a training product does not have any effect on the requirement for a learner to complete the entire relevant QPS training program, this information will be provided to participants in its course materials.

Trainers and assessors

Clause 1.13

In addition to the requirements specified in Clause 1.14 and Clause 1.15, the RTO's training and assessment is delivered only by persons who have:

a) vocational competencies at least to the level being delivered and assessed;
b) current industry skills directly relevant to the training and assessment being provided; and
c) current knowledge and skills in vocational training and learning that informs their training and assessment.

Industry experts may also be involved in the assessment judgement, working alongside the trainer and/or assessor to conduct the assessment

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPS procures and recruits employees capable of meeting the technical, skill and education requirements of the RTO's scope of registration and operations. QPS is an enterprise RTO responsible for the training and assessment of its own staff. The trainers/assessors are predominately recruited from these staff.

The QPSRTO ensures that where qualifications are awarded via a delivery and assessment pathway, unit training and assessment staff have the required trainer and assessor qualifications and experience through verification by the relevant course coordinators. Course coordinators are responsible for ensuring that a staff profile is completed and trainer/assessor requirements met prior to that staff member delivering training or conducting assessment on behalf of the RTO. This is done in accordance with quality assurance procedure *QPSRTO 015 Management of RTO Staff Training.*

Trainers and/or assessors are also required to provide evidence of vocational experience and provide copies of relevant qualifications and experience. These are verified through the QPS staff training records or the QPS staff selection process as outlined in the Human Resource policies and the public service Directive No 15/13 Recruitment and Selection. This requirement is monitored during internal audits of the delivery units by the Training Quality Section.

The QPS ensures that personnel involved in training delivery, assessment and support of Training Product/s undertake an induction, in accordance with *QPSRTO 026 Staff Induction,* that provides information about how they are to undertake their assigned duties and activities responsibly, safely, efficiently and effectively.

The information provided in the RTO induction includes:

- the quality manual;
- legislation that impacts on their duties;
- the VET Quality Framework;
- Training and/or Assessment Strategies;
- relevant Quality Assurance procedures.

The information provided in a course induction includes:

- an overview of the course learning and/or assessment strategy; and
- an outline of the qualification or accredited course competency requirements, and
- the course learning and assessment materials, and
- local operating procedures that govern how tasks and activities are to be performed, and
- any supervisory arrangements relating to trainers and/or assessors.

The RTO's policies and procedures are documented on the QPS Intranet site for all staff to access.

Clause 1.14

The RTO's training and assessment is delivered only by persons who have the training and assessment credential specified in Item 2 or Item 3 of Schedule 1.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer Clause 1.13 and quality assurance procedure *QPSRTO 026 Staff Induction*

Clause 1.15

Where a person conducts assessments only, the RTO ensures that the person has the training and assessment credential specified in Item 2, or Item 3, or Item 5 of Schedule 1.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer Clause 1.13 and quality assurance procedure *QPSRTO 026 Staff Induction*

Clause 1.16

The RTO ensures that all trainers and assessors undertake professional development in the fields of the knowledge and practice of vocational training, learning and assessment including competency based training and assessment.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer Clause 1.13 and quality assurance procedure *QPSRTO 026 Staff Induction*

Individuals working under the supervision of a trainer

Clause 1.17

Where the RTO, in delivering training and assessment, engages an individual who is not a trainer or assessor, the individual works under the supervision of a trainer and does not determine assessment outcomes.

Source: Standards for Registered Training Organisations (RTOs) 2015

Where a training product on the QPS scope of registration is awarded via a delivery and assessment pathway, Course Coordinators are responsible for approving those persons who are involved in the delivery of training and assessment for the relevant program they are responsible for. Where a person who is not a trainer or assessor is engaged by the delivery unit to deliver training, the Course Coordinator is to ensure that a suitable supervisory plan has been developed and put in place in accordance with Clause 1.20.

Course Coordinators are to ensure that persons, who are not trainers or assessors but are delivering training on behalf of the QPSRTO, have the necessary industry (technical) or vocational expertise in the field of training being delivered as well as meeting the requirements of Clause 1.18.

Persons who do not meet the requirements of Clause 1.15 are not to determine assessment outcomes for training product/s.

Quality assurance procedure QPSRTO 015 Management of RTO Staff Training refers.

Clause 1.18

The RTO ensures that any individual working under the supervision of a trainer under Clause 1.17:

a) holds the training and assessment credential specified in Item 6 of Schedule 1;
b) has vocational competencies at least to the level being delivered and assessed; and
c) has current industry skills directly relevant to the training and assessment being provided.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 1.17.

Clause 1.19

Where the RTO engages an individual under Clause 1.17, it ensures that the training and assessment complies with Standard 1.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 1.17.

Clause 1.20

Without limiting Clauses 1.17 – 1.19, the RTO:

a) determines and puts in place:
   i. the level of the supervision required; and
   ii. any requirements, conditions or restrictions considered necessary on the individual's involvement in the provision of training and collection of assessment evidence; and
b) ensures that trainers providing supervision monitor and are accountable for all training provision and collection of assessment evidence by the individual under their supervision.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 1.17.

Delivery of the training and assessment qualifications for trainers and assessors

Clause 1.21 to 1.25 - Not applicable to the QPSRTO

Transition of training products

Clause 1.26

Subject to Clause 1.27 and unless otherwise approved by the VET Regulator, the RTO ensures that:

a) where a training product on its scope of registration is superseded, all learners' training and assessment is completed and the relevant AQF certification documentation is issued or learners are transferred into its replacement, within a period of one year from the date the replacement training product was released on the National Register;
b) where an AQF qualification is no longer current and has not been superseded, all learners' training and assessment is completed and the relevant AQF certification documentation issued within a period of two years from the date the AQF qualification was removed or deleted from the National Register;
c) where a skill set, unit of competency, accredited short course or module is no longer current and has not been superseded, all learners' training and assessment is completed and the relevant AQF certification documentation issued within a period of one year from the date the skill set, unit of competency, accredited short course or module was removed or deleted from the National Register; and
d) a new learner does not commence training and assessment in a training product that has been removed or deleted from the National Register.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPSRTO ensures that requests for additions, deletions or amendments to the QPSRTO Scope of Registration are managed in a systematic and consistent way. Training Quality overseas the transition from superseded training packages as well monitoring the requirements for reaccreditation and re-registration of VET accredited courses that the QPS delivers and/or assesses. The management of the QPSRTOs Scope of Registration is conducted in accordance with the quality assurance procedure *QPSRTO 001 Management of the QPSRTO Scope of Registration.*

The QPS ensures that delivery of AQF Qualifications and accredited courses commences only after QPS has received notification of approval for the extension to the QPS scope of registration from the VET regulator. The RTO Chief Executive Officer approves all registration documentation prior to submission to the VET regulator.

All documentation required for registration is captured within the approved records management system and is accessible to managers, trainers, assessors, administration and support staff. Registration records are maintained as quality records and retained in compliance with QPS policies and the Records Retention and Disposal Schedule

The QPS will manage the transition from superseded Training Packages within 12 months of their publication on Training.gov.au and also manage the transition from superseded accredited courses so that it will deliver only current endorsed Training Packages or currently accredited courses.

The QPS will manage this process by:

- monitoring the currency of Training Packages and accredited courses via:
  - subscribing to Training.gov.au updates, and
  - reviewing currency of Training Packages during course reviews/internal audits, and
  - liaising with the Australian and New Zealand Policing Advisory Agency, and
- making application for changes to scope of registration within the 12 months transition period; and

- ensuring that participants training is completed within the required timeframes or they are transitioned into the new training product (if applicable) within 12 months.

Clause 1.27

The requirements specified in Clause 1.26 (a) do not apply where a training package requires the delivery of a superseded unit of competency.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 1.26.

Standard 2 – The operations of the RTO are quality assured.

Clause 2.1 – Implement quality assurance strategies

The RTO ensures it complies with these Standards at all times, including where services are being delivered on its behalf. This applies to all operations of an RTO within its scope of registration.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPS maintains a quality manual that includes:

- a description and scope of the quality system, including any allowable exclusions
- reference to documented procedures; and
- a description of interaction between processes of the quality system.

The Officer in Charge, Training Quality ensures current quality assurance system documentation is available to all persons providing product development, delivery, assessment, support or administration services on behalf of the RTO.

Training Managers ensure personnel under their control have access to current quality system documentation.

Documentation Requirements

The quality system shall be established and maintained in a tiered documentation structure, including those documents required by regulation, the VET Quality Framework, contracts and agreements to ensure effective operations.

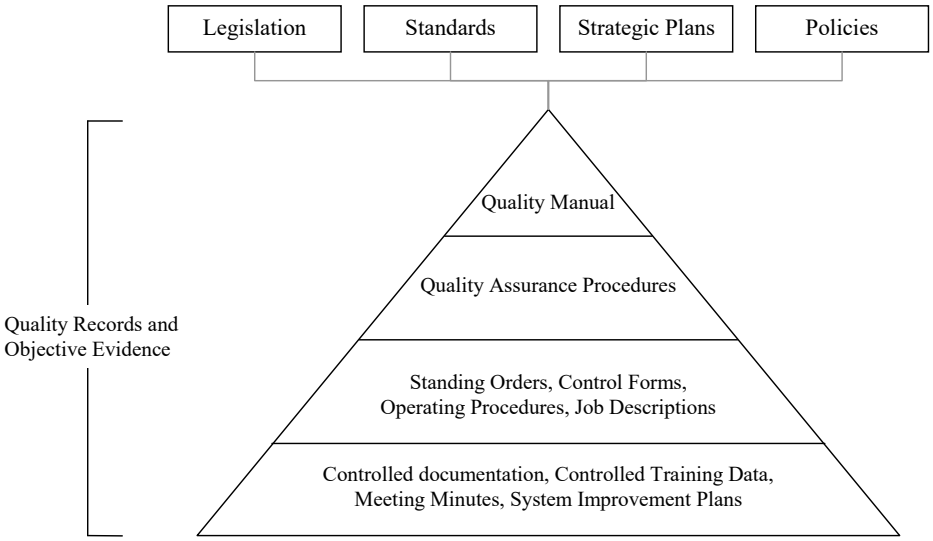
Each lower tier of documents supports the tier above and includes increasing levels of detail. The tiered structure includes:

- a quality manual, containing policies for system requirements;
- the RTO quality assurance procedures, containing descriptions of who, what, when and how activities are to be undertaken to achieve the requirements of the quality system;
- Standing Orders that provide how quality assurance procedures are incorporated into business tasks and activities;
- control forms used to collect quality data;
- training program work instructions that document who, what, when and how quality activities are undertaken within a training program;
- job descriptions that document the responsibilities of staff and provide evidence of the implementation of the requirements of the quality system.

- quality records generated and maintained as a result of complying with the requirements of the quality system.

Structure of Quality System Documentation

Figure 1: Structure of Quality System documentation



Document Approval

Training programs or offices that create or use documentation related to the production of an RTO training product or the operation of the quality system within their area of responsibility maintain local procedures and instructions to control documentation and associated data. Document control elements include:

- Unique document identification number;
- Descriptive document name;
- Details of the document owner;
- Date document was approved;
- Details of the authorised person who approved the document;
- Version or revision number

Procedures or external standard documents on paper, which display 'Not a Controlled Copy' or similar words, are not used to control operations essential to the effective functioning of the quality system. Reference copies are validated against physical or electronic controlled master documents.

A master copy of obsolete or repealed document are retained for at least the life of the training product and as required in the QPS Records Retention and Disposal Schedule.

The use of national or international standards is limited to current versions only unless otherwise required through a contractual agreement. Where the document is developed by and the QPS has custody of the Copyright that the following words are included in the footer area of each page, ‘Copyright State of Queensland (Queensland Police Service)’.

Document changes

Changes to the RTO Management System Documents are processed in accordance with procedure QPSRTO 003 *Development/amendment of RTO Management System Policies, Procedures and Forms*.

Changes to Delivery Unit documents are reviewed and approved by the document owner, unless specifically designated and authorised in writing by the authorised course coordinator.

Change records shall include:

- The unique document identification number;
- Details of the document owner;
- Date the change was approved;
- A description of the change;
- The updated version or revision number;

Document distribution lists show the new version or revision number of the document and the date the changed document became effective.

Approved changes are communicated to appropriate personnel in a timely manner.

Quality Records

Quality records are maintained as evidence of compliance with the requirements of regulations and standards and the effective operation of the quality system.

Quality records are maintained on approved systems only.

Quality records meet the following requirements:

- Legible and identifiable with the product or process involved;
- Stored and maintained to provide reasonable access, in facilities that provides a suitable environment to minimise deterioration, damage or loss.
- Access is managed in accordance with QPS information security policies.
- Useable and readable.
- Electronic records are migrated to new versions of software programs as necessary.
- Backed up when stored on computer-based systems.
- Available for production to Training Quality, external National VET Regulator auditors or as authorised or required by law.
- Retained as quality records for the period of time identified within the QPS Records Retention and Disposal Schedule.
- Assessment records will be retained as per the QPS Records Retention and Disposal Schedule and the requirements of the relevant NVR General Directions.

Quality records include:

- customer agreements;
- partnership agreements;
- training project plans;
- course accreditation documentation;
- registration documentation;
- course outlines;
- Learning and Assessment Strategy;
- industry unit of competency or module descriptor;
- learning materials;
- assessment tools
- work instructions;
- job descriptions of facilitators and administrative staff;
- staff and client induction documentation;
- course joining instructions;
- client enrolment records;
- completed client assessment items [QPSRTO 014 Recordkeeping (Assessment)];
- client unit or module summative assessment results;
- self audits or training program internal review documentation;

- evaluation reports and data records;
- trainer and assessor profiles;
- course validation documentation;
- assessment validation documentation;
- system improvement plans.

Continuous Improvement
Refer to clause 2.2.

Internal audit
Refer to clause 2.2.

Corrective Action

The QPS is highly motivated towards satisfying all of our clients. Any service complaints are reported to the Coordinator, Training Quality for resolution. Complaints and appeals are addressed as per procedure *QPSRTO018 Complaints and Appeals*.

The Coordinator, Training Quality receives copies of all internal audit reports and communicates compliance issues to the management committee.

The relevant Course Coordinator corrects identified issues of non-compliance as soon as is practicable and reports on rectifications to their Training Manager.

The designated team member of Training Quality corrects identified issues of non-compliance as soon as is practicable and reports on rectifications to the Coordinator, Training Quality.

The Training Manager has the responsibility of providing information about all system improvement actions to their functional manager.

The Training Manager submits improvement action plans to the Coordinator, Training Quality for the consideration of the management committee.

The Training Quality captures, maintains and reviews corrective action reports and system improvement plans.

Client feedback
Refer to clause 2.2.

Responsibilities:

Manager, Education and Training Services
The Manager, Education and Training Services is the Legally Authorised Representative of the QPSRTO and is responsible for:

- endorsing the quality policy;
- ensuring that the quality policy is disseminated and clearly understood across the organisation;
- endorsing yearly reviews of the suitability and effectiveness of the quality system;
- monitoring the QPSRTO level of compliance with the Standards;
- approving all course accreditations for submission to the registering body;
- monitoring the standard of QPSRTO products and services;
- approving applications to extend, maintain or reduce the QPSRTO's scope of registration.

Officer in Charge, Training Quality
The Officer in Charge, Training Quality is responsible for:

- monitoring the effectiveness of the quality system;
- ensuring appropriately qualified and skilled personnel are available to conduct internal audits;
- ensuring the quality system satisfies organisational and customer requirements;
- participating in reviews of the suitability and effectiveness of the quality system.

Coordinator, RTO Administration and Training Support
The Coordinator, RTO Administration and Training Support is responsible for:

- documenting and maintaining the quality system;
- obtaining and communicating quality system requirements to training managers and partnering organisations;
- ensuring the quality system satisfies organisational and customer requirements;
- coordinating improvements to the quality system;
- ensuring regular internal audits of training providers are conducted;
- participating in reviews of the suitability and effectiveness of the quality system;
- maintaining a record of all certification issued by the QPSRTO.

Program Training Manager
The Program Training Manager is responsible for:

- implementing the QPS Quality Management System within their area of responsibility;
- obtaining and communicating customer requirements to appropriate personnel and the functional program manager;
- ensuring appropriately qualified, skilled and trained personnel and other resources are available to implement the quality system;
- maintaining the qualifications, skills and currency of staff to deliver and assess AQF qualifications and accredited courses within their area of responsibility;
- ensuring products and services satisfy customer requirements including quality, safety, cost, schedule, performance, reliability, accuracy and maintainability;
- managing quality records of education and training products and services as required by the quality system;
- ensuring staff have access to current quality assurance system documentation;
- ensuring that personnel comply with applicable legislation, standards, regulations, specifications and the quality system.

Course Coordinator
The Course Coordinator is responsible for:

- maintaining the QPS Quality Management System within their area of responsibility;
- delivering training services that achieve customer requirements;
- maintaining their qualifications, currency and skills;
- inducting course staff which includes trainers, assessors, administrative officers and support staff;

- ensuring that the course facilitators are appropriately qualified, and that there are current facilitator profiles for each course facilitator;
- providing participants with any information that affects their participation in the course;
- maintaining quality records of planning, delivery, evaluation and validation that comply with applicable legislation, standards, regulations, specifications and the quality system;
- ensuring participant's results are accurately captured in the approved Learning Management System in accordance with requirements of the quality system;
- requesting formal certification for participants who have attained or are recognised as having the knowledge and skills required for its issuance;
- actively participating in internal and external audits;
- ensuring the quality of their work;
- notifying their Training Manager of requirements not being met.

All personnel involved with the delivery of Training Product/s
All personnel are responsible for:

- ensuring the quality of their work;
- maintaining their qualifications and skills to deliver, assess or to provide training support services;
- operating in conformance with the requirements of the quality system, and;
- notifying their respective Course Coordinator of requirements not being met.

Training Partnerships

Refer to Clause 2.3

Clause 2.2

The RTO:

a) systematically monitors the RTO's training and assessment strategies and practices to ensure ongoing compliance with Standard 1; and
b) systematically evaluates and uses the outcomes of the evaluations to continually improve the RTO's training and assessment strategies and practices. Evaluation information includes but is not limited to quality/performance indicator data collected under Clause 7.5, validation outcomes, client, trainer and assessor feedback and complaints and appeals.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPSRTO undertakes internal audits of the delivery units in order to ensure a systematic and continuous improvement approach to the management of operations. During these audits, training and assessment strategies and practices are monitored in order to ensure ongoing compliance with Standard 1. The outcomes of internal audits are reported to the QPSRTOs Chief Executive Officer on an annual basis.

The QPSRTO will collect the following data for analysis to identify improvements in training and assessment:

- client satisfaction surveys/questionnaires including the Quality Indicator data
- client/industry interviews/meetings
- industry skills councils feedback
- records of staff/planning meetings and agreed actions;
- records of complaints and appeals and their resolution
- internal and external audit reports
- staff performance-appraisal reports
- trainer self-evaluation
- course reviews/assessment validation

This data will be collected and actioned as outlined in the following procedures:

- QPSRTO003 Development/Amendment of RTO Management System (Policies, Procedures and Forms)
- QPSRTO007 Systematic Validation of Assessment Practices and Judgements
- QPSRTO008 Quality Management System Audit
- QPSRTO011 RTO Evaluation Procedure
- QPSRTO015 Management of RTO Staff Training
- QPSRTO018 Complaints and Appeals
- QPSRTO028 Industry Relevance of Training Assessment and Delivery

Clause 2.3

The RTO ensures that where services are provided on its behalf by a third party the provision of those services is the subject of a written agreement.

Source: Standards for Registered Training Organisations (RTOs) 2015

Training Partnerships

A training partner is an individual not employed by the QPS, external organisation or agency that provides delivery and/or assessment services on behalf of the QPSRTO as stipulated within a Partnership Agreement.

A training partner is subject to the requirements of the quality system to the extent that the partnership agreement stipulates and is required to participate in internal and external audits.

A ratified Partnership Agreement is required before a training partner provides training delivery and/or assessment services on behalf of the QPSRTO.

The Partnership Agreement specifies how each party to the agreement will discharge their responsibilities in compliance with the requirements of the VET Quality Framework, the quality system and other conditions stipulated within the agreement.

All training and assessment conducted by external agencies will be reviewed by the QPSRTO to ensure compliance with the VET Quality Framework.

The Partnership Agreement will stipulate the process for the monitoring and review of the training partnership.

Partnership Agreements are maintained as quality records and retained in compliance with the QPS policies and the Records Retention and Disposal Schedule.

A register of partnership agreements will be maintained.

Clause 2.4

The RTO has sufficient strategies and resources to systematically monitor any services delivered on its behalf, and uses these to ensure that the services delivered comply with these Standards at all times.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 2.3.

Standard 3 –The RTO issues, maintains and accepts AQF certification documentation in accordance with these Standards and provides access to learner records.

Clause 3.1

The RTO issues AQF certification documentation only to a learner whom it has assessed as meeting the requirements of the training product as specified in the relevant training package or VET accredited course.

Source: Standards for Registered Training Organisations (RTOs) 2015

Issuing qualifications or statements of attainment

The QPSRTO issues qualifications and Statements of Attainment in accordance with *QPSRTO002 Certification & Issuing Qualifications and Statements of Attainment* procedure.

The QPSRTO formally recognises achievement as follows:

Qualification

- If a participant has achieved exactly the unit of competency required for a qualification:
  - A qualification, naming the qualification achieved; and
  - A separate list of the units of competency of modules that contribute to the qualification called a Memorandum of Results, will be issued.

- If a participant achieves fewer units of competency or modules than required for a qualification:
  - A Statement of Attainment will be issued listing all the units of competency or modules achieved in partial completion of a qualification.

- If a participant achieves more units of competency or modules required for a qualification:
  - A qualification naming the qualification achieved; and
  - A separate listing of the units of competency or modules that contributed to the qualification called a Memorandum of Results; and
  - The extra units of competency or modules achieved over and above those required for the qualification are listed on the same Memorandum of Results if the units of competency or modules are within the packaging rules for that qualification; or
  - If the units of competency or modules are outside the packaging rules for that qualification, a Statement of Attainment is issued listing the extra units.

Accredited Short Course

- If a participant achieves exactly the units of competency required for an accredited short course:
  - A Statement of Attainment will be issued listing all the units of competency or modules achieved in completion of the accredited short course.

- If a participant achieves fewer units of competency or modules than required for an accredited short course:
  - A Statement of Attainment will be issued listing all the units of competency or modules achieved in partial completion of the accredited short course.

The QPSRTO ensures that a participant's final summative assessment result for each unit of competency, module or subject is accurately recorded within the approved Learning Management System before issuing a qualification or statement of attainment.

The QPSRTO keeps a complete and accurate record of a participant's work in accordance with the QPS Records Retention and Disposal Schedule and VET regulator requirements from the date a participant:

- is assessed as having attained the required knowledge and skills for a qualification or course; or
- is recognised as having the required knowledge and skills for a qualification or course.

The QPSRTO issues qualifications within 30 days from the day a participant is assessed as having attained or is recognised as having the knowledge and skills required for its issue.

The QPSRTO issues a statement of attainment in partial completion of a qualification upon receiving a written request from the participant.

The QPSRTO re-issues qualifications, statements of attainment or statement of achievement within 21 days from the date of receiving a written request from a participant for its re-issue.

The QPSRTO keeps sufficient information to re-issue a qualification, statement of attainment or statement of achievement for 40 years from the date a participant attains or is recognised as having the knowledge and skills required for its issue.

Records of qualifications and statements of attainment issued by the QPSRTO are maintained as quality records that are retained in accordance with the QPS Records Retention and Disposal Schedule.

The QPSRTO will retain learners' records of attainment of units of competence and qualifications for a period of 40 years (QPS Records Retention and Disposal Schedule).

***Note:* The QPS is exempt from the unique student identifier requirements.**

Clause 3.2

All AQF certification documentation issued by an RTO meets the requirements of Schedule 5.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPSRTO ensures all qualifications and Statements of Attainment issued for AQF qualifications or accredited courses comply with the Australian Qualifications Framework requirements.

A single unit of competency is the smallest measure of achievement recognised and recorded on a Statement of Attainment or Memorandum of Results.

The QPSRTO issues qualifications and Statements of Attainment in accordance with *QPSRTO002 Certification & Issuing Qualifications and Statements of Attainment* procedure.

Clause 3.3

AQF certification documentation is issued to a learner within 30 calendar days of the learner being assessed as meeting the requirements of the training product if the training program in which the learner is enrolled is complete, and providing all agreed fees the learner owes to the RTO have been paid.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 3.1.

Clause 3.4

Records of learner AQF certification documentation are maintained by the RTO in accordance with the requirements of Schedule 5 and are accessible to current and past learners.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to Clause 3.1.

Clause 3.5

The RTO accepts and provides credit to learners for units of competency and/or modules (unless licensing or regulatory requirements prevent this) where these are evidenced by:

a) AQF certification documentation issued by any other RTO or AQF authorised issuing organisation; or
b) authenticated VET transcripts issued by the Registrar.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPSRTO recognises the AQF qualifications and statements of attainment issued by any other RTOs or AQF authorised issuing organisations. Students will not be charged fees for this recognition process.

Clause 3.6 – Participate in the Student Identifier scheme (QPS Exempt)

The RTO meets the requirements of the Student Identifier scheme, including:

a) verifying with the Registrar, a Student Identifier provided to it by an individual before using that Student Identifier for any purpose;
b) ensuring that it will not issue AQF certification documentation to an individual without being in receipt of a verified Student Identifier for that individual, unless an exemption applies under the *Student Identifiers Act 2014*;
c) ensuring that where an exemption described in Clause 3.6 (b) applies, it will inform the student prior to either the completion of the enrolment or commencement of training and assessment, whichever occurs first, that the results of the training will not be accessible through the Commonwealth and will not appear on any authenticated VET transcript prepared by the Registrar; and
d) ensuring the security of Student Identifiers and all related documentation under its control, including information stored in its student management systems.

Source: Standards for Registered Training Organisations (RTOs) 2015

The QPS is currently exempt from the national Student Identifier requirements.

Standard 4 – Accurate and accessible information about an RTO, its services and performance is available to inform prospective and current learners and clients.

Clause 4.1 – Provide accurate information to learners about services and qualifications

QPSRTO's Management System
QPS is an enterprise RTO and delivers training to its own staff. Staff enrol in training as a result of:

- Applying to become a police officer (Recruit training)
- Ongoing professional development for advancement of their career in the Police Service

Employees undertaking national recognised training with the QPSRTO are able to access a range of information about the QPSRTO through the QPS intranet via their employee computer access. As an enterprise RTO, access to this information is restricted to employees who have been granted the relevant access however the information is made available to employees of approved partnership organisations.

RTO Delivery/Assessment Information
Information regarding the services offered by the QPSRTO is made available to learners via the QPS Intranet site. The information available includes but is not limited to:

- the national code and title of the qualifications or accredited courses, and
- the vocational outcomes of the qualifications or accredited courses, and
- an overview of the delivery and assessment requirements of the qualification or accredited course, and
- entry requirements for qualifications or accredited courses, and
- information about credit transfer arrangements, and
- information about RPL arrangements, and
- validation and moderation arrangements, and
- information about the QPSRTO fee refund policy (where applicable), and
- information about the QPSRTO academic appeals process, and
- information about the RTO complaints process.

In addition to the above information, participants will also be provided with QPS specific course/program information relevant to the training they are undertaking prior to a course commencing. The information provided may include:

- the scheduled start and end dates of the course/program, and
- location details of training venues to be used, and
- equipment and resources to be provided by the participant, and
- training and assessment arrangements, and
- support services.

Also refer to 'Training Partnerships' in clause 2.3.

Standard 5 – Each learner is properly informed and protected.

Clause 5.1

Prior to enrolment or the commencement of training and assessment, whichever comes first, the RTO provides advice to the prospective learner about the training product appropriate to meeting the learner's needs, taking into account the individual's existing skills and competencies.

Source: Standards for Registered Training Organisations (RTOs) 2015

As an enterprise RTO, the primary learners undertaking training with the QPSRTO are employees of the organisation. The QPSRTO ensures that job role requirements and the management of organisational risk continue to be a significant driver when it comes to determining the mode of delivery and amount of training that each learner is to undertake. In most instances, the achievement of national training outcomes are directly connected and dependent upon the successful completion of organisational training programs and courses.

Each delivery unit has developed training and assessment strategies specific to their delivery unit which meet the requirements of the relevant training product and align to job role requirements. The strategies are developed by the Course Coordinator in accordance with quality assurance procedure QPSRTO 028 *Industry Relevance of Training Assessment and Delivery.*

Training and Assessment Strategies are also to be made available to eligible prospective participants in electronic format, such as via intranet sites etc. unless the release of the strategy to persons other than those directly involved with the delivery, assessment or administration of the training product, would compromise the safety or security of the policing sector.

Clause 5.2

Prior to enrolment or the commencement of training and assessment, whichever comes first, the RTO provides, in print or through referral to an electronic copy, current and accurate information that enables the learner to make informed decisions about undertaking training with the RTO and at a minimum includes the following content:

a) the code, title and currency of the training product to which the learner is to be enrolled, as published on the National Register;
b) the training and assessment, and related educational and support services the RTO will provide to the learner including the:
    i. estimated duration;
    ii. expected locations at which it will be provided;
    iii. expected modes of delivery;
    iv. name and contact details of any third party that will provide training and/or assessment, and related educational and support services to the learner on the RTO's behalf; and
    v. any work placement arrangements.
c) the RTO's obligations to the learner, including that the RTO is responsible for the quality of the training and assessment in compliance with these Standards, and for the issuance of the AQF certification documentation.

d) the learner's rights, including:
   i. details of the RTO's complaints and appeals process required by Standard 6; and
   ii. if the RTO, or a third party delivering training and assessment on its behalf, closes or ceases to deliver any part of the training product that the learner is enrolled in;
e) the learner's obligations:
   i. in relation to the repayment of any debt to be incurred under the VET FEE-HELP scheme arising from the provision of services;
   ii. any requirements the RTO requires the learner to meet to enter and successfully complete their chosen training product; and
   iii. any materials and equipment that the learner must provide; and
f) information on the implications for the learner of government training entitlements and subsidy arrangements in relation to the delivery of the services.

Source: Standards for Registered Training Organisations (RTOs) 2015

Refer to clause 5.1.

Clause 5.3

Where the RTO collects fees from the individual learner, either directly or through a third party, the RTO provides or directs the learner to information prior to enrolment or the commencement of training and assessment, whichever comes first, specifying:

a) all relevant fee information including:
   i. fees that must be paid to the RTO; and
   ii. payment terms and conditions including deposits and refunds;
b) the learner's rights as a consumer, including but not limited to any statutory cooling-off period, if one applies;
c) the learner's right to obtain a refund for services not provided by the RTO in the event the:
   i. arrangement is terminated early; or
   ii. the RTO fails to provide the agreed services.

Source: Standards for Registered Training Organisations (RTOs) 2015

A participant who is an employee of the Queensland Police Service is, unless otherwise stipulated, exempt from any application, course, participant and tuition fees for training and assessment services provided by the Queensland Police Service.

An agency making application to enrol a participant/s in a fee for service course must read and understand the fees and charges information and the QPSRTO refund policy before signing a Memorandum of Understanding or similar document.

Clause 5.4

Where there are any changes to agreed services, the RTO advises the learner as soon as practicable, including in relation to any new third party arrangements or a change in ownership or changes to existing third party arrangements.

Source: Standards for Registered Training Organisations (RTOs) 2015

A participant who is an employee of the Queensland Police Service will primarily achieve a nationally recognised training outcome via an assessment only pathway after the completion of the relevant organisational training course or program that produces evidence that meets the requirements of that Training Product. In the event that there are changes to the relevant QPS training program that impacts the achievement of, or linkages to, national training outcomes then the course coordinator is responsible for advising affected participants as soon as practicable.

In instances where there are changes to the agreed services and the training is being delivered to participants of an external agency under the conditions outlined in a Memorandum of Understanding, then the changes must be reflected in an updated or revised Memorandum of Understanding which has been signed by all relevant parties.

Standard 6 – Complaints and appeals are recorded, acknowledged and dealt with fairly, efficiently and effectively.

Clause 6.1

The RTO has a complaints policy to manage and respond to allegations involving the conduct of:

a) the RTO, its trainers, assessors or other staff;
b) a third party providing services on the RTO's behalf, its trainers, assessors or other staff; or
c) a learner of the RTO.

Clause 6.2

The RTO has an appeals policy to manage requests for a review of decisions, including assessment decisions, made by the RTO or a third party providing services on the RTO's behalf.

Clause 6.3

The RTO's complaints policy and appeals policy:

a) ensure the principles of natural justice and procedural fairness are adopted at every stage of the complaint and appeal process;
b) are publicly available;
c) set out the procedure for making a complaint or requesting an appeal;
d) ensure complaints and requests for an appeal are acknowledged in writing and finalised as soon as practicable; and
e) provide for review by an appropriate party independent of the RTO and the complainant or appellant, at the request of the individual making the complaint or appeal, if the processes fail to resolve the complaint or appeal.

Clause 6.4

Where the RTO considers more than 60 calendar days are required to process and finalise the complaint or appeal, the RTO:

a) informs the complainant or appellant in writing, including reasons why more than 60 calendar days are required; and
b) regularly updates the complainant or appellant on the progress of the matter.

Clause 6.5

The RTO:

a) securely maintains records of all complaints and appeals and their outcomes; and
b) identifies potential causes of complaints and appeals and takes appropriate corrective action to eliminate or mitigate the likelihood of reoccurrence.

Source: Standards for Registered Training Organisations (RTOs) 2015

QPSRTO's Management System

The RTO manages complaints and appeals in a fair and timely manner. The QPSRTO will respond to and manage complaints or allegations regarding the conduct of the RTO, RTO staff, third party or partner organisations and learners in accordance with the requirements outlined in the *QPSRTO018 Complaints and Appeals* procedure. This procedure is to be read in conjunction with the QPS complaints and discipline process.

The RTO manages appeals in accordance with the *QPSRTO018 Complaints and Appeals* procedure. Complaints and appeals will be dealt with in a manner which adheres to the principles of natural justice and procedural fairness.

The principles of natural justice and procedural fairness include but are not limited to:

- Ensuring complaints and appeals are dealt with in a timely manner;
- Ensuring the information/evidence relied upon is relevant in the circumstances;
- Ensuring complainants/appellants are provided with copies of all relevant documentation;
- Ensuring complainants/appellants are given the opportunity to respond to issues or matters raised;
- Ensuring complainants/appellants have the opportunity to utilise or access a support person during investigation of the complaint or appeal;
- Ensuring confidentiality is maintained throughout the relevant processes unless legislative requirements require otherwise;
- Ensuring the relevant decision makers act fairly and without bias;

Students are provided information on the complaints and appeals process via the QPS intranet.

Staff are initially made aware of the complaints and appeals process during the staff induction process and then ongoing through meetings and emails.

Clause 6.6 – Not applicable to QPS

Standard 7 –The RTO has effective governance and administration arrangements in place.

Clause 7.1

The RTO ensures that its executive officers or high managerial agent:

a) are vested with sufficient authority to ensure the RTO complies with the RTO Standards at all times; and
b) meet each of the relevant criteria specified in the Fit and Proper Person Requirements in Schedule 3.

Clause 7.2

The RTO satisfies the *Financial Viability Risk Assessment Requirements*.

Clause 7.3

Where the RTO requires, either directly or through a third party, a prospective or current learner to prepay fees in excess of a total of $1500 (being the threshold prepaid fee amount), the RTO must meet the requirements set out in the Requirements for Fee Protection in Schedule 6.

Clause 7.4

The RTO holds public liability insurance that covers the scope of its operations throughout its registration period.

Clause 7.5

The RTO provides accurate and current information as required by the *Data Provision Requirements* as updated from time to time.

Source: Standards for Registered Training Organisations (RTOs) 2015

The position of Manager, Education and Training Services is the Chief Executive Officer of the QPSRTO. The position has the relevant authority, designated or otherwise, to oversee and influence the management of the RTO.

Refer to Standard 8 for further information regarding the role of the Manager, Education and Training Services.

Management Responsibility (Governance)

In this Quality Manual and its implemented procedures, the RTO addresses the following:

- its compliance with the *VET Quality Framework* and any national guidelines, and
- its compliance with the *National Vocational Education and Training Regulator Act 2011* and any guidelines and policies made under the *Act*, and
- its compliance with QPS policies and procedures, and
- management's commitment to achieving compliance, organisational expectations and goals, and
- the needs of the RTO clients.

The QPSRTO management committee (hereafter referred to as the management committee) supports the establishment and maintenance of the quality management system for the management of products and services provided by the RTO that comply with regulatory and other requirements that govern the delivery and assessment of training product/s. Improvements to the quality system are made to enhance the achievement of QPS strategic objectives in support of the QPS Mission Statement and Priorities of the People Capability Command.

The RTO implements internal audits of the quality system to determine the system's effectiveness and suitability. Results of these reviews are provided to management and maintained as quality records.

Emphasis shall be placed on continuous improvement to the Quality Management System including:

a) Identification of processes needed for management of the RTO operations;
b) Determination of the sequence and interaction of processes;
c) Determination of acceptance criteria and methods required to ensure effective operations;
d) Ensuring the availability of information to support operations;
e) Measuring, monitoring and analysing processes and implemented actions to achieve planned results and continuous improvement.

The management committee in partnership with line managers identify and provide adequate resources, including appropriately qualified and trained personnel, for managing and supporting work and internal audit activities.

The organisation ensures the decision making of senior management is informed by the experiences of its trainers and assessors through the collection of the following data:

- Client feedback
- Results of internal audits
- Enrolments and completions
- Number of qualifications and Statements of Attainment issued.

Reports are prepared and passed up through the following chain of command:

- Coordinator, Training Quality
- Manager, Education Services Unit
- Director, Training Strategy.

Management committee

The management committee consists of:

a) Manager, Education and Training Services
b) Officer in Charge, Training Quality
c) Coordinator, RTO Administration and Training Support

The management committee establishes and maintains the RTO Quality Policy and commitment to quality.

The management committee identifies resource requirements and provides adequate resources for personnel involved in management, performance of work, and verification activities.

Resources include suitably trained and qualified personnel, equipment, and supplies.

Verification includes internal auditing.

The responsibility, authority and the interrelation of personnel who contribute to the quality requirements of products and services are defined throughout the quality system documentation.

Information/data is collated by the various members of the management committee in their job roles and forwarded to the Manager, Education and Training Services for consideration.

The management committee has the following functions:

- To support quality education and training provided by the RTO and the quality system;

- To advise and report on matters relating to the education and training products and services provided by the QPSRTO to:
  - the Assistant Commissioner, People Capability Command, and
  - the Australian and New Zealand Police Advisory Agency (ANZPAA),
  - the National Centre for Vocational Education Research (NCVER),
  - the National VET Regulator (NVR).
- To support the development, accreditation and registration of quality training product/s.
- To approve and amend the quality management system as considered desirable and appropriate.
- To ensure that ongoing management is responsive to changing circumstances in relation to quality management.

Financial viability and reporting

The RTO is administered by Queensland Police Service and financial management is undertaken in accordance with QPS Financial Management Practice Manual which is based on the Financial Accountability Act 2009 and the Finanical Performance Management Standard 2009. Financial reporting is undertaken in accordance with the Financial Management Practice Manual.

Fees and charges

QPSRTO does not charge fees for the delivery of training to its own employees. Fees may be charged to outside agencies who engage QPSRTO to deliver training to their staff. The fees to be charged for the training are documented in a MOU between the two parties and not at a student level. The QPSRTO does not collect fees in advance for the provision of nationally recognised training products.

Fees for the delivery of training to external agencies

The QPSRTO may provide nationally recognised training to external agencies for a fee for service. (QPSRTO 019 Student Fees and Refunds). The fee for service may include any or all of the following fees:

Design fee. A fee determined as sufficient to recover staff and resource costs associated with client consultation, research and the design of delivery and assessment materials.

Development fee. A fee determined as sufficient to recover staff and resource costs in developing, amending or revising delivery and assessment materials as required.

Delivery fee. A fee determined as sufficient to recover:

a) the actual cost of providing training to a course participant, and
b) the actual staff, resource, venue and equipment costs incurred as part of providing training and assessment services to a participant.

All fees and charges are calculated by the Business Manager, Business and Resource Management Unit and approved by the Director, Training Strategy.

For the purpose of calculating fees, including fees for recognition of prior learning, the term nominal hours means the nominal hours assigned to the unit of competency or module as detailed in the relevant mapping guide provided by NCVER.

To ensure consistency, the QPSRTO does not make adjustments to fees and charges to reflect variations in timetabling or in instances where a participant completes a course/qualification or module/unit of competency in less time than that specified in the approved course outline.

Fees for course development

The QPSRTO charges fees for the development, accreditation and registration of a nationally recognised education and training product where applicable.

A calculation of the break even cost for a course fee is to be sufficient to recover no more than the actual cost of producing a training product for delivery and assessment and should include:

- development costs, and
- product license fees (if applicable), and
- accreditation fee (if applicable), and
- registration fees (as applicable).

The total cost of developing, accrediting and registering a course is to be determined and reported by the project manager for the information of the Director, Training Strategy.

Payment of fees and charges

The QPSRTO maintains all monies received for delivery and assessment services in a separate account. This account is not accessed until the course commences. A relevant proportion of fees paid remain in that account until the delivery and assessment is completed to ensure refunds are available for eligible participants.

Fees are charged to external departments, organisations or agencies and not to individual learners or prospective learners. The fees and charges associated with training and assessment services provided by the QPS for a fee for service includes:

- a course design fee payable within 30 days of the invoice issue date.
- a course development fee payable within 30 days of the invoice issue date.
- a course delivery fee payable within 30 days of the invoice issue date.

For courses delivered and assessed in blocks or semesters,

- the course/participant fees and charges are calculated on the training and assessment services being offered in the next block or semester, and
- the course/participant fees and charges for the next block or semester is due at least seven days prior to the commencement of the block or semester, and
- a participant who has not paid any applicable block or semester fees and charges prior to the commencement date is not enrolled in that block or semester.

Two attempts at an assessment are included in the participant or tuition fees. If more than 2 attempts are required a further assessment fee applies. The additional assessment fee will be negotiated with the client and recorded in the MOU with the client.

Refunds

If the QPSRTO cancels a course an agency that has paid any fees will receive:

- a full refund of all fees paid, or
- a credit to another course of the same value.

An agency that withdraws from a course being offered by the QPSRTO prior to the signing of a Memorandum of Understanding or similar document by both agencies will be eligible for a full refund of any fees paid.

An agency that withdraws from a course being offered by the QPSRTO, after the signing of a Memorandum of Understanding or similar document by both agencies, but before the course commencement date, will be eligible for a refund of the course delivery fee only.

An agency that withdraws from a course being offered by the QPSRTO after the signing of a Memorandum of Understanding or similar document by both agencies and after the course commencement date will not be eligible for a refund of any design, development or delivery fees.

An application for a refund due to exceptional circumstances must be made in writing as soon as practicable, detailing the exceptional circumstances relied upon with supporting documentation attached, to the Manager, Education Services Unit, [redacted]

Any refund of paid fees and charges must be approved by the Manager, Education Services Unit.

RTO guarantee to students

QPSRTO will provide the appropriate resources to ensure that students have every opportunity to complete the training and/or assessment in which a student has enrolled and commenced. Despite this guarantee, a student must be a current employee of the QPS in order to be eligible to commence or continue undertaking training offered by the QPSRTO (except in instances where training is offered to external students and is documented in a Memorandum of Understanding). In instances where the training and/or assessment services are delivered under a Memorandum of Understanding, the specific guarantee to students will be outlined in that document.

Where a student, who has enrolled and commenced training and/or assessment in a national qualification or accredited course, ends their employment with the QPS (either voluntarily or involuntarily), their enrolment in that training will be cancelled. No further training and/or assessment services will be provided to that student without the approval of the Assistant Commissioner, People Capability Command.

Students who have their enrolment cancelled as a result of their employment ending will be eligible to receive formal recognition for the units of competency they have been awarded at that time in accordance with the 'Issuing qualifications or statements of attainment' policy contained in this manual.

Cost for re-issuing qualifications and statements of attainment

QPSRTO does not charge fees for the re-issuing of a qualification or statement of attainment

The RTO will provide the registering body with a statement demonstrating its financial viability, and/or its annual financial statements, and/or a business plan on request of the registering body. The RTO is administered by Queensland Police Service and financial management is undertaken in accordance with QPS Financial Management Practice Manual which is based on the Financial Accountability Act 2009 and the Financial Performance Management Standard 2009. Financial reporting is undertaken in accordance with the Financial Management Practice Manual.

Queensland Police Service has a Public and Products Liability insurance policy in respect of all of its activities, with the Queensland Government Insurance Fund. The policy has an unlimited sum insured and is renewed annually. The policy provides cover anywhere in Australia.

This policy indemnifies the QUEENSLAND POLICE SERVICE in respect of all sums for which it is legally liable to pay to a third party as compensation for personal injury and property damage as a result of an unexpected and unintended event in connection with its activities, in accordance with the policy terms and conditions.

Standard 8 – The RTO cooperates with the VET Regulator and is legally compliant at all times.

Clause 8.1

The RTO cooperates with the VET Regulator:

a) by providing accurate and truthful responses to information requests from the VET Regulator relevant to the RTO's registration;
b) in the conduct of audits and the monitoring of its operations;
c) by providing quality/performance indicator data;
d) by providing information about substantial changes to its operations or any event that would significantly affect the RTO's ability to comply with these standards within 90 calendar days of the change occurring;
e) by providing information about significant changes to its ownership within 90 calendar days of the change occurring; and
f) in the retention, archiving, retrieval and transfer of records.

Clause 8.2

The RTO ensures that any third party delivering services on its behalf is required under written agreement to cooperate with the VET Regulator:

a) by providing accurate and factual responses to information requests from the VET Regulator relevant to the delivery of services; and
b) in the conduct of audits and the monitoring of its operations.

Clause 8.3

The RTO notifies the Regulator:

a) of any written agreement entered into under Clause 2.3 for the delivery of services on its behalf within 30 calendar days of that agreement being entered into or prior to the obligations under the agreement taking effect, whichever occurs first; and
b) within 30 calendar days of the agreement coming to an end.

Clause 8.4

The RTO provides an annual declaration on compliance with these Standards to the VET Regulator and in particular whether it:

a) currently meets the requirements of the Standards across all its scope of registration and has met the requirements of the Standards for all AQF certification documentation it has issued in the previous 12 months; and
b) has training and assessment strategies and practices in place that ensure that all current and prospective learners will be trained and assessed in accordance with the requirements of the Standards.

Clause 8.5

The RTO complies with Commonwealth, State and Territory legislation and regulatory requirements relevant to its operations.

Clause 8.6

The RTO ensures its staff and clients are informed of any changes to legislative and regulatory requirements that affect the services delivered.

Source: Standards for Registered Training Organisations (RTOs) 2015

Management Representative

The Manager, Education and Training Services is the Chief Executive Officer of the RTO.

The Manager, Education and Training Services:

- ensures that the Quality Management System is established, implemented, and maintained according to legislation, regulations and standards.
- has the authority to make modifications to the RTO Quality Management System as considered appropriate and desirable.
- liaises with external parties on matters related to the Quality Management System.

The Manager, Education and Training Services will ensure that the RTO cooperates with its registering body:

- In the conduct of audits and the monitoring of its operations. The RTO agrees to participate in audits scheduled by the registering body and will cooperate with auditors in the conduct of the audit. The organisation will make available all required documentation and records as required for the audit.
- By providing accurate and timely data relevant to measures of its performance such as the National Quality Indicator data and/or AVETMISS compliant data
- By providing information about significant changes to its operation such as significant changes in management, change of address or company structure. These changes will be reported when they occur using ASQA approved reporting requirements.
- If the RTO ceases to operate it will provide the registering body the records of all students in the format required by the registering body.
- Assessment records will be maintained in accordance with the QPS Records Retention and Disposal Schedule which exceeds the requirements of the ASQA policy for the retention of student assessment records.
- The RTO will provide the registering body with a statement demonstrating its financial viability, and/or its annual financial statements, and/or a business plan on request of the registering body. The RTO is administered by Queensland Police Service and financial management is undertaken in accordance with QPS Financial Management Practice Manual which is based on the Financial Accountability Act 2009 and the Financial Performance Management Standard 2009. Financial reporting is undertaken in accordance with the Financial Management Practice Manual.

The QPSRTO will comply with relevant Commonwealth, State or Territory legislation and regulatory requirements that are relevant to operations and scope of registration. The requirements from the applicable legislation are incorporated into the QPSRTO's Quality Manual, policies, procedures, student information, staff induction material and training materials.

Staff will be fully informed of any legislative requirements, where it affects their duties in vocational education and training, initially via the induction process and ongoing via meetings and emails.

Clients will be fully informed of any legislative requirements, where it affects their participation in vocational education and training, via the student information materials and orientation programs.

The legislation identified as being relevant to operations and scope of registration includes:

- *Acts Interpretation Act 1954* (Qld)
- *Anti-Discrimination Act 1991* (Qld)
- *Copyright Act 1968* (C'wlth)
- *Equal Opportunity in Public Employment Act 1992* (Qld)
- *Evidence Act 1977* (Qld)
- *Fair Trading Act 1989* (Qld)
- *Financial Administration and Audit Act 1977* (Qld)
- *Information Privacy Act 2009*
- *Judicial Review Act 1991* (Qld)
- *National Vocational Education and Training Regulator Act 2011*
- *Police Service Administration Act* 1990 (Qld)
- *Public Records Act 2000* (Qld)
- *Public Service Act 1996* (Qld)
- *Right to Information Act 2009*
- *Work Health and Safety Act 2011*

Definitions

Academic Appeal
A process initiated by a participant when he or she disagrees an assessment result.

Accredited short course
A course accredited by the VET Regulator in accordance with the Standards for VET Accredited Courses that leads to an AQF statement of attainment.

Appeal
The process instigated by the complainant when he/she is not satisfied with a decision made by the QPSRTO.

Approved Partnership Organisation
Organisations or agencies that appear on the QPS register of agreements. The organisation or agency who is responsible for ensuring that the established policies and procedures of the QPSRTO are implemented for all training and assessment services provided on its behalf. Partner organisations must comply with the responsibilities outlined in the written agreement.

Applicant
The person applying to participate in a qualification or accredited course.

Assessors
Persons who assess a learner's competence in accordance with Clauses 1.13 to 1.16 for, or on behalf of, the Registered Training Organisation.

Assessment
Assessment is the process of collecting evidence and making judgements on the nature and extent of progress towards the performance requirements set out in a standard or a learning outcome. The judgement is intended to determine whether competency has been achieved or not. The key features of assessment are validity, reliability, flexibility and fairness.

Assessment guidelines
An endorsed component of a Training Package which underpins assessment and which sets out the industry approach to valid, reliable, flexible and fair assessment.

Assessment method
A particular technique used to gather different types of evidence. This may include methods or techniques such as questioning, observation, practical demonstrations, written assessments, third party reports, interviews, simulations and portfolios.

Assessment strategy
A documented framework to guide and structure the assessment arrangements of a vocational education and training qualifications and statements of attainment. It is the umbrella document that outlines the macro-level requirements for designing the learning and assessment process at the qualification level.

Assessment system
A coordinated set of documented policies and procedures (including assessment materials and tools) that ensure assessments are consistent and are based on the Principles of Assessment contained in Table 1.8-1 and the Rules of Evidence contained in Table 1.8-2 of the RTO standards 2015.

Assessment validation
Is a quality review process. It involves checking that the assessment tool produced valid, reliable, sufficient, current and authentic evidence to enable reasonable judgements to be made as to whether the requirements of the relevant aspects of the Training Package or accredited course have been met. It includes reviewing and making recommendations for future improvements to the assessment tool, process and/or outcomes.

Audit
A planned, systematic and documented process used to assess an RTO's compliance with the Standards for Registered Training Organisations (RTOs) 2015. The National VET Regulator (ASQA) conducts independent audits as a condition of registration. RTOs can conduct internal audits to assess their compliance with the Standards and their own policies and procedures as part of their continuous improvement process. Audits include both the internal audit of QPS Delivery Units and internal audits of the QPSRTO Quality Management System.

Australian Qualification Framework (AQF)
The policy framework that defines all qualifications nationally in post-compulsory education and training in Australia. The AQF defines each qualification, as well as the principles and protocols covering cross-sectoral qualification links and the issuing of qualifications and statements of attainment.

Australian Skills Quality Authority (ASQA)
The national regulator for Australia's vocational education and training sector. ASQA is responsible for monitoring the quality of training and assessment of RTO's operating in compliance with the Standards for Registered Training Organisations (RTOs) 2015.

Client
Is a learner, enterprise or organisation which uses or purchases the services provided by the RTO.

Code
The unique identifier for units of competency, skill sets, VET accredited courses, modules, AQF qualifications or training packages as required by the Standards for Training Packages and Standards for VET Accredited Courses.

Complaint
A formal complaint process undertaken when a student feels aggrieved by a decision/action of the RTO; but does not include the process of appealing an assessment decision.

Competency
The consistent application of knowledge and skill to the standard of performance required in the workplace. It embodies the ability to transfer and apply skills and knowledge to new situations and environments.

Completed Student Assessment Item
The actual piece(s) of work completed by a student or evidence of that work, including evidence collected for an RPL process. An assessor's completed marking guide, criteria and observation checklist for each student may be sufficient where it is not possible to retain the student's actual work. However, the retained evidence must have enough detail to demonstrate the assessor's judgement of the student's performance against the standard required (ASQA General direction: Retention requirements for completed student assessment items).

Continuous improvement
The implementation of appropriate, efficient and systematic improvement processes designed to support the provision of quality education and training products and services to meet or exceed the needs of the organisation, customers and stakeholder groups.

Corporate Records Management System (CRMS)
A computer application approved for PCAP use that captures information about physical documents and digital information so the documents and information can be tracked and retrieved over time. It includes the policy framework for capturing and managing information of continuing value to the QPS.

Corporate Records Management System (CRMS) Data Entry Standard
The standard for naming information captured within a records management system in a consistent format to ensure all records of continuing value are accessible over time.

Course Coordinator
Course coordinators are delegated by the Training Manager to plan, implement and monitor the learning and assessment strategies used to train and assess training products. They ensure that appropriately qualified, skilled and trained personnel and other resources are available to implement the quality system within their area of responsibility. Course Coordinators are answerable to Training Managers.

Credit transfer
Is the assessment of the initial course or subject that the individual is using to claim access to, or the award of credit in, the destination course to determine the extent to which it is equivalent to the required learning outcomes, competency outcomes, or standards in a qualification. This may include credit transfer based on formal learning that is outside the AQF.

Customer
An organisation or individual that enters into a formal agreement with the RTO for the development of vocational education and training products or delivery of training services.

Current industry skills
The knowledge, skills and experience required by VET trainers and assessors and those who provide training and assessment under supervision to ensure that their training and assessment is based on current industry practices and meets the needs of industry. Current industry skills may be informed by consultations with industry and may include, but is not limited to:

a) having knowledge of and/or experience using the latest techniques and processes;
b) possessing a high level of product knowledge;
c) understanding and knowledge of legislation relevant to the industry and to employment and workplaces;
d) being customer/client-oriented;
e) possessing formal industry and training qualifications; and
f) training content that reflects current industry practice.

Documentation (including Course Documentation)
Any document written, electronic or hard-copy, used within the quality system and materials used in the delivery of training programs. This includes information available via electronic means such as via the intranet or websites.

Document changes
Changes to the RTO Management System Documents are processed in accordance with procedure *QPSRTO 003 Development/amendment of RTO Management System (Policies, Procedures and Forms)*. Procedures for version control and instructions to control documentation and associated materials are maintained by the Training Quality (TQ) and will be subject to an internal audit.

Changes to delivery unit documents are reviewed and approved by the document owner, unless specifically designated and authorised in writing by the authorised course coordinator. Procedures for version control and instructions to control documentation and associated materials are maintained by the delivery unit and will be subject to an internal audit to ensure they meet, at a minimum, the objectives of this procedure.

Document owner
Person responsible for keeping and managing a document on behalf of the QPS.

Enrolment
The acceptance of a participant's enrolment in an AQF qualification or accredited course by the QPSRTO.

Enterprise RTO
Where the RTO is embedded within an industry organisation's structure and that organisation's primary function is not training. The RTO is both an operational training organisation and is also representative of the industry in which it is embedded.

Employer
The employer, for the purpose of *QPSRTO011 RTO Evaluation Procedure*, is the supervisor of each individual learner who has completed the nationally recognised training.

Evaluation
As used in the procedure *QPSRTO011 RTO Evaluation Procedure* is a periodic, systematic and impartial assessment of how valid, current and effective the training is for the participant, as provided by the QPSRTO.

Functional manager
The person authorised to direct roles, functions, activities and tasks to individuals outside the manager's direct line of command.

Ignite
The QPS database used for recording training and development for sworn and unsworn QPS staff and personnel.

Industry and Skills Council
The Commonwealth, State and Territory ministerial council established by the Council of Australian Governments (COAG), or its successor.

Industry
The bodies that have a stake in the services provided by RTOs. These can include, but are not limited to:
a) enterprise/industry clients, e.g. QPS as the employer;

b) group training organisations e.g. Representation of delivery unit staff on committees involved in the review of the Public Safety Training Package and Police Training Package
c) industry organisations;
d) industry regulators;
e) industry skills councils such as Government Skills Australia or similar bodies;
f) industry training advisory bodies, other Australasian Policing jurisdictions including the Australian and New Zealand Advisory Agency (ANZPAA); and unions.

Industry engagement
The purposes of Clauses 1.5 & 1.6, may include, but is not limited to, strategies such as:

a) partnering with local employers, regional/national businesses, relevant industry bodies and/or enterprise RTOs;
b) involving employer nominees in industry advisory committees and/or reference groups;
c) embedding staff within enterprises;
d) networking in an ongoing way with industry networks, peak bodies and/or employers;
e) developing networks of relevant employers and industry representatives to participate in assessment validation; and
f) exchanging knowledge, staff, and/or resources with employers, networks and industry bodies.

Industry Engagement Activities
Strategies and activities that establish a connection and sharing of information between the delivery unit and policing industry stakeholders with regards to the expectations and outcomes from QPSRTO training and assessment practices. The type of strategies and activities may vary depending on the particular vocational area however may include engaging with industry groups, national policing bodies and internal networks through meetings or other forums.

Industry Relevance
Ensuring that the training assessment and delivery practices are relevant to the needs of the respective policing industry areas. Industry relevance is supported by engagement with a variety of internal and external stakeholders however these can vary depending on the particular domain of policing.

Internal audit
An audit conducted by, or on behalf of, the RTO itself for internal purposes.

Joining Instructions
A document that provides instructions to a participant upon enrolment that prescribes, where relevant, entry requirements, pre-course work, outcomes of training, residential and administrative arrangements such as travel, accommodation, dress and meals.

Legally Authorised Representative (LAR)
The RTO LAR is the Manager, Education and Training Services.

Learner
A person being trained and/or assessed by the RTO for the purpose of issuing AQF certification documentation.

Line manager
The person authorised to direct the work and control the availability of equipment and resources of another.

Mode of delivery
The method adopted to deliver training and assessment, including online, distance, or blended methods.

Module

A group of learning outcomes in a VET accredited course where it can be established that it is not possible to develop an appropriate unit of competency.

Moderation
The process of bringing assessment judgements and standards into alignment. It is a process that ensures the same standards are applied to all assessment results within the same Unit(s) of Competency. It is an active process in the sense that adjustments to assessor judgements are made to overcome differences in the difficulty of the tool and/or the severity of judgements.

National Register
The register maintained by the Commonwealth Department responsible for VET and referred to in section 216 of the *National Vocational Education and Training Regulator Act 2011*.

National VET Regulator (NVR)
The meaning given by section 3 of the *National Vocational Education and Training Regulator Act 2011*.

Participant
A person who has enrolled and has been approved by the RTO to participate in a qualification or course.

Participant Evaluation
A training evaluation form disseminated to participants at the conclusion of a training program/course to ascertain feedback in relation to training content, resources and assessment processes.

Training Partner
An organisation or agency responsible for ensuring that the established policies and procedures of the RTO are implemented for all delivery and assessment services provided on the RTO's behalf.

Training Project Plan
A document that establishes the overall baseline for implementation as well as the agreements among RTO Managers and customers.

Professional development
Activities that develop and/or maintain an individual's skills, knowledge, expertise and other characteristics as a trainer or assessor. This includes both formal and informal activities that encompass vocational competencies, currency of industry skills and knowledge and practice of vocational training, learning and assessment, including competency based training and assessment. Examples of professional development activities include:

a) participation in courses, workshops, seminars, conferences, or formal learning programs;
b) participation in mentoring, professional associations or other learning networks;
c) personal development through individual research or reading of publications or other relevant information;
d) participation in moderation or validation activities and participation in industry release schemes.

Qualification
Is a formal certification, issued by a relevant approved body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional, industry or community needs.

In the vocation education and training sector (VET) qualifications are awarded to a person that has satisfied all requirements of the units of competency or modules that comprise an AQF qualification, as specified by:

a) a nationally endorsed Training Package; or

b) an accredited course that provides training for that qualification.

For the purposes of qualifications, the VET sector defines "competency" as the consistent application of knowledge and skills to the standard of performance required in the workplace. It focuses on what is expected of the person in applying what they have learned and embodies the ability to transfer and apply skills and knowledge to new situations and environments.

Quality
The ability of a set of inherent characteristics of a product, system or process to meet specified standards or objectives and fulfil the expectations of customers and interested parties.

Quality framework
The documentation of procedures, specifications, responsibilities and continuous improvement processes needed to implement quality management.

Quality Management
An approach used by managers that focuses on effective teamwork and promotes the concept of continuous improvement across all levels of the organisation.

Quality Policy
The overall intentions and directions of the QPS with regards to quality as formally expressed by the RTO Managers.

Quality Records
A subset of training information that demonstrates conformance to the requirements and effective operation of the quality system. Quality records are those records important enough to be specifically identified as such in the quality system procedures or work instructions.

Quality Management System
Includes the organisational structure, procedures, process and resources needed to implement quality management.

Recognition of Prior Learning (RPL)
A process that assesses an individual's non-formal and informal learning to determine the extent to which that individual has achieved the required learning outcomes, competency outcomes, or standards for entry to, and/or partial or total completion of, a qualification.

Records retention
Relates specifically to the retention and storage of evaluation information sourced from learners and employers. The required duration of retention for the purpose of this policy has been sourced from QPS Retention and Disposal Schedule.

Registered Training Organisation (RTO)
A training organisation registered as an RTO by the National VET Regulator and the registration is entered on the National Register. A training organisation must be registered in order to deliver and assess training product/s and issue nationally recognised qualifications.

The Queensland Police Service training organisation (QPSRTO) is registered by a registering body in accordance with the VET Quality Framework, within a defined scope of registration.

Registration
The formal approval and recognition of a training organisation by the National VET Regulator, in accordance with the Standards for Registered Training Organisations.

Scope of registration
The defined scope for which a training organisation is registered that identifies the particular services and products that can be provided. An RTO may be registered to provide either:
a) training delivery and assessment services and products and issue AQF qualifications and statements of attainment; or
b) assessment services and products and issue AQF qualifications and statements of attainment.

Services
The training, assessment, related educational and support services and/or any activities related to the recruitment of prospective learners. It does not include services such as student counselling, mediation or ICT support.

Skill set
A single unit of competency or a combination of units of competency from a training package which link to a licensing or regulatory requirement, or a defined industry need.

Staff
A person who is responsible for the management, coordination, delivery, assessment, administration or support of a course that leads to a nationally recognised outcome.

Statement of attainment
Formal certification in the VET sector issued by an RTO under the AQF when an individual has satisfied the requirements of the unit/s of competency or accredited short course specified in the statement and that a person has achieved:

a) part of a qualification; or
b) one or more units of competency from a nationally endorsed Training Package; or
c) all the units of competency or modules comprising learning outcomes for an accredited course that does not meet the requirements for a qualification.

Statement of Achievement
Formal certification issued by the QPS that a person has achieved the learning outcomes of an approved training program or course.

Statistically valid
For the purposes of these Standards, a random sample of appropriate size is selected to enable confidence that the result is sufficiently accurate to be accepted as representative of the total population of assessments being validated.

Systematic Validation of Assessment
A planned approach to the quality review of assessment practices to ensure the assessment tool/s and practices produce valid, reliable, sufficient, current and authentic evidence upon which assessment decisions are based.

Systematic Validation of Assessment Judgements
A planned approach to the review of a statically valid sample of assessment decisions for each training product/s on the QPSRTO scope of registration in order to identify opportunities for ongoing improvement to assessment tools and processes.

Supporting documentation
Documentation provided by a course participant as evidence of his or her ability to perform a process or task to a pre-defined standard.

Technical Representative
A technical representative is an individual who possesses broad industry knowledge and experience in one or more vocational areas. The knowledge and experience may have been formally recognised through the awarding of a relevant nationally recognised qualification. In instances where this has not occurred, the individual will have demonstrated vocational competencies at least to the same level. Refer to Vocational Competency for further information.

Third Party or Partner Organisation
Services of individuals or organisations rendered by QPSRTO to deliver training and/or assessment independent of the RTO, but does not include a contract of employment between the RTO and its employee.

In the case where internal processes fail to resolve a complaint or appeal, engagement of third party or partner organisations are parties that are external to and independent of the QPSRTO.

Training
The systematic development of the knowledge/skill behaviour pattern required to adequately perform a given task or job, and maintain and improve that performance.

Training and Assessment Strategy
A framework that guides the training requirements and the teaching, training and assessment arrangements of a vocational education and training qualification. It is the documented process that articulates the approach of and method adopted by a delivery unit with respect to training and assessment designed to enable learners to meet the requirements of the training package or accredited course that outlines the macro-level requirements of the training and assessment process, usually at the qualification level.

Training
The process used by an RTO or a third party delivering services on its behalf, to facilitate learning and the acquisition of competencies in relation to the training product on the RTO's scope of registration.

Training Manager
The person who has the responsibility and authority to accomplish or implement a specific activity or process for providing education and training services of training product/s within the RTO scope of registration in accordance with the RTO quality system.

Training and assessment strategies and practices
The approach of, and method adopted by, an RTO with respect to training and assessment designed to enable learners to meet the requirements of the training package or accredited course.

Training Package
The components of a training package endorsed by the Industry and Skills Council or its delegate in accordance with the Standards for Training Packages. The endorsed components of a Training Package are: units of competency; assessment requirements (associated with each unit of competency); qualifications; and credit arrangements. The endorsed components form part of the requirements that an RTO must meet under these Standards. A training package also consists of a non-endorsed, quality assured companion volume/s which contains industry advice to RTOs on different aspects of implementation.

Training Product
An AQF qualification, skill set, unit of competency, accredited short course and module.

Training Program
A program (also known as a learning program), developed by an RTO, that meets the training and assessment requirements of a qualification from a Training Package, one or more designated units of competency, or an accredited course. The training program may specify such matters as essential and elective units, the sequence and timing of training and assessments, and the resources required. It may form part of a training and assessment strategy.

Training.gov.au
Training.gov.au (TGA) is the database on Vocational Education and Training in Australia. TGA is the official National Register of information on Training Packages, Qualifications, Courses, Units of Competency and Registered Training Organisations (RTOs).

Unit of competency
The specification of knowledge and skill contained within a unit of competency and the application of that knowledge and skill to the standard of performance expected in the workplace.

Validation
The quality review of the assessment process. Validation involves checking that the assessment tool/s produce/s valid, reliable, sufficient, current and authentic evidence to enable reasonable judgements to be made as to whether the requirements of the training package or VET accredited courses are met. It includes reviewing a statistically valid sample of the assessments and making recommendations for future improvements to the assessment tool, process and/or outcomes and acting upon such recommendations.

Version
Indicated by a whole number where a document is new or a major change is made to the document.

Version Control Register
Tracking document of all RTO quality management documents which are in a state of continuous improvement, to know which is the latest version and when each document is due for revision and who is responsible for the document.

VET
Vocational education and training.

VET accredited course
A course accredited by the VET regulator in accordance with the Standards for VET Accredited Courses.

VET Quality Framework
VET quality framework comprises of:

a) the Standards for Registered Training Organisations
b) the Australian Qualifications Framework
c) the Fit and Proper Person Requirements
d) the Financial Viability Risk Assessment Requirements
e) the Data Provision Requirements

VET Regulator
VET regulator is:

a) the National VET Regulator; and
b) a body of a non-referring State that is responsible for the kinds of matters dealt with under the VET legislation for that State.

Vocational Competency

Vocational competency is defined as broad industry knowledge and experience, usually combined with a relevant industry qualification. A person who has vocational competency will be familiar with the content of the vocation and will have relevant current experience in the industry. Vocational competency must be considered on an industry-by-industry basis and with reference to the guidance provided in the Assessment Guidelines of the relevant training Package or Accredited Course.

Training packages or Accredited Courses include advice specific to the industry related to the vocational competencies of trainers and assessors. This may include advice on relevant industry qualifications and experience required for training and assessing against the Training Package or Accredited Course. The Training Package or Accredited Course will also provide specific industry advice outlining what it sees as acceptable forms of evidence to demonstrate the maintenance of currency of vocational competency.

Appendix 2 (Schedules from the Standards for RTOs 2015)

Table 1.8-1: Principles of Assessment

Fairness	The individual learner's needs are considered in the assessment process. Where appropriate, reasonable adjustments are applied by the RTO to take into account the individual learner's needs. The RTO informs the learner about the assessment process, and provides the learner with the opportunity to challenge the result of the assessment and be reassessed if necessary.
Flexibility	Assessment is flexible to the individual learner by: ▪ reflecting the learner's needs; ▪ assessing competencies held by the learner no matter how or where they have been acquired; and ▪ drawing from a range of assessment methods and using those that are appropriate to the context, the unit of competency and associated assessment requirements, and the individual.
Validity	Any assessment decision of the RTO is justified, based on the evidence of performance of the individual learner. Validity requires: ▪ assessment against the unit(s) of competency and the associated assessment requirements covers the broad range of skills and knowledge that are essential to competent performance; ▪ assessment of knowledge and skills is integrated with their practical application; ▪ assessment to be based on evidence that demonstrates that a learner could demonstrate these skills and knowledge in other similar situations; and ▪ judgement of competence is based on evidence of learner performance that is aligned to the unit/s of competency and associated assessment requirements.
Reliability	Evidence presented for assessment is consistently interpreted and assessment results are comparable irrespective of the assessor conducting the assessment.

Table 1.8-2: Rules of Evidence

Validity	The assessor is assured that the learner has the skills, knowledge and attributes as described in the module or unit of competency and associated assessment requirements.
Sufficiency	The assessor is assured that the quality, quantity and relevance of the assessment evidence enables a judgement to be made of a learner's competency.
Authenticity	The assessor is assured that the evidence presented for assessment is the learner's own work.
Currency	The assessor is assured that the assessment evidence demonstrates current competency. This requires the assessment evidence to be from the present or the very recent past.

Schedule 1

Item	Relevant Standard	Training and assessment credentials
1		The following credential: *TAE40110 Certificate IV in Training and Assessment or its successor.*
2	1.11 1.14 1.15 1.24	One of the following credentials: Credential: *TAE40116 Certificate IV in Training and Assessment or its successor* or *TAE40110 Certificate IV in Training and Assessment, and one of the following:* *i. TAELLN411 Address adult language, literacy and numeracy skills or its successor or* *ii. TAELLN401A Address adult language, literacy and numeracy skills* *and one of the following:* *iii. TAEASS502 Design and develop assessment tools or its successor or* *iv. TAEASS502A Design and develop assessment tools or* *v. TAEASS502B Design and develop assessment tools.*
3	1.14 1.15	The following credential: *A Diploma or higher level qualification in adult education.*
4		The following credential: *TAESS00001 Assessor Skill Set*
5	1.11 1.15	One of the following credentials: Credential *TAESS00011 Assessor Skill Set or its successor* or Credential: *TAESS00001 Assessor Skill Set and one of the following:* *i. TAEASS502 Design and develop assessment tools or its successor or* *ii. TAEASS502A Design and develop assessment tools or* *iii. TAEASS502B Design and develop assessment tools.*
6	1.18	One of the following credentials: Credential: *TAESS00007 Enterprise Trainer – Presenting Skill Set* or Credential: *TAESS00014 Enterprise Trainer – Presenting Skill Set or its successor* or Credential: *TAESS00008 Enterprise Trainer – Mentoring Skill Set* or

		Credential: *TAESS00013 Enterprise Trainer – Mentoring Skill Set or its successor* or Credential: *TAESS00003 - Enterprise Trainer and Assessor Skill Set* or Credential: *TAESS00015 - Enterprise Trainer and Assessor Skill Set or its successor*
7	1.23	One of the following credentials: Credential: *TAE50111 Diploma of Vocational Education and Training* or Credential: *TAE50116 Diploma of Vocational Education and Training or its successor* or Credential: *TAE50211 Diploma of Training Design and Development* or Credential: *TAE50216 Diploma of Training Design and Development or its successor* or Credential: *A higher level qualification in adult education.*

Schedule 2

Independent validation requirements for RTOs delivering training and assessment qualifications or assessor skill sets from the Training and Education Training Package (or its successor)

For the purposes of Clause 1.25, the requirements for independent validation will apply as follows:

a) For an RTO applying to extend its scope of registration to include the delivery and assessment of an AQF qualification or assessor skill set from the Training and Education Training Package (or its successor), validation is of:
   i. the RTO's assessment tools, processes and outcomes in relation to other AQF qualifications and/or units of competency on its scope of registration, as directed by the VET Regulator, and
   ii. the assessment system to be adopted in the delivery of the training and assessment qualification or assessor skill set.

b) For an RTO applying for the renewal of its registration where its scope of registration includes the delivery and assessment of an AQF qualification or assessor skill set from the Training and Education Training Package (or its successor), validation is of:
   i. the assessment system for delivery of the training and assessment qualification or assessor skill set, and
   ii. the RTO's assessment tools, processes and outcomes in relation to the training and assessment qualification or assessor skill set.

For the purposes of Clause 1.25, independent validation of AQF qualifications or the assessor skill set from the Training and Education Training Package (or its successor) must be conducted by one or more persons who collectively have:

a) current knowledge and skills in vocational teaching and learning, and
b) the training and assessment qualification or assessor skill set at least to the level being validated.

Schedule 3

Fit and Proper Person Requirements

Criteria for suitability

In assessing whether a person meets the Fit and Proper Person Requirements, the VET Regulator will have regard to the following considerations:

a) whether the person has been convicted of an offence against a law of the Commonwealth or a State or Territory of Australia, or of another country, and if so, the seriousness of the offence and the time elapsed since the conviction was recorded

b) whether the person has ever been an executive officer or high managerial agent of an RTO at a time that the RTO had its registration on the National Register cancelled or suspended by its VET Regulator for having breached a condition imposed on its Registration

c) whether the person has ever been an executive officer or high managerial agent of an RTO at a time that the RTO was determined to have breached a condition of its registration under the *Education Services for Overseas Students Act 2000* or the *Tertiary Education Quality and Standards Agency Act 2011*

d) whether the person has ever become bankrupt, applied to take the benefit of a law for the benefit of bankrupt or insolvent debtors, compounded with his or her creditors or assigned his or her remuneration for the benefit of creditors, and if so, the time elapsed since this event occurred

e) whether the person has ever been disqualified from managing corporations under Part 2D.6 of the Corporations Act 2001, and if so, whether the disqualification remains in place

f) whether the person was involved in the business of delivering courses or other services on behalf of a person that was the subject of regulatory action described in points b) or c) above, and if so, the relevance of the person's involvement

g) whether the person has ever provided a VET Regulator with false or misleading information or made a false or misleading statement to a VET Regulator, and if so, whether it is reasonable to assume that the person knew that the statement made or information provided to the VET Regulator was false or misleading

h) whether the person has ever been determined not to be a fit and proper person as prescribed under any law of the Commonwealth or of a State or Territory of Australia, and if so, whether that determination remains in place

i) whether the public is likely to have confidence in the person's suitability to be involved in an organisation that provides, assesses or issues nationally recognised qualifications

j) whether the person has ever been an executive officer or high managerial agent of an RTO at a time that the RTO was determined to have breached a government training contract, and

k) any other relevant matter

Schedule 4

Conditions of Use of NRT Logo

The Nationally Recognised Training (NRT) Logo is a distinguishable mark of quality for promoting and certifying national vocational education and training leading to AQF certification documentation. The NRT Logo is a registered trade mark.

The following describes a range of situations and conditions for using the NRT Logo.

Advertisements and promotional information in any medium (print, television, radio, banners, internet, etc.)

1. RTOs registered by any VET Regulator may use the NRT Logo to promote nationally recognised training provided that training is within the RTO's scope of registration.
2. Impressions must not be created that may lead an observer to conclude the NRT Logo applies to all training provided by the RTO, if this is not the case. The NRT Logo cannot be used by an RTO where the training is accredited, but is outside the scope of registration of the RTO. Where training is being promoted and does not meet the requirements stipulated in the VET Quality Framework or is outside the RTO's scope of registration, it must be made clear the NRT Logo is not associated with that training.
3. Use of the NRT Logo is only permitted where there is a direct relationship to an AQF qualification and/or unit of competency as specified within training packages or VET accredited courses.

Student information (brochures, course handbooks, prospectuses, etc.)

4. When an RTO is promoting the training it offers and wishes to use the NRT Logo, its promotional material such as brochures, handbooks and prospectuses must clearly distinguish between nationally recognised training within the scope of registration and that which is not nationally recognised.

Corporate stationery, business cards, buildings, training resources and marketing products

5. The NRT Logo must not be used on products such as corporate stationery, business cards, building signage, mouse pads, pens, satchels, packaging around products nor learning resources supporting training.

Certificates, Statements of Attainment and other testamurs

6. The NRT Logo must be depicted on all AQF certification documentation issued by the RTO. These can only be issued by an RTO when the qualification and/or unit of competency are within the RTO's scope of registration. The NRT Logo must not be depicted on other testamurs or transcripts of results.

Schedule 5

Application of the AQF Qualifications Issuance Policy within the VET Sector

RTOs must meet the requirements of the AQF for issuing AQF qualifications and statements of attainment, in addition to the following requirements.

Issuing AQF Qualifications

1. RTOs must include the following information on the testamur, in addition to the requirements of the AQF Qualifications Issuance Policy:
   a) the name, National RTO code and logo of the issuing organisation
   b) the code and title of the awarded AQF qualification, and
   c) the NRT Logo in accordance with the current conditions of use contained in Schedule 4.
2. The following elements are to be included on the testamur as applicable:
   a) the State / Territory Training Authority logo (only where use of the logo is directed by State / Territory Training Authorities, e.g. within User Choice contracts)
   b) the industry descriptor, e.g. Engineering
   c) the occupational or functional stream, in brackets, e.g. (Fabrication)
   d) where relevant, the words, 'achieved through Australian Apprenticeship arrangements', and
   e) where relevant, the words, 'these units/modules have been delivered and assessed in <insert language> followed by a listing of the relevant units/modules.
3. RTOs must not include the learner's Student Identifier on the testamur consistent with the Student Identifiers Act 2014.
4. RTOs will:
   a) retain registers of AQF qualifications they are authorised to issue and of all AQF qualifications issued
   b) retain records of AQF certification documentation issued for a period of 30 years, and
   c) provide reports of Records of qualifications issued to its VET Regulator on a regular basis as as determined by the VET Regulator.

Issuing Statements of Attainment

5. RTOs must include the following information on a statement of attainment:
   a) the name, National RTO Code and logo of the issuing organisation
   b) a list of units of competency (or modules where no units of competency exist) showing their full title and the national code for each unit of competency
   c) the authorised signatory
   d) the NRT Logo

e) the issuing organisation's seal, corporate identifier or unique watermark

f) the words 'A statement of attainment is issued by a Registered Training Organisation when an individual has completed one or more accredited units'

6. The following elements are to be included on the statement of attainment as applicable:

a) the State/Territory Training Authority logo (only where use of the logo is directed by State/ Territory Training Authorities)

b) the words 'These competencies form part of [code and title of qualification(s)/course(s)]'

c) the words, 'These competencies were attained in completion of [code] course in [full title]', and

d) where relevant, the words, 'these units / modules have been delivered and assessed in <insert language>' followed by a listing of the relevant units/modules.

7. RTOs must not include the learner's Student Identifier on the statement of attainment consistent with the Student Identifier Act 2014.

8. RTOs will:

a) maintain registers of all statements of attainments issued

b) retain records of statements of attainment issued for a period of 30 years, and

c) provide reports of its records of statements of attainment issued to its VET Regulator on a regular basis, as determined by the VET Regulator.

EXHIBIT 4

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Management of the QPSRTO Scope of Registration

QPSRTO 001

Description:	The procedure for the maintaining the RTO scope of registration including the addition, transition and removal of qualifications, accredited courses and units of competency.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	2.1
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Last Reviewed:	21/9/2022
Next Review:	September 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
5.1. Manager, Education and Training Services (ETS) 3
5.2. Coordinator, Training Quality (TQ) 3
5.3. Course Coordinator 4
6. PROCESS 4
6.1. Changes to Scope of Registration (NOT PREVIOUSLY OFFERED) 4
6.2. Changes to Scope of Registration (TRANSITIONAL) 6
6.3. VET accredited courses (REACCREDITATION) 6
6.4. VET accredited courses (ADDITION TO SCOPE AFTER REACCREDITATION) 7
6.5. Removal of qualifications and VET accredited courses from the QPSRTO Scope of Registration 7
7. FORMS 8
8. DOCUMENT HISTORY 8

1. PURPOSE

The purpose of this procedure is to ensure that requests for additions, deletions or amendments to the QPSRTO Scope of Registration are managed in a systematic and consistent way. It includes managing the transition from superseded training packages as well as covering the requirements for reaccreditation and re-registration of VET accredited courses that the QPS delivers and/or assesses

2. SCOPE

All Training Product/s or VET accredited courses delivered and/or assessed or intended to be delivered and/or assessed by the QPS.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- National Vocational Education and Training Regulator Act 2011
- Standards for Registered Training Organisations (RTOs) 2015
- Australian Qualifications Framework

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- Approving the addition of qualifications and VET accredited courses to the QPSRTO Scope of Registration
- Approving the removal of qualifications and VET accredited courses from the QPSRTO Scope of Registration

5.2. Coordinator, Training Quality (TQ)

The Coordinator, Training Quality is responsible for:

- Ensuring that the QPSRTO transitions from superseded Training Packages within 12 months of their publication on the National Register.
- Ensuring that the QPSRTO transitions from superseded VET accredited courses so that it delivers only currently endorsed Training Packages or currently VET accredited courses.
- Preparing and submitting documentation required to facilitate additions, deletions or amendments to the QPSRTO Scope of Registration as approved by the Manager ETS.
- Conducting pre-registration compliance audits of QPS delivery units prior to the submission of extension of scope applications.
- Overseeing the reaccreditation of expiring VET accredited courses where continued delivery of the relevant VET accredited course is approved by the Manager ETS.

5.3. Course Coordinator

The Course Coordinator is responsible for:

- In the case of new additions to scope, developing the required delivery, assessment and program management resources necessary to meet the requirements of the relevant qualification or VET accredited course.
- In the case of deletions from scope, ensuring that all teach out and records management requirements are actioned appropriately and no new enrolments in the relevant qualification or VET accredited course occurs.
- In the case the AQF qualification is no longer current and has not been superseded, all learner's training and assessment is completed and the relevant AQF certification documentation is issued within a period of two years from the date the AQF qualification was removed or deleted from the National register.

6. PROCESS

6.1. Changes to Scope of Registration (NOT PREVIOUSLY OFFERED)

6.1.1 A delivery unit seeking registration to deliver an AQF qualification or VET accredited course not previously offered by the QPS is to forward a Business Case via their chain of command to the Manager ETS seeking to gain approval in principle.

The Business Case is, at a minimum, to contain the following information:

a) Project Rationale
b) Strategic Contribution
c) Related Initiatives
d) Options analysis
e) Benefits analysis

6.1.2 The Manager ETS will advise the Coordinator TQ if approval in principle has been granted and that an addition to scope is being sought for the qualification, unit/s of competency or accredited short course.

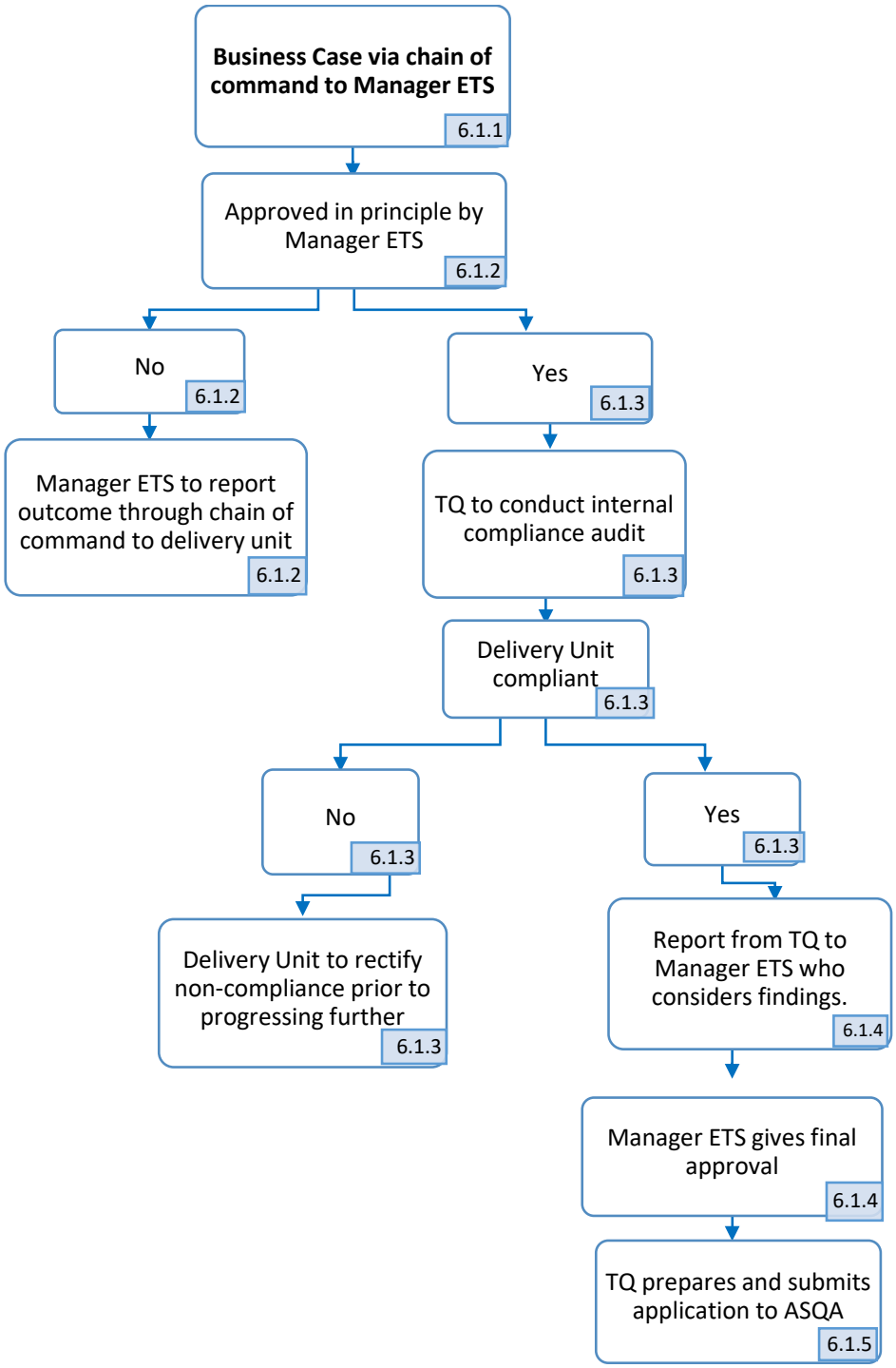
6.1.3 On receiving advice from the Manager ETS, the Coordinator TQ will arrange for an internal audit to be conducted on the intended delivery unit. The audit will assess the delivery unit's compliance with Standards for Registered Training Organisations 2015 and QPSRTO Quality Assurance Procedures. Any non-compliances identified by TQ during the audit process must be rectified prior to an application to add to the QPS scope of registration is submitted.

6.1.4 Once any non-compliances have been rectified, the Coordinator TQ will advise the Manager ETS that the delivery unit has successfully passed an internal pre-registration audit. The Manager ETS will give final approval for an application to be submitted to the Australian Skills Quality Authority (ASQA) to have the relevant qualification, skill set or VET accredited course added to the QPS Scope of Registration.

6.1.5 Once final approval has been received, the Coordinator TQ will manage the submission of the application to ASQA. Upon receiving advice from ASQA that the application has been approved, the Coordinator TQ will advise the delivery unit that training and/or assessment of the qualification or VET accredited course can commence.

QUEENSLAND POLICE SERVICE

Scope of Registration (Not Previously Offered) - Flow Chart



6.2. Changes to Scope of Registration (TRANSITIONAL)

6.2.1 Where a training package qualification on the QPS Scope of Registration has been superseded and the delivery unit is seeking to continue delivering the qualification, the Coordinator TQ has responsibility for ensuring that the relevant QPS delivery units transition to the new training package qualification within 12 months.

6.2.2 TQ will liaise with the relevant Course Coordinator in order to determine equivalency between the existing and replacement qualification/s. This assessment will inform the extent of the body of work which will be required to be undertaken in preparation for registration of the 'new' qualification/s.

6.2.3 The Course Coordinator will then be responsible for preparing a transition plan based on the assessment undertaken in conjunction with TQ. The Course Coordinator will then be responsible for developing all required delivery, assessment and program management resources necessary to meet the requirements of the replacement qualification.

6.2.4 The Course Coordinator is to ensure that all learners' training and assessment is completed and the relevant AQF certification documentation is issued or learners are transferred into its replacement, within a period of one year from the date the replacement training product was released on the National Register.

6.2.5 Where an AQF qualification is no longer current and has not been superseded, all learners' training and assessment is completed and the relevant AQF certification documentation issued within a period of two years from the date the AQF qualification was removed or deleted from the National Register.

6.2.6 Upon receiving notification from the Course Coordinator that the delivery unit has finalised all preparations for delivery of the replacement qualification, TQ is to undertake a pre-registration audit to assess the delivery unit's compliance with Standards for RTOs 2015 and QPS RTO Quality Assurance Procedures. Any non-compliances identified by TQ during the audit process must be rectified prior to an application to change the QPS scope of registration is submitted.

6.2.7 Once any identified non-compliances have been rectified, the Coordinator TQ will forward a report to the Manager, Education Services Unit advising that the delivery unit has successfully passed an internal pre-registration audit. The Manager, Education Services Unit will then provide final approval for a change of scope application to be submitted to ASQA by the Coordinator TQ.

6.3. VET accredited courses (REACCREDITATION)

6.3.1 Where a VET accredited course on the QPS Scope of Registration is due to expire and the delivery unit is seeking to continue delivering the accredited course, the relevant Course Coordinator is to forward a business case via their chain of command to the Manager ETS seeking the necessary approval for reaccreditation.

6.3.2 In order to reduce the duplication of processes, applications seeking approval to reaccredit a course will also be considered as an application for approval to add the new accredited course to scope.

6.3.3 The Business Case is, at a minimum, to contain the following information:

(a) Project Rationale
(b) Strategic Contribution
(c) Related Initiatives
(d) Options analysis
(e) Benefits analysis

(f) Cost analysis

6.3.4 An application to renew an accredited course must be submitted to ASQA at least 90 days prior to the expiry date therefore the business case must be received by the Manager ETS at a minimum 6 months prior to the course expiry date.

6.3.5 If approval to reaccredit the course is granted, the Coordinator TQ is to liaise with the relevant Course Coordinator in order to develop a project plan for the management of the reaccreditation process. The process must be in accordance with the ASQA Standards for VET Accredited Courses.

6.3.6 The Course Coordinator will be responsible for undertaking stakeholder engagement activities and collating all required information necessary for TQ staff to complete the ASQA Application for accreditation (initial or renewal).

6.3.7 The Coordinator TQ will prepare and submit the application for accreditation (initial or renewal) to ASQA and, in conjunction with the Course Coordinator. The Coordinator TQ will monitor the accreditation process and address any rectification matters identified.

6.3.8 Upon receiving notification from ASQA that the course has been reaccredited, the Coordinator TQ will notify the relevant course coordinator. The Coordinator TQ will then commence the process for adding the reaccredited course to the QPS Scope of Registration.

6.4. VET accredited courses (ADDITION TO SCOPE AFTER REACCREDITATION)

6.4.1 Prior to submitting an application to add a reaccredited course to scope, the Course Coordinator will be responsible for developing, updating and/or reviewing all required delivery, assessment and program management resources necessary to meet the requirements of the reaccredited course.

6.4.2 Upon receiving notification from the Course Coordinator that the delivery unit has finalised all preparations for delivery of the replacement qualification, TQ will undertake a pre-registration audit to assess the delivery unit's compliance with Standards for Registered Training Organisations 2015 and QPS RTO Quality Assurance Procedures. Any non-compliances identified by TQ during the audit process must be rectified prior to an application to change the QPS scope of registration is submitted.

6.4.3 Once any identified non-compliances have been rectified, the Coordinator TQ will advise the Manager ETS advising that the delivery unit has successfully passed an internal pre-registration audit. The Manager ETS provides final approval for a change of scope application to be submitted to ASQA by the Coordinator TQ.

6.5. Removal of qualifications and VET accredited courses from the QPSRTO Scope of Registration

6.5.1 Where a delivery unit no longer intends to award an AQF qualification, VET accredited course or part thereof currently listed on the QPS Scope of Registration as an outcome of the training provided, the course coordinator is to forward a report via their chain of command to the Manager ETS requesting that the AQF qualification, relevant units of competency or VET accredited course be removed from scope.

6.5.2 If approved, the Manager ETS will advise the Coordinator TQ that the AQF qualification or VET accredited course is to be removed from the QPS Scope of Registration. The Coordinator TQ will be responsible for preparing and submitting the application to amend to the Scope of Registration via AQSANet.

6.5.3 If the application is not approved by the Manager ETS, relevant advice will be provided to the delivery unit via the chain of command.

6.5.4 Course coordinators are to ensure that all enrolled learners' training and assessment is completed and the relevant AQF certification documentation issued prior to seeking removal from scope.

6.5.5 In instances where a skill set, unit of competency or accredited short course is no longer current and has not been superseded, course coordinators are to ensure that all enrolled learners' training and assessment is completed and the relevant AQF certification documentation issued within a period of one year from the date the product was removed or deleted from the National Register.

7. FORMS

- QPSRTO 001 F01 Qualification Transition Plan

8. DOCUMENT HISTORY

Version No.	Modification	Date
1.0	Initial Version – Manager ETSP	30/09/2014
2.0	Replace Professional Development and Education Services Group with Training Strategy Group Replace Education Services Unit with Education Services Unit Replace Standards for NVR Registered Training Organisations 2012 with Standards for Registered Training Organisations 2015. Section 6.1, bullet point 6 add words 'from ASQA' in second sentence. In diagram – replace PDESG with TSG. Replace CDU with CDRU Section 6.5, bullet point one - added the words 'or part thereof' and 'relevant units of competency'.	1/04/2015
2.1	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Certification & Issuing of Qualifications and Statements of Attainment

QPSRTO 002

Description:	The procedure for the RTO to issue to persons whom it has assessed as competent in accordance with the requirements of the Training Package or VET accredited course, a qualification or statement of attainment (as appropriate).
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	5.3
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Last Review Date:	21/09/2022
Next Review Date:	December 2023

This document is uncontrolled when printing

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
5.1. Manager, Education and Training Services (ETS) 3
5.2. Coordinator, Training Quality (TQ) 3
5.3. Course Coordinator 4
5.4. Administration Officer, Training Quality 4
5.5. Participants 4
6. PROCESS FLOWCHART 5
7. PRODUCTION OF AQF CERTIFICATION 6
7.1. LMS Produced Certification 6
8. REQUESTING CERTIFICATION WHEN NOT PRODUCED WITHIN THE LEARNING MANAGEMENT SYSTEM 6
8.1. Course Coordinator 6
8.2. Participant 6
9. ISSUE AND DISPATCH OF CERTIFICATION PRODUCED BY TRAINING QUALITY (NOT LMS GENERATED) 7
9.1. Capturing Request 7
9.2. Verify Participant Results 7
9.3. Producing Certification 7
9.4. Dispatch certification 7
9.5. Update Certificate record 7
10. RECORDS RETENTION 8
11. DOCUMENT HISTORY 8

1. PURPOSE

The purpose of this procedure is to ensure that the QPS RTO issues to persons whom, it has assessed as competent in accordance with the requirements of the Training Package or accredited course, a qualification or statement of attainment (as appropriate) that:

- Meets the Australian Qualifications Framework (AQF) requirements.
- Identifies the RTO by its name, national RTO code number from the National Register (Training.gov.au) and RTO logo.
- Includes the code and title of the awarded AQF qualification for qualifications.
- Includes a list of units of competency (or modules where no units of competency exist) showing their full title and the national code for each unit of competency.
- Includes the Nationally Recognised Training (NRT) logo in accordance with the current conditions of use contained in schedule 4 of the Standards for RTOs 2015.

2. SCOPE

This procedure applies to all AQF certificates or statements of attainment issued by the QPS RTO. Issuance of compliant documentation is to occur within 30 calendar days of the learner being assessed as meeting the requirements of the training product in which the learner is enrolled is complete.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- National Vocational Education and Training Regulator Act 2011
- Standards for Registered Training Organisations (RTOs) 2015
- Australian Qualifications Framework
- QPS Records Retention and Disposal Schedule
- QPSRTO 014 Recordkeeping (Assessment)

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- approving the content and layout of the QPS RTO Qualification and Statement of Attainment templates (in line with AQF requirements);
- approving the QPS RTO AQF certification documentation signatory.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- dealing with any complaints relating to the issuance of AQF certification documentation by the QPS RTO;
- ensuring that AQF certification documentation is only awarded to learners who are recorded in the Learning Management System as having meet the requirements of the relevant training product;
- ensuring only approved QPS RTO Qualification and Statement of Attainment templates are used when producing AQF certification documentation;

- ensuring that QPS RTO Qualification and Statement of Attainment templates comply with AQSA and AQF requirements;
- ensuring that requests for AQF certification that are to be produced manually are processed by the Training Quality Services Section in a timely manner;
- approving the re-issue of AQF certification documentation;
- ensuring that accurate records of AQF certification documentation issued by the QPS RTO are maintained.

5.3. Course Coordinator

The Course Coordinator is responsible for:

- ensuring that only participants whom have been assessed as meeting the requirements of the relevant training products are recorded as in the Learning Management System as being competent;
- ensuring that only currently qualified assessors determine a participant's competency against the requirements of the relevant training products;
- ensuring that the Learning Management System accurately reflects the qualified assessor/s who determined a participant's competency against the requirements of the relevant training products;
- where AQF certification is not generated within the Learning Management System, requesting AQF certification documentation for eligible participants.

5.4. Administration Officer, Training Quality

The Administration Officer, Training Quality Services Section is responsible for:

- ensuring requests for AQF certification documentation not produced within the Learning Management System are captured in the approved records management systems;
- ensuring approval for the reissue of certification to external or ex-QPS employees is obtained from the Coordinator TQ;
- producing certification using relevant QPS RTO approved AQF documentation template and dispatching in a timely manner;
- capturing records of certification issuance in the approved management systems.

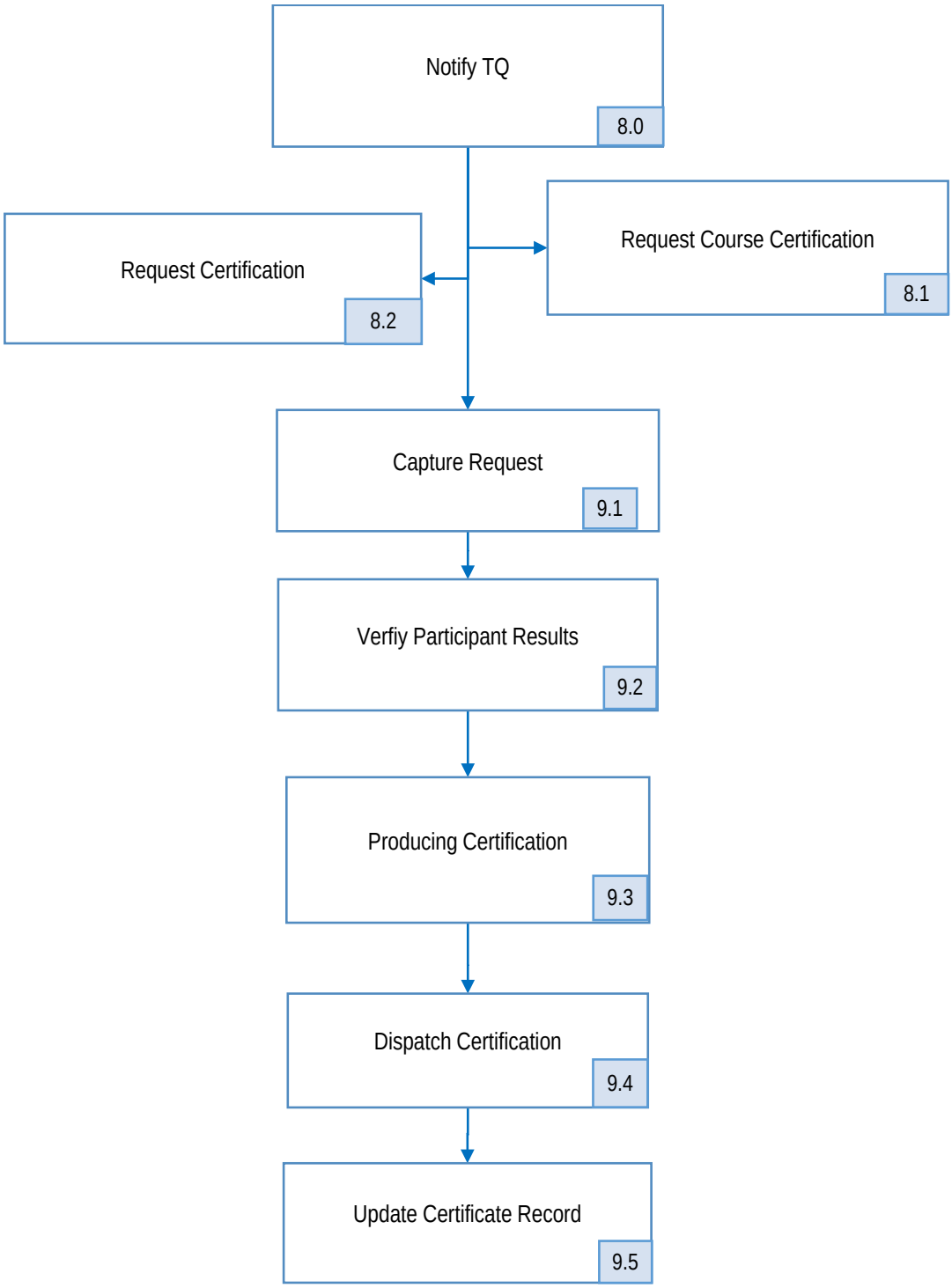
5.5. Participants

A participant is responsible for:

- requesting the reissue of certification in the event of the original having been lost, stolen or destroyed.

6. PROCESS FLOWCHART

CERTIFICATE PRODUCTION WHEN NOT CREATED WITHIN THE LEARNING MANAGEMENT SYSTEM



7. PRODUCTION OF AQF CERTIFICATION

7.1. LMS Produced Certification

The majority of AQF certification documentation awarded by the Queensland Police Service is produced within the Learning Management System (LMS). Linkages between the relevant QPS training programs and the nationally recognised training outcomes are established and monitored by the Coordinator TQ within the LMS.

In accordance with section 5.4, Course Coordinators are responsible for ensuring only qualified assessors determine competency against the requirements of the relevant training products and are recorded against the course milestones linked to the nationally recognised training outcome.

The successful achievement of a milestone linked to a nationally recognised training outcomes will result in the awarding of the associated skills (unit/s of competency) and certification (qualification) where relevant.

8. REQUESTING CERTIFICATION WHEN NOT PRODUCED WITHIN THE LEARNING MANAGEMENT SYSTEM

8.1. Course Coordinator

The Course Coordinator is responsible for notifying the TQ that a participant has either:

a. Attained the competency requirements of a full qualification or VET accredited course, or

b. Has attained competency for individual units of competency for a Statement of Attainment

The notification should be sent by email to TQ at the group email address of [redacted].

The notification should provide the following information:

- Participant employee or student identification number;
- Participant name;
- The code and title of the qualification or accredited course;
- The code and/or title of each unit of competency;
- The final assessment result for each unit of competency;
- The actual end date.

The notification is to be received by TQ as soon as practicable and within 5 working days from the date that a participant:

a. attained the competency requirements of a full qualification or VET accredited course; or

b. attained the competency requirements for individual unit/s of competency of a qualification or VET accredited course for a statement of attainment to be issued.

8.2. Participant

Participants are to notify TQ when seeking reissue of AQF certification documentation.

The notification should be:

a. sent by QPS employees [redacted]

b. sent by external participants or ex-QPS employees to the day to day email [redacted]

c. sent by post to the Training Quality, Education and Training Services, [redacted]

9. ISSUE AND DISPATCH OF CERTIFICATION PRODUCED BY TRAINING QUALITY (NOT LMS GENERATED)

9.1. Capturing Request

Capture the request for certification within the approved records management system in accordance with the data entry standard.

9.2. Verify Participant Results

a) Verify the participant's results for the requested certification within the learning management system; and

b) If the final results are not recorded within the learning management system, notify the requesting course coordinator or delegate that the request cannot be actioned until the results have been entered as detailed in QPSRTO 014 - Recordkeeping (Assessment).

9.3. Producing Certification

a) All certification produced by the Training Quality Services Section is in electronic format.

b) The current approved electronic template can be found at [redacted] Do not use the "Archive Templates".

c) The relevant fields in the certificate template are to be completed using the data for the participant contained in the learning management system.

d) Check the produced certification for accuracy of information.

e) Save produced certification in PDF format.

9.4. Dispatch certification

a) Forward PDF certification via email to requesting area or participant as an attachment.

9.5. Update Certificate record

a) Upload a copy of the certification into the learning management system against the participants 'Top Drawer/Documents' tab.

b) Query and locate the notification record in the approved records management system as detailed in the Objective Users Guide.

Update the record in the approved records management system with:

a. the date that the certification has been produced and;

b. the date that the certification was sent via email.

10. RECORDS RETENTION

Description	Reference	Action
Certification data	ET/TRA/3	Retain for 40 years after last action in a readable, accessible and inalterable form
Requests for certification	ET/TRA/15	Retain for 2 years after action completed

11. DOCUMENT HISTORY

Version No.	Modification	Date
01	Initial Version	30/10/2001
02	References and template updated. Retention period included.	30/10/2005
03	References updated "Master" Template Files are to hold one version of Qualification, Trainee Qualification and 1 set of MOR's "Archive" Templates File is for all old templates and is not to be used Standing Order updated to SO 03.2	02/02/2011
3.1	Minor amendments to authorities, AQF references, training.gov.au, and document history.	20/9/2011
3.2	Procedure review schedule amended from 3 monthly to annually. Amendment to include VET before the term accredited course. National Training Information Service replaced with National Register (Training.gov.au). Vocational Education, Training and Employment Act 2000 replaced with *National Vocational Education and Training Regulator Act 2011*. AQTF Essential Conditions and Standards for Continuing Registration replaced with Standards for NVR Registered Training Organisations	10/8/2012
3.3	Section No. Front cover, Sect 5, Sect 10.3 ESB replaced with PDESB Chief Superintendent replaced with Director, Professional Development and Education Services Branch Qualifications Support Team replaced with Training Quality Services Section Section 10.3 21 days replaced with – within a reasonable timeframe	24//7/2013
3.4	Section No, Sect 9.3, Sect 10.3(b), Sect 12.4, Sect 13, Sect 5.1	23/09/2014

	PDESB replaced with PDESG Assistant Commissioner replaced with Chief Superintendent, Education and Training. Section 9.3 - Physical document to be scanned and placed in records management system. Section 10.3(b) – Traineeship completion date removed. Section 12.4 – Certificate printed double sided with MOR on reverse side and on QPS logo embossed paper Section 13 – Electronic certification for Diploma of Public Safety (Policing). Section 5.1 add 'dispatch certification'	
Version No.	**Modification**	**Date**
4.0	Section No. Front cover, Sect 1, Sect 2, Sect 3 Professional Development and Education Services Group replaced with Training Strategy Group. Curriculum Development Unit replaced with Curriculum Development and Review Unit. Section 1. added the following points: • Includes the code and title of the awarded AQF qualification for qualifications; • Includes a list of units of competency (or modules where no units of competency exist showing their full title and the national code for each unit of competency • Added words 'contained in schedule 4 of the Standards for RTOs 2015' in the 5th bullet point Section 2. replaced 'within a reasonable timeframe after they have been assessed as competent in a nationally recognised training programs or VET accredited courses delivered and/or assessed by the QPS' with '30 calendar days of the learner being assessed as meeting the requirements of the training product in which the learner is enrolled is complete, and providing all agreed fees the learner owes to the QPS RTO have been paid' Section 3. Qualification replaced 'possession and application of both knowledge and skills to defined standards, expressed as outcomes that correspond to relevant workplace requirements and other vocational needs' with 'consistent application of knowledge and skills to the standard of performance required in the workplace'	12/2/2015

	Standards for NVR Registered Training Organisations replaced with Standards for Registered Training Organisations 2015.	
4.1	Reviewed and *Education and Training* replaced with *Training and Development - Police*	Sept 2015
4.2	Responsibilities for CEO, Manager ESU and Coordinator TQSS added. Minor amendments to certificate issue process to reflect current practise.	July 2016
5.0	Procedure updated to reflect production of AQF certification within the Learning Management System.	Oct 2017
5.1	Removal of reference to Standing Order 3.2 for certificate issuance.	October 2019
5.2	Updated to reflect production of electronic certification using manual entry as opposed to mail merge.	August 2020
5.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Development/Amendment of RTO Management System (Polices, Procedures and Forms)

QPSRTO 003

Description:	Procedure for the development and amendment of the RTO Management System Policies, Procedures and Forms.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	6.1
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Latest Review Date:	21/09/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by the Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
   4.1. Linked procedures 3
   4.2. External Information 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
   5.3. Quality Systems Review Officer (QSRO) 3
6. DEVELOPMENT / AMENDMENT PROCESS (SEE FLOW CHART) 4
7. APPROVAL PROCESS 7
8. FORMS ASSOCIATED 10
9. RECORDS MANAGEMENT 10
10. DOCUMENT HISTORY 10

1. PURPOSE

To define the process to be used to develop, amend, document and record QPS RTO Management System Policies, Procedures and associated forms and to ensure the processes implementing key policies and procedures are consistent and systematic.

2. SCOPE

This procedure applies to policies, procedures and forms that are specific to the operations of the RTO administration processes. These documents will demonstrate the ongoing continuous improvement of the RTO operations and ensure the RTO consistently operates in accordance with the Standards for Registered Training Organisations (RTOs) 2015.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

4.1. Linked procedures

- QPSRTO 007 Internal Audit & Assessment Validation

4.2. External Information

- National Vocational Education and Training Regulator Act 2011
- Standards for Registered Training Organisations (RTOs) 2015
- Australian Qualifications Framework

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- Authorising of the implementation of Quality Assurance System policies, procedures, forms, registers and templates.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Reviewing changes or amendments Quality Assurance System policies, procedures, forms, registers and templates.
- recommending documentation for authorisation by the Manager, Education and Training Services;
- approving sub-versions of amended procedures.

5.3. Quality Systems Review Officer (QSRO)

The Quality System Review Officer, TQ is responsible for:

- allocating procedure and form codes;
- maintaining registers of procedures and forms (electronic);
- managing storage of and access to electronic copies of procedures and forms;
- re-drafting and resubmission of adjusted procedures, and forms for subsequent consideration for approval;
- managing a program of internal quality audits to ensure procedures and forms are up-to-date and remain accurate;
- developing new procedures identified by the internal quality audit process.

6. DEVELOPMENT / AMENDMENT PROCESS (SEE FLOW CHART)

6.1 Where a procedure needs to be developed or amended as a result of review or other continuous improvement activities, approval is to be sought from the Coordinator TQ via email.

The information to be provided when seeking approval includes, but is not limited to:

a) briefly describing the procedure;
b) identifying any other forms that need to support the procedure;
c) identifying any links or other documents required to inform the procedure.

6.2 The Coordinator TQ is to forward the request to the Quality System Review Officer who will check that:

a) the Policy/Procedure has not previously been developed or amended;
b) is not already in the process of being documented/amended and;
c) check whether other forms are currently available or are in the process of being developed.

6.3 The Quality System Review Officer is to inform the Coordinator TQ of any conflicting situations which have been identified. In such cases, the request for development/amendment should either not be approved if it would become a parallel activity or be returned for adjustment to take into account any existing situations.

6.4 Once approved the Quality System Review Officer should:

For a new policy/procedure/form:

a) allocate a policy/procedure/form code;
b) record the code on the relevant policy/procedure/form register with the status list as UNDER DEVELOPMENT;
c) update continuous improvement register.

For an amended policy/procedure/form:

a) Create a copy of the current document in the relevant DRAFT folder and change the status of the document 'UNDER REVIEW' in the relevant electronic register;
b) amend the version/sub-version number of the document in the respective DRAFT folder in line with RTO version control procedures;
c) update continuous improvement register.

6.5 The Quality System Review Officer will draft the actual procedure ensuring consistency across the RTO Quality management systems referring to the Quality Assurance Style Guide and using:

QPSRTO_PROC TEMPLATE the RTO Quality Assurance Procedure template

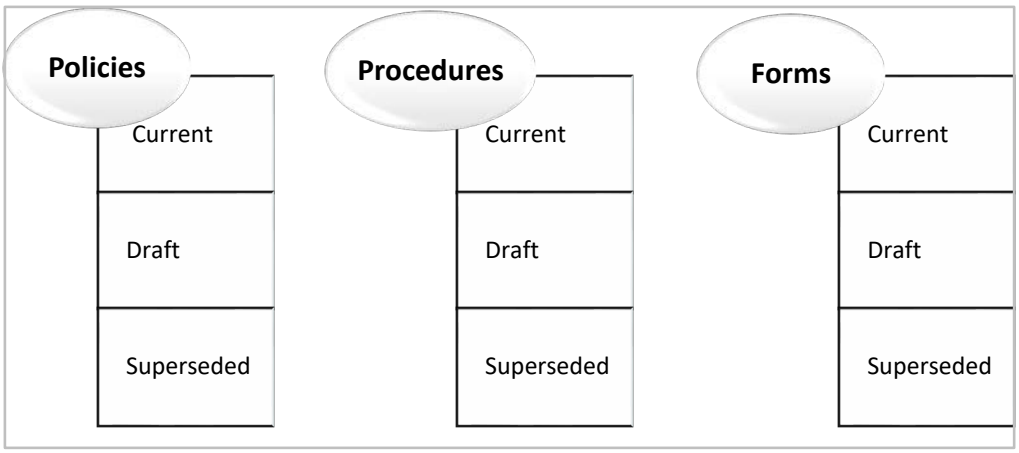
6.6 The Quality System Review Officer will test the procedure and form(s) for validity and clarity with:

a) a member of staff experienced in the area described; and
b) a member of staff whose duties are not usually linked to the area described.

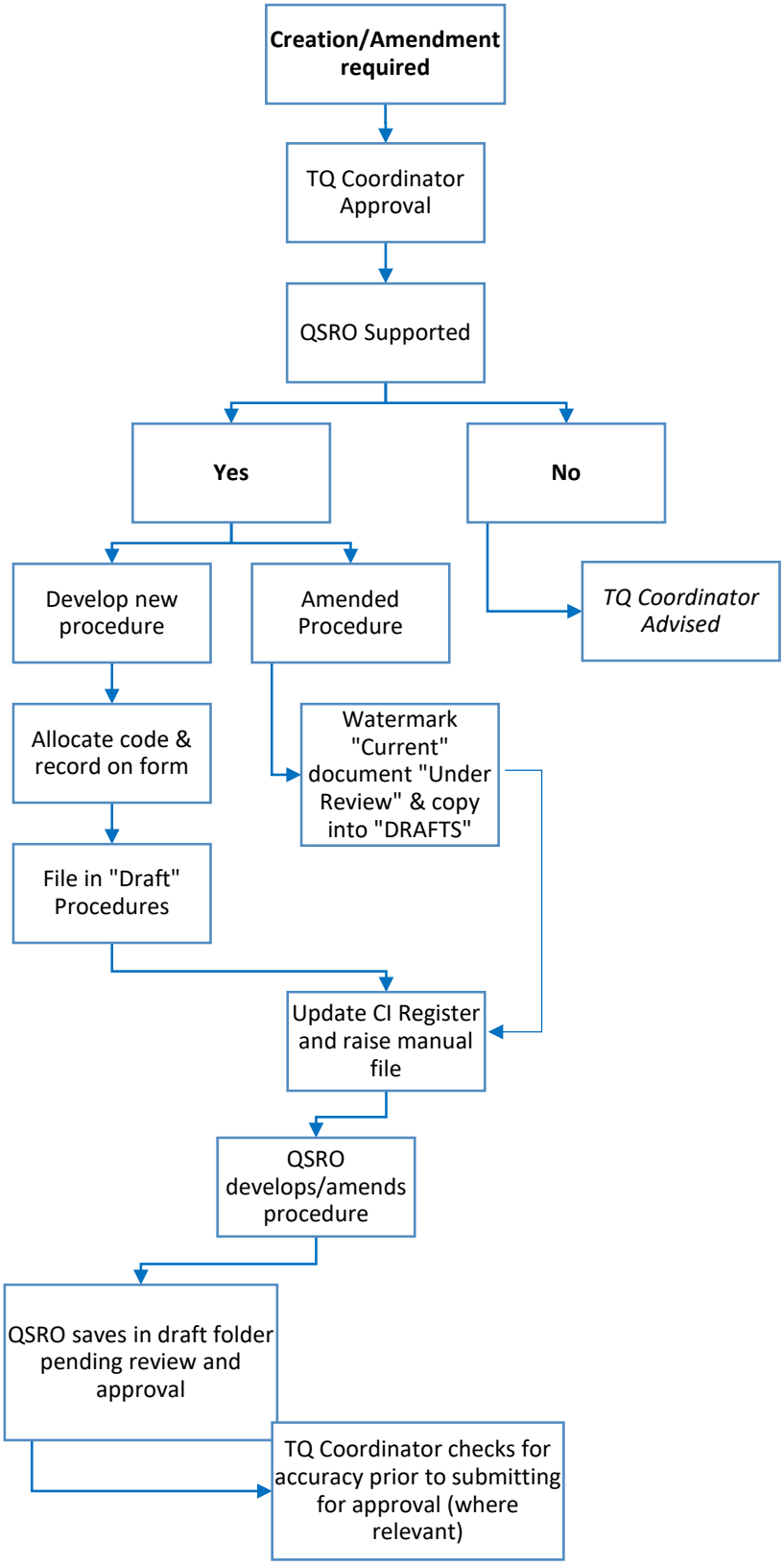
6.7 Amendments to the draft procedure and form(s) are made as required and recommended by the validation process.

6.8 The Quality System Review Officer is responsible for saving the electronic copy of the document in the respective DRAFT file pending review and approval.

Note: Electronic files have been set up in the following structure:



DEVELOPMENT/AMENDMENT PROCESS (Flow Chart)



7. APPROVAL PROCESS

7.1 **Minor Changes**

Submission for approval for any minor amendment to be made to procedures/forms which do not seek to change significant parts of the meaning, layout or content or have a significant impact on the quality systems of the RTO can be approved by the Coordinator TQ.

a) The Quality System Review Officer is to submit the draft policy/procedure to the Coordinator TQ for approval;
b) The amended procedure/form is to be identified through a sub-version change i.e. 6.1 to 6.2;
c) On approval, the Quality System Review Officer to proceed with steps 7.8 and 7.9 below.

7.5 **Major Changes**

Major changes to documents will require a new version. Major changes will occur when:

a) A significant principle in the document has changed; or
b) The format of the document has undergone a significant change; or
c) More than 30% of the document has been changed.

7.6 The Quality System Review Officer will pass the draft of the new/amended policy/procedure/form to the Coordinator TQ.

7.7 The Coordinator TQ will review the documentation provided and upon approval/recommendation forward to Manager ETS for authorisation or further recommendations.

7.8 On receipt of the **approval** to implement from the Manager ETS, the Quality System Review Officer will arrange for:

a) The administration officer to raise a document number in the electronic management system (objective) and copy approved procedures into the system.
b) The objective number to be recorded on the electronic file and moved from 'DRAFT' to respective 'CURRENT' file, the electronic copy of the procedure and form(s) to be uploaded to the QPS's Intranet.
c) Any documents that have been superseded are to be removed from the 'CURRENT' electronic file to the respective 'SUPERSEDED' electronic file.

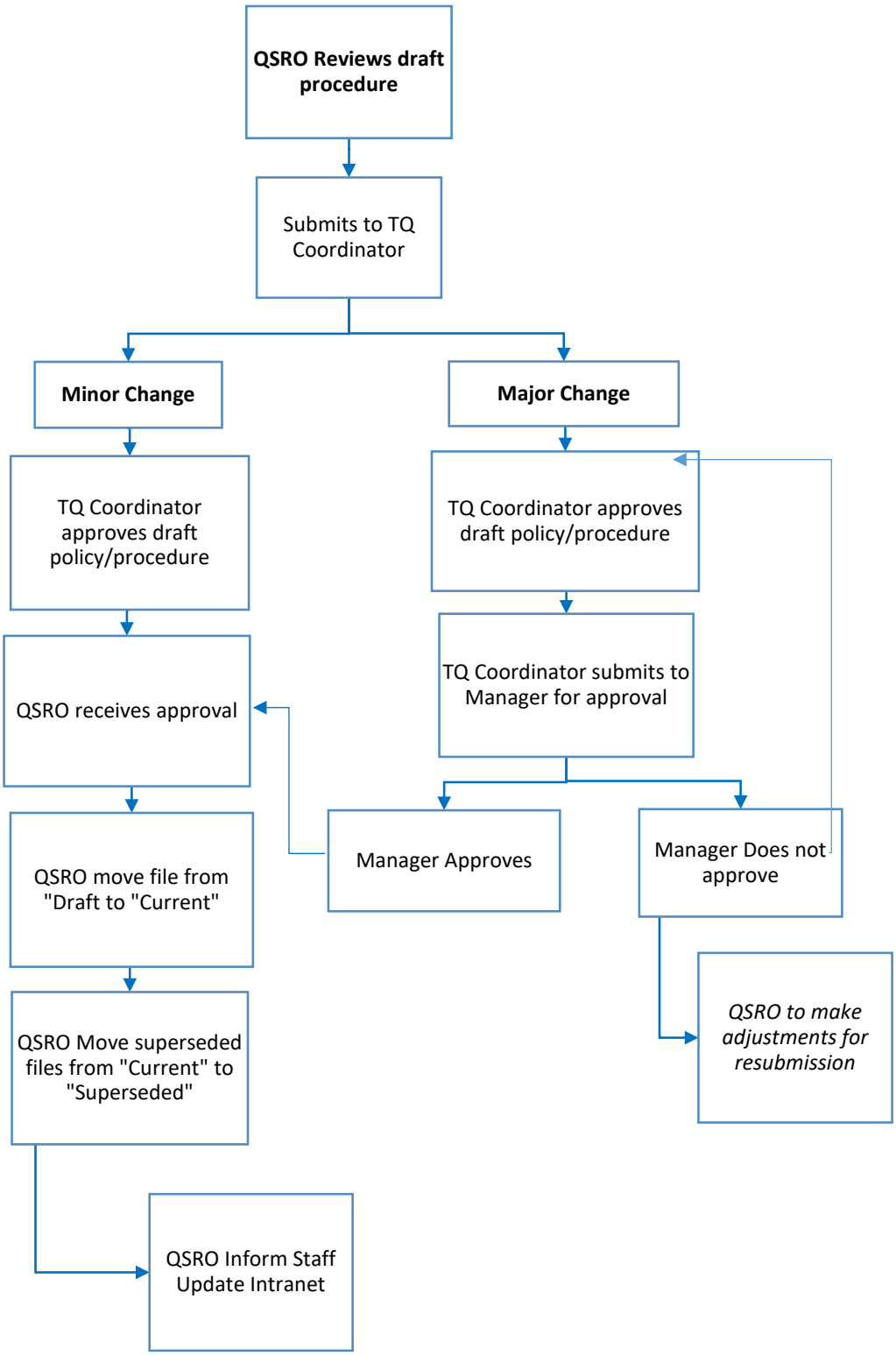
7.9 The Quality System Review Officer will inform staff of the availability of the new procedure and form(s) through e-mail and/or circular memorandum.

7.10 If the Manager ETS does **not approve** the implementation, the policy/procedure/form(s) will be returned to the Quality System Review Officer for adjustment and resubmission with the direction that the implementation of the procedure and form(s) is not to proceed.

7.11 In the latter case, the Manager ETS will communicate the reasons in a written report to the Coordinator TQ.

7.12 Where there is a recommendation that the documentation is to be adjusted and resubmitted, the Quality System Review Officer will be responsible for the redrafting and resubmission.

APPROVAL PROCESS



8. FORMS ASSOCIATED

- QPSRTO_PROC TEMPLATE
- QAP_StyleGuide - Quality Assurance Procedure Template Style Guide

9. RECORDS MANAGEMENT

- QPS Intranet and electronic files 'DRAFT'
- QPS Intranet and electronic files 'CURRENT'
- Electronic files 'SUPERSEDED'
- Electronic Management System (Objective)

10. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial Version.	30/10/2001
2	Version 2	20/06/2004
3	Version 3	17/07/2009
4	Version 4	04/03/2011
4.1	Minor amendment to authorities and document history – approved by Coordinator TQS	20/09/2011
4.2	Procedure updated to remove AQTF references and amended to reflect NVR requirements.	10/08/2012
4.3	Procedure updated to reflect section name change (QST to TQSS)	24/07/2013
4.4	Education and Training Command replaced with Education and Training Director, Professional Development and Education and Training Group replaced with Director, Professional Development and Education Services Group	02/09/2014
5.0	Replace Professional Development and Education Training Group with Training Strategy Group Replace TQSS with TQS Replace Training Quality Services Section with Training Quality Services. 3.1 Remove: The Standards for Registered Training Organisations 2015 includes Essential Standards for Initial Registration and Essential Standards for Continuing Registration. Replace: Chief Superintendent, Education and Training with Director, Training Strategy Group. 7.1 Replace Coordinator, RTO Administration with Coordinator, Training Quality Services	26/02/2015
5.0	Review and replace Curriculum Development Review Unit with Education Services Section	2/09/15
6.0	Deletion of change request form.	20/10/17

6.1	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Version Control

QPSRTO 004

Description:	Procedure for the RTO to implement version control procedures for managing materials throughout its registration period.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	2.4
Date Approved:	21/09/2022
Date Effective:	21/09/2022
Latest Review Date:	21/09/2022
Next Review Date:	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
6. PROCESS - Quality Management System Documentation 4
7. Course Documentation 5
8. DOCUMENT HISTORY 6

1. PURPOSE

To implement ongoing version control procedures for managing all documents, applicable to the QPS RTO, using a consistent and systematic approach.

2. SCOPE

This procedure applies to all documents that fall within the scope of QPSRTO Quality Management System including those developed and maintained by QPS delivery units.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- Standards for Registered Training Organisations (RTOs) 2015
- QPS Records Retention and Disposal Schedule
- QPS RTO Quality Manual

4.1. Linked Procedures

- QPSRTO 007 Internal Audit and Assessment Validation;

5. RESPONSIBILITIES

5.1. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Monitoring of version control across RTO operations through audit and validation activities;
- Implementing corrective action processes in instances of incorrect or inconsistent version control practices being identified.

5.2. Quality Systems Review Officer, (QSRO)

The Quality Systems Review Officer, Training Quality Services Section is responsible for:

- Management of version control of Quality Assurance Procedures and associated forms;
- Maintaining and managing the RTO's Quality Assurance Version Control Register and other associated documentation;
- Ensuring the latest version of electronic documents on the file server are updated and monitored;
- Updating the TQ Continuous Improvement Register as applicable;
- Arranging for the latest version of Quality Assurance Procedures and associated forms are on the QPS Intranet where appropriate;
- Communicating changes to appropriate personnel in a timely manner (QPSRTO 003 refers).

5.3. Course Coordinators

Course coordinators are responsible for:

- Implementing and managing the version control of course documentation, including assessment tools and online information in line with this procedure;
- Ensuring that superseded versions of course documentation is maintained in accordance with organizational and legislative requirements;
- Ensuring that only current, and approved, course documentation is available;

- Ensuring that a version control register, or other mechanisms for monitoring and controlling version control records, is maintained for course documentation.

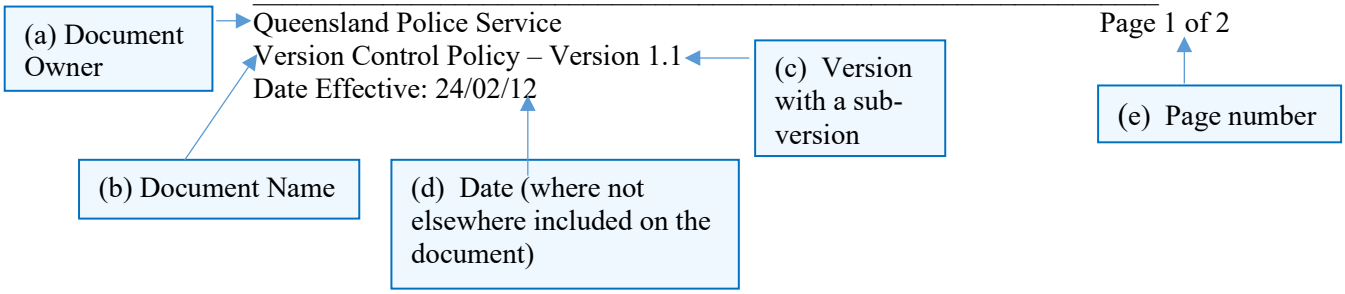
6. PROCESS - QUALITY MANAGEMENT SYSTEM DOCUMENTATION

6.1. For Quality Management System documentation, all documents shall contain the following version control measures in the footer of each document:

a) Document Owner – the details of the document owner;
b) Document Title – the title should reflect the content/purpose of the document;
c) Version – the updated version or revision number of the document shall denote the version and issue and shall be in the form of "Version X.Y";
d) Date Effective – the date the document takes effect and supersedes any prior document (unless effective date is included elsewhere on the document);
e) Page Number – the page number of each page within the document should be noted as either a single page number or in the format of "Page X of Y".

In addition to this information, it may also include the file location for that document.

The format of the information should be similar to:



6.2. **Major changes** to documents will require a new version. Major changes will occur when:

a) A significant principle in the document has changed, or;
b) A work procedure, task or responsibility has been amended, added or deleted as a result of the proposed change;
c) The format of the document has undergone a significant change.

6.3. **Minor changes** to documents will require a sub-version. Minor changes will occur when a proposed change to the document involves changes to content such as references, acronyms or the rectification of grammatical errors. Clarification on version or sub-version changes should be sought from the Coordinator TQ if doubt exists.

6.4. The currency of documents should be reviewed according to the review date and internal audit requirements. Once reviewed:

- If changes are made to the document the date effective and the document version number or sub-version number will be updated to indicate the currency of that document.
- If no changes are made to the document then the date effective, version number and sub-version number will remain the same. A record of the document review will be recorded in the Version Control register.

6.5. Superseded copies of documents or associated forms are to be retained for reference purposes and noted as superseded. Electronic versions are to be moved from "current" into "superseded" file of the relevant document folder on the file server.

6.6. Arrange for current version to be updated on the QPS Intranet if applicable.

6.7. Communicate update to appropriate personnel.

6.8. Continuous Improvement register is to be updated to record actions.

7. COURSE DOCUMENTATION

7.1. For course documentation, all documents should contain the following key version control measures preferably within the footer of the document;

- Document Title – the title should reflect the content/purpose of the document;
- Version – the updated version or revision number of the document shall denote the version and issue and shall be in the form of "Version X.Y";
- Date Effective – the date the document takes effect and supersedes any prior document;
- Page Number – the page number of each page within the document should be noted as either a single page number or in the format of "Page X of Y"

7.2. Changes to versions for course documentation are to be determined and managed in accordance with point 6.2 and 6.3 above.

QUEENSLAND POLICE SERVICE

8. DOCUMENT HISTORY

Version No.	Modification	Date
Draft	Initial Version	24/02/2012
1	Procedure updated to reflect Standards for NVR Registered Training Organisation requirements.	10/08/2012
1.1	Procedure reviewed and updated to reflect: NVR change 2011 to 2012 and Education Services Branch to Professional Development and Education Services Group. Approval authority now Director, PDESG as CEO of RTO – approved by Director, TSG	17/03/2014
2.0	S4 – S5 Reviewed and updated. Changes included responsibilities of course coordinators and reference to Standards for RTOs 2015. Formatting adjustments made	2/9/15
2.1	Responsibility of Coordinator, TQSS included.	3/11/2017
2.2	'Date effective' description clarified to include elsewhere on the document.	31/10/2019
2.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021
2.4	Minor amendments to role titles.	21/09/2022

Quality Assurance Procedure

Systematic Validation of Assessment Practices and Judgements

QPSRTO 007

Description:	Procedure for the systematic validation of assessment practices and judgements of Training Product/s delivered by, or on behalf of, the QPS RTO as part of the continuous improvement process.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	6.0
Date Approved:	29/4/2021
Date of last review:	21/09/2022
Next Review Date:	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
   5.3. Lead Validator 4
   5.4. Course Coordinator 4
6. PROCEDURE FOR CONDUCTING ASSESSMENT VALIDATION 4
   6.1. QPSRTO Assessment Validation Schedule 4
   6.2. Appointment of Lead Validator 5
   6.3. Preparing for Assessment Validation Activity 5
   6.4. Conducting the Validation of Assessment Practices and Judgements 6
   6.5. Finalising the Validation of Assessment Practices and Judgements 6
7. PROCESS 7
8. FORMS 8
9. RECORDS 8
10. DOCUMENT HISTORY 8

1. PURPOSE

The purpose of this procedure is to ensure that the QPS RTO undertakes systematic validation of assessment practices and judgements of Training Products offered by the organisation in accordance with the Standards for Registered Training Organisations (RTOs) 2015.

2. SCOPE

This procedure applies to all assessments that contribute to Training Product outcomes which are undertaken by the QPS RTO.

This procedure applies to all persons involved in the delivery, assessment and support of Training Products on the QPS Scope of Registration.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- QPS Quality Manual
- Standards for Registered Training Organisations (RTOs) 2015.
- Qld Police Service Retention and Disposal Schedule.

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- approving, and ensuring the correct and consistent implementation of the quality management system and quality assurance policies across the QPS RTO;
- providing guidance and assistance in relation to disputed assessment validation findings;
- making a final decision in relation to disputed assessment validation findings;
- approving the QPSRTO Assessment Validation Schedule.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- developing and updating the QPSRTO Assessment Validation Schedule;
- identifying and assigning staff to lead and participate in validation activities;
- ensuring that staff (either individually or collectively) assigned to validation activities have;
    - current vocational competencies and current industry skills relevant to the assessment being validated (at least on the first occasion of the product being validated);
    - the training and assessment credential TAE40116 (or as listed in Schedule 1, Item 2 of the Standards for Registered Training Organisations (RTOs) 2015);
    - current knowledge and skills in vocational teaching and learning.
- Identifying a statistically valid sample of completed student assessment records for validation;
- reviewing assessment practices and validation outcomes including recommendations for systems improvements;
- forwarding validation outcome reports including recommendations for systems improvements to the relevant Course Coordinator for action;
- providing assistance to resolve disputed assessment validation findings;
- advise Course Coordinators upon completion of audits; and
- producing the annual report on validation outcomes for the Manager ETS

5.3. Lead Validator

Lead validators will be responsible for:

- preparing for validation activities which they have been assigned by the Coordinator TQ;
- confirming that staff (either individually or collectively) assigned to validation activities have;
    - current vocational competencies and current industry skills relevant to the assessment being validated;
    - the training and assessment credential TAE40116 (or as listed in Schedule 1, Item 2 of the Standards for Registered Training Organisations (RTOs) 2015);
    - current knowledge and skills in vocational teaching and learning.
- leading validation activities for QPS RTO Training Products on scope to identify improvement actions for the delivery unit;
- preparing and monitoring the implementation of system improvement plans where relevant;
- reporting the progress of outcomes of assessment validation to the Coordinator TQ;
- assisting with the resolution of disputed assessment validation findings.

5.4. Course Coordinator

The Course Coordinator is responsible for:

- providing assistance to the validation team in relation to evidence required to be sighted and reviewed during assessment validation activities;
- nominating a suitably qualified technical representative/s to take part in the validation of assessment practices and judgements who was not directly involved in the particular instance of the delivery and assessment of the training product being validated;
- gathering and maintaining participant information, human resource profiles of delivery and assessment staff;
- gathering a statistically valid sample of completed student assessment records for validation;
- responding, developing and implementing any System Improvement actions, relevant to the delivery unit, that were identified during assessment validation activities conducted in accordance with this procedure.

6. PROCEDURE FOR CONDUCTING ASSESSMENT VALIDATION

6.1. QPSRTO Assessment Validation Schedule

The QPSRTO Assessment Validation Schedule will identify the following:

- each Training Product currently on the QPS RTO Scope of Registration;
- when the assessment validation activity for each Training Product is to occur;
- the nominated lead validator (if known) to be involved in the assessment validation;
- the nominated technical representative/s (if known) to be involved in the assessment validation.

The timing of the assessment validation activity for each training product will be based on a variety of factors including, but not limited to:

- the requirements of Standard 1, Clause 1.10 of the Standards for Registered Training Organisations (RTOs) 2015;
- the outcomes of previous assessment validation activities;
- changes to qualification requirements due to training package amendments;
- change of course coordinator and/or training and assessment staff;
- number of annual enrolments and completions;
- number of participant complaints or appeals.

Once developed, the QPSRTO Assessment Validation Schedule is to be stored electronically on the file server under *Audits* within the RTO folder. An additional sub-folder should be produced and named Audit [YEAR]. All correspondence in relation to assessment validation activities will be stored within this folder. Each qualification scheduled for assessment validation will also be

designated a folder. The naming convention for the qualification folders will contain the qualification code. *Example:* POL6115

6.2. Appointment of Lead Validator

The Coordinator TQ will assign a member of the section to undertake the role of lead validator prior to the scheduled assessment validation date. The Coordinator TQ will liaise with the relevant Course Coordinator to identify a suitably qualified technical representative/s to take part in the assessment validation activity and notify the lead validator accordingly.

The following points are supplied as a framework when preparing for, conducting and finalising assessment validation activities.

6.3. Preparing for Assessment Validation Activity

Prior to commencing the assessment validation activity, lead validators should familiarise themselves with the Training Product to be validated. Electronic copies of most Training Products on the QPS RTO scope of registration can be located via the training.gov.au website. In the event that the qualification is from the Police Training Package (POL) and has been deemed "Not For Public Access" (NFPA), access to the units of competency are available from the RTO folder located on the fileserver. This also applies to accredited course information.

At a minimum, lead validators should:

- confirm the relevant Australian Qualifications Framework (AQF) level of the qualification;
- locate the relevant units of competency and packaging rules;
- access the Ignite LMS and familiarise themselves with the program structure noting the composition of core and elective units;
- review relevant assessment guidelines and associated packaging rules.

Lead validators are to access the previous validation reports and system improvement plans where applicable. This information will be located on the server in the audit folder recorded under the corresponding year. A review of the validation report and any system improvements should be undertaken to identify areas for review. The lead validator should ensure that any system improvements identified during previous assessment validation activities have been actioned to a satisfactory level by the delivery unit. This will be done during the site audit.

Prior to conducting any site visits, access the QPS intranet to view any relevant information relating to the relevant Training Product and associated QPS training program. Programs or courses provide varying information however, you may be able to access information which is provided to participants. These documents can be used to commence the assessment validation. As a minimum, the training and/or assessment strategy and previous validation outcomes are to be reviewed before any site visits.

All units of competency which make up the Training Product are to be reviewed during the assessment validation process. It is important that the validators familiarise themselves with the units of competency as this knowledge will assist when the assessment tools and processes are reviewed during the validation activity.

The lead validator is to ensure that the statistically valid sample of student assessment records (as advised by the Coordinator TQ) are reviewed during the validation activity. Details of the student records being validated are to be crossed referenced against Ignite to ensure accuracy and consistency.

6.4. Conducting the Validation of Assessment Practices and Judgements

The lead validator, in conjunction with the nominated technical representative, is to systematically work through the validation table recording details of the sighted evidence presented within the table.

Where a particular portion of the validation was not completed i.e. due to the unavailability of documentation or personnel during a site visit, this is to be noted along with the reasons why. Arrangements are to be made for a follow-up visit or for the relevant evidence to be provided for desktop review.

When conducting the validation of the assessment tools/instruments, the lead validator is to record the overall result for all assessment tools/instruments in the validation table. For example, if all but one of the assessments tools/instruments validated meet the requirements for validity, the overall outcomes recorded in the audit table will be for meeting validity will be 'No'.

The lead validator must record the details of the issue/s identified and refer to the evidence sighted within the Delivery Unit Assessment Validation table. The comments should also contain recommendations with regards to rectifying the identified issue/s.

When conducting the validation of assessment practices and judgements, the lead validator is to record the overall outcome of the review on the QPSRTO 007 F02 *Systems Improvement Plan* form. The lead validator must record the details of the issue/s identified and refer to the evidence sighted. The comments should also contain recommendations with regards to rectifying the identified issue/s.

6.5. Finalising the Validation of Assessment Practices and Judgements

The lead validator is responsible for finalising the validation documentation. The lead validator is to forward a copy of the validation table and systems improvement plan (if applicable) to the Coordinator TQ. The lead validator should discuss recommendations and system improvements as detailed in the validation table with the Coordinator TQ.

The Coordinator TQ will then complete a covering report for dissemination to the delivery unit manager. The report will contain a copy of the completed audit table and systems improvement plan. The completed validation table and associated documentation is to be stored on the file server in the relevant folder as outlined above.

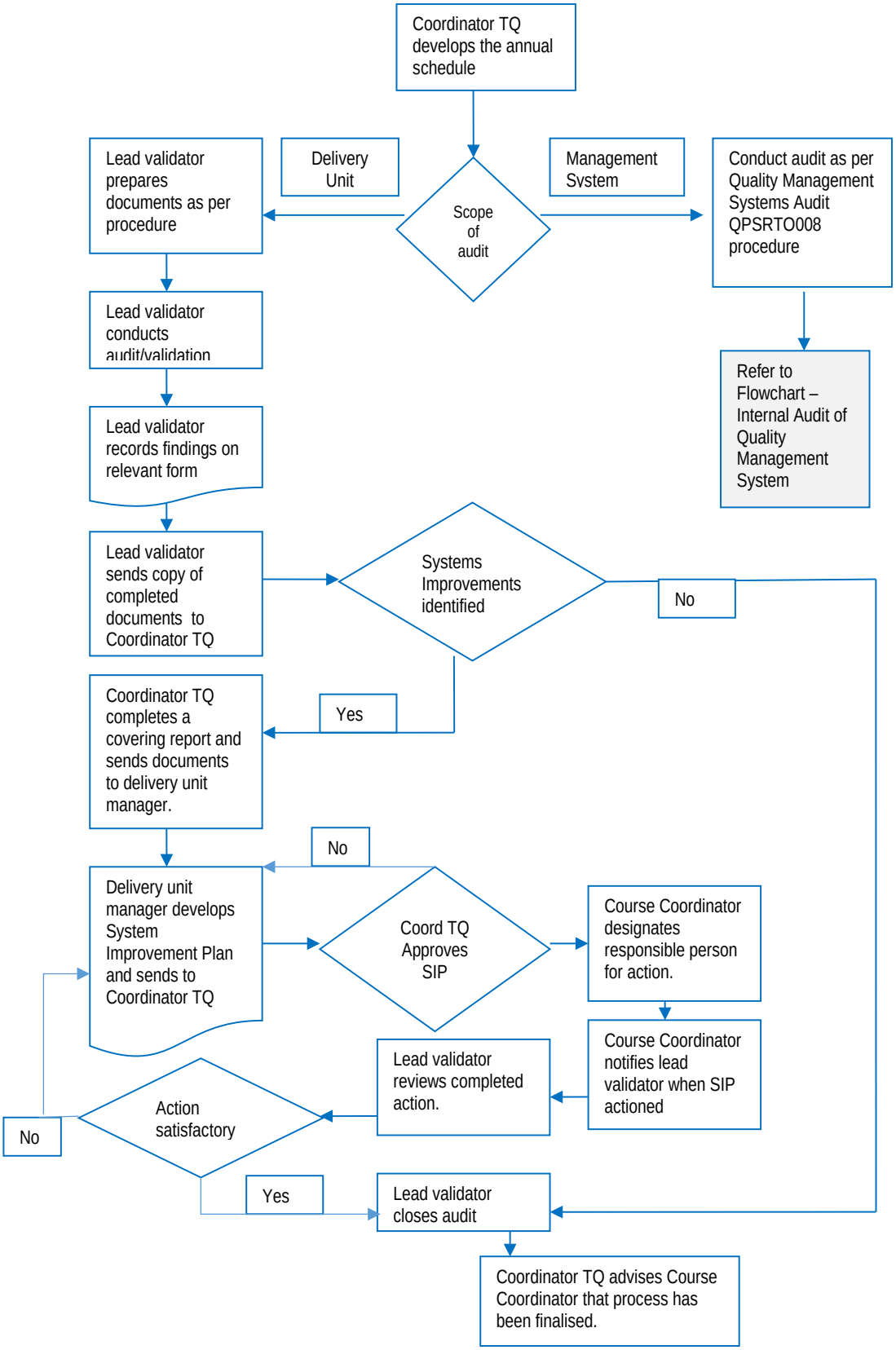
Once a finalised Systems Improvement Plan has been received from a delivery unit, the validation activity can be finalised. The completed Systems Improvement Plan is to be reviewed by the Coordinator TQ and signed off if accepted.

The Coordinator TQ is responsible for capturing the finalised documentation and any other correspondence deemed necessary in the approved records management system.

The Coordinator TQ is to notify the Course Coordinator that the review has been finalised.

7. PROCESS

Validation of Assessment Practices and Judgements



8. FORMS

- QPSRTO007 F01 Delivery Unit Assessment Validation Table
- QPSRTO 007 F02 Systems Improvement Plan (Delivery Unit)

9. RECORDS

- Completed QPSRTO internal audit report (Management Systems) (Electronic record retained for 7 years after last action)
- Completed QPSRTO internal audit report (Delivery Unit)/ Validation of Assessment Processes and Judgements (Electronic record retained for 7 years after last action)
- Completed Systems Improvement Plan (Electronic record retained for 7 years after last action)
- Continuous Improvement Register (Electronic record – ongoing use)

10. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial Version	31/10/2001
2	Minor Amendments	29/05/2002
3	Minor Amendments	15/8/2006
4	Internal audit of delivery units included in this procedure	22/7/2009
4.1	Minor changes to Authorities, AQTF references and Quality Manual references and document history.	20-9-2011
4.2	Minor updates to reflect NVR requirements and internal branch/unit naming conventions.	10/8/2012
4.3	Updated with Self-Assessment Process. Forms added.	22/9/2014
5.0	Redeveloped in line with the RTO standards 2015.	1/4/2015
5.0	Review and replace 'learning and assessment strategy' with 'training and assessment strategy'	2/9/15
5.1	Additional responsibility for Lead Audit to ensure vocational competencies of technical representative. Consolidation of forms 3, 4, 5 & 6 into Form 3 *Validation of Assessment Processes and Judgements.*	7/9/2016
5.2	Minor change to 'Purpose' statement.	31/10/2019
6.0	Procedure title changed from 'Internal Audit and Assessment Validation' to 'Systematic Validation of Assessment Practices and Judgments'. Clarification of validation team member TAE and vocational requirements.	29/4/2021

	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Quality Management System Audit

QPSRTO 008

Description:	Procedure for the internal audit of the RTO management systems.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	1.1
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Latest Review Date:	21/09/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
   5.3. Lead Auditor 4
6. PROCESS 5
7. FORMS 5
8. RECORDS 6
9. DOCUMENT HISTORY 6

1. PURPOSE

The purpose of this procedure is to ensure that internal audits of the RTO's quality management systems are performed on an annual basis as a systematic and continuous improvement approach to the management of operations.

2. SCOPE

This procedure applies to all persons involved in the delivery, assessment and support of Training Product/s in the QPS RTO.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- QPS Quality Manual
- Standards for Registered Training Organisations (RTOs) 2015
- Qld Police Service Retention and Disposal Schedule

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- approving, and ensuring the correct and consistent implementation of the quality management system and quality assurance policies across the QPS RTO;
- overviewing the outcomes of Quality Management System Audits.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- scheduling annual Quality Management System Audits;
- assigning a Lead Auditor to conduct the Quality Management System Audit;
- reviewing the outcomes of Quality Management System Audits;
- implementing any System Improvement actions, relevant to the RTO management systems, identified during an audit conducted in accordance with this procedure;
- advising the Manager ETS upon completion of audits;
- producing the annual report on audit activities for the Manager ETS;
- recording changes to the Quality Management System within the continuous improvement register.

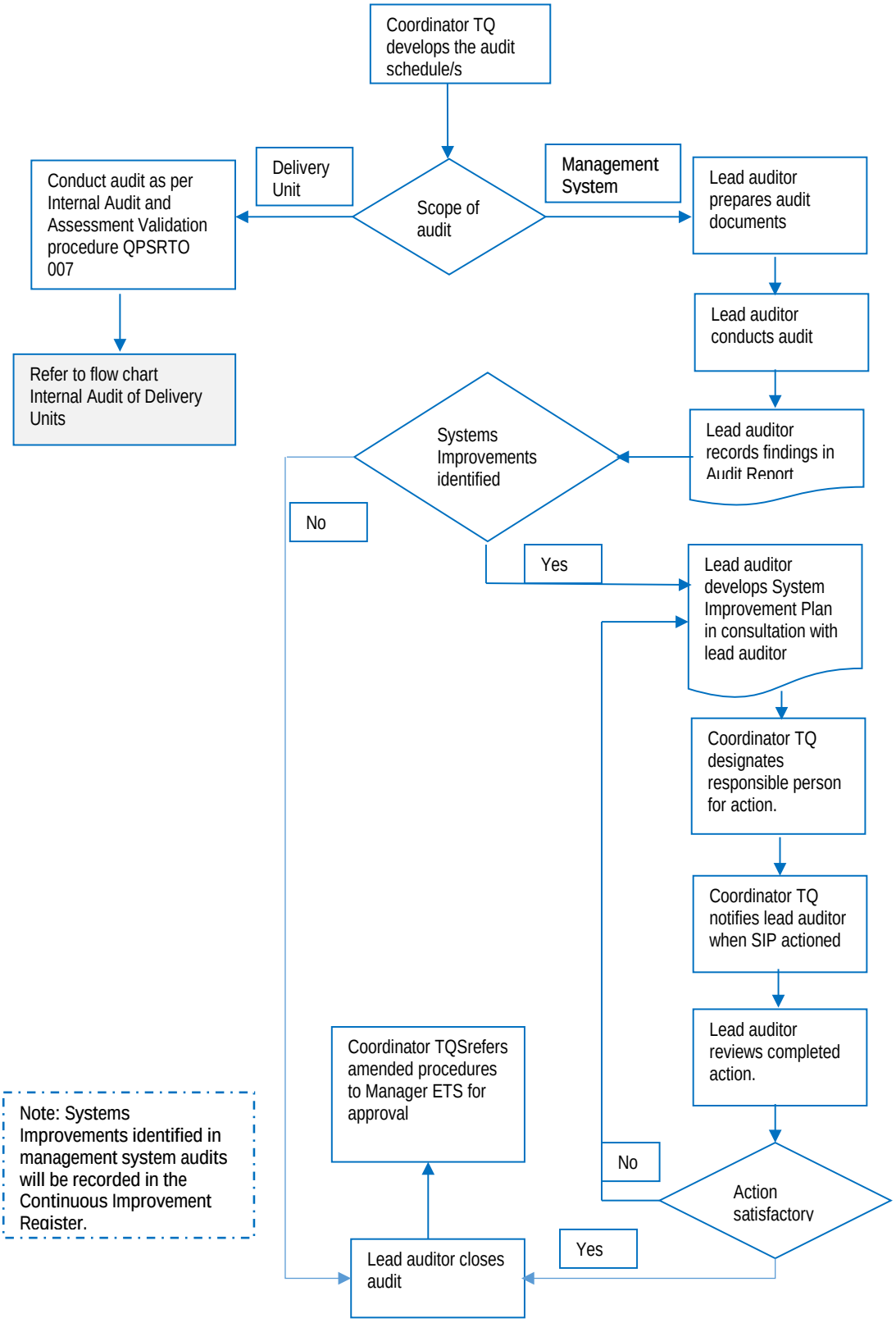
5.3. Lead Auditor

Lead Auditors will be responsible for:

- leading audits of the Quality Management Systems and identifying non-compliances and/or suggested improvement actions for the program;
- reporting the outcomes of the Quality Management System Audit to the Coordinator TQ;
- developing a systems improvement plan;
- monitoring the implementation of system improvement plans;
- reporting progress of audits to the Coordinator TQ;

6. PROCESS

Internal Audit of Quality Management System



7. FORMS

- QPSRTO 008 F01 Internal Audit Report (Management Systems)

- QPSRTO 008 F02 Systems Improvement Plan (Quality Management System)

8. RECORDS

- Completed QPSRTO internal audit report (Management Systems) (Electronic record retained for 7 years after last action)
- Completed QPSRTO internal audit report (Delivery Unit) (Electronic record retained for 7 years after last action)
- Completed Systems Improvement Plan (Electronic record retained for 7 years after last action)
- Continuous Improvement Register (Electronic record – ongoing use)

9. DOCUMENT HISTORY

Version No.	Modification	Date
1.0	Initial Version	01/04/2015
1.1	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

Quality Assurance Procedure

Recognition of Prior Learning

QPSRTO 010

Description:	Procedure for awarding recognition of previously gained knowledge, skills and competencies towards the achievement of nationally recognised training product (Training Products) outcomes.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	7.4
Date Approved:	21/09/2022
Date Effective:	21/09/2022
Last Review Date:	21/09/2022
Next Review Date:	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Coordinator, Training Quality (TQ) 3
   5.2. Course Coordinators 3
   5.3. Participant 4
   5.4. Assessor 4
6. PROCESS 5
   6.1. RPL Procedure 6
   6.2. Credit for previously attained units of competency and/or modules 7
7. DOCUMENT HISTORY 8

1. PURPOSE

The purpose of this procedure is to ensure that the QPS RTO has a robust assessment system in place for awarding recognition of previously gained knowledge, skills and competencies towards the achievement of nationally recognised training product (Training Products) outcomes.

It also includes the recognition of knowledge and skills which are gained by an applicant through a combination of formal and informal learning which is directly related to an applicant's employment with the Queensland Police Service or approved partner organisation.

The procedure ensures that recognition of prior learning (RPL) assessments comply with the relevant training package or VET accredited course assessment requirements as well as the Standards for Registered Training Organisations (RTOs) 2015.

2. SCOPE

This procedure applies to all persons involved in the delivery, assessment and support of Training Product/s offered by the QPS RTO.

As an enterprise RTO, the QPS has an overriding duty to ensure all staff are adequately trained to perform their delegated duties and fulfil job role requirements as determined by the organisation. Whilst the opportunity to apply for RPL will be offered to applicants meeting enrolment eligibility criteria for the relevant Training Product, participants may still be required to complete all or part of the organisations training program which provides evidence towards the nationally recognised outcome.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- Standards for Registered Training Organisations (RTOs) 2015

5. RESPONSIBILITIES

5.1. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Ensuring that Training Product certification templates within the Learning Management System (LMS) meet the requirements of the Australian Qualifications Framework and the relevant ASQA Fact Sheet;
- The approval/authorisation of employees endorsed as qualified QPS RTO trainers and/or assessors;
- Issuing nationally recognised certification where certification is not generated within the LMS.

5.2. Course Coordinators

Course coordinators are responsible for:

- Ensuring that only employees approved as QPS RTO assessors conduct an assessment of the evidence provided by the participant (or the evidence previously obtained from a relevant QPS training program/s and/or workplace) to determine the extent to which it meets the evidentiary requirements of the Training Product for which the participant is seeking RPL;
- enrolling eligible participants seeking RPL into the respective qualification (where no direct linkage to a QPS QC course/s has been established);
- receiving and acknowledging the formal application for recognition (where no direct linkage to a QPS QC course/s has been established);

- ensuring the participant is formally advised on the outcome of the assessment and is invited to attend a formal interview to further assess where gaps in the evidence have been identified;
- ensuring the participant is advised of the overall assessment outcome, including in instances where a participant/s is unable to demonstrate competence against the entire Training Product outcome;
- ensuring Learning Management System is updated to reflect recognition of prior learning for units of competency achieved;
- ensuring credit is provided to learners for any previously completed AQF recognised units of competency and/or modules issued by an RTO or AQF authorised issuing organisation.

5.3. Participant

The eligible participant is responsible for:

- submitting a formal application for recognition of prior learning to the Course Coordinator (where no direct linkage to a QPS QC course/s has been established).
- collating evidence to support the application for recognition of prior learning which may include any combination of the following:
  - detailed resume;
  - testimonials from previous employers;
  - certificates of achievement (relevant unrecognised courses – internal or external) certified by a Commissioner of Declarations or Justice of the Peace;
  - qualifications and/or statements of attainment certified by a Commissioner of Declarations or Justice of the Peace;
  - detailed description of tasks and activities undertaken in various job roles and their relationship to the units of competency for RPL is sought;
  - attending formal interviews with an assessor where necessary.

5.4. Assessor

In instances where a direct linkage to a QPS QC course/s has been established, the Assessor is responsible for:

- ensuring that required evidence drawn from the associated course/s or program being relied upon for the assessment decision is full and complete;
- determining whether additional evidence is required and if so, advise the applicant accordingly;
- complying with the relevant training package or VET accredited course assessment requirements as well as the Standards for Registered Training Organisations (RTOs) 2015 when making the assessment determination.

In instances where there is no direct linkage to a QPS QC course/s, the Assessor is responsible for:

- considering and assessing applications for recognition of prior learning assigned to them by the relevant course coordinator;
- determining whether additional evidence is required and if so, advise the applicant accordingly;
- complying with the relevant training package or VET accredited course assessment requirements as well as adhere to the Standards for Registered Training Organisations (RTOs) 2015 when making the assessment determination.

6. PROCESS

6.1 Recognition of Prior Learning

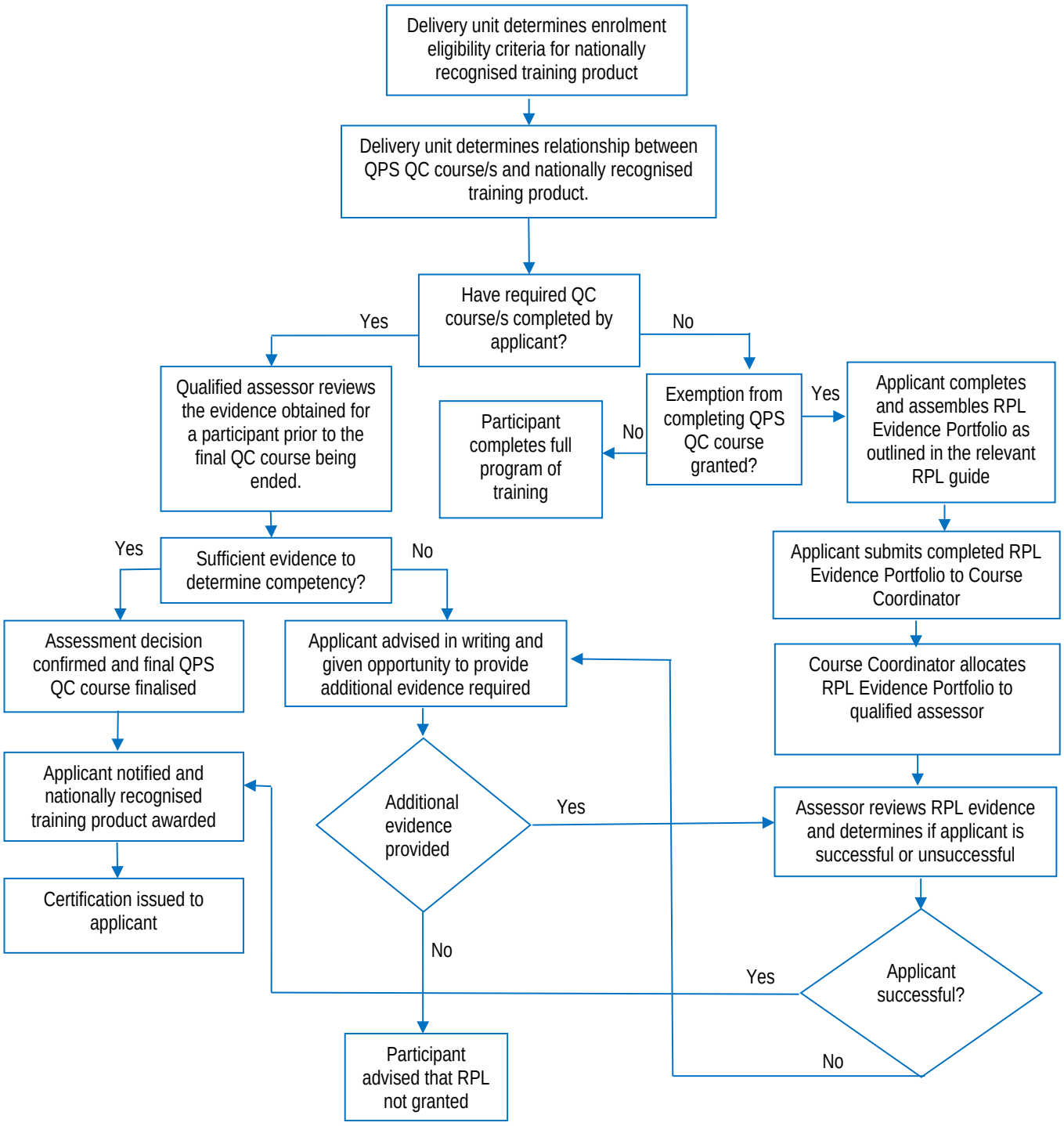
- All nationally recognised training products offered by the Queensland Police Service are to have clearly stated enrolment eligibity criteria. The enrolment eligibility criteria, at a minimum, is to be contained within the relevant Training and Assessment Strategy or Assessment Only Strategy.
- Participants eligible to enrol in nationally recognised training products (where a direct linkage to a QPS QC course/s has been established) via an *assessment only pathway* are to be enrolled in the relevant QC course/s.
- In instances where a single QC course represents the total assessment evidence outcomes for a nationally recognised training product, a qualified assessor is to review the evidence obtained for a participant prior to the QC course being finalised. Only when the assessor is completely satisfied that competency for the nationally recognised training product/s has been achieved by a participant is the QC course to be finalised.
- In instances where multiple QC courses contribute to the assessment evidence outcomes for a nationally recognised training product (i.e F2F course plus additional workplace evidence portfolio), the achievement of the nationally recognised training product is to be linked to the final QC course that must be completed by a participant. A qualified assessor is to review the evidence obtained for a participant prior to the final QC course being finalised. Only when the assessor is completely satisfied that competency for the nationally recognised training product/s has been achieved by a participant is the QC course to be finalised.
- In cases where an eligible RPL applicant has not undertaken a relevant QPS QC course/s, the Course Coordinator is to determine the level of risk associated with the relevant job role and what affect the awarding of RPL has on the requirement for that learner to complete all or part of the QPS training program.
- Where the awarding of RPL for all or part of a nationally recognised training product does not have any effect on the requirement for a learner to complete the entire relevant QPS training program (as part of employment requirements), this information will be provided to participants in the respective course materials.
- In instances where a participant seeks RPL, course coordinators are responsible for compliance and administration of their respective delivery unit's policy and procedure for RPL which involves, but is not limited to the Course Coordinators responsibilities.

6.2 Credit for previously attained units of competency and/or modules

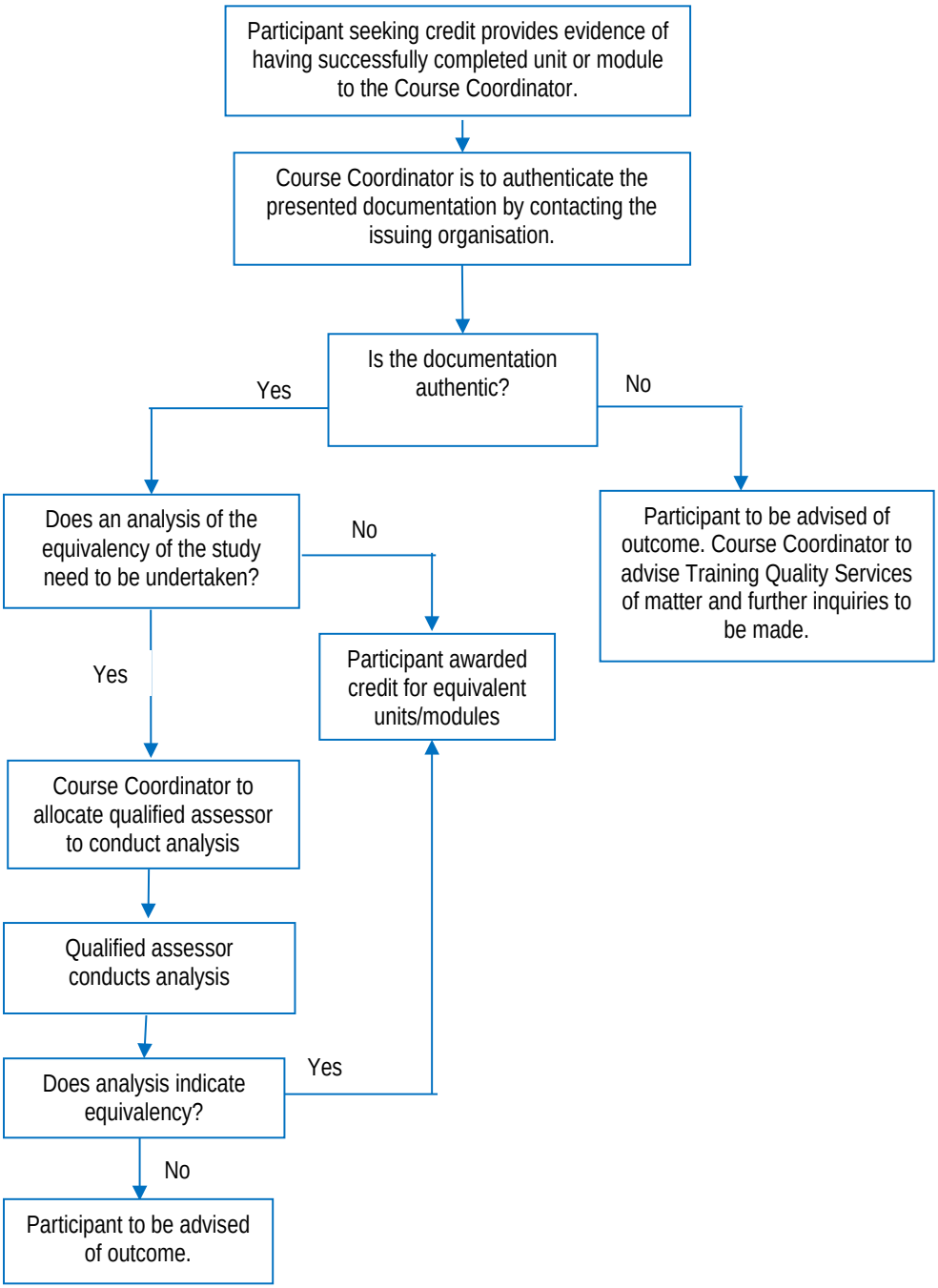
- Providing credit for participants who have previously completed units of competency or modules is not a recognition of prior learning (RPL) process. RPL is a form of assessment of the competence of a person, while providing credit is recognising the equivalence of studies previously undertaken and completed successfully. In some cases, licensing or regulatory requirements may prevent a unit or module being awarded through a credit process.
- Participants are required to provide evidence, in the form of AQF documentation or an authenticated VET transcript, of having successfully completed a unit or module to the Course Coordinator when seeking credit.
- The Course Coordinator is to authenticate the presented documentation by contacting the issuing organisation. Once authenticated, the participant is to be awarded credit towards the relevant components of the nationally recognised training product in which the participant is enrolled.
- Where a determination needs to be made with regards to the equivalency between the completed study (i.e through a university or other AQF authorised issuing authority) and a VET unit or module, the Course Coordinator is to ensure that this process is undertaken by a suitably qualified assessor.

PROCESS FLOW CHART

6.1. RPL Procedure



6.2. Credit for previously attained units of competency and/or modules



7. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial	30/10/01
2	Updated styles	20/04/04
3	Updated format and content	25/03/05
4	Updated format and content	13/06/06
5	Updated format and content	05/06/07
6	Updated format and content	21/10/2009
6.1	Minor amendments to authorities, AQTF title and document history.	20/9/2011
6.2	Minor amendment - references changed to training and assessment strategy, addition of responsibilities of course co-ordinator reflecting compliance within their own delivery unit RPL policy and procedure. Addition of another point of reference in procedures for Course coordinators.	26/10/2011
6.3	Procedure updated to reflect Standards for NVR Registered Training Organisations 2011 requirements	10/8/2012
6.4	Updates made to RPL guide and RPL kit as well as ESB to PDESG and Qualifications Support Team to Training Quality Services Section.	03/09/2013
7.0	Updated to reflect requirements of new standards 2015.	01/04/2015
7.0	Added 6.2 in relation to licensing and regulatory requirements	3/9/2015
7.1	RPL procedure updated to reflect assessment only strategy and relationship to QPS QC course/s when making determination.	3/8/2016
7.2	Addition of responsibilities for Coordinator, Training Quality Services.	5/8/2020
7.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021
7.4	Changes made to approving authority for authorised QPS RTO trainers/assessors.	21/09/2022

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

RTO Evaluation

QPSRTO 011

Description:	A procedure for administering RTO delivery unit evaluations, as well as Quality Indicator learner engagement and employer satisfaction evaluations
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	2.4
Date Approved:	21/9/2022
Date Effective:	21/9/2022
Last Review Date:	21/9/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
5.1 Manager, Education and Training Services (ETS) 3
5.2 Coordinator, Training Quality (TQ) 3
5.3 Course Coordinators 4
6. PROCESS 4
6.1 Quality Indicators 4
6.2 Sampling 4
7. QUALITY INDICATOR LEARNER ENGAGEMENT EVALUATIONS 5
7.1 Responsibilities for administering evaluations 5
8. QUALITY INDICATOR EMPLOYER SATISFACTION EVALUATIONS 5
8.1 Coordinator, Training Quality (TQ) Responsibilities 5
8.2 Timing of surveys 5
8.3 Methodology 5
9. ANALYSIS AND FURTHER ACTION 5
10. FORMS 6
10.1 Appendices 6
11. DOCUMENT HISTORY 6

1. PURPOSE

The purpose of this procedure is to ensure that the QPS RTO undertakes systematic evaluation of the training and assessment products and services provided by the organisation. Evaluation information includes but is not limited to quality/performance indicator data, validation outcomes, client trainer and assessor feedback and complaints and appeals.

Evaluation, as it relates to the QPS, is to inform those involved in the decision-making process and all stakeholders about aspects of QPS education, training and development activities. As such, evaluation forms a key element of a cycle of continuous improvement in the pursuit of best practice and excellence in police education, training and development in Queensland.

2. SCOPE

This procedure contains the requirements for administering RTO delivery unit evaluations, as well as Quality Indicator learner engagement and employer satisfaction evaluations. The procedure applies to all QPS delivery units providing nationally recognised training outcomes as well as areas involved in administrative functions which support the delivery/assessment of nationally recognised training such as Training Quality (TQ).

Conducting evaluations allows the QPS RTO to assess how valid, current and effective the products and services delivered are for clients and provides quality data upon which continuous improvement is based. It also ensures QPS delivery units providing nationally recognised training are producing learners who have the required skills and knowledge for the relevant job. The QPSRTO retains evidence to show how evaluation has been planned and conducted in a systematic way and that actions match the outcomes of reviews.

3. DEFINITIONS

Refer to Quality Manual for definitions.

4. REFERENCES

- Standards for Registered Training Organisations 2015
- QPS Education and Training Policies
- QPS Information Management Manual

5. RESPONSIBILITIES

5.1 Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- approving, and ensuring the correct and consistent implementation of the quality assurance strategies and quality assurance policies across the QPS RTO;
- ensuring management decisions affecting RTO operations are informed by the analysis of relevant evaluation data.

5.2 Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- developing Learner Satisfaction and Employer Satisfaction surveys within the online survey software at the commencement of each calendar year;
- ensuring that quality indicator learner and employer satisfaction evaluations developed within the online survey software meet the national regulators requirements;
- ensuring that quality indicator learner and employer satisfaction evaluations are distributed to identified students on a biannual basis;

- liaising with students, supervisors and course coordinators for completion of Quality Indicator learner and employer satisfaction evaluation;
- analysing the collected data obtained through learner and employer satisfaction evaluation;
- reporting to the Manager ETS on the survey results to inform decision making in relation to RTO operations;
- facilitating Delivery Unit Network Conferences to discuss evaluation outcomes;
- reporting the results of surveys to ASQA.

5.3 Course Coordinators

Course Coordinators are responsible for:

- administering delivery unit evaluations;
- ensure the collection of learner evaluation data;
- analysing the data to determine whether changes need to be made to training materials (for continuous improvement);
- taking action, where appropriate, based on that data;
- recording any action taken in a continuous improvement register;
- storing completed evaluations as required under the QPS Records Retention and Disposal Schedule;
- making available to the RTO during audits, upon request, all completed evaluations and all related documentation, including data analysis and action relating to continuous improvement.

6. PROCESS

6.1 Quality Indicators

The QPS, as an RTO, is required to collect and report quality indicator data to ASQA on an annual basis to demonstrate a commitment to continuous improvement. These reports are compiled by TQ.

The Quality Indicators are:

- **Learner engagement** - This indicator focuses on the extent to which learners are engaging in the types of activities likely to promote high-quality skill outcomes and includes learner perceptions of the quality of their competency development and the support they received from RTOs (QPS delivery units).
- **Employer satisfaction** - This indicator focuses on employer evaluations of learner competency development and the relevance of learner competencies for work and further training, as well as employer evaluation of the overall quality of the training and assessment.

Learner engagement and employer satisfaction Quality Indicator data are reported against through collection of evaluation data.

6.2 Sampling

In terms of the resources available for administration and follow-up procedures, the QPS as an RTO may target certain students/supervisors to complete evaluations. This is to streamline the expenditure of their energy into getting a high return rate from a small number of learners and employers, rather than dispersing their energy and achieving a lower rate from a larger group. This allows the QPS as an RTO to provide a balance between representative samples of data

and the avoidance of evaluation fatigue. In addition, focusing on a particular group can often result in a higher response rate and better quality data.

7. QUALITY INDICATOR LEARNER ENGAGEMENT EVALUATIONS

7.1 Responsibilities for administering evaluations

- The Coordinator TQ will run a report within the Ignite LMS biannually (June and November) to identify employees who have been awarded nationally recognised training certifications within the preceding survey period;
- The following student information will be ascertained:
  - name of student
  - employee number
- The Coordinator TQ will contact the relevant students via email with a preformatted email (See Appendix B for sample version of email and link to electronic survey) which includes a link to the Learner Satisfaction survey.
- Learner satisfaction responses are captured within the online survey software.

8. QUALITY INDICATOR EMPLOYER SATISFACTION EVALUATIONS

8.1 Coordinator, Training Quality (TQ) Responsibilities

- The Coordinator TQ will identify a cross section of Education and Training Officers (ETOs) who will be requested to complete an Employer Satisfaction evaluation. Selection will be based on an analysis of the location of employees who have completed Learner Satisfaction surveys within the reporting year.
- The Coordinator TQ will contact the relevant ETOs via email with a preformatted email (See Appendix B for sample version of email and link to electronic survey) which includes a link to the Employer Satisfaction survey.
- Employer satisfaction responses are captured within the online survey software.

8.2 Timing of surveys

The Coordinator TQ should ensure that all Quality Indicator employer satisfaction evaluations are forwarded to the ETOs by October of the 'data collection period', to allow time for the surveys to be completed within that data collection period.

8.3 Methodology

In relation to Quality Indicator employer satisfaction evaluations, the Coordinator TQ should ensure that there is an equitable rotation of these evaluations across the RTO scope of registration. This is to ensure that Quality Indicator data is gathered across all delivery units over time.

9. ANALYSIS AND FURTHER ACTION

There is a requirement under the Standards for Registered Training Organisations (RTOs) 2015 to report the results of the surveys to ASQA. The specific guidelines for capturing and managing QPSRTO Quality Indicator data is contained in the RTO file server in the folder titled 'Quality Indicators' which is located in the ASQA folder.

The Coordinator TQ will analyse the results of the surveys to determine if any action is required to improve the training offered by the RTO delivery units. The outcomes of the surveys and

analysis will be communicated and discussed with delivery units during Delivery Unit Network Conferences facilitated by TQ.

10. FORMS

10.1 Appendices

- Appendix A Learner Engagement Preformatted Email (including link to electronic survey)
- Appendix B Employer Satisfaction Preformatted Email (including link to electronic survey)

11. DOCUMENT HISTORY

Version No.	Modification	Date
01	Initial Version	05/11/2010
1.1	Minor amendments to authorities and document history.	20/09/2011
1.2	Amendments to reflect NVR requirements and branch name changes.	10/08/2012
2.0	Amendments to reflect RTO standards 2015 and QI data collection processes	6/8/15
2.1	Procedure updated to reflect biannual distribution of Learner Satisfaction Surveys	6/11/2017
2.2	Reviewed by Ed Spink. Minor amendment made to Quality Data Indicator references.	11/5/2018
2.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021
2.4	Amendment to Purpose statement and RETOs amended to ETOs. Dedicated section included for Course Coordinator responsibilities. *Checkbox* replaced with online survey software.	21/09/2022

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Recordkeeping (Assessment)

QPSRTO 014

Description:	Capturing and keeping completed assessment items for Training Product/s.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	5.3
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Latest Review Date:	26/9/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Coordinator, Training Quality (TQ) 3
   5.2. Course Coordinator 3
   5.3. Assessor 4
6. PROCESS 5
7. RECORDS RETENTION 6
8. FORMS 6
9. DOCUMENT HISTORY 6

1. PURPOSE

The purpose of this quality assurance procedure is to ensure that a full and accurate record of a course participant's assessment undertaken during his or her participation in a training program or course is captured and retained in a way that meets or exceeds the requirements of the ASQA General direction: Retention requirements for completed student assessment items.

2. SCOPE

Queensland Police Service (QPS) records management is governed by the Public Records Act 2002 (the Act) and must comply with a number of standards including Information standard 40: Recordkeeping (IS40) and Information Standard 31: Retention and Disposal of Public Records (IS31). These standards help the QPS meet their record keeping obligations under the Act.

This quality assurance procedure applies to course assessments conducted for, or on behalf of, the Registered Training Organisation.

3. DEFINITIONS

Refer to the QPSRTO Quality Manual and ASQA General direction: *Retention requirements for completed student assessment items* for definitions.

4. REFERENCES

- ASQA General direction: Retention requirements for completed student assessment items
- *National Vocational Education and Training Regulator Act 2011*
- *Public Records Act 2002*
- QPS Corporate Records Management System Data Entry Standard
- QPS Corporate Thesaurus
- QPS Records Retention and Disposal Schedule
- Standards for Registered Training Organisations (RTOs) 2015

5. RESPONSIBILITIES

5.1. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Monitoring compliance to ensure that public records falling within the scope of this procedure are retained in accordance with the Public Records Act 2002 and Information Standards 31 and 40.

5.2. Course Coordinator

The course coordinator is responsible for:

- Ensuring that public records falling within the scope of this procedure are retained in accordance with the Public Records Act 2002 and *Information Standards 31* and *40*.
- Ensuring that all completed student assessment items (including evidence relied upon for RPL assessment decisions) are captured and/or recorded for each student;
- Creating assessment files for each student;
- Linking assessment documents; and
- Filing assessment evidence.

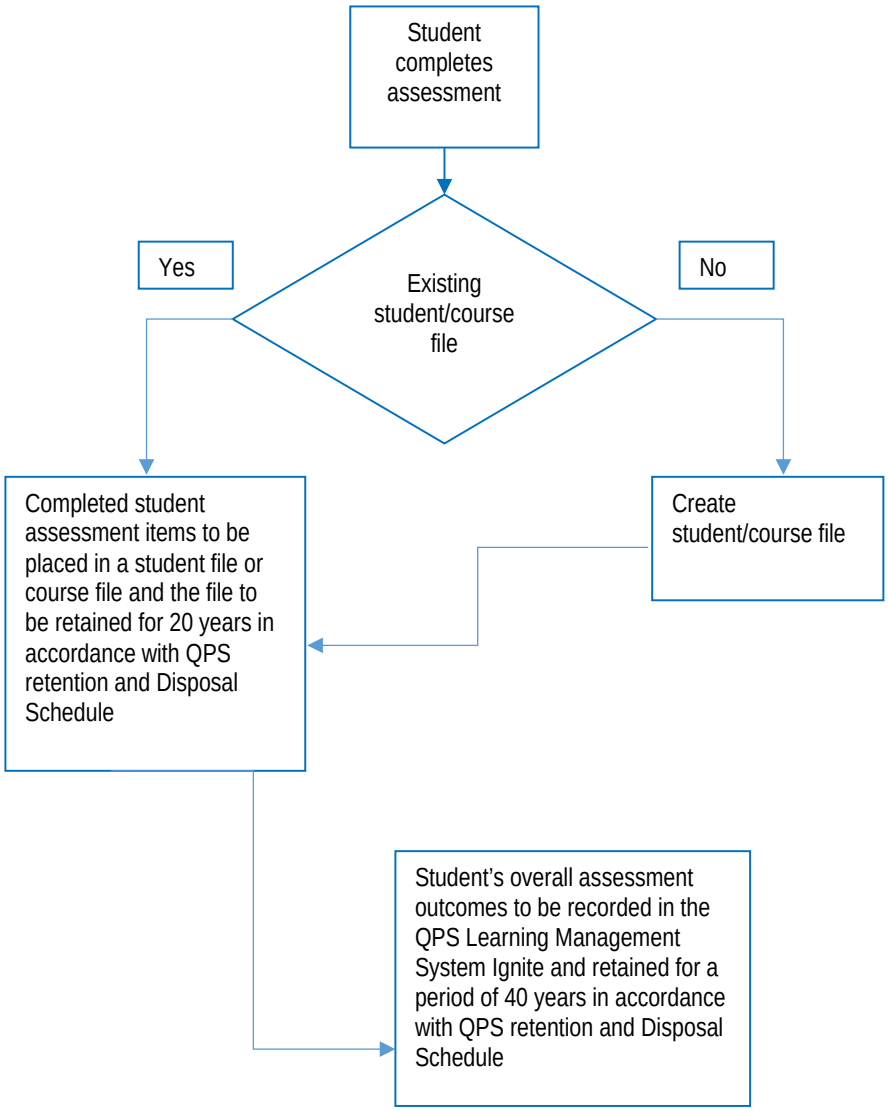
5.3. Assessor

The assessor is responsible for:

- Making the assessment decision;
- Collating assessment.

6. PROCESS

Recordkeeping Process



Note: A Registered Training Organisation is required to keep completed student assessment items in accordance with the ASQA General direction: Retention requirements for completed student assessment items. However QPS retains its assessment records in accordance with QPS Retention & Disposal Schedule which exceeds the requirements of the AQSA General Direction.

7. RECORDS RETENTION

Description of Records	Status	Reference	Disposal Action
Assessment Item	Temporary	ET/TRA/5	Retain for 20 years after last action.
Supporting documentation	Temporary	ET/TRA/5	Retain for 20 years after last action
Results of examination – may be hard copy and/or electronic copy	Temporary	ET/TRA/3	Retain for 40 years after last action.

8. FORMS

Nil

9. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial	-
2	Minor amendments	-
3	Minor amendments	12/09/2003
4	Process addressed in flowchart.	09/12/2009
4.1	Minor update to reflect AQTF 2010	08/02/2011
4.2	Minor update to amend authorities,	20/09/2011
4.3	Amended to reflect NVR requirements.	10/08/2012
4.4	Minor update to reflect section changes ESB to PDESG and QST to TQSS	04/09/2013
4.5	Minor update to reflect approval authority change Chief Superintendent, Education and Services Command to Director, Professional Development and Education Services Group	02/09/2014
5.0	Reviewed and updated to reflect Standards for RTOs 2015.	01/04/2015
5.0	Reviewed	3/9/15
5.1	Minor wording change to 'Purpose' statement.	13/11/2017
5.2	Additional information included in 'scope'. Minor inclusion of information in course coordinator responsibilities.	01/11/2019
5.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Management of RTO Staff Training

QPSRTO 015

Description:	Procedure for the induction and ongoing professional development for RTO staff.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	7.4
Date Approved:	26/9/2022
Date Effective:	26/9/2022
Last Review Date:	26/9/2022
Next Review Date	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by the Training Strategy Group at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Strategy Group intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
   5.3. Course Coordinator (Assessment only Strategies) 3
   5.4. Course Coordinator (Training and Assessment Strategies) 4
6. PROCESS 4
   6.1. Induction 5
   6.2. Trainer and Assessor requirements 5
   6.3. Evidence of trainer and assessor competence 5
   6.4. Professional development of trainers and assessors 5
   6.5. Professional development of Training Quality staff 5
7. RECORDS 5
8. FORMS 5
9. DOCUMENT HISTORY 6

1. PURPOSE

This RTO Quality Assurance Procedure identifies the requirements for trainer and assessor qualifications and experience and outlines the processes for their induction and ongoing professional development.

2. SCOPE

This RTO Quality Assurance Procedure applies to the training requirements of all trainers and assessors employed by the Queensland Police Service who deliver and/or assess Training Product/s on behalf of the QPS RTO.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- QPSRTO 026 Staff Induction
- QPSRTO 010 Recognition of Prior Learning
- Standards for Registered Training Organisation (RTO's) 2015

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- ensuring qualified and skilled staff perform their duties consistently to meet the quality and performance requirements of our clients in compliance with national standards and other regulations.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- ensuring that the course QC1483 Registered Training Organisation (RTO) Induction is available within the Ignite LMS;
- the approval/authorisation of employees endorsed as qualified QPS RTO trainers and/or assessors.

5.3. Course Coordinator (Assessment only Strategies)

Where nationally recognised training products are awarded via an assessment only pathway, the Course Coordinator is responsible for:

- ensuring that assessment against nationally recognised products is only provided by staff who have current industry skills and knowledge and who can undertake all the tasks defined in the elements of competency to industry standards;
- ensuring that the assessment staff are appropriately qualified, and that there are current assessor profiles for each approved assessor;
- maintaining records of assessor qualifications, experience and industry currency;
- ensuring that all assessors undertake professional development in the fields of knowledge and practice of vocational training, learning and assessment and encourage regular attendance at annual educational training conferences;
- maintaining records of any training / professional development pertaining to the delivery of the RTO on Ignite, and update the Facilitator Profiles with these histories and performing annual reviews on staff profiles;

- ensure and maintain evidence that all assessors are regularly exposed to industry workplaces and participate in workplace tasks;
- record results and evidence of engagement with industry to confirm the required skills and knowledge for assessors; and
- provision of supervision where needed, determining the level of supervision required, any requirements, conditions or restrictions considered necessary on the individual's involvement in the collection of assessment evidence.

5.4. Course Coordinator (Training and Assessment Strategies)

Where nationally recognised training products are awarded via a delivery and assessment pathway, the Course Coordinator is responsible for:

- ensuring that training and assessment against nationally recognised products is only provided by staff who have current industry skills and knowledge and who can undertake all the tasks defined in the elements of competency to industry standards;
- ensuring that the training and assessment staff are appropriately qualified, and that there are current trainer and assessor profiles for each approved trainer and assessor;
- maintaining records of trainer and assessor qualifications, experience and industry currency;
- ensuring that all trainers and assessors undertake professional development in the fields of knowledge and practice of vocational training, learning and assessment and encourage regular attendance at annual educational training conferences;
- maintaining records of any training / professional development pertaining to the delivery of the RTO on Ignite, and update the Facilitator Profiles with these histories and performing annual reviews on staff profiles;
- ensure and maintain evidence that all trainers and assessors are regularly exposed to industry workplaces and participate in workplace tasks;
- record results and evidence of engagement with industry to confirm the required skills and knowledge for trainers and assessors; and
- provision of supervision where needed, determining the level of supervision required, any requirements, conditions or restrictions considered necessary on the individual's involvement in the delivery of training and/or collection of assessment evidence.

6. PROCESS

Staff conducting training and/or assessment for nationally recognised training products are required to have:

a) vocational competencies at least to the level being delivered or assessed;
b) current industry skills relevant to the training and assessment being provided; and
c) current knowledge and skills in vocational training and learning that informs their training and assessment

Staff are to undergo an induction into the RTO and respective work unit and undertake professional development to maintain currency in both training and/or assessment and the relevant technical competencies.

6.1. Induction

Each Course Coordinator should induct new facilitators in accordance with QPSRTO 026.

6.2. Trainer and Assessor requirements

Trainers and assessors are to hold the competencies in accordance with the Standards for Registered Training Organisations (RTO's) 2015.

6.3. Evidence of trainer and assessor competence

Each course coordinator should provide and collect facilitator profiles (QPSRTO_015_F1 — available on RTO intranet site). Each Course Coordinator should obtain certified copies of certificates (for qualifications obtained externally) and file with facilitator profiles as per RTO Quality Assurance audit of registered programs procedures.

6.4. Professional development of trainers and assessors

Trainers and/or assessors must undertake ongoing professional development to maintain currency in relation to the following three areas:

(a) VET knowledge and skills, and

(b) Industry currency, and

(c) Trainer/assessor competence.

The Course Coordinator will record any training / professional development / industry exposure pertaining to the delivery of the RTO on Ignite, and update the Facilitator Profiles with these histories. Quality Assurance Procedure QPSRTO028 Industry relevance of training and assessment defines the requirements to maintain industry knowledge and skills.

Course Coordinators, trainers and/or assessors will also have access to all updated relevant RTO procedures, forms, and associated documentation on the QPS Bulletin Board RTO Web site and attend Delivery Unit Network Conferences on a regular basis.

6.5. Professional development of Training Quality staff

When TQ staff attend training that is internal to QPS, the record of the training will be entered on Ignite by the Course Co-ordinator. For professional development that is attended outside of the QPS, the individual staff member will be responsible for recording this professional development in their Staff Profile document in the Staff Profile file.

7. RECORDS

- All training records, for example certificates of attendance, will be retained on the employee's training file for the duration of their employment.
- All records will be retained for a minimum of forty years.
- All records will be classified as 'Confidential'.

8. FORMS

- QPSRTO_015_F1 Facilitator Profile
- QPSRTO_015_F2 Facilitator's Induction Checklist

9. DOCUMENT HISTORY

Version No.	Modification	Date
1	Minor amendments	30/10/2001
2.	Minor amendments	28/02/2002
3.	Minor amendments	29/05/2002
4.	Procedure expanded to include "equivalence"	03/11/2005
5.	Procedure amended to reflect actual process identified as a result of internal audits of delivery units	28/04/2010
6.	Procedure amended to comply with the release of AQTF 2010.	13/10/2010
6.1	Minor changes to authorities and trainer requirements.	16/8/2011
6.2	Procedure amended to reflect NVR requirements.	10/8/2012
6.3	Changes made to reflect changes in QPS structure, PDESG and TQSS name changes throughout document. Changes also made to reflect NSSC determination for trainer and assessor competencies effective from 1 July 2013.	06/08/2013
7.0	Procedure amended to comply with the release Standards for Registered Training Organisation (RTO's) 2015	01/04/2015
7.0	Reviewed and approved.	3/9/15
7.1	Reviewed and 'Selection' removed from title. Change LMS reference from Advance to Ignite.	17/11/2017
7.2	Reviewed by Ed Spink. Minor updates to current trainer/assessor training package references.	11/05/2018
7.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021
7.4	Changes to Coordinator TQ responsibilities. Inclusion of QPSRTO 010 Recognition of Prior Learning in references.	26/9/2022

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Complaints and Appeals

QPSRTO 018

Description:	The process for submitting and investigating complaints, academic appeals and appeals against decisions made by the QPSRTO.
Approval Authority:	Manager, Education and Training services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	6.2
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Last Review Date:	26/9/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
   5.3. Course Coordinator 4
   5.4. Training Manager 4
   5.5. Manager, Education and Training Services (ETS) 4
6. COMPLAINT 4
7. ACADEMIC APPEAL 7
8. APPEAL 10
9. FORMS 12
10. RECORDS 12
11. DOCUMENT HISTORY 12

1. PURPOSE

This procedure is for the efficient and effective management of all client complaints and appeals in relation to the operation of the QPS Registered Training Organisation (RTO).

2. SCOPE

This procedure ensures the principles of natural justice and procedural fairness are adopted at every stage of the complaint and appeal process without bias. It allows the complainant to be heard with access to all relevant information and with the right of reply and allowing those who have had an allegation made against them to provide a response during the investigation of the complaint or appeal. This applies to all persons involved in the design, delivery, assessment and support of all Training Product/s in the QPS RTO.

This document sets out the complaints and appeals procedure to:

a) manage and respond to allegations involving the conduct of:
   i. the RTO, its trainers, assessors or other staff;
   ii. a third party providing services on the RTO's behalf, its trainers, assessors or other staff (if applicable) or;
   iii. a learner of the RTO;

b) manage requests for a review of decisions, including assessment decisions, made by the RTO or a third party providing services on the RTO's behalf.

c) where the complaint is in relation to the behaviour of a member of the Queensland Police Service, the complainant must follow the QPS Complaint and Client Service Reporting requirements located on the Ethical Standards Command (ESC) website.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- QPS Complaint and Client Service Reporting Procedures
- Standards for Registered Training Organisation (RTO's) 2015

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- Ensuring that complaints and appeals in relation to RTO activities which fall outside the scope of the QPS Complaint and Client Service Reporting requirements are dealt with in a timely and fair manner;
- Overviewing the outcomes of any formal complaints and appeals that are dealt with by the QPS RTO.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- reviewing the contents of the complaint and forwarding it on to the appropriate authority for action;
- conducting analysis/investigations into appeals against decisions made by the QPS RTO;
- publishing the staff profile form on the Training Quality intranet site and maintaining currency;
- making recommendations on the outcomes of appeals against decisions;
- recording details in the complaints and appeals register;

- capturing the complaint/academic appeal/appeal against a decision within Objective;
- allocating complaint to relevant person for action; and
- the forwarding of complaints in relation to members of the Queensland Police Service direct to the Complaints Manager in accordance with QPS Complaint and Client Service Reporting requirements.

5.3. Course Coordinator

The Course Coordinator is responsible for ensuring:

- initial complaint is confirmed with the complainant to ensure that all of the details on the complaint form are correct and accurate;
- the complainant is provided with an opportunity to present their case and provide any further evidence to support their case;
- investigations into the complaint are conducted with regard to all allegations and recommendations are made where necessary;
- any discussions and investigations in relation to the complaint are documented;
- the provision of written confirmation of the outcomes of the complaint to the complainant;
- records of the complaint investigations are forwarded to the Training Manager where necessary;
- outcomes of complaints/appeals are forwarded to complainant; and
- a copy of the complaint and outcomes are forwarded to the Coordinator TQ.

5.4. Training Manager

The Training Manager is responsible for ensuring:

- initial enquiries are made to the Course Coordinator in relation to the current status of investigations into the complaint;
- further enquiries are undertaken with the complainant, if necessary;
- further investigations into the complaint allegations are conducted and recommendations are made where necessary;
- written confirmation on the outcomes are passed to the complainant;
- records of complaint investigations are forwarded to the Coordinator TQ where necessary.

5.5. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- convening and chairing formal appeal hearings;
- making final determinations on formal appeals;
- providing written responses of appeal outcomes to appellants.

6. COMPLAINT

6.1 It is recommended that complaints or allegations concerning the delivery unit with reference to 6.2 are to be managed and resolved with the Course Coordinator and/or Training Manager where possible. Actions taken at the local level maximises the potential for early resolution of the issue. If the complainant is dissatisfied with the decision made through local action, then the complainant may progress the complaint to the Coordinator TQ for internal review.

6.2 To register a complaint or allegation involving the conduct of:

a) the QPS RTO, its trainers, assessors or other staff;
b) a third party providing services on the QPS RTO's behalf, its trainers, assessors or other staff or;
c) a learner of the RTO;

The complainant is required to submit a formal complaint in writing using the *Appeals and Complaints Notification Form (QPSRTO 018 F01* and email or post the Form, to the Coordinator, Training Quality or the relevant Course Coordinator. The Coordinator TQ confirms receipt of the application via written correspondence, records details and allocates the complaint to the appropriate person for investigation i.e. the delivery unit (if evidence of 6.1 has not been provided) or TQ.

6.3 The form requests the following information to be provided by the complainant:

a) full name
b) student number and/or payroll number
c) training program attended
d) subject matter
e) name of facilitator
f) date of lodgement of complaint

6.4 The complaint is investigated by appropriate persons to determine a course of action and must be finalised as soon as practicable. A timeframe of thirty (30) calendar days is considered acceptable to resolve the complaint.

6.5 Complaints requiring more than sixty (60) calendar days to process and finalise the complaint from initial receipt of application, notice must be provided to:

a) inform the complainant in writing, including reasons why more than 60 days are required, and
b) regular updates should be provided to the complainant on the progress of the matter.

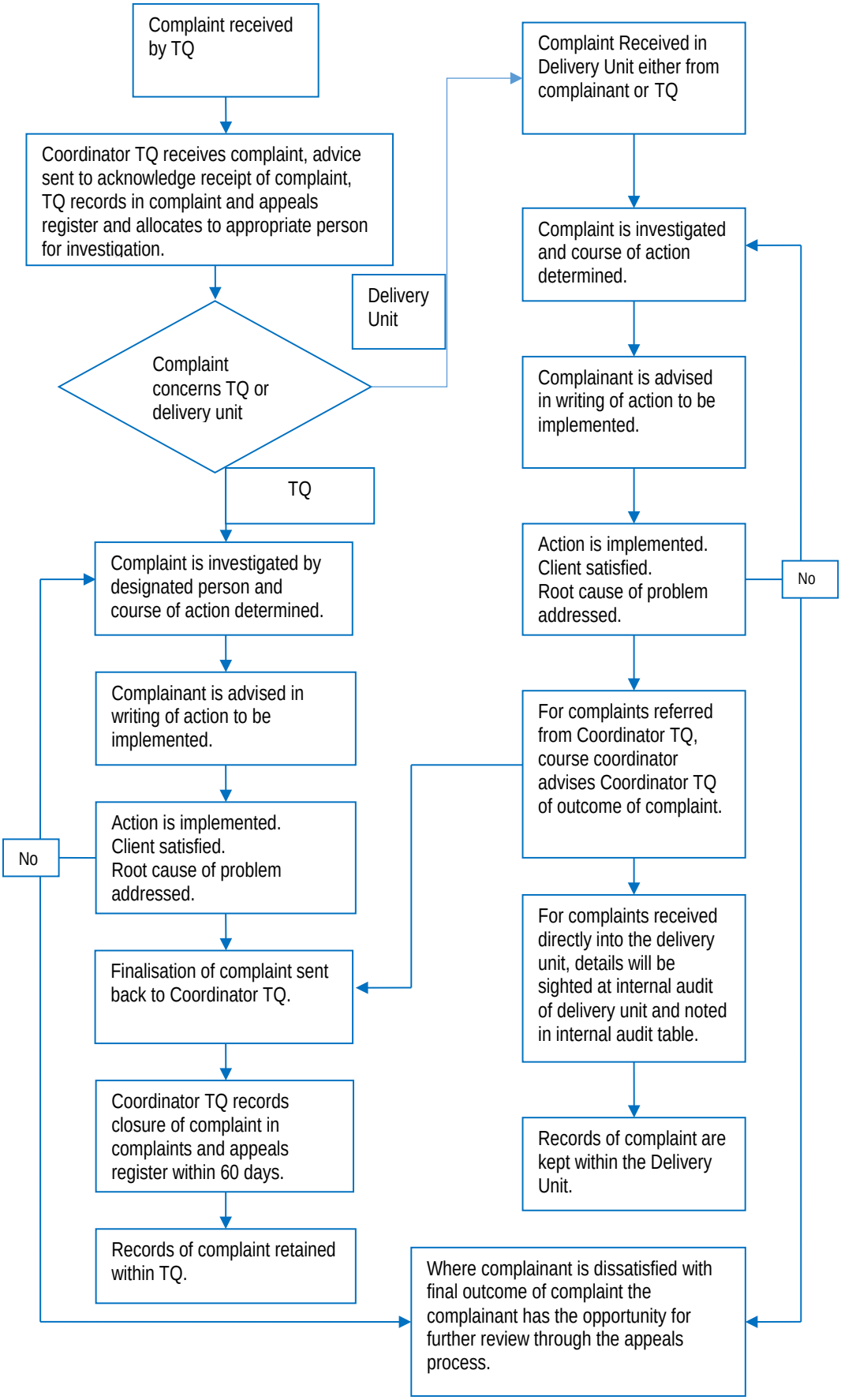
6.6 The complainant is informed of the outcome in writing and TQ records closure ofthe complaint in the complaints and appeals register.

6.7 Complaints received and resolved directly by the delivery unit, will be recorded at local level for sighting at internal audit. Records of complaints will remain within the delivery unit.

6.8 If the complainant is dissatisfied with the decision made at review they may submit a formal appeal within 28 days of the decision being made, by email or post, using the *Appeals and Complaints Notification Form (QPSRTO 018 F01)*, to the Coordinator TQ.

6.9 The complaint is actioned in accordance with the “Complaints flow chart”.

Complaints Flow Chart



7. ACADEMIC APPEAL

7.1. Where the complainant is dissatisfied with an assessment decision by the QPS RTO, third party or partner organisation providing services on behalf of the QPS, the complainant must approach the assessor who made the original assessment decision to discuss the result and negotiate for re-assessment where applicable/necessary.

7.2. The complainant must negotiate with the assessor for a suitable time and place to conduct a re-assessment where applicable/necessary.

7.3 Where the assessor determines that the original assessment decision stands and the appellant remains dissatisfied, he/she may submit a formal appeal against the academic decision using the *Appeals and Complaints Notification Form (QPSRTO 018 F01)*, to Coordinator, Training Quality within 28 days of the original decision being made. The Coordinator TQ confirms receipt of the application via written correspondence, records details and allocates to the appropriate person for investigation i.e. the Course Coordinator or Training Manager (where the Course Coordinator is the original assessor).

7.4 When submitting a formal appeal against an academic decision, the student must provide:

a) their full name
b) student number and/or payroll number
c) training program attending
d) subject matter under appeal
e) date of the assessment
f) name of the assessor
g) reasons in full for the appeal

7.5 The appeal is investigated by appropriate persons to determine a course of action and must be finalised as soon as practicable. A timeframe of thirty (30) calendar days is considered acceptable to resolve the appeal.

7.6 Appeals requiring more than sixty (60) calendar days to process and finalise the appeal from initial receipt of application, notice must be provided to:

a) inform the appellant in writing, including reasons why more than 60 days are required, and
b) regular updates should be provided to the complainant on the progress of the matter.

7.7 The appellant is informed of the outcome in writing and all records are returned to the Coordinator TQ for capturing in the complaints and appeals register.

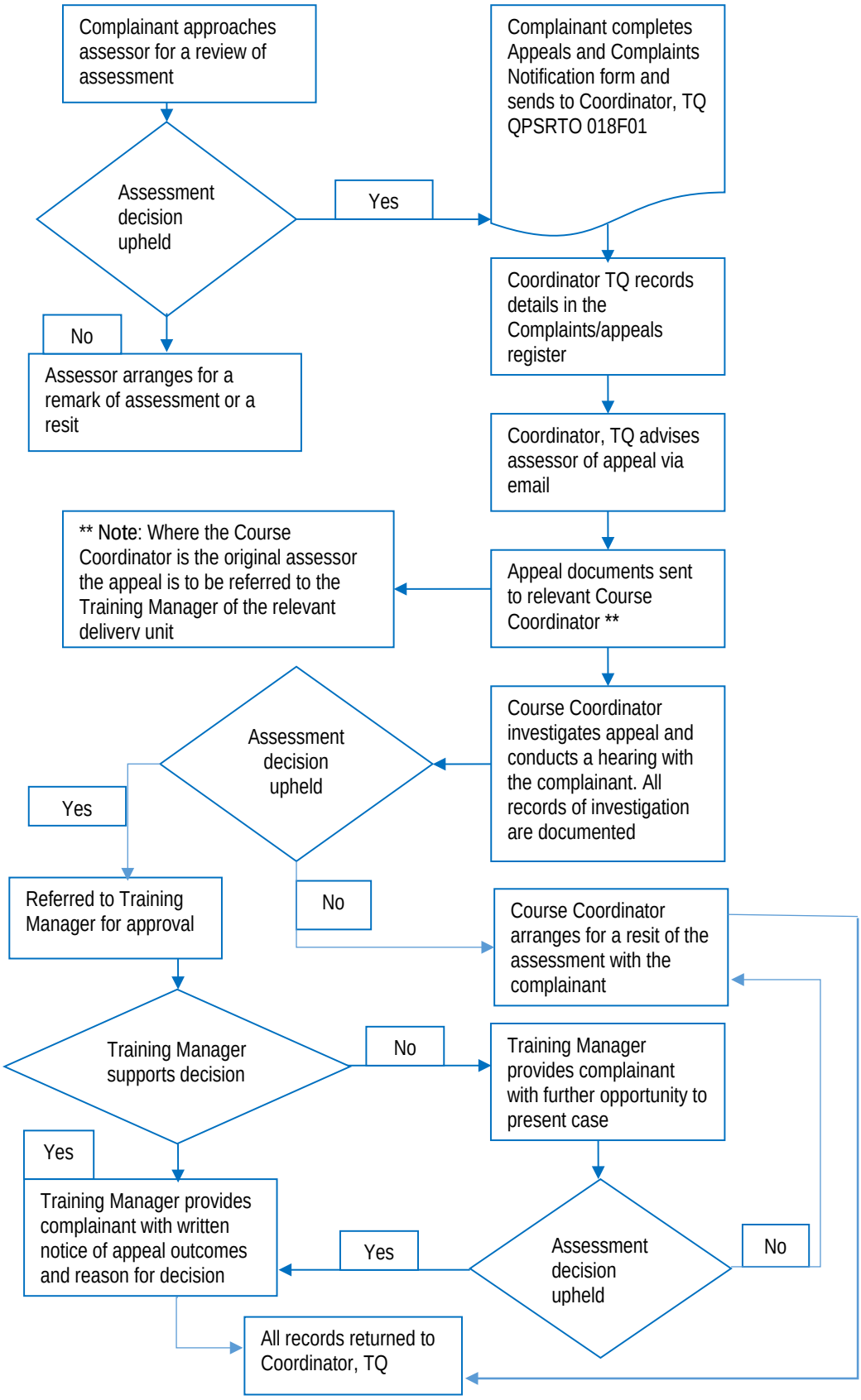
7.8 If the appellant is dissatisfied with the decision made at review by the QPS RTO and have exhausted all avenues through the internal appeal handling procedure, they may refer their grievances to the following external agencies: ASQA (online complaints form) or the National Training Complaints Hotline, phone number 13 38 73 for an independent review.

7.9 The Academic Appeal is conducted in accordance with the "Academic Appeal Flow Chart".

Note: Where a re-assessment is required, the Training Manager must request that the Course Coordinator find an appropriately qualified assessor to conduct a re-assessment of the

complainant. This may be conducted by the Course Coordinator if they are suitably qualified. They must then negotiate and mutually agree suitable arrangement for the re-assessment with the complainant.

Academic Appeal Flow Chart



8. APPEAL

8.1 Where a complainant is not satisfied with a decision made by the QPS RTO, third party or partner organisation providing services on behalf of the QPS (including unresolved complaints or academic appeals) the appellant may submit a formal appeal within 28 days of the decision being made, by email or post, using the Appeals and Complaints Notification Form (QPSRTO 018 F01), to the Coordinator, Training Quality.

8.2 The student must provide:

a) their full name
b) student number and/or payroll number
c) training program attending
d) decision under appeal
e) date of the decision
f) name of the original decision maker
g) reasons in full for the appeal

8.3 The Coordinator TQ confirms receipt of the application via written correspondence, records details and forwards the appeal to the Manager ETS to arrange for a formal hearing between the appellant and Coordinator TQ.

8.4 The Manager ETS may make a decision on the day of the hearing or within 5 days of the hearing. However a timeframe of thirty (30) days is considered acceptable to resolve an appeal, and every effort is made to finalise the process as soon as practicable.

8.5 If an appeal cannot be resolved within sixty (60) days of the appeal initially received, notice must be provided to:

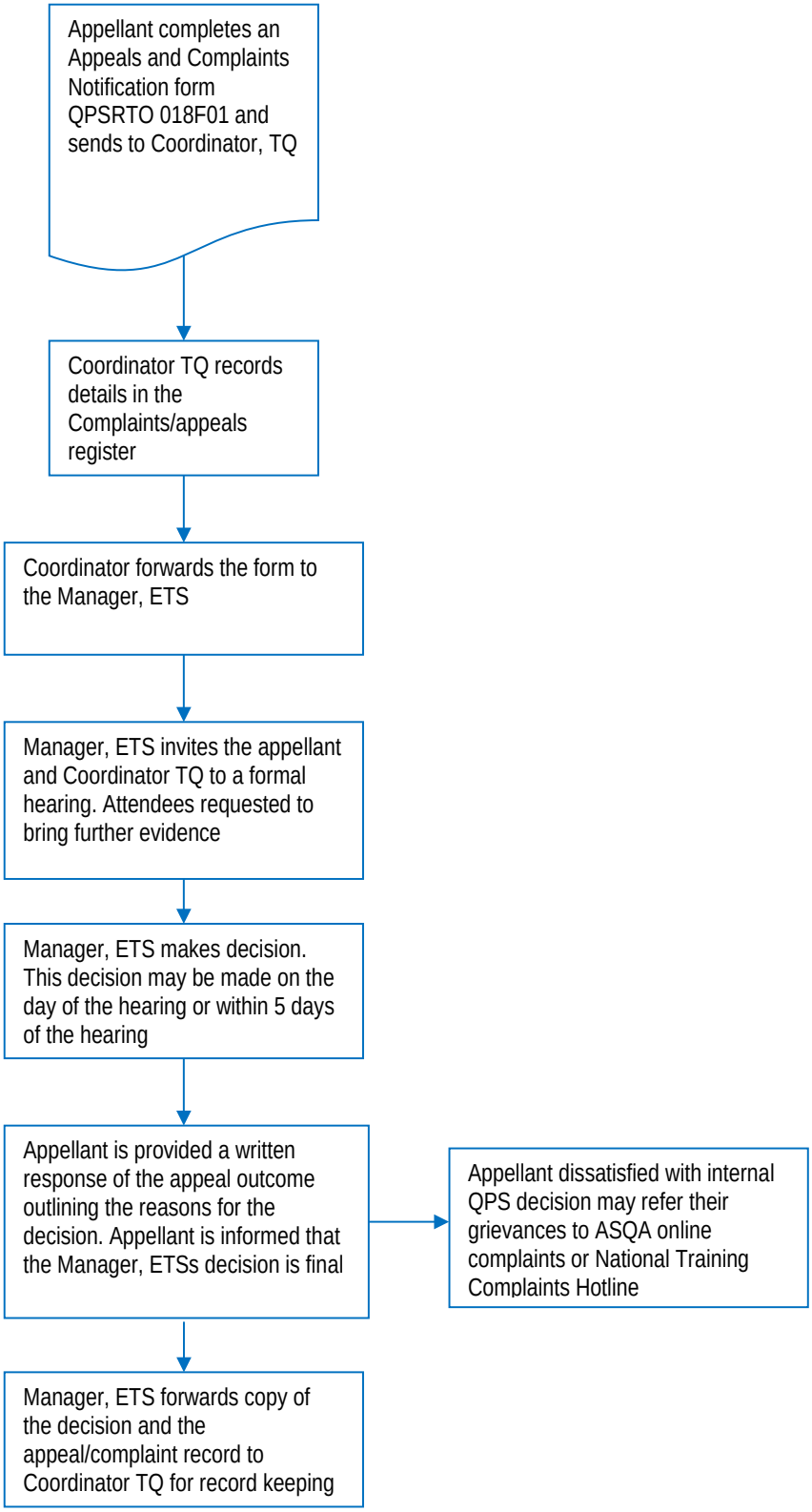
a) inform the appellant in writing, including reasons why more than 60 calendar days are required, and
b) regular updates should be provided to the appellant on the progress of the matter.

8.6 The appellant is informed of the outcome of the decision in writing and all records are returned to Coordinator TQ for capturing in the complaints and appeals register.

8.7 If the appellant is dissatisfied with the decision made at review by the QPS RTO and have exhausted all avenues through the internal appeal handling procedure, they may refer their grievances to the following external agencies: ASQA (online complaints form) or the National Training Complaints Hotline, phone number 13 38 73 for an independent review.

8.8 The Appeal will be conducted in accordance with the “Appeal Flow Chart”.

Appeal Flow Chart



9. FORMS

- QPSRTO 018 F01 Appeals and Complaints Notification Form

10. RECORDS

The QPS RTO securely maintains records of all complaints and appeals and their outcomes, and identifies potential causes of complaints and appeals and takes appropriate corrective action to eliminate or mitigate the likelihood of reoccurrence. This is captured in the continuous improvement register.

The Coordinator TQSS records details in the complaints/appeals register and the following records are maintained by the QPS RTO:

a) Completed complaint files
b) Completed Academic Appeal files
c) Completed Appeal files

11. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial Version	06/11/2001
2	Minor amendment	23/06/2004
3	Minor amendment	30/10/2005
4	Minor amendment	25/03/2008
5	Minor amendment	10/08/2009
5.1	Minor amendments to authorities.	20/09/2011
5.2	Procedure amended to reflect NVR requirements.	10/08/2012
5.3	Minor amendments to section name changes. ESB changed to PDESG and QST changed to TQSS.	03/09/2013
6.0	Minor procedure amendments and updated to reflect Standards for Registered Training Organisations (RTOs) 2015 requirements.	01/04/2015
6.0	Reviewed and approved – replace CDU with ESU	3/9/15
6.1	Update to QPS ESC Complaint and Client Service Reporting	17/11/2017
6.2	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Student Fees and Refunds

QPSRTO 019

Description:	Procedure for the refund of client fees paid for vocational education and training services.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	2.2
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Last Review Date:	26/9/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITY 3
   5.1. Manager, Business and Partnerships (BP) 3
6. PROCESS 3
   6.1. Establishment of memorandum of understanding 3
   6.2. Fees and refund arrangements 3
   6.3. Tuition Fees 4
   6.4. Protection of fees paid in advance 4
7. DOCUMENT HISTORY 4

1. PURPOSE

The purpose of this procedure is to outline the process for negotiating fees and fee refunds in circumstances where the QPS Registered Training Organisation delivers Training Product/s within its scope of registration to approved external clients.

2. SCOPE

This procedure only applies to approved external clients where the QPS RTO charges a fee for the delivery of training.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- Standards for Registered Training Organisations (RTOs) 2015
- QPS Administration Manual
- Financial Management Practice Manual

5. RESPONSIBILITY

5.1. Manager, Business and Partnerships (BP)

The Manager BP is responsible for:

- Negotiating and establishing the fee and refund clauses of the Memorandum of Understanding for the provision of vocational education and training to external clients; and;
- Ensuring that the Memorandum of Understanding is signed by authorised signatories prior to the delivery of vocational education and training.

6. PROCESS

6.1. Establishment of memorandum of understanding

a) The Manager BP will ensure that a Memorandum of Understanding has been developed and signed by the authorised signatories prior to the delivery of vocational education and training to external clients.

b) Memorandums of Understanding are to be developed in accordance with the QPS Administration Manual.

6.2. Fees and refund arrangements

a) The Manager BP is to ensure that the Memorandum of Understanding clearly outlines the fee and refund arrangements established in relation to the delivery of the vocational education and training.

b) Where possible, the fee and refund arrangements are to be established by the Manager BP in consultation with the relevant external department, organisation or agency.

c) Fees for the design and development of training products are managed separately from fees associated with training delivery.

d) Fees are charged to external departments, organisations or agencies and not to individual learners or prospective learners.

e) Refunds will be processed in line with the requirements of the Financial Management Practice Manual.

6.3. Tuition Fees

a) The QPS does not charge its employees tuition fees.

b) For training provided to external participants, specific arrangements relating to tuition fees (if any), will be included in the Memorandum of Understanding.

6.4. Protection of fees paid in advance

Any fees paid to the QPS in advance by external departments, organisations or agencies for vocational education and training will be deposited into a bank account in the name of the Queensland Police Service.

7. DOCUMENT HISTORY

Version No.	Modification	Date
1.0	Procedure approved by C/Sup McCarthy	28/09/2011
1.1	Procedure updated to reflect NVR changes.	10/08/2012
1.2	Procedure updated to reflect organisational naming changes and approval authorities.	17/03/2014
2.0	Reviewed and updated to reflect organisational name changes and Standards for Registered Training Organisations (RTOs) 2015.	01/05/2015
2.1	Updated reference from Manager, Business and Resource Management to Manager, Business Improvement.	20/11/2017
2.2	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Staff Induction

QPSRTO 026

Description:	Procedure to be utilised for the induction of staff into the QPS Registered Training Organisation.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	4.3
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Last Review Date:	26/9/2022
Next Review Date:	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Course Coordinator 3
   5.2. Coordinator, Training Quality (TQ) 3
6. PROCESS 3
   6.1. Conduct Induction – Delivery Units 3
   6.2. Training Quality Staff Induction 4
   6.3. Capture record 4
6. FORMS 6
7. DOCUMENT HISTORY 6

1. PURPOSE

The purpose of this quality assurance procedure is to outline the process required for the induction of persons who are involved in training, assessments or client services on behalf of the QPS RTO.

2. SCOPE

This procedure applies to all persons involved in the delivery, assessment and support of Training Product/s within the QPS RTO. This procedure should be read in conjunction with the QPS Standard: Induction and Orientation.

3. DEFINITIONS

Refer to Quality Manual for definitions.

4. REFERENCES

- Standards for Registered Training Organisations (RTOs) 2015
- QPS Standard: Induction and Orientation

5. RESPONSIBILITIES

5.1. Course Coordinator

Course Coordinators are responsible for:

- Ensuring that all employees involved in training and/or assessment or client service of Training Product/s on behalf of the QPS RTO undertake an appropriate induction which at a minimum includes completion of QC1483 Registered Training Organisation (RTO) Induction;
- Ensuring staff have access to the delivery unit policies, procedures and documentation;
- Ensuring that work instructions established in delivery units are used to implement the requirements specified in the RTO procedures, and that new employees involved in training and assessment have continual access to the latest versions;
- Any work instructions developed to implement the induction program are documented; and the
- Ensuring the roles and responsibilities of the new employee in the delivery unit, are clearly documented.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Ensuring that the course QC1483 Registered Training Organisation (RTO) Induction is available within the Ignite LMS;
- Monitoring that staff involved in the management and maintenance of RTO operations complete course QC1483 Registered Training Organisation (RTO) Induction. Ensuring that the information materials within the course QC1483 Registered Training Organisation (RTO) Induction are monitored and updated from time to time.

6. PROCESS

6.1. Conduct Induction – Delivery Units

Course Coordinators are to ensure that all new staff involved in the delivery, assessment or administration of training products offered by the QPS complete the course QC1483 Registered Training Organisation (RTO) Induction. This induction program includes information on:

a) the requirements of the Standards for Registered Training Organisations (RTOs) 2015;
b) the requirements of the AQF;
c) competency based training and assessment;
d) training packages (specifically those within the QPS RTO scope of registration);
e) vocational education and training requirements;
f) responsibilities for access and equity;
g) accredited courses;
h) policies and procedures of the QPS RTO;
i) learning and assessment strategies of the qualifications applicable to the delivery unit; and
j) relevant legislation.

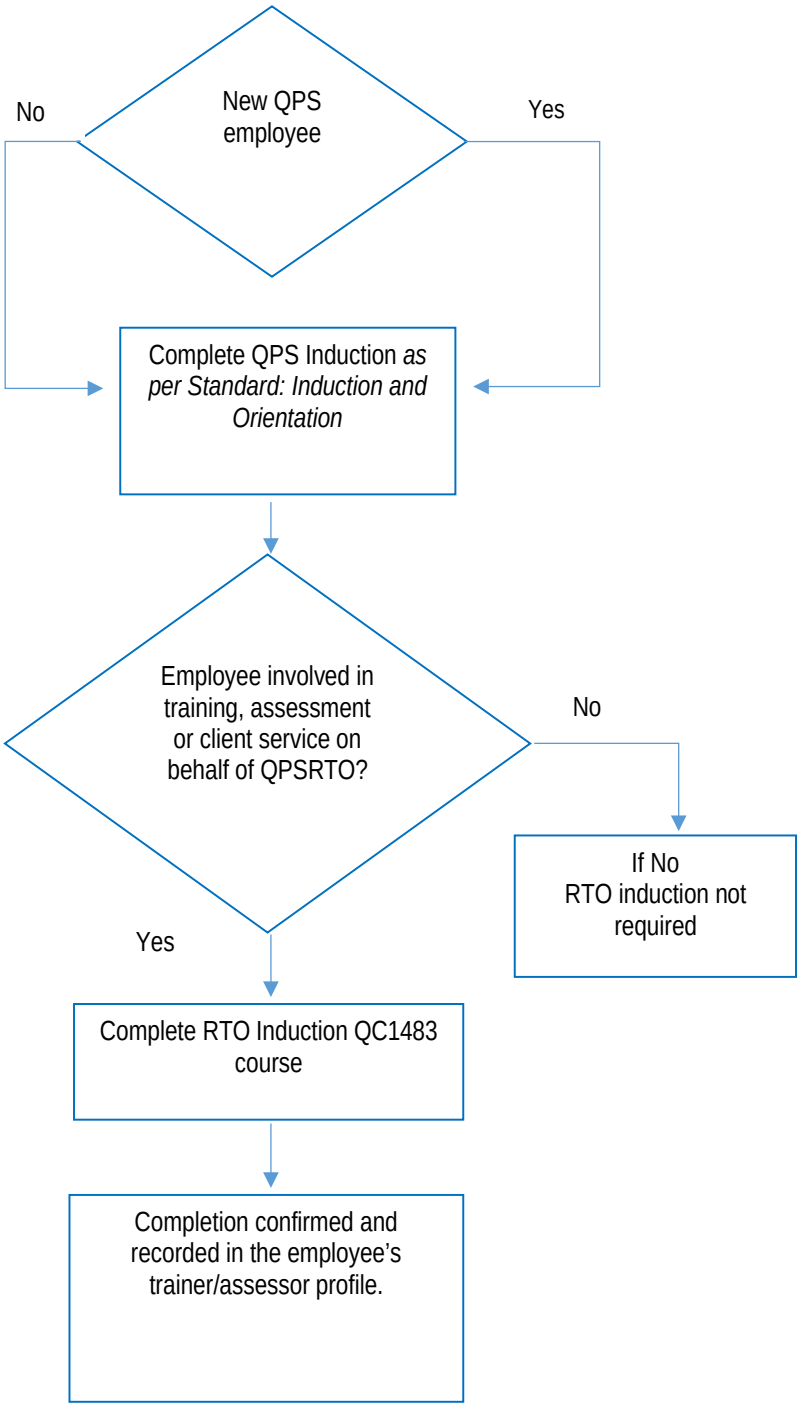
6.2. Training Quality Staff Induction

The Coordinator TQ is to monitor that all new TQ staff complete the course QC1483 Registered Training Organisation (RTO) Induction as soon as practicable after commencing duties within the section.

6.3. Capture record

Course Coordinators are to ensure that staff profiles for approved trainers and/or assessors are updated to record completion of the course QC1483 Registered Training Organisation (RTO) Induction.

Flowchart – Induction Process



6. FORMS

Nil

7. DOCUMENT HISTORY

Version No.	Modification	Date
3	Minor amendments	18/09/2009
3.1	Minor amendments to authorities, DET definition and AQTF title.	20/09/2011
3.2	Minor wording changes in relation to references to HRM Manual Chapter 5, Induction and Orientation. Amendments in scope and 6.1.3.	11/10/2011
3.3	Procedure amended to reflect NVR requirements. Branch name updated.	10/08/2012
3.4	Names of units sections updated. Update of HR policy. Change of Learning and Assessment Strategy to 'Training and Assessment Strategy'.	18/07/2013
4.0	Sect 4 and Sect 6 Updated to reflect requirements of Standards for Registered Training Organisations (RTOs) 2015 and organisational name changes.	01/04/2015
4.1	Details of new induction course included.	29/11/2017
4.2	Minor amendment to wording of 6.3.	21/11/2019
4.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Management of Enrolment Records

QPSRTO 027

Description:	Procedure for ensuring that provide training delivery, assessments or client services on behalf of the QPSRTO maintain up-to-date records of enrolments.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Version Number:	5.2
Date Approved:	29/4/2021
Date Effective:	29/4/2021
Latest Review Date:	26/9/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]8, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Coordinator, Training Quality (TQ) 3
   5.2. Coordinator, Ignite Service Centre (ISC) 3
   5.3. Course Coordinator 3
6. PROCESS 3
   6.1. Enrolment Process (QPS Employees) 3
   6.2. Enrolment Process (Non-QPS Employees) 4
7. PARTICIPATION RECORDS 4
8. DOCUMENT HISTORY 4

1. PURPOSE

The purpose of this procedure is to ensure that persons who provide training delivery, assessments or client services on behalf of the QPS RTO maintain up-to-date records of enrolments.

2. SCOPE

This procedure applies to all persons involved in the delivery, assessment and support of Training Product/s in the QPS RTO.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- Ignite User Guides
- Standards for Registered Training Organisations (RTOs) 2015
- QPSRTO002 Certification & Issuing of Qualifications and Statements of Attainment

5. RESPONSIBILITIES

5.1. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Ensuring requests for the creation of enrolment records for non-QPS participants within the Ignite Learning Management System are processed in a timely manner.

5.2. Coordinator, Ignite Service Centre (ISC)

The Coordinator ISC is responsible for:

- Ensuring requests for the creation of non-QPS participant record in the non-Aurion system are submitted and processed in a time manner;
- Advising the Coordinator TQ when the relevant request has been actioned.

5.3. Course Coordinator

The Course Coordinator is responsible for:

- Ensuring the QPS enrolment process for approved applications for a qualification or accredited course from QPS employees is carried out in accordance with this procedure;
- Ensuring that enrolment requests for approved non-QPS participants are forwarded to the Coordinator TQ as soon as reasonably practicable after the enrolment is accepted;
- Ensuring that all required information is provided or available to participants prior to enrolment or the commencement of training, whichever comes first;
- Ensuring that records of a participant progress are kept up to date within the approved training database.

6. PROCESS

6.1. Enrolment Process (QPS Employees)

- Enrolment records for nationally recognised training outcomes are captured within the associated QPS training program (QC) Ignite courses.

- A milestone within the QPS training program (QC) Ignite course records both the acceptance of enrolment into, and the subsequent assessment outcome for the Training Product/s or accredited course for a participant.
- Only participants meeting the relevant enrolment eligibility criteria (based on job role requirements) are to be enrolled in a Training Product/s or accredited courses.
- The relevant QPS course coordinator maintains final approval regarding the acceptance of a participant's enrolment in Training Product/s or accredited courses.
- Current and accurate information regarding the training and assessment or assessment only pathway for the Training Product/s is available for prospective participants prior to enrolment in the qualification or accredited course via the Training Quality intranet site.

6.2. Enrolment Process (Non-QPS Employees)

- Only approved participants from partner organisations, who meet the relevant enrolment eligibility criteria (based on job role requirements), are to be enrolled in a Training Product/s or accredited courses.
- Course Coordinators are to forward requests for the creation of a profile within the Ignite LMS for all approved non-QPS employees to the Coordinator ISC for processing.
- Upon notification that the profile has been created, the Course Coordinator will complete the required data entry tasks associated with the non-QPS employee's enrolment, including the distribution of a participant's certification.
- The Coordinator TQ will monitor all non-QPS employee's enrolments to ensure they comply with established quality assurance procedures.

7. PARTICIPATION RECORDS

- Participant's records within the Ignite LMS are to be updated in line with the achievement of Training Product (i.e. units of competency, accredited courses) within a reasonable time after the relevant assessment decision has been made.
- Upon the achievement of all required components of a Training Product, the participant's record in the approved training database is to be updated as soon as practicable.
- Marking of the relevant milestone within the QPS training program (QC) Ignite course will capture the assessment decision as well as generate the nationally recognised certification within the Ignite Learning Management System.

8. DOCUMENT HISTORY

Version No.	Modification	Date
3	Updated from previous procedure.	February 2010
3.1	Updated AQTF and HRDB references. Approved by Chief Superintendent A C McCarthy	September 2011
3.2	Updated to reflect NVR standards and Branch name changes.	August 2012
3.3	Updated to reflect changes from ESB to PDESG and QST to TQSS	July 2013

4.0	Reviewed and updated to reflect requirements of Standards for Registered Training Organisations (RTOs) 2015 and organisational name changes.	1/4/2015
5.0	Procedure updated to include the enrolment of non-QPS employees within the Ignite LMS.	10/11/2017
5.1	Procedure reviewed an amended to reflect Ignite milestone recording for nationally recognised training outcomes.	25/11/2019
5.2	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

QPS RTO Quality Assurance System

Industry Relevance of Training Assessment and Delivery

QPSRTO 028

Description:	Procedure for the maintaining industry relevance of training products within the QPS RTO in accordance with the Standards for Registered Training Organisations 2015
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Revision Number:	3.5
Date Approved:	26/9/2022
Date Effective:	26/9/2022
Last Review Date:	26/9/2022
Next Review Date:	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Course Coordinators, Delivery Units 3
6. PROCESS 3
   6.1 Maintaining industry relevance 3
   6.1. Process for industry engagement 4
   6.2. Utilisation of industry engagement outcomes 4
7. INDUSTRY ENGAGEMENT FLOW CHART 5
8. ISSUE/RETENTION OF DOCUMENTS 5
9. FORMS 5
10. DOCUMENT HISTORY 5

1. PURPOSE

The purpose of this procedure is to outline the process for maintaining, revising and updating training and/or assessment strategies and practices to ensure continued industry relevance.

Evidence of industry engagement, and how the outcomes of industry engagement have been systematically utilised to ensure the relevance of training and assessment, is required to be presented during an internal audit conducted by the Training Quality (TQ) or during an external audit by the Australian Skills Quality Authority (ASQA).

2. SCOPE

This procedure applies to QPS course coordinators that are responsible for industry engagement activities and ensuring the industry relevance of training programs they administer.

Any work processes, guidelines or instructions developed by QPS delivery units used to validate training assessment and training delivery strategies must adhere to the scope of this quality assurance document.

3. DEFINITIONS

Refer to Quality Manual for definitions

4. REFERENCES

- Standards for Registered Training Organisations (RTOs) 2015.
- QPS RTO Delivery Unit Training and/or Assessment Strategy.
- QPS_RTO_014 Record Keeping (Assessment).

5. RESPONSIBILITIES

5.1. Course Coordinators, Delivery Units

The Course Coordinator is responsible for ensuring that:

- industry engagement activities are conducted in accordance with this quality assurance procedure;
- the actual procedure for industry engagement activities is conducted in accordance with the procedure outlined in the Training and/or Assessment Strategy for the relevant training product;
- the outcomes of industry engagement activities are recorded in an Industry Engagement Log (or similar document) and systematically utilised by the training program to assist in maintaining industry relevance;
- evidence of industry engagement and the outcomes can be produced during an internal audit conducted by the Training Quality or during an external audit conducted by ASQA.

6. PROCESS

6.1 Maintaining industry relevance

To maintain industry relevance of training and assessment strategies, practices and resources:

- Industry engagement activities must be conducted at least annually.

- The intended method/s for industry engagement must be documented in the delivery units Training and/or Assessment Strategy.
- The actual conduct of industry engagement activities must be consistent with what is documented in the Training and/or Assessment Strategy.
- Evidence that industry engagement has been performed consistently in line with the Training and/or Assessment Strategy, must be retained for presentation during an internal or external audit or validation activity.
- Evidence of the systematic use of industry engagement outcomes must be retained for presentation during an internal or external audit or validation activity.
- Should changes to training and assessment practices be identified through the industry engagement process, these are to be captured and recorded within established continuous improvement processes.

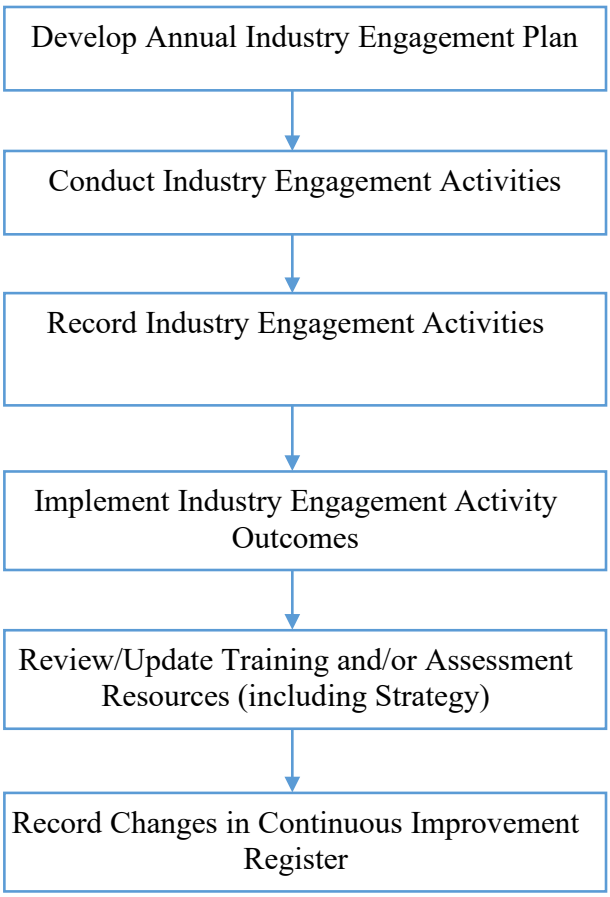
6.1. Process for industry engagement

- When conducting industry engagement, relevant internal and external stakeholders and/or industry experts who are noted in the Training and/or Assessment Strategy, must be consulted.
- Records of industry engagement activities are to be recorded in the Industry Engagement Log (or similar document).
- Delivery and assessment methodologies and processes and resources must be reviewed, compared and evaluated to ensure consistency in assessment and compliance with industry best practice.
- All aspects of training and assessment strategies and practices, including the currency of trainers and assessors, must be considered when conducting industry engagement activities.
- Documentary evidence of industry engagement activities outlined in the Training and/or Assessment Strategy, and subsequent outcomes, must be kept.
- Documentary evidence may include but is not limited to:
    a) records/minutes of industry engagement meetings with nominated stakeholders;
    b) documented feedback from clients regarding assessment methodologies and tools;
    c) methods for ongoing reviews (e.g. guidelines, work instructions);
    d) copies of meeting minutes, memos and emails explaining the changes to training and assessment practices and instruments;
    e) documented approvals.

6.2. Utilisation of industry engagement outcomes

- The outcomes of industry engagement activities are to be used to ensure the ongoing industry relevance of training and/or assessment strategies.
- Information collected from industry engagement activities is to be analysed in order to identify opportunities for improvement in training and/or assessment practices.
- Amendments are to be made to the relevant training and/or assessment documentation (if required) to reflect the improvements made as a result of the outcomes of industry engagement activities.
- Previous versions of the training and/or assessment documentation are to be maintained to show changes/improvements.

7. INDUSTRY ENGAGEMENT FLOW CHART



8. ISSUE/RETENTION OF DOCUMENTS

- Superseded copies of materials for training delivery and/or assessment must be retained by QPS and approved partnership delivery unit's accordance with the QPS Records Retention and Disposal Schedule.

9. FORMS

- QPSRTO 028 F01 Industry Engagement Log

10. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial document	30/10/2005
2.	Process amended to reflect delivery units processes	09/12/2009
2.1	Minor amendments to authorities, TAS and AQTF title	20/09/2011
2.2	Amended to reflect NVR changes and Branch name changes.	10/08/2012
2.3	Amended to reflect structural name changes and approval authority.	17/03/2014
3.0	Updated to reflect requirements of Standards for Registered Training Organisations (RTOs) 2015 and organisational	01/04/2015

	name changes. National qualifications and accredited courses changed to training products. Moved reference section from section 5 to section 3 as this is consistent with other QAs.	
3.1	Reviewed and approved – adjust description	3/9/2015
3.2	Reference to APO (Approved Partner Organisation) removed. Flow chart added.	21/11/2017
3.3	Minor amendments to Training Strategy unit titles.	12/12/2018
3.4	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021
3.5	Inclusion after Industry Engagement Log the words 'or similar document' to allow flexibility in the recording of industry engagement activities and follow up.	26/9/2022

QUEENSLAND POLICE SERVICE

Quality Assurance Procedure

Unique Student Identifier

QPSRTO029

Description	This procedure identifies the requirement and management of unique student identifiers by the QPSRTO in accordance with the Standards for Registered Training Organisations (RTO) 2015
Approval Authority	Manager, Education and Training Services
Document Custodian	Coordinator, Training Quality
Revision Number:	1.3
Date Approved	29/4/2021
Date Effective	29/4/2021
Last Review Date:	26/9/2022
Next Review Date:	December 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
6. UNIQUE STUDENT IDENTIFIER (USI) 3
7. PROCESS 4
8. PROCEDURE 4
9. DOCUMENT HISTORY 4

1. PURPOSE

The purpose of this procedure is to identify the requirements and process for the management of Unique Student Identifiers (USI) by the QPS RTO.

The USI scheme allows learners to access a single online repository of their Australia-wide VET achievements.

2. SCOPE

The QPS RTO is currently exempt from reporting on USI data. This means that any nationally recognised training undertaken by learners under the scope of the QPS RTO will not be recorded against individual learners' USIs.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- Standard for Registered Training Organisations (RTOs) 2015
- Australian Government USI website

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- Monitoring the USI exemption provided to the QPS and approving the submission of further exemptions applications as necessary.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- Ensuring that information regarding the USI exemption provided to the QPS and its impact on a participants national VET transcript is readily available and current to QPS RTO clients.

6. UNIQUE STUDENT IDENTIFIER (USI)

The USI scheme came into effect as of 1 January 2015 all students undergoing nationally recognised training need to have a Unique Student Identifier (USI). This includes students doing Vocational Education Training (VET) in schools. The USI will be able to capture information as of 1 January 2015 and will be unable to capture information about training undertaken before 1 January 2015. As such information is retrospective to the commencement of the scheme and the system is not designed to back-capture training completed before 2015.

The Unique Student Identifier (USI) is a reference number made up of numbers and letters and can be created for free on the USI website. The USI is a secure online record of a learner's nationally recognised training that can be accessed anytime and anywhere. The USI is linked to the National Vocational Education and Training (VET) Data Collection, which means that nationally recognised training and qualifications gained anywhere in Australia from different training organisations will be kept together for individual learners. (www.usi.gov.au/)

7. PROCESS

7.1 Obtaining a USI

Individuals are able to obtain a Unique Student Identifier by logging onto the USI website www.usi.gov.au. Individuals requiring a USI are responsible for creating their own, the USI website provides detailed information on how to achieve this simple process.

7.2 Individual Exemptions for Students

Individuals who have a genuine personal objection to being assigned a USI can apply for an exemption to the Student Identifiers Registrar. Further information and how to obtain an individual exemption can be found on the USI website (www.usi.gov.au).

7.3 QPS RTO USI exemption

Presently the QPS RTO has an exemption from reporting on USI data. This means that any nationally recognised training undertaken by learners under the scope of the QPS RTO will not be recorded against individual learners' USI.

Nationally recognised training undertaken outside of the QPS (e.g. First Aid training) will require learners to provide a verified USI number prior to any certificate or qualification being issued. In some cases this may mean that you can complete the training but will not receive your qualification or certificate until you provide your USI number to the RTO.

The QPSRTO will continue to issue VET qualifications and statement of attainments.

The QPSRTO will continue to maintain records.

8. PROCEDURE

The QPSRTO currently issues VET qualifications and statement of attainments to learners and maintains records in compliance with the Standards for Registered Training Organisations RTOs) 2015 in an approved training database.

If an individual who has been issued with a USI chooses to record their USI number within the Ignite LMS they are able to do so via the following:

- Login to the Ignite LMS as a participant;
- Click on their name in the right-hand top corner;
- Open the Personal Profile tab;
- Click on the Other Info. tab;
- Click the modify button;
- Enter the Unique Student Identifier in the relevant field;
- Click save.

9. DOCUMENT HISTORY

Version No.	Modification	Date
1.0	New procedure	18/11/15
1.1	Updated to reflect ability for participants to record USI in Ignite LMS.	21/11/2017

1.2	Section 8 amended to remove reference to having had to complete NRT with QPS prior to being able to record USI in Ignite system.	25/11/2019
1.3	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	29/4/2021

EXHIBIT 5

[redacted]

[redacted]

EXHIBIT 6

Code	Title	Start date	3 years	5 years	Previous Validatation Date/s	Scheduled Validatation Date	Outcomes/Comments
POL54115	Diploma of Forensic Investigation	30/10/2015	30/10/2018	30/10/2020	24/11/15, 27/11/2018, 29/4/2022	New qualification ready for national endorsement	Rectifications required. Refer to report.
POL65115	Advanced Diploma of Police Investigation	30/10/2015	30/10/2018	30/10/2020	09/10/2018, 4/11/2021		Rectifications required. Refer to report.
POL87115	Graduate Certificate in Police Prosecution	30/10/2015	30/10/2018	30/10/2020	06/06/16, 25/09/2018	After 4 July 2022	
POL21115	Certificate II in Community Engagement	28/04/2017	28/04/2020	28/04/2022	16/08/2018	Sem 2 2022	Rectifications required. Refer to report.
POL31215	Certificate III in Police Liaison	28/04/2017	28/04/2020	28/04/2022	27/09/2019		Rectifications required. Refer to report.
POL50118	Diploma of Policing	12/02/2018	12/02/2021	11/02/2023	15/10/2020		Rectifications required. Refer to report.
10755NAT	Course in Interviewing Children and Recording Evidence (ICARE)	01/01/2019	01/01/2022	01/01/2024	29/10/2020		Rectifications required. Refer to report.
MAR10220	Certificate I in Maritime Operations (General Purpose Hand Near Coastal)	27/10/2020	27/10/2023	27/10/2025	10/12/2021		Rectifications required. Refer to report.
POL60219	Advanced Diploma of Police Intelligence Operations	30/11/2020	30/11/2023	30/11/2025	N/A	In progress	Replacement Qualification
10806NAT	Course in Personal Awareness, Responsibility and Resilience (Project Booyah - RESPECT)	31/05/2021	31/05/2024	31/05/2026	New course	Sem 2 2022	New accredited course
POL50218	Diploma of Police Bomb Technical Response	06/09/2021	06/09/2024	06/09/2026	New qualification		New qual on scope
POL58121	Diploma of Police Search and Rescue Coordination (Marine/Land)	21/09/2021	21/09/2024	21/09/2026	Transition		Transition from POL58115
POL60421	Advanced Diploma of Police Search and Rescue Management	21/09/2021	21/09/2024	21/09/2026	Transition		Transition from POL60419
POL60521	Advanced Diploma of Police Witness Protection	21/09/2021	21/09/2024	21/09/2026	Transition		Transition from POL60519
POL62115	Advanced Diploma of Human Source Management	23/11/2021	23/11/2024	23/11/2026	New qualification	February 2023	New qual on scope

EXHIBIT 7

Quality Assurance Procedure

Systematic Validation of Assessment Practices and Judgements

QPSRTO 007

Description:	Procedure for the systematic validation of assessment practices and judgements of Training Product/s delivered by, or on behalf of, the QPS RTO as part of the continuous improvement process.
Approval Authority:	Manager, Education and Training Services
Document Custodian:	Coordinator, Training Quality
Objective Number:	
Revision Number:	6.0
Date Approved:	29/4/2021
Date of last review:	21/09/2022
Next Review Date:	July 2023

This document is uncontrolled when printed

This quality assurance procedure is reviewed by Education and Training Services at least annually. Only sections that possess controlled copies of this quality assurance procedure will be notified of any modifications or changes. The practice of saving uncontrolled copies of quality assurance procedures on local computer servers or hard drives is discouraged. The most current version of this quality assurance procedure is accessible from the Training Quality intranet site.

Enquiries regarding the application, interpretation or obtaining controlled copies of this quality assurance procedure are to be directed to the Coordinator, Training Quality, [redacted]

Contents

1. PURPOSE 3
2. SCOPE 3
3. DEFINITIONS 3
4. REFERENCES 3
5. RESPONSIBILITIES 3
   5.1. Manager, Education and Training Services (ETS) 3
   5.2. Coordinator, Training Quality (TQ) 3
   5.3. Lead Validator 4
   5.4. Course Coordinator 4
6. PROCEDURE FOR CONDUCTING ASSESSMENT VALIDATION 4
   6.1. QPSRTO Assessment Validation Schedule 4
   6.2. Appointment of Lead Validator 5
   6.3. Preparing for Assessment Validation Activity 5
   6.4. Conducting the Validation of Assessment Practices and Judgements 6
   6.5. Finalising the Validation of Assessment Practices and Judgements 6
7. PROCESS 7
8. FORMS 8
9. RECORDS 8
10. DOCUMENT HISTORY 8

1. PURPOSE

The purpose of this procedure is to ensure that the QPS RTO undertakes systematic validation of assessment practices and judgements of Training Products offered by the organisation in accordance with the Standards for Registered Training Organisations (RTOs) 2015.

2. SCOPE

This procedure applies to all assessments that contribute to Training Product outcomes which are undertaken by the QPS RTO.

This procedure applies to all persons involved in the delivery, assessment and support of Training Products on the QPS Scope of Registration.

3. DEFINITIONS

Refer to Quality Manual for Definitions.

4. REFERENCES

- QPS Quality Manual
- Standards for Registered Training Organisations (RTOs) 2015.
- Qld Police Service Retention and Disposal Schedule.

5. RESPONSIBILITIES

5.1. Manager, Education and Training Services (ETS)

The Manager ETS is responsible for:

- approving, and ensuring the correct and consistent implementation of the quality management system and quality assurance policies across the QPS RTO;
- providing guidance and assistance in relation to disputed assessment validation findings;
- making a final decision in relation to disputed assessment validation findings;
- approving the QPSRTO Assessment Validation Schedule.

5.2. Coordinator, Training Quality (TQ)

The Coordinator TQ is responsible for:

- developing and updating the QPSRTO Assessment Validation Schedule;
- identifying and assigning staff to lead and participate in validation activities;
- ensuring that staff (either individually or collectively) assigned to validation activities have;
    - current vocational competencies and current industry skills relevant to the assessment being validated (at least on the first occasion of the product being validated);
    - the training and assessment credential TAE40116 (or as listed in Schedule 1, Item 2 of the Standards for Registered Training Organisations (RTOs) 2015);
    - current knowledge and skills in vocational teaching and learning.
- Identifying a statistically valid sample of completed student assessment records for validation;
- reviewing assessment practices and validation outcomes including recommendations for systems improvements;
- forwarding validation outcome reports including recommendations for systems improvements to the relevant Course Coordinator for action;
- providing assistance to resolve disputed assessment validation findings;
- advise Course Coordinators upon completion of audits; and
- producing the annual report on validation outcomes for the Manager ETS

5.3. Lead Validator

Lead validators will be responsible for:

- preparing for validation activities which they have been assigned by the Coordinator TQ;
- confirming that staff (either individually or collectively) assigned to validation activities have;
    - current vocational competencies and current industry skills relevant to the assessment being validated (at least on the first occasion of the product being validated);
    - the training and assessment credential TAE40116 (or as listed in Schedule 1, Item 2 of the Standards for Registered Training Organisations (RTOs) 2015);
    - current knowledge and skills in vocational teaching and learning.
- leading validation activities for QPS RTO Training Products on scope to identify improvement actions for the delivery unit;
- preparing and monitoring the implementation of system improvement plans where relevant;
- reporting the progress of outcomes of assessment validation to the Coordinator TQ;
- assisting with the resolution of disputed assessment validation findings.

5.4. Course Coordinator

The Course Coordinator is responsible for:

- providing assistance to the validation team in relation to evidence required to be sighted and reviewed during assessment validation activities;
- nominating a suitably qualified technical representative/s to take part in the validation of assessment practices and judgements who was not directly involved in the particular instance of the delivery and assessment of the training product being validated;
- gathering and maintaining participant information, human resource profiles of delivery and assessment staff;
- gathering a statistically valid sample of completed student assessment records for validation;
- responding, developing and implementing any System Improvement actions, relevant to the delivery unit, that were identified during assessment validation activities conducted in accordance with this procedure.

6. PROCEDURE FOR CONDUCTING ASSESSMENT VALIDATION

6.1. QPSRTO Assessment Validation Schedule

The QPSRTO Assessment Validation Schedule will identify the following:

- each Training Product currently on the QPS RTO Scope of Registration;
- when the assessment validation activity for each Training Product is to occur;
- the nominated lead validator (if known) to be involved in the assessment validation;
- the nominated technical representative/s (if known) to be involved in the assessment validation.

The timing of the assessment validation activity for each training product will be based on a variety of factors including, but not limited to:

- the requirements of Standard 1, Clause 1.10 of the Standards for Registered Training Organisations (RTOs) 2015;
- the outcomes of previous assessment validation activities;
- changes to qualification requirements due to training package amendments;
- change of course coordinator and/or training and assessment staff;
- number of annual enrolments and completions;
- number of participant complaints or appeals.

Once developed, the QPSRTO Assessment Validation Schedule is to be stored electronically on the file server under *Audits* within the RTO folder. An additional sub-folder should be produced and named Audit [YEAR]. All correspondence in relation to assessment validation activities will be stored within this folder. Each qualification scheduled for assessment validation will also be

designated a folder. The naming convention for the qualification folders will contain the qualification code. *Example:* POL6115

6.2. Appointment of Lead Validator

The Coordinator TQ will assign a member of the section to undertake the role of lead validator prior to the scheduled assessment validation date. The Coordinator TQ will liaise with the relevant Course Coordinator to identify a suitably qualified technical representative/s to take part in the assessment validation activity and notify the lead validator accordingly.

The following points are supplied as a framework when preparing for, conducting and finalising assessment validation activities.

6.3. Preparing for Assessment Validation Activity

Prior to commencing the assessment validation activity, lead validators should familiarise themselves with the Training Product to be validated. Electronic copies of most Training Products on the QPS RTO scope of registration can be located via the training.gov.au website. In the event that the qualification is from the Police Training Package (POL) and has been deemed "Not For Public Access" (NFPA), access to the units of competency are available from the RTO folder located on the fileserver. This also applies to accredited course information.

At a minimum, lead validators should:

- confirm the relevant Australian Qualifications Framework (AQF) level of the qualification;
- locate the relevant units of competency and packaging rules;
- access the Ignite LMS and familiarise themselves with the program structure noting the composition of core and elective units;
- review relevant assessment guidelines and associated packaging rules.

Lead validators are to access the previous validation reports and system improvement plans where applicable. This information will be located on the server in the audit folder recorded under the corresponding year. A review of the validation report and any system improvements should be undertaken to identify areas for review. The lead validator should ensure that any system improvements identified during previous assessment validation activities have been actioned to a satisfactory level by the delivery unit. This will be done during the site audit.

Prior to conducting any site visits, access the QPS intranet to view any relevant information relating to the relevant Training Product and associated QPS training program. Programs or courses provide varying information however, you may be able to access information which is provided to participants. These documents can be used to commence the assessment validation. As a minimum, the training and/or assessment strategy and previous validation outcomes are to be reviewed before any site visits.

All units of competency which make up the Training Product are to be reviewed during the assessment validation process. It is important that the validators familiarise themselves with the units of competency as this knowledge will assist when the assessment tools and processes are reviewed during the validation activity.

The lead validator is to ensure that the statistically valid sample of student assessment records (as advised by the Coordinator TQ) are reviewed during the validation activity. Details of the student records being validated are to be crossed referenced against Ignite to ensure accuracy and consistency.

6.4. Conducting the Validation of Assessment Practices and Judgements

The lead validator, in conjunction with the nominated technical representative, is to systematically work through the validation table recording details of the sighted evidence presented within the table.

Where a particular portion of the validation was not completed i.e. due to the unavailability of documentation or personnel during a site visit, this is to be noted along with the reasons why. Arrangements are to be made for a follow-up visit or for the relevant evidence to be provided for desktop review.

When conducting the validation of the assessment tools/instruments, the lead validator is to record the overall result for all assessment tools/instruments in the validation table. For example, if all but one of the assessments tools/instruments validated meet the requirements for validity, the overall outcomes recorded in the audit table will be for meeting validity will be 'No'.

The lead validator must record the details of the issue/s identified and refer to the evidence sighted within the Delivery Unit Assessment Validation table. The comments should also contain recommendations with regards to rectifying the identified issue/s.

When conducting the validation of assessment practices and judgements, the lead validator is to record the overall outcome of the review on the QPSRTO 007 F02 *Systems Improvement Plan* form. The lead validator must record the details of the issue/s identified and refer to the evidence sighted. The comments should also contain recommendations with regards to rectifying the identified issue/s.

6.5. Finalising the Validation of Assessment Practices and Judgements

The lead validator is responsible for finalising the validation documentation. The lead validator is to forward a copy of the validation table and systems improvement plan (if applicable) to the Coordinator TQ. The lead validator should discuss recommendations and system improvements as detailed in the validation table with the Coordinator TQ.

The Coordinator TQ will then complete a covering report for dissemination to the delivery unit manager. The report will contain a copy of the completed audit table and systems improvement plan. The completed validation table and associated documentation is to be stored on the file server in the relevant folder as outlined above.

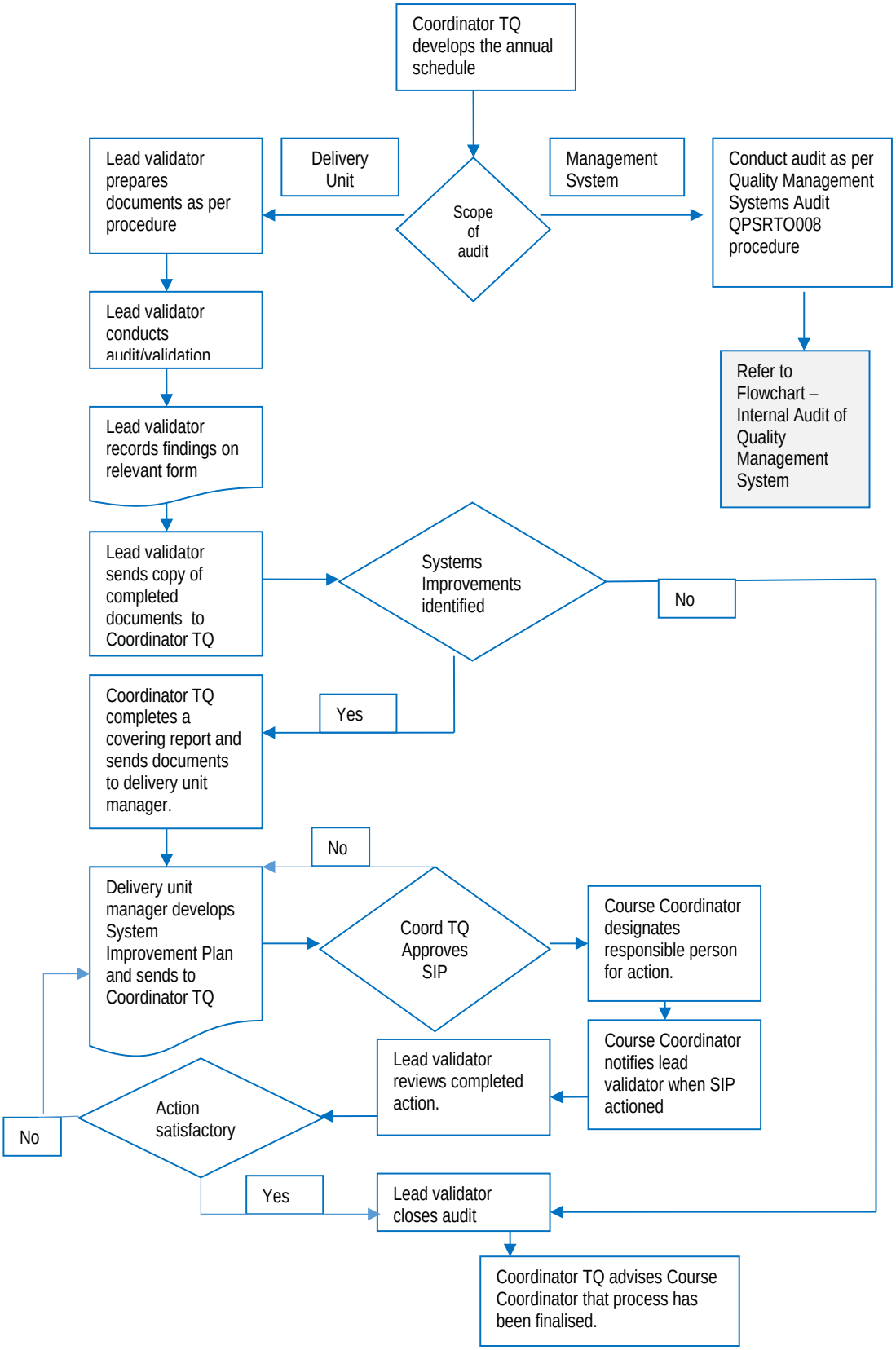
Once a finalised Systems Improvement Plan has been received from a delivery unit, the validation activity can be finalised. The completed Systems Improvement Plan is to be reviewed by the Coordinator TQ and signed off if accepted.

The Coordinator TQ is responsible for capturing the finalised documentation and any other correspondence deemed necessary in the approved records management system.

The Coordinator TQ is to notify the Course Coordinator that the review has been finalised.

7. PROCESS

Validation of Assessment Practices and Judgements



8. FORMS

- QPSRTO007 F01 Delivery Unit Assessment Validation Table
- QPSRTO 007 F02 Systems Improvement Plan (Delivery Unit)

9. RECORDS

- Completed QPSRTO internal audit report (Management Systems) (Electronic record retained for 7 years after last action)
- Completed QPSRTO internal audit report (Delivery Unit)/ Validation of Assessment Processes and Judgements (Electronic record retained for 7 years after last action)
- Completed Systems Improvement Plan (Electronic record retained for 7 years after last action)
- Continuous Improvement Register (Electronic record – ongoing use)

10. DOCUMENT HISTORY

Version No.	Modification	Date
1	Initial Version	31/10/2001
2	Minor Amendments	29/05/2002
3	Minor Amendments	15/8/2006
4	Internal audit of delivery units included in this procedure	22/7/2009
4.1	Minor changes to Authorities, AQTF references and Quality Manual references and document history.	20-9-2011
4.2	Minor updates to reflect NVR requirements and internal branch/unit naming conventions.	10/8/2012
4.3	Updated with Self-Assessment Process. Forms added.	22/9/2014
5.0	Redeveloped in line with the RTO standards 2015.	1/4/2015
5.0	Review and replace 'learning and assessment strategy' with 'training and assessment strategy'	2/9/15
5.1	Additional responsibility for Lead Audit to ensure vocational competencies of technical representative. Consolidation of forms 3, 4, 5 & 6 into Form 3 *Validation of Assessment Processes and Judgements.*	7/9/2016
5.2	Minor change to 'Purpose' statement.	31/10/2019
6.0	Procedure title changed from 'Internal Audit and Assessment Validation' to 'Systematic Validation of Assessment Practices and Judgments'. Clarification of validation team member TAE and vocational requirements.	29/4/2021

	Replace approving authority due to CEO change and updated to reflect Training Strategy (now Education and Training Services) internal naming and structures.	

EXHIBIT 8

Delivery Unit Assessment Validation Table

Training Product Code & Name	**POL54115 Diploma of Forensic Investigation**			
Course Coordinator	**S/Sergeant Asha Haxton**			
Validation Team	**1. S/Sgt Adrian Robb** **(TQ member)**	**2.**	**3.** **(Technical representative)**	**4.**
Date/s of Validation	[redacted]			
Units of Competency Reviewed (Where full qualification not audited)	**1. POLFOR025 Process Forensic Evidence** **2. POLFOR027 Assess and Control incident/crime scene**			
Student Records Examined (Validation of judgements)	**1.** [redacted] **2.** [redacted] **3.** [redacted] **4.** [redacted]		**5.** [redacted] **6.** [redacted] **7.** [redacted] **8.** [redacted]	
HR Profiles Examined	**1. S/Sgt** [redacted]			

Delivery Unit Assessment Validation Table

Training and Assessment Strategy/Assessment Only Strategy (clauses 1.1-1.4)				
Note: Training and Assessment Strategy may be incorporated in one document or made up of a number of documents.	Procedure	Clause		
1. Has the training and/or assessment strategy been developed in consultation with industry? (In some instances, this may be restricted to internal QPS stakeholders only or may be a combination of internal/external stakeholders).	028	1.5	☒ **Yes**	☐ **No**
2. If yes, is there evidence of the relevant consultation having occurred? (e.g. emails, reports, meeting minutes etc)	028	1.6	☒ **Yes**	☐ **No**
3. Are the proposed target groups for the relevant Training Product identified?	007	1.2, 1.7	☒ **Yes**	☐ **No**
4. Are the proposed target groups identified appropriate to the qualification or in accordance with the accredited course document/training package?	007	1.2, 1.7	☒ **Yes**	☐ **No**
5. Has the delivery unit identified all relevant legislation applicable to their operations?	007	8.5	☒ **Yes**	☐ **No**
6. Does the training and/or assessment strategy identify delivery and/or assessment (including RPL) modes?	007	1.2, 1.12	☒ **Yes**	☐ **No**
7. Does the training and/or assessment strategy identify how learning resources are accessible by all learners regardless of the location or mode of delivery?	007	1.3	☒ **Yes**	☐ **No**
8. Does the training and/or assessment strategy identify assessment validation processes and pathways?	007	1.9, 1.11	☒ **Yes**	☐ **No**
9. Is there evidence that training and/or assessment strategies have been systematically reviewed and modified where necessary?	007	1.6, 1.9	☒ **Yes**	☐ **No**
10. Is there evidence to demonstrate that any improvements suggested/recommended have been implemented?	007	1.6, 2.2	☒ **Yes**	☐ **No**
11. Does the training and/or assessment strategy reflect the packaging rules of the training package/accredited course?	007	1.1, 1.4	☒ **Yes**	☐ **No**
12. Does the training and/or assessment strategy ensure that learners receive training and assessment that meets their needs and current industry requirements?	007	1.1, 1.3, 1.5	☒ **Yes**	☐ **No**
13. Does the training and/or assessment strategy specify human resources to be used?	007	1.3	☒ **Yes**	☐ **No**

Delivery Unit Assessment Validation Table

Training and Assessment Strategy/Assessment Only Strategy (clauses 1.1-1.4)				
14. Does the training and/or assessment strategy specify physical resources to be used?	007	1.3	☒ **Yes**	☐ **No**
15. Does the delivery unit have access to the following in order to support training and/or assessment?	007	1.3	☒ **Yes**	☐ **No**
1. Facilities			☒ **Yes**	☐ **No**
2. Equipment			☒ **Yes**	☐ **No**
3. Training and Assessment Materials			☒ **Yes**	☐ **No**

COMMENTS:

The assessment strategy for POL54115 clearly indicates the enrolment and assessment arrangements for the qualification. The Strategy outlines the structure of the QPS Scenes of Crime Development Program (SCDP). The Strategy was reviewed and updated in November 2021 in response to changes to the SCDP.

Sighted continuous improvement and industry engagement documentation. Outcomes from participant feedback data evaluation to the captured in the continuous improvement register also moving forward.

☒ **Compliant**	☐ **System Improvement**

Delivery Unit Assessment Validation Table

Delivery and Assessment				
	Procedure	Clause		
1. Are the units of competency from the relevant qualification or accredited course being assessed to the latest version? **[NOTE: Please check on *Training.gov.au* to confirm this.]**	007	1.1	☒ **Yes**	☐ **No**
2. Do the assessments comply with the requirements of the relevant training package?	007	1.8	☒ **Yes**	☐ **No**
3. Do the assessments include marking guides and/or observation checklists that define the evidence being gathered to deem participants as competent?	007	1.8	☒ **Yes**	☐ **No**
4. Do assessment tools contain clear, concise instructions for the student and assessor including: • the nature of the assessment activity • conditions of the assessment • required materials and equipment • assessment criteria to be used • sequencing, timing and location of the tasks	007	1.8	☒ **Yes**	☐ **No**
5. Do the assessments meet the principles of assessment?			☒ **Yes**	☐ **No**
• Validity – assessment covers the broad range of skills and knowledge that are essential to competent performance, assessment of knowledge and skills is integrated with their practical application, assessments collect evidence that supports that a candidate could apply knowledge and skill in other similar situations, assessments are aligned to the unit/s of competency and associated assessment requirements.	007	1.8-1	☒ **Yes**	☐ **No**
• Reliability – assessment evidence is consistently interpreted and outcomes comparable irrespective of the assessor conducting the assessment.	007	1.8-1	☒ **Yes**	☐ **No**
• Flexibility – assessment reflects the candidate's needs, draws on a range of assessment methods and uses those that are appropriate to the context, the unit of competency and associated assessment requirements.	007	1.8-1	☒ **Yes**	☐ **No**
• Fairness – assessment considers individual candidate's needs including reasonable adjustment where appropriate, all candidates are treated in the same way and no-one is disadvantaged due to a bias in assessment practices (candidate's needs are addressed and catered for).	007	1.8-1	☒ **Yes**	☐ **No**

Delivery Unit Assessment Validation Table

Delivery and Assessment				
6. Are all delivery locations associated with assessing the qualification using identical assessment tools?	007	1.3,1.8	☒ **Yes**	☐ **No**
7. Does the collection of assessment evidence meet the rules of evidence?				
• Validity – assessment confirms that the candidate has the skills, knowledge and attributes as described in the module or unit of competency and associated assessment requirements.	007	1.8-2	☒ **Yes**	☐ **No**
• Authenticity – To accept evidence as authentic, an assessor must be assured that the evidence presented for assessment is the candidate's own work.	007	1.8-2	☒ **Yes**	☐ **No**
• Currency – assessment evidence demonstrates 'current' competency and is from the present or the very recent past.	007	1.8-2	☒ **Yes**	☐ **No**
• Sufficiency – relates to the quality, quantity and relevance of the assessment evidence considered by an assessor in determining competency.	007	1.8-2	☒ **Yes**	☐ **No**
8. Do the assessments incorporate the required knowledge evidence and performance evidence (and/or required skills and knowledge) identified within the unit/s of competency?	007	1.8	☒ **Yes**	☐ **No**
9. Are the assessment conditions required by the unit/s of competency being addressed in the assessment?	007	1.8	☒ **Yes**	☐ **No**
10. Do the assessment practices and tools produce consistent assessment decisions across different assessors and locations (if applicable)? (Note: The validation outcomes of a statistically valid sample of assessment decisions is to be recorded on the relevant QPSRTO form in line with procedure QPSRTO 007 Internal Audit and Assessment Validation)	007	1.8	☒ **Yes**	☐ **No**
11. Do the assessment samples demonstrate that the evidence provided by the students indicates the instructions were sufficient and easy to follow?	007	1.8	☒ **Yes**	☐ **No**
12. Is there evidence that indicates the amount of training provided to participants was sufficient to allow competency to be achieved?	007	1.2	☒ **Yes**	☐ **No**
13. Is there evidence to demonstrate that participants are provided with & acknowledge feedback after the assessment decision/s?	007	1.8	☒ **Yes**	☐ **No**

Delivery Unit Assessment Validation Table

Delivery and Assessment					
14. Are participants being provided with information regarding the purpose and context of the assessment?		007	1.8	☒ **Yes**	☐ **No**
15. Is there a process in place for the Recognition of Prior Learning (RPL)?		007	1.8, 1.12	☒ **Yes**	☐ **No**
16. Does the RPL process meet the principles of assessment and the rules of evidence?		007	1.8	☒ **Yes**	☐ **No**
17. Is there information contained within the RPL process that will enable participants to collect sufficient evidence and participate collaboratively in the RPL process?		007	1.3, 1.8	☐ **Yes**	☒ **No**
18. Has an RPL application been received within the last 12 months? (If yes, auditor should consider reviewing a finalised RPL application as part of the audit process.)		007	1.8	☐ **Yes**	☒ **No**
19. Are the learning and assessment materials and resources detailed in the training and/or assessment strategy current and readily available to all trainers and assessors?		007	1.3	☒ **Yes**	☐ **No**
20. Where training and/or assessment occurs in the workplace (including the gathering of assessment evidence), is there evidence of delivery unit engagement with workplace representatives?		007	1.3, 1.5	☒ **Yes**	☐ **No**
21. Has a formal, systematic assessment validation been conducted within the last 12 months?		007	1.9, 1.10	☒ **Yes**	☐ **No**
22. Has the delivery unit conducted validation of assessment judgements?		018	1.9, 1.10	☒ **Yes**	☐ **No**
23. Have any complaints or appeals been received by the delivery unit?		018	6.1, 6.3	☐ **Yes**	☒ **No**
24. Was the complaint/appeal dealt with in accordance with the QPSRTO Complaints and Appeals procedure?	☒ **N/A**	018	6.1,6.2, 6.4, 6.5	☐ **Yes**	☐ **No**

COMMENTS:

A review of the assessment tools (both knowledge and practical) indicate clear instructions are provided to participants undertaking the assessment. Written assessments are accompanied by a marking guide. The Industry Engagement log shows evidence of engagement with staff collecting evidence on behalf of the qualified assessor.

The assessment files clearly show participants are receiving and acknowledging feedback with regards to the assessments.

Delivery Unit Assessment Validation Table

Delivery and Assessment	
On the SOCDP website, it states that after successful completion of the 12 month program participants will be awarded the nationally recognised Diploma of Forensic Investigation. It is recommended that this be changed to '*participants will be enrolled in the nationally recognised Diploma of Forensic Investigation. Please refer to the QPS RTO Training Programs and Qualifications website for further information'.* This also applies to the information (Page 5) in the Student Responsibilities section of the SOC Development Program Student Information and Workbook. Whilst the qualification is awarded via a structured assessment only pathway based on the SOC Development Program, there is still a cohort of existing SOC officers who may seek the qualification via an RPL and haven't completed recent versions of the training program. It is recommended that the RPL pathway for officers who haven't recently completed the SOC Development Program be reviewed and updated.	
☐ **Compliant**	☒ **System Improvement**

Delivery Unit Assessment Validation Table

Training and Assessment Staff				
	Procedure	Clause		
1. Is there evidence that training and assessment staff are provided with RTO Induction (QD0174 or QC1483) and Course Induction information?	015	1.13	☒ **Yes**	☐ **No**
2. *For those staff who are conducting assessment against nationally recognised training outcomes*– Is there evidence of possessing the Certificate IV in Training and Assessment (TAE40116), a diploma or higher level qualification in adult education or the TAESS00011 Assessor Skill Set?	015	1.15	☒ **Yes**	☐ **No**
3. *For those staff who are delivering training as part of a Delivery and Assessment Strategy for a nationally recognised training outcome* – Is there evidence of possessing the Certificate IV in Training and Assessment (TAE40116) or a diploma or higher level qualification in adult education?	015	1.14	☒ **Yes**	☐ **No**
4. Is there evidence of the vocational competence/experience of training and assessment staff relevant to the units of competency being trained and/or assessed?	015	1.13	☒ **Yes**	☐ **No**
5. Is the delivery unit verifying the qualifications and experience of trainers and assessors?	015	1.13	☒ **Yes**	☐ **No**
6. Are trainer and assessor profiles being created and maintained (QPSRTO-015-F1)?	015		☒ **Yes**	☐ **No**
7. Do the profiles demonstrate that the trainers and assessors are accessing professional development opportunities or updating their competency that are/is relevant to the units of competency in which they are training/assessing? (QPSRTO-015-F1)	015	1.16	☒ **Yes**	☐ **No**
8. Do the profiles demonstrate that the trainers and assessors are accessing professional development opportunities to continue developing their Vocational Education and Training (VET) knowledge and skills? (QPSRTO-015-F1)	015	1.16	☒ **Yes**	☐ **No**

COMMENTS:

S/Sgt Haxton has completed the RTO Induction Course (QC1483).

S/Sgt Haxton completed TAE40116 on 4/11/2021 and has the relevant vocational competencies. At the time of assessment for the student files reviewed, S/Sgt Haxton had completed the TAESS00011 Assessor Skill Set requirements on 7/10/2021. The participants were deemed competent against the qualification requirements on 11/10/2021.

Delivery Unit Assessment Validation Table

☒ Compliant	☐ System Improvement

Delivery Unit Assessment Validation Table

Participant Information				
	Procedure	Clause		
1. Is information being provided to participants about:				
• the code, title and currency of the qualification, accredited course or unit of competency being undertaken	007	5.2	☒ **Yes**	☐ **No**
• training and assessment arrangements including the estimated duration, training/assessment locations and modes of delivery? (Note: this information should be made available to the participants via the Training and Assessment Strategy)	007	5.2	☒ **Yes**	☐ **No**
• any work placement arrangements associated with the training program	007	5.2	☒ **Yes**	☐ **No**
• the name and contact details of any third parties involved in the provision of training and/or assessment services on behalf of the delivery unit (if applicable)	007	5.2	☒ **Yes**	☐ **No**
• the RTO's responsibility for the quality of the training and assessment in compliance with the Standards (this is on TQS website also)	007	5.2	☒ **Yes**	☐ **No**
• the RTO is responsible for the issuance of AQF certification documentation (this is on the TQS website)	007	5.2	☒ **Yes**	☐ **No**
• learning support	007	5.2	☒ **Yes**	☐ **No**
• complaints and appeals procedures	007	5.2	☒ **Yes**	☐ **No**
• recognition of prior learning (RPL) arrangements and credit transfer	007	5.2	☐ **Yes**	☒ **No**
• how the training product will meet the learner's needs taking into account the individual's existing skills and competencies	007	5.1	☒ **Yes**	☐ **No**
2. Is there evidence of participants being informed of QPS RTO USI exemption status prior to either the completion of enrolment or commencement of training and assessment, (whichever occurs first), that the		3.6	☒ **Yes**	☐ **No**

Delivery Unit Assessment Validation Table

Participant Information				
results of the training will not be accessible through the Commonwealth and will not appear on any authenticated VET transcripts prepared by the Registrar.				

COMMENTS:

Refer to comments in the Delivery and Assessment Section regarding the review and update of information for officers seeking the qualification via and RPL pathway and haven't completed the recent versions of the SOC Development Program.

☐ **Compliant**	☒ **System Improvement**

Delivery Unit Assessment Validation Table

Records Management				
	Procedure	Clause		
1. Is the curriculum documentation captured, managed and maintained?	014	3.1-3.6	☒ **Yes**	☐ **No**
2. Are the current versions of the curriculum training and assessment materials able to be easily accessed and used by training and support staff? (I.E, in clearly labelled folders; use of version control – is version control consistent across all documents; ability to archive outdated materials.)	014	3.1-3.6	☒ **Yes**	☐ **No**
3. Does Ignite accurately reflect the current version of the qualification or accredited course?	014	3.1-3.6	☒ **Yes**	☐ **No**
4. Are student files created for each enrolled participant?	014	3.1-3.6	☒ **Yes**	☐ **No**
5. Are completed participant's assessment items (excluding online-assessments) captured on the participant's student file; and have retention timeframes been set within the approved resources management systems? (Such as Objective)	014	3.1-3.6	☒ **Yes**	☐ **No**
6. Are the assessment results accurately captured in the approved Training Management System? (Ignite)	014	3.1-3.6	☒ **Yes**	☐ **No**
7. Is access to confidential information safeguarded?	014	3.1-3.6	☒ **Yes**	☐ **No**
8. Is there a process in place for ensuring student enrolment & completion records are recorded accurately and completely within the approved information systems? (Such as objective.)	014	3.1-3.6	☒ **Yes**	☐ **No**
9. How many participants completed the qualification or accredited course in the preceding 12 months?	014	3.1-3.6	**Total: 12**	
COMMENTS:				
☒ **Compliant**		☐ **System Improvement**		

Delivery Unit Assessment Validation Table

Continuous Improvement				
	Procedure	Clause		
1. Are there client/stakeholder feedback instruments?	011	2.2	☒ **Yes**	☐ **No**
2. Is there evidence of the collection of client and stakeholder feedback?	011	2.2	☒ **Yes**	☐ **No**
3. Is there a process in place to analyse the collected data?	011	2.2	☒ **Yes**	☐ **No**
4. Is there evidence of the analysis of client and stakeholder feedback?	011	2.2	☒ **Yes**	☐ **No**
5. Is there evidence that the collected and analysed data has resulted in the subsequent implementation of any changes to administration, training or assessment and/or client services? i.e. Continuous Improvement Register	011	2.2	☒ **Yes**	☐ **No**
6. Does the delivery unit have in place a process/system for reviewing, modifying and improving the learning and assessment resources?	011	2.2	☒ **Yes**	☐ **No**
7. Is there evidence to demonstrate that these improvements (where applicable) have been implemented?	011	2.2	☒ **Yes**	☐ **No**

COMMENTS:

Continuous improvement and industry engagement registers were sighted. The course coordinator advised that participant feedback is gathered and analysed. It is recommended that the continuous improvement register be used to record changes as a result of student feedback and a responsibility for undertaking the analysis of the feedback documented as part of the Course Coordinators responsibilities.

☒ **Compliant**	☐ **System Improvement**

EXHIBIT 9

SYSTEMS IMPROVEMENT PLAN
QPSRTO_007_F02 (Delivery Unit)

Qualification Name: Diploma of Forensic Investigation **Qualification Code: POL54115**

Audit date: [redacted] **Lead Auditor: S/Sergeant Adrian Robb**

Clause where systems improvement identified. (Refer to audit table)	Details of systems improvement identified. (What needs to be fixed?)	How will the systems improvement be addressed? (What's going to be done?)	Proposed time frame for improvements.	Person/s responsible for improvements	Date Completed (Lead Auditor to sign)
Clauses 1.3, 1.8 and 5.2	On the SOCDP website, it states that after successful completion of the 12-month program participants will be awarded the nationally recognised Diploma of Forensic Investigation. It is recommended that this be changed to 'participants will be enrolled in the nationally recognised Diploma of Forensic Investigation. Please refer to the QPS RTO Training Programs and Qualifications website for further information'. This also applies to the information (Page 5) in the Student Responsibilities section of the SOC Development Program Student Information and Workbook.				

	Whilst the qualification is awarded via a structured assessment only pathway based on the SOC Development Program, there is still a cohort of existing SOC officers who may seek the qualification via an RPL and haven't completed recent versions of the training program. It is recommended that the RPL pathway for officers who haven't recently completed the SOC Development Program be reviewed and updated.				
TQSS USE ONLY **Date Plan Finalised:**					

EXHIBIT 10

QUEENSLAND POLICE SERVICE

Training Quality
Education and Training Services
People Capability Command
Queensland Police Service Academy
P. O. Box 1110
Archerfield Qld 4108

TELEPHONE (07) [redacted]

Our Ref: **22/**

Your Ref:

[redacted]

TO:	**Inspector, Quality Management Section** **Forensic Services Group**
CC:	**Manager, Education and Training Services**
FROM:	**Manager, Training Quality** **Education and Training Services**
SUBJECT:	**Internal Audit and Assessment Validation of POL54115 Diploma of Forensic Investigation**

1. Between [redacted] staff from Training Quality undertook and internal assessment validation activity for the POL54115 Diploma of Forensic Investigation (the qualification). In addition to the review of completed student files, the validation activity also examined assessment processes and procedures.

2. The qualification is offered to eligible employees via a Recognition of Prior Learning (RPL) pathway only. The evidence relied upon by the qualified assessor is drawn primarily from the QPS Scenes of Crime Development Program (SCDP) or from the workplace for existing officers performing duties as fulltime Scenes of Crime Officers.

3. The QPS Scenes of Crime Development Program is conducted over a 12-month period to train and develop police officers in becoming professional forensic officers. The program is divided into the following five phases:

   [redacted]

4. Between [redacted], 7 participants were awarded the qualification. Due to the relatively small number of participants, all assessment records for this cohort were included in the validation activity.

5. The validation involved the review of assessment records held within the Ignite Learning Management System for the SCDP. In addition to the online review, the assessment records for the nominated participants were retrieved and subsequently underwent validation.

6. The audit and validation activity identified minimal issues with the assessment processes and practices. The assessment resources are of a high standard and the administrative practices ensure consistent and quality outcomes.

7. A number of minor recommendations were made with regards to information provided to participants. Overall, the Course Coordinator and program staff are to be commended for their commitment to ensuring ongoing compliance with the Standards for Registered Training Organisations (RTOs) 2015.

8. The outcomes of the audit and assessment activity have been documented in the attached Delivery Unit Assessment Validation Table. A Systems Improvement Plan identifying the relevant recommendations is also attached.

RECOMMENDATIONS

9. It is recommended that this report and attachments be forwarded to the Senior Sergeant Quality Management Section for attention and actioning.

[redacted]

A A ROBB
SENIOR SERGEANT 9971
MANAGER, TRAINING QUALITY
EDUCATION AND TRAINING SERVICES

Attachments:
Attachment 1. Delivery Unit Assessment Validation Table for POL54115 Diploma of Forensic Investigation
Attachment 2. Systems Improvement Plan for POL54115 Diploma of Forensic Investigation

EXHIBIT 11

SYSTEMS IMPROVEMENT PLAN
QPSRTO_007_F02 (Delivery Unit)

Qualification Name: Diploma of Forensic Investigation **Qualification Code: POL54115**

Audit date: [redacted] **Lead Auditor: S/Sergeant Adrian Robb**

Clause where systems improvement identified. (Refer to audit table)	Details of systems improvement identified. (What needs to be fixed?)	How will the systems improvement be addressed? (What's going to be done?)	Proposed time frame for improvements.	Person/s responsible for improvements	Date Completed (Lead Auditor to sign)
Clauses 1.3, 1.8 and 5.2	On the SOCDP website, it states that after successful completion of the 12-month program participants will be awarded the nationally recognised Diploma of Forensic Investigation. It is recommended that this be changed to 'participants will be enrolled in the nationally recognised Diploma of Forensic Investigation. Please refer to the QPS RTO Training Programs and Qualifications website for further information'. This also applies to the information (Page 5) in the Student Responsibilities section of the SOC Development Program Student Information and Workbook.	Discussion in relation to requirements of improvement. Wording to be addressed and actioned- Completed 07/07/2022 Options in relation to RPL pathways to be discussed. Determined to be assessed on case by case basis, as received- completed 07/07/2022. Webpage, Student information and Training Manual updated in line with above-07/07/2022	6 weeks	S/Sgt Asha Haxton	[redacted]

	Whilst the qualification is awarded via a structured assessment only pathway based on the SOC Development Program, there is still a cohort of existing SOC officers who may seek the qualification via an RPL and haven't completed recent versions of the training program. It is recommended that the RPL pathway for officers who haven't recently completed the SOC Development Program be reviewed and updated.				
TQSS USE ONLY **Date Plan Finalised:** [redacted]					

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF LETITIA EVERIST

I, **Letitia Everist,** of 200 Roma Street, Brisbane, Queensland state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked '**Exhibit 1**' is a copy of that notice.

1. I am the Senior Sergeant, Quality and Training Officer for the Scientific Section, in the Forensic Services Group (FSG) of the Queensland Police Service (QPS).

Qualifications and Experience

2. I am the holder of the following tertiary qualifications:

   (a) Bachelor of Science from Griffith University 1995;

   (b) Master of Science – Forensic Science from Griffith University 2008.

3. I was sworn into the QPS in November 1996 as a Constable of Police. Since that time, I have held the following positions:

   (a) Between November 1996 and December 1999, I was a Constable performing general duties at Maroochydore and Redcliffe Police Stations.

   (b) Between January 2000 and July 2003, I was a Scenes of Crime Officer at Maryborough Scenes of Crime Section, Maryborough Police Station. During this time, I progressed to the rank of Senior Constable.

   (c) Between July 2003 and January 2017, I was a Scientific Officer at the Physical Evidence Unit (now known as the Major Crime Unit), Scientific Section Brisbane. During this time, I progressed to the rank of Sergeant.

(d) Since January 2017 I have held my current role as the Senior Sergeant, Quality and Training Officer for Scientific Section.

Identify any courses or diplomas you have completed since joining the QPS.

4. Since joining the QPS, I have completed the following courses relevant to my role as a Scientific Officer:

(a) Internal Auditor Training (QPS);

(b) NATA Technical Assessor Course;

(c) Shoemark Digital Workflow (SAPOL);

(d) Advanced Footwear Impression;

(e) TAE40110 Cert IV in Training;

(f) Hair Identification Workshop (AFP);

(g) Advanced BPA Course (QPS);

(h) DNA Tapelift Training QPS (2008);

(i) Digital Camera Conversion (QPS);

(j) Diploma of Fire Investigation (QFRS);

(k) Bomb Scene Refresher Workshop (QPS);

(l) Semen Detection Workshop (SAPOL);

(m) Fingernail Scrapings (QPS);

(n) Polilight Application (AFP);

(o) Scenes of Crime Training (QPS);

(p) Diploma of Public Safety from QPS (2003);

(q) Diploma of Fire Investigation from Qld Fire and Rescue Service (2006).

5. I do not have a curriculum vitae (CV).

Your Role and Functions

6. I currently work in the Forensic Services Group, specifically in the Scientific Section based in QPS Police Headquarters. I am a Senior Sergeant performing the role of the Quality and Training Officer.

7. My duties as the Quality and Training Officer of the Scientific Section (as cited in FTC07 Position Description Senior Sergeant Forensics) include:

   (a) Overview forensic examinations including monitoring of compliance with procedure to ensure the accuracy and reliability of reported results.

   (b) Manage and maintain the administrative, financial, strategic planning and quality management activities and processes within the area of responsibility.

   (c) Coordinate, monitor and review the education, training and development of staff, participate in performance assessments and ensure subordinates comply with the Service Code of Conduct.

   (d) Participate in and/or coordinate multidisciplinary teams involved in ongoing monitoring of forensic services NATA compliance practices (where applicable).

   (e) Provide advice including submissions and briefings on administrative and operational activities, relevant legislation, policies, practices and procedures.

   (f) Establish and maintain communication channels with internal and external clients and stakeholders and represent the Service on various committees and advisory bodies.

   (g) Initiate and promote the development, research and implementation of innovative processes and practices.

8. Attached and marked '**Exhibit 2**' is a copy of position description for Senior Sergeant Forensics.

.....[redacted].....

Letitia Everist

[redacted]

9. I report to Inspector Darren Pobar, Forensic Manager of the Scientific Section in the Forensic Services Group.

10. The following people report to me:

    (a) Administration Officer [redacted]; and

    (b) Technical Officer [redacted]

QPS Scientific Officers

11. The role of a Scientific Officer (as cited in the current position description FTS01 Forensic Scientist) includes:

    (a) Performing forensic procedures and examinations as authorised by the Superintendent, Forensic Services Group;

    (b) Providing forensic science services and advice to operational police in relation to crime scene examination, blood stain pattern analysis, fire investigation, marks comparison and other forensic services;

    (c) Conducting forensic examinations and identify, record, collect, examine and interpret physical evidence as required by investigating and forensic police and courts of law;

    (d) Preparing reports and statements on forensic science matters;

    (e) Providing evidence to courts of law on forensic science matters;

    (f) Successfully participating in internal and external training programs, as required, and develop skills and knowledge relevant to the provision of Forensic Services; and

    (g) Complying with the requirements of the QPS Forensic Services Quality System, including adherence to forensic procedures and maintenance of a case information management system as approved by the Superintendent, Forensic Services Group.

12. Attached and marked '**Exhibit 3**' is a copy of the position description for a Forensic Scientist.

13. Typical duties of a Scientific Officer attached to the Major Crime Unit or a regional Scientific Section, relevant to biological evidence, include performing presumptive screening tests and the detection, collection and recording of other biological samples, including, but not limited to: blood, seminal fluid, hair, and suspected saliva stains. These examinations may be conducted at a crime scene or within a laboratory.

14. The role of a Scientific Officer, as outlined above, encompasses those officers also attached to the Ballistics Unit. For the purposes of this statement, I will provide information relevant to the Major Crime Unit and regional Scientific Officers whose role involves detection, collection, recording of biological evidence. Officers attached to the Ballistics Unit are not involved with biological evidence.

15. All officers who obtain positions within the Scientific Section must possess an undergraduate science degree, or equivalent, and a minimum of two years sworn service.

16. The training that Scientific Officers are required to undertake for their role includes:

    (a) QPS Scenes of Crime Training Course (if not already completed prior to obtaining a position within the Scientific Section) provided by the Quality Management Section. I cannot provide the information relevant for the units of study of this course.

    (b) Griffith University Graduate Certificate in Crime Scene Investigation. This course includes theory and practical study relating to biological and non-biological evidence. This program is delivered and assessed mostly by QPS Scientific Officers with some presentations provided by external units/organisations.

    (c) QPS Basic Hair Examination (human vs non-human) which is only undertaken by a small number of Scientific Officers based in southeast Queensland.

Letitia Everist

(d) Scientific Officers also undertake other training programs relating to non-biological evidence which are delivered by subject matter experts within the QPS. They include:

(i) Detection and Collection of impression evidence

(ii) Soil

(iii) Entomology

(iv) Diatoms

(v) Bloodstain Pattern Analysis (BPA)

(vi) Marks Comparisons (shoe/tyre comparisons)

(vii) Skeletal Recovery

(viii) Bomb Scene Examination (delivered by Explosive Ordinance Response Team)

(ix) Anatomy/Pathology

(x) Fire Scene Examination

(xi) Basic Microscopy

(xii) Physical Match

(xiii) Cannabis Identification

(xiv) Expert Evidence

(xv) Crime Scene Management/Reconstruction.

17. As part of their training, Scientific Officers also receive information sessions from relevant subject matter experts (within and external to the QPS) regarding the following units and topics:

(a) Document Examination Unit

(b) Analytical Services Unit

(c) DNA Unit

(d) Forensic Imaging Section

(e) Ibutton

(f) Bias

(g) QA/Quals

(h) Forensic Chemistry

(i) QHFSS Biology

18. The DNA-related training components of the Griffith University Graduate Certificate in Crime Scene Investigation are as follows:

(a) Introduction to Forensic Alternate Light Sources

(b) Saliva and other biological fluids (faeces, urine, vomit)

(c) Hair:

(i) Overview of hairs – features

(ii) Detection/collection/packaging

(iii) Awareness of types of examinations

(d) Seminal Fluid:

(i) Semen physiology and function

(ii) Semen Visible detection

(iii) Chemical Screening for seminal fluid

(iv) Effects of water and Washing

(v) Immuno diffusion detection P30

(vi) Sampling and reporting on Semen

[redacted]

.....[redacted].....

Letitia Everist

(e) Blood:

(i) Blood Intro

(ii) Visual Detection

(iii) Presumptive screening TMB and Combur

(iv) Hematrace

(v) Luminol

(vi) LCV and Amido Black

(vii) Collection, packaging and reporting

(f) Queensland Health and Forensic Scientific Services – Forensic Biology lecture

19. DNA-related training which do not form part of the Graduate Certificate in Crime Scene Examination include the QPS Hair Examination course. Components of the Hair Examination course are as follows:

(a) Basic light microscopy

(b) Introduction to hair examination

(c) Identification of human and non-human hair features

(d) Human hair examinations

(e) Acceptance Criteria

(f) Use of Leica microscope/software

20. Scientific Officers are trained in the collection and sampling of biological material via the previously mentioned training courses. These courses include theoretical content and involve practical application and assessments. Training materials reflect and refer to the content of FSG Technical Procedures relating to collection of biological samples. The FSG Technical Procedures are listed in paragraph 35 of this statement.

21. The role of a Scenes of Crime Officer (SOCO) is to perform forensic procedures and examinations. Typical duties of a SOCO are to conduct a forensic examination at volume crime offences and some major crime offences. SOCOs will assist Scientific Officers at major crime scenes.

22. The role of a SOCO differs to that of a Scientific Officer in that Scientific Officers attend mostly major crime scenes, have been trained in a larger number of presumptive screening tests and have available to them some equipment that SOCOs do not have (for example forensic light sources). Scientific Officers also provide opinion evidence in relation to some forensic disciplines. SOCOs generally attend to examination of volume crime scenes and assist with examination of major crime scenes.

23. In regards to external standards for the training programs, I cannot comment on the compliance with external standards for the SOCO training program. For the Scientific Officer training, the Graduate Certificate in Crime Scene Investigation is awarded by Griffith University.

24. Whilst I am not aware of any particular standards that Griffith University must comply with, I am aware that the Griffith University Graduate Certificate in Crime Scene Investigation is informed by the ANZPAA Education and Training Guidelines for Crime Scene Investigation and also the ANZPAA Graduate Certificate in Crime Scene Investigation.

25. The training program that all Scientific Officers complete complies with ISO IEC 17025 General requirements for the competence of testing and calibration laboratories and AS5388 Forensic Analysis.

26. Documents relevant to paragraphs 17(c), 18 and 19 are listed in the Schedule attached and marked '**Exhibit 4**'. Copies of the documents were provided to this Commission pursuant to Notice to Produce issued to the Commissioner of Police.

27. Scientific Officers and SOCOs are attached to the Forensic Services Group. Scientific Officers are attached to a Scientific Section of which there are 5 located in major centres throughout Queensland, being Coomera, Brisbane, Rockhampton, Townsville and

Cairns. SOCOs are distributed within 36 facilities throughout the state, both in regional and metropolitan locations.

28. Scientific Officers do not undertake any routine refresher training relevant to the collection of biological evidence.

29. Scientific Officers undertake a number of proficiency tests, however, there are no specific tests relevant to biological evidence. Officers however undergo Scene Assessments every two years which involves the direct observation and assessment of routine work procedures by another suitably qualified forensic practitioner.

30. Scientific Officers perform technical reviews on all case files.

31. One Scientific Officer per Scientific Section is required to submit a response to the annual major crime 'After the Fact' (AtF) test which is an online virtual crime scene assessment test.

32. Court testimony of each Scientific Officer is monitored in any 12-month period that testimony is given.

DNA Collection

33. Scientific Officers generally attend major crime scenes which are deemed to be offences against the person (e.g. homicide, attempted murder, rapes, serious assaults) and other major crime scenes such as fire/explosion scenes and Cannabis crops.

34. Scientific Officers attend the majority of homicides, however, do not attend in every instance. This may be due to the context of the scene, the type of evidence within the scene and what type of skills or techniques are required to examine the scene. Attendance at any scene by a Scientific Officer is at the request of the Forensic Coordinator or Forensic Manager after consultation with SOCOs and Investigating Officers with consideration given to geographical location/environmental conditions and any potential threat to the preservation and integrity of evidence.

35. The collection of DNA material is regulated by procedure CSE101 – Biological Evidence. More broadly the collection of DNA evidence is regulated by the following procedures:

(a) CSE100 – Crime Scene Examination

(b) CSE105 – LCV Detection and Enhancement of Bloodstains

(c) CSE111 – Hair and Fibre Detection and Collection

(d) CSE115 – Use of Combur Test Strips

(e) CSE119 – ABAcard Hema-Trace

(f) HEX100 – Hair Examination and Comparison

(g) PST100 – Tetramethylbenzidine (TMB) Screening Test for Blood

(h) PST101 – ABAcard P30 Test for Seminal Fluid

(i) PST102 – Luminol Detection and Enhancement of Bloodstains

(j) PST104 – Seminal Fluid Screening and Sampling Protocols

(k) PST105 – Forensic Light Sources

36. To my knowledge, there have been no departures from policy or policies concerning the collection of biological material on more than one occasion.

37. The FSG Quality Manager in the recent past has provided approval for the temporary use of expired swabs or tapelifts due a supply issue. I am however unaware of the frequency, or if at all, in which a Scientific Officer has had to use an expired swab or tapelift during this time.

38. The Quality Management Unit of the FSG does not have oversight over the work of SOCOs and Scientific Officers except for the periodic oversight during internal audits.

.....

Letitia Everist Witness

Other issues

39. There are no problems or issues that have been raised to me in relation to the collection of biological evidence. I am not aware of any areas of improvement for QPS Scientific Officers.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 13th day of October 2022

[redacted] ..... [redacted]

Letitia Everist Witness

JUSTICE OF THE PEACE (QUALIFIED) Reg.N[redacted] DEPT. OF JUSTICE & ATTORNEY GENERAL

[redacted] ..... [redacted] .....

Letitia Everist Witness

In the matter of the *Commissions of Inquiry Act 1950*

Commissions of Inquiry Order (No. 3) 2022

Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF LETITIA EVERIST
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice number 2022/00243 – Requirement to give information in a written statement – dated 05/10/2022
2.	Queensland Police Service Position Description – Senior Sergeant FTC07 – dated 26/11/2021
3.	Queensland Police Service Position Description – Constable/Senior Constable FTS01 – dated 19/10/2021
4.	Schedule of Documents – Notice 2022/00078 – List of of units of study for the Graduate Certificate in Crime Scene Investigation and the Hair Examination course

Exhibit 1

Notice number: 2022/243

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Letitia Everist

Of: Queensland Police Service

I, Walter Sofronoff KC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **12 noon Wednesday 12 October 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 5th day of October 2022

[redacted]

Walter Sofronoff KC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/243

Schedule of topics for statement

Senior Sergeant Letitia Everist

1. State your current rank and position in the Queensland Police Service (**QPS**).

Qualifications and Experience

2. List any tertiary qualifications you hold, the year obtained, and the institute from which the qualifications were obtained.

3. Provide your work history since you commenced in the QPS. Include the year you commenced, each position you held, and the location and year(s) each position was held.

4. Identify any courses or diplomas you have completed since joining the QPS.

5. Attach a current CV.

Your Role and Functions

6. Do you work in the Forensic Services Group (**FSG**)? Identify the section and unit you work in, and where you sit in that section and unit.

7. Outline the duty of your position. If there is a document outlining the role or duties of your position, identify and attach that document.

8. Identify the person or people (name, rank and position) you report to.

9. Identify the person or people (name, rank and position), if any, who report to you.

QPS Scientific Officers

10. Explain the role and typical duties of a Scientific Officer.

11. Explain the qualifications (if any) and training required for that role, all units of study (theory and practical). Identify what organisation or unit conducts any such training.

12. Outline how, if at all, Scientific Officers are trained or instructed in policies concerning the collection and sampling of biological material.

13. Explain the role and typical duties of a Scenes of Crime Officer (**SOCO**). How is the role of a SOCO different to that of a Scientific Officer?

14. Identify what external standards the training programs for SOCOs and Scientific Officers comply with.

15. Explain what group, sections and/or units within the QPS contain SOCOs and Scientific Officers.

16. Outline all ongoing refresher training and proficiency testing that Scientific Officers are required to undertake. As part of your answer, address whether Scientific Officers undertake technical reviews, scene assessments, 'After the Fact', and/or 'Train the Trainer', and court testimony monitoring.

17. Identify and attach all policies, guidelines, training manuals and similar documents relevant to any of your answers to questions 10 to 16.

DNA Collection

18. What type of crime scenes do Scientific Officers attend? Do Scientific Officers currently attend every instance of a homicide? Why/why not?

19. Identify which QPS policy or policies (if any) regulate Scientific Officers' collection of DNA material, and which policy or policies regulate the collection of DNA evidence more broadly.

20. Outline any departures from policy or policies concerning the collection of biological material that have occurred on more than one occasion.

21. Does the Quality Management Unit of the FSG have oversight over the work of SOCOs and Scientific Officers?

Other issues

22. Are there are any other problems, issues or areas of improvement for QPS Scientific Officers you are aware of?

Exhibit 2

Queensland Police Service

Position Description

With Honour We Serve

Rank	Senior Sergeant	**Role Code**	FTC07	**Function**	Senior Sergeant Forensics Forensic Services Group
Role Scope	This generic position will manage, plan, coordinate, monitor and review operational and administrative activities within the area of responsibility in support of a timely, efficient and effective provision of forensic services. These services may be in the areas of: • Scientific • Fingerprints • NATA accreditation • Electronic Recording • Vehicle Inspection Unit • Quality Management				

Selection Criteria

Are you the right person for the job?	All members are expected to espouse, practice and fulfil their duties in a manner consistent with the: ▪ QPS Values of Integrity, Professionalism, Community and Respect and Fairness; ▪ QPS Purpose to Prevent, Disrupt, Respond and Investigate; and ▪ Leadership Competencies for Queensland (LC4Q). Your application will be assessed against the Selection Criteria and Rank Profile Criteria.	
Integrity Criteria	**1**	A standard of personal integrity as required by the Commissioner of the Queensland Police Service.
Qualification Criteria	**2**	Existing appointment at the rank of Senior Sergeant or higher; OR Successful completion of Management Development Program (MDP) Level 2; or alternatively Successful completion of Leadership Capability Program (LCP), Level 2 in [redacted] (Note: Officers at a higher rank who are appointed to a position designated at a lower rank are required to take a voluntary reduction in rank in order to take up the new position.)
Role Specific Criteria	**3**	Holds, or has held, a Forensic Authorisation in Crime Scene Examination, or alternatively has, or has been, certified as an expert practitioner in a recognised forensic discipline (**this is required for all roles**). Possession of a Graduate Certificate in Forensic Investigation or equivalent (**this is only required for the role of Senior Forensic Scientist**). A qualified expert in Firearm Science **(this is only required for the role of Senior Forensic Scientist – Ballistics).** A qualified expert in Fingerprint Science **(this is only required for the role of Senior Fingerprints Expert).**

		Current registration as an Approved Inspector for the issue of safety certificates OR expertise in vehicle identification **(this is only required for the role of Senior Vehicle Inspector).**	
Rank Profile Criteria *These criteria reflect the LC4Q and are consistent for each rank.* *Your response should address the Leadership LC4Q competencies in the context of the Key Accountabilities for this position and with regard to the associated Locality Profile.* *The LC4Q stream for* ***Senior Sergeant*** *is* ***Program Leader.*** *For assistance with the QPS context for these criteria please refer to the link below to the Leadership Centre.*	**4**	**Vision:**	▪ Leads strategically ▪ Stimulates ideas and innovation ▪ Leads change in complex environments ▪ Makes insightful Decisions
	5	**Results:**	▪ Develops and mobilises talent ▪ Builds enduring relationships ▪ Inspires others ▪ Drives accountability and outcomes
	6	**Accountability:**	▪ Fosters healthy and inclusive workplaces ▪ Pursues continuous growth ▪ Demonstrates sound governance

Key Accountabilities

Role Context Key Accountabilities outline specific roles and responsibilities for this position	▪ Overview forensic examinations including monitoring of compliance with procedure to ensure the accuracy and reliability of reported results. ▪ Manage and maintain the administrative, financial, strategic planning and quality management activities and processes within the area of responsibility. ▪ Coordinate, monitor and review the education, training and development of staff, participate in performance assessments and ensure subordinates comply with the Service Code of Conduct. ▪ Participate in and/or coordinate multidisciplinary teams involved in ongoing monitoring of forensic services NATA compliance practices **(where applicable).** ▪ Provide advice including submissions and briefings on administrative and operational activities, relevant legislation, policies, practices and procedures. ▪ Establish and maintain communication channels with internal and external clients and stakeholders and represent the Service on various committees and advisory bodies. ▪ Initiate and promote the development, research and implementation of innovative processes and practices.

Additional Information

Notes	For training roles, Certificate IV in Training and Assessment is highly desirable.
Supporting Documentation	In preparing your application it is essential you consider: ▪ The LC4Q in the QPS context is outlined in a document hosted by the Leadership Centre titled 'QPS Leadership Competencies' and is available at:

	[redacted] ▪ Please refer to the notes section for this vacancy to access Locality Profile information. Copy and paste the link into a browser to access the Locality Profile relevant to this vacancy.

Privacy Collection Statement

The Queensland Police Service (QPS) is collecting information for the purpose of processing your application for an advertised internal QPS vacancy. The collection of this information is authorised by the Police Service Administration Act 1990.

Current @ 26.11.2021

Exhibit 3

Queensland Police Service

Position Description

With Honour We Serve

Rank	Constable / Senior Constable	**Role Code**	FTS01	**Function**	Forensic Scientist All Regions
Role Scope	To provide an efficient and effective forensic service to operational police and courts of law.				

Selection Criteria

Are you the right person for the job?	All members are expected to espouse, practice and fulfil their duties in a manner consistent with the: ▪ QPS Values of Integrity, Professionalism, Community and Respect and Fairness; ▪ QPS Purpose to Prevent, Disrupt, Respond and Investigate; and ▪ Leadership Competencies for Queensland (LC4Q). Your application will be assessed against the Selection Criteria and Rank Profile Criteria.		
Integrity Criteria	1	A standard of personal integrity as required by the Commissioner of the Queensland Police Service.	
Qualification Criteria	2	A serving sworn member of the Queensland Police Service who has successfully completed the Field Training Program (or previous equivalent). A minimum of two years sworn service. A Bachelor's degree in Science (or equivalent) from a recognised institution* in a relevant field of study and the ability to be accepted into a current Scientific Training Program, as approved by the Manager, Scientific Section. *with minimum pass grades (4) in first year Fundamental Sciences (this may include combinations of cell/plant biology, chemistry, physics, molecular biology, biochemistry).	
Role Specific Criteria	3	Nil.	
Rank Profile Criteria *These criteria reflect the LC4Q and are consistent for each rank.* *Your response should address the Leadership LC4Q competencies in the context of the Key Accountabilities for this position and with regard to the associated Locality Profile.* *The LC4Q stream for* ***Constable/Senior Constable*** *is* ***Team Leader.*** *For assistance with the QPS context for these criteria please refer to the*	4	**Vision:**	▪ Leads strategically ▪ Stimulates ideas and innovation ▪ Leads change in complex environments ▪ Makes insightful Decisions
	5	**Results:**	▪ Develops and mobilises talent ▪ Builds enduring relationships ▪ Inspires others ▪ Drives accountability and outcomes
	6	**Accountability:**	▪ Fosters healthy and inclusive workplaces ▪ Pursues continuous growth ▪ Demonstrates sound governance

link below to the Leadership Centre			

Key Accountabilities

Role Context Key Accountabilities outline specific roles and responsibilities for this position	▪ Perform forensic procedures and examinations as authorised by the Superintendent, Forensic Services Group. ▪ Provide forensic science services and advice to operational police in relation to crime scene examination, blood stain pattern analysis, fire investigation, marks comparison and other forensic services. ▪ Conduct forensic examinations and identify, record, collect, examine and interpret physical evidence as required by investigating and forensic police and courts of law. ▪ Prepare reports and statements on forensic science matters. ▪ Provide evidence to courts of law on forensic science matters. ▪ Successfully participate in internal and external training programs, as required, and develop skills and knowledge relevant to the provision of Forensic Services. ▪ Comply with the requirements of the QPS Forensic Services Quality System, including adherence to forensic procedures and maintenance of a case information management system as approved by the Superintendent, Forensic Services Group.

Additional Information

Notes	**<u>For Scientific Section positions only</u>:** The Scientific Section, Brisbane is comprised of multiple capabilities including Major Crime and Ballistics. Each capability requires additional qualifications that can be gained through internal training and additional studies through Griffith University. Specifically: • Major Crime capability requires completion of Graduate Certificate in Crime Scene Investigation, Griffith University plus internal Fire Investigation training. • The Ballistics capability requires completion of the National Training Curriculum for Firearm Examiners course and an internal Toolmarks Examination course. It is expected that upon completion of this training, Ballistics Officers will be assessed by the Australasian Forensic Science Accreditation Board (AFSAB) to become an accredited Forensic Firearm Examiner. **<u>For Regional positions only</u>:** Regional positions require the completion of a Graduate Certificate in Crime Scene Investigation, Griffith University and the internal Fire Investigation training.
Supporting Documentation	In preparing your application it is essential you consider: ▪ The LC4Q in the QPS context is outlined in a document hosted by the Leadership Centre titled 'QPS Leadership Competencies' and is available at: [redacted] ▪ Please refer to the notes section for this vacancy to access Locality Profile information. Copy and paste the link into a browser to access the Locality Profile relevant to this vacancy.

Privacy Collection Statement

The Queensland Police Service (QPS) is collecting information for the purpose of processing your application for an advertised internal QPS vacancy. The collection of this information is authorised by the Police Service Administration Act 1990.

Current @ 19.10.2021

EXHIBIT 4

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

STATEMENT OF TAYLA JADE SMITH

I, **Tayla Jade Smith,** of 57-59 Sydney Street, Mackay state as follows:

The following statement is provided in response to a notice I received from the Commission of Inquiry into Forensic DNA Testing in Queensland requiring me to give information in a written statement regarding my knowledge of matters set out in the Schedule attached to that notice. Attached and marked **'Exhibit 1'** is a copy of that notice.

1. My name is Tayla Jade Smith and I am a Plain Clothes Senior Constable currently attached to the Mackay Criminal Investigation Branch.

Qualifications and position

2. I currently hold the following qualifications:

   (a) Graduate certificate in Police Prosecution (2019) Nationally Accredited Training program through QPS; and

   (b) Graduate Certificate of Domestic Violence (2019) Attained from the Queensland University of Technology.

3. I commenced employment with Queensland Police Service on the 21st of September 2014 and have held positions in the following locations:

   (a) Recruit at the Queensland Police Academy 21/09/2014 – 21/04/2015;

   (b) Constable at Cairns Police Station 21/04/2015 – 21/04/2016;

   (c) Constable at Cooktown Police Station 21/04/2016 – 27/03/2017;

   (d) Senior Constable Prosecutor Cairns 21/03/2017 – 01/03/2019;

   (e) Sergeant Prosecutor Thursday Island 01/03/2019 – 15/11/2019;

   (f) Plain Clothes Constable Mackay Child Protection and Investigation Unit 15/11/2019 – 20/03/2022; and

[redacted]

(g) Plain Clothes Senior Constable Mackay Criminal Investigation Branch 20/03/2022 – Present.

4. I do not have a CV, my work history is outlined above.

5. My current role is as an investigator with the Mackay Criminal Investigation Branch. My responsibilities in this role include identifying and investigating a wide variety of criminal offences for the purposes of identifying an offender and commencing proceedings though the court system.

6. I work in the Mackay District in the Central Queensland Region. I report directly to [redacted], the Officer in Charge of Mackay Criminal Investigation Branch. I have no staff reporting to me.

7. I investigate a variety of offences including drug offence, offences against the person, property related offences and fraud offences.

DNA Testing Results

8. During investigations, I am notified of the results of the forensic DNA testing of submitting samples through QPRIME. Whenever I have received a confirmation of a DNA match, I receive an 'FYI' task to my task list. As a result of this task, I check QPRIME which shows an entry for the relevant results.

9. In respect of the result '*No DNA detected*' (or similar), I have not seen this result type before. My understanding of this result is that there is no DNA detected on a sample. I am not aware that further testing options available.

10. In respect of the result '*DNA insufficient for further processing*' (or similar), my understanding of this result type is that there was not enough sample to conduct a DNA test.

11. Up until 1st September 2022, I was not aware that further testing options are available upon receiving this result, as I take the result to mean what it states, that the DNA sample obtained was not able to be further tested.

12. On the 1st of September 2022, I received a phone call from Alicia QUARTERMAIN from the Forensic DNA Analysis team in Brisbane regarding one of my recent case files. I had previously observed on the file that the offender I had charged had returned a positive match on a DNA sample take at the scene. However, when speaking to Alicia

[redacted]

QUARTERMAIN, she informed me that there were samples that could be further tested. Alicia QUARTERMAIN advised that she was able to do further testing on the DNA sample obtained from the crime scene in this matter that would potentially enable a stronger comparison for court. After her explanation and recommendation on the process, given that she is qualified in the role of DNA processes, I agreed to this further testing.

13. I do not recall receiving any further types of DNA results aside from those already mentioned above.

14. I generally do not communicate with staff or scientists at the Queensland Health Forensic and Scientific Services (QHFSS) regarding specific cases. One time I recall speaking with someone at QHFSS was in relation to a statement for court.

15. In my experience, I do not disclose the details of the investigation or any DNA results to a victim prior to a formal statement and complaint being received. Therefore, it does not impact a victim's decision on whether they wish to commence proceedings.

16. Each case is different and unique, there are occasions where during the process of an investigation I have advised a complainant of the results of a DNA sample comparison obtained as part of an update in an investigation.

17. DNA is often useful in establishing a strong case in conjunction with other forms of evidence. In my experience it is not often used as a stand alone piece of evidence to prove the elements of an offence, rather assists in either identifying a suspect that results in a targeted investigation on a particular suspect, or strengthening the evidence already held by the investigator.

18. An example of DNA identifying a suspect might be related to a burglary type offence, where police have a statement describing an offender and also CCTV depicting an offender. Successful DNA results that are taken from the door on which the offender used to enter the dwelling, for example, can assist in strengthening the identification of the offender for a successful prosecution.

19. As stated above each investigation is different and may require different investigative methods be considered. Therefore, the role DNA plays in these investigations also varies. I am not in a position to rank different types of evidence in order of importance.

[redacted]

Tayla Jade Smith Witness

TAKEN AND DECLARED before me at MacKay in the State of Queensland this 21st day of October 2022

[redacted]

Tayla Jade Smith Witness

[redacted]

Tayla Jade Smith Witness

In the matter of the *Commissions of Inquiry Act 1950*
Commissions of Inquiry Order (No. 3) 2022
Commission of Inquiry into Forensic DNA Testing in Queensland

QP 0125A
05/22
Δ3

STATEMENT OF TAYLA JADE SMITH
INDEX TO EXHIBITS

Exhibit no.	Description
1.	Notice number 2022/00223 Requirement to give information in a written statement

Notice number: 2022/00223

COMMISSION OF INQUIRY INTO FORENSIC DNA TESTING IN QUEENSLAND

Section 5(1)(d) of the *Commissions of Inquiry Act 1950*

REQUIREMENT TO GIVE INFORMATION IN A WRITTEN STATEMENT

To: Plain Clothes Senior Constable Tayla Smith

Of: Queensland Police Service

I, Walter Sofronoff KC, Commissioner, appointed pursuant to Commissions of Inquiry Order (No. 3) 2022 to inquire into certain matters pertaining to forensic DNA testing in Queensland require you to attend to give a written statement to the Commission pursuant to section 5(1)(d) of the *Commissions of Inquiry Act 1950* in regard to your knowledge of the matters set out in the Schedule annexed hereto.

YOU MUST COMPLY WITH THIS REQUIREMENT BY:

Giving a written statement signed and witnessed as a declaration in accordance with the *Oaths Act 1867* to the Commission of Inquiry on or before **5.00 pm Tuesday 27 September 2022**, by delivering it to Level 21, 111 George Street, Brisbane.

A copy of the written statement must also be provided electronically by email at [redacted] with the subject line "Requirement for Written Statement".

If you believe that you have a reasonable excuse for not complying with this notice, you will need to satisfy me of this by the above date.

DATED this 23rd day of September 2022

[redacted]

Walter Sofronoff KC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Notice 2022/00223

Schedule of topics for statement

Plain Clothes Senior Constable Tayla Smith

1. State your full name, current position/title and where you work.

Qualifications and position

2. List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained.

3. Detail your work history.

4. Attach a current CV.

5. Identify the duties/responsibilities of your position. As part of your answer:

   (a) Include a description of the geographical area you work in, and identify who you report to and who (if anyone) reports to you.

   (b) Include a description of what types of crime you investigate.

DNA Testing Results

6. Are you notified of the results of the forensic DNA testing of submitted samples? If yes, explain how you are notified. Explain if this varies between the type of sample submitted or type of result received.

7. In respect of the result '*No DNA detected*' (or similar):

   (a) What is your understanding of the result? If you have not seen this result-type before, confirm same.

   (b) What is your understanding of the options for further testing available to you on receiving this result, if any?

   (c) Identify if your understanding of the result or the options for further testing has changed at any point. Identify the reason for any change and date of any change.

8. In respect of the result '*DNA insufficient for further processing*' (or similar):

   (a) What is your understanding of the result? If you have not seen this result-type before, confirm same.

(b) What is your understanding of the options for further testing available to you on receiving this result, if any?

(c) Identify if your understanding of the result or the options for further testing has changed at any point. Identify the reason for any change and date of any change.

9. What other type of results do you recall receiving? What is your understanding of those results?

10. Do you typically or occasionally communicate with staff or scientists at Queensland Health Forensic and Scientific Services about particular matters or samples?

11. Are DNA results ever passed onto complainants or witnesses? If yes, in your experience, does providing the result have an effect on the complainant's decision to proceed with the criminal complaint? If so, explain how.

12. Do you find DNA evidence is often or sometimes important in identifying an offender, deciding how to investigate a case or building a case against an accused? If yes, provide examples. Provide details if other types of evidence are typically more important than DNA evidence.

STATEMENT OF JAN CONNORS

I, Jan Mary Connors, Director of the Child Protection and Forensic Medical Service of the Queensland Children's Hospital, 501 Stanley St, South Brisbane, do solemnly and sincerely declare that:

Heading : Qualifications and experience:

Question 1 –State your full name and current position/title at Queensland Health (QH)

1. My name is Jan Mary Connors. My substantive position is Director of the Child Protection and Forensic Medical Service (CPFMS) for Children's Health Queensland, based at the Queensland Children's Hospital. I am currently acting in a higher-level position as Acting Director and Medical Lead for the Division of Medicine, Children's Health Queensland. I have been doing so for approximately the past two and a half years. During this time, I have maintained a role as a senior medical officer in CPFMS

Question 2 –List your tertiary qualifications, the year you obtained them and the institute from which the qualifications were obtained.

2.

Qualification	Name of University / College	Country of Qualification	Year Obtained
MBBS	Uni of Qld	Australia	1980
Dip Child Health	Royal College of Physicians, London	United Kingdom	1985
FRACP	RACP	Australia	1990
MPH	Uni of Qld	Australia	2003
FFCFM (RCPA)	RCPA	Australia	2015
(Masters of Forensic Medicine)	Monash University and Victorian institute of Forensic Medicine	Australia	2015

[redacted] ... [redacted]

Your name Witness

Question 3:- Detail your work history since you graduated from University.

3.

a) 1981-1983: Resident/registrar, Townsville General Hospital
b) 1984-1985: Paediatric SHO/registrar, Basingstoke District Hospital/ Addenbrookes Hospital, Cambridge, UK
c) 1986- 1990: Paediatric registrar, Mater Children's Hospital (MCH) South Brisbane and Royal Women's Hospital Brisbane.
d) 1991-1996: Paediatrician, Child Development and General paediatrics, MCH.
e) 1991-2003: Private Practice; General Paediatrics/ Developmental and Behavioural Paediatrics.
f) 1996-2003: Community Paediatrician
g) 2001-2006: Paediatrician Child Protection Unit (CPU), MCH; Community Child Protection Paediatrician,
h) 2006-2014: Director and senior Paediatrician, CPU, MCH
i) 2013-2014: Director Paediatric Health Servcies, MCH
j) 2015- currently: Director, CPFMS
k) 2019 (Feb-Sept): Acting Medical Director and Medical lead, Division of Medicine, QCH
l) 2020- (July-currently): Acting Medical Director and Medical lead, Division of Medicine, QCH

Question 4: Detail your appointments to any boards and/or committee, and the purpose of the boards/ committee.

4. I do not hold any board appointments.
5. I have until recently (May 2022) been a committee member of the Chapter of Community Child Health, of the Royal Australasian College of Physicians (RACP). The Chapter represents the area of community child health within the College which oversees child protection training and represents the College for matters related to child protection, particularly in the area of community paediatrics.

6. I was the inaugural Chair and am the current Chair of the State-wide Child Protection Clinical Partnership. The Partnership supports QH clinicians across Queensland in relation to child protection practice.

Question 5: Attach a current CV

7. Please see **Exhibit JC-01 – Curriculum Vitae**

Your role and Unit:

Question 6: Provide an overview of your responsibilities, and the role and function of the unit that you work in.

8. I answer this in relation to my substantive role as Director, CPFMS.
9. As Director of CPFMS, I have the overarching operational responsibility for the service. All professional streams report to me operationally as outlined below.

Question 7: Outline who you report to, who reports to you, the staff you are responsible for and their positions, roles and responsibilities.

10. CPFMS is a multidisciplinary team consisting of medical (Paediatricians, Fellows in training, registrars), nursing, allied health (social work and psychology) and administrative staff. We have a program manager. All staff report to me operationally and have additional professional oversight.
11. The service provides a 24-hour medical officer service for acute care.
12. Medical staff are responsible for the medical assessment and management of children referred for concerns that are in some way related to the child protection system.
13. This includes acute assessment of children presenting with concerns about abuse and neglect. Referrals can come from within the hospital e.g., the emergency department or from referral by QPS or Child Safety. Occasionally referral will come from external sources such as general practice.
14. In general, we see children who live within the catchment of QCH which approximates to the Greater Brisbane area.
15. Referrals can be for physical abuse, sexual abuse, neglect, illness fabrication and induction.

16. CPFMS also provides ambulatory service for children linked to the Department of Children, Youth Justice and Multicultural Affairs (Child Safety), providing medical assessment and management plans for general health, developmental and behavioural concerns.
17. CPFMS provides QH core medical representatives to numerous Suspected Child Abuse and Neglect (SCAN) Team meetings.
18. Paediatricians provide supervision and training for the junior medical staff of Fellows and registrars.
19. Nursing staff support medical assessments and fulfill the roles of Child Protection Liaison officers.
20. Psychology and social work assist in the assessment and management of children referred to the service.

Question 8: Explain what the role of a child protection advisor is and what type of practitioner undertakes that role. Explain when and how those positions were created, and whether they exist Queensland-wide.

21. In 2004, there was a Crime and Corruption Commission inquiry "Protecting children: An Inquiry into abuse of children in foster care".
22. This led to widespread changes across the child protection system.
23. In 2005, there was an injection of resources to QH to support the provision of child protection services with a focus of funding new designated roles at all hospitals where children could be admitted.
24. Child Protection Advisors (CPAs) are designated positions who have a child protection responsibility in each HHS. These positions are predominantly held by medical officers but in some circumstances may be covered by nursing or social work.
25. Child Protection Liaison Officers (CPLO) were also established, and these have predominantly been filled by nursing staff but also by social workers.
26. The main expectation of these positions was to support SCAN teams, but they have taken on the role of designated child protection clinicians for HHSs, playing a key role as a contact point for child protection matters, providing education, training and consultative advice.

27. There has been no further funding to these positions since 2005 despite increasing demands on services.
28. Also, at the time of the creation of these positions, equipment (Colposcopes) was provided across the state with expectation that sexual abuse cases could be expertly managed at the HHS where the victim presented.

Question 9: Attach a copy of the Child Protection Capability Framework document (or similar).

29. Please see **Exhibit JC-02 – Child Protection Capability Framework**
30. Microsoft Word - Attachment 1 - Queensland Health Child Protection Capability Framework
31. This document was created to support clinicians across QH to understand what level of responsibility they have for child protection and to outline the responsibilities of the HHS to support staff with training and resources. It is not a credentialling document.

Question 10: Who is responsible for the collection of biological material for forensic DNA testing from children under 14 years? What are the reasons for designating responsibility in this way? What policies, procedures and/or guidelines set out this responsibility? Attach a copy of the policies, procedures and/or guidelines.

32. It is the responsibility of paediatricians to collect biological material for forensic DNA testing for children under 14 years.
33. This age cut off is a guideline only and is open to discussion on a case-by-case basis.
34. Paediatricians have a specific skill set around the assessment and treatment of children. Queensland Health Paediatricians have varying levels of training in the area of child protection and even more varied training in forensic assessment.
35. Responsibility for seeing children who have been sexually abused does sit with local HHS paediatricians, but training for this is driven by the desire of that clinician to upskill. Many take this responsibility very seriously and do all they can to provide a high-quality service. Some elect not to take up available training. This can lead to inadequate after hours cover.

36. This can lead to delays in service and movement of the child and family between HHSs to seek forensic examination.
37. For older young people (14years and above) it is likely that presentations will be more in keeping with sexual assault (compared to child sexual abuse) which is usually managed by adult sexual assault services. This requires specific clinical capability, services, support and training which are not traditionally the remit of paediatrics.
38. In all cases there is the opportunity for a case-by-case discussion and individual considerations to achieve best outcomes for the young person.
39. **Exhibit JC-03:** Conducting child sexual assault examination (health.qld.gov.au)
40. **Exhibit JC-04:** Acute medical care of paediatric patients who have experienced alleged sexual abuse/assault (health.qld.gov.au)

Question 11: Who is responsible for the collection of biological material for forensic DNA testing from children aged between 15 and 17 years? Why?

41. Adult sexual assault services and forensic medical officers as per the reasons outlined above.

Question 12: For the collection of biological material in each of the ways referred to in the two paragraphs immediately above, are sexual assault investigation kits (SAIKs) used? If yes, are they the same SAIKs used for adults?

42. Yes, SAIK kits are used and as far as I know they are the same kits that are used by adults but not all components of the kit will be required. E.g., it is usually not possible to do a high-vaginal or cervical swabs in a child.

Question 13: Are there any other key differences in equipment used or records kept in relation to SAIKs conducted on children compared to SAIKs conducted on adults?

43. It is generally held that best practice for children is to do photo documentation of the genital examination. This allows for peer review of any changes that may or may not be relevant to the allegation. Children can show a number of anatomical variations in the genital area prior to puberty, and it is important not to misinterpret these findings.

44. This photo documentation is often done using a video colposcopy machine or other video camera and/or still photography if required.
45. I understand that it is usual practice with older children post puberty and adults to use a speculum to assist in examination and collection of swabs e.g., high vaginal or cervical swabs. This is not a skill that paediatricians generally hold.

Question 14: Does the SAIK contain equipment to take a reference sample from the child?

46. Yes, there is ability to take DNA reference material using a buccal swab. This is not usual practice and is done on specific request from QPS.

Question 15: Are there any minimum qualifications a practitioner must hold to perform a SAIK on a child, whether agreed under 14 years or aged between 15 and 17 years? If yes, identify those minimum qualifications.

47. Under 14 years, the expectation is that this will be done by, or supervised by, a Paediatrician. However, this is more in keeping with current best practice and it may be the case in more geographically remote areas that local medical officers will need to medically assess the child or young person and to collect required specimens.
48. It is advised that where medical staff examining the child or young person is not experienced in the forensic collection of specimens that the SAIK be done in collaboration with forensic medical officers and adult sexual assault services.
49. We hope to promote the role of nursing staff in completing SAIK administration for children under 14 years of age. Currently there is no training available to paediatric nurses to do this. CPFMS at CHQ has employed the first Paediatric Nurse Practitioner in training in Queensland with aim to develop this role.

Question 16: Are there optional qualifications or training programs related to forensic medicine that paediatricians can undertake? If yes, identify those programs.

50. As mentioned above, Paediatricians who have the responsibility of assessing and managing children and young people with allegations of sexual abuse, are encouraged to obtain additional training in this area.
51. In recent years, COVID19 has limited the ability to run and attend a number of the usual activities that have been available. It is hoped that these activities will become available again soon.
52. Paediatricians often seek this out of their own accord.
53. Starship Children's Hospital, Sydney Children's Hospital together with Westmead Children's Hospital, and Royal Children's Hospital Melbourne, all regularly run courses in the assessment and management of sexual abuse. These are usually short courses of approximately 3 days that do not lead to any specific qualification.
54. CPFMS offers the following supports:
    a) On site professional development activities on request where the paediatrician can spend some time in an observership at CPFMS
    b) 24 hours on call support for clinicians across the state
    c) Peer review of examinations and interpretation of findings on request. Secure pathways for sharing sensitive information have been developed to facilitate this.
    d) Regular workshops/symposia to provide professional development and upskilling. This has been done in the past by a nurse and Paediatrician providing upskilling at a number of HHSs across the state.

55. Formal qualifications in Forensic Medicine are available through Monash University in conjunction with the Victorian Institute of Forensic Medicine. Completion of this course leads to the qualification of Master of Forensic Medicine, or Graduate Diploma in Forensic Medicine if a shorter course is completed. Some clinicians have elected to do only some of the available modules that are relevant to paediatrics. A number of Paediatricians have elected to do these courses. Preference for employment at CPFMS is given to paediatricians who have completed or are doing one of these courses.
56. Doing a formal forensic medicine course is not a pre-requisite to doing SAIK assessment. To do so would greatly limit the available workforce.

Question 17: Broadly, what skills and experience are necessary to correctly conduct a forensic medical examination?

57. These skills can be divided into skills for the examination and skills to interpret the finding and provide a forensic report.

    a) Examination skills:

    Paediatricians have expertise in engaging with children and examining them in a manner that is not confronting. A purely sterile approach can be confronting to the child. Child friendly approaches to the examination are taken including making the examination area as comfortable as possible. For this reason, invasive interventions including the taking of blood for reference DNA, buccal swabs for DNA, are limited to situations where this is specifically requested by QPS.

    Paediatricians have expertise in the examination of the pre-pubertal genital area. This is required in general paediatric practice for a number of medical conditions. They do not hold expertise in use of speculum examinations. They understand paediatric genital anatomy and how to visualise the hymen without causing pain and how to interpret anatomical variations that may no longer be visible past puberty.

    b) Learning to examine a child as described above is not a difficult skill to acquire and maintain. There is however additional skill in interpreting the findings and providing a high-quality forensic report. With good photo documentation it is possible for the examination to be done by a general paediatrician with the required training at the site the child presents, and for clinicians with more expert forensic training to assist with interpretation and report writing.

Question 18: Do you think that a paediatrician is able to competently administer a SAIK on a child if they have no specific training in conducting forensic medical examinations? Are there any resources a paediatrician can consult in such a circumstance?

58. As mentioned above there is a level of training that is required but can be easily achieved by the paediatrician, and should be expected when employing a new paediatrician to a HHS.

59. Should a paediatrician need assistance they should be able call upon the Forensic Medical Service (FMS) or adult sexual assault service colleagues to assist in the forensic specimen taking.
60. The CPFMS based at QCH provides 24 hour on call support.

Question 19: Do nurses conduct SAIKs on children? If yes, what qualifications must they have and/or what courses must they complete, if any? If no, are there any plans to enable nurse practitioners to conduct SAIKs on children?

61. Currently there is no capability for nurses to conduct sexual abuse examinations. I understand that there has been a Sexual Assault Nurse Examiner (SANE) course developed for adult services, but this has not been extended to services for children under 14 years.
62. As mentioned above CPFMS is undertaking the training of our first paediatric Nurse Practitioner. It is hoped that this will be the first step in increasing the nursing capability in this area which may be of greatest benefit in more regional and remote areas where there can, at times, be quite significant staff turnover in Paediatricians or lack of paediatrician cover.

Question 20: What policies, procedures and guidelines does QH have that address the methods, procedures and systems for the using a SAIK on children? Attach a copy of any documents you identify.

63. On the central QH intranet site, QHEPS, there is the guideline on examination for sexual abuse:
64. This can be found as **attachment JC-03**

Question 21: What policies, procedures and guidelines does QH have that address the training, testing or auditing of staff in regard to using a SAIK on children? Attach a copy of any documents you identify.

65. I am not aware of any policies, procedures or guidelines that cover this area.

Question 22: Do you or your staff undertake forensic medical examinations on children suspected or accused of having committed a crime?

66. Not as a general rule. There may be the rare case where we will be asked to do this by police.

Question 23: Apart from instances of alleged sexual assault, are there other scenarios where biological evidence is collected from children for the purposes of forensic DNA testing?

67. Swabs for DNA may be taken from fresh bite marks in a physical assault.

Question 24: Have any problems or concerns been identified or raised with you regarding the methods, systems or processes used by QH in conducting forensic examinations on children? If yes, when, by who, how and what was the problem or concern? If no, confirm same. Do you consider there is any need to change the composition of the current SAIK used on children in Queensland?

68. Concerns have been raised to us by QPS and by HHSs who have told CPFMS that they have no one who can see children and young people who present to their service.
69. There is concern about the inability or unwillingness of some HHSs to commit to providing the sexual abuse service after hours, despite a memorandum being issued to all HHS of the need to see victims of abuse or assault at the facility they present to. It is still the case that QPS, families and victims are, at times, required to present to multiple facilities, delaying the time it takes for the victim to have their assessment and management.
70. **Exhibit JC-05:** Caring for people disclosing sexual assault | Health service directive | Queensland Health
71. It is important that the victim can receive adequate holistic assessment and management at the medical facility they present at as much as possible. Like all areas of medical care, small services without in-house paediatric cover will need to refer to their nearest facility that does have 24 hour paediatric cover and a Child Protection Unit.

Structure and Organisation:

Question 25: In a typical Hospital and Health Service, is there a paediatrician dedicated to, or in charge of, overseeing the collection of biological material from children for forensic DNA testing?

72. In most HHSs the responsibility for the provision of paediatric care will sit with the Director of Paediatrics.
73. All hospitals where children are admitted have a Child Protection Unit with Child Protection Advisor (CPA) and Child Protection Liaison Officers.
74. The CPA is a designated child protection position and is expected to be skilled in carrying out SAIK procedures. They will report to the Director of Paediatrics.
75. The CPA cannot however cover 24 hours a day and for full coverage there needs to be skills attained by all paediatrician on call or a separate dedicated on call group for child protection and forensic assessments.

Question 26: Is the structure of the QH child protection services in the Gold Coast and Brisbane different to other areas? If so, how?

76. Both CPFMS at QCH and the Gold Coast service have Paediatricians committed specifically to child protection with Directors of Child Protection and paediatricians with formal forensic training.

Question 27: Do you have oversight of practitioners conducting SAIKs on children aged under 14 years around Queensland? If no, who does have oversight?

77. While CPFMS provides support across the state in ways already mentioned, we have no jurisdiction over the provision of services in other HHSs outside of Children's Health Queensland.
78. The only visibility we have of the work done outside our own service is when other paediatricians ask for our support and advice.
79. The Director of Paediatrics at each HHS would be responsible for the services provided at that HHS.

Physical facilities:

Question 28: Describe the physical facilities or rooms at the Queensland Children's Hospital where SAIKs are administered on children. Do you oversee the procedures used in cleaning those rooms/facilities? Provide details of what equipment is used and to what standard (if any) they are cleaned?

80. We have one examination room that holds a colposcope that has recording capability.
81. This room in within the CPFMS and children presenting to the emergency department will be brought to this room.
82. We do not have a formal cleaning policy, but cleaning occurs to a routine medical standard.
83. This is currently being reviewed and a cleaning guideline being developed by our Nurse Practitioner in training and one of our forensic paediatricians.

Question 29: Explain what type of facilities or rooms are typically used for forensic examinations on children outside of Brisbane.

84. I am not specifically aware of what these facilities look like.

Other issues:

Question 30: Does your unit or do your staff receive any communication or feedback from the QHFSS or Queensland Police Service about the SAIKs you conduct in particular cases and the quality of biological samples that are taken in those cases?

85. No

Question 31: Would you be assisted by the provision of such feedback? Why/why not?

86. It would be helpful to know if there are any concerns and we would welcome the feedback.

Question 32: Identify and detail any other concerns, criticisms or feedback you have of the current Queensland SAIK model or the current; processes for collecting biological material for forensic DNA testing from children. Would the quality of forensic services be improved if your unit had greater visibility or a great role across the state? Attach supporting documents if necessary.

87. I have no additional concerns to what has been outlined above.
88. To support the principle that a victim of sexual abuse/assault should be managed at a facility close to where they present and in a timely manner, there needs to be capability built in each HHS. Ideally there should be a consistent response, both medically and from a psychosocial perspective, to allegations of assault or abuse, independent of where the victim presents. It is important to minimise trauma to the victim by involving the minimum number of personnel possible in the clinical care and forensic examination: having the right care at the right place.
89. For over 20 years, HHSs employing Paediatricians have had the opportunity to make sexual abuse training an expectation of employment and to build this capability.
90. Some HHSs have done this very well, showing that it is very achievable. Other HHSs have elected not to.
91. The alternative to this would be to build hub and spoke models across the state and have the victims travel to those hubs. This would need increased resourcing at those sites.
92. CPFMS would welcome an increased role in oversight of forensic services across the state (for all aspects of abuse). Currently, we hear from clinicians who want our support, but there are many cases that we do not hear about, with no expectation of peer review.
93. Since 2005 there has been little to no funding to QH child protection services despite increasing demands. Building further capacity across the state needs resourcing to support an already overstretched health system.

All the facts and circumstances declared in my statement, are within my own knowledge and belief, except for the facts and circumstances declared from information only, and where applicable, my means of knowledge and sources of information are contained in this statement.

I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867.*

TAKEN AND DECLARED before me at ## in the State of Queensland this ## day of ## [month] 2022

[redacted]. ..... [redacted] .....

Your name Witness [redacted]

Exhibits Index – [Your name] Statement

Question	Exhibit	Document Title
1	JC-01	Curriculum Vitae
2	JC-02	Queensland Health Child Protection Capability Framework
3	JC-03	Conducting child sexual assault examination Qh-GDL-943:2015
4	JC-04	Acute medical care of paediatric patients who have experienced alleged sexual abuse/assault
5	JC-05	Caring for people disclosing sexual assault | Health service directive | Queensland Health

EXHIBIT 1.

Curriculum Vitae

Personal Information:
Full name: Dr Jan Connors
Contact details: [redacted]

Qualifications Obtained (Primary & Postgraduate):

Qualification	Name of University / College	Country of Qualification	Year Obtained
MBBS	Uni of Qld	Australia	1980
Dip Child Health	Royal College of Physicians, London	United Kingdom	1985
FRACP	RACP	Australia	1990
MPH	Uni of Qld	Australia	2003
FFCFM (RCPA)	RCPA	Australia	2015
(Masters of Forensic Medicine)	Monash University and Victorian institute of Forensic Medicine	Australia	2015

Employment history:

Dates	Feb 2019 – Sept 2019 July 2020 - present
Position Title	Acting Medical Director and medical lead, Division of Medicine CHQ: 0.5 FTE
Responsibilities	• Medical Director and lead of the leadership team Division of Medicine CHQ • Line management and budget responsibilities for services within the Division of medicine. •
Facility/facilities	CHQ
City/State	Brisbane
Country	Australia

Dates	Nov 2015 - current
Position Title	Director, Child Protection and Forensic Medical Service (CPFMS) fulltime
Responsibilities	• Management of a multidisciplinary service with responsibility for the identification and protection of children presenting to the MCH and for support and training of staff of the MCH. • Professional and operational line management for all medical staff within the CPFMS… junior and senior registrars and consultant staff.

	• Operational line management for all staff including allied health, nursing staff and administrative staff. • Budget accountability for the CPFMS cost centre. • Promotion of organisational strategic direction. Patient safety and quality initiatives and KPIs. • Professional appraisal and development of medical staff within the CPFMS. • Promotion of education, including state-wide tele-health education and support for the research officer. • Development and review of policy related to child protection. • Clinical Child protection services including forensic assessment, reports and court appearances. • Community child protection for Inala in CHQ community health.
Facility/facilities	CPFMS, Lady Cilento Children's Hospital, CHQ From 2018, no longer LCCH: name change to Queensland Children's Hospital
City/State	Brisbane
Country	Australia

Current:

Dates	2013 to Nov 2014
Position Title	Director Paediatric Health Services, Mater Children's Hospital 0.5FTE (provision of backfill for this position intermittently through 2012-13)
Responsibilities	• Line management of Directors of Paediatric Medical Specialties including: General Paediatrics; Respiratory and Sleep medicine; Neurology; Radiology; Infectious Diseases; Endocrinology; Metabolic medicine; Rheumatology; Cardiology; Dermatology; Haematology; Child Development; Child Protection; Emergency Medicine. • Report to Executive Director of Mater Adults Women's and Children's Hospitals. • Budget accountability for Division of Medicine, MCH, through reporting lines of cost centre managers. • Accountable for accreditation standards including mandatory training and patient safety and quality initiatives. • Management of human resource practices including performance appraisal and professional development of reporting directors. • Promotion of professional and behavioural standards that are in keeping with the values of the organisation. • Promotion of organisational strategic direction and indentified KPIs. • Supporting amalgamation processes for the development of the QCH workforce. • Member of the MCH Executive Committee. • Chair of the MCH Directors meeting which also includes Directors of Paediatric Surgery, Critical Care, PICU and CYMHS.

	• Member of Mater Health Services (MHS) Patient Safety and Quality meeting chaired by CEO of MHS. • Member of the Ambulatory and OPD Executive Committee • Member of the MCH patient flow and safety management group. • Member of the Collaborative Care steering committee for children with complex needs. • Member of the medication safety committee • Actively involved in Patient safety and Quality review of incident reports and investigations including RCAs.
Facility	Mater Children's Hospital, South Brisbane
City/State	Brisbane, Queensland
Country	Australia

Current:

Dates	May 2006 – Nov 2014
Position Title	Director, and Senior Paediatrician, Child Protection Unit (CPU). MCH: fulltime until addition of above position in June 2013.
Responsibilities	• Management of a multidisciplinary service with responsibility for the identification and protection of children presenting to the MCH and for support and training of staff of the MCH. • Professional and operational line management for all medical staff within the CPU...junior and senior registrars and consultant staff. • Operational line management for all staff including allied health, nursing staff and administrative staff. • Budget accountability for the CPU cost centre. • Promotion of organisational strategic direction. Patient safety and quality initiatives and KPIs. • Professional appraisal and development of medical staff within the CPU. • Promotion of education, including state-wide tele-health education and support for the research officer. • Development and review of MCH policy related to the CPU. • Clinical Child protection services including forensic assessment, reports and court appearances. • General paediatrics OPD. • Community child protection for Inala in CHQ community health.
Facility/facilities	CPU, MCH
City/State	Brisbane
Country	Australia

Dates	July 2003 – May 2006
Position Title	Fulltime combined appointment: Community Paediatrician/MCH
Responsibilities	Clinical services across community and hospital. • Child development and child protection QEII Health Service District and • Child Protection and general paediatrician MCH.
Facility/facilities	Queensland Health
City/State	Brisbane
Country	Australia

Dates	March 2001- July 2003
Position Title	Part time community Paediatrician
Responsibilities	Child Development Child Protection
Facility/facilities	Queensland Health • Inala Community Health • Mt Gravatt Child Development service.
City/State	Brisbane
Country	Australia

Dates	August 2001 – July 2003
Position Title	Relieving Paediatrician CPU, MCH
Responsibilities	Child protection paediatrician
Facility/facilities	MCH
City/State	Brisbane
Country	Australia

Dates	Jan 2001- Aug 2002
Position Title	Relieving Development paediatrician
Responsibilities	Developmental Paediatrics
Facility/facilities	MCH
City/State	Brisbane
Country	Australia

Dates	Oct – Dec 2000

Position Title	Relieving community paediatrician
Responsibilities	Child Development
Facility/facilities	Pine Rivers Child Development Service
City/State	Brisbane
Country	Australia

Dates	March 1998- Aug 2002
Position Title	Relieving Community Paediatrician
Responsibilities	General/community Paediatrics
Facility/facilities	Riverton Early parenting Centre
City/State	Brisbane
Country	Australia

Dates	Nov 1996- June 1997
Position Title	Temporary part time visiting community paediatrician
Responsibilities	Child development
Facility/facilities	Child Youth and family health, Inala, QEII health service district
City/State	Brisbane
Country	Australia

Dates	1991- 2003
Position Title	Private Practice
Responsibilities	General paediatrics Child development
Facility/facilities	
City/State	Brisbane
Country	Australia

Dates	1991 – 1996
Position Title	Relieving Paediatrician
Responsibilities	Child development General paediatrics
Facility/facilities	MCH
City/State	Brisbane
Country	Australia

Dates	1990
Position Title	Senior registrar neonatology
Responsibilities	Neonatology
Facility/facilities	RBWH
City/State	Brisbane
Country	Australia

Dates	1987-1989
Position Title	Paediatric registrar
Responsibilities	Paediatric training, basic and advanced
Facility/facilities	MCH
City/State	Brisbane
Country	Australia

Dates	1986
Position Title	Senior House Officer
Responsibilities	Paediatric Surgery
Facility/facilities	MCH
City/State	Brisbane
Country	Australia

Dates	1984-1985
Position Title	Paediatric SHO/Registrar
Responsibilities	General paediatrics
Facility/facilities	Basingstoke District Hospital Addenbrookes Hospital and Rosey maternity hospital, Cambridge
City/State	Basingstoke and Cambridge
Country	United Kingdom

Dates	1981-1983
Position Title	Resident /registrar
Responsibilities	All areas
Facility/facilities	Townsville General Hospital
City/State	Townsville
Country	Australia

Current & All Previous Medical Licensing Authorities:

Licensing Authority	Country of Registration	Registration Number
AHPRA/ Medical Board of Australia	Australia	MED0001351386

Professional development:

Masters of Public Health (MPH): 2003:

- Health care delivery systems
- Introduction to Epidemiology
- Introduction to Biostatistics
- Principles of Epidemiology
- Social and Behavioural Determinants of Health
- Qualitative Research
- Applied Statistical Methods
- Applied Study Design
- My Master of Public Health Dissertation was: 'The Impact of Child Abuse on Queensland Women Prisoners'.

Masters of Forensic Medicine through Monash University, Melbourne. I completed course work to Masters level in 2015. As well as specific forensic paediatric subjects I have done 'Medical Evidence' and 'Ethics, Medicine and the Law'.

2014: 'Leadership of Quality and Safety in Health Care' QUT: Brisbane

- A framework for Quality and Safety Leadership
- Leadership in complex and chaotic environments
- Organisational Leadership for Quality and safety
- Organising for Quality and Safety Improvement
- Developing integrated teams
- Advanced change management
- Person centred care
- Engaging clinicians in quality and safety improvement
- Measuring Quality: developing meaningful clinical indicators
- Applying quality improvement principles.

Networks/ organisations:

2004-2013: Clinical Chair of the Southern Queensland Child Protection Network and then Chair of the Steering Committee for the State-wide Child Protection Clinical Partnership (SCPCP). 2013-2014 Chair SCPCP

Current Chair of SCPCP

Member of the steering committee of the State-wide Child Youth Clinical Network (SCYCN).

Past member of the Queensland Paediatric Quality Council, a subgroup of the SCYCN which reviews child deaths.

Chair of the Child Protection Special Interest group of the RACP - past three years finishing may 2022

Current Qld representative on the RACP Chapter Community Child Health Committee

Member of the Clinical Ethic Consultation service of CHQ

Member of the Morbidity and Mortality Committee of CHQ.

Member of the Credentialing Committee CHQ

Inaugural Chair and now member of the Steering committee for the Child Protection Practitioners Association of Australasia.

Education and research:

I have been actively involved in the Child Protection workshops for Child Protection Advisors and Child Protection liaison officers since 2005.

I have presented at a number of state-wide Child Protection forums.

I have chaired a working party that developed and provided a Child Protection education module to sites across Queensland.

I have supervised RACP trainees in submitting projects for their RACP advanced training requirements since 2000.

Other papers/presentations/:

- State: 2009: PACT (Protect all children today) Conference on the "Medical Aspects of Child Protection"
- National: 2003: Australian National Public Health Conference: MPH Dissertation: "The Long term impact of child abuse on women prisoners".
- International: 2004: ISPCAN Conference. "Child protection significance of childhood ingestions".
- 2012: National RACP workshop presentation on clandestine drug laboratories.
- Presentation at the International Shaken Baby Syndrome Conference in Paris, May 2014. "Temporary Brittle Bone Disease and Abusive Head Trauma: lack of evidence for a fundamentally flawed belief system"
- Regular presenter at Child Protection Advisor workshops for the past 10 years;
- Presentation at national Chapter of Community Child Health Satellite meeting Brisbane, 2012: "Medical assessment of Children exposed to illicit Drug labs"
- Presentation at the MCH inter-agency Child Protection Symposium Sept 2014: "Fabricated and Induced Illness"

Publications:

- "Use of cannabis in severe childhood epilepsy and child protection considerations." Yao, M; Easterbrook, L; Connors, J; and Koopmans, L:
  Journal of Paediatrics and Child Health. 51 (2015) 491-496.
- "Classifying Injury Causation in Interim Medico-Legal Reports Following Forensic Evaluation of Suspicious Childhood Injury": Catherine Skellern, Jan Connors: SM J Pediatr. 2017; 2(1): 1007

Editorial review:

- I have provided reviews for perspective journal articles for both the Journal of Forensic and Legal Medicine and the Journal of Paediatrics and Child Health.

Policy:

2006: State-wide Telecast presentation on Care and Treatment Orders.

Chair: Working party which developed a clinical capability framework for Child protection.

2004-2012: Southern Qld representative for the QH strategic directions meeting for the Child Safety Unit of QH.

Clinical representative for numerous child protection inter-departmental government meetings.

2012-13: Submission to and evidence before the Queensland Child protection Commission of Inquiry (Carmody Inquiry) into the Qld Child Protection system. Invited member of an advisory group to the Inquiry.

Queensland Health

EXHIBIT 2.

Queensland Health Child Protection Capability Framework

A partnership between the Statewide Child Protection Clinical Partnership and Social Policy and Legislation Branch, Department of Health

Queensland Government

Contents

Acknowledgement 3

A message from the Director-General 4

Foreword 5

1. Introduction 6

2. Legislative responsibilities 7

3. Key principles 8

4. Aims 8

5. What is a capability? 9

6. Structure of the Framework 10

7. How to use the Capability Framework 12

8. The capability levels 13

Capability level one: Foundational 13
Capability level two: Fundamental 14
Capability level three: Intermediate 17
Capability level four: Experienced 20
Capability level five: Specialist 22

9. Conclusion 26

10. Reference list 28

Appendix one – Legislation 29

Appendix two – Additional reading 31

Appendix three – What level am I? Guidance tool 33

Glossary 35

Acknowledgement

Aboriginal and Torres Strait Islander children are over-represented in child protection and out-of-home care services compared to non-Indigenous children. The reasons for this are complex and are connected to past policies and the legacy of colonisation. Poverty, assimilation policies, intergenerational trauma and discrimination and forced child removals have all contributed to the over-representation of Aboriginal and Torres Strait Islander children in care, as has a lack of understanding of the cultural differences in child-rearing practices and family structure.[1 2]

Aboriginal and Torres Strait Islander children are 37.3% of the total out-of-home care population, including foster care, but only 5.5% of the total population of children. Aboriginal and Torres Strait Islander children are now 10.2 times more likely to be removed from their families than non-Indigenous children.[3]

The percentage of children in out-of-home care who identified as Aboriginal and Torres Strait Islander people rose from 39.3% to 42.7%. Between 2014/15 and 2018/19, compared with non-Aboriginal and Torres Strait Islander children and young people, Aboriginal and Torres Strait Islander children and young people were on average:

- 8.1 times more likely to be subject to children protection orders
- 5.1 times more likely to be subject to a notification
- 8.3 times more likely to be subject to short terms orders
- 7.9 times more likely to be subject to long terms order.[4]

[1] Human Rights and Equal Opportunity Commission [HREOC], 1997; SNAICC, 2016a; Titterton, 2017

[2] Child Family Community Australia Resource Sheet – January 2020; Australian Institute of Family Studies

[3] The Family Matters Report 2019: Measuring trends to turn the tide on the over-representation of Aboriginal and Torres Strait Islander children in out-of-home care in Australia.

[4] Department of Child Safety, Youth and Women (2019). Our Performance. https://www.csyw.qld.gov.au/child-family/our-performance.

A message from the Director-General

The safety and wellbeing of all children in Queensland is a priority for Queensland Health. We are committed to promoting and maintaining a culture that provides a safe environment for children and that promotes every health contact as an opportunity to support a family and protect a child.

We recognise that promoting the safety and wellbeing of children and supporting families is a shared responsibility across government and community. Everyone shares the responsibility of preventing abuse, neglect and exploitation. That is why Queensland Health requires the commitment, support and cooperation of all staff, volunteers and external contractors who help to deliver our services. We all have a role to play in promoting a culture of care and protection for all children. A key element of this is understanding what constitutes abuse and neglect and what creates risks of harm to children.

As part of our commitment, Queensland Health will:

- publish this Child Protection Capability Framework on QHEPS
- continue to develop contemporary education resources to support Hospital and Health services to better equip staff to be aware of, and comply with, our child protection requirements, and
- incorporate the Royal Commission's Child Safe Standards in Queensland Health policies, procedures and guidelines.

Every person within Queensland Health who comes into contact, or works with children, must seek to uphold the rights and dignity of all children and commit to establishing safe and supportive relationships with families.

We regularly undertake internal reviews of our Statewide child protection policies and guidelines to ensure they always support a culture and practice that puts the safety of children at the centre of our thinking and action. Everyone is encouraged to take action to improve and enhance policies, guidelines or practices that seek to improve the safety and wellbeing of children.

Dr John Wakefield
Director-General
Department of Health

Foreword

Children and young people rely on responsible adults to help them be safe from abuse and neglect.

Meeting our legal responsibilities and achieving clinical excellence in our response to child protection across Queensland requires a statewide guiding framework for individuals and Hospital and Health Services (HHSs). This framework must align with relevant Queensland legislation, policy, and guidelines.

The current child protection reform agenda, Supporting Families Changing Futures 2019 – 2023, and the recommendations from the Royal Commission into Institutional Responses to Child Sexual Abuse provide an overarching strategic direction to help embed a culture to keep children safe, at all levels of organisations. Principle 7 of the National Child Safe Standards states, "Staff and volunteers are equipped with the knowledge, skills, and awareness to keep children and young people safe through ongoing education and training."[5]

We, the Statewide Child Protection Clinical Partnership (SCPCP), have embarked on this journey to develop a statewide child protection capability framework (the framework) in partnership with clinicians and the Social Policy and Legislation Branch, Department of Health. Our goal is to enhance the existing resources that guide child protection practice standards for Queensland Health staff. Consultation, involvement, and collaboration have been at the heart of its development, with input from staff across all 16 HHSs and the Mater Misericordiae.

The release of this capability framework signifies the completion of Phase One, which outlines the knowledge, skills, and capability needed for Queensland Health staff to safeguard children and effectively support vulnerable children and families. Phase Two will involve the development of contemporary resources which will be made available to all HHSs to help support local implementation of the framework.

We encourage you to use the capability framework as an essential component of your local strategy for embedding clinical excellence in child protection practice in your HHS.

Dr Jan Connors
Clinical Chair
Statewide Child Protection Clinical Partnership

[5] http://childsafe.humanrights.gov.au/national-principles/about-national-principles

1. Introduction

The safety and wellbeing of children and young people and their protection from abuse and neglect is an important, shared responsibility in the community. All of Queensland's Hospital and Health Services (HHSs) have a duty outlined in legislation for staff to recognise and respond (refer or report) to concerns about the safety and wellbeing of a child, and to work cooperatively with other agencies to protect children.

The continuum of Queensland Health services across primary, secondary, and tertiary care offers many opportunities to identify children and young people at risk, initiate early care, and prevent or reduce the impact of adverse childhood experiences that can last a lifespan. The right response at the right time can make all the difference to the safety and wellbeing of a child.

Effective responses and positive outcomes rely upon Queensland Health staff possessing knowledge and skills in child protection responses, and having the confidence to liaise with colleagues, seek appropriate advice, and work with children and families when there are concerns about their safety and wellbeing. All Queensland Health staff who encounter children, young people, and parents or carers must know what to do if they have any concerns about child abuse or neglect. These staff members must also understand that it is their responsibility to recognise risks and respond appropriately. Appropriate response may also come from health services where children are not seen in person, but there are concerns about how adult issues may be impacting on the care and safety of a child.

The Child Protection Capability Framework (capability framework) outlines five levels of capability for Queensland Health staff across the continuum of care. Its primary aim is to ensure that all Queensland Health staff, clinical and non-clinical, have a common understanding of their responsibilities to enable them to recognise risk factors for abuse and neglect and respond appropriately, within the scope of their role, to any suspicions of a child in need of protection.

The capability framework has been endorsed by the Social Policy and Legislation Branch, Department of Health, as best practice. Further, it is fully supported by all Queensland Health child protection policies and guidelines. All HHSs are encouraged to implement this framework and incorporate it into their own workforce development strategies.

Throughout this document, we use the term 'Queensland Health staff' to include all Queensland Health employees, volunteers, and external contractors working within Queensland Health HHSs, including employees of Health Support Queensland. The term 'child' is used to refer to infants, children, and young people aged under 18 years. 'The framework' is used throughout this document to refer to this document, the *Child Protection Capability Framework*.

2. Legislative responsibilities

All children have a right to grow up in an environment free from neglect and abuse. As enshrined in the *United Nations Convention on the Rights of the Child 1989*, the best interests of children are paramount.

The protection of children and the duties of Queensland Health staff are contained within several areas of legislation. Specifically, these responsibilities fall under the following:

- *Child Protection Act 1999*
- *Civil Liability Act 2003*
- *Public Health Act 2005*
- *Right to Information Act 2009*
- *Information Privacy Act 2009*
- *Hospital and Health Boards Act 2011*
- *Child Protection Reform Amendment Act 2017*
- *Human Rights Act 2019*, and
- *Working with Children (Risk Management Screening) Act 2000.*

Queensland Health staff have a duty to *'protect children who have been harmed or are at risk of harm when the children present at health service facilities'.*[6] The *Child Protection Act 1999* is the overarching legislation relating to the protection, welfare, and best interests of children and young people, and is administered by the Department of Child Safety, Youth, and Women (Child Safety). Queensland Health staff have both mandatory and non-mandatory obligations under the *Child Protection Act 1999* to report any reasonable/reportable suspicions of child abuse and neglect. The paramount principle for administering the act is to ensure the safety, wellbeing, and best interests of a child, both throughout childhood and for the rest of the child's life.

Importantly, under Part 2A, Chapter 2 of the *Civil Liability Act 2003*, Queensland Health, as a public entity, would be in breach of its duty to prevent child abuse for children under its care or the care of a person associated with the public authority, unless it is proven that the public entity has taken all reasonable steps to prevent the abuse. The requirement to take all reasonable steps to prevent abuse follows recommendations under the *Royal Commission on Institutional Responses to Child Sexual Abuse 2017.*

The recent *Human Rights Act 2019* places further duties on Queensland Health staff to consider the protection of families and children, where relevant, as part of their decision-making functions.

Appendix one provides a detailed overview of the relevant legislation.

[6] Public Health Act, 2005

3. Key principles

The capability framework is underpinned by the following key principles for child protection practice:

- All children have a right to be safe, cared for, protected, and able to reach their full potential.
- Every health contact is an opportunity to support a family and protect a child.
- Queensland Health staff have a legal responsibility to protect children who have been harmed or are at risk of harm.
- All Queensland Health staff have a role to play in protecting children and can achieve this through child and family-centred care and child aware practice, even when only working with adults who are parents/carers.
- Queensland Health staff play an important role in the continuum of care for children. These staff members are in a unique position to identify risks and support needs at an early stage, then respond promptly so children and families can thrive, and harm can be prevented.
- All Queensland Health staff should know how to respond when they identify concerns about a child's care, safety, or wellbeing, and have the skills to take all reasonable steps to protect the child.
- A working partnership between Queensland Health and the wider service system can help to ensure a coordinated and collaborative response to the protection, safety, health, and wellbeing needs of children, young people, and their families.
- A Commitment by all Queensland Health HHSs to create a culture of innovation and continuous improvement in relation to services provided to children and their families as a strategy to prevent child abuse and neglect to children. This includes the importance of reporting on the finding of reviews and quality improvement initiatives on a regular basis.
- Supporting and outlining expectations around child protection capability can help increase the confidence of Queensland Health staff, thus encouraging them to recognise and respond appropriately to suspicions of child abuse and neglect and help facilitate the correct level of help for children and families at the right time.

4. Aims

The overarching goals of the framework are multi-faceted, and aim to:

- Support Queensland Health's shared commitment to the safety and wellbeing of children and prioritisation of the health needs of vulnerable children and young people.
- Promote clinical excellence in Queensland Health Child Protection Unit models within HHSs that strive to deliver child-focussed practice, integration, and clinical multidisciplinary care.
- Define the capabilities, knowledge, and skills of Queensland Health staff that will best support HHSs to effectively respond to the care, safety, wellbeing and protection needs of children in Queensland.
- Provide a common understanding of mandatory and non-mandatory obligations of Queensland Health staff to report a reasonable/reportable suspicion of child abuse and neglect and instil confidence about how to correctly fulfil these in practice.
- Encourage a workforce that is proactive and responsive to early warning signs to at risk and vulnerable children and identifies every health contact as an opportunity to support a family and protect a child.
- Provide a common language around child-aware practice and child protection to support a greater consistency in communication and training across diverse teams and regions of the state.

- Provide a common understanding of the full care continuum and pathways available to support the safety and wellbeing of children and their families in Queensland, and the role of Queensland Health staff within this.
- Continue to develop contemporary statewide education resources to support local implementation of the framework. Contribute to instilling a child-focussed, child-safe organisational culture and workforce within Queensland Health.

5. What is a capability?

Each level within the framework identifies a set of capabilities relevant to staff at that level. Capability, in this context, refers to a combination of skills, knowledge, and experience recommended for individual staff working within that level.

The framework aims to ensure that these qualities inform child protection responses and practice in a way that is commensurate with an individual's occupational role and level of responsibility.

Capability involves individuals being able to critically reflect on and evaluate their own skills, knowledge, and practice, being open to exploring alternative approaches, and being willing to undertake additional learning and development activities to build on existing knowledge and skills.

6. Structure of the Framework

About the capability levels

The framework outlines five capability levels for Queensland Health staff across the continuum of care. Each of these levels contains a distinct set of knowledge and skills.

The five capability levels are outlined in table one:

Table one: Child Protection Capability Framework levels

Capability Level		Focus	Target group	Description	Levels included
Capability Level one	**Foundational**	Knowledge	Non-clinical staff, volunteers and contractors.	Basic awareness of child protection responsibilities.	1
Capability Level two	**Fundamental**	Knowledge	All Queensland Health clinical staff.	Awareness of prevention, early intervention, child protection, and the care continuum.	1 and 2
Capability Level three	**Intermediate**	Skill	All Queensland Health clinical employees working predominantly with children and/or with adults (who may be parents/carers) in higher risk areas for child protection.	Moves beyond awareness to application of knowledge of prevention, early intervention, child protection, and the care continuum, with some support from experienced and specialist staff.	1, 2 and 3
Capability Level four	**Experienced**	Experienced skill	Experienced clinical staff who work predominantly with children and/or parents/carers and can provide additional assessment, coaching, advice, and support to clinical staff regarding early intervention, child protection, and the care continuum.	Builds on levels one, two, and three, focussing on in-depth assessment, coaching, advice, and support to children, parents/carers, and other staff members.	1, 2, 3 and 4
Capability Level five	**Specialist**	Specialist and leadership	All clinical employees in dedicated specialist Child Protection roles, including Child Protection Liaison Officers, Child Protection Advisors, and Paediatricians providing child protection services.	Applies knowledge and skills at a specialist level, providing education, training, advice, and guidance to Queensland Health staff. Also, working regularly with internal and external stakeholders to manage effective child protection responses.	1, 2, 3, 4 and 5

The capability levels are designed as a step-up model with progression of the knowledge and skills being cumulative, as outlined in the table above.

Below are some example scenarios to illustrate the step-up model and progression of knowledge and skills between levels:

- A physiotherapist in an aged care ward at level two will work towards the knowledge and skills outlined in levels one and two.
- An emergency registrar in a paediatric ward at level three will work towards the knowledge and skills outlined at levels one, two, and three.
- A senior social worker at level four will work towards the knowledge and skills outlined in the framework at levels one, two, three, and four.
- A Child Protection Liaison Officer identified as level five will work towards the knowledge and skills outlined in the framework at levels one, two, three, four, and five.

Minimum levels

It is critical that all Queensland Health staff have a base level understanding of the legal requirements of Queensland Health staff to protect children and take all reasonable steps to prevent child abuse. As such, the framework sets out the recommended minimum levels of knowledge and skill for all Queensland Health staff, clinical and non-clinical, to assist with meeting their legal responsibilities. This aligns with current Professional Child Protection Capability Requirements Guideline.

Table two below sets out the recommended minimum levels within this framework.

Table two: minimum levels recommended

Minimum level knowledge and skill recommended			
Non-clinical staff, volunteers, and contractors	Level one	Foundational	Basic awareness of child protection responsibilities
All Queensland Health clinical staff	Levels one and two	Fundamental	Awareness of the care continuum and child protection

7. How to use the Capability Framework

The framework can be used as an effective tool to support workplace training and professional development. Each HHS is best placed to decide the most appropriate level for each role. Similar roles can vary considerably in their work functions across HHSs, according to local arrangements.

The capability framework levels do not correspond to professional grades/levels due to differences in the structure of health services, roles, and how services are provided across the state. The framework has been designed with flexibility for HHSs to consider the size of the region, structure of the health services, scope of practice within each role and facility, and the knowledge, skills, and experience of their individual staff members.

Staff will not always fit neatly into one level. The framework has been designed with fluidity between levels which encourages staff to develop knowledge and skills that extend into the next or higher level. For example, mental health staff working exclusively with children on child protection orders (e.g. Evolve Therapeutic Services) are likely to be working towards level four capability, with some staff members requiring some of the specialist level knowledge and skills of level five. In these circumstances, where not all capabilities are relevant at the higher level, service managers are encouraged to work with individuals and teams to identify the specific capabilities at the higher level that is relevant to them in their particular role to effectively encourage the local training and professional development of these staff members.

Application of the framework

In applying the framework, HHSs are encouraged to consider ways to identify a mix of staff across all levels at each facility. HHSs may also consider how to implement a combination of staff within the higher risk areas for child protection within their facilities – especially where there are a higher prevalence of vulnerabilities and/or child protection concerns.

Examples of higher risk areas for child protection include:

- Emergency departments - adult and paediatric
- Social Work and after-hour services
- Maternity services
- Paediatric services
- Community health services including child health and school-based youth health nurses
- Aboriginal and Torres Strait Islander health services, such as Aboriginal and Torres Strait Islander maternity services
- Child and youth mental health services
- Adult mental health services
- Alcohol and other drug services

This list is not exhaustive and may contain different elements within each facility.

Queensland Health continues to maintain key specialist child protection positions in all HHSs to provide support to frontline staff. This strategy helps to ensure that children, young people, and their families in the child protection system are provided with the best possible service response. Those who give such responses include Child Protection Liaison Officers, Child Protection Advisors, Child Protection Social Workers, and Paediatricians who assume some of the responsibilities of Child Protection Advisors, without the designated title. These staff members hold a substantial degree of professional responsibility and autonomy to act on child protection concerns and work extensively within a multi-agency context.

To fulfil their roles and responsibilities effectively, it is recommended that these groups of staff are supported in their efforts to obtain the specialist knowledge and skill outlined at level five. This ensures the in-depth knowledge and

understanding recommended for Queensland Child Protection systems. These actions also encourage the acceptance of policies, legislation, and processes that lead to professional leadership across health care services. Liaison with external agencies and the ability to provide high-quality advice and guidance to other health staff also furthers the goals that have been stated.

The simplest way to identify the appropriate level for each individual is to examine the descriptive titles for each level, as noted in table one. A 'What level am I?' guidance tool has been included in appendix three to assist individuals in identifying which level of the framework they are working towards.

8. The capability levels

Capability level one: Foundational

Who: All Queensland Health staff

Capability at level one has been designed to provide a foundational awareness of child protection and the legal responsibilities of Queensland Health staff to protect children. Level one includes information about what constitutes vulnerability, risk factors, child abuse and neglect, and what to do if the staff members have any concerns about the safety of a child.

This is the minimum recommended level for all non-clinical staff, including administration staff, volunteers, and all external contractors working for Queensland Health. It is recommended that all clinical staff aim for knowledge and skills at levels one and two, thus providing them with a more detailed awareness and understanding of the care continuum including secondary support service pathways, child protection, and their legal responsibilities.

Capability level one – Basic awareness of child protection responsibilities

1. Responsibilities to protect children
2. Nature of child abuse and risk factors
3. Responsive action, advice, and support

Capability Level One: Foundational
Basic awareness of child protection responsibilities
Who? *All Queensland Health Staff*
This is the minimum level recommended for all non-clinical staff, volunteers, and external contractors.

No.	Capability	Knowledge recommended	Skills required
Capability one	**Responsibilities to protect children.**	Knowledge of: • the rights of children to be safe and protected from harm and to achieve their full potential in life • the Queensland care continuum that supports the safety and wellbeing of children and their families • key principles of the overarching legislation guiding Queensland Health responsibilities to protect children including the key principles of the *Child Protection Act 1999* • mandatory and non-mandatory reporting requirements • the responsibility of all Queensland Health staff to promote the safety of children	Ability to: • describe why protecting children is everyone's responsibility • describe their legal responsibilities to safeguard children within the scope of their role • recognise whether they are a mandatory or non-mandatory reporter based on their role.

		• one's own role, and the role of others within the organisation, in implementing child protection policies and procedures • the duty of care to report any concerns about the conduct of colleagues towards children or parents/carers with an appropriate staff member • the requirement for all Queensland Health facilities to be child-safe organisations.	
Capability two	**Nature of child abuse and risk factors.**	Knowledge of: • the prevalence of child abuse and neglect in Queensland • the types of risk factors, social factors, and vulnerabilities that may impact on a child's care, safety, and wellbeing • the definition of child abuse and neglect in all forms including physical, emotional, and sexual abuse and neglect • key terms from the *Child Protection Act 1999* including 'child in need of protection' and 'child in out-of-home care.'	Ability to: • describe the vulnerabilities and risk factors that may impact on the care, safety, and wellbeing of a child • describe what constitutes child abuse and neglect.
Capability three	**Responsive action, advice, and support.**	Knowledge of: • the importance of responding to concerns promptly to ensure an adequate response and manage risks • whom in the organisation to talk to if there are concerns about a child and/or adult, during and after hours • the role of specialist child protection staff in the HHS and how to contact them • the importance of seeking personal support from a line manager and/or employee support service if a child protection concern has had a personal impact, and how to access the Employee Assistance program.	Ability to: • describe the steps to take when concerned about the safety and wellbeing of a child • locate the specialist child protection staff in the organisation • seek appropriate advice and guidance promptly • seek personal support including the Employee Assistance program.

Capability level two: Fundamental

Who: All Queensland Health clinical staff (level one and two)

Level two is the minimum level of knowledge and skills recommended for all clinical staff working in Queensland Health settings including a thorough understanding of the required knowledge contained in levels one and two.

Level two has been designed to incorporate the knowledge and skills outlined in the current Queensland Health *Child abuse and neglect education module: Responsibility, recognising and reporting* to help all clinical staff understand the minimum knowledge and skills recommended to meet their legal responsibilities as mandatory and/or non-mandatory reporters of children in need of protection.

Level two covers a more detailed understanding of the continuum of care, benefits of early intervention, and role of Queensland Health to act to prevent child abuse and neglect, the indicators of harm, abuse, and neglect of a child, and a more detailed overview of how to respond (refer or report).

Capability level two – Awareness of early intervention, child protection, and the care continuum

1. Prevention, early intervention, and the continuum of care

2. Indicators and risks of harm to a child
3. Policy and procedures for the responsive care and protection of children.
4. Appropriate responsive care and protection of children
5. Information sharing and record-keeping

Capability level two: Fundamental
Awareness of early intervention, child protection and the care continuum
Who? *All Queensland Health clinical staff*
This is the minimum level recommended for all clinical staff.

No.	Capability	Knowledge recommended	Skills recommended
Capability one	Prevention, early intervention, and the continuum of care.	Knowledge of: • the definitions of prevention, early intervention, child and family-centred care and child-aware practice in the context of protecting children • the domains of wellbeing for children and young people including being healthy, using services, having material basics, learning, being loved and safe, and participation • the benefits of routinely enquiring about the care arrangements of children who are not seen • the full Queensland care continuum, including secondary support services available to support a child's care, safety, and wellbeing • how early intervention can help prevent child abuse and supports families to address issues • whom to contact in the HHS (e.g. social work service) and in the local community to help assess additional needs of a child and/or family • principles for consent from families when providing early intervention support (FACC/IFS), referrals, and information-sharing. • availability of the escalation pathway for medical officers concerned about Child Safety's decision-making related to the immediate safety of the child upon discharge (in development - available 2021), including contacts within the HHS for assistance navigating the pathway	Ability to: • describe the factors that can assist with the prevention of child abuse and neglect • describe the definition and benefits of early intervention • describe own role in prevention and early intervention of child abuse and support for families • routinely enquire about the care arrangements, safety, and wellbeing of unseen children when working with parents/carers • identify the domains that contribute to a child's safety and wellbeing • describe the care continuum in Queensland • describe the secondary support services available to support families with multiple, complex needs.
Capability two	Indicators and risks of harm to a child.	Knowledge of: • the legal definition of harm and/or risk of harm to a child • potential indicators of harm in all forms including physical and emotional abuse, sexual abuse, neglect, child sexual exploitation, grooming, and the signs to look for • potential impact that a parent/carer's physical and mental health can have on the	Ability to: • describe the types of risk factors and possible indicators of safety and wellbeing concerns for children • describe how adult issues can potentially impact on children • recognise inadequate care and/or possible harm and risks of harm to children.

		care, safety, and wellbeing of a child (e.g. problematic substance use, domestic and family violence, homelessness, and disability/chronic illness).	
Capability three	Policy and procedures for the responsive care and protection of children.	Knowledge of: • how and where to access the Queensland Health policies, guidelines, and procedures to support child protection responses • the threshold for reporting suspicions of a child in need of protection to Child Safety services within the Child Protection Act 1999 including an understanding of the terms a reportable suspicion, a reasonable suspicion, significant harm, and a parent able and willing • the different thresholds and options available to support decision-making around whether to refer a family to secondary support services or to report concerns to Child Safety • the process to report to Child Safety in writing a reasonable suspicion of child abuse and neglect • legislative protections you have in reporting your suspicion of child abuse and neglect within the *Child Protection Act 1999.*	Ability to: • locate Queensland Health policies and procedures • find the contact details for the HHS Child Protection Unit, Child Safety after-hours, and Child Safety Regional Intake Service teams • describe the threshold for reporting concerns of significant harm to Child Safety • describe the steps to take when deciding an appropriate response (referral or report) • describe the steps required to make a report to Child Safety.
Capability four	Appropriate responsive care and protection of children.	Knowledge of: • the urgency of escalating immediate concerns about the safety and wellbeing of a child to ensure safety measures are initiated in a timely way • how to access and use the *Queensland Child Protection Guide* to support decision-making about a course of action to respond (refer or report) concerns • how and when to consult with specialist child protection staff in the local HHS • how children in need of protection and who may become in need of protection, and their families, should receive coordinated services that meet their needs in a timely and effective way • how and when to involve culturally appropriate service providers, including Indigenous Liaison Officers, when working with Aboriginal and Torres Strait Islander children and families, culturally and linguistically diverse families and/or refugees.	Ability to: • escalate any immediate concerns with urgency to instigate safeguarding measures • use the *Queensland Child Protection Guide* to help inform decision-making • escalate any immediate concerns with urgency to instigate safeguarding measures • access appropriate advice and guidance to determine whether concerns require a referral to support services or meet the threshold for a report to child safety • know when to involve other appropriate staff members and/or service providers when identifying and responding to care, wellbeing, and safety needs of children • with guidance, make a report to Child Safety and refer a family for further assessment to appropriate secondary support services within the HHS and/or local community – includes

			cases where needs are identified but do not meet the threshold for reporting to Child Safety.
Capability five	Information sharing and record-keeping.	Knowledge of: • information-sharing guidelines that determine what information can be shared and with whom • confidentiality and consent requirements when child protection concerns are identified • the importance of sharing all relevant information about a child and family with an appropriate staff member • the importance of documenting any concerns about a child's care, safety, and/or wellbeing • how written documentation contributes to the assessment, treatment, and ongoing care of a child • what information is relevant to the document in a Child Safety online e-report • the need to record any decisions to report suspected child abuse and neglect and keep a copy of the report on the clinical record.	Ability to: • abide by information-sharing policies • record all observations, facts, identified risks, concerns, and actions in the clinical record, including the name of the person consulted with and any conversations with Child Safety • differentiate between fact and opinion in a written and verbal report • document all concerns about a child in the appropriate record • follow record-keeping procedures.

Capability level three: Intermediate

Who: All Queensland Health clinical employees working predominantly with children and all clinical employees working with adults (who may be parents/carers) in higher risk areas for child protection

Level three capabilities build upon the knowledge and skills contained in levels one and two for staff that work predominantly with children and adults who are parents/carers. A high level of contact with vulnerable children and families provides these clinicians with increased opportunities to identify vulnerabilities, risks, and indicators of harm. The clinicians can then take action that protects children and supports families. It is recommended that clinicians at level three develop and practice their skills in how to routinely enquire about children, have difficult conversations with children and families, and sensitively discuss a range of concerns and family issues.

Capability level three – Moves beyond awareness to application of knowledge of early intervention, child protection, and the care continuum, with some support, as needed, from experienced and specialist staff members.

1. Culturally safe, trauma-informed engagement with children and families
2. Assessment and identification of risk and harm
3. Collaborative and coordinated care to protect children and support families

Capability Level Three – Intermediate
*Builds on level one and two – **Moves beyond awareness to application of knowledge of early intervention, child protection, and the care continuum, with some support, as needed, from experienced and specialist staff members.***
Who? *All Queensland Health clinical employees working predominantly with children and/or clinical employees working with adults (who may be parents/carers) in higher risk areas for child protection*

No.	Capability	Knowledge recommended	Skills recommended
Capability one	Culturally safe, trauma-	Knowledge of:	Ability to:

	informed engagement with children and families.	• the long-term impact of adverse childhood experiences • the impact of intergenerational trauma on the care, safety, and wellbeing of Aboriginal and Torres Strait Islander children and their families • the importance of trauma-informed responses with children and parents/carers • culturally safe and responsive approaches to engaging with Aboriginal and Torres Strait Islander communities • cross-cultural competence skills such as the use of interpreters to support families from culturally and linguistically diverse backgrounds • communication strategies that build and promote respect, trust, and engagement • the rights of children to participate in decisions that affect them • how own beliefs, experience, and attitudes influence professional involvement in working with vulnerable families and children.	• work sensitively from a trauma-informed perspective, recognising the impact of adverse childhood experiences • be aware of the cultural and respect-based need to consult and collaborate with internal and/or external Aboriginal and Torres Strait Islander services in an appropriate manner, such as Indigenous Health Liaison Officers, Aboriginal and Torres Strait Islander Health Services and Aboriginal and Torres Strait Islander Family Wellbeing Services • provide a thoughtful and sensitive response to cultural and language-based barriers that may arise and create obstacles to the full understanding and participation of families from culturally or linguistically diverse backgrounds • engage with children, young people, and families in a caring, respectful, and trauma-informed way.
Capability two	Assessment and identification of risk and harm.	Knowledge of: • the physical, developmental, psychosocial, and mental health needs of children • what constitutes risk to a child's safety and wellbeing, now and in the future, and how to differentiate immediate risk • the definition of cumulative harm and how risk factors and parental vulnerabilities (e.g. mental health, domestic and family violence, problematic substance use, long term chronic conditions) may combine to cause harm or increase risk of harm to a child • the increased vulnerabilities of certain groups of children and young people such as those who have a disability, are Aboriginal or Torres Strait Islander, and/or culturally and linguistically diverse • how the presence of risk factors does not necessarily lead to child abuse and neglect • the additional complexities and risks for children, young people, and	Ability to: • identify additional support needs of children and families and make timely and appropriate referrals, with consent, to assist families to increase parenting capacity and address vulnerabilities • identify risks to a child's safety and wellbeing, now and in the future • recognise clinical presentations that may give rise to suspicions of child abuse and/or neglect • identify patterns of risk and/or increased risk including cumulative harm, including missed appointments • describe the additional complexities and risks of vulnerable groups • identify multiple and complex needs of children and families who would benefit from additional support • identify cumulative harm and how risk factors and vulnerabilities may be combining to increase risks to a child • identify strengths and protective factors of families • sensitively enquire about a family's circumstances, including any concerns of injuries or harm, with support from appropriate colleagues where required

		families who are already involved in the child protection system • the cultural norms and components of child-rearing in Aboriginal and Torres Strait Islander families and communities • the types of protective factors that can help moderate risk or adversity and promote healthy development and child and family wellbeing • the risks of harm to unborn children and what to do if there are concerns about an unborn child • the basics of forensic procedures and advice that are available to assist with assessment of injury and/or harm • whom to contact within the HHS to arrange forensic services.	• respond to concerns about an unborn child • liaise with experienced and/or specialist health staff to undertake a more thorough assessment of injury/harm/risk factors.
Capability three	Collaborative and coordinated care to protect children and support families	Knowledge of: • the legal framework around information-sharing, confidentiality, and consent related to children and young people under 18, adults, and caregivers -- including Gillick Competency guidelines • the importance of collaboration and partnership in working to protect children and support families • culturally appropriate service delivery and engagement with Aboriginal and Torres Strait Islander service providers and other culturally-focussed providers • what to do if there are differences in opinion about how to respond to child protection concerns and where to seek further support and advice • Queensland Health domestic and family violence information-sharing requirements.	Ability to: • appropriately share information with other professionals to ensure a joined-up response • provide culturally safe responses in partnership with Aboriginal and Torres Strait Islander children, families, and internal services, such as Indigenous Liaison Officers, Aboriginal and Torres Strait Islander Maternity Services and/or external service providers, such as Institute for Urban Indigenous Health, Aboriginal and Torres Strait Islander Family Wellbeing Services • work appropriately with culturally and linguistically diverse children and families while remaining attuned to their cultural and language needs • act as an effective advocate for children and young people to ensure any additional needs are met • follow escalation procedures and challenge decisions where health staff have ongoing concerns for a child's safety and/or the outcome of a child protection report • respond to domestic and family violence concerns in line with Queensland Health policy and guidelines.

Capability level four: Experienced

Who: Experienced clinical staff who work predominantly with children and/or parents/carers. These staff members provide additional assessment, coaching, advice, and support to clinical staff regarding early intervention, child protection, and the care continuum.

Capability at this level is aimed at staff who work in roles where they can provide additional assessment, coaching, advice, and support regarding the care continuum and responses of Queensland Health staff to either refer or report concerns.

Clinicians working at this level are confident in their ability to deal sensitively with children and families to help assess risk factors, to support an appropriate response, and to contribute to effective risk management plans. Clinicians at this level provide coaching, advice, and support to other clinical staff members who are less experienced in child protection, supporting them in risk assessment and decision-making about the most appropriate response to take. Clinicians at this level are likely to have some contact with other agencies in the course of responding to complex needs and safety concerns, including family support services, Child Safety, and/or other internal and external support services.

Capability level four – Builds on levels one, two, and three, focussing on in-depth assessment, coaching, advice, and support to children, parents/carers and other staff members.

1. Information-gathering and assessment of need and risk
2. Responsive risk-management and health care management of vulnerable children
3. Coaching, advice, and support to staff

Capability Level Four - Experienced
Builds on levels 1, 2, and 3 by providing additional assessment, advice, and support to children and families and/or with other staff members at levels one, two, and three

Who? *Experienced clinical staff at level four who work predominantly with children and/or parents/carers and can provide additional assessment, coaching, advice, and support to other clinical staff regarding child protection concerns*

No.	Capability	Knowledge recommended	Skills recommended
Capability one	Information-gathering and assessment of need and risk	Knowledge of: • information-gathering and assessment tools, including psychosocial and clinical assessment, to help assess risks and protective factors relating to a child's safety and well being • risk assessment frameworks and HHS child protection management plans • indicators of health presentations that warrant further consultation and investigation • psychosocial factors and parental/care capacity limitations that may impact on the safety and wellbeing of a child in an adult/parent's care • how to assess risk and protective factors.	Ability to: • undertake an in-depth psychosocial and/or clinical assessment of a child and/or family • undertake risk assessments • undertake further investigations regarding concerns of injury and/or harm (medical staff only) • assess the safety and wellbeing of a child e.g. physical examination, developmental, mental health and psychosocial assessment • recognise suspected child abuse and neglect that presents within the health context including antenatal risk factors, medical neglect, cumulative effects of harm, unexplained injuries, or harm that warrants further consultation with specialist child protection teams, reflect on observations and information available to assess risk of and/or actual harm and or neglect in determining risk and reporting obligations.

Capability two	Responsive risk management and health care management of vulnerable children.	Knowledge of: • the importance of clinical review of a child and/or parent/carer with timeliness that reflects the seriousness/complexity of the concern • how to contribute to, formulate, and/or communicate effective management plans for children when there are concerns about their safety and wellbeing, within a multidisciplinary approach including escalation as part of this process • the forensic procedures and services available locally for identifying physical abuse, sexual abuse, and emotional harm -- and who to refer to for arranging these to occur • the main features of commonly used statutory court orders applied for by Child Safety to protect children e.g. temporary assessment order, and how these apply to clinical situations including children's inpatient admissions and contact with parents/carers. • Child Safety multiagency meetings and processes including multiagency Suspected Child Abuse and Neglect (SCAN) team to enable coordinated responses to the protection needs of children • the complex care needs of children in out of home care and evidence informed practice to ameliorate vulnerabilities.	Ability to: • initiate measures to reduce immediate risks of harm to a child and manage risk, including high risk and complex needs, in an ongoing way • escalate concerns about risk to a child and consult appropriately trained paediatricians for clinical review and decisions on presenting concerns, including physical injuries, for forensic medical examinations • identify and communicate risk management strategies and/or plans for children within a multidisciplinary approach • communicate sensitively, ethically, and effectively with children and families • consultations with children to ensure that they can participate in decisions affecting them, as appropriate to their age and ability • appropriately manage risks for inpatients that arise from parental contact for children undergoing child protection investigations and/or under child protection orders via liaison with HHS Child Protection Units/services • identify and outline the health management of children in need and those subject to child protection investigations • contribute to assessments of parenting capacity and children's needs, and to the planning and evaluation of interventions • participate in and/or lead the care coordination of vulnerable clients, including children in or out of home care, as appropriate to role.
Capability three	Coaching, advice, and support to staff	Knowledge of: • the importance of providing accurate advice and support to staff members to ensure the right response is made at the right time • strategies for critical thinking, coaching, and support of staff members • the potential personal impact of child protection cases on staff and strategies for mitigation to support them	Ability to: • communicate a staff member's legal responsibilities to respond to child protection concerns, including mandatory reporting requirements • support and coach clinical staff to apply professional and/or clinical knowledge and skills to identify and respond to suspicions of child abuse and neglect • support less experienced health staff to have sensitive and difficult conversations with children and parents/carers

- strategies for communicating risk assessments and management plans to colleagues and external agencies.
- advocate for clinical staff to routinely enquire about parental/care arrangements to assess risks to the safety and wellbeing of children in their care, including the safety and wellbeing of unborn children
- support staff to make considered judgements about how to act to proactively reduce risks and protect and promote a child's wellbeing
- coach staff on the steps involved in escalating safety and wellbeing concerns about a child, even if the child is not their patient
- contribute to child protection-related quality improvement activities such as audit, case discussion, peer review, and supervision.

Capability level five: Specialist

Who: Clinical staff in specialist Child Protection roles -- including Child Protection Liaison Officers (CPLO), Child Protection Advisors (CPA), Child Protection Social Workers, Managers of Child Protection Units, and Paediatricians designated to provide child protection services.

Capability at level five requires in-depth specialist knowledge and understanding of Queensland Child Protection systems, policies, legislation and processes, professional leadership across health care services, and liaison with external agencies. This includes the ability to provide high-quality advice and guidance to health staff at all other levels across the HHS in assessing risk, deciding what response should be made, and in coordinating the protection needs of children.

Staff at this level hold professional and/or organisational authority and a substantial degree of personal responsibility and autonomy to act on child protection concerns as a primary point of contact for the HHS. They work extensively within a multi-agency context as a conduit between HHSs and other key government and non-government agencies, including Child Safety, the Queensland Police Service, and Education Queensland, in helping to manage the day-to-day protection needs of children. Staff at level five have a responsibility within their HHS to lead and/or assist in the delivery of education and training to other Queensland Health staff, particularly staff at levels one and two of the capability framework.

The skill-mix of specialist staff differs across each HHS and is dependent on the size, structure, and reporting within each HHS child protection unit. Each HHS is best placed to determine which capabilities relate to staff within their child protection unit.

This group of staff have responsibilities for responding to child protection issues and promoting the welfare of vulnerable children.

Capability level five – Applies knowledge and skills at a specialist level, providing education, training, advice, and guidance to Queensland Health staff and working regularly with internal and external stakeholders to manage effective child protection responses. Key elements of this role include knowledge and skill in:

1. Child protection pathways, thresholds, legislation, policies, and guidelines.
2. Child Safety and service system interagency processes.
3. Specialist advice, guidance, and support.
4. Leadership in child protection quality improvement.
5. Record-keeping and management of sensitive child protection information.
6. The expert's role in key stages of the court processes, including the role and powers of the different courts, the standard and the burden of proof (Child Protection Advisors/ Child Protection Paediatricians only).

Capability Level Five - Specialist

Applies knowledge and skills at a specialist level, provides education, training, advice, and guidance to staff at levels one, two, three, and four, and works regularly with internal and external stakeholders (e.g. Child Safety, Queensland Police Service) to manage effective child protection responses.

Who? *Clinical staff in specialist Child Protection roles including Child Protection Liaison Officers (CPLO), Child Protection Advisors (CPA), Child Protection Social Workers, Managers of Child Protection Units, Paediatricians designated to provide child protection services.*

No.	Capability	Knowledge recommended	Skills recommended
Capability one	Child protection pathways, thresholds, legislation, policies, and guidelines	In-depth knowledge of: • all relevant legislation, policies, guidelines, directives, and best practice for child protection practice • policies, guidelines, and best practice for children in out-of-home care • the legal framework around information-sharing related to the protection of children, including the relevant sections of the Act, Instrument of Delegation, and consent • the legislative and policy provisions in relation to unborn children, who may be at risk of harm after birth, and unborn high-risk alert procedures • the Queensland Health Care and Treatment Order for protecting children and noting who is the local Designated Medical Officer • the role of the Suspected Child Abuse and Neglect (SCAN) Team System and Queensland Health Representatives. • policy and service delivery provisions in the escalation pathway for medical officer concerned about Child Safety's decision-making related to the immediate safety of the child upon discharge e	• Ability to: • work within the bounds of the legislation, working with a high degree of autonomy, using professional judgement and consulting where appropriate • facilitate information sharing with key agencies that is accurate, cooperative, timely, and compliant with legislative requirements in a way that protects a child's privacy • provide specialist advice and support to staff on legislative and policy requirements relating to child protection and child-safe responses • identify organisational risk within the HHS regarding relevant statewide legislation and policy • recognise when further legal advice is required and where to obtain this • contribute to the development of local and statewide child protection policy, guidelines, educational resources, and protocols to support practice. • assist colleagues—in particular, medical officers—with navigating the escalation pathway, including steps required by Queensland Health policy, Hospital and Health Service procedures, engagement with Child Safety and legislative provisions
Capability two	Child Safety and service system and interagency processes involved in responding to child protection concerns	Specialist knowledge of: • the roles and responsibilities of Child Safety, the processes activated, and possible outcomes when a child protection report is made • the different types of statutory child protection court orders that can be made and other non-statutory Child Safety interventions	Ability to: • facilitate liaison, communication, and information-sharing regarding child protection matters between Queensland Health and other agencies • establish collaborative and productive partnerships with key members of the service system • respond to Unborn Child High Risk Alerts on behalf of Queensland Health and liaise with local Child Safety Officers to develop safety plans for families of

		• the roles and responsibilities of partner agencies in responding to child abuse and neglect • the contribution required of health staff within Child Safety investigations • court and criminal justice systems, the role of the courts, burden of proof, and the role of professional and expert witnesses • local models and systems for interagency approaches to the care and protection of children, including processes for the SCAN team system, family meetings, and coordinating a child's plan • SCAN team system manual and forms • consent, guardianship, visitation, and information-sharing for staff delivering healthcare to children under Child Protection Orders and appropriate safety management plans for inpatients subject to these orders • statutory interventions and Child Safety plans to reduce risks to children and how to provide coordinated and appropriate responses to concerns of child abuse and neglect • Child Safety case planning processes and engagement in the development of risk management plans to enhance the safety and wellbeing of children.	unborn children, effectively represent Queensland Health at interagency child protection meetings including SCAN team meetings and SCAN business meetings, participate in multi-agency discussions and respond to recommendations • participate as a representative in SCAN and SCAN team meetings as an Agency Stakeholder • participate in and/or help facilitate internal or interagency case reviews and provide information and guidance to Queensland Health Staff regarding this process • contribute to interagency assessments, the gathering and sharing of information, and, where appropriate, analysis of risk when there are concerns about the safety and wellbeing of a child • advise other agencies, as appropriate to role, about the health management of individual children in child protection cases • review child protection reports and Child Safety outcome reports to identify and assess unmet risk, respond to recommendations, and support needs • escalate any disagreement on a child protection report child concern report outcome and follow appropriate child safety escalation procedures • communicate advice and guidance to clinical staff regarding child protection orders and the implications.
Capability three	Specialist advice, guidance, and support	Specialist knowledge of: • HHS organisational structures, policies, procedures, and practice in order to advocate where required • statutory interventions and Child Safety plans to reduce risks to children and how to provide coordinated and appropriate responses to concerns of child abuse and neglect • the complex care needs of children in out-of-home care and the *National Clinical Assessment* framework for children in out-of-home care	Ability to: • provide high level advice and guidance to clinicians to support effective and appropriate management of child protection concerns • provide child protection advice and education to clinicians and senior managers regarding child protection policy, legislation, and practices • confidently challenge practice and support colleagues by challenging perceived views offered by other professionals • work in collaboration with relevant health staff and external agencies to develop comprehensive management plans to

		• after-hours clinical paediatric consultant, child safety after-hours, local procedures, and local contact details. •	ameliorate vulnerability, with the aim of reducing the likelihood of harm to a child • consult with specialist Paediatricians to manage forensic examination responses appropriately • help coordinate the complex care needs of children in out-of-home care by liaising with relevant internal and external stakeholders.
Capability four	Record-keeping and management of sensitive child protection information	In-depth knowledge of: • documentation and storage of child protection information policies, guidelines, and practices • Queensland government policies, directives, and governance practice regarding information of a sensitive nature and the management of that information, including how long to retain corporate, administrative, and clinical records • who in the HHS to liaise with regarding advice on information management.	Ability to: • review and analyse clinical notes and information and present a comprehensive account of relevant information to support interagency information requests and decision-making • assess the sensitivity of child protection information to ensure appropriate and secure storage and transfer of highly sensitive documents, images and forensic evidence • apply a risk-based approach to information management of sensitive records • maintain local data bases and corporate, administrative and clinical records related to the provision of child protection services • clarify and follow information management policies, statewide directives and governance practices regarding incidents and allegations of child abuse, sexual assault and vulnerable persons.
Capability five	Leadership in child protection education, quality improvement, and data management	Knowledge of, or working towards knowledge of: • quality improvement activities to enhance child protection responses • datasets and data definitions to support quality improvement activities • how to identify best available evidence, research, system reviews, and reform action plans • national and statewide commissions of inquiry and reform programs that inform child protection and Queensland Health responses.	Ability to lead and/or contribute to: • lead awareness-raising initiatives -- for example, child protection week initiatives. • facilitate education and training of Queensland Health staff regarding the Queensland care continuum and child protection responses • identifying, assessing, implementing, managing, and reporting on changes to the scope of the CPLO role and HHS requirements relevant to new child protection legislation and statewide policy, reform, and initiatives • collecting, administering, and reporting quantitative and qualitative data to inform continuous improvement in policy development and service delivery

			• service planning and quality improvement activities related to the provision of child protection services.
Additional capability **For Child Protection Advisors and/or paediatricians providing designated child protection services only**	The expert's role in key stages of the court process	Knowledge of: • forensic medical clinical practice and the procedures and investigations required when there are suspicions of harm to children • indicators of fabricated and/or induced illness • the role and responsibilities of a SCAN Core Representative • court and criminal justice systems and the potential for assessments and documentation to be used as evidence in court processes • the expert's role in key stages of the court process, including the role and powers of the different courts, the standard and the burden of proof • the requirements of Queensland Health facilities to respond to children and young people who have experienced sexual assault or sexual abuse.	Ability to: • analyse information, present a well-documented overview/assessment of evidence, and communicate recommendations in writing and verbally • act in the expert witness role within the family and criminal justice system, as well as civil proceedings and judicial reviews • interpret and influence solicitor's instructions • respond to cross-examination • provide an honest and balanced presentation of opinions on causation • undertake high quality forensic practice when relevant • undertake forensic medical examinations and photo-documentation where physical abuse, sexual abuse, and/or sexual assault is suspected • document history taken and physical examinations in a manner that is appropriate for child protection and legal processes • support and work collaboratively with Child Protection Liaison Officers • act as the after-hours contact for clinicians where there are issues regarding child protection concerns • respond to suspicions of fabricated and/or induced illness • participate as a representative in SCAN and SCAN team meetings as a Core Representative • provide medical and professional opinions regarding concerns about a child in need of protection and effectively advocate for the protection of children.

9. Conclusion

The capability framework has been designed to provide a set of guidelines describing the practice capabilities recommended for all Queensland Health staff in fulfilling their responsibilities to protect children and promote their welfare. It has been informed by and built upon a wealth of expertise by clinicians across HHSs.

The framework provides a guide for Queensland Health individuals, teams, and work areas within HHSs regarding child protection capability.

HHSs are encouraged to consider the full range of the framework and how it may apply locally. This includes consideration of how the framework aligns with local child-safe organisation policies and practices and how it may support local workforce development strategies, including the induction of new staff.

Over time, this framework will continue to evolve to meet any changes in statewide child protection legislation and policy. Comments and additions will be welcomed and included in future editions by contacting the SCPCP (statewide_child_protection_clinical_partnership@health.qld.gov.au).

HHSs are encouraged to support and adopt this framework to help achieve the best possible outcomes for children and young people in Queensland. The SCPCP and Social Policy and Legislation Branch, Department of Health will work collaboratively to progress the development of contemporary statewide educational resources which will be made available to all HHSs in the future.

10. Reference list

Australian Human Rights Commission (2019) *National principles for child safe organisations*, https://www.humanrights.gov.au/sites/default/files/National%20Principles%20for%20Child%20Safe%20Organisations.pdf

Queensland Government. (2018). *Guideline: Reporting a reasonable/reportable suspicion of child abuse and neglect*. Brisbane: Department of Health.

Royal Commission into Institutional responses to child sexual abuse, https://www.childabuseroyalcommission.gov.au/

Statement of Intent regarding the prioritisation of health services for children and young people in the child protection system (2018)

The Queensland Government child protection reform agenda *Supporting Families Changing Futures* 2019-2023

Appendix one – Legislation

The following provides a summary of the legislation relevant to the protection of children in Queensland and the duties of Queensland Health Staff in this context.

Act	Key messages	Link
Child Protection Act 1999	• To report, under mandatory and non-mandatory obligations, any reasonable suspicions that a child (including an unborn child) may need protection or has suffered, is suffering, or is at risk of suffering significant harm, and there may not be a parent willing and able to protect the child from harm • collaborate and contribute to multi-disciplinary service delivery • share relevant information about health services provided to children with identified safety and wellbeing concerns.	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-1999-010
***Civil Liability Act 2003* (CL Act)** **Div 2, Part 2A, Chapter 2**	• A public entity is taken to breach its duty to prevent child abuse for children under its care or the care of a person associated with the public authority, unless it is proven that the public entity has taken all reasonable steps to prevent the abuse.	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2003-016

Public Health Act 2005	• The object of the PH Act includes *'protecting children who have been harmed or are at risk of harm when the children present at health service facilities'.*
	• Guiding principles for Part 3 – this part is to be administered under the principle that *the welfare and best interests of a child are paramount.* The following principles apply:
	  o *Every child has the right to protection from harm;*
	  o *Families have the primary responsibility for the physical, psychological, and emotional wellbeing of their children;*
	  o *The preferred way of ensuring a child's wellbeing is through the support of the child's family;*
	  o *Powers conferred under this part should be exercised in a way that is open, fair, and respects the right of people affected by their exercise, and in particular, in a way that ensures –*
	  o *the views of a child and the child's family are considered; the child and the child's parents have the opportunity to take part in making decisions affecting the wellbeing of the child.*
	• Person in charge of health service facility is taken to have custody of the child held at the facility and has -
		https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2005-048

	○ the right to have the child's daily care; and ○ the right and responsibility to make decisions about the child's daily care. • Designated medical officers may make a care and treatment order for a child to hold the child at a health service facility if it is reasonably suspected the child has been harmed, is at risk of harm, or is likely to be harmed if taken from the facility.	
Information Privacy Act 2009	• The Information Privacy Act 2009 (Qld) (IP Act) regulates how public sector agencies must collect, manage, use, and disclose personal information.	https://www.legislation.qld.gov.au/view/html/inforce/current/act-2009-014
Hospital and Health Boards Act 2011	• Disclose confidential information for the protection, safety, and wellbeing of a child by a designated person.	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2005-048
Human Rights Act 2019	• It is unlawful for a public entity – (a) to act or make a decision in a way that is not compatible with human rights; or in making a decision, to fail to give proper consideration to human rights relevant to the decision. • Protection of families and children	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2019-005

Appendix two – Additional reading

Queensland Health staff can access all relevant Queensland Health Child Protection Guidelines and Resources on the staff intranet. Search: Child Safety Unit. https://qheps.health.qld.gov.au/csu/policy

Queensland policies and guidelines

- *Queensland Health guideline 'Responding to an Unborn Child High Risk Alert'*
- *Queensland Health guideline 'Reporting and responding to a reasonable suspicion of child abuse and neglect'*
- *Queensland Health guideline 'Information sharing in child protection'*
- *Queensland Health Guide 'Information Sharing Between mental health staff, consumers, family, carers, nominated support persons, and others'*
- *Department of Child Safety, Youth and Women 'Information Sharing Guidelines to meet the protection and care needs and promote the wellbeing of children'*
- *Department of Child Safety, Youth and Women 'Child Safety Practice Manual'*
- *Department of Child Safety, Youth and Women 'Child Protection Guide' https://www.csyw.qld.gov.au/resources/dcsyw/about-us/partners/government/child-protection-procedures-manual.pdf*
- *Statement of Intent regarding the prioritisation of health services for children and young people in the child protection system (2018)*

Queensland child protection inquiries, frameworks and standards

- *Taking Responsibility: A Roadmap for Queensland Child Protection*, Queensland Child Protection Commission of Inquiry, 2013
- *Supporting Families Changing Futures 2019 – 2023*
- *Queensland out-of-care home outcomes framework, 2017*
- *Making Tracks towards closing the gap in health outcomes for Indigenous Queenslanders by 2033 – policy and accountability framework.*
- *Changing Tracks Action Plan 2020-2022,* Department of Child Safety, Youth and Women
- *Our Way: A generational strategy for Aboriginal and Torres Strait Islander children and families 2017 – 2037.*

Interstate frameworks

NSW Government. (2013). *Child wellbeing and child protection policies and procedures for NSW Health.* Sydney: NSW Government Relations.

National frameworks and standards

- *The Australian National Framework for Protecting Children: Protecting Children is Everyone's Business 2009-2020*
- *Royal Commission into Institutional Responses to Child Sexual Abuse Final Report and Recommendations* December 2017
- *National Clinical Assessment Framework for Children and Young People in Out of Home Care (OOHC), 2011*
- *Close the Gap: Indigenous Health Equality Summit Statement of Intent, 2008*

- *Family Matters Roadmap, 2019*
- Australian Government. (2017). *DFAT child protection guidance note: Health activities*. Canberra: Department of Foreign Affairs and Trade.

International research

Hood, R., Price, J., Sartori, D., Maisey, D., Johnson, J and Clark, Z (2017). Collaborating across the threshold: The development of interprofessional expertise in child safeguarding. *Journal of Interprofessional Care*, 31(6), pp.705-713

London Safeguarding Children Board. (DATE*). Competence still matters: Safeguarding training for all employees and volunteers (A guide to the responsibilities of all organisations).* London: London Safeguarding Children Board Training Group.

NHS Education for Scotland. (2011). *Core competency framework for the protection of children*. Edinburgh: NHS Education for Scotland.

Royal College of Paediatrics and Child Health. (2006). *Safeguarding children and young people: roles and competences for health care staff*. London: Royal College of Nurses.

Royal College of Nursing. (2014). *Safeguarding children and young people: roles and competences for health care staff*. London: Royal College of Nurses.

Southwark Safeguarding Children Board. (2016). *SSCB Learning Strategy 2016-2017: Multiagency safeguarding training*. Southwark: Southwark Safeguarding Children Board.

Appendix three – What level am I? Guidance tool

The 'What level am I?' guidance tool can be used by individuals to assist them in determining what level they are working towards in the Child Protection Capability framework. Please note, this is a guidance tool and there is no requirement for individuals to complete this.

Question number	Question	Capability Level
Clinical and non-clinical staff including volunteers, students, external contractors		
1.	Minimum level/s recommended for all staff: Are you in a non-clinical role? Are you in a clinical role?	 Non-clinical – level one only. Clinical – Levels one and two.
Clinical staff only		
2.	Do you work predominantly with children?	If yes, levels one, two, and three. Please also consider questions at 3. And 4. If no, levels one and two only.
	Do you work predominantly with children and/or adults in a higher risk area for child protection including: • Emergency departments - adult and paediatric • Social Work and after-hour services • Maternity services • Paediatric services • Community health services including child health and school-based youth health nurses • Aboriginal and Torres Strait Islander health services • Child and youth mental health services • Adult mental health services • Alcohol and other drug services	If yes, levels one, two, and three. Please also consider questions at 3. And 4. If no, levels one and two only.
3.	When answering the following questions, please consider your scope of practice in working with children, families, and clinicians. You do not need to be in a supervisor or senior role to answer yes to the questions below.	If yes, levels one, two, three, and four. If no, remain at the level as per your previous answers.
	a) In the scope of your role, can you provide further assessment of a child and/or family's circumstances, presenting concerns, needs, and/or risk factors?	If yes, levels one, two, three, and four. If no, remain at the level as per your previous answers.
	b) In the scope of your role, can you provide advice, coaching, and/or support to other staff members when they have identified concerns about the safety and/or wellbeing of a child?	If yes, levels one, two, three, and four. If no, remain at the level as per your previous answers.
4.	Are you in a specialist role that delivers designated child protection services within your	If yes, levels one, two, three, four, and five.

	HHS? Examples: Child Protection Liaison Officer, Child Protection Advisor, Manager of a Child Protection Unit, Child Protection Social Worker, Paediatrician undertaking designated child protection and/or forensic services.	If no, remain at the level as per your previous answers.

Glossary

Term	Definition/Explanation	Source
Assessment	An assessment is the dynamic process of analysis through which the best course of action is decided to meet the protective needs of the child following an examination and evaluation of all relevant historical and current evidence and information gathered.	Department of Child Safety, Youth and Women Practice Manual https://www.csyw.qld.gov.au/resources/childsafety/practice-manual/pg-assess-risk-of-harm.pdf
Child	For the purposes of this document, a child is 'an individual under 18 years of age' and includes all infants, children, and young people.	s.8 *Child Protection Act 1999*
Child abuse	Child abuse is an action or inaction that causes injury, death, emotional harm or risk of harm to a child. There are four forms of abuse – physical, sexual, emotional abuse, and neglect.	https://www.qfcc.qld.gov.au/sites/default/files/For%20professionals/factsheets/03aboutchildabuseandharm.PDF
Child aware	In terms of being Child Aware, child and family-centred care approaches require taking into account a client's role as a parent and how their own presenting issues (e.g., drug and alcohol misuse, mental health) may influence this. It also involves a consideration of the practical requirements of parenting (e.g., planning meetings around child care availability) and an understanding of how other family members or the broader family context may support the client in their parenting and in addressing their concerns. See also child and family-centred care below.	https://aifs.gov.au/cfca/publications/good-practice-guide-child-aware-approaches-keeping-children-safe-and-wel/child-aware
Child in need of protection	A child in need of protection is a child who: a. has suffered harm, is suffering harm, or is at unacceptable risk of suffering harm; AND b. does not have a parent able and willing to protect the child from the harm.	s.10 *Child Protection Act 1999*
Child and family centred care	Child and family-centred care is an approach to health care that is respectful of, and responsive to, the preferences, needs, and values of children and families. It recognises that the child or patient is at the core of all that we do, and that the family is central in the child's life and therefore central to our care processes. Child and family-centred care, also known as family-sensitive approaches or child aware approaches, recognise the centrality and importance of family life for most people. They take into consideration the familial and broader social context of the client and understand that a client's "parenting role may be both a motivator for change as well as a potential stressor" (Australian Centre for Child Protection, 2012). Family-sensitive approaches support clients in their parental role, as well as taking into consideration the needs of their children, in order to improve treatment outcomes and maintain the safety and wellbeing of the clients' children	https://aifs.gov.au/cfca/publications/good-practice-guide-child-aware-approaches-keeping-children-safe-and-wel/child-aware
Child Protection Advisor	The Child Protection Advisor is a nominated HHS position. They play a key role in the provision of child safety and protection services, both at an HHS and inter-agency level. Persons who hold these positions have expertise in matters of child protection.	Department of Health - Child Safety Fact Sheet
Child Protection Guide	The Child Protection Guide—an online tool to support professionals, such as teachers, doctors and nurses, child care workers, and others working with children and families, in deciding where to refer or report concerns about a child's safety or wellbeing. It is not mandatory to use the Child Protection Guide when making decisions about where to refer or report child protection concerns. The guide is designed to complement critical thinking and does not preclude or replace any course of action a professional reasonably believes is appropriate.	https://www.csyw.qld.gov.au/resources/campaign/supporting-families/child-protection-guide.pdf
Child Protection Liaison Officer	Child Protection Liaison Officers are employees who provide a single point of contact regarding child protection matters for HHS staff, the Queensland Police Service, and the Department of Child Safety regarding HHS clients. Persons occupying these positions can be from a variety of disciplines (e.g. nursing, social work, psychology, medicine).	*Department of Health - Child Safety Fact Sheet*
Child Safety	Child Safety services (Child Safety) is part of the Department of Child Safety, Youth and Women (DCSYW). The role of CSS is to: • investigate reports that allege a child has been significantly harmed or is at risk of significant harm and may not have a parent who is able and willing to protect the child from harm • ensure an ongoing provision of services to children who have been significantly harmed or are at risk of significant harm and may not have a parent able and willing to protect the child from harm.	https://qheps.health.qld.gov.au/__data/assets/pdf_file/0019/362305/educationmodule.pdf

	• act as the lead agency in facilitating a whole-of-government response to child protection issues, including the Suspected Child Abuse and Neglect (SCAN) team system and Information Coordination Meeting (ICM). The Director-General of CSS (also the Chief Executive) and all child safety officers from CSS are authorised officers under section 149 of the Child Protection Act 1999. They have the power to investigate allegations of harm or alleged risk of harm to a child, and assess the child's need of protection or take appropriate action under the Child Protection Act 1999.	
Clinical assessment	This procedure refers to a physical, psychiatric, psychological, or dental examinations that result in a judgment being made about the patient. It can include forensic examination and an examination or assessment carried out by a nursing or other appropriately qualified health practitioner. This term also refers to a biopsychosocial assessment undertaken by a multidisciplinary mental health team.	Department of Health Guideline – Reporting a Reasonable/Reportable Suspicion of Child Abuse and Neglect
Cumulative harm	Cumulative harm is defined as harm experienced by a child as a result of a series or pattern of harmful events and experiences that may have occurred in the past or are ongoing. There is a strong possibility of multiple inter-related risk factors existing over critical developmental periods. The effects of cumulative harm can diminish a child's sense of safety, stability, and well-being.	Department of Child Safety, Youth and Women Practice Manual https://www.csyw.qld.gov.au/resources/childsafety/practice-manual/pg-assess-risk-of-harm.pdf
Cultural competency and cultural safety	The multicultural nature of Australian society requires a thoughtful approach to interaction between diverse origins, traditions, and languages. Since it applies to both professional and personal interactions, cultural competence is the ability to act in an appropriate, ethical, and respectful manner while honouring the cultural differences of others. Cultural safety equates to acting in a way that respects and recognises other cultures, traditions, and familial or social norms. This approach is especially relevant to the indigenous cultures within Australia, most often as it relates to medical care or social welfare issues. Ongoing research is attempting to address the imbalance of power between medical or service providers and the citizens they are meant to be serving.	https://www.mja.com.au/journal/2017/207/1/embedding-cultural-safety-australias-main-health-care-standards Australian Health Ministers' Advisory Council (2016). Cultural Respect Framework 2016-2026; For Aboriginal and Torres Strait Islander Health.
Department of Child Safety, Youth and Women (Child Safety)	The Queensland Government's lead agency for child safety and adoption services. Child Safety focuses on safety, belonging and wellbeing, and supporting the delivery of services to build families' capacity to care for and nurture their children.	https://www.csyw.qld.gov.au/child-family
Early intervention	Strategies, services, and supports that families experiencing 'low risk' issues and vulnerabilities can access -- either early in a child's life, or early in the 'life' of a problem. These can include counselling, mental health services, home help, and financial support.	https://www.napcan.org.au/wp-content/uploads/2019/09/2019-NAPCAN-Prevention-Framework-300819.pdf
Emotional abuse	Emotional abuse occurs when a child's social, emotional, cognitive or intellectual development is impaired or threatened. It can include emotional deprivation due to persistent: • rejection • hostility • teasing/bullying • yelling • criticism • exposure of a child to domestic and family violence.	https://www.csyw.qld.gov.au/child-family/protecting-children/what-child-abuse
External contracted services (example)	Those members who are working on HHS sites/premises for/to/on behalf of a HHS or its patients and clients. These include: • HHS employees who are not in the HHS payroll system (e.g. seconded but not transferred staff, specialty or consultancy service staff on contracts, etc) • employees of Agency or Contractors • Students in placement • Observers and Sponsored Work Experience / Honorary Workers • Volunteers • HHS Facility Tenants • Non-Government Organisation (NGO) service partners.	CHQ Organisational Development
Harm	Harm is the detrimental impact on the child caused by abuse.	*Section 9, Child protection Act*

	In section 9 of the Child Protection Act 1999 'harm' to a child is defined as: any detrimental effect of a significant nature on the child's physical, psychological, or emotional wellbeing. It is immaterial how the harm is caused. Harm can be caused by: • physical, psychological, or emotional abuse or neglect. • sexual abuse or exploitation. • a single act, omission, or circumstance; or a series or combination of acts, omissions, or circumstances.	
Clinician	A person registered under the Health Practitioner Regulation National Law to practise, other than as a student, in any of the following— (i) the dental profession as any of the following— (A) dentist; (B) dental therapist; (C) dental hygienist; (D) oral health therapist; (ii) the nursing and midwifery profession as a nurse; (iii) the medical profession; (iv) the occupational therapy profession; (v) the optometry profession; (vi) the physiotherapy profession; (vii) the psychology profession; or (b) a person who is eligible for practising membership of The Speech Pathology Association; or (c) a person who is eligible for membership of the Australian Association of Social Workers.	*Schedule 3, Child Protection Act 1999*
Neglect	Neglect occurs when a child's basic necessities of life are not met, and their health and development are affected. Basic needs include: • food • housing • health care • adequate clothing • personal hygiene • hygienic living conditions • timely provision of medical treatment • adequate supervision.	https://www.csyw.qld.gov.au/child-family/protecting-children/what-child-abuse
Out-of-home care	A child or young person in 'out-of-home care' is a child or young person who is placed in the care of another person or entity (other than a parent) under the Child Protection Act 1999 and who has not been reunified with a parent. Out-of-home care arrangements are varied and include: foster or kinship care placement, residential care placement (including therapeutic residential services), transitional care arrangements, or supported independent living.	*Child Protection Act*
Parent	A parent of a child is – (1) The child's mother, father or someone else having or exercising parental responsibility for the child; or (2) The Chief Executive Child Safety Services, for a child who is in the custody or guardianship of the Chief Executive Child Safety Services under the *Child Protection Act 1999* (3) a person in whose favour a residence order or contact order for the child is in operation under the *Family Law Act 1975* (Cwlth); (4) a person, other than the chief executive, having custody or guardianship of the child under— (i) a law of the State, other than this Act; or (ii) a law of another State; (5) a long-term guardian of the child. The following also applies: (1) A parent of an Aboriginal child includes a person who, under Aboriginal tradition, is regarded as a parent of the child. (2) A parent of a Torres Strait Islander child includes a person who, under Island custom, is regarded as a parent of the child. (3) A reference in this part to the parents of a child or to one of the parents of a child is, if the child has only one parent a reference to the parent.	*Ss.11;13;23 Child Protection Act 1999*

Physical abuse	Physical abuse occurs when a child has suffered, or is at risk of suffering, non-accidental physical trauma or injury. Physical abuse can include: • hitting • shaking • throwing • burning • biting • poisoning. Physical abuse does not always leave visible marks or injuries. It is not how bad the mark or injury is, but rather the act itself that causes injury or trauma to the child.	https://www.csyw.qld.gov.au/child-family/protecting-children/what-child-abuse
Prevention	Child abuse and neglect is preventable. Prevention of child abuse and neglect refers to strategies that seek to stop child abuse and neglect before it happens Public health models aim to prevent problems before they occur and comprise three platforms; primary, secondary and tertiary services.	Australian Institute of Family Studies (2017). Prevention of child abuse and neglect. Commonwealth of Australia: Victoria
	A public health approach can be used to prevent child abuse and neglect with the aim of reducing the need for statutory protection services. The public health model is a concept with currency in many areas, including health, education and welfare. It attempts to prevent or reduce a particular illness or social problem in a population by identifying risk factors	Sanders, M. Higgins, D. & Prinz, R. (2018). A population approach to prevention of child maltreatment in: Family Matters No. 100
Protective factor	Protective factors are attributes or conditions that can occur at individual, family, community or wider societal level. Protective factors moderate risk or adversity and promote healthy development and child and family wellbeing (Child Welfare Information Gateway, 2014). They serve as safeguards that can help parents find resources or supports and encourage coping strategies that allow them to parent effectively, even under difficult circumstances.	https://aifs.gov.au/cfca/publications/risk-and-protective-factors-child-abuse-and-neglect
Queensland care continuum	An inclusive and integrated approach to health, wellness, and safety that covers the full spectrum of ages within the population of Queensland. In the sections that are specifically related to children's issues, this approach is fully documented and enforceable by the relevant authorities and practitioners. The most up-to-date initiatives and instructions are found within the link in the right column.	https://www.qld.gov.au/ data/assets/pdf file/0030/86970/fags-carers-care-services.pdf
Reasonable suspicion of child abuse and neglect	This may include suspicion of harm arising from physical abuse and physical neglect, emotional abuse and emotional neglect, sexual abuse, and exploitation. The harm caused to children is often on a continuum from mild to life-threatening.	Department of Health - Child Safety Fact Sheet
Reportable suspicion	A reportable suspicion about a child is a reasonable suspicion that the child: • has suffered, is suffering, or is at unacceptable risk of suffering, significant harm caused by physical and sexual abuse and • may not have a parent able and willing to protect the child from the harm.	*S13E Child Protection Act 1999*
Risk Assessment	Risk assessment is the purposeful process of gathering information on the child, the parent, the family, and their environmental context to determine the probability and degree to which a child may be harmed in the future. A safety assessment, as part of a risk assessment, is an analysis of current attitudes, behaviours, and family functioning to identify the presence of any threats to the child's immediate safety - that is, indicators that may be operating at a more intense, threatening, immediate, or dangerous level - and the immediate interventions needed to protect the child from the present danger.	https://www.csyw.qld.gov.au/resources/childsafety/practice-manual/pg-assess-risk-of-harm.pdf
Risk factor	Risk factors for child maltreatment are the measurable circumstances, conditions or events that increase the probability that a family will have poor outcomes in the future. When combined with limited protective factors, they increase the probability of children experiencing child abuse or neglect	https://aifs.gov.au/cfca/publications/risk-and-protective-factors-child-abuse-and-neglect
Secondary support services	Secondary Family Support services are required to reduce harm or risk of harm to children and young people, prevent crises or problems within families from arising or escalating, and stabilise or maintain family wellbeing. It is expected that Secondary Family Supports services will: improve the wellbeing and safety of children, young people, and their families, build the capacity of families to care for and protect their children, provide linkages to local universal support services and community groups that enable families to access the resources they need to build their capacity, solve problems, and make positive choices/changes, prevent entry or re-entry to the statutory child protection system.	https://www.csyw.qld.gov.au/about-us/partners/child-family/our-community-partners/family-support

	Queensland secondary support services include Family and Child Connect, Intensive Family Support Services, and Aboriginal and Torres Strait Islander Family Wellbeing Services.	
Sexual abuse/sexual assault	Sexual abuse and/or sexual assault occurs when an adult, stronger child, or adolescent uses their power or authority to involve a child in sexual activity. Sexual abuse can be physical, verbal, or emotional and can include: • kissing or holding a child in a sexual manner • exposing a sexual body part to a child • having sexual relations with a child under 16 years of age • talking in a sexually explicit way that is not age or developmentally appropriate • making obscene phone calls or remarks to a child • sending obscene mobile text messages or emails to a child • fondling a child in a sexual manner • persistently intruding on a child's privacy • penetrating the child's vagina or anus by penis, finger, or any other object • oral sex • rape • incest • showing pornographic films, magazines, or photographs to a child • having a child pose or perform in a sexual manner • forcing a child to watch a sexual act • child prostitution.	https://www.csyw.qld.gov.au/child-family/protecting-children/what-child-abuse
Trauma informed	Trauma informed practice is a strengths-based approach to an understanding of, and responsiveness to, the impacts of trauma. It emphasises physical, psychological, and emotional safety for people seeking help and for the helpers. It also creates opportunities for people affected by trauma to rebuild a sense of control and empowerment. It recognises the prevalence of trauma and is sensitive to and informed by the impacts of trauma on the wellbeing of individuals and communities.	https://healingfoundation.org.au//app/uploads/2020/07/HF_Glossary_of_Healing_Terms_A3_Poster_Jul2020_V1.pdf
Wellbeing domains	Wellbeing provides a holistic view of a child or young person's life, based on six areas of wellbeing: Loved and Safe, Healthy, Participating, Positive Sense of Identity & Culture, Material Basics and Learning.	https://www.aracy.org.au/the-nest-in-action/common-approach-resources

EXHIBIT 3

Department of Health

Guideline

Document Number # QH-GDL-943:2015

Conducting Child Sexual Assault Examinations

1. Purpose

This Guideline provides consistency and best practice for conducting child sexual assault examinations.

2. Scope

This Guideline provides information for all employees, contractors and consultants within Queensland Health and Hospital and Health Services (HHS).

3. Related documents

Procedures, guidelines and protocols:

- Guideline for Care and Treatment Order for a Child
- Guideline for Consent in Child Protection and Management of Complex Care Cases and End of Life Decision Making
- Guideline for Health Professionals Child Safety Capability Requirements
- Guideline for Information Sharing in Child Protection
- Guideline for Reporting a Reasonable/Reportable Suspicion of Child Abuse and Neglect
- Guideline for Responding to an Unborn Child High Risk Alert.

4. Guideline for conducting child sexual assault examinations

4.1 Conducting sexual assault examinations

4.1.1 All medical practitioners shall comply with the informed consent requirements detailed in the *Queensland Health Guide to Informed Decision-Making in Healthcare*, prior to conducting sexual assault examinations in children and young people.

4.1.2 For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.

4.1.3 For child victims of sexual assault, 14 years of age and over, forensic sexual assault examinations should be performed by a Forensic Medical Officer, Government Medical Officer, Forensic Nurse Examiner or a Medical Officer appropriately skilled to conduct forensic medical examinations.

5. Review

This Guideline is due for review on: 01 June 2020

Date of Last Review: 01 June 2018

Supersedes: Nil

6. Business Area Contact

Strategy Children and Families Unit, Strategic Policy and Legislation Branch, Strategy, Policy and Planning Division, Department of Health

7. Definitions of terms used in the guideline and supporting documents

Term	Definition / Explanation / Details	Source
Child	For the purposes of this document, a child is 'an individual under 18 years of age'.	s.8 *Child Protection Act 1999*
Forensic nurse examiner	Forensic nurse examiner means a nurse who is appointed by the chief executive (health) to perform the role of a forensic nurse examiner. They are employed by the Clinical Forensic Medicine Unit.	Forensic scientific services
Forensic sexual assault examination	This is a specific examination undertaken utilising the Sexual Assault Investigation Kit (SAIK) performed at the request of investigating police.	Forensic scientific services
Informed consent	For consent to be informed, the patient or decision maker needs to be fully aware and have an understanding of the condition, the nature and purpose of the available and proposed healthcare, and potential consequences of each option. Furthermore the patient should be aware of what is likely to occur should they choose not to receive the healthcare. This results from a process of shared decision making and the provision of information in a manner appropriate to the needs of an individual patient or decision-maker.	Queensland Health Guide to Informed Decision-Making in Healthcare (2012)
Government medical officer	A medical officer employed as a government medical officer has the ability to perform procedures under the *Coroners Act 2003*	Queensland Health Human Resources Policy C3
Medical examination	A medical examination is a physical, psychiatric, psychological or dental examination, assessment or procedure and includes forensic examination and an examination or assessment carried out by a health practitioner.	*Schedule 3 Child Protection Act 1999*

8. Approval and implementation

Guideline Custodian:

Joanna Gurd, Manager, Strategy Children and Families Unit, Strategic Policy and Legislation Branch

Responsible Executive Team Member:

Kathleen Forrester, Deputy Director-General, Strategy Policy and Planning Division

Approving Officer:

David Harmer, Senior Director, Strategic Policy and Legislation Branch

Approval date: 01 June 2018

Effective from: 01 June 2018

Version control

Version	Date	Prepared by	Comments
V1.0	01/04/2014	Kyle Fogarty	
V1.0	07/04/2014	Joanna Gurd	
V2.0	01/11/2014	Sharon McDonald	Queensland Child Protection Reform
V3.0	11/12/2014	Sharon McDonald	Consultation feedback incorporated
V4.0	28/04/2016	Kyle Fogarty	Periodic review
V4.1	01/05/2016	Joanna Gurd	Final
V4.2	28/05/2018	Joanna Gurd	Final and Periodic review

Guideline

EXHIBIT 4

Acute medical care of paediatric patients who have experienced alleged sexual abuse/assault

Document ID	CHQ-GDL-02603	Version no. 4.0	Approval date	27/04/2022
Executive sponsor	Executive Director Medical Services		Effective date	27/04/2022
Author/custodian	Director, Child Protection and Forensic Medical Service		Review date	27/04/2025
Supersedes	3.0			
Applicable to	Children's Health Queensland staff who may interact with patients who disclosure suspected sexual abuse/neglect			
Authorisation	Executive Director Clinical Services			

Purpose

Children's Health Queensland is committed to promoting the protection, safety, health and wellbeing of children and young people who are at risk of harm or have experienced harm from child abuse and neglect.

Child Protection and Forensic Medical Service (CPFMS) aims to support patients who have experienced sexual assault and their families using a trauma-informed approach.

This guideline will outline the processes for children presenting to the Queensland Children's Hospital (QCH) following an alleged acute sexual assault. It will provide recommendations for the acute assessment, risk stratification, medical management and follow-up of children post sexual assault. It contains information on emergency contraception, vaccination considerations, and antibiotic prophylaxis for sexually transmitted diseases.

Scope

This guideline is relevant for staff in the QCH Emergency Department (ED), CPFMS, Clinical Safety Nurses and After-Hours Social Work. However it is applicable for all Child Health Queensland employees (permanent, temporary and casual) and all organisations and individuals acting as its agents (including Visiting Medical Officers and other partners, contractors, consultants and volunteers) who may interact with patients who disclose suspected sexual abuse/neglect.

Related documents

- CHQ-GDL-65664 Post-Exposure Prophylaxis for HIV
- CHQ-PROC-02613 Reporting sexual offending against a child (under 18 years) to Queensland Police Service

- CHQ-PrOC-02613-1 Reporting sexual offending against a child (under 18 years) to Queensland Police Service Flowchart
- CHQ-GDL- 02611 Reporting a reasonable / reportable suspicion of child sexual abuse or assault (health.qld.gov.au)
- CHQ-GDL-02610 Clinical Management of Possible Non-Accidental Injuries (health.qld.gov.au)
- CHQ-WI-00726 Management of Paediatric Patients with near hanging or strangulation (health.qld.gov.au)

Guideline

ALERT

Every child who presents following a suspected sexual assault should be discussed with the Child Protection and Forensic Medical Service On-call Paediatrician or Fellow to help guide forensic assessment and child protection decision making.

Determine if a sexual assault examination is required

Every child who presents to the QCH Emergency Department with suspected sexual abuse or following a sexual assault should be discussed with the **Child Protection and Forensic Medical Service** (CPFMS) On-call **Paediatrician or Fellow** (3068 2660 or via switch afterhours) to help guide forensic assessment and child protection decision making.

The decision to conduct a sexual assault examination will be informed by the nature and timing of the alleged assault, the age of the patient, and any symptomatology. CPFMS conducts both forensic (within 72 hours of alleged sexual assault) and therapeutic sexual assault examinations for children outside the forensic window and **under the age of 14 years**. The decision to conduct an examination resides with the CPFMS Consultant.

Forensic sexual assault examinations are performed at the request of Queensland Police Service (QPS), and require the involvement of QPS in a timely manner before the medical assessment can be performed. Social work (ED, SWEWPHS or CPFMS) can assist in supporting the family to make a statement to QPS.

Children **over the age of 14 years** are not routinely seen for forensic sexual assault examinations by the CPFMS Paediatricians and are usually referred to an adult service. Each case should **still** be discussed with the CPFMS Paediatrician to determine the most appropriate pathway. While in the QCH Emergency Department, they should be offered opportunistic sexual health screening and treatment (*as detailed below*), as well as holistic psychosocial support with involvement of a social worker.

If external agencies (e.g. QPS), GPs or external hospitals contact Emergency or CATCH regarding an alleged sexual assault of a Paediatric patient, they should be directed to contact CPFMS Intake during work hours (3068 2660) or the CPFMS on-Call Paediatrician to determine urgency of clinical review, and to ensure appropriate legislative mandatory reporting requirements have been met. Clinicians with concerns of child sexual abuse have a mandatory requirement to report to The Department of Children, Youth Justice and Multicultural Affairs (DCYJMA) (Child Safety). More information can be found within CHQ-GDL-02611 Reporting a reasonable / reportable suspicion of child sexual abuse or assault.

Changes to the Criminal Code Act 1899 (Qld) were made in July 2021 to strengthen the protection of children from offences of a sexual nature, such that it is an **offence for any adult not to report sexual offending** by another adult against a child to QPS, even if the offence was historical. Dual reporting is not required if a report to Child Safety has already been made. More information can be found within Reporting sexual offending against a child (under 18 years) to Queensland Police Service (health.qld.gov.au)

CPFMS reviews for sexual assaults require the assistance of CPFMS nursing and social work staff. For urgent assessment required afterhours, the SWEWPHS and Safety Clinical Nurse Consultant provide this support role, with ongoing follow up psychosocial support handed over to the CPFMS social work team.

Emergency medical management following an acute sexual assault

Initial Assessment

Presentations of children following an acute sexual assault can be complex and require a holistic assessment and a multi-disciplinary approach. While it is important to minimise contamination of the patient's history prior to a police statement, the Emergency assessment still needs to consider the acute medical and psychological needs and safety of the patient. Patients may have comorbid physical injuries (e.g. complications of strangulation, bruising, etc, see Appendix 4) and the history taking and examination should screen for other non-genital acute injuries, as well as genital injuries that may require urgent surgical intervention (e.g. significant vaginal bleeding). Consideration of intoxication and psychological state may also impact on the ability of the patient to consent to have a sexual assault assessment or make a statement to police. Senior clinical staff and social workers should be involved early in the process to direct appropriate care.

Sexual Assault Assessment

When responding to paediatric patients following an acute sexual assault, the following process should be followed, with consultation with the On-Call CPFMS Paediatrician/Fellow.

(1) Assess level of risk to child

(2) Determine the appropriate screening investigations

(3) Identify need for

- (a) Antibiotic prophylaxis
- (b) Emergency contraception
- (c) Immunisation
- (d) HIV post exposure prophylaxis
- (e) Medical follow up

(4) Involvement of the social work team to ensure patient and family have psychosocial supports and onwards referrals for counselling and Victims Assist supports

Assess level of risk to child

Sexual assault presentations can be assessed as low or high risk for medical sequelae based on the nature of the assault, risk factors of the alleged perpetrator, and history and examination findings.

Low Risk	Touching or non-penetrative acts (with no concern of exchange of bodily fluids)
High Risk (Any one or more of the following):	Child has symptoms or signs of sexually transmitted infection (STI). (symptoms or signs of STI may include genital discharge, pain, bleeding, itchiness, presence of a lesion). Penetration or concerns of recent or healed genital injury from penetration. Penile/seminal contact with any body orifice. Perpetrator characteristics: (1) Alleged offender unknown to victim (stranger) (2) Alleged offender has known or historical STI, or engages in behaviours at high risk of STI (e.g. multiple partners, men who have sex with men (MSM), intravenous drugs) or from high risk community for blood borne viruses (3) Multiple alleged offenders Already diagnosed with one STI. Sibling or other child/adults in household have STI. High community rates of STIs. Indigenous child or offender.

Patients screened as "low risk" will generally not require STI or pregnancy related medical interventions, but may still require psychosocial support, and involvement of statutory agencies (QPS and Child Safety) depending on the nature of the assault/abuse. "High risk" patients should have appropriate medical screening and interventions for STI and pregnancy-related risks, as outlined below. Screening/treatment is also recommended where there is child or family preference or if otherwise medically indicated, or if recollection of events is compromised due to intoxication, etc.

Screening investigations

Depending on the nature of the alleged assault, consideration needs to be given to the risk of STIs and pregnancy resulting from the assault.

Suggested STI screening includes:

- **Bloods:** Hepatitis B serology, Hepatitis C serology, HIV serology, Syphilis Serology, B-HCG (if bedside test not performed)
- **Urine:** B-HCG, Chlamydia trachomatis PCR, Neisseria gonorrhoea PCR, Urine Culture
- Genital swabs if discharge (includes at meatus of urethra for boys)
- Directed investigations depending on symptoms (e.g. lower abdominal pain)

Appropriate counselling regarding the implications of the above testing also needs to be discussed with the family. With consent of the patient and family, consider copying the General Practitioner into the above results to ensure adequacy of follow up, particularly if prophylaxis is declined. Baseline STI screening is opportunistic and may not reflect infections acquired at the time of the assault.

Identify the need for:

Antibiotic prophylaxis

Ceftriaxone IV or IM (gonorrhoea prophylaxis)

- Dose: Infants, children and adolescents:
  - 50 mg/kg (maximum 500 mg) as a single dose intramuscularly or intravenously.
  - For patients weighing more than 150 kg: give 1,000 mg as a single dose.
- For intramuscular dose preparation and administration information, refer to the RCH Paediatric injectable guidelines and Guidelines for Maximal Amounts of solutions to be Injected into Muscle Tissue within CHQ-PROC-01039 Medication - Administration.

AND

Azithromycin Oral (chlamydia prophylaxis)

- Dose: Infants, children and adolescents: 60 mg/kg (Maximum 1,000 mg) as a single dose

Emergency contraception

Options for oral emergency contraception include levonorgestrel (LAM listed) and ulipristal (requires individual patient approval before supply). In some patients, a copper IUD may be another method of emergency contraceptive to consider that can be used up to 120 hours after exposure.

ALERT

Give either Levonorgestrel or ulipristal.

Do not administer both as effectiveness is reduced.

Levonorgestrel (Postinor-1) 1.5 mg single dose.

- Efficacy decreases with time, so give as-soon-as-possible following contact.
- Reduced efficacy after 72 hours, but can be used up to 120 hours (5 days) after exposure.
- If vomiting occurs within 2 hours of taking dose, repeat ASAP.

- Can use antiemetic (ondansetron) prior to dose to minimise nausea.
- Effectiveness can be reduced if taken with inducers of CYP3A4 medications (for example many anti-epileptics) – contact pharmacy for review of drug interactions.
- Consumer information: Postinor-1 - NPS MedicineWise

Ulipristal (EllaOne) 30 mg single dose

- Better efficacy compared to levonorgestrel up to 120 hours (5 days) after exposure
- Less emetogenic than levonorgestrel, but nausea can still occur.
- Can repeat the dose if vomiting occurs within 3 hours of dose.
- Effectiveness can be reduced if used with progestogen contraceptive – patients should be advised to wait at least 5 days before taking hormonal contraception, and should use a barrier method during this time and for a week after recommencing hormonal contraception.
- Effectiveness can be reduced if taken with inducers of CYP3A4 medications (for example many anti-epileptics) – contact pharmacy for review of drug interactions.
- Note: Ulipristal is not listed on the Queensland Health List of approved medicines (LAM) and requires an Individual patient approval before supply can be ordered.
- Consumer information: EllaOne - NPS MedicineWise

Immunisation

Hepatitis B

For unimmunised children, provide **Hepatitis B vaccination**, as soon as possible after exposure (within 14 days). Hepatitis B vaccination can be given the same time as Hepatitis B immunoglobulin at a separate site.

Recommended schedule:

Age	Dose	Repeat Schedule
All children	Paediatric Engerix B (10 microgram) 0.5 mL IM	Repeat dose at 1 month and 6 months
11- 15 years	Adult Engerix B (20 microgram) 0.5 mL IM	Repeat dose at 6 months

If alleged perpetrator known to be Hepatitis B positive and high-risk assault, also consider **Hepatitis B immunoglobulin IM.** Treatment is recommended as soon as possible after exposure, preferably within 72 hours of last sexual contact (but can be up to 14 days).

To obtain HBIg at QCH contact Blood Bank on 3068 3555.

Recommended schedule:

Weight	Dose
Less than 30kg	100 international units (IU)
30 kg or more	400 international units (IU)

HBIg comes in vials of 100 IU and 400 IU (concentration is approximately 100 IU per mL)

For immunised children with HBsAb less than 10 IU/mL (or if uncertain that serology will be followed up), a **booster dose of Hepatitis B vaccination** is recommended (as soon as possible, but within one week). If a high-risk exposure and sero-conversion is uncertain consider if Hepatitis B immunoglobulin is also required.

Human Papillomavirus (HPV)

For unimmunised children > 9 years of age who have been exposed to genital contact (even if not penetrative), consideration should be given to earlier commencement of HPV vaccination course (4,5). Involvement of the patient's GP to facilitate this vaccination course may be preferred for patients presenting afterhours.

Recommended schedule:

Age	Dose	Repeat Schedule
9-14 year	Gardasil 9 (9vHPV) 0.5 mL IM	Repeat dose at 6-12 months (2 dose schedule)
15 to 18 years (or immunocompromised patients of any age)	Gardasil 9 (9vHPV) 0.5 mL IM	Repeat dose at 2 months, and a third dose at 6 months (3 dose schedule)

- Additional doses may be required if provided at shorter dose intervals
- Families should be advised that Gardasil is included as part of the Year 7 School Vaccination Program, and they will need to opt out of Gardasil as part of this program if commencing the dosing regimen early

HIV post exposure prophylaxis

Consult the HIV PEP guideline CHQ-GDL-65664 Post-Exposure Prophylaxis for HIV for risk assessment and treatment information. If high risk exposure and requires PEP or if further advice is required, please discuss with Infectious Diseases on-call clinician.

Medical Follow Up

In addition to ensuring the appropriate follow up of the above testing, recommended additional screening includes:

- Urine chlamydia and gonorrhoea in 2 weeks
- Blood tests for Hepatitis B and Hepatitis C, HIV and syphilis serology at 3 months and 6 months

The above recommendations (and any immunisation follow up) should be included in a discharge letter to the GP which is provided to the patient prior to leaving the Emergency Department. A generic GP letter is included in Appendix 3.

Psychosocial Supports

Paediatric patients who are reviewed in the context of an alleged sexual assault require ongoing psychosocial evaluation and support and should be referred to appropriate services, e.g. Bravehearts. They may also be eligible for financial support from Victims Assist Medical Certificate - Victim Assist Queensland - Financial assistance application forms - victims of crime | Publications | Queensland Government. Early involvement of social work support is essential for these presentations, as well as handover to the CPFMS social work team to follow up with the family in the days that follow the acute assessment.

Consultation

Key stakeholders who reviewed this version:

- Paediatric Consultant, Child Protection & Forensic Medicine Service
- Paediatric Fellow, Child Protection & Forensic Medicine Service
- Senior Social Worker, Child Protection & Forensic Medicine Service
- Clinical Nurse Consultant, Child Protection & Forensic Medicine Service
- Acting Director of Infection Management and Prevention service
- Paediatric Infection Specialist (IMPS and QSIS)
- Senior Pharmacist – Immunisation (QSIS)
- Emergency Consultant, Child Protection Lead
- Senior Clinical Pharmacist – Ambulatory care
- Clinical Pharmacist Lead – Material Management service
- Clinical Pharmacist Lead – Antimicrobial Stewardship
- Pharmacist Advances – Safety and Quality
- CHQ Medication Advisory Committee – Endorsed 17.3.2022

Definition of terms

Term	Definition
CPFMS	Child Protection and Forensic Medical Service
ED	Emergency Department
HIV	Human Immunodeficiency Virus
HPV	Human Papillomavirus
IUD	Intra-uterine device
MSM	Men who have sex with men
PEP	Post exposure prophylaxis
STI	Sexually transmitted Infection

QPS	Queensland Police Service
CPIU	Child Protection Investigation Unit
DCYJMA	Department of Children, Youth Justice and Multicultural Affairs (Child Safety)

References

1. Hoehn EF, Overmann KM, Fananpazir N et al. Improving Emergency Department Care for Pediatric Victims of Sexual Abuse. Pediatrics. 2018; 142 (6): e20181811. DOI: https://doi.org/10.1542/peds.2018-1811
2. Post-Exposure Prophylaxis after Non-Occupational and Occupational exposure to HIV Australian National Guidelines (Second edition) ASHM
3. Australian National Council on AIDS, Hepatitis C and Related Diseases May 2000 Information Booklet
4. Australian Technical Advisory Group on Immunisation (*ATAGI*). Australian Immunisation Handbook, Australian Government Department of Health, Canberra, 2018, immunisationhandbook.health.gov.au
5. Sena AC et al. Sexual Assault and Sexually Transmitted Infections in Adults, Adolescents, and Children. CID. 2015. 61 (Suppl 8): S856- 864
6. Centres for Disease Control and Prevention. Sexually Transmitted Infections (STI) Treatment Guidelines. MMWR Recomm Rep 2021. Vol 70. No 4. Available from: Sexually Transmitted Infections Treatment Guidelines, 2021 (cdc.gov)
7. American Academy of Pediatrics. Red Book Online. 2021. Available from: Red Book Online Webinars | Red Book Online | American Academy of Pediatrics (aap.org)

Suggested Reading

(1) Queensland Health: HIV post-exposure prophylaxis (PEP): Adult guideline for assessment and management of non-occupational exposures. Available via intranet: http://www.health.qld.gov.au/publications/clinical-practice/guidelines-procedures/pep-guideline.pdf

(2) CHQ Guideline: Post Exposure Prophylaxis for HIV. Available via intranet. https://www.childrens.health.qld.gov.au/wp-content/uploads/PDF/ams/gdl-65664.pdf

(3) Child Family Community Australia: Responding to children and young people's disclosures of abuse. 2015. Available via internet : https://aifs.gov.au/cfca/publications/responding-children-and-young-people-s-disclosures-abu

(4) Commonwealth of Australia, Department of the Prime Minister and Cabinet, National Strategy to Prevent and Respond to Child Sexual Abuse 2021- 2030. 2021. Available via internet: https://childsafety.pmc.gov.au/sites/default/files/2021-10/national-strategy-2021-30.pdf

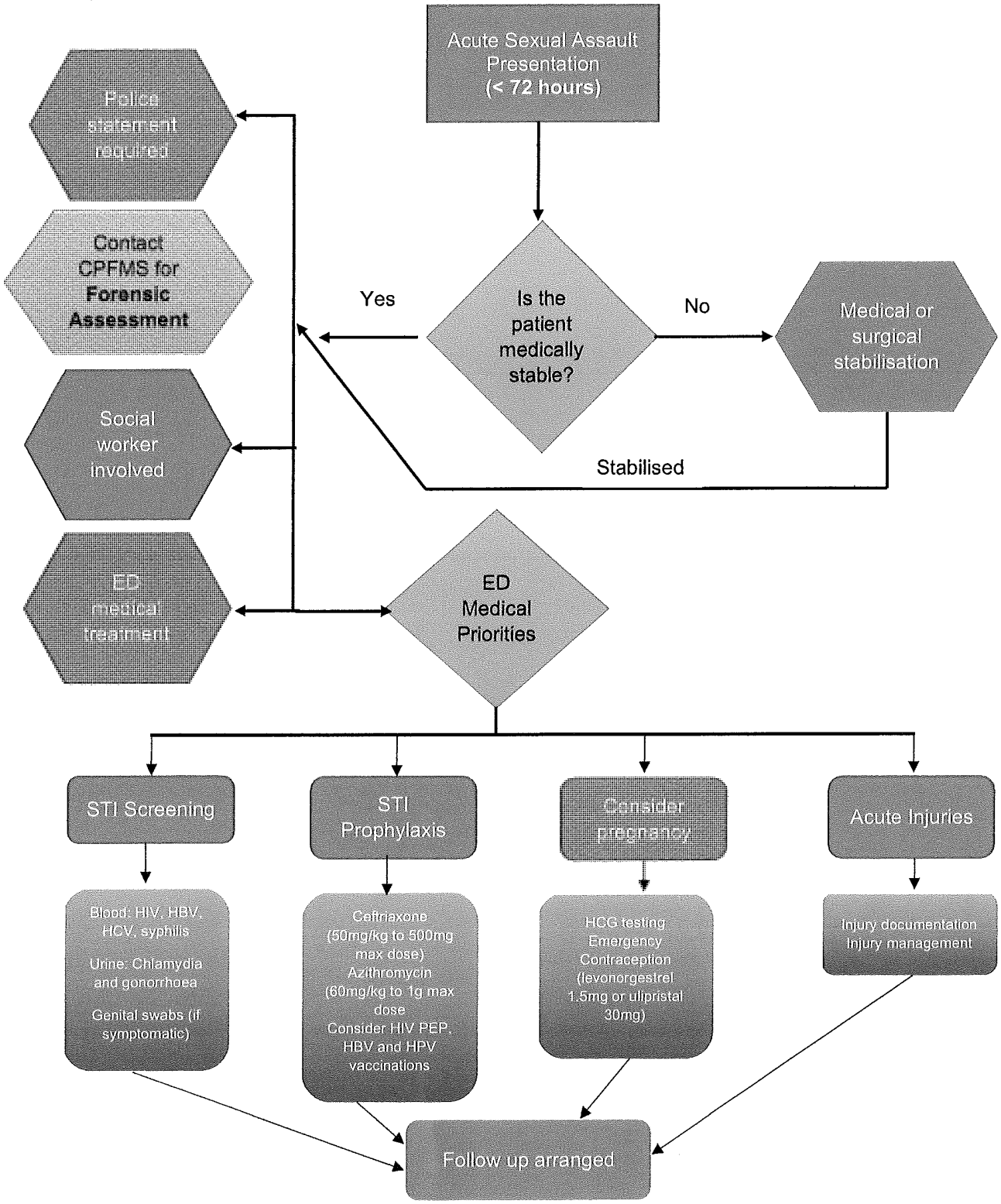
(5) Pediatric Strangulation, Part 1. Family Justice Center Alliance. https://www.familyjusticecenter.org/resources/pediatric-strangulation-part-1/

Guideline revision and approval history

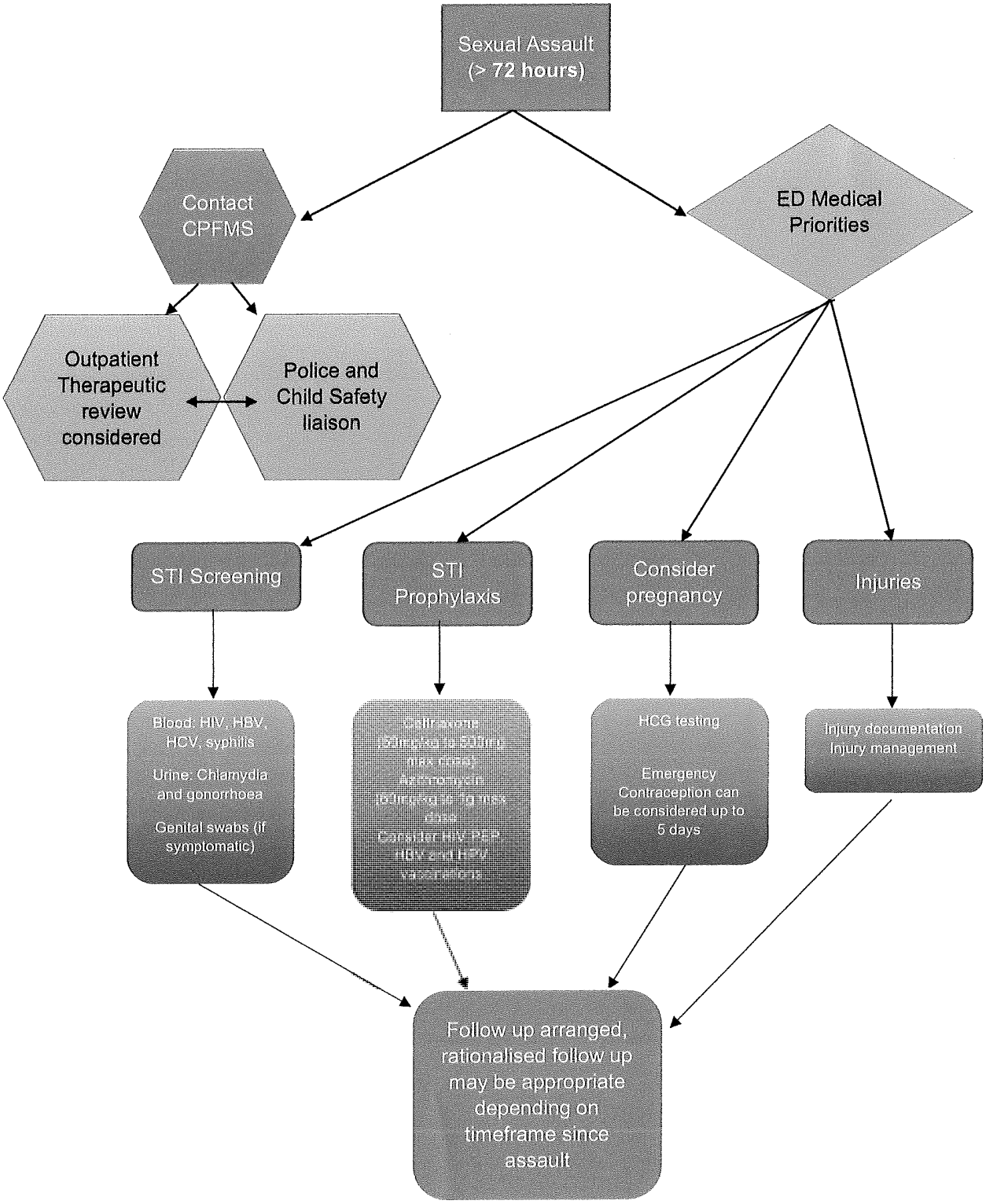
Version No.	Modified by	Amendments authorised by	Approved by
1.0 28/05/2015	CPHMS Clinical Team and Manager	Director CPFMS	Divisional Director, Division of Medicine
2.0 18/04/2019	Program Manager, Child Protection	A/Divisional Director Medicine	Executive Director Clinical Services (QCH)
3.0 23/07/2021	Program Manager, Child Protection	A/Director, Child Protection and Forensic Medical Service	A/Divisional Director Medicine
4.0 06/04/2022	Program Manager, Child Protection		A/Divisional Director Medicine

Keywords	Sexual Assault, Childhood Sexual Abuse, Post exposure prophylaxis, PEP, HIV, antiretroviral, paediatric, hepatitis B, hepatitis C, blood borne viruses, BBV, 02603
Accreditation references	NSQHS Standards (1-8): 1. Clinical Governance and 2. Consumer Engagement ISO 9001:2015 Quality Management Systems

Appendix 1: Flow Chart – High Risk Acute Presentations < 72 hours



Appendix 2: Flow Chart – High Risk Presentation > 72 hours



Appendix 3: GP Letter Template

Patient Label

__/__/__

Dear Dr _____

RE: _____ DOB: _____

Thank you for following up with the above patient. They presented to QCH ED on __/__/__ and had the following performed: [SELECT THOSE THAT APPLY]

- ❑ STI screen (urine chlamydia and gonorrhoea, blood serology)
- ❑ STI prophylaxis
- ❑ Pregnancy test
- ❑ Emergency contraception

They have been recommended to follow up with their general practitioner for ongoing care. The recommended follow up investigations include:

- Urine Chlamydia and Gonorrhoea at 2 weeks
- Blood serology (HIV, HBV, HCV, Syphilis) at 3 months and 6 months

As part of their medical review, their vaccination status with respect to HPV and HBV was discussed, with ongoing follow up as per the Immunisation Schedule with their GP.

Vaccinations administered during the review were:

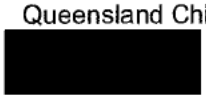
- _____ Date:
- _____ Date:

Yours sincerely,

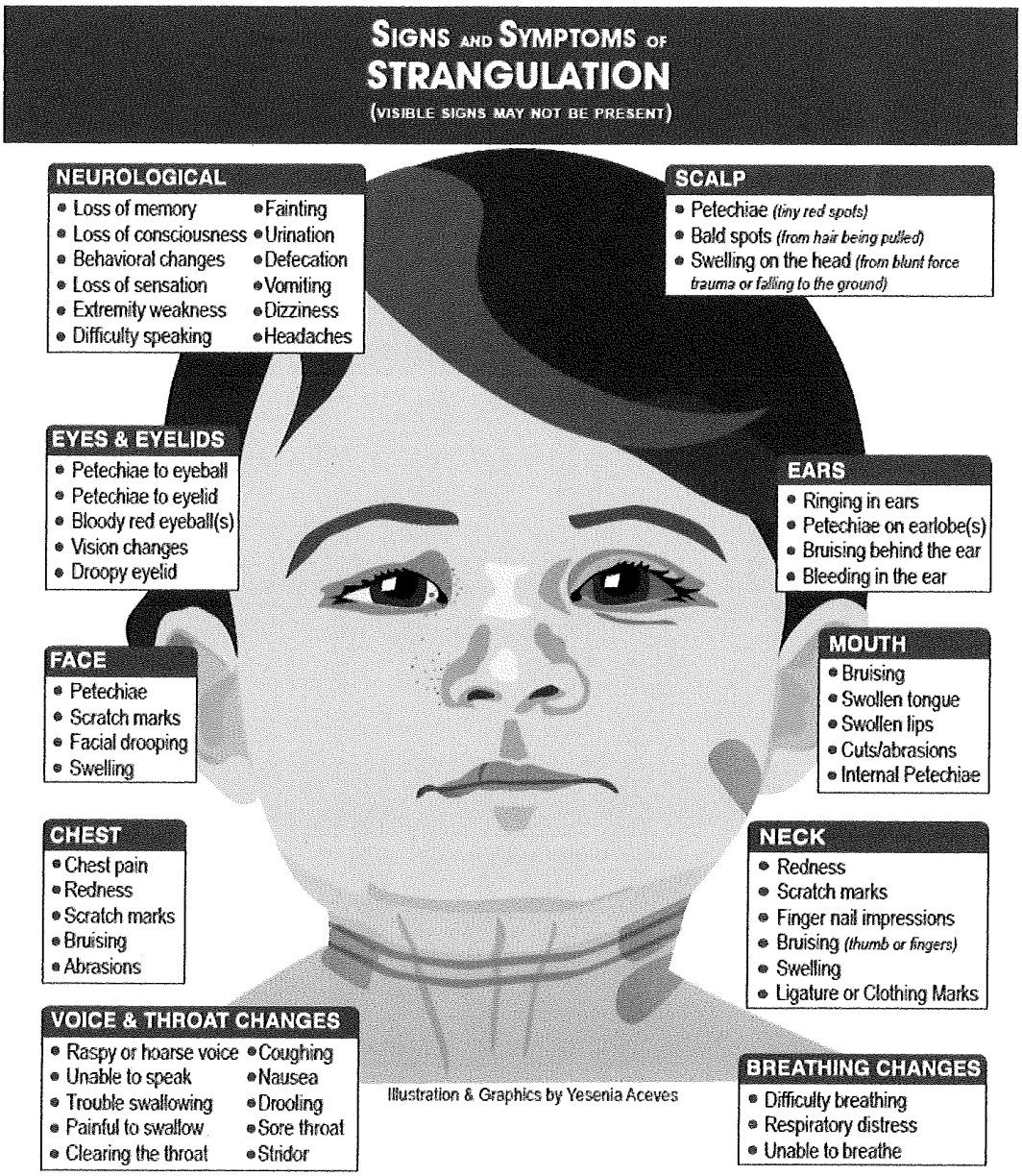
Signature:

Dr _____

Queensland Children's Hospital



Appendix 4: Signs and Symptoms of Strangulation



Source: *Strangulation in Intimate Partner Violence, Chapter 16, Intimate Partner Violence. Oxford University Press, Inc. 2009.*

STRANGULATION PREVENTION

strangulationtraininginstitute.com

v 10.5.2017

Pediatric-Signs-and-Symptoms-of-Strangulation-2017.pdf (familyjusticecenter.org)

Management of Paediatric Patients with near hanging or strangulation (health.qld.gov.au)

EXHIBIT 5.

Queensland Government

Queensland Health

Caring for people disclosing sexual assault

Directive number: QH-HSD-051:2019

Effective date: 22 July 2019

Review date: 22 July 2022

Supersedes: New

On this page:

- Purpose
- Scope
- Principles
- Outcomes
- Mandatory requirements
- Related or governing legislation, policy and agreements
- Supporting documents
- Business area contact
- Review
- Approval and implementation
- Definitions of terms used in this directive
- Version control

Purpose

This Health Service Directive requires Hospital and Health Services to take a consistent approach to managing the clinical and psychosocial needs of people who have experienced sexual assault. This includes the person-centred provision of forensic examinations.

Scope

This directive applies to all Hospital and Health Services (HHSs).

Principles

- Compassion—everyone disclosing sexual assault will be treated with respect, courtesy, compassion and dignity and their clinical care and any forensic examination will be responsive to their particular needs including access to, or referral to counsellors and support services.
- Person-centred care—everyone disclosing sexual assault will have access to trained clinicians who can provide timely and confidential clinical care and forensic examinations after presentation to hospital.
- Information—everyone disclosing sexual will be given clear information about their options relating to having a forensic examination and the level of involvement of police.
- Collaboration—HHSs will work effectively with the Queensland Police Service, other government agencies as well as community organisations to ensure a responsive, supportive and integrated approach to caring for people disclosing sexual assault.

Outcomes

Hospital and Health Services included in the scope of this directive shall achieve the following outcomes:

- Compliance with Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
- Compliance with the Queensland Health Guideline: Guideline for management of care of people 14 years and over disclosing sexual assault
- Compliance with the Department of Health Guideline: Conducting Child Sexual Assault Examinations (*Document Number # QH-GDL-943:2015*)
- Compliance with the informed consent requirements detailed in the Queensland Health Guide to Informed Decision-Making in Healthcare
- In doing so, HHSs will provide consistently high-quality, compassionate and person-centred services to people disclosing sexual assault who present to public hospitals.

Mandatory requirements

Hospital and Health Services (HHS) will:

- Provide 24-hour access to clinical care and forensic examinations for people 14 years and over disclosing a sexual assault in accordance with the Guideline for the management of care of people 14 years and over disclosing sexual assault.
- Ensure everyone who discloses that they are the victim of a sexual assault is informed of their choices about forensic examinations and reporting the assault to police, including the benefits of early reporting.
- Provide forensic examinations to victims of sexual assault when victims choose to have a forensic examination regardless of whether victims decide to report the matter to police or decide to defer this decision.
- Ensure adherence to informed consent for all aspects of caring for people disclosing sexual assault, including clinical treatment, forensic examinations, evidence collection and storage, police involvement, referrals and the release of information to third parties.
- Provide clear information about the storage, access and destruction of forensic examination samples to victims of sexual assault who have a forensic examination but choose to defer the decision to report the assault to police.
- Provide a suitable model of care for managing paediatric sexual assault patients (under 14 years of age) within each HHS.
- Report all suspected child sexual assaults to Child Safety Services in line with the mandatory reporting and duty of care responsibilities of clinicians.
- Ensure all patients are referred to (with patient consent) and/or provided information regarding sexual assault counselling and support services.

Related or governing legislation, policy and agreements

- *Hospital and Health Boards Act 2011 (Qld)*
- *Criminal Code Act 1899 (Qld)*
- *Victims of Crime Assistance Act 2009 (Qld)*
- *Police Powers and Responsibilities Act 2000 (Qld)*
- *Guardianship and Administration Act 2000 (Qld)*
- *Public Guardian Act 2014 (Qld)*
- Queensland Health Guide to Informed Decision-Making in Healthcare
- Charter of Victims' Rights
- *Child Protection Act 1999 (Qld)*
- *Domestic and Family Violence Protection Act 2012*
- *Powers of Attorney Act 1998 (Qld)*

Supporting documents

- Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault (as amended from time to time)
- Queensland Health Guideline: Guideline for the management of care of people 14 years and over disclosing sexual assault (as amended from time to time)
- Department of Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015
- Queensland Health Guide to Informed Decision-Making in Healthcare

Business area contact

- Community and Scientific Services, Health Support Queensland.

Review

This Health Service Directive will be reviewed at least every three years.

Date of last review: 22/07/2019

Supersedes: New Directive

Approval and implementation

Directive Custodian

Chief Executive Officer, Health Support Queensland

Approval by Chief Executive

Director-General
Queensland Health

Approval date: 17/07/2019

Issued under section 47 of the *Hospital and Health Boards Act 2011*.

Definitions of terms used in this directive

Term	Definition / explanation / details	Source
Hospital and Health Service	Hospital and Health Services are statutory bodies and are the principal providers of public sector health services.	*Hospital and Health Boards Act 2011*
Forensic Examination	The forensic examination consists of obtaining a history as to the nature of the assault to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic samples as it relates to the alleged sexual assault. (A Sexual Assault Investigation Kit (SAIK) is used to collect DNA evidence)	Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
Child	Under the age of 18 years For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.	Department of Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015)
Trained Clinicians	Forensic Examinations can be provided by: • Forensic Physician • Medical Officers who have received training in sexual assault	

	examination • Senior Medical Officers accessing phone support from Clinical Forensic Medicine Unit • Government Medical Officers • Forensic Nurse Examiners (postgraduate qualification in Forensic Medicine) • Sexual Assault Nurse Examiners. Nurses trained in sexual assault examinations having completed a recognised short-course eg SANE 40CPD short course)

Version control

Version	Date	Prepared by	Comments
0.1	22/07/2019	Heath Support Queensland	New Health Service Directive

Last updated: 22 July 2019

Links

Copyright (https://www.health.qld.gov.au/global/copyright-statement)
Disclaimer (https://www.health.qld.gov.au/global/disclaimer)
Privacy (https://www.health.qld.gov.au/global/privacy)
Right to information (https://www.health.qld.gov.au/system-governance/contact-us/access-info)
Accessibility (https://www.qld.gov.au/help/accessibility/)
Jobs in Queensland Government (https://smartjobs.qld.gov.au/jobtools/jncustomsearch.jobsearch?in_organid=14904)
Other languages (https://www.qld.gov.au/languages/)

© The State of Queensland (Queensland Health) 1996-2022

Queensland Government (https://www.qld.gov.au/)

Curriculum Vitae Dr Adam Griffin
(MBBS, M.Forens.Med, FFCFM(RCPA), FACLM)

AHPRA: **MED0001399231**

Director
Senior Forensic Physician
Clinical Forensic Medicine Unit
51 Herschel Street
Brisbane Qld 4000

As at August 2022

1. My name is Dr Adam Griffin. I am a legally qualified medical practitioner registered in Australia to practice in the State of Queensland, and based in Brisbane. I am a Senior Forensic Physician and the Director of the Clinical Forensic Medicine Unit in Queensland.

2. I have a medical degree from the University of Queensland (MBBS) and qualified in 1996. I have a Masters in Forensic Medicine through Monash University, Melbourne. I am currently studying law through the Queensland University of Technology.

3. I am a Fellow of the Australasian College of Legal Medicine (ACLM) and President of the College since 2019. This professional College is the pathway through which Clinical Forensic Medicine is recognised as an area of advanced credentialed practice in Queensland.

4. I have been working as a Forensic Medical Officer or Forensic Physician since August 2007, Deputy Director of the Unit from 2009 to 2012 and Director of Queensland's Clinical Forensic Medicine Unit from 2013 to date. Prior to this I worked extensively in Acute and Emergency Medicine.

5. I am a foundation Fellow of the Faculty of Clinical Forensic Medicine (FFCFM) within the Royal College of Pathologists of Australasia (RCPA).

6. I am a member of Forensic and Clinical Toxicology Australia (FACTA) and the Australian and New Zealand Forensic Sciences Society (ANZFSS).

7. The principal function of the Clinical Forensic Medicine Unit is to provide clinical forensic medical services. These range of services include:

    - Examination of victims of crime and of alleged offenders with a view to obtaining, documenting and interpreting medical evidence.
    - Examination and treatment of sexual assault victims.
    - Providing toxicological advice to police and the Courts in relation to traffic and other offences.
    - Providing medical (including toxicological) advice to the Coroner.
    - Providing a medical service (telephone advice, examination and treatment) to police detainees in watch houses.[1]
    - Advising police, ambulance and doctors at suspicious death scenes to provide advice to police.
    - Appearing in Court to give objective, impartial expert evidence.

8. I provide supervision and training to doctors on the professional pathway to Fellowship in the Australasian College of Legal Medicine. I provide lectures to Detectives in Clinical Forensic Medicine each quarter, with a separate lecture series relating directly to sexual assault investigation and drug facilitated crime.

9. I provide a peer review service to the Medicine and Law Journal. I have spoken at national and international medical and legal conferences relating to Clinical Forensic Medicine, particularly in relation to health care related death, death investigation and toxicology in Clinical Forensic Medicine.

[1] This particularly involves the care of those with drug addiction, suffering intoxication or withdrawal syndromes, mental health conditions and general medical issues.

Queensland Health Sexual Offences Medical Protocol (confidential)

Please print this document and action/ complete applicable components

References to police throughout the document are not relevant to Just in Case (JIC) examinations. Some sections of this document are not applicable for Just in Case examinations – this is indicated throughout.

Notes regarding use of this Medical Protocol.

Sexual Assault Investigation Kits (SAIK: provided by Queensland Police) have been assembled to assist in the forensic examination of victims of sexual assault and should be used according to these instructions. This will ensure that the patient is appropriately examined, and laboratory specimens correctly collected, the medico-legal requirements will be fulfilled if all details are completed. Discard all unused material.

Security

The silver tape of the transport bag should be removed, and the edges of the tamper-proof bag stuck down. Blood and/or urine taken for toxicology must be placed in Police Traffic transport kits. Reference samples are collected by Police and must be kept separately from the medical evidence samples (not applicable for JIC)

Police

The Police are responsible for rapid transport of medical specimens and duplicate Medical Protocol pages to DNA Analysis Unit (and Forensic Toxicology if a sample taken).
Reference samples must be kept separate.

Enquiries regarding SAIK contents

DNA Analysis Unit or Forensic Toxicology
39 Kessels Rd
COOPERS PLAINS QLD 4108
[redacted]

Queensland Government

Room cleaning

- Prior to a sexual assault examination, the clinician should perform a routine clean of the work area including work benches/trolley and examination couch to minimize the risk of DNA cross-contamination.

- This should include initial spraying of the work areas with 0.05% bleach solution which should be left for 5 minutes before wiping down with a clean disposable paper towel. This is followed by spraying with 70% ethanol solution to dry bleach residue, followed by wiping down with a clean disposable paper towel.

Consent

- Consent for a sexual assault examination is not implied and needs to be obtained. Do not assume that the complainant fully understands what the examination entails. Discuss all aspects of the examination such as history, general physical examination, genital examination, the taking of forensic specimens and photographing of injuries (not genitals) as well as obtaining consent for release of protocol and specimens to police and therefore for Court purposes.

- Consent must be given freely and be valid (capacity to give consent). Furthermore, the complainant needs to know that consent may be withdrawn at any stage.

- If there are concerns that the complainant does not have capacity to consent a Statutory Health Attorney (if appointed) or the Office of the Public Guardian may be contacted to obtain consent. (This is not relevant for Just In Case: such cases should all require investigation).

- Obtain the name and signature of the witness to the examination (preferably same sex as complainant, and unrelated to the complainant).

History

- Elements of history are recorded on pages 1 and 2 of the SAIK examination sheets. This will need to be photocopied for your records as the originals are placed in the sealed SAIK bag that is sent for DNA analysis.

- Record your details and those of requesting police officer. Date and time of alleged assault and date and time of examination; type of assault; previous/ relevant sexual history of the complainant; date of last menstrual period etc., as well as whether complainant has subsequently showered, douched, cleaned teeth etc.

- A brief summary of the assault can then be recorded, remembering that this is a contemporaneous summary for subsequent provision of a statement. Record all elements of the assault that will direct you to where you will examine for injury and take specimens.

Examination—general

- The complainant is directed to the examination room and asked to disrobe onto a drop sheet if clothing is required for forensic examination. Clothing is then placed one item at a time into individual paper bags (provided by the Queensland Police) which are sealed and identified (not for Just In Case).[1] The drop sheet is then folded inwards and placed into the plastic bag provided.

- A head to toe general examination is made documenting any acute injuries. Note the mood and demeanour of the complainant and if clothing is damaged or stained (if worn during the assault). If the history suggests kissing/biting/licking or if ejaculate was alleged to have been deposited on the skin, then the relevant area needs to be swabbed (wet swab followed by a dry swab). A swab is moistened with sterile water and rolled across the area. The swab is immediately replaced inside its sheath. A second (dry) swab is then rolled over the area. All swabs should be sealed before packaging.

- Specific areas that should be observed are scalp, inner oral mucosa, behind ears and hands/wrist areas looking for injuries. Fingernail scrapings may be taken by Scenes of Crime Officers (Queensland Police) if the complainant reports scratching their alleged attacker (not applicable for Just In Case).

- Injuries can be detailed on the general examination page and body charts are provided in the appendix to graphically document injuries.

Examination—genital

- **Female genital examination** needs to record whether the external genitalia is mature, pubertal or prepubertal and whether there is any blood, discharge or lubrication present on inspection.

- Inspect the mons and labia majora looking for injuries; separate the labia majora and inspect the labia minora, hymen and posterior fourchette areas looking for injuries such as abrasions and tears. Note any injuries to clitoris and urethral areas. Examine the inner thighs looking for injuries such as bruising; as well as perineal area. An anatomical diagram is provided in the appendix to assist with documenting genital injury.

- Swabs are taken from inner labia majora (formerly recorded as ‘vulval’); lower vaginal area (just inside labia minora) and high vaginal area (preferably from the posterior fornix under direct vision with the aid of a speculum if practicable, inserted carefully ‘blind’ if not, or cervical os swab if assault greater than 3 days and less than 7 days). Swabs are best performed in a rolling action of the cotton tip. The external labia majora area should be swabbed in the case of attempted penetration/sexual assault.

- **Male genital examination** includes examination of the external genitalia for signs of injury as well as anal/rectal area as dictated by the history of the alleged assault.

- In cases where examination is of an alleged offender, wet and dry swabs are obtained of the shaft of the penis; the base of the penis and the glans penis including coronal sulcus under the glans. (Not relevant for Just in Case)

[1] There is no provision for clothing retention in Just In Case examinations.

Anorectal examination

- Inspect the perianal area for recent or old injuries including bruising and abrasions noting any tears and their position, likely age, tenderness etc. A dry swab can be obtained remembering that, in females, ejaculate can migrate from the vulvovaginal area.

- Inspect the anal canal for tears, abrasions and bruises, if possible with the aid of a proctoscope.

- Inspection of the rectum can only occur via a proctoscope. A rectal swab can be taken via the proctoscope avoiding contact with the wall of the instrument. Tenderness may prohibit use of the proctoscope: please note this in the record.

Other specimens

- Swabs may be taken from the oral mucosa if there is a history of penile penetration with or without ejaculation. The swab should cover all areas of the oral mucosa, particularly in the gutter between the inner cheek and lower molars and under the tongue.

- In the absence of oral penetration and if the complainant has full recall of the incident a reference DNA swab may be taken from the mouth of the complainant by attending police. (Not for Just In Case)

- Fingernail scrapings or clippings may be taken if the history suggests that the complainant scratched the alleged offender. These can be arranged through QPS Scenes of Crime Officers. (Not for Just In Case)

- At the end of the examination it is recommended that a swab be taken of the work surface to exclude potential DNA contamination.

Toxicology

- Use police traffic kits: one for blood and one for urine. Complete details in the Sexual Assault Toxicology Form and only use the tubes provided. This is not applicable for Just In Case.

- For blood tests, take 5ml blood and place in the small blood tube. Write the complainant's name, date of birth, time and date as well as collector's name on tube. Affix barcode label from the kit to "barcode" space on Sexual Assault Toxicology Form. Sign the seal and attach to lid of blood tube, then place small tube into medium tube, and thence into the large tube.

- Separate kits are used when both blood and urine are collected. The same procedure is adopted for urine tests. Urine is also placed in the small blood tube, and the same packaging procedure followed as for blood. Write the complainant's name, date of birth, time and date as well as collector's name on tube. Affix barcode label from the kit to "barcode" space on Sexual Assault Toxicology Form. Sign the seal and attach to lid of medium tube, then place into the large tube.

- Photocopy the Sexual Assault Toxicology Form and place a copy into each box. Seal the boxes with the Yellow "Infectious Hazard" sticker.

- Write on the outer box "DFSA – Not Traffic".

- The original Sexual Assault Toxicology Form remains in the SAIK with the other specimens and documents. Ensure you take a photocopy yourself for your record.

Other blood tests

This section is not applicable for Just in Case

- A blood sample may be collected specifically for comparative interpretation of DNA profiles rather than a buccal swab, particularly if the complainant has little recollection of events or if oral penetration has occurred. Blood taken is placed into an EDTA specimen container and is used to determine the DNA profile of the victim.

- **FTA Paper** may be "spotted" with blood (two drops from the end of a needle is adequate) in lieu of providing blood in an EDTA specimen container. A finger-prick would suffice. Saliva/mouth swabs may also be placed upon FTA paper.

- If any concerns, instruct QPS to collect a reference sample the following day.

Completing the examination involving the Queensland Police

This section is not applicable for Just in Case – see next section

- At the completion of the examination the specimens are labelled with date, time, examiner and anatomical location of swabs. It is hoped in time there will be unique barcodes available for such labelling purposes. The swabs are then sealed and placed in the tamper-proof evidence bag along with the SAIK and toxicology paperwork (4 pages) and drop sheet if used.

- The SAIK bag is then sealed and handed to police along with any other specimens (toxicology, clothing etc.).

- Use the front page of SAIK kit **(see page 7)** to obtain signature of handover of custody of specimens to police noting the police officer's name and station as well as date and time of handover.

- At the completion of the examination, another clean of the work area should be performed (as in 1 above) to minimize the risk of DNA contamination.

Completing the examination involving a Just In Case.

- At the completion of the examination the specimens are labelled with date, time, examiner and anatomical location of swabs. The swabs are then sealed and placed in the tamper-proof Just In Case evidence bag along with the SAIK and drop sheet if used.

- The SAIK bag is then sealed and the chain of custody process engaged to forward the specimen to QH FSS.

- At the completion of the examination, another clean of the work area should be performed (as in 1 above) to minimize the risk of DNA contamination.

- Use Pathology Queensland Chain of Custody form

After care

- If the complainant has not been taking contraception or if in any doubt, they should be offered a stat dose of Postinor-1.

- Consideration needs to be given to sexually transmitted infection and need for PEP (post-exposure prophylaxis for HIV) and referral to a Sexual Health Clinic for follow up. We recommend discussion with the local HHS Infectious diseases team. Information is also available at: http://www.health.qld.gov.au/sexhealth/

Police SAIK (Chain of Custody)

Sexual Assault Investigation Kit (SAIK)		
SURNAME:	OTHER NAMES:	
DOB:	SEX: Male □ Female □	
EXAMINING CLINICIAN: ADDRESS OF EXAMINING CLINICIAN: E-MAIL ADDRESS: CONTACT PHONE NUMBER:	INVESTIGATING OFFICER: POLICE STATION: E-MAIL ADDRESS: CONTACT PHONE NUMBER:	
DATE SAIK EXAMINATION: TIME SAIK EXAMINATION:	DATE OF ASSAULT: TIME OF ASSAULT:	
FORENSIC SAMPLES HANDED TO POLICE		
NAME	DATE	TIME
SIGNATURE	STATION	

Queensland Government

Queensland Health
Clinical Forensic Medicine Unit (CFMU)

Consent for Forensic Examination

Examiner's Name: _____ Date: _____

Patient's Name: _____
Surname Other names

Reporting Options (Clinician ticks box after explaining options)

☐ **Patient has chosen to make a formal report to police**

I hereby consent to

- a complete medical examination including a pelvic (internal) examination
- to the recording of the findings
- the collection of all necessary specimens for laboratory tests
- the taking of necessary photographs of injuries related to the reason for this examination.

I understand that I can stop the examination at any time

- I give my permission for information and evidence collected during this examination for forensic purposes to be given to Police and the Office of the Director of Public Prosecutions, to assist an investigation.

PATIENT NAME _____
Surname Other names

Signature of patient or Authorised person_____

Signature of witness _____

Date _____

☐ **Patient has chosen NOT to make a formal report to police, at this time**

I hereby consent to

- a complete medical examination including a pelvic (internal) examination
- to the recording of the findings
- the collection of all necessary specimens for laboratory tests
- the taking of necessary photographs of injuries related to the reason for this examination.

I understand that I can stop the examination at any time

I have decided NOT to make a complaint to police at this time and I understand that

- Delaying a report *to Police* may reduce the opportunity to obtain evidence and may reduce the information available to Police in an investigation.
- Only DNA samples will be collected during the examination.
- I can report to police at later date.
- The kit containing samples collected during the examination will only be stored for 12 months
- There is a small chance of deterioration in the sample quality over time

PATIENT NAME _____
Surname Other names

Signature of patient or Authorised person_____

Signature of witness _____

Date _____

Forensic Examination Consent Process- Explanatory Notes for Examiner

The Forensic examination is distinct from standard medical care. To obtain fully informed consent for the forensic examination, the clinician should convey specific features of the forensic examination process.

1. A forensic examination is for collecting evidence. It includes taking a history of the event, using swabs to collect DNA or other evidence, and documenting injuries. Advise the patient that:
    - A forensic examination is to collect evidence for a police investigation at some point.
    - They can choose not to have a forensic examination.
    - The history-taking is just to inform collection of samples, so they only need to provide information they are comfortable with;
    - They are in control of the process.
    - They can decide at any time to stop the examination
2. The limitations of the examination:
    - A forensic examination may not yield biological or physical findings that could be used in evidence
    - A forensic examination may not contribute to the investigation or subsequent prosecution.
3. For victims who proceed with standard police reporting explain that:
    - The examination findings will be shared with the Police, and possibly with the Office of Public Prosecutions, to further an investigation or subsequent prosecution (this is unlike the normal rules of confidentiality in a standard clinician-patient relationship).
    - The complainant remains in control of the process and can withdraw the consent to share information with police.
4. For victims who proceed with a 'Just in Case' pathway:
    - It may the best option for an individual in his/ her circumstances but there are limitations to this procedure relating to possible loss of evidence.
    - It is important to share the following limitations of the JIC process with the person.
        - possible loss of an opportunity by the police (witnesses, CCTV for example);
        - inability to collect other evidence samples (clothes, photographs, fingernail scrapings, toxicology etc);
        - and a small possibility of deterioration in sample quality.
    - Reinforce that samples will only be kept for 12 months.
    - Inform victims that a counsellor will be in touch in subsequent days, but they may opt out of getting this contact.
    - Inform victims that contact will be attempted during the 12-month period as part of follow up care.

Keep checking if the person has any questions about the information

Sexual Assault Investigation Kit (SAIK)

DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd., Coopers Plains QLD 4108. Telephone (07[redacted]

SURNAME:	**OTHER NAMES:**
DOB:	**SEX: Male ☐ Female ☐**
EXAMINING CLINICIAN: **ADDRESS OF EXAMINING CLINICIAN:** **E-MAIL ADDRESS:** **CONTACT PHONE NUMBER:**	**INVESTIGATING OFFICER:** **POLICE STATION:** **E-MAIL ADDRESS:** **CONTACT PHONE NUMBER:**
DATE SAIK EXAMINATION: **TIME SAIK EXAMINATION:**	**DATE OF ASSAULT:** **TIME OF ASSAULT:**

TYPE OF ASSAULT	Digital	Penile Penetration	Oral	Object Penetration
Oral				
Vagina				
Anus				
Penis				

Other (details in Summary of Assault Details):

Examination Location:

PREVIOUS SEX ACTIVITY:

Yes ☐ Date if < 7 days ago: _____

No ☐

Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐

Use of condom with previous coitus Yes ☐ No ☐ Unknown ☐

ASSAULT DETAILS:

Was a condom used:

Yes ☐ No ☐ Unknown ☐

Did ejaculation occur:

Yes ☐ No ☐ Unknown ☐

Was a lubricant used:

Yes ☐ No ☐ Unknown ☐

How many offenders were involved in the assault*:

Male _____ Female _____

* If multiple offenders please detail each person's involvement in the Summary of Assault Details.

For Female SAIK:

Date LMP: _____

SINCE THE ASSAULT HAS THE PATIENT

Changed Clothing:	Yes ☐	No ☐
Washed Clothing:	Yes ☐	No ☐
Showered/Bathed:	Yes ☐	No ☐
Douched:	Yes ☐	No ☐
Urinated:	Yes ☐	No ☐
Defecated:	Yes ☐	No ☐
Vomited:	Yes ☐	No ☐
Washed Mouth:	Yes ☐	No ☐
Cleaned Teeth:	Yes ☐	No ☐
Had drink/food:	Yes ☐	No ☐

SUMMARY OF ASSAULT DETAILS

CASE HISTORY:

Has the Patient consumed a substance which may alter consciousness:

Yes ☐ No ☐ Unknown ☐

Can the Patient recall and communicate the incident? :

Yes ☐ No ☐ Yes ☐ No ☐ Unknown ☐

Did the assault involve any kissing/licking/biting? :

Yes ☐ No ☐

If yes, give details of locations: _____

Was there any genital/anal injury causing bleeding? :

Yes ☐ No ☐

If yes, give details _____

Medical examination information form – DNA

SUMMARY OF ASSAULT DETAILS (continued)

CLOTHING AND OTHER ITEMS

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ❑ Worn post-assault ❑ Worn both pre-assault and post-assault ❑

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ❑ Worn post-assault ❑ Worn both pre-assault and post-assault ❑

REFERENCE SPECIMENS: Please package in a separate envelope within the SAIK kit

FTA Sample (preferred) Yes ❑ No ❑ Cells ❑ Blood ❑

Blood Reference Sample Yes ❑ No ❑ 5ml EDTA tube

Oral Reference Swab Yes ❑ No ❑ May be used only if no allegation of oral assault or loss of consciousness

Blood Sample taken for toxicology Yes ❑ No ❑ Urine Sample taken for toxicology Yes ❑ No ❑

Medical examination information form – DNA

PLEASE DOCUMENT THE SPECIMEN COLLECTED FOR DNA BELOW:			
FEMALE SAIK SWABS			
☐ High Vaginal	UNIQUE IDENTIFIER	☐ Low Vaginal	UNIQUE IDENTIFIER
☐ Inner L Majora	UNIQUE IDENTIFIER	☐ Cervical	UNIQUE IDENTIFIER
☐ Perianal	UNIQUE IDENTIFIER	☐ Rectal	UNIQUE IDENTIFIER
☐ Oral:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
☐ Other:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
MALE SAIK SWABS			
☐ Base of Penis	UNIQUE IDENTIFIER	☐ Shaft of Penis	UNIQUE IDENTIFIER
☐ Glans Penis	UNIQUE IDENTIFIER	☐ Rectal	UNIQUE IDENTIFIER
☐ Perianal	UNIQUE IDENTIFIER	☐ Scrotum	UNIQUE IDENTIFIER
☐ Oral:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
☐ Other:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
BODY/SKIN SWABS (please specify if biting, licking or kissing has occurred at site from which body swab was collected)			
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
FINGERNAIL SCRAPINGS		**DROPSHEET**	
☐ Right Hand: **(Refer SOCO)**	☐ Left Hand: **(Refer SOCO)**	☐	UNIQUE IDENTIFIER

SEXUAL ASSAULT TOXICOLOGY FORM – not used for JIC

NAME:	DOB:

DIRECTIONS FOR THE COLLECTION OF TOXICOLOGY SPECIMENS

- Collect blood and urine samples ASAP if incident occurred within previous 72 hours.
- Use two separate police traffic (UIL/UID) toxicology kits; one for the blood and one for the urine and CLEARLY mark them 'Crime Scene Sample — not Traffic'
- ALWAYS collect the blood specimen in a Fluoride Oxalate tube. Urine specimens may be collected in a sterile container, a minimum of 20mLs is preferred.
- Complete the questionnaire and place this form inside the kits.

QUESTIONNAIRE

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss, and signs or symptoms of intoxication reported by the patient/subject:

Alcohol before the	YES	NO	Type/amount/time of last drink before incident?
Alcohol since the	YES	NO	Type/amount/time of last drink prior to sample collection?
Drugs prior to the	YES	NO	Type/amount/how taken/time of last drug ingestion before incident?
Drugs since the inc incident (including those administered by QAS if known)?	YES	NO	Type/amount/how taken/time of any drugs ingested since the incident?
Any prescription medications?	YES	NO	Type/dose/when last taken?
Any 'over the counter'/herbal preparations?	YES	NO	Type/when last taken?
Any history of liver/kidney	YES	NO	
Weight of patient (kg)			Time and details of last meal?
DATE AND TIME BLOOD SAMPLE COLLECTED			STICKER BAR CODE
DATE AND TIME URINE SAMPLE PASSED			STICKER BAR CODE
Name of Examining Clinician:			Signature of Clinician

General examination

SURNAME	OTHER NAMES

FOR FORENSIC PURPOSES WEAR GLOVES AT ALL TIMES. AS A MINIMUM CHANGE THE GLOVES BETWEEN THE GENERAL EXAMINATION, GENITAL EXAMINATION AND ANAL EXAMINATION (IF PERFORMED)

- Clothing (if still wearing clothing worn during the assault) should be removed on a drop sheet in the presence of the examiner).
- Place each item in a separate identified bag until decision made regarding police action.
- Avoid further damage, if possible, when clothing is removed or during inspection.
- If possible dry wet clothing before bagging and use a paper bag rather than a waterproof bag.

APPEARANCE AND MOOD OF PATIENT
State of dress, hair and emotional state (observation not interpretation)

Clothing: General description of stains or damage.

GENERAL EXAMINATION: Use the diagrams in appendix if required. Detail everything (all bruises, abrasions, lacerations, incised wounds, bites, tenderness, and swelling).

Normal		Abnormal (specify)	Note if not examined.
☐	Mouth	☐	_____
☐	Neck and throat	☐	_____
☐	Head and scalp	☐	_____
☐	Ears	☐	_____
☐	Hands and nail	☐	_____
☐	Arms	☐	_____
☐	Face	☐	_____
☐	Feet	☐	_____
☐	Legs	☐	_____
☐	Thorax (anterior)	☐	_____
☐	Thorax (posterior)	☐	_____
☐	Abdomen (anterior)	☐	_____
☐	Abdomen (posterior)	☐	_____
☐	Buttocks	☐	_____

Female genital examination

SURNAME	OTHER NAMES

EXTERNAL EXAMINATION

VULVA Lubrication Dry ☐ Moist ☐ Blood ☐

Appearance of fluid or discharge _____

EXTERNAL GENITALIA Mature ☐ Pubertal ☐ Prepubertal ☐

EXAMINATION: record any pain or tenderness. **State if not examined**. Use the diagram in appendix if required.

Normal		Abnormal	
☐	Mons	☐	_____
☐	Labia majora	☐	_____
☐	Labia minora	☐	_____
☐	Introitus	☐	_____
☐	Posterior fourchette	☐	_____
☐	Hymen	☐	_____
☐	Urethra	☐	_____
☐	Clitoris	☐	_____
☐	Inner thighs	☐	_____
☐	Perineum	☐	_____
☐	Anus	☐	_____
☐	Perianal skin	☐	_____

Swabs are taken to detect whether blood, semen or foreign cellular material is present. Before proceeding with internal examination, take internal labia majora and low vaginal swabs (in that order) for forensic and medical purposes Use a speculum for high vaginal swabs (posterior fornix or cervix). Use proctoscope for rectal swabs. See general information.

INTERNAL EXAMINATION

SPECULUM EXAMINATION (If performed)

Normal		Abnormal (specify)	**State if not examined**
☐	Lower vagina	☐	_____
☐	Upper vagina	☐	_____
☐	Cervix	☐	_____

VAGINAL EXAMINATION (If indicated clinically)

RECTAL EXAMINATION (If indicated by history)

Male ano-genital examination (include all signs of trauma)

SURNAME	OTHER NAMES

EXTERNAL EXAMINATION

EXTERNAL GENITALIA

Mature ☐ Pubertal ☐ Prepubertal ☐

EXAMINATION Record any pain or tenderness. Use the diagram in appendix if required.

Circumcised Yes ☐ No ☐

Normal		Abnormal	
☐	Penis	☐	_____
☐	Foreskin	☐	_____
☐	Scrotum	☐	_____
☐	Testes	☐	_____
☐	Perineum	☐	_____
☐	Perianal skin	☐	_____

Swabs are taken to detect whether blood, semen or foreign cellular material is present. Use proctoscope for rectal swabs. See general information.

INTERNAL EXAMINATION
PROCTOSCOPE EXAMINATION (Describe all injuries)

RECTAL EXAMINATION (DIGITAL) (If indicated)

Date:....

REFERRAL TO: ☐ **Sexual Health Clinic** ☐ **GP**

EXAMINING PRACTITIONER:

Name: **Place of Examination:**

Dear Clinician,

Re:

Name: DOB:__/__/____

Affix Hospital Label

Address:

I have performed a forensic medical examination in relation to an alleged sexual assault.
Thank you for seeing this patient for follow up with regard to sexual health management and ongoing care.

DETAILS OF INCIDENT:

Date:....

Type of assault: (brief description):

POST-COITAL CONTRACEPTION GIVEN	POST EXPOSURE PROPHYLAXIS GIVEN
☐ Postinor. Time Taken:	☐ Azithromycin: 1 gram stat (2 tablets)
☐ Other:	☐ Ciprofloxacin: 500mg stat
	☐ Hepatitis B (HBV) Immunoglobulin
	☐ HIV PEP

Please do not hesitate to contact me should you have any queries.

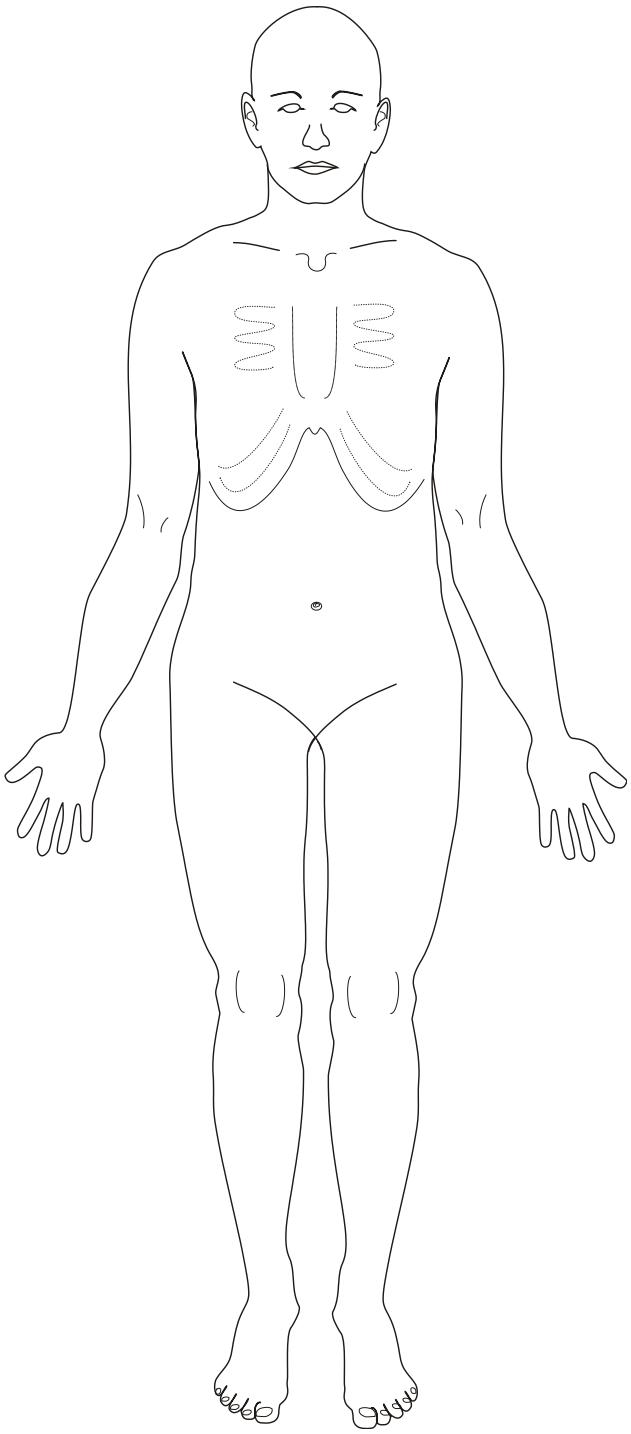
Yours sincerely,

(signed)

General examination

SURNAME	OTHER NAMES

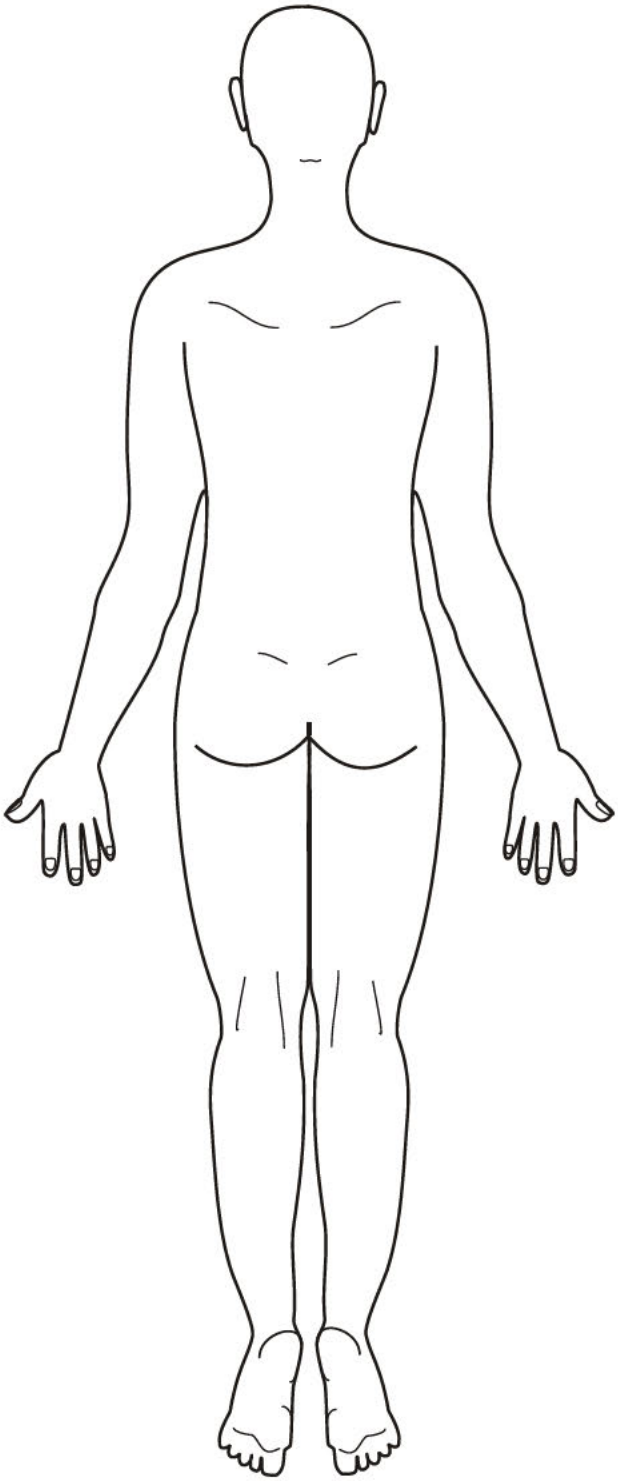
WHOLE BODY FRONT



General examination

SURNAME	OTHER NAMES

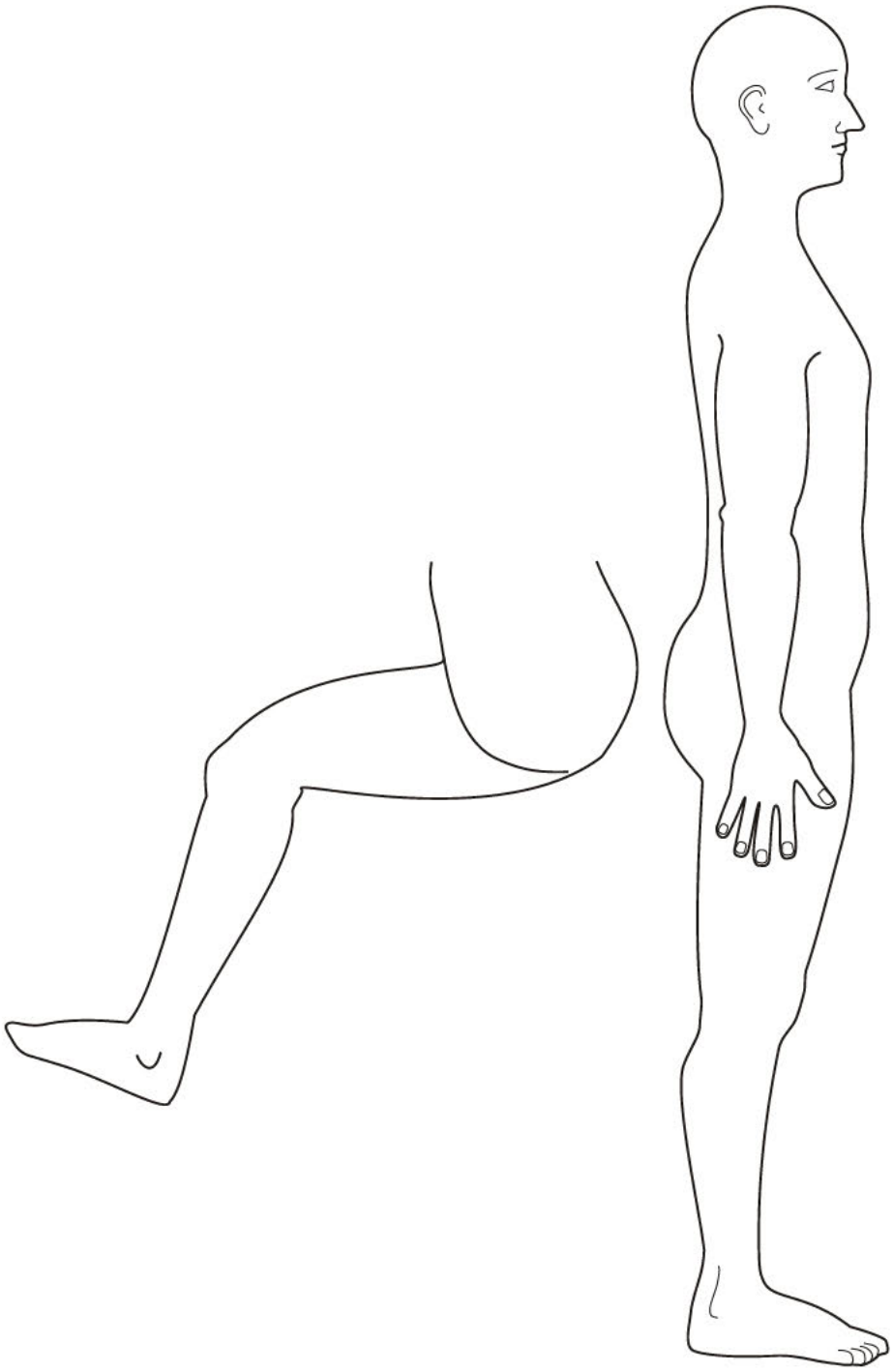
WHOLE BODY BACK



General examination

SURNAME	OTHER NAMES

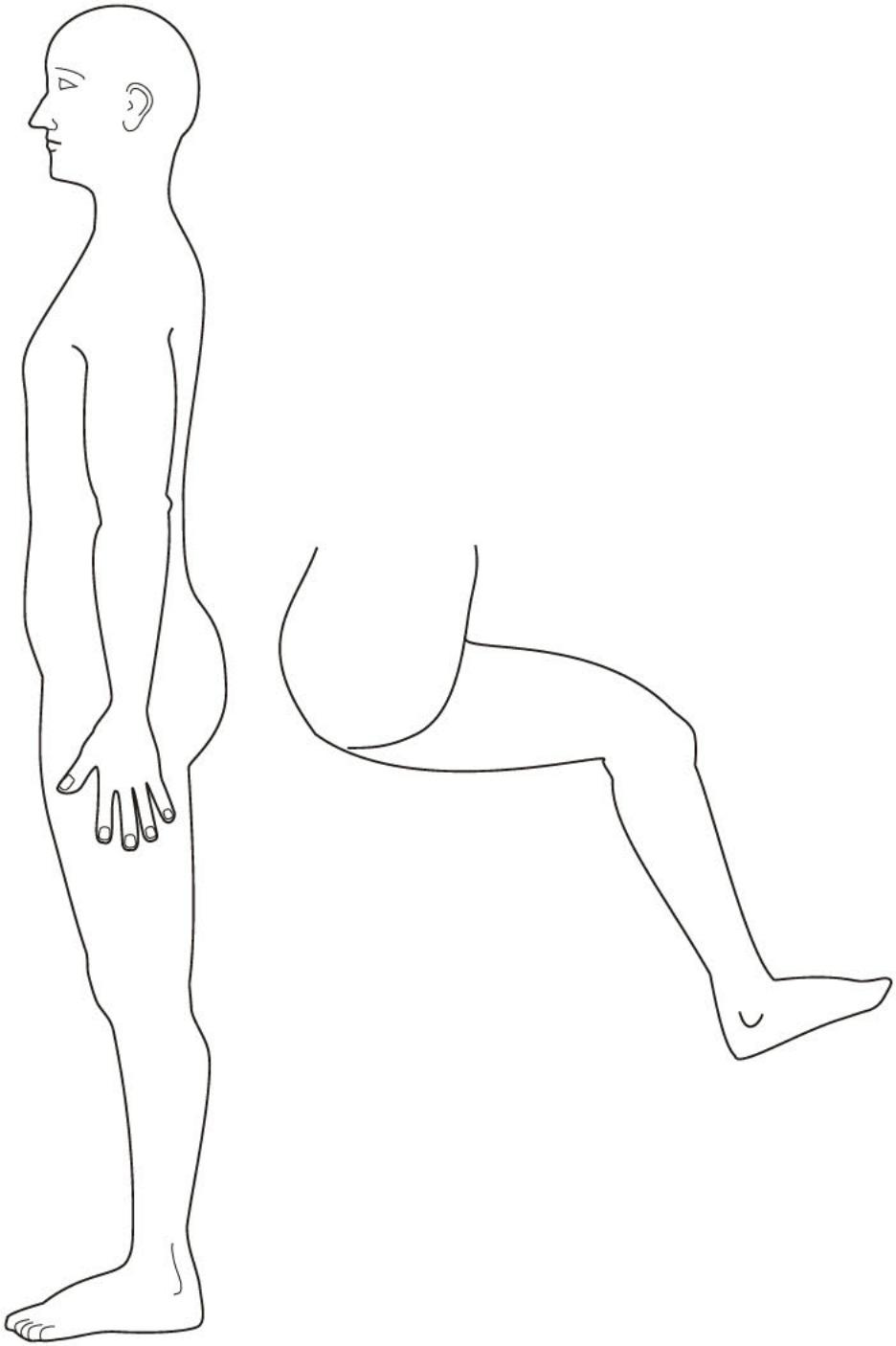
WHOLE BODY RIGHT SIDE AND INNER LEG



General examination

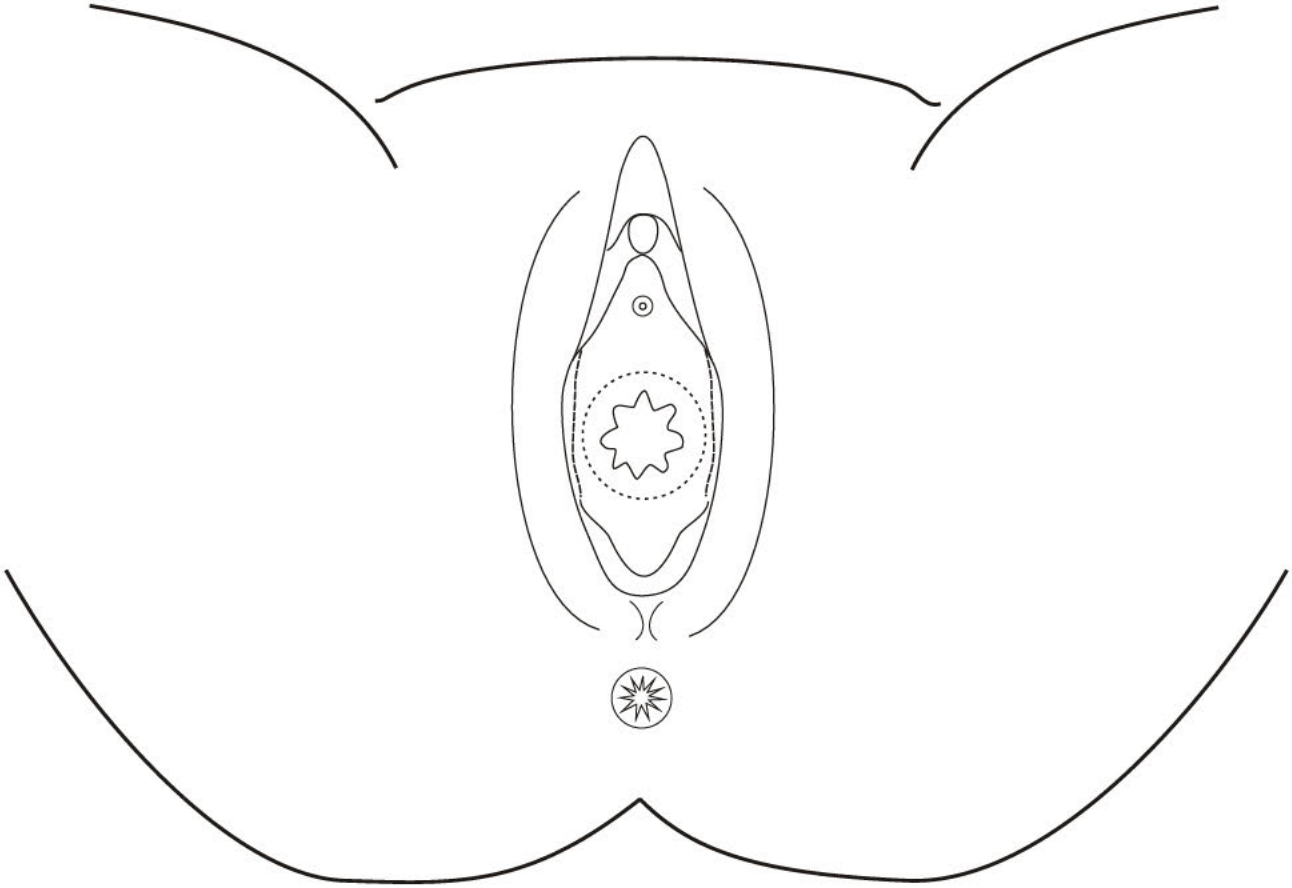
SURNAME	OTHER NAMES

WHOLE BODY LEFT SIDE AND INNER LEG



General examination - female

SURNAME	OTHER NAMES



General examination—male

SURNAME	OTHER NAMES

Queensland Health

Queensland Health Guideline

Document Number: QH-GDL-472:2019

Guideline for the Management of care for people 14 years and over disclosing Sexual Assault

1. Purpose

This guideline provides recommendations regarding best practice to support the management of people 14 years and over who have disclosed Sexual Assault. The guideline recognises that services can be adapted as appropriate to suit local capabilities.

2. Scope

This Guideline applies to all Hospital and Health Services (HHSs).

3. Aboriginal and Torres Strait Islander considerations

Hospital and Health Services should give consideration to providing cultural and gender appropriate services, including practitioners if possible.

4. Related documents

- *Hospital and Health Boards Act 2011* (Qld)
- *Criminal Code Act 1899* (Qld)
- *Victims of Crime Assistance Act 2009* (Qld)
- *Police Powers and Responsibilities Act 2000* (Qld)
- *Guardianship and Administration Act 2000* (Qld)
- *Public Guardian Act 2014* (Qld)
- *Child Protection Act 1999*
- Queensland Health Guide to Informed Decision-Making in Healthcare
- Charter of Victims' Rights
- Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault
- Department of Health Guideline: Conducting Child Sexual Assault Examinations
- Queensland Health Guide to Informed Decision-Making in Healthcare

Associated Health Service Directive

Caring for People Disclosing Sexual Assault QH-HSD-051:2019

Forms and Templates

https://qheps.health.qld.gov.au/hsq/forensics/response-to-sexual-assault

Queensland Government

5. Guideline for the management for people 14 years and over disclosing sexual assault

5.1. Principles

Hospital and Health services will have systems in place to offer adults disclosing that they are the victim of a sexual assault with medical care, psychosocial support and if required, access to a forensic examination. It is recognised that there will be local variation in how this is achieved but processes will:

- Maintain the patient's safety, confidentiality and privacy.
- Minimise further impact on a traumatised person by involving the minimum number of personnel possible in the clinical care and forensic examination and where possible offering choice of gender.
- Include support from social workers, sexual assault workers, nursing staff or relevant local non-government support services. Offer interpreter services where required.
- Recognise that investigation of sexual assault, a criminal offence, is a police matter. Patients will be encouraged to report the assault to police. However, where a patient with the capacity to consent is clear that they do not want police involved, they may choose to have a forensic examination. This may include a child aged 14 – 17 years of age who has parental consent for the examination and/or a Gillick-competent[1] child.
- Report all reasonable suspicions of child abuse and neglect in line with the mandatory reporting and duty of care responsibilities of clinicians.
- Commence within two hours of the patient's arrival in the Emergency Department and where possible by a minimum number of clinicians.
- Be based on informed consent for all aspects of the management including treatment and forensic examination. Adhere to defined meanings of consent, accounting for a person's capacity to consent, including that such capacity may require assessment if the adult person has a mental health disability, intellectual impairment or is temporarily affected by substances including alcohol.
- Recognise that a forensic examination is defined as a 'personal matter', in Part 2 of Schedule 2 of the Powers of Attorney Act, that is, not a health care matter.
- Ensure that consent for forensic examination for a person with impaired capacity can only be provided by an authorised power of attorney, (general power of attorney or Enduring power of attorney), appointed Guardian or the Public Guardian. Substituted decision-making by a statutory health attorney is not authorised for forensic examinations.
- Ensure that patients are aware that they may withdraw consent at any time.
- Ensure patients understand what happens to any samples from a forensic examination, including storage, access and destruction processes.

[1] A Gillick-competent child is one who has the capacity to consent despite being under 18 years of age. To be Gillick-competent, the child must have sufficient understanding, intelligence and maturity to appreciate the nature of the care to be provided, the consequences and risks, and the alternatives. This will vary according to the significance of the decision and factors within the child such as their maturity: Gillick v West Norfolk and Wisbech Area Health Authority [1986] 1 AC 112.

5.2. Clinical Care

1. **Nursing triage** on presentation at Emergency Department is as per all presentations including assessment for injuries and vital signs. Clinical interventions will take priority over forensic examination (*See Attachment 1*).
2. Immediately notify the Senior Medical Officer for any significantly injured or potentially unstable patients to arrange **urgent medical assessment**.
3. Offer all patients psychosocial support in a private environment, if available, and discussion of options including information to inform a decision on police involvement and a forensic examination.
4. For patients under 18 years, if a reportable suspicion[2] has been formed about a child, the treating health professional is to report that to Child Safety Services in line with mandatory reporting responsibilities of clinicians.
5. Pending consent of the patient and explanation of options, clinical staff trained in providing Sexual Assault examinations collect evidence using Sexual Assault Investigation Kit. See details in 7.3.
6. Accurate and comprehensive clinical notes should be recorded in the patient's hospital record. All clinical documentation should be made in accordance with QH-POL-280:2014 Clinical Records Management Policy as well as clinical documentation guidelines that are relevant to individual Hospital and Health Services. A forensic examination should be documented using an appropriate proforma. The forensic record is separate to the patient's clinical record. Copies of clinical documentation should only be filed in the forensic record if relevant to the forensic medical examination.
7. It is recommended that all examinations occur in the presence of an appropriate person acting as a chaperone / support person where possible.

5.3. Clinical Interventions

5.3.1. Time-critical interventions include:

- injuries sustained during the assault
- emergency contraception
- Hepatitis B vaccination +/- immunoglobulin
- HIV Post Exposure Prophylaxis (PEP)
- Chlamydia prophylaxis treatment.

5.3.2. Investigations include:

- for injuries as clinically indicated
- Beta-HCG if possibility of pregnancy pre-existing
- Full Blood Count (FBC), Electrolytes and Liver Function Tests (ELFTs) if commencing PEP
- other serology may be deferred until follow-up
- Sexually Transmitted Infection (STI) screening is recommended two weeks post episode by a relevant practitioner—this may be by referral to a general practitioner or sexual health service.

5.3.3. Clinical interventions (details in Attachment 2):

- Treat any injuries identified on assessment as clinically indicated.
- Consider Hepatitis B immunity.

---

[2] 'Reportable suspicion' about a child is defined in section 13E(2) of the Child Protection Act 1999 (Qld) as a reasonable suspicion that the child has suffered, is suffering, or is at unacceptable risk of suffering, significant harm caused by physical or sexual abuse; and, may not have a parent able and willing to protect the child from the harm. If a reportable suspicion has been formed, a written report must be given to the chief executive (section 13E(3)).

- Consider HIV risk: if high or uncertain risk HIV exposure, contact Infectious Disease physician or sexual health clinic for advice regarding PEP and follow up.
- Consider Emergency Contraception: Postinor 1 (levonorgestrel 1.5mg) up to 72 hours after reported assault or if >72hrs -120 hours, consider Ulipristal acetate.
- Consider STI prophylaxis if unreliable follow up or patient concern.
- Consider Tetanus Prophylaxis if indicated.
- Arrange appropriate follow up: this follow up will vary with site, reported events, individual circumstances and background medical issues.

5.4. Psychosocial Interventions:

Where available, the person should be referred to a Sexual Assault support service or Social Work service for post-acute support such as:

- assisting to the person to return to their usual level of functioning
- providing information about options available including their rights as a victim of crime.
- practical support, including contacting family members or support persons. If consent provided, talk to family members or support persons about how best to support the patient
- advice on 'common' responses, symptoms and reactions following a sexual assault
- psychosocial and risk assessment – physical, psychological and/or financial risk to patient and any noted child protection concerns
- information and referral, with consent, to relevant sexual assault support service.

The social worker, or other health professional, should also advise the patient of their right to:

- sexual health medical advice, treatment and follow up
- information about reporting options, including making a formal complaint to the Queensland Police Service
- referral to the Queensland Police Service via PoliceLink on telephone 131 444 to report the matter or attend any police station in their area to discuss their legal options
- Queensland Police Service's alternate reporting options
- referral to the state-wide Sexual Assault Helpline on telephone 1800 010 120.

For those under 18 years, report all suspected sexual assaults in line with mandatory reporting responsibilities of clinicians.

Where the sexual assault has occurred within an intimate personal relationship, family relationship or an informal care relationship, the patient should be informed of their option to seek protection under the Domestic and Family Violence Protection Act 2012. Where appropriate, the patient should also be referred to a specialist domestic violence service for support and assistance.

5.5. Forensic Examinations:

- Wherever possible, the forensic examination should be provided by a suitably trained clinician such as a Forensic Nurse Examiner; Nurse(s) trained in sexual assault examination; Government Medical Officer(s); Forensic Physician; or other Medical Officer(s) who have received training in forensic examinations.
- When there is no trained clinician available, a Senior Medical Officer can complete the examination accessing phone support from the Clinical Forensic Medicine Unit.
- A sexual assault investigation kit (SAIK) should be used, and a sexual assault examination record completed.
- Care should be taken to minimise the risk of DNA contamination from the room's fixtures and facilities.

- If the patient consents to a forensic examination but does not wish to make a formal complaint to police or wishes to defer this decision, then the examination is performed without notification to police. In this case, Queensland Health stores the sample centrally until such a time that the patient decides to report the sexual assault to police, or the sample is destroyed after 12 months. Patients should provide written acknowledgement that the sample will be destroyed after 12 months, unless QPS request the sample following a complaint to QPS by the patient.
- Release of patient information and specimens to police should only occur with the patient's consent.
- Examiners should ensure that chain of custody obligations are rigorously attended to, ensuring that the validity of collected forensic evidence is maintained.
- Forensic examiners with scope of practice in Adult sexual assault must NOT perform forensic examination for patients under the age of 14 years. Forensic examiners with a scope of practice in paediatric sexual assault may attend all patients 18 years and under.

6. Definition of Terms used in the guideline

Term	Definition / Explanation / Details	Source
Hospital and Health Service	Hospital and Health Services are statutory bodies and are the principal providers of public sector health services.	*Hospital and Health Boards Act 2011*
Forensic Examination	The forensic examination consists of obtaining a history as to the nature of the assault to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic samples as it relates to the alleged sexual assault. A Sexual Assault Investigation Kit (SAIK) is used to collect DNA evidence	Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
Child	Under the age of 18 years For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.	Queensland Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015
Trained Clinicians	Forensic Examinations can be provided by: • Forensic Physician • Medical Officers who have received training in sexual assault examination • Senior Medical Officers accessing phone support from Clinical Forensic Medicine Unit • Government Medical Officers • Forensic Nurse Examiners (postgraduate qualification in Forensic Medicine) • Sexual Assault Nurse Examiners. Nurses trained in sexual assault examinations having completed a recognised short-course eg SANE 40CPD short course)	

7. Document approval details

Guideline custodian

General Manager, Community and Scientific Support, Health Support Queensland.

Approval officer

Chief Executive Officer, Health Support Queensland

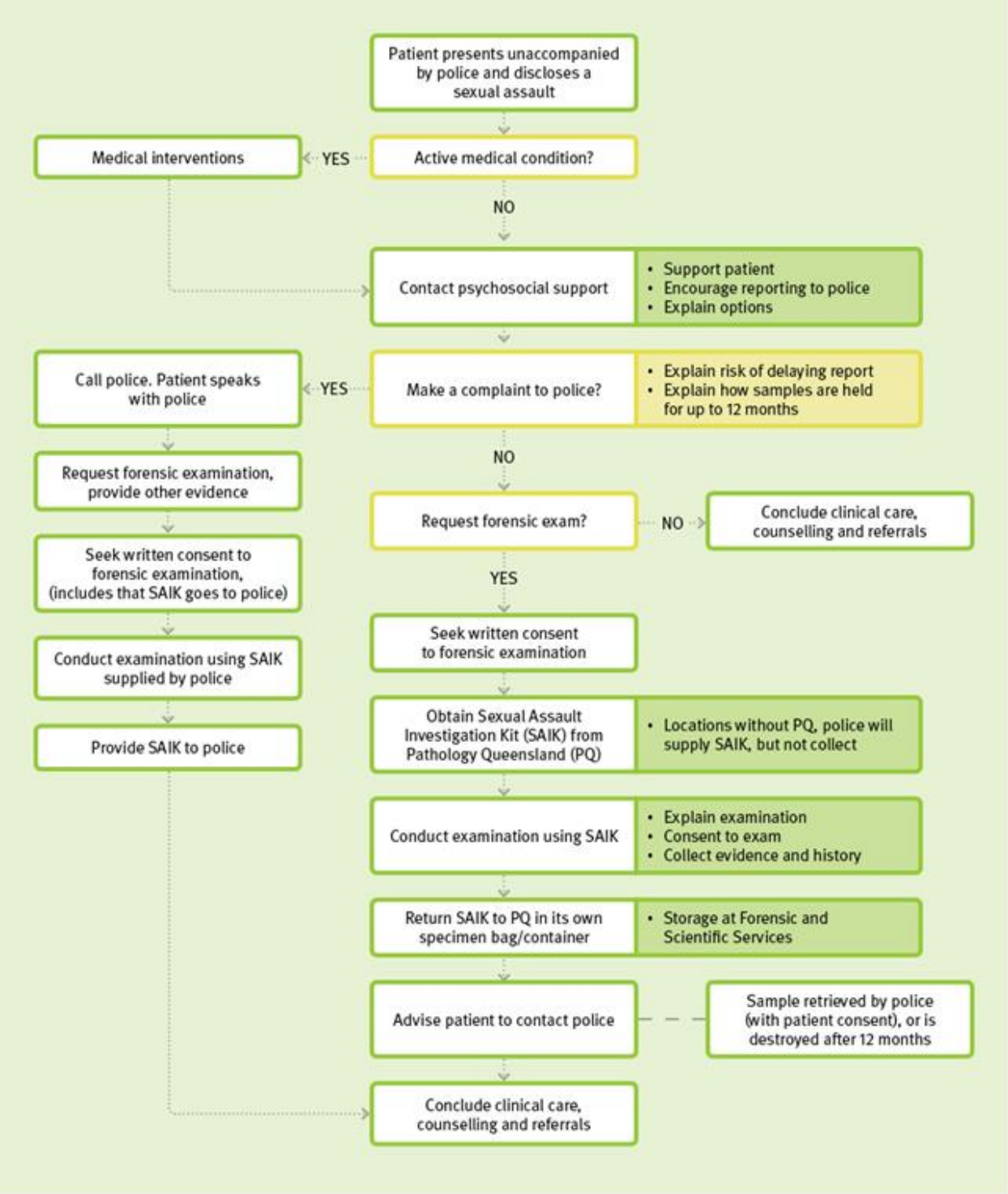
Approval date: 10 September 2019

Approval date: 10 September 2019

8. Version control

Version	Date	Prepared by	Comments / reason for update
1	22/07/2019	Health Support Queensland	New Guideline published as a HSD guideline
2	12/09/2019	Health Support Queensland	Transferred to QH guideline Updated to address specific considerations for patients aged 14-17 years based on input from subject matter experts

Attachment 1: Emergency Department sexual assault management pathway



Attachment 2: Detailed clinical interventions

Hepatitis B risk assessment and management post sexual assault

If immunised: pathology testing only to confirm immunity and review and follow up of Hepatitis B status. This may be done at follow up.

Hepatitis B Immunoglobulin is not routinely required.

If no previous immunisation, or incomplete immunisation then start the immunisation course or give a booster (i.e. only one or two prior doses).

Consider 400 units IM Hepatitis B IG in a non-immune patient within 72 hours particularly if exposure to member of high-risk group for Hepatitis B (Indigenous, injecting drug user, person from countries where Hepatitis B is endemic) or known hepatitis B. This is most effective administered as soon as possible after exposure, however can be delivered up to 14 days post assault. A repeat Hepatitis B IG is also required at one and six months. This may be provided at a sexual health clinic or via a General Practitioner.

https://immunisationhandbook.health.gov.au/resources/handbook-tables/table-post-exposure-prophylaxis-for-non-immune-people-exposed-to-a-source

Assessing need for HIV prophylaxis post sexual assault

The risk of HIV following sexual assault in Australia is very low. Despite the low likelihood of infection, HIV remains a concern for victims and should be discussed. Giving a realistic estimation of risks may provide reassurance to the victim.

HIV prophylaxis is infrequently required following sexual assault but should be considered if offender was known to be: HIV positive, a male who has sex with males (MSM), an Intravenous Drug User (IVDU) or was from a high HIV risk country such as Sub-Saharan Africa, South East Asia or Papua New Guinea. Transmission risk is also higher if the sexual assault resulted in bleeding from genito-anal injury. *Refer to the Australasian Society for HIV Medicine (ASHM) guidelines for table summarising quantitative risks in different sexual activity scenarios which can be found at:
http://www.pep.guidelines.org.au/index.php/assessment-of-the-risk-of-hiv-transmission/what-is-the-hiv-transmission-risk-exposure#table1

Routine baseline status for HIV should be undertaken. For pre-HIV counselling please refer to the HIV-pre and post-test counselling information and patient brochures located at:

https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/hiv-aids

For high-risk cases or any concerns, discuss each case individually with on call Infectious Disease consultant or local Sexual Health Clinic. Many will not be recommended Post Exposure Prophylaxis (PEP). Risk of exposure should be considered depending on sexual assault type and potential sero-prevalence of perpetrator. PEP Guidelines for non-occupational exposure to HIV can be obtained from the ASHM website.

https://www.ashm.org.au/HIV/PEP

Post-exposure prophylaxis starter drug packs should be available for the Emergency Department. These are authorised by the Infectious Disease consultant or Sexual Health Consultant who will advise which

starter pack to use. Most will require Pack A (two drugs) and it is important to follow correct procedures in its administration and documentation. They must be instituted within 72 hours. Follow up of these patients is as an outpatient to Infectious Disease or Sexual Health Clinic or other local arrangement depending on facility location.

Common side effects are nausea, headaches, lethargy (up to 1/3 of patients cease these drugs before completion due to side effects). More serious side effects include liver toxicity. Baseline full blood count (FBC) and electrolytes and liver function tests (ELFT) are required before starting.

Emergency Contraception post sexual assault

If patient has good effective contraception this is not required, e.g. Implanon, Depo provera, Mirena coil in situ, no missed oral contraceptive in last menstrual cycle.

Discuss benefits of “morning after pill”. Generally, this is very safe and should be given if there is any risk of pregnancy.

If indicated, Postinor 1 (Levonorgestrel 1.5mg) up to 72 hours should be taken immediately. It is only effective IF USED WITHIN 72 HOURS OF ALLEGED ASSAULT. It is more effective, the earlier it is used. Consider offering oral maxalon if patient is known to have nausea with the drug. However, very few patients (1.4 – 5.0 per cent) vomit with the progesterone-only emergency contraceptive and antiemetics are not routinely recommended.

If presentation is >72 hours and less than 120 hours, an alternate drug - Ulipristal acetate is likely to be more effective. It is contraindicated in patients with liver disease, asthma requiring steroids, with breast feeding and less-effective if using antacids or Proton Pump inhibitors.

Advise pregnancy test if next period late or different from normal.

Prophylaxis of Sexually Transmitted Infection post sexual assault

Overall risk of STI such as chlamydia, gonorrhea and trichomonas is low. Options of treatment prophylactically in Emergency Department or STI screens in two weeks should be considered depending on patient demographics, likely patient compliance and patient choice.

Chlamydia is the most frequently encountered STI that would be amenable to prophylaxis. After urine PCR (or swabs including throat and rectal if applicable) are collected, Azithromycin 1gm orally stat should be given prophylactically in the Emergency Department if it is difficult to ensure compliance by follow-up of patient.

These patients still require follow up STI screening with a urinary PCR at two weeks post sexual assault as the above does not prevent other infections.

Other bacterial STIs have a very low prevalence in metropolitan Queensland. For high-risk or complex exposures (e.g. multiple perpetrators, perpetrators from population group with high rates of STI), contact Sexual Health Service or Infectious Disease consultant for advice.

If risk is significant, compliance with follow up low or if advice unavailable for such cases give the following two-drug therapy (Please be mindful of Ceftriaxone Resistant Gonorrhoea – if prescribed collect a first pass urine sample for Microscopy, culture and sensitivity (MC&S) and PCR prior to treatment):

1. Ceftriaxone 500mg IM with 2mls 1 per cent lignocaine/Ceftriaxone 500mg IV stat - same if pregnant **AND**
2. Azithromycin 1gm orally stat - same if pregnant.

Follow up after reported sexual assault

All patients should be referred for follow up including pathology results and recommended ongoing testing. Most patients are suitable for medical follow up with their general practitioner, but they should be offered a choice of follow up options.

Patients with more complex or high-risk exposures should be referred to a Sexual Health Clinic or an Infectious Disease specialist for follow-up. A Sexual Health Clinic may also be offered to patients with concerns about confidentiality or those who require access to a free service.

Patients who are commenced on HIV post-exposure prophylaxis should be urgently referred to the Infectious Disease team or the local Sexual Health Service clinic for ongoing supply of medication and specialised management of antiretroviral drugs.

Refer to appropriate Sexual Assault Support Service and/or other psychosocial services such as referral to National Sexual Assault Helpline (NSAH) - 1800 737 732 which operates 24/7 and can provide phone counselling sessions.

Packaging swabs and biological specimens

Queensland Healthcare practitioners collecting swabs and other biological specimens in a 'Just in Case' / Queensland Police Service Sexual Assault Investigation Kit (JIC/QPS SAIK) should be aware of the following information.

A print-friendly SBAR packaging of swabs and other biological specimens (DOCX 87 kB) is available to download and put on notice boards.

SAIK and JIC kit contents

SAIK and JIC kits compiled by FSS contain the following:

- swabs
- a drop sheet in a generic clip seal plastic bag (CSPB)
- paperwork in a generic clip seal plastic bag.

The kits do not contain biohazard bags; however, including clinical consumables, such as biohazard bags, may be considered later.

Biohazard risk

On occasion, sterile swabs and other biological specimens collected during a sexual assault examination are being placed in a CSPB or directly into the tamper-proof evidence bag. The corners of the swab casing are sharp and often result in the generic CSPB being perforated. If a leakage occurs, surfaces that the CSPB comes in to contact with, and the integrity of the documentation, are compromised if they become contaminated by biological material, or wet from fluids. This creates a biohazard risk for people that come into contact with contaminated surfaces and for staff at Forensic and Scientific Services (FSS).

Also, JIC/QPS SAIK documentation is handled outside a laboratory setting by staff not wearing gloves. The documentation comes in to contact with multifunction copying devices and other office equipment, which creates a further biohazard risk.

Process for packaging

Healthcare providers who collect sterile swabs and other specimens while conducting a sexual assault examination **must place items collected into a biohazard bag, and then in to the CSPB**. Fluids should be packaged separately from swabs in separate biohazard bags. Please ensure that the completed documentation is returned to the CSPB prior to placing it in the JIC/QPS SAIK.

Access to biohazard bags: for ease of access and use, it is recommended that biohazard bags are included on all Hospital and Health Service sexual assault trolleys.

Just in case sexual assault investigation kit flow chart

Collector

Collect kit from Pathology Queensland/ local police

Collect dry swab/s

Label swab/s:
Full name
Date of birth
Date and time of collection
Specimen site

Complete request form using **Unique bag ID** as surname, add first name and DOB and place in plastic pocket on **outside** of the **Tamper evident security bag**

Place the swab/s inside the security bag and seal
Complete the receipt, tear off and keep

Keep cool and deliver to PQ laboratory

Complete **Chain of custody form** at each specimen transfer step

PQ laboratory

Register in **AUSLAB**

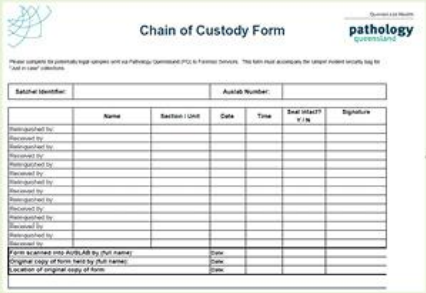
Send cool in a designated Esky to FSS (QIS 24545) **immediately**
Call TOLL on 1300 108 382
to organise 'Same day courier'

If unable to send same day, store cool for up to 8 hours then specimens must be frozen.

Unique bag ID use as surname

Request from to be placed outside the Tamper evident security bag

Place **Chain of custody form** outside bag

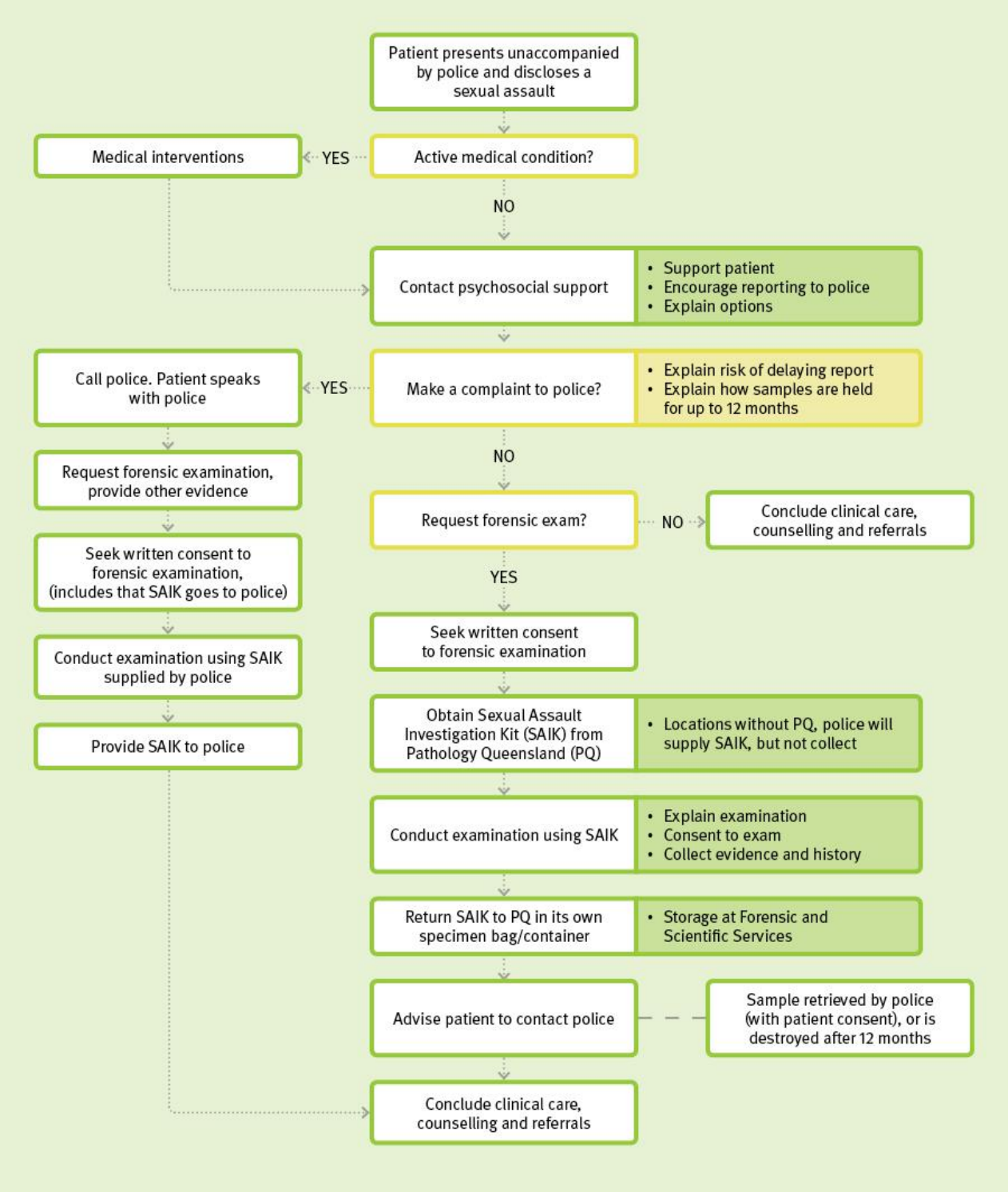


Need more information?

Contact the Clinical Forensic Medicine Unit
(07) 3722 1300 (Monday-Friday, 8am-5pm)
(afterhours calls redirected to Police Comms—ask for on-call forensic physician)

Queensland Government

Sexual assault reporting flow chart



Need more information?

Contact the Clinical Forensic Medicine Unit
(07) 3722 1300 (Monday-Friday, 8am-5pm)
Afterhours call (07) 3364 3512 and ask for the on-call forensic physician

Queensland Government

Sexual assault nurse examiner course

This course has been developed in collaboration with Central Queensland University (CQU). Participants of the course must complete both the online component and the face-to-face workshop to complete the course.

Summary

This short course provides nurses and midwives with the knowledge and skills to provide competent, comprehensive, patient-centred, coordinated care to adult and adolescent (14 years and over) patients disclosing sexual assault.

The course provides an introduction to forensic nursing and sexual violence, as well as informed consent, history taking, forensic sexual assault examinations, describing injuries and documentation.

Upon successful completion of the course (online component and workshop) participants will be issued with a Queensland Health and CQU co-branded digital badge, awarded continuous professional development (CPD) hours, earned the title of sexual assault nurse examiner, and be provided with the opportunity to participate in the SANE-FNE community of practice.

Online learning outcomes

- Gain an understanding of contemporary aspects of forensic nursing and sexual violence
- Develop knowledge and skills in forensic history taking with sexual assault victims
- Interpret requirements of a forensic physical examination within the role of the sexual assault examination nurse
- Interpret requirements of a forensic specimen collection within the role of the sexual assault examination nurse
- Define the role of the nurse in sexually transmitted infection prophylaxis and pregnancy risk assessment
- Define the role of the nurse in documentation

Workshop outcomes

The workshop will review and consolidate the knowledge and skills obtained online, with a focus on the practical application of informed consent, taking a history, performing the physical sexual assault examination, documenting findings, obtaining specimens and preparing a statement for court.

Face-to-face workshops

Workshops are scheduled quarterly and are conducted at 51 Herschel Street, Brisbane.

Workshops will be held in:

- 26 July 2022
- 27 September 2022
- 6 December 2022

Duration

32 hours (online component) plus attendance at one eight-hour, face-to-face workshop.

Study mode

Online and face-to-face workshop

CPD hours

40 hours

Intakes

Enrolments are taken throughout the year on a continuous basis.

Eligibility

Participants enrolling in this course must be:

- experienced nurses or midwives
- registered with the Australian Health Practitioner Regulation Agency
- supported by the Hospital and Health Service Executive Director of Nursing and Midwifery (or equivalent)
- agreeable to completing all course requirements and offering a return of service obligation by participating in an on-duty and/or on-call roster to conduct sexual assault examinations for a 12-month period.

How to enrol

Email [redacted] for a SANE enrolment contact at your Hospital and Health Service (HHS). The local HHS contact will discuss with you enrolment requirements and expectations. They will also be responsible for providing you with the CQU enrolment key. This enrolment key is to be used by staff endorsed by their HHS to complete the SANE course. It **must not** be shared with other colleagues.

CQU will invoice the Clinical Forensic Medicine Unit on a monthly basis. You will not be required to pay for the course.

Workshops

This 90-minute workshop focuses on the primary clinical and forensic consultation when a patient discloses sexual assault.

Attendees will gain:

- an understanding of the forensic examination process
- confidence with collecting evidence as part of patient focussed care
- contacts for additional support from Forensic Physicians when providing a forensic examination.

Sessions are held via Microsoft Teams. To register your interest email CFMU. A Microsoft Teams RSVP/meeting acceptance email will be sent to your inbox.

Next workshop

- Wednesday 17 August 2022 at 12:30 pm via Teams

Department of Health

Queensland Government

MEMORANDUM

To: Chief Executives, Hospital and Health Services

Copies to: Deputy Directors-General, Health Service and Clinical Innovation Division and System Support Services

Chief Executive Officer, Health Services Support Agency

From: Philip Davies,
Deputy Director-General
System Policy and Performance Division

Contact No: [redacted]
Fax No:

Subject: Health Service Directive Protocol for conducting child sexual assault examinations

File Ref: PS000402

The Health Service Directive "Protocols Applying to Hospital and Health Services" mandates the application of a number of clinical and non-clinical protocols across all Hospital and Health Services.

The currently published *Protocol for conducting child sexual assault examinations* (Protocol) requires amendment. Please see the attached Protocol including amendments for your consideration and feedback.

Section **3.1.3** of the Protocol for conducting a child sexual assault examination has been amended to include the Forensic Nurse Examiner (FNE) as a person trained to perform a sexual assault medical examination for child victims of sexual assault 14 years of age and over.

An additional amendment to section **3.1.3** provides for the inclusion of medical officers who are appropriately skilled to conduct sexual assault medical examinations for child victims of sexual assault 14 years of age and over.

The Clinical Forensic Medicine Unit provides 24 hour telephone assistance to medical officers and FNE's conducting sexual assault medical examinations.

There will be an abbreviated consultation period commencing Monday 30 September 2013 and concluding **cob Friday 18 October 2013**. Please send any comments or feedback via email to [redacted]

If you have any questions regarding this consultation please contact Joanna Gurd, Manager, Strategic Policy Priority Areas on [redacted]

[redacted]

Philip Davies
Deputy Director-General
System Policy and Performance Division
28 / 09 /2013

Encl.: Attachment: HSD Protocol for conducting child sexual assault examinations (amendments included).

Response to sexual assault

Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault

Queensland Government

These guidelines have been developed through a strong collaborative approach by a Government Interagency Working Group including representatives from:

- **Queensland Police Service**
- **Department of Justice and Attorney-General**
  - *Office of the Director of Public Prosecutions*
  - *Queensland Courts*
  - *Victim Assist Queensland*
  - *Youth Justice Conferencing*
- **Department of Communities, Child Safety and Disability Services**
- **Queensland Health**
  - *Aboriginal and Torres Strait Islander Health Unit*
  - *Clinical Forensic Medicine Unit*
  - *Child Advocacy Service*
  - *Royal Brisbane and Women's Hospital Department of Social Work Services (Sexual Assault Service)*

The Strategic Policy Priority Areas, System Policy and Performance Division of Queensland Health were consulted during this process.

The guidelines are intended to outline key principles and a best practice framework for working with people who have experienced sexual assault. This includes children and young people who have been sexually abused or sexually assaulted.

The term victim is used throughout the document where there is reference to specific legislation and where the person is either a male or female who has experienced sexual assault. The term sexual assault is used throughout the document and includes those assaults where rape and/or sexual abuse has taken place or is alleged to have taken place.

Mr Ian Maynard
Director-General
Department of Health

Mr Ian Stewart
Commissioner of Police
Queensland Police Service

Mr Michael Hogan
Director-General
Department of Communities, Child Safety and Disability Services

Mr John Sosso
Director-General
Department of Justice and Attorney-General

June 2014

Contents

Preface 3
Glossary 4

Section 1

Introduction 5
Governance 5
Sexual assault 5
Responses to victims 5
Children and young people 6

Section 2

Principles of the Interagency Guidelines 7
Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism 7
Fair and dignified treatment 7
Privacy of victim 7
Information about services 7
Information about investigation of the offender 7
Information about prosecution of the offender 7
Victim to be advised on their role as a witness 7
Minimal exposure to and contact with the offender 8
Victim Impact Statement 8
Information about the convicted offender 8
Making a complaint 8

Section 3

The Roles of Key Government Agencies 9
Queensland Police Service 9
Queensland Health 9
Department of Justice and Attorney-General 10
Office of the Director of Public Prosecutions 10
Victim Assist Queensland 10
Youth Justice Conferencing 10
Queensland Courts 11
Department of Communities, Child Safety and Disability Services 11
Non-government organisations 11

Section 4

Interagency Approach 12
Teamwork 12
Confidentiality 12
Training 12
Information provision 12
Referrals 12
Feedback 13
Access, availability and promotion of services 13
Gender of service providers 13
Diverse needs 13
Aboriginal and Torres Strait Islander people 13
Communication 13
People with a disability 13
People from culturally and linguistically diverse backgrounds 14
Translating and interpreting services 14

Section 5

Interagency Procedures 15
Crisis intervention 15
Initial report to police 15
Initial report to a health facility 15
Medical examination and treatment 15
Referral to the local sexual assault team 16
Notifying the police 16
Victim attending with police 16
Initial contact 16
Forensic medical examinations 16
Forensic medical examinations and informed consent for people aged 14 years and above 16
Forensic medical examinations and informed consent for people under 14 years of age 17
Chain of evidence 17
Timing and nature of the forensic medical examination 18
Presence of police and support person at medical and forensic examinations 18
Consent to release information and evidence 18
Access to health records 18
Drug facilitated sexual assault 18
Victim DNA reference samples 18
Support person during the police interview 18
Discontinuance of police action before a proceeding has commenced 19
Domestic Violence Protection Orders 19
Follow-up and registration on the Victims Register 19

Conclusion 20

Preface

The guidelines are designed to promote whole-of-government interagency cooperation and service coordination with an aim to improve governmental responses to victims of sexual assault. The need for enhanced coordination and cooperation has long been recognised and resulted in the development of the *2001 Queensland Government Interagency Guidelines for responding to adult victims of sexual assault*.

The 2013 guidelines aim to facilitate best practice, quality service and support to people who have experienced sexual assault.

Legislation relevant to and defining sexual assault includes but is not limited to:

- *Aboriginal and Torres Strait Islander Peoples Recognition Act 2013*
- *Child Protection Act 1999*
- *Criminal Code Act 1899*
- *Criminal Law (Sexual Offences) Act 1978*
- *Domestic and Family Violence Protection Act 2012*
- *Evidence Act 1977*
- *Health Act 1937 & associated regulations*
- *Hospital and Health Boards Act 2011*
- *Mental Health Act 2000*
- *Police Powers and Responsibilities Act 2000*
- *Public Health Act 2005*
- *Victims of Crime Assistance Act 2009*

Policy referred to includes but is not limited to:

- Queensland Government Language Services Policy
- Queensland Health Protocol for conducting child sexual assault examinations

The guidelines should be read in conjunction with internal agency procedures such as the Office of the Director of Public Prosecutions Guidelines and the Queensland Police Service Operational Procedures Manual. In addition to legislation, policies and procedures, the Queensland Government joins with governments around Australia in the implementation of the National Plan to Reduce Violence against Women and their Children 2010-2022.

Each government agency has a complementary and essential role in ensuring that people have access to effective, timely and appropriate information, support, care and treatment following a sexual assault.

Given the nature of the crime, sexual assault is an area of legal and social complexity. The guidelines are designed to help government officers and agencies work together in the best interests of the person who has been sexually assaulted through better understanding one another's roles and responsibilities.

The Queensland Government encourages reporting of criminal activity and prosecution of offender(s) where possible.

Glossary

CPA	*Child Protection Act 1999*
DCCSDS	Department of Communities, Child Safety and Disability Services
DFVPA	*Domestic and Family Violence Protection Act 2012*
EA	*Evidence Act 1977*
FME	Forensic Medical Examination
FMO	Forensic Medical Officer
FNE	Forensic Nurse Examiner
ODPP	Office of the Director of Public Prosecutions
QH	Queensland Health
QPS	Queensland Police Service
SAIK	Sexual Assault Investigation Kit
Victim Assist	Victim Assist Queensland
YJC	Youth Justice Conferencing

Section 1 Introduction

Governance

The government agencies responsible for delivering a service to victims of sexual assault, in accordance with relevant legislation, whole-of-government policy and internal departmental procedures, are responsible for the ongoing governance of this document. The guidelines are underpinned by each government agency's own internal policies and procedures which they are obligated to adhere to. Each government agency has a formal complaints mechanism which is accessible to members of the public.

The Government Interagency Working Group will meet bi-annually to review the guidelines and consider matters of particular concern for people impacted by sexual assault and to consider the impact of any legislative change.

Sexual assault

Sexual assault is a crime of violence. It is a humiliating and degrading experience. It has an emotional, physical, financial and social cost, not only to those directly affected, but also for the community as a whole.

The number of reported sexual offences against women aged 15 or over in Queensland in 2011/2012 was 2035 compared with 227 against males.[1]

Major Australian studies indicate that only 11-25 per cent of sexual assaults are reported to the police and that most offenders are known to the victim.[2] People who experience sexual assault may feel a range of emotions including shock, fear, guilt, shame, depression and an inability to trust others. The social stigma attached to sexual assault can heighten these feelings and increase the trauma experienced. It is imperative that when disclosing or reporting a sexual assault, people receive an effective, professional and appropriate response from the agencies to which they report.

Community education can encourage family and friends to respond supportively and appropriately to a disclosure of sexual assault. However, in order to assist their recovery, victims may also need access to a range of personal support services including counselling, medical services and assistance to report the crime to the police.

The information provided in the guidelines is intended to provide a strategic overview to support the development of policies and procedures at a local level. Local level procedures will differ according to the nature of the service system in each area. It is also intended to contribute to improving service responses to victims.

Responses to victims

Following disclosure of a sexual assault, the following needs of the victim should be addressed:

- immediate safety needs
- immediate health needs
- options for pursuing justice
- ongoing emotional needs for longer term wellbeing.

In order to avoid secondary traumatisation and mitigate the risk of negative, long term outcomes, government responses to sexual assault must be both sensitive and effective. These responses therefore need to take into account the diversity of victims, including their cultural and linguistic background, disability, sexual orientation, age and geographical location. In addition to assisting recovery, more sensitive and effective responses may also lead to an increase in reporting rates.

This, in turn, can lead to a more accurate understanding of the prevalence of sexual assault, inform community education and awareness approaches, and result in improved prevention strategies.

1 Queensland Police Service (2012) Statistical Review 2011-2012 Brisbane
2 Australian Bureau of Statistics (1996) Women's Safety Survey, Cat.no. 4218.0 (unpublished data) as cited in Office of Women's Policy (1999) A Social and Economic Profile of Women in Queensland 1999 Brisbane; Australian Bureau of Statistics (1996) Victims of Crime Survey

Children and young people

It should be noted that the *Child Protection Act 1999* (CPA) is relevant where there are concerns that a child has been sexually abused and where a child does not have a parent able and willing to protect them from the abuse. The main principle for administering the CPA is that the safety, wellbeing and best interests of a child are paramount. Section 159B of the CPA imposes a responsibility on particular service providers to assess and meet the protection and care needs of children and provide collaborative and coordinated support to their families.

The definition of harm in the CPA includes harm resulting from sexual abuse or exploitation. A child is defined in the CPA as an individual less than 18 years of age. Where the child or young person is under the age of 16, their parent or guardian should be consulted where possible and appropriate. Whilst certain circumstances may not make this possible, the child or young person should have access to a support person throughout the response.

The safety and protection of children and young people who are sexually assaulted is a high priority. When disclosing a sexual assault, young people should be encouraged to access services so that they are aware of their options in terms of support, assistance, treatment and prevention.

When working with a young person who reports a sexual assault, personnel from the Queensland Police Service, Department of Communities, Child Safety and Disability Services (DCCSDS) and Queensland Health (QH) are required to follow the statutory requirements under the CPA and the *Public Health Act 2005* relevant to their position.

Where the child or young person is subject to an order granting custody or guardianship of the child, the Chief Executive, Child Safety, DCCSDS, must be notified regarding the report of a sexual assault.

Confidentiality cannot be guaranteed where a child or young person is believed to be in need of protection from harm. To work in the best interest of that child or young person, information may need to be exchanged between departments. It is best practice for the child or young person to be advised that a report to the DCCSDS and the police may take place. Certain circumstances may not make this possible.

Section 2
Principles of the Interagency Guidelines

Government responses to sexual assault are framed by the following overarching principles:

- All agencies will focus on the safety, physical and psychological needs of the victim
- The victim's right to privacy and confidentiality will be respected at all times unless disclosure is required by another law
- Comprehensive information about all processes and options will be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location
- The victim's informed decision will be respected at every stage of the process
- The victim's sense of personal control will be supported and encouraged
- All relevant agencies will work collaboratively to respond to sexual assault, to provide clear, up to date and comprehensive information about other agencies and services and will facilitate access to appropriate agencies and services on request
- All agencies will ensure documentation and records are prepared in accordance with individual agency requirements and respect confidentiality, privacy, security and choice.

Fundamental Principles of Justice for Victims of Crime and Complaints Mechanism

Government responses are also framed by the legislated responsibilities defined in the Fundamental Principles of Justice for Victims of Crime (Principles of Justice) in Queensland, set out in Chapter 2 of the *Victims of Crime Assistance Act 2009*.

If a victim feels they have been treated unfairly or without respect by a Queensland Government officer, they have the right to complain to the government agency responsible for the conduct of the officer or to Victim Assist Queensland (Victim Assist).

As a guide, the following is a summarised version of the Principles of Justice:

Fair and dignified treatment

The victim must be treated fairly and shown dignity, respect, compassion and courtesy. The government entity must take in to account and be responsive to the particular needs of the victim relating to the victim's age, sex, race, cultural identity, impairment, sexuality or religion.

Privacy of victim

A person's personal information, including their address and phone number, can only be disclosed with consent or as authorised by the law.

Information about services

The victim must be given timely information about relevant services available to them, including welfare, health, counselling, legal help and financial assistance.

Information about investigation of the offender

If the victim asks, they should be given information about the investigation of the offender where possible. Information given to a victim may include the progress of the investigation and the name of the person charged.

Information about prosecution of the offender

If asked by the victim, the prosecuting agency is to give the victim details about the crime committed against them, including when the victim may attend a court proceeding, notice of a decision to change a charge, or notice of the outcome of a court proceeding.

Victim to be advised on their role as a witness

A victim, who is to be a witness for the prosecution in the trial for the crime committed against them, is to be informed by the prosecuting agency about the trial process and their role as a witness.

Minimal exposure to and contact with the offender

As much as possible, relevant agencies present at court are to ensure the victim has minimal contact with or exposure to the offender during court proceedings or in the court building.

Victim Impact Statement

During sentencing of the offender, the victim has the right to give details of the impact and harm caused to the victim by the offence, to the prosecutor as an impact statement. Victims can access information about completing a victim impact statement by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Guide to Making a Victim Impact Statement* at *www.justice.qld.gov.au.*

Information about the convicted offender

A victim can apply to be registered on the Victims Register. If the offender is then convicted and imprisoned, the victim will be provided with this information on request. This includes information on the sentence, an escape from custody, or day of release. To be included on the Victims Register call 1800 098 098.

Making a complaint

If a victim of crime feels a government agency, person or persons within the agency have engaged in conduct that is not consistent with the Principles of Justice, they have the right to make a complaint. Victims can access information about making a complaint by calling Victim Assist on 1300 546 587 or by accessing a copy of the *Complaint Form* at *www.justice.qld.gov.au.*

Government agencies are obligated to have a formal complaints management system, and the Queensland Government is committed to having these systems available and acted upon in accordance with the Principles of Justice.

Section 3
The Roles of Key Government Agencies

Queensland Police Service

The Queensland Police Service (QPS) has three main functions in relation to sexual assault cases including:

1. Investigate complaints of sexual assault and establish whether an offence of sexual assault has been committed.
2. Protect victims of sexual assault.
3. Identify, apprehend and prosecute offenders.

In carrying out this role, the police should:

- observe QPS Operational Procedures Manual
- observe QPS local procedures or instructions
- observe legislative requirements
- observe the Fundamental Principles of Justice for Victims of Crime
- provide victims with information regarding the investigation and prosecution
- provide protection to victims at immediate risk of sexual assault
- provide victims with information about support services

Queensland Health

In responding to sexual assault, the role of QH is to provide medical care, forensic medical examinations (FME), sexual health assistance and information and support. These responses are provided by public hospitals, the Clinical Forensic Medicine Unit and may include specialist sexual assault teams. The extent and nature of this care varies across hospital and health services in accordance with local procedures and resources.

Assistance and care in the acute phase includes:

- medical treatment
- collection and documentation of medico-legal evidence where appropriate
- sexual health information and treatment
- information about rights as a victim of crime
- information about reporting to police and legal processes
- support and information extended to support networks.

In addition, QH provides education and training to government and non-government agencies, with an aim to broaden community knowledge, improve responses and prevent sexual violence as outlined in the National Plan to Reduce Violence against Women and their Children 2010 – 2022.

Department of Justice and Attorney-General

The Office of the Director of Public Prosecutions (ODPP), Victim Assist Queensland (Victim Assist), Youth Justice Conferencing (YJC) and the Queensland Courts all fall within the responsibilities of the Department of Justice and Attorney-General. The following provides an overview of each of these separate agencies.

Office of the Director of Public Prosecutions

The ODPP represents the Crown in criminal proceedings against persons accused of committing serious criminal offences including sexual assault. The criminal proceedings include:

- the committal hearing, before a Magistrate in Brisbane Central, Ipswich and Southport Magistrates Courts. In other centres, this hearing is conducted by prosecutors within the police
- trials before a judge alone or a judge and jury
- sentencing hearing before a judge
- any appeals arising from the trial or sentence.

In addition to prosecuting matters in court, the ODPP is responsible for:

- assisting victims by providing information about the progress of a prosecution, the victim's role as a witness, and how the victim can inform the court of the impact of the crime by providing a victim impact statement
- giving victims reasons for decisions made in relation to proceedings which directly affect them
- taking into account the wishes of a victim who does not wish to proceed with a prosecution for any reason
- providing information about the availability of other resources and processes that may assist victims
- requesting that the court give sexual assault matters appropriate priority
- ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building
- liaising with other relevant agencies to ensure that the victim and family members understand the legal and procedural issues which may impact them.

In carrying out the role of the ODPP, all officers are obliged to comply with the Director's Guideline No. 25 as at 2013 http://www.justice.qld.gov.au/__data/assets/pdf_file/0015/16701/Directors-guidelines.pdf. This aims to ensure that the Principles of Justice, as set out in the *Victims of Crime Assistance Act 2009* are complied with.

Victim Assist Queensland

Victim Assist provides access to specialised support services and financial assistance for victims of personal acts of violence including sexual assault.

Financial assistance may be available to victims of sexual assault to help them pay for the cost of goods and services that have arisen, or will arise as a consequence of the assault.

This includes medical and dental expenses, and expenses associated with improving safety or relocation from their current location in order to escape the offender.

Victim Assist also provides information, referrals and support (which may include court support) to victims, and assistance in making a victim impact statement if the victim chooses to make one.

Youth Justice Conferencing

If the offender is a young person, there may be alternative processes to the matter being dealt with by a court. The purpose of YJC is to hold the young offender accountable for their actions and to come to an agreement on what they will do to attempt to make reparation for the harm caused. To safeguard the victim, additional procedures are adopted before a conference for a sexual assault can occur. These include referring the victim to a counselling service as well as compulsory attendance of the juvenile offender in a specialist treatment service.

Queensland Courts

Queensland Courts afford victims of sexual offences, affected child witnesses and special witnesses protections when proceeding through court. These are detailed in the *Evidence Act 1977* (EA) and the *Criminal Law (Sexual Offences) Act 1978*.

Section 21A of the EA provides protections for special witnesses and affected child witnesses. The court can declare a person a special witness by hearing evidence (if the witness does not automatically fall into the special category, such as where the witness is a child or the person has a mental impairment). When the court hears evidence from these special witnesses, there are a range of options to assist the witness. These include ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building. Where the witness is an affected child witness, there are further protections in place.

For further information refer to the Supreme Court Bench Book: *http://www.courts.qld.gov.au/information-for-lawyers/benchbooks-and-ucpr-bulletin/supreme-and-district-courts-benchbook.*

Department of Communities, Child Safety and Disability Services

The Department of Communities, Child Safety and Disability Services allocates funding to non-government organisations to assist people, predominantly women, who have experienced sexual assault, in accessing necessary services and support needed to rebuild their lives as quickly as possible. These sexual assault services offer flexible, holistic and ongoing personal support including advocacy and sexual assault counselling (including crisis counselling), in a culturally appropriate and safe environment.

The range of support provided by these services includes:

- provision of information, advice and referral
- needs assessment and development of case/service plans
- individual advocacy
- sexual assault counselling for victims and survivors of sexual assault
- community education.

For more information about access to sexual assault services in local areas, contact the Sexual Assault Helpline on 1800 010 120.

Child Safety Services is the Queensland Government agency for child protection and adoption services. The department is dedicated to protecting children and young people from harm or who are at risk of harm, and whose parents cannot provide adequate care or protection for them.

Non-government organisations

It is acknowledged that a number of government departments provide grant funding to non-government organisations to deliver a range of specialist sexual assault services. Local procedures and service agreements in relation to services provided by these organisations should be adhered to.

Section 4
Interagency approach

Given the often violent and complex nature of sexual assault, an interagency approach is essential. The Queensland Police Service (QPS), Queensland Health (QH), the Department of Justice and Attorney-General (DJAG) and the Department of Communities, Child Safety and Disability Services (DCCSDS), each have a different but fundamental role in responding to sexual assault. Each of these agencies should assist each other in understanding and supporting their role and be familiar with, and sensitive to, their differing and complementary roles. An interagency approach provides opportunities to discuss and address issues of mutual concern across departments.

Teamwork

Quality of care depends on partnership between these different agencies. Each agency should establish local procedures to facilitate improved liaison and coordination between services. These procedures should include systems for information sharing and conflict resolution.

Confidentiality

Confidentiality, privacy of information and security of records is imperative when working with people who have experienced sexual assault. It is a fundamental principle in treating victims with dignity and respect.

Access to and disclosure of personal information regarding the assault will conform to legal requirements and be limited to people directly involved in the case. Except where legal obligations exist, information will not be released without the prior consent of the person involved. This includes names and identifying information.

Training

Joint training can contribute to achieving interagency objectives and allow those working in the field to understand how best practice is achieved. Training and orientation should be ongoing and could include input from relevant local services.

Information provision

Police officers, doctors, social workers, health workers and legal officers, should provide people with relevant information which may include written material. This information should be offered in a way which is non-judgemental, appropriate, clear and sensitive to the victim in terms of language, culture, age, disability, gender, sexuality and location.

People should be made aware of, and be given an opportunity to discuss and consider the implications of proceeding with medical, investigative and legal processes so that they can make informed decisions. These decisions must be respected. It should be noted however that the decision whether or not an investigation should proceed rests primarily with the police.

Referrals

Relevant referral procedures and guidelines between police and health services should be observed.

Staff of government agencies should be familiar with local specialist services and actively support people who have experienced sexual assault to access appropriate supports available in their community. In addition, relevant health, welfare and legal services likely to be accessed by victims will need to develop local strategies and procedures to ensure that referral processes are appropriate and coordinated. These services should also be aware of the admission procedures and location of the nearest health facility and police station.

Feedback

Quality of care is essential in ensuring that people are referred to the appropriate service. QPS, QH, DJAG and DCCSDS should ensure that local interagency links and procedures operate in a coordinated manner. Mechanisms for giving feedback about service delivery should also be in place and observed.

Access, availability and promotion of services

People who have experienced a sexual assault may need encouragement to use medical, counselling, police and legal services. Local procedures should ensure that services are accessible and coordinated. This includes the use of written information and community education materials.

Gender of service providers

Following a sexual assault, the person may feel uncomfortable talking with personnel of the opposite sex. If a preference for female or male personnel is expressed, all reasonable steps to accommodate this preference should be taken.

Diverse needs

Procedures need to be flexible in order to respond to diverse needs; including culture, language, gender, disability, religion, sexuality and geographical location. Furthermore, it is important to understand how these needs impact access to and utilisation of appropriate services.

All agencies should ensure that procedures and facilities provide access to appropriate services for Aboriginal and Torres Strait Islander people, people of non-English speaking backgrounds, children and young people and people with disabilities, including physical disabilities.

Aboriginal and Torres Strait Islander people

Service provision should reflect the cultural needs of Aboriginal and Torres Strait Islander people. Agencies should have a referral mechanism to facilitate access to culturally appropriate information for Aboriginal and Torres Strait Islander people. Where there is consent and it is appropriate to do so, Aboriginal and Torres Strait Islander liaison workers may be offered to assist people during the process.

Communication

The Queensland Government recognises that a significant number of people may require interpreter services, as well as culturally appropriate support in order to adequately disclose and report a sexual assault, and make informed decisions about the support and options available to them.

People with a disability

Services and agencies should facilitate access to appropriate support workers and interpreters for people with a disability. Disability includes intellectual, physical, sensory, psychiatric or neurological impairment, or a combination of these, resulting in a substantial reduction in the person's capacity to make informed decisions or communicate. With the person's consent, and when it is safe and appropriate to do so, services should also consult with relevant people involved in that person's life such as carers, guardians and specialist agencies or departments.

People from culturally and linguistically diverse backgrounds

Service provision should be responsive to, and respect the cultural, religious and language needs of the person who has experienced sexual assault. Where communication in English is difficult or where requested, accredited interpreters and cultural support workers should be used to assist in both eliciting information from, and providing information to the person who has experienced sexual assault. This supports client safety and enables informed decision making about health care, investigative and legal processes for both the client and agency.

Translating and interpreter services

All reasonable steps will be taken by government agencies and funded non-government organisations providing sexual assault responses, to ensure fair and equitable access to interpreting and translating services that are responsive and high quality.

All reasonable steps should be taken to make an accredited interpreter available in all situations where an interpreter and/or translator is required, unless there are extenuating circumstances that genuinely prevent an interpreter from being used. This may include, for example, a medical emergency or where a language group or community is very small and confidentiality is a concern for the client, or where there is no interpreter available for that language group. All agencies will take into consideration the wishes of the person who have been impacted by the sexual assault in relation to the use of an interpreter.

Each government agency is required to observe its own policies and procedures in relation to the use of interpreters. These internal procedures should align with the *Queensland Government Language Services Policy.*

Section 5
Interagency procedures

Regardless of where sexual assault is first reported, the first priority is to ensure the safety and welfare of the person reporting. Prompt referral to the designated specialist service should take place.

Crisis intervention

The purpose of intervention by a designated sexual assault response worker is to:

- provide immediate assistance, stabilisation and emotional support to assist the person to return to their level of functioning before the crisis
- assist the person to process their perception of the stressor
- provide information about the options available, as well as the procedures of the local health facility
- provide an opportunity for the person to express their concerns and feelings
- offer practical support, including contacting family members or support persons where appropriate
- talk to family members or support persons (if present) about how best to support the victim
- co-ordinate the interagency response and facilitate patient care and treatment along the sexual assault pathway
- provide information in relation to available community support resources.

The sexual assault worker will advise the victim of their right to access medical advice and treatment including sexual health treatment. If information or clarification about police procedures is requested, the sexual assault worker will, with the victim's consent, arrange for police to provide this information.

During any phase of this process, a support person can be present. The support person should not adversely influence the process.

Initial report to police

Police receiving a report of a sexual assault will act on the information received. The police should inform the victim of relevant decisions made and where necessary, obtain the victim's consent.

Initial report to a health facility

Health facilities, such as hospitals, are often the first place where a person will disclose a sexual assault. When this happens, nursing and medical staff will assess the general medical condition of the person and administer immediate medical treatment if required. Assessment of a person's need and urgent medical intervention will always be the first priority.

Medical examination and treatment

A general, non-forensic medical examination may be conducted by a medical professional with the aim to:

- reassure victims about their physical welfare, including giving information on, and providing treatments to reduce the risks of pregnancy and sexually transmitted infections
- assess, treat and document injuries
- provide advice and referral options for follow up medical care.

A medical examination should include sexual health intervention as described in *Queensland Sexual Health Clinical Management Guidelines of 2010 section 6: http://www.health.qld.gov.au/sexhealth/documents/cm_guidelines06.pdf.*

Unconscious patients who are admitted to hospital with a suspicion of sexual assault will be assessed and treated as medical emergencies.

Referral to the local sexual assault team

Health staff must follow local procedures in the management of sexual assault. All efforts should be made to contact the designated sexual assault team and where there is no specialist team, crisis intervention and support will be delivered by health staff present. A referral for follow-up support and care should be made as soon as possible.

Notifying the police

The sexual assault worker should discuss available reporting options with the person. If the victim requests to speak to police, it is the role of the sexual assault team or other designated staff member, to notify the police as soon as possible to ensure all evidence including the crime scene can be secured. Notification and initial reporting to police does not mean an investigation will automatically take place.

Where police are operating under time constraints, they should inform health staff. Working together to meet time constraints will directly impact the quality of the outcome for the victim.

Victim attending with police

Where victims arrive at the health facility with police, procedures outlined in referral to the local sexual assault team above should still be followed by health staff.

Initial contact

It is the sexual assault worker's role to coordinate an immediate response; offer practical and emotional support, assess the person's immediate physical and emotional safety and recognise the potentially traumatic nature of the assault.

Medical assessment will be conducted in accordance with local procedures.

Forensic medical examinations

Doctors or nurses conducting forensic examinations must follow local procedures in the management of sexual assault.

The forensic examination consists of obtaining a history as to the nature of the assault in order to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic evidence as it relates to the alleged sexual assault.

Forensic medical examinations and informed consent for people aged 14 years and above

Informed consent reflects a legal and moral principle whereby the victim has the right to decide what is appropriate for them. This includes the right to accept or to decline a forensic examination and to change that decision.

In order for a patient to exercise this right, they require access to information that is relevant to them. An explanation about the nature of the forensic examination must be given by the forensic medial officer (FMO) or forensic nurse examiner (FNE) and police also need to inform the victim about police investigation processes.

The victim should be made aware that they may withdraw their consent at any time to any particular procedure, or any aspect of the examination. However after the examination is complete, an investigation by police may continue to progress.

It should be noted that the decision to have a forensic examination is a health care matter and therefore legislation and policy around informed decision-making in health care applies in this circumstance. For more information on decision-making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

It is the responsibility of the medical and forensic staff to assess capacity to consent. Where a person lacks capacity, it is appropriate to identify a capable adult to act on the patient's behalf. Please refer to section 2.2 of the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf.*

If at any point there is a possibility that the capable adult identified is the offender, it is in the best interests of the patient for an Adult Guardian to be appointed in accordance with the *Powers of Attorney Act 1998* and the *Guardianship and Administration Act 2000*.

Where possible the examination will be carried out using the Sexual Assault Investigation Kit (SAIK).

Forensic medical examinations and informed consent for people under 14 years of age

Paediatric patients are generally those aged less than 14 years of age. It is usual practice for the child to be transferred to the hospital's child protection area for an examination, even if they have had initial treatment in an adult emergency setting. Emergency medical treatment for any child should be undertaken by the Department of Emergency Medicine prior to a forensic medical assessment.

Paediatric forensic medical assessments are undertaken by paediatricians. This will be done by the Child Protection Advisor on call (or similar) or the general paediatrician on call.

All examinations conducted on children should be consistent with Queensland Health's Hospital and Health Services Health Service Directive: Protocol for conducting child sexual assault examinations: *http://www.health.qld.gov.au/directives/docs/ptl/qh-hsdptl-029-11.pdf*. All paediatric FMEs should also adhere to legislation and policy around informed decision-making in health care. For more information on decision –making in health care settings, please refer to the Queensland Health guide to informed decision-making in healthcare: *www.health.qld.gov.au/consent/documents/ic-guide.pdf*

Chain of evidence

The chain of evidence and the need for 'contemporaneous recollection of facts' to aid an investigation is essential. The chain of evidence involves not only the examination of the victim, but also includes the geographic location where the assault occurred, the identification and interview of witnesses and identification of relevant additional evidence. Evidence collected needs to be stored and transported in approved and standardised ways as outlined in police procedures to ensure the utility in a court proceeding. This further emphasises the importance of police involvement prior to an examination being conducted.

Storage and transportation issues need to be considered when undertaking an examination as the inability to safely and correctly store and transport evidence may damage the evidence or make it inadmissible in court in the later stage of an investigation and prosecution.

The doctor or nurse conducting the forensic examination should discuss the case with the police before the forensic examination takes place. This is to ensure that:

- all necessary evidence is collected
- a re-examination is prevented
- unusual evidence is not overlooked.

Timing and nature of the forensic medical examination

In determining the timing and nature of the FME a number of factors will be considered. These include the time since the assault, the physical and emotional state of the victim and their account of the assault.

This process, particularly if it involves an internal gynaecological or anal examination, can be distressing and the examination may need to be delayed or discontinued on account of the victim's physical and emotional state.

Presence of police and support person at medical and forensic examinations

Regardless of age, a person is entitled to have a support person present during the medical and forensic examination. This may include a friend or family member, a nurse, health care worker or sexual assault worker, who is not a potential witness.

There is no legal requirement for a police officer to be present during the medical and FME. However, if a victim requests the presence of police, this police officer is to be the same gender as the victim.

A police officer must be present to receive all evidence collected during a forensic examination immediately after the procedure to maintain continuity of the evidence for any potential court proceeding.

Consent to release information and evidence

The doctor or nurse conducting the FME will not release the SAIK to police without the signed consent of the victim or the capable adult acting on their behalf.

Access to health records

Health records, including counselling notes, are confidential. However, patients should be notified that any records can be subject to a subpoena or other court-related mechanisms.

Drug facilitated sexual assault

Where the administration of drugs in the sexual assault is suspected, testing to maximise the chances of detecting these substances should be administered in a timely fashion. However, the decision to test remains a clinical one which is made by the FMO or FNE.

Victim DNA reference samples

DNA reference samples (usually a blood sample or mouth swab) should be taken routinely as part of the FME.

Support person during the police interview

Police should inform victims that they may be accompanied by a support person while their statement is being taken. However, the victim must be advised that:

- the support person may not participate in the interview
- the support person may not directly or indirectly influence the interview
- a potential witness may not act as a support person.

Discontinuance of police action before a proceeding has commenced

Where the victim does not wish to proceed with further police action, police should:

- make clear that following the withdrawal of the complaint no further police action will be taken
- attempt to obtain a signed withdrawal of complaint
- inform the adult victim (18 years and over, only) of the online *Adult Sexual Assault Resource (http://www.police.qld.gov.au/programs/adultassault/)* package that provides alternative reporting options

If a proceeding has commenced, the victim's wishes will be taken into account when deciding if the matter will continue.

Domestic Violence Protection Orders

Sexual assault is one form of domestic and family violence. Where the sexual assault has occurred within an intimate personal relationship (marriage, engagement, couple), family relationship or an informal care relationship, the victim should be informed of their option to seek protection under the *Domestic and Family Violence Protection Act 2012*. In situations where domestic violence has occurred and where protection is needed to prevent further violence, a domestic violence order can be applied for by the victim, by police on behalf of the victim or by another person authorised by the victim. This is done through the Magistrates Court.

Where appropriate, victims should also be referred to a specialist domestic violence service for support and assistance, for example DVConnect Womensline Ph. 1800 811 811 and DVConnect Mensline Ph. 1800 600 636.

Follow-up and registration on the Victims Register

After the trial and/or sentence, the victim will have the opportunity to talk to the case lawyer about the outcome of the case and the sentence imposed, if any. This opportunity may arise immediately after the trial and/or sentence concludes or at a later time by telephone.

If the offender is imprisoned or placed under the supervision of Queensland Corrective Services, the victim may register their details on the Victims Register which is administered by Queensland Corrective Services. A victim and/or their family or nominee can register to be kept informed about the offender's imprisonment, movement between locations and proposed parole dates. They will also be given the opportunity to make submissions to parole boards when offenders apply.

Where the offender is a young person, the Victim Information Register may be utilised. This register is administered by Youth Justice within the Department of Justice and Attorney-General. A victim and/or their family or nominee can register to be kept informed about the young person's detention, movement between locations and supervised release dates.

If the offender appeals against their conviction and/or sentence or the Attorney-General appeals against the leniency of the sentence, the victim will be kept informed about the progress and outcome of the appeal and any consequential matters arising from the appeal.

Key stakeholders at the local level should maintain current referral information on appropriate support and other community services available. Localised referral pathways and protocols should be developed between key service providers to ensure timely referral pathways for those in need of support.

Conclusion

The government agencies acknowledged in this document (QPS, QH, DJAG and DCCSDS) have committed to the principles, roles, approaches and procedures articulated in the guidelines. This commitment aims to ensure that individuals who have experienced sexual assault are provided with timely, high quality and coordinated service delivery responses appropriate to their needs and appropriate to the role played by departmental officers.

Key service providers are encouraged to use this document as a framework to develop local level arrangements and protocols to ensure best practice, quality service and support to people who have experienced sexual assault.

The government agencies responsible for the development of the guidelines would like to thank all key government and non-government stakeholders who kindly contributed their knowledge and expertise.

For information or comments please contact:
Queensland Government Interagency Working Group Responding to Sexual Assault

pathology queensland — Queensland Government

"Just in Case" – Chain of custody Sample

FIX LAB No. HERE

UR Number ORR+

Surname

Given Name D of B ___/___/___

Patient Address Sex F M (circle)

P/code Ph:

HCF QHSS | From Ward FBIO | Results to Ward/Clinic FBIO

Consultant SSTOX (Supervising Scientist)

Requesting Practitioner SSTOX (Supervising Scientist)

Surname Initials

Signature

Date / /

Extra Copies To: Dr

Address

Extra Copies To: Dr

Address

LABORATORY USE ONLY

Rec'd Time Signed

ALL collectors must complete Fasting Y ☐ N ☐ Time_____hrs

Signature Date ___/___/___

Print Name Collector Code

Tests Requested

FORSS

(Just in case testing)

Please refer to the flowchart below for **detailed instructions**

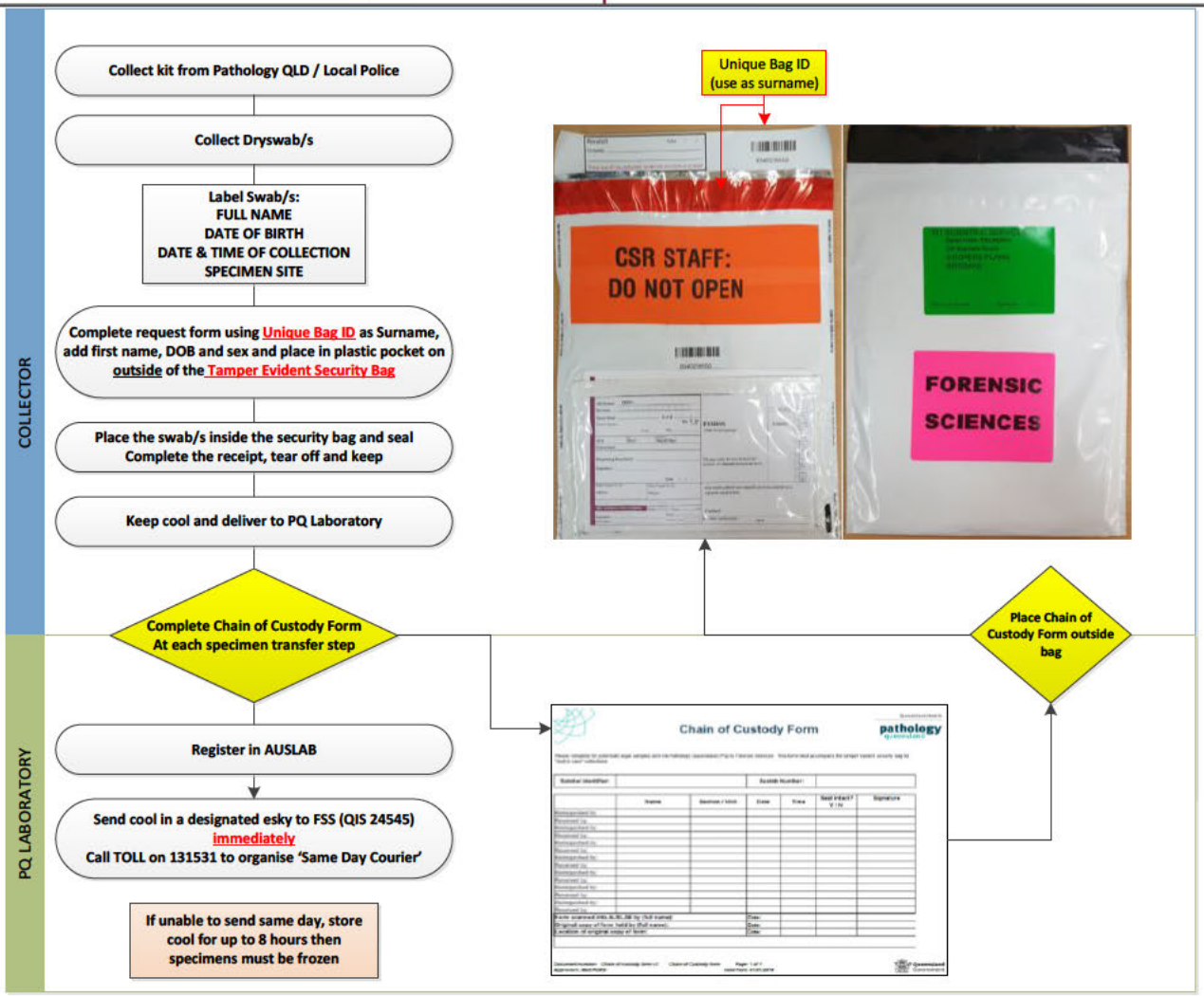
LAB USE ONLY

FORSS

EDTA
HEPARIN
SST
CITRATE
ESR
7 ml EDTA (Blood Bank)
FL OX
Blood Culture
GASES
Tissue Swab

Any routine patient care requests are to be ordered on a separate request form

BILLING CATEGORY LAB



- # Consent

Consent for forensic examination (DOC, 83KB) (updated November 2019)

Use the consent for forensic examination form for all patients undergoing a forensic examination, this includes:

- with police involvement (use police-issued SAIK)
- without police involvement (use JIC SAIK)

The clinician providing the forensic examination will take the patient through the informed consent process with reference to the information included on page 2 of the consent form.

The form is also embedded in the medical protocol.

When a person who has had a JIC later decides to proceed with a complaint, they will need to contact police. Police will provide the person with a police-issued form to consent to the release of samples for testing.

Queensland Health

For Clinician: Potential forensic evidence "Just in Case" Forensic Examinations

Patients who have disclosed a sexual assault but are not ready to involve police can request a forensic examination "Just in Case" they decide to make a police complaint later.

Just in Case kit collection, request and delivery

Sexual Assault Investigation Kit customised for Just in Case (JIC SAIK) examinations can be collected from the local Pathology Queensland Laboratory or local Police. Note: Call hospital switch to be put through to your local PQ laboratory.

Each JIC SAIK will include collection swabs (check expiry date), tamper evident bag, pathology request form, JIC consent form and chain of custody form.

- Go through the consent form with patient to ensure that they acknowledge that their sample will be destroyed after 12 months if they have not progressed with a complaint.

For the kits obtained from local police, please ensure the **JIC consent form, pathology Queensland request form and **chain of custody form** are added to the SAIK kit.

Place the request form and the chain on custody on the outside of the tamper evident security bag and seal the bag. Tear off the receipt and keep.

The sealed and completed kit will be hand delivered to the Pathology Queensland laboratory for immediate transport to Forensic and Scientific Services. If unable to send to laboratory immediately, kit must be refrigerated (if >8hrs, kit to be frozen until transported to the laboratory).

Forward report on examination to CFMU (as per process for all sexual assault examinations).

Pathology request form – clinician to complete

When completing the form to ensure privacy include: **the unique bag ID as the patient surname the first name of the patient, the date of birth and sex.**

Chain of Custody Form – clinician to complete

Relinquished by: At every stage the person relinquishing the package must complete the chain of custody form with their name, section/unit/date/time and whether the tamper seal was intact and sign.

Received by: At every stage the person receiving/processing the package must complete the chain of custody form with their name, section/unit/date/time and whether the tamper seal was intact and sign.

The chain of custody form must stay with the package <u>at all times.</u>

Re: SAIK issues

Adam Griffin <[redacted]
Mon 2/09/2019 6:56 AM
To: Abigail Ryan <[redacted]
Cc: Allan McNevin <[redacted]

Thanks Abbie,

Much appreciated.

Kind regards
Adam

Get [Outlook for iOS]

From: Abigail Ryan <[redacted]
Sent: Monday, September 2, 2019 6:54:35 AM
To: Adam Griffin <[redacted]
Cc: Allan McNevin <[redacted]
Subject: SAIK issues

Hi Adam,

As requested I've been recording SAIK details with issues or excessive swabs. See below:

[redacted]
Dr Cathy Lincoln
SAIK contained: 2x high vaginal, 2x low vaginal, 2x inner labial, 2x oral, 2x control

[redacted]
Dr Adebiyi Sunday
SAIK notes stated 1x low vaginal swab collected however SAIK contained 6x endocervical swabs

[redacted]
Dr Cathy Lincoln
SAIK contained: 1x endocervical, 2x high vaginal, 1x low vaginal, 1x inner labial, wet &dry left breast, wet &dry right breast, 2x control

[redacted]
Lydia Mirabito
Details of swabs were collected not recorded in SAIK notes.

[redacted]
Dr Cathy Lincoln
SAIK contained: 2x endocervical, 2x high vaginal, 1x low vaginal, 1x inner labial, 2x ear, 2x control

[redacted]

Dr Cathy Lincoln

SAIK contained: 2x endocervical, 2x high vaginal, 2x low vaginal, 2x inner labial, 1x perianal, 1x anal, 2x control

We can keep recording issues with SAIKs and keep feeding them back to you.

Thanks
Abbie

Abbie Ryan
A/Senior Scientist – Evidence Recovery Team
Forensic DNA Analysis, Police Services Stream
Forensic & Scientific Services, Health Support Queensland, Queensland Health
[redacted]
a 39 Kessels Road, Coopers Plains, QLD 4108
e [redacted] w www.health.qld.gov.au/healthsupport/businesses/forensic-and-scientific-services

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

Re: SAIK Issues from Laboratory

Adam Griffin <[redacted]
Fri 18/10/2019 3:51 PM
To: Cathy Lincoln <[redacted] Ines Baptista <[redacted]
Cc: CFMUDirectorCorro <[redacted]
Bcc: Abigail Ryan <[redacted] Allan McNevin <[redacted]

Good afternoon,

I am reaching out due to concerns received from the forensic laboratory with regards to sexual assault kits they have received from your practice.

The collection of multiple swabs from the same genital region is not supported by the laboratory. The laboratory has indicated:

- collecting multiple swabs from the same intimate / internal site yields little benefit with respect to increased recovery of forensically relevant information;
- the examination of swabs collected as part of a Sexual Assault Investigation Kit is a particularly labour intensive process, kits containing extra samples that are of limited benefit greatly add to the time taken to complete examinations AND
- this increases time and number of events of interpretation and reporting.

The collection of two swabs (wet and dry) from skin is acceptable.

I am aware the Faculty of Forensic and Legal Medicine in the UK has issued guidelines recommending multiple swabs. I am further aware they have provided an accompanying document "the evidence" which does not contain evidence supporting double swabbing of areas other than skin. The local RCPA guidelines do not mention multiple swabs of (particularly) the endocervix.

The laboratories concerns resonate and should be taken into account when considering your practice. If a basis exists for this practice it would need to be compelling: I would welcome you sharing it.

Kind regards,
Adam

Dr Adam Griffin
Director
Clinical Forensic Medicine Unit
Health Support Queensland, Queensland Health
[redacted]
a 51 Herschel Street, Brisbane, 4000
e [redacted] **w** www.health.qld.gov.au/healthsupport

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

Attachments Index

AG-01 - CV A Griffin

AG-02 - Queensland Health Sexual Offences Medical Protocol

AG-03 - Guideline for the Management of care for people 14 years and over disclosing Sexual Assault

AG-04 - Packaging swabs and biological specimens

AG-05 - jic-flowchart

AG-06 - sexual-assault-reporting-flowchart-1

AG-07 - Sexual assault nurse examiner course

AG-08 - Clinician Workshops

AG-09 - DG paeds exam 14 Att 2 memo

AG-10 - qld-govt-guidelines-for-responding-to-sexual-assault

AG-11 - jic-a4-pathology request-form

AG-12 – Consent

AG-13 - clinician-jic-instructions-2

AG-14 - Mail re multiple swabs

AG-15 - Mail to Cathy Lincoln

Health Support Queensland

Department of
Health

[redacted]

17 September 2018

Mr Michael Byrne QC
Office of the Director of Public Prosecutions
GPO Box 2403
BRISBANE Qld 4001

[redacted]

Dear Mr Byrne

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
[redacted]

Dr Lincoln will be in contact with you shortly and will discuss communication processes and rostering arrangement commencing on October 1, 2018.

I am confident these new arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Services
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
[redacted]

Queensland
Government

Health Support Queensland

Department of
Health

[redacted]

20 September 2018

Mr David Cuskelly
Acting Chief Superintendent, Gold Coast District
Queensland Police Service
[redacted] Surfers Paradise Police Complex
68 Ferny Way
SURFERS PARADISE Qld 4217

[redacted]

Dear Mr Cuskelly

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
[redacted]

Dr Lincoln will be in contact with you shortly and will discuss communication processes and rostering arrangement commencing on October 1, 2018.

I am confident these new arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Support
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
[redacted]

Health Support Queensland

Department of
Health

[redacted]

17 September 2018

Dr Michael Cleary
Executive Director, PAH-QEII Health Network
Metro South Hospital & Health Service
GPO Box 4043
EIGHT MILE PLAINS Qld 4113

[redacted]

Dear ~~Dr Cleary~~ Michael

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

I am writing to you to inform you that Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. From this date, full responsibility for management of forensic medicine services in the Logan area will transfer to the Gold Coast HHS. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
[redacted]

As forensic medical officers will be transferred to the employ of the Gold Coast HHS, arrangements will need to be put into place to ensure all doctors are appropriately credentialed in both Hospital and Health Service regions.

Ms Paula Duffy, Executive Director Diagnostic and Emergency Medical Services at the Gold Coast HHS will be in contact with you shortly to facilitate the credentialing of forensic medical officers in the South East region.

I appreciate you may not have been aware of the proposed change in service arrangements, though I am confident the move to the new arrangements will be seamless and ensure the provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

Michel Lok
General Manager
Strategy, Community and Scientific Services
Health Support Queensland

Health Support Queensland

Department of
Health

[redacted]

17 September 2018

Detective Inspector Simon Palmer
Queensland Police Service
GPO Box 1440
BRISBANE Qld 4000

[redacted]

Simon

Dear Detective Inspector Palmer

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
[redacted]

Dr Lincoln will be in contact with you shortly and will discuss communication processes and rostering arrangements commencing on 1 October 2018.

I am confident these new arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Support
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
[redacted]

Health Support Queensland

Department of
Health

[redacted]

17 September 2018

Mr Terry Ryan
Coroners Court of Queensland
GPO Box 1649
BRISBANE Qld 4001

[redacted]

Terry

Dear Mr Ryan

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
[redacted]

Dr Lincoln will be in contact with you shortly and will discuss communication processes and rostering arrangement commencing on October 1, 2018.

I am confident these new arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Services
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
[redacted]
Website www.health.qld.gov.au

RCPA
The Royal College of Pathologists of Australasia

Clinical Forensic Medicine

TRAINEE HANDBOOK 2022

It is essential to read this Handbook in conjunction with the ***Trainee Handbook – Administrative Requirements*** which is relevant to all trainees. This has information about the College's structure and policies, together with details of requirements for registration, training and examination applications.

TABLE OF CONTENTS

Abbreviations ii
SECTION 1 1
INTRODUCTION 1
PERSONAL CHARACTERISTICS NEEDED 1
GENERAL AIMS OF THE TRAINING PROGRAM 2
ADMINISTRATIVE REQUIREMENTS 3
SUPERVISION 5
ASSESSMENT 6
RESOURCES 7

SECTION 2 9
ENTRUSTABLE PROFESSIONAL ACTIVITIES FOR THE CLINICAL FORENSIC PHYSICIAN 9
RESEARCH AND SCHOLARLY ACTIVITIES 115
PEER REVIEW 119

SECTION 3 120
Appendix 1: EPA-Training Site Matrix 121
Appendix 2: Table of Workplace-based (WBA) assessments for each EPA 122
Appendix 3: Portfolio Requirements 127
Appendix 4: Mid-Program Examination 128
Appendix 5: End of Program Examination 129
Appendix 6: Clinical Forensic Medicine Project Reports 130
Appendix 7: Research, Peer Review and Scholarly Activity Log 133
Appendix 8: Workplace-based Assessment (WBA) Forms and log templates 135

- Mini-Clinical Evaluation Exercise (Mini-CEX) 136
- Directly Observed Procedural Skills (DOPS) 138
- Case-based Discussion (CbD) 140
- Case-based Discussion on Management and Leadership of a CFM service (EPA13). 142
- Assessment of Oral testimony 144
- Assessment of Medicolegal Statements and Reports 146

Appendix 9: Confirmation of Entrustment form 151
Appendix 10: Guidelines for completing the Supervisor report 152
Appendix 11: Key Competencies, Sub-competencies and Milestones, and EPAs 153
Appendix 12: Key Competency Domains and EPA Map 172

Abbreviations

ANZFSS	Australian and New Zealand Forensic Science Society
BEA	Board of Education and Assessment
CbD	Case-based Discussion
CWS	Clinical Work Sampling
CFM	Clinical Forensic Medicine
CFMU	Clinical Forensic Medicine Unit
CPDP	Continuing Professional Development Program
DOPS	Directly Observed Procedural skill
ED	Emergency Department
EPA	Entrustable Professional Activity
FTE	Full Time Equivalent
FP	Forensic Pathologist
GP	General Practitioner
KC	Key Competency
MDI	Medicolegal Death Investigation
Mini CEX	Mini Clinical Evaluation Examination
MSF	Multi-Source Feedback
PFM	Paediatric Forensic Medicine
RCPA	Royal College of Pathologists of Australasia
RPL	Recognition of Prior Learning
SAS	Sexual Assault Service
SC	Sub-competency
SOM	Sexual Offence Medicine
TM	Traffic Medicine
WBA	Workplace-based Assessment

© January 2022 Royal College of Pathologists of Australasia

SECTION 1

INTRODUCTION

Clinical Forensic Medicine (CFM) is concerned with provision of forensic medical services primarily to the living and the collection and interpretation of information for the purposes of civil and criminal law, the judiciary and the police. It is that branch of clinical medicine that deals with both the medical and legal aspects of patient care.

A broad scope of clinical experience in particular emergency medicine and primary care, will be of value, as trainees must be competent to manage acutely ill and injured patients. Clinical experience in other areas including paediatrics, gynaecology, psychiatry, addiction medicine and sexual health care will also be relevant.

Clinical forensic physicians work closely with police, lawyers, coroners, forensic pathologists and forensic scientists; the scope of their work involves clinical examination of living persons, the provision of written reports and oral testimony in court. Their clinical work encompasses both forensic and health care roles; the forensic examination of complainants and alleged perpetrators to assist the legal process and the provision of health care to patients in contact with the legal system. While the clinical forensic physician's responsibility to the courts demands independence and impartiality, his/her contact with vulnerable patient groups also requires health care advocacy and public health roles.

PERSONAL CHARACTERISTICS NEEDED

A clinical forensic physician needs to have:

- Broad general medical experience ideally including emergency medicine, primary care, paediatrics, gynaecology, psychiatry, addiction medicine and sexual health care
- Good oral and written communication skills and interpersonal skills
- Sound knowledge of pathophysiology of disease and trauma
- Sound knowledge of surface and internal anatomy
- Sound knowledge of pharmacology of common drug classes
- Sound knowledge in the natural and forensic sciences
- Sound knowledge of the law and relevant legislation
- Competence in clinical reasoning
- A methodical and analytical approach
- Ability to practice as part of a team as well as autonomously
- Sense of responsibility balanced with ability to discern limitations and seek help when appropriate
- A high level of self-motivation, conscientiousness and reliability
- Ability to formulate and articulate well-balanced views
- Patience and attention to detail
- Emotional stability
- Commitment to collegial and inter-professional communication and collaboration
- An understanding of aspects of bereavement
- The ability and willingness to offer guidance and teaching to trainees in clinical forensic medicine
- Habits of ongoing self-evaluation, reflection and development
- An inquiring mind, to initiate ethical research
- Personal honesty and integrity

© January 2022 Royal College of Pathologists of Australasia

GENERAL AIMS OF THE TRAINING PROGRAM

The Clinical Forensic Medicine (CFM) training program is a competency-based program with mid-program and end of program examinations and a range of *Workplace-based Assessments* (WBA) linking the competency framework to actual practice using the concept of *Entrustable Professional Activities* (EPAs).

Full entrustment in the following thirteen (13) EPAs and subsequent achievement of end of program examinations for the Fellowship in Clinical Forensic Medicine recognises the ability to practice all EPAs unsupervised and certifies professional expertise in clinical forensic medicine at a level equivalent to fellowship in other disciplines.

All EPAs address skills required to achieve competence across the diverse areas of practice of a clinical forensic physician. The term 'forensic setting' refers to the full range of circumstances at the interface of clinical medicine and the legal system, in which a clinical forensic physician may be required to work.

Clinical EPAs

1 Forensic Medical Examination of Sexual Offence Complainant
(child/adolescent/adult)

2 Forensic Medical Examination of Non-Sexual Offence Complainant
(child/adolescent/adult)

3 Forensic Medical Examination of Alleged Perpetrator
(sexual and non-sexual offences; child/adolescent/adult)

4 Assessment of Suspected Abuse / Neglect in Forensic Settings

5 Fitness for Interview Assessment
(adult/adolescent/child)

6 Health Care Assessment and Provision in Forensic Settings

7 Assessment of Fitness to Drive and Medically-related Impairment

8 Injury Assessment and Interpretation

9 Clinical Toxicological Assessments

10 Provision of Medicolegal Opinions
(excluding coronial opinions)

11 Medico-legal Death Investigation
(including coronial opinions)

12 Oral Testimony
(criminal/civil/coronial)

Professional practice and quality (non-clinical) EPA

13. Management and Leadership of a CFM Service

ADMINISTRATIVE REQUIREMENTS

This handbook should be read in conjunction with the *Trainee Handbook - Administrative Requirements* on the College website.

Entry requirements

Trainees must be registered as medical practitioners with the Medical Board of Australia, or of Singapore or Malaysia; or the Medical Council of New Zealand, or of Hong Kong, and must be entitled to practise medicine in his or her country of domicile. Trainees must have a minimum of three (3) years postgraduate clinical experience before applying.

Experience in emergency medicine is particularly recommended, as trainees must be competent to manage acutely ill and injured patients with other relevant areas of practice being primary care, paediatrics, psychiatry, gynaecology, addiction medicine and sexual health care.

There will be recognition of coursework completed prior to and during training. The Master of Forensic Medicine offered by Monash University is recommended, in particular the core units, and may lead to exemptions from some assessments.

See Admissions to College Training Programs policy: https://www.rcpa.edu.au/Library/College-Policies

Training requirements

Training requirements for the Clinical Forensic Medicine training program are defined in Full Time Equivalents (FTE) rather than calendar years. To gain the Fellowship in Clinical Forensic Medicine, a trainee requires a minimum of five (5) FTE years of certified training in sites or positions approved or accredited by the Board of Education and Assessment (BEA), and satisfactory completion of the assessment program detailed in this Handbook. There is no time limitation for completion of training, the standard being full entrustment in all EPAs and successful completion of the end of program examination. However, the end-of-program exit examination should be completed within five (5) calendar years of passing the mid-program examinations.

Throughout their training period, trainees should ordinarily maintain a 0.5 FTE (minimum 0.3 FTE) position in sites accredited for clinical forensic medicine training by the RCPA Board of Education and Assessment.

Please note that ordinarily, a maximum of four (4) calendar years is to be spent in any one accredited location over the course of the training program. However full entrustment in all EPAs may require additional rotations of 3-6 months depending on primary training site (see Appendix 1 - EPA-Training site Matrix).

Previous relevant clinical experience and completion of coursework in approved programs* may allow limited accreditation of training time. For retrospective accreditation of such learning, trainees should make an Application for a Training Determination prior to training registration. The Chief Examiner will evaluate the application based on comparison of competency standards i.e. milestones achieved through academic programs/previous practical experience, and determine the training requirements and any retrospective accreditation. Normally, trainees should be enrolled in or have completed the Monash University postgraduate Master of Forensic Medicine. If trainees are completing studies concurrent to their training and seeking accreditation, evidence of completion should be submitted for evaluation by the Chief Examiner.

Please note that all trainees including those who have completed or are currently undertaking academic programs in clinical forensic medicine MUST undertake training in RCPA accredited sites as detailed in the appendix and fulfil the necessary casework and assessment requirements.

The FFCFM program structure on the next page outlines the entry, training and assessment requirements.

* *Approved programs include the Monash University postgraduate Master of Forensic Medicine program or Graduate Diploma in Forensic Medicine, or other postgraduate programs by local or overseas universities with a substantiative clinical forensic medicine component as approved by the College.*

FFCFM program structure

Entry level requirements

Medical qualification
Current registration Australia, Hong Kong, Singapore, Malaysia or NZ
Post-graduate medical practice of at least three (3) years; experience in emergency medicine and primary care preferred; paediatrics, psychiatry, gynaecology, addiction medicine and sexual health also relevant.
Satisfactory current practice history
Current employment in approved CFM position (at least 0.3FTE)
Enrolment in Monash University MForensMed (or equivalent)

Training program

Minimum five (5) FTE years addressing all of the following areas of clinical practice as represented in 13 defined *Entrustable Professional Activities (EPAs):*

- General Clinical Forensic Medicine
- Paediatric Forensic Medicine
- Custodial Medicine
- Sexual Offence Medicine
- Traffic Medicine
- Medicolegal Death Investigation (Coronial)

Assessments

A) Portfolio consisting of:
i. Continuous workplace-based assessments (WBA) addressing *Core CFM* and *Transition to Fellowship* milestones for all EPAs:

- Direct Observation of Procedural Skills (DOPS)
- Case-based discussions (CbD)
- Mini-Clinical Evaluation Exercise (mini-CEX)
- Peer-reviewed statements/reports
- Assessment of Management and Leadership
- Assessment of Oral Testimony

ii. Activity log (clinical activities, court evidence, attending workshops/conferences)
iii. Audit activities

B) Annual/per rotation Supervisor reports re EPA progress and milestone/performance measures
C) Research projects and activities
D) Teaching activities – recorded in activity log
E) Formal Confirmation of Entrustment, in all EPAs
F) *Mid-program written examination* addressing theoretical knowledge basis of clinical forensic medicine (satisfactory completion of MForensMed, Monash University or equivalent may lead to exemption)
G) *End-of-program standardised oral examination* covering all components of curriculum

Confirmation of Entrustment		
EPAs requiring early L4 entrustment suggested by end of Year 2 full time equivalent (depending on training site and caseload)		L5 entrustment of all EPAs required to sit end-of-program exit examination
1	FME sexual offence complainant	
2	FME non-sexual offence complainant	
3	FME alleged perpetrator	
4	Assessment of suspected abuse/neglect in forensic settings	
6	Healthcare assessment/provision in forensic setting	
10	Provision of medicolegal opinion (excluding coronial opinions)	
12	Oral testimony	
EPAs requiring L4 entrustment in Year 4 full-time equivalent (or earlier depending on training site and caseload)		
5	Fitness for interview assessment	
7	Assessment of fitness to drive and medically related impairment	
8	Injury assessment and Interpretation	
9	Clinical toxicological assessment	
11	Medicolegal death investigation (including coronial opinions)	
EPAs that can be entrusted anytime		
13	Management and leadership CFM service	

© January 2022 Royal College of Pathologists of Australasia

SUPERVISION

All training must be supervised. More than one supervisor can be appointed, depending on location and specific expertise. The College recommends that any one supervisor be responsible for no more than two trainees.

Who can be a supervisor?

The supervisor will normally be a CFM practitioner who is a Fellow of the Faculty of Clinical Forensic Medicine. However non-fellows may be approved by the Board of Education and Assessment if no fellow is available. Normally, only one supervisor is nominated, but if the trainee spends significant periods working in an area where the supervisor has no personal involvement (see Appendix 1) the supervisor must certify that suitable supervision is being provided. The supervisor must also ensure that adequate supervision is arranged in their absence.

In some circumstances, shared supervision may be necessary, but there must be a nominated primary supervisor with overall responsibility. While it is not appropriate for supervision to be delegated to someone who is not a CFM practitioner, it may be appropriate for other senior pathology and scientific staff with relevant experience to sign off some workplace-based assessment forms.

The role of the supervisor

Supervisors should develop a prospective training and research program, in collaboration with the trainee, on initial registration and annually; these are to be submitted to the RCPA. Supervisors should also ensure that the trainee has sufficient time and opportunities to carry out the required training activities.

Supervisors, and others to whom aspects of training have been delegated, are expected to monitor and provide regular feedback on the development of the trainee's competence. Regular, formal, documented meetings with the trainee should occur at least every three months. Supervisors should observe trainees' practical performance and interaction with clinicians and other professional groups; and review resultant reporting. This may be delegated to other trainers where appropriate, e.g., when the trainee is on secondment to another facility or a mortuary for a segment of training.

The formal duties of supervisors, such as requirements to report the trainee's progress to the Board of Education and Assessment, are described in the RCPA *Induction Manual for Supervisors* and the RCPA policy on the *Role of the Supervisor*. Please refer to the most current version of these documents for detailed information *(see RCPA website and Appendix 9).*

Summative entrustment

Entrustment decisions related to EPAs are the responsibility of the **primary supervisor** (and the on-site supervisor if different as per Appendix 1) and are competency-based rather than time-based. These decisions will be reached after a programme of comprehensive workplace-based and other assessments as detailed in the individual EPA descriptions in Section 2. Different trainees in different settings may reach full entrustment of an EPA at different times. Each level of supervision reflects different authorisation to act:

1. Observing the activity
2. Acting with direct supervision present in the room
3. Acting with supervision available within minutes (trainee to discuss case with supervisor before leaving patient)
4. Acting unsupervised (i.e. with clinical oversight)
5. Providing supervision to juniors

Level 4 entrustment represents the privilege to work unsupervised and should be formally documented in a *Statement of Awarded Responsibility* (STAR).

Supervisors may allow ad-hoc entrustment of EPA–related activities to trainees for purposes of deliberate practice, but such decisions will not be related to summative entrustment.

ASSESSMENT

The assessment requirements summarised below are presented in more detail in the appendices.

Formal Examinations

- **Clinical Forensic Medicine mid-program written Examination**. This examination has an emphasis on the theoretical knowledge basis of clinical forensic medicine. Trainees with recognition of prior learning (RPL) may receive exemptions from the whole or particular components of the examination. See *Appendix 4* for details.

- **Clinical Forensic Medicine end-of-program Standardised Oral Examination**. Trainees who have been fully entrusted in all EPAs are eligible to sit for the end-of-program examination, usually in the final year of training. See *Appendix 5* for details.

All durations refer to full-time training or part-time equivalent in an RCPA accredited facility.

Portfolio

The portfolio is a collection of ***workplace-based assessment*** forms, ***Statements of Awarded Responsibility***, the ***case log book***, that provides evidence that trainees have successfully completed a range of activities that form part of their daily work. The portfolio records the trainee's progress in developing technical skills and professional values, attitudes and behaviours that are not readily assessed by formal examinations. The periodic and annual supervisor reports are also kept in the portfolio.

The ***workplace-based assessments***, mini Clinical Evaluation Exercises (mini-CEX), Direct Observation of Practical Skills (DOPS), Case-based Discussions (CbDs), and audits. Trainees have the responsibility of initiating the workplace-based assessments and negotiating a convenient time for the assessment with supervisors or a suitably qualified delegate. Assessments should be able to be done regularly without significant disruption to workplace productivity. Trainees are responsible for providing the appropriate *forms (see Appendix 8) and* ensuring that they have completed the required number by the required dates. Activities in research, teaching and scholarship are also logged in the portfolio.

The ***case log book*** details the trainee's experience with a range of cases encountered in routine clinical forensic medical practice. Documentation on each case includes an introduction, a report of the clinical findings obtained through history and examination, copies of medico-legal forms used, working notes, written reports if relevant, and a one-page summary and reflection.

Research, teaching and scholarship activities are also recorded in the portfolio.

Portfolio requirements are described in *Appendix 3.*

Clinical Forensic Medicine Project Reports

Two (2) reports demonstrating substantive casework and research in Clinical Forensic Medicine must be completed to fulfil assessment requirements for Research component of the program. Publications in Clinical Forensic Medicine completed during the period of training may be considered for the Report requirement. See *Appendix 6* for detailed requirements.

Supervisor Report - Annual Review of Progress

Trainees must submit a supervisor report for each year of training, including periods of rotation Please refer to *Appendix 10* for specific requirements.

RESOURCES

The following resource list is not exhaustive. In addition, each EPA description specifies relevant recommended texts and other resources. Trainees are encouraged to read widely and keep up-to-date in general medicine as well as clinical forensic medicine.

Textbooks

Baselt, R.C. (Ed.) (2014). *Disposition of toxic drugs and chemicals in man* (10th ed.). California: Biomedical Publications.

Bilo, R.A.C., Robben, S.G.F. & van Rijn, R.R. (2010). *Forensic aspects of pediatric fractures: Differentiating accidental trauma from child abuse.* Springer.

Busuttil, A. & Keeling, J.W. (Eds.) (2009). *Paediatric Forensic Medicine & Pathology* (2nd ed.). Hodder Arnold.

Dolinak, D., Matshes, E. & Lew, E. (2005). *Forensic Pathology: Principles and practice*. Elsevier Academic Press.

Drummer, O.H. (2001). *The forensic pharmacology of drugs of abuse*. Arnold Publishers.

Freckelton, I. & Ranson, D. (2006). *Death investigation and the coroner's inquest*. Melbourne, Australia: Oxford University Press.

Garriott, J.C. (Ed.) (2008). *Garriott's medicolegal aspects of alcohol* (4th ed.). Arizona USA: Lawyers and Judges Publishing Co.

Gunn, A (2009). *Essential forensic biology* (2nd ed.). Wiley-Blackwell.

Iscan, M.Y., & Steyn, M. (Eds) (2013). *The human skeleton in forensic medicine (3rd ed.).* Springfield Illinois: Charles C Thomas.

Karch, S.B. & Drummer, O.H. (2016). *Karch's pathology of drug abuse* (5th ed.). Florida, USA: CRC Press.

Kumar, V., Abbas, A.K. Fausto, Nn & Aster, J. (Eds) (2014). *Robbins & Cotran pathologic basis of disease (9th ed.).* Philadelphia: WB Saunders.

Levy, D.A. & Harcke, T.H. (2011). *Essentials of forensic imaging: A text atlas.* CRC Press.

Payne-James, J, Busuttil, A. & Smock, W (Eds) (2003). *Forensic medicine: Clinical and pathological aspects*. California, USA: Greenwich Medical Media.

Redmayne, M. (2001). *Expert evidence and criminal justice*. Oxford University Press.

Saukko, P., & Knight, B. (2004). *Knight's forensic pathology* (3rd ed.). CRC Press.

Saukko, P., & Knight, B. (2015). *Knight's forensic pathology* (4th ed.). CRC Press.

Spitz, W.U. (Ed.) (2006). *Spitz and Fisher's medicolegal investigation of death: Guidelines for the application of pathology to crime investigation* (4th ed.). Springfield, Illinois: Charles C Thomas.

Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer.

Thali, M.J., Dirnhoffer, R., Vock, P. (2009). *The virtopsy approach: 3D optical and radiological scanning and reconstruction in forensic medicine.* CRC Press.

Thali, M.J., Viner, M.D., & Brogden, B.G. (2011). *Brogden's forensic radiology (2nd ed.)*. CRC Press.

Journals

Journal of Forensic and Legal Medicine

American Journal of Forensic Medicine and Pathology

Australian Journal of Forensic Sciences
International Journal of Legal Medicine

Journal of Forensic Sciences

Journal of Child Sexual Abuse

Child Abuse & Neglect - The International Journal

Forensic Pathology Reviews

Forensic Science International

Forensic Science Medicine and Pathology

Science and Justice

Medicine Science and the Law

Legal Medicine

Accident Analysis and Prevention

Journal of Medical Toxicology

Websites

Peer Review:

Review by Peers - A guide for professional, clinical and administrative processes. Australian Commission on Safety and Quality in Health Care, July 2010. Retrieved from http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/37358-Review-by-Peers1.pdf

Clinical Audit How to Guides. University Hospital Bristol. Retrieved from http://www.uhbristol.nhs.uk/for-clinicians/clinicalaudit/how-to-guides/

Faculty of Forensic and Legal Medicine, UK. *Quality Standards in Forensic Medicine (July 2013)* Retrieved from http://www.fflm.ac.uk/wp-content/uploads/documentstore/1378397186.pdf

RCPA IQA Framework – Clinical Forensic Medicine: http://www.rcpa.edu.au/Library/Practising-Pathology/IQAFW/Frameworks/Docs/IQA-Framework-Clinical-Forensic-Medicine

Research:

RCPA Research and Scholarship resources: http://www.rcpa.edu.au/Education/Research-and-Scholarship

RCPA Ethics Module 6: http://www.rcpa.edu.au/Education/Professional-Qualities/ethics

SECTION 2

ENTRUSTABLE PROFESSIONAL ACTIVITIES FOR THE CLINICAL FORENSIC PHYSICIAN

The thirteen (13) EPAs of clinical forensic physicians are elaborated through the individual EPA descriptions.

Each EPA description details:

- the context of the EPA;
- key competencies, sub competencies and their milestones (see Appendix 11) related to the EPA;
- the required knowledge, skills and attitudes/professional behaviours;
- recommended learning activities and case load for the summative entrustment decision;
- workplace-based and other assessments required for the summative entrustment decision;
- estimated stage of training for entrustment.

In discussion with their supervisor, trainees should use their judgement to select the learning activities and casework that are most likely to achieve the milestones for each stage of training and an appropriate level of entrustment, being mindful of the range of learning opportunities offered by their particular training site. Familiarity with new and emerging knowledge and skills aspects that may not appear in the EPA descriptions is also expected.

Competence in EPAs and milestones achieved early in training should be maintained throughout.

Clinical Forensic Medicine EPA 1 - Forensic Medical Examination of Sexual Offence Complainant

EPA identification code: **EPA 1**	**Recommended training sites for entrustment:** **Sexual Assault Services** **CFMUs providing sexual assault services** **Paediatric Forensic Services**
EPA title	**Forensic Medical Examination of Sexual Offence Complainant (Child/Adolescent/Adult)**
Specification and any limitations	Across the diverse areas of practice, a Clinical Forensic Physician entering unsupervised practice is able to conduct a forensic medical examination of a sexual offence complainant (child, adolescent, adult) and report on this examination. This includes: • provide appropriate triage regarding clinical problems to ensure that the child /adolescent/adult obtains a high standard of medical care from a suitably trained professional at an appropriate facility at an appropriate time • demonstrate process used to obtain consent from or for child/adolescent/adult forensic examination and procedures • provide a high standard of physical examination • produce high quality documentation, including photography • collect appropriate forensic and medical samples in a manner that that safeguards the potential use of results in court (including minimising DNA contamination) • provide good patient care and treatment (including preventive health care, mental health care and sexual health care) • practice evidence-based forensic medicine
Key Competencies and sub-competencies related to this EPA* **there are no sub-competencies unique to this EPA*	FS1, FS2, FS3, FS4, FS5 EC1, EC2, EC3, EC4, EC5 ML1, ML3 CC2 CM1, CM2.1, CM2.2, CM2.4, CM2.5, CM3.1, CM3.2, CM4, CM5 QM1, QM2, QM3, QM4, QM5, QM6 HA3 TL1, TL2, TL3, TL4, TL6 EP1, EP3, EP4, EP6, EP7 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills

Required knowledge, Skills and behaviour	*Knowledge of:* • Legislation related to sexual crimes, consent to forensic medical procedures and the operation of the child protection system • Role and responsibilities of the Clinical Forensic Physician • Victim demographics • The principles of trauma informed care • Child growth and development • Pathophysiology of injury • The role of forensic evidence in criminal investigations • Forensic toxicology • Medical issues related to sexual violence • Evidence-based medicine *Skills in:* • Respectful and culturally competent communication • The assessment of the capacity to consent • Prioritising needs • Forensic assessment and procedures • Documentation, including photo-documentation • Injury interpretation • Evidence collection • Medical assessment and treatment of sexual assault/abuse complainants • Analysing practice and using evidence to improve forensic practice • Working with other healthcare and forensic professional groups, healthcare advocacy *Attitudes/ behaviour:* • Respectful approach to, and demonstrated courtesy towards, children, adolescents and adults their care-givers • Respectful approach to, and demonstrated courtesy towards, other professionals • Recognises own role, responsibilities and limitations • Demonstrates an impartial and objective approach to the evaluation of suspected SA • Responds promptly to requests and enquiries • Demonstrates a desire to provide safety and healthcare that could improve the quality of life for the sexual assault complainant • Demonstrates a desire for high professional standards, quality performance, continuous improvement, and participates in QA and audit processes

© January 2022 Royal College of Pathologists of Australasia

References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: Textbooks • Finkel, M.A., & Giardino, A.P. (2009). *Medical evaluation of child sexual abuse: A practical guide* (3rd ed.). American Academy of Pediatrics. • Jenny, C. (Ed.) (2011). *Child abuse and neglect: Diagnosis, treatment, and evidence*. Missouri, USA: Elsevier, Saunders. • *The Physical Signs of Child Sexual Abuse (2015): An evidence-based review and guidance for best practice* (2nd ed.). Royal College of Paediatrics and Child Health (RCPCH) (2015). Retrieved from http://www.rcpch.ac.uk/csa • Girardin, B., Faugno, D., Seneski, P.C., Slaughter, L., & Whelan, M. (1997). *Color atlas of sexual assault*. Missouri: Mosby. • Saukko, P., & Knight, B. (2015). *Knight's forensic pathology* (4th ed.). CRC Press. • Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer. Royal College of Paediatrics and Child Health (RCPCH) Publications at: http://www.rcpch.ac.uk/child-health/standards-care/child-protection/publications/child-protection-publications . Note 2015 RCPCH service specifications for facilities and workforce competencies in relation to medical services for sexually abused children • Finkelhor, D. (2009). *Childhood victimization: Violence, crime, and abuse in the lives of young people.* Oxford Publications. • Giardino, A., Finkel, M., Giardino, E., Siedl, T., & Ludwig, S. (1992). *A practical guide to the evaluation of sexual abuse in the prepubertal child*. California: Sage Publications. • Heger, A., & Emans, S.J. (1992). *Evaluation of the sexually abused child: A medical textbook and photographic atlas*. New York: Oxford University Press. • Emans, S.J., & Laufer, M.R. (2011). *Pediatric and adolescent gynecology* (6th ed.). Lippincott Wilkins and Williams. • Giardino, A., Datner, E. & Asher, J (2003). *Sexual assault, victimization across the life span: A clinical guide.* Missouri: G.W. Medical Publishing. *Sexually Transmitted Infections*: • 2015 Sexually Transmitted Diseases Treatment Guidelines. Centres for Disease Control and Prevention (CDC). Retrieved from http://www.cdc.gov/std/tg2015/ • Australian STI Management Guidelines for Use in Primary Care (2015). Australian Sexual Health Alliance (ASHA). Retrieved from http://www.sti.guidelines.org.au/ • British Association for Sexual Health and HIV. BASHH Clinical Effectiveness Group Guidelines. Retrieved from https://www.bashh.org/guidelines .

	Journals • The Quarterly Update • Child Abuse & Neglect - The International Journal • Journal of Child Sexual Abuse • Child Maltreatment (Journal of American Professional Society on the Abuse of Children) • APSAC Advisor (American Professional Society on the Abuse of Children) • Child Abuse Review • Journal of Forensic and Legal Medicine • International Journal of Legal Medicine • Australia's National Research Organisation for Women's Safety (http://anrows.org.au) Policies • RACP (Intercollegiate) - Australia and NZ: https://www.racp.edu.au/ • Genital Examinations in Girls and Young Women: A Clinical Practice Guideline. Retrieved from https://www.racp.edu.au/docs/default-source/advocacy-library/genital-examinations-in-girls-and-young-women-a-clinical-practice-guideline.pdf • American Academy of Pediatrics (AAP) (https://www.aap.org/) • Committee on Child Abuse and Neglect (1999). Guidelines for the Evaluation of Sexual Abuse of Children: Subject Review. *Pediatrics, 103(1)*. Retrieved from http://pediatrics.aappublications.org/content/103/1/186 • Kaufmann, M. and the Committee on Adolescence (2008). Care of the Adolescent Sexual Assault Victim. *Pediatrics, 122(2)*. Retrieved from http://pediatrics.aappublications.org/content/pediatrics/122/2/462.full.pdf • Parent Tips for Preventing and Identifying Child Sexual Abuse: https://www.aap.org/en-us/about-the-aap/aap-press-room/news-features-and-safety-tips/pages/Parent-Tips-for-Preventing-and-Identifying-Child-Sexual-Abuse.aspx#sthash.fobmOLG2.dpuf • *The Physical Signs of Child Sexual Abuse (2015): An evidence-based review and guidance for best practice* (2nd ed.). Royal College of Paediatrics and Child Health (RCPCH) (2015). Retrieved from http://www.rcpch.ac.uk/csa • Faculty of Forensic and Legal Medicine (UK) (https://fflm.ac.uk/). • 1800RESPECT - National Sexual Assault, Domestic Family Violence Counselling Service (includes webinars for workers and worker support) (https://www.1800respect.org.au).

	N.B. Also trainees must be well informed about: • Legislation • Local procedural guidelines • Organisational policies and procedures • Position statements (local) • CFM guidelines e.g. re DNA minimisation Webinars Royal College of Paediatrics and Child Health (RCPCH) webinars on Child Sexual Abuse (CSA). Retrieved from http://www.rcpch.ac.uk/improving-child-health/child-protection/child-sexual-abuse-csa/child-sexual-abuse-csa
Recommended learning activities	Training courses in CSA, adolescent and adult sexual assault Conferences, workshops and seminars Webinars and CDROMS, podcasts Self-directed learning – reads books and journals. Web-based references such as UpToDate and Medscape Log books – with exercises for reflection re practice and understandings Case based discussions Peer review programs Case conferences Read medico-legal reports written by experts Observe others provide testimony in court
Case load for summative entrustment decision	All trainees are expected to complete a minimum of fifteen (15) cases to be considered for summative entrustment. It is recommended that trainees whose primary training site offer services related to this EPA routinely complete a minimum of thirty (30) cases.

© January 2022 Royal College of Pathologists of Australasia

Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Estimated stage of training for entrustment	Level 4 (unsupervised) for most routine assessments in the second year of full-time training with increasing expertise anticipated during the remainder of program Level 5 (teaching others) by the end of advanced training

EPA 1 Forensic Medical Examination of Sexual Offence Complainant Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
FS1. Injury interpretation - Apply knowledge of pathology of trauma in interpretation of injury (including genital)	Recognise and interpret basic injuries and injury patterns with a thorough understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH)	Interpret and evaluate complex injury patterns in limited forensic situations. Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re: legal definitions	Interpret and evaluate complex injury patterns in varied forensic situations including deceased persons, advises others on correct interpretation in peer review
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly as per rules and using appropriate terminology	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records)
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site (e.g. semen positive swabs from genitalia), identify possible contamination
FS4. Use of forensic toxicology - Apply knowledge of forensic	Apply knowledge of forensic toxicology and drugs of abuse (including	Accurately interpret and document the effects of illicit and therapeutic drugs	Accurately interpret and document effects of common and rare illicit and therapeutic

toxicology and drugs of abuse and related skills in formulating forensic medical opinions	pharmacokinetics, pharmacodynamics, interactions, analytical methods) in interpreting effects of common drugs in forensic medical situations	and their adverse reactions, perform accurate calculations, and formulate forensic medical opinions for various settings e.g. fitness for interview, capacity to consent	drugs and formulate complex forensic medical opinions in varied situations (e.g. likely drug dosage, tolerance), advise others in peer review
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and clothing) with other health/legal professionals	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and ensure patient safety, prevention of contamination and chain of custody	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/ rectify/ advise regarding possible compromise in patient safety, collection and handling of evidence
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to manage healthcare concerns of persons in custody	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody against police/ custodians. Understand relevant police/custodians procedures (i.e. communication, monitoring, protocols).	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision, address complaints against police/custodians sensitively and effectively.	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms,	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify problematic /less than ideal/ ambiguous documentation by others.

© January 2022 Royal College of Pathologists of Australasia

	medical/legal vocabulary of forensic medicine.		
EC5. Handover communication - Communicate effectively with other healthcare professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, drugs & poisons, child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination with cultural sensitivity, compassion and empathy	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour)	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.

© January 2022 Royal College of Pathologists of Australasia

CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.2. Clinical procedures - Perform and interpret non-invasive procedures and/or testing related to healthcare assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures /testing and recognise high risk states in forensic settings (e.g. STI, mental health).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM2.5. Public health - Manage public health issues in forensic settings	Advise and support individuals on disease prevention (e.g. prophylaxis) and health promotion.	Support individuals for disease prevention, health promotion with an understanding of wider systems. Recognise and take responsibility for situations where public health supersedes individual health.	Manage public health implications for individuals and communities effectively in forensic settings and wider systems.
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that defines victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM3.2. Forensic procedures - Perform and interpret non-invasive procedures and/or testing for forensic medical assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures and testing and recognise high risk states in forensic settings (e.g. sexual assault).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM4. Prioritize care - Prioritize health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.

© January 2022 Royal College of Pathologists of Australasia

QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek feedback, and manage clinical forensic tasks appropriately	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences.	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible).	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently.
QM3. Evidence-based quality improvement - Systematically analyse practice and implement/ advocate for evidence-based changes towards quality of a forensic service	Use strategies for reflection on clinical practice when encountering opportunities during casework. Identify the needs for quality review in health care and health care systems.	Engage in opportunities and methods for quality improvement based on reflection on both individuals and populations in clinical practice. Promote quality health care in own service.	Engage in continuous quality improvement activities efficiently. Use one's own successes to advocate for a culture that promote quality health care and optimal health care systems.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports.	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
QM6. Risk–benefit analysis - Incorporate considerations of cost awareness and risk–benefit analysis in individual and/or population-based care as appropriate	Use externally provided information (e.g. research around a clinical forensic procedure) to inform cost-containing action and/or preliminary risk–benefit analysis.	Critically appraise information in making cost and risk–benefit decisions. Adopt strategies that decrease cost and risk, and optimize benefits for individuals and the justice system.	Integrate cost analysis into one's practice while minimizing risk and optimizing benefits for individuals and communities.
HA3. Advocate for patient needs – Advocate for individual	Recognise when it is necessary to advocate for individual patient needs and	Advocate with the healthcare team for needs of individuals and cohorts of	Contribute to a culture where team members value and advocate for patient

patient needs in communication with the healthcare team, including in care transitions	develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	needs in providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
TL4. Working with respect – work respectfully and resolve conflicts in the team towards better patient outcomes	Recognise and respect the diversity of team member perspectives on clinical situations and their expert decisions.	Respond to team members with respect and appropriate assertiveness. Engage in respectful negotiations to optimise care.	Resolve potential conflicts in a manner that supports a collaborative culture and better patient outcomes.
TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc…). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities, and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.

© January 2022 Royal College of Pathologists of Australasia

EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.

© January 2022 Royal College of Pathologists of Australasia

Clinical Forensic Medicine EPA 2 - Forensic Medical Examination of Non-Sexual Offence Complainant

EPA identification code: **EPA 2**	**Recommended training sites for entrustment:** **CFMUs** **Sexual assault services providing domestic violence services** **Paediatric Forensic Services**
EPA title	**Forensic Medical Examination of Non-Sexual Offence Complainant (Child/Adolescent/Adult)**
Specification and any limitations (maximum 150 words)	Across the diverse areas of practice, a Clinical Forensic Physician entering unsupervised practice is able to conduct a forensic medical examination of a non-sexual offence complainant and report on this examination. This includes: • provide appropriate triage regarding clinical problems to ensure that the complainant obtains a high standard of medical care from a suitably trained professional at an appropriate facility at an appropriate time • demonstrate process used to obtain consent from or for child/adolescent/adult forensic examination and procedures • produce high quality documentation, including photography • provide a high standard of physical examination • collect forensic and medical samples in a manner that safeguards the potential use of results in court (including minimises DNA contamination) • provide good patient care, provide treatment (including preventive health care and mental health care) • practice evidence-based forensic medicine
Key Competencies and sub-competencies related to this EPA* **there are no sub-competencies unique to this EPA*	FS1, FS2, FS3, FS4, FS5 EC1, EC2, EC3 ML1, ML3 CC2 CM1, CM2.1, CM2.2, CM2.4, CM3.1, CM3.2, CM4, CM5 QM1, QM2, QM3, QM4, QM5, QM6 HA3 TL1, TL2, TL3, TL4, TL6 EP1, EP3, EP4, EP6, EP7 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills

Required knowledge, skills and behaviour	*Knowledge of:* • Legislation related to crimes against the person of a non-sexual nature, consent to forensic medical procedures and the operation of the child protection system • The role of forensic evidence in criminal investigations • Role and responsibilities of the Clinical Forensic Physician • Medical issues related to violence and exposure to interpersonal violence • The principles of trauma informed care • Pathophysiology of injury and healing • Epidemiology of accidental injury - across the age spectrum • Epidemiology of injury caused by assault (including child abuse) – across the age spectrum • Medical conditions that mimic injury • Investigations and strategies used to differentiate injury caused by accidents from injury caused by assault and medical conditions that mimic injury • Forensic toxicology • Victim demographics • Child growth and development • The structure and operation of the child protection system • Evidence-based medicine *Skills:* • Demonstrate respectful and culturally competent communication • Assess capacity to consent • Obtain consent from the appropriate individual organisation • Prioritise needs and time • Conduct forensic assessment of injury and forensic procedures such as collection of samples for analysis • Document to a high standard suitable for use in court, including photo-documentation • Interpret cause and timing of injury • Collect Evidence (verbal and biological samples) • Assess and treat medical needs • Analyse practice and use evidence to improve forensic practice • Work with other healthcare professionals and forensic professional groups • Advocate for healthcare *Attitudes/ behaviour:* • A respectful approach to, and demonstrated courtesy towards, children, adolescents and adults and their care-givers • A respectful approach to, and demonstrated courtesy towards, other professionals

	• Willingness to recognise own role, responsibilities and limitations • An impartial and objective approach to the evaluation of suspected assault and abuse • A prompt response to requests and enquiries • A desire to provide safety and healthcare that could improve the quality of life for the complainant • A desire for high professional standards, quality performance, continuous improvement, and participates in QA and audit processes
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer. • Payne-James, J, Busuttil, A. & Smock, W (Eds) (2003). *Forensic medicine: Clinical and pathological aspects*. California, USA: Greenwich Medical Media. • Jenny, C. (Ed.) (2011). *Child abuse and neglect: Diagnosis, treatment, and evidence*. Missouri, USA: Elsevier, Saunders. • Busuttil, A. & Keeling, J.W. (Eds.) (2009). *Paediatric Forensic Medicine & Pathology* (2nd ed.). Hodder Arnold. • Chadwick, D.L, Alexander, R., Giardino, A.P., Esernio-Jenssen, D, & Thackeray, J.D (Eds.) (2014). *Chadwick's child maltreatment: Physical abuse and neglect.* Whaley & Whaley. • Finkelhor, D. (2009). *Childhood victimization: Violence, crime, and abuse in the lives of young people.* Oxford Publications. <u>Journals</u> • Journal of Forensic and Legal Medicine • The Child Abuse Quarterly Update • Child Abuse & Neglect - The International Journal • Child Maltreatment (Journal of American Professional Society on the Abuse of Children) • International Journal of Legal Medicine <u>NB Also Trainees must be well informed about:</u> • Legislation (in relation to crimes, medical records, healthcare, mental health care, consent, medical negligence, presentation of evidence in the legal system and end of life) • Local procedural guidelines in relation to forensic procedures, engagement with police and the operation of the child protection system • Organisational policies and procedures • Position statements (local) • Policies, procedures and guidelines of colleges other than RCPA in relation to evaluation of complainants of crimes against a person of a non-sexual nature

Recommended learning activities	Training course in the recognition and response to assault and non-accidental injury Unit of postgraduate study in child abuse (minimum of one unit related to forensic evaluation of childhood injury) Attend conferences, workshops and seminars Use Webinars and CDROMS, podcasts Self-directed learning – read books and journals. Use web-based references such as UpToDate and Medscape Record cases in a log book – with exercises for reflection on practice, and identification of new understandings Complete case based discussions Attend and present cases at peer review meetings and programs Attend and contribute to case conferences Read medico-legal reports written by experts Observe others provide testimony in court
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	All trainees are expected to demonstrate competencies in Forensic Medical Examination of 30 Non-Sexual Offence Complainants in order to be considered for summative entrustment
Estimated stage of training for entrustment	Level 4 (unsupervised) for most routine assessments in second year of full time training with increasing expertise anticipated during the remaining 2 to 3 years Level 5 (teaching others) by the end of advanced training

EPA 2 Forensic Medical Examination of Non-Sexual Offence Complainant Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*

FS1. Injury interpretation - Apply knowledge of pathology of trauma in interpretation of injury (including genital)	Recognise and interpret basic injuries and injury patterns with a thorough understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH).	Interpret and evaluate complex injury patterns in limited forensic situations. Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re legal definitions.	Interpret and evaluate complex injury patterns in varied forensic situations including deceased persons, advises others on correct interpretation in peer review.
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly using general principles and appropriate terminology.	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner.	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records).
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained.	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination.	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site (e.g. semen positive swabs from genitalia), identify possible contamination.
FS4. Use of forensic toxicology - Apply knowledge of forensic toxicology and drugs of abuse and related skills in formulating forensic medical opinions	Apply knowledge of forensic toxicology and drugs of abuse (including pharmacokinetics, pharmacodynamics, interactions, analytical methods) in interpreting effects of common drugs in forensic medical situations.	Accurately interpret and document the effects of illicit and therapeutic drugs and their adverse reactions, perform accurate calculations, and formulate forensic medical opinions for various settings e.g. fitness for interview, capacity to consent	Accurately interpret and document effects of common and rare illicit and therapeutic drugs and formulate complex forensic medical opinions in varied situations (e.g. likely drug dosage, tolerance), advise others in peer review.
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and clothing) with other health/legal professionals	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence.	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and ensure patient safety, prevention of contamination and chain of custody.	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/rectify/ advise regarding possible compromise in patient safety, collection and handling of evidence.
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.
ML3. Legal knowledge – Use knowledge of relevant legislation	Identify the appropriate local legislation and regulatory framework for medico-legal	Provide expert opinions and reports that address relevant medico-legal and forensic	Ensure that all forensic "output" whether oral or written is consistent with the

and regulations to facilitate 'good clinical forensic practice'	and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, Drugs & Poisons, Child protection etc.	issues consistent with local laws, in civil and criminal cases.	appropriate legal and regulatory framework.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to manage healthcare concerns of persons in custody	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody against police/ custodians. Understand relevant police/custodians procedures (i.e. communication, monitoring, protocols).	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision, address complaints against police/custodians sensitively and effectively.	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting.	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination, and with cultural sensitivity, compassion and empathy	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations.	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour).	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.

© January 2022 Royal College of Pathologists of Australasia

CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.2. Clinical procedures - Perform and interpret non-invasive procedures and/or testing related to healthcare assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures /testing and recognise high risk states in forensic settings (e.g. STI, mental health).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that define victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM3.2. Forensic procedures - Perform and interpret non-invasive procedures and/or testing for forensic medical assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures and testing and recognise high risk states in forensic settings (e.g. sexual assault).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM4. Prioritise care - Prioritise health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.

© January 2022 Royal College of Pathologists of Australasia

QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek feedback, and manage clinical forensic tasks appropriately	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences.	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible).	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently.
QM3. Evidence-based quality improvement - Systematically analyse practice and implement/ advocate for evidence-based changes towards quality of a forensic service	Use strategies for reflection on clinical practice when encountering opportunities during casework. Identify the needs for quality review in health care and health care systems.	Engage in opportunities and methods for quality improvement based on reflection on both individuals and populations in clinical practice. Promote quality health care in own service.	Engage in continuous quality improvement activities efficiently. Use one's own successes to advocate for a culture that promote quality health care and optimal health care systems.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
QM6. Risk–benefit analysis - Incorporate considerations of cost awareness and risk–benefit analysis in individual and/or population-based care as appropriate	Use externally provided information (e.g. research around a clinical forensic procedure) to inform cost-containing action and/or preliminary risk–benefit analysis.	Critically appraise information in making cost and risk–benefit decisions. Adopt strategies that decrease cost and risk, and optimize benefits for individuals and the justice system.	Integrate cost analysis into one's practice while minimizing risk and optimizing benefits for individuals and communities.

© January 2022 Royal College of Pathologists of Australasia

HA3. Advocate for patient needs – Advocate for individual patient needs in communication with the healthcare team, including in care transitions	Recognise when it is necessary to advocate for individual patient needs and develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	Advocate with the healthcare team for needs of individuals and cohorts of patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	Contribute to a culture where team members value and advocate for patient needs in providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
TL4. Working with respect – work respectfully and resolve conflicts in the team towards better patient outcomes	Recognise and respect the diversity of team member perspectives on clinical situations and their expert decisions.	Respond to team members with respect and appropriate assertiveness. Engage in respectful negotiations to optimise care.	Resolve potential conflicts in a manner that supports a collaborative culture and better patient outcomes.
TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities, and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.

EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc.) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.

© January 2022 Royal College of Pathologists of Australasia

Clinical Forensic Medicine EPA 3 - Forensic Medical Examination of Alleged Perpetrator

EPA identification code: **EPA 3**	**Recommended training sites for entrustment:** **CFMUs** **Custodial Medicine Services**
EPA title	**Forensic Medical Examination of Alleged Perpetrator (Sex and Non-sex Offence; Child/Adolescent/Adult)**
Specification and any limitations (maximum 150 words)	A Clinical Forensic Physician entering unsupervised practice is able to conduct a forensic medical examination of an alleged perpetrator (child, adolescent, adult) in relation to any police investigation, and report on this examination. This includes ability to: • Perform forensic medical examination of an alleged perpetrator that meets ethical obligations, legal requirements and the needs of investigators. • Work in accordance with the relevant legislation and ethical instruments with respect to forensic examination of alleged perpetrators in particular, relating to minors and other vulnerable groups. • Perform a high standard of physical examination to identify injury and other evidence • Collect appropriate forensic samples in a manner that that safeguards the potential use of results in court (including minimising DNA contamination and safe guarding chain of custody) • Produce high quality documentation (including photography) that meets ethical obligations, legal requirements and the needs of investigators. • Acknowledging the needs of the legal system and • Formulate an opinion succinctly and accurately for investigators • Identify and advise investigators in relation to potential evidentiary issues • Provide appropriate triage regarding clinical problems to ensure a high standard of medical care from a suitably trained professional at an appropriate facility at an appropriate time. • Practice evidence-based forensic medicine
Key Competencies and sub-competencies related to this EPA* **there are no unique sub-competencies to this EPA*	FS1, FS2, FS3, FS5 EC-1, EC2, EC3, EC4, EC5 ML1, ML3 CM1, CM2.1, CM2.4, CM2.5, CM3.1, CM3.2, CM4, CM5 CC2 HA3 TL2, TL3, TL4, TL6 EP1, EP3, EP4, EP6, EP7 QM1, QM2, QM4, QM5 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills

Required knowledge, Skills and behaviour	*Knowledge of:* • Ethics related to the interface between medicine, ethics, and the law. • Legislation related to police investigation and consent to/judicial orders for forensic medical procedures including special consideration with respect to child/adolescent alleged perpetrator • Dual role and responsibilities of the Clinical Forensic Physician • Pathophysiology of injury • The role of forensic evidence in criminal investigations • Forensic toxicology • Medical issues related to crimes against the person, including sexual violence • Offender demographics • *Doli incapax* • Evidence-based forensic medicine *Skills in:* • Respectful and culturally competent communication • The assessment of capacity to consent • Prioritising health needs • Documentation, including photography • Injury interpretation • Evidence collection • Identifying potential evidentiary issues for investigators • Minimising DNA contamination • Analysing practice and using evidence to improve forensic practice • Working with other forensic professional and healthcare groups *Attitudes/ behaviour:* • Responds promptly to requests and enquiries • Respectful approach to, and demonstrated courtesy towards patient/alleged perpetrators and other professionals • Recognises dual role of forensic physician, responsibilities and limitations • Demonstrates an impartial and objective approach to the forensic evaluation of alleged perpetrator • Demonstrates ability to handle complex ethical situations when appropriate • Demonstrates a desire for high professional standards
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer.

	• Payne-James, J, Busuttil, A. & Smock, W (Eds) (2003). *Forensic medicine: Clinical and pathological aspects*. California, USA: Greenwich Medical Media. • Gall, J.A.M., & J Payne-James (Eds) (2010). *Current practice in forensic medicine* (1st ed.). Wiley. • Gall, J.A.M., & Payne-James (Eds) (2016). *Current practice in forensic medicine* (2nd ed.). Wiley. • Byard, R., & Payne-James, J. (Eds) (2015). *Encyclopedia of forensic and legal medicine* (2nd ed.). Elsevier. • DiMaio, V.J. & DiMaio, D. (2001). *Forensic pathology* (2nd ed.). CRC Press. • Dolinak, D., Matshes, E. & Lew, E. (2005). *Forensic Pathology: Principles and practice*. Elsevier Academic Press. • Saukko, P., & Knight, B. (2015). *Knight's forensic pathology* (4th ed.). CRC Press. • Baselt, R.C. (Ed.) (2014). *Disposition of toxic drugs and chemicals in man* (10th ed.). California: Biomedical Publications. • Drummer, O.H. (2001). *The forensic pharmacology of drugs of abuse*. Arnold Publishers. • Gunn, A (2009). *Essential forensic biology* (2nd ed.). Wiley-Blackwell. <u>Journals</u> • Journal of Forensic and Legal Medicine • American Journal of Forensic Medicine and Pathology • Australian Journal of Forensic Sciences • International Journal of Legal Medicine • Journal of Forensic Sciences • Forensic Pathology Reviews • Forensic Science International • Forensic Science Medicine and Pathology • Science and Justice • Medicine Science and the Law • Journal of Analytical Toxicology <u>Guidelines/Protocols</u> • Faculty of Forensic and Legal Medicine (UK) (https://fflm.ac.uk/). <u>Legislation and Ethics instruments</u> • Australasian Legal Information Institute (http://www.austlii.edu.au/) • UN Convention on Rights of Child • UN Declaration of Human Rights

Recommended learning activities	Conferences, workshops and seminars Webinars and CDROMS, podcasts Self-directed learning; texts, journals. Web-based references such as UpToDate and Medscape Case based discussions Peer review programs Case conferences Read medico-legal reports written by experts Observe others provide testimony in court
Case load for summative entrustment decision	All trainees are expected to complete a minimum of 10 cases to be considered for summative entrustment. It is recommended that trainees whose primary training site offers services related to this EPA routinely complete a minimum of 20 cases.
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Estimated stage of training for entrustment	L4 entrustment by end of year 2 full time equivalent where primary training site offers services related to this EPA; by end of year 4 otherwise.

EPA 3 Forensic Medical Examination of Suspect Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
FS1. Injury interpretation - Apply knowledge of pathology of trauma	Recognise and interpret basic injuries and injury patterns with a thorough	Interpret and evaluate complex injury patterns in limited forensic situations.	Interpret and evaluate complex injury patterns in varied forensic situations

in interpretation of injury (including genital)	understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH)	Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re legal definitions	including deceased persons, advises others on correct interpretation in peer review
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly as per rules and using appropriate terminology	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records)
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site (e.g. semen positive swabs from genitalia), identify possible contamination
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and clothing) with other health/legal professionals	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and ensure patient safety, prevention of contamination and chain of custody	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/ rectify/ advise regarding possible compromise in patient safety, collection and handling of evidence
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health

the police to manage healthcare concerns of persons in custody	against police/ custodians. Understand relevant police/custodian procedures (i.e. communication, monitoring, protocols).	to requests to improve healthcare provision, address complaints against police/ custodians sensitively and effectively.	care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms, medical/legal vocabulary of forensic medicine.	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify problematic /less than ideal/ ambiguous documentation by others.
EC5. Handover communication - Communicate effectively with other healthcare professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, drugs & poisons, child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.

© January 2022 Royal College of Pathologists of Australasia

CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations.	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour).	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.
CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM2.5. Public health - Manage public health issues in forensic settings	Advise and support individuals on disease prevention (e.g. prophylaxis) and health promotion.	Support individuals for disease prevention, health promotion with an understanding of wider systems. Recognise and take responsibility for situations where public health supersedes individual health.	Manage public health implications for individuals and communities effectively in forensic settings and wider systems.
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that defines victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM3.2. Forensic procedures - Perform and interpret non-invasive procedures and/or testing for forensic medical assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures and testing and recognise high risk states in forensic settings (e.g. sexual assault).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM4. Prioritize care - Prioritize health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.

© January 2022 Royal College of Pathologists of Australasia

CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination with cultural sensitivity, compassion and empathy.	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
HA3. Advocate for patient needs – Advocate for individual patient needs in communication with the healthcare team, including in care transitions	Recognise when it is necessary to advocate for individual patient needs and develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	Advocate with the healthcare team for needs of individuals and cohorts of patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	Contribute to a culture where team members value and advocate for patient needs in providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc.).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
TL4. Working with respect – work respectfully and resolve conflicts in the team towards better patient outcomes	Recognise and respect the diversity of team member perspectives on clinical situations and their expert decisions.	Respond to team members with respect and appropriate assertiveness. Engage in respectful negotiations to optimise care.	Resolve potential conflicts in a manner that supports a collaborative culture and better patient outcomes.

© January 2022 Royal College of Pathologists of Australasia

TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities, and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.

© January 2022 Royal College of Pathologists of Australasia

QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek feedback, and manage clinical forensic tasks appropriately	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences.	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible).	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports.	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.

© January 2022 Royal College of Pathologists of Australasia

Clinical Forensic Medicine EPA 4 – Assessment of suspected abuse/neglect in forensic settings

EPA identification code: **EPA 4**	**Recommended training sites for entrustment:** **CFMUs** **Sexual assault services providing domestic violence services** **Paediatric Forensic Services,** **Custodial Medicine Services**
EPA title	**Assessment of suspected abuse/neglect in forensic settings**
Specification and any limitations (maximum 150 words)	Across the diverse areas of practice, a Clinical Forensic Physician entering unsupervised practice is able to identify, forensically assess and appropriately respond to suspected neglect/abuse of a person. This includes the ability to: • Recognise those at risk of neglect/abuse such as children, the elderly, those with physical disabilities, intellectual impairment, mental illness, refugees in both complainant and suspect/custodial settings. • Liaise with other professionals and care providers to obtain additional information necessary in the assessment of abuse and neglect. • Recognise physical signs of neglect/abuse (injury and non-injury) • Assessment of environment in which neglect/abuse of a person is identified. • Recognise the necessity to report to authorities and understand relevant processes and legal requirements • Produce high quality documentation and comprehensive reports to summarise evidence • Triage healthcare problems to ensure a high standard of medical care from a suitably trained professional at an appropriate facility at an appropriate time • Advocate for those at risk of neglect/abuse to optimise safety and health care • Communicate effectively with health professionals, police and prison staff • Understand the health care implications of neglect/abuse
Key Competencies and sub competencies related to this EPA* **there are no unique sub-competencies to this EPA*	Competencies relating to EPAs 1,2,3 and 6 are also required for EPA 4: FS1, FS2, FS5 EC1, EC2, EC3, EC4 ML1, ML3 CC1, CC2 CM1, CM2.1, CM2.2, CM2.4, CM2.5, CM3.1, CM3.2, CM4, CM5 QM1, QM2, QM3, QM4, QM5, QM6 HA1, HA2, HA3 TL1, TL2, TL3, TL4, TL6 EP1, EP2, EP3, EP4, EP6, EP7 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills

	TS2
Required knowledge, skills and behaviour	*The following are applicable to both complainant and alleged perpetrator/custodial settings unless otherwise specified:* *Knowledge of:* • Legislation related to crimes against the person of a non-sexual nature, elder abuse/neglect, guardianship and administration, consent to forensic medical procedures and the operation of the child protection system • The role of forensic evidence in criminal investigations • Role and responsibilities of the Clinical Forensic Physician • Medical issues related to neglect and abuse • The principles of trauma informed care • Pathophysiology of injury and healing • Interpretation of injury patterns relating to neglect, abuse, torture (e.g. torture, ligature marks) • Other findings associated with neglect (e.g. nutritional deficiencies, bed sores, poor hygiene, infestations, animal/insect/rodent related trauma) • Epidemiology of accidental injury - across the age spectrum • Epidemiology of injury caused by assault (including child and elder abuse) – across the age spectrum • Investigations and strategies used to differentiate injury caused by accidents from injury caused by abuse and neglect and medical conditions that mimic injury • Investigative interviewing • Forensic toxicology • Demographics of groups at risk of neglect/abuse • Child growth and development • Ageing and cognitive decline • The structure and operation of protective systems • Evidence-based medicine • Health advocacy • Public health implications and illness prevention *Skills:* • Demonstrate respectful and culturally competent communication • Communication with people with a disability • Assess capacity to consent and cognitive functioning • Obtain consent from the appropriate individual or organisation • Prioritise needs and time • Conduct forensic assessment for neglect/abuse • Document to a high standard suitable for use in court, including photo-documentation • Interpret cause and timing of injury

© January 2022 Royal College of Pathologists of Australasia

	• Collect and collate evidence from various sources • Assess and treat medical needs • Assess for domestic squalor • Analyse practice and use evidence to improve forensic practice • Work with other healthcare professionals and forensic professional groups • Advocate for healthcare and safety *Attitudes/ behaviour:* • A respectful approach to, and demonstrated courtesy towards, children, adolescents and adults and their care-givers • A respectful approach to, and demonstrated courtesy towards, other professionals • Willingness to recognise own role, responsibilities and limitations • An impartial and objective approach to the evaluation of suspected neglect and abuse • A prompt response to requests and enquiries • A desire to provide safety and healthcare that could improve the quality of life for the complainant • A desire for high professional standards, quality performance, continuous improvement, and participates in QA and audit processes
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer. • Jenny, C. (Ed.) (2011). *Child abuse and neglect: Diagnosis, treatment, and evidence*. Missouri, USA: Elsevier, Saunders. • Busuttil, A. & Keeling, J.W. (Eds.) (2009). *Paediatric Forensic Medicine & Pathology* (2nd ed.). Hodder Arnold. • Chadwick, D.L, Alexander, R., Giardino, A.P., Esernio-Jenssen, D, & Thackeray, J.D (Eds.) (2014). *Chadwick's child maltreatment: Physical abuse and neglect.* Whaley & Whaley. • Finkelhor, D. (2009). *Childhood victimization: Violence, crime, and abuse in the lives of young people.* Oxford Publications. <u>Journals</u> • Journal of Forensic and Legal Medicine • Journal of Elder Abuse and Neglect • The Child Abuse Quarterly Update • Child Abuse & Neglect - The International Journal • Child Maltreatment (Journal of American Professional Society on the Abuse of Children) • International Journal of Legal Medicine <u>NB Trainees must be well informed about:</u>

	• Legislation (in relation to crimes, medical records, healthcare, mental health care, consent, medical negligence, presentation of evidence in the legal system and end of life) • Local procedural guidelines in relation to forensic procedures, engagement with police and the operation of the child protection system • Organisational policies and procedures • Position statements (local) • Policies, procedures and guidelines of colleges other than RCPA in relation to evaluation of complainants of crimes against a person of a non-sexual nature
Recommended learning activities	Training course in the recognition and response to neglect/abuse Unit of postgraduate study in child abuse (minimum of one unit related to forensic evaluation of childhood injury), elder abuse, investigative interviewing Attend conferences, workshops and seminars Use Webinars and CDROMS, podcasts Self-directed learning – read books and journals. Use web-based references such as UpToDate and Medscape Record cases in a log book – with exercises for reflective re practice and identification of new understandings Complete case based discussions Attend and present cases at peer review meetings and programs Attend and contribute to case conferences Read medico-legal reports written by experts Observe others provide testimony in court
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	All trainees are expected to demonstrate competencies in identifying and responding to a minimum of 10 suspected cases of neglect/abuse in either a complainant or suspect/custodial setting for summative entrustment.
Estimated stage of training for entrustment	Level 4 (unsupervised) for most routine assessments in second year of full time training with increasing expertise anticipated during the remaining 2 to 3 years Level 5 (teaching others) by the end of advanced training

EPA 4 Assessment of Suspected Abuse/Neglect in Forensic Settings Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
FS1. Injury interpretation - Apply knowledge of pathology of trauma in interpretation of injury (including genital injury)	Recognise and interpret basic injuries and injury patterns with a thorough understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH).	Interpret and evaluate complex injury patterns in limited forensic situations. Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re legal definitions.	Interpret and evaluate complex injury patterns in varied forensic situations including deceased persons, advises others on correct interpretation in peer review.
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly using general principles and appropriate terminology.	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner.	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records).
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and clothing) with other health/legal professionals	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence.	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and ensure patient safety, prevention of contamination and chain of custody.	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/ rectify/ advise regarding possible compromise in patient safety, collection and handling of evidence.
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.

© January 2022 Royal College of Pathologists of Australasia

ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, Drugs & Poisons, Child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to manage healthcare concerns of persons in custody	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody against police/ custodians. Understand relevant police/custodian procedures (i.e. communication, monitoring, protocols).	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision, address complaints against police/custodians sensitively and effectively.	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms,	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify ambiguous documentation by others.

© January 2022 Royal College of Pathologists of Australasia

	medical/legal vocabulary of forensic medicine.		
CC1. Respect for diversity - Work effectively and respectfully with people of different cultural backgrounds (incl. aboriginal, Torres Strait Islander and Māori peoples) with cultural humility and awareness of cultural diversity	Acknowledge the range of backgrounds and cultures of complainants and suspects and the role of this diversity in effectiveness of the health care system. Recognise issues relating to health inequities and inequalities.	Integrate perspectives on cultural diversity and health inequities and inequalities appropriately in developing effective and culturally respectful care plans. Reflect patient differences and views in respectful communication with the patient and the healthcare team.	Engage in culturally sensitive shared decision-making with the individual and the healthcare team. Ensure that health inequities and inequalities are addressed and mitigated. Promote a culture of respect for diversity among other professionals in forensic settings.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting.	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination, and with cultural sensitivity, compassion and empathy	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations.	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour).	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.
CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.2. Clinical procedures - Perform and interpret non-invasive procedures and/or testing related to healthcare assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures /testing and recognise high risk states in forensic settings (e.g. STI, mental health).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM2.5. Public health - Manage public health issues in forensic settings	Advise and support individuals on disease prevention (e.g. prophylaxis) and health promotion.	Support individuals for disease prevention, health promotion with an understanding of wider systems.	Manage public health implications for individuals and communities effectively in forensic settings and wider systems.

© January 2022 Royal College of Pathologists of Australasia

		Recognise and take responsibility for situations where public health supersedes individual health.	
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that define victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM3.2. Forensic procedures - Perform and interpret non-invasive procedures and/or testing for forensic medical assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures and testing and recognise high risk states in forensic settings (e.g. sexual assault).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM4. Prioritise care - Prioritise health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences.	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently.

feedback, and manage clinical forensic tasks appropriately		approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible).	
QM3. Evidence-based quality improvement - Systematically analyse practice and implement/ advocate for evidence-based changes towards quality of a forensic service	Use strategies for reflection on clinical practice when encountering opportunities during casework. Identify the needs for quality review in health care and health care systems.	Engage in opportunities and methods for quality improvement based on reflection on both individuals and populations in clinical practice. Promote quality health care in own service.	Engage in continuous quality improvement activities efficiently. Use one's own successes to advocate for a culture that promote quality health care and optimal health care systems.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
QM6. Risk–benefit analysis - Incorporate considerations of cost awareness and risk–benefit analysis in individual and/or population-based care as appropriate	Use externally provided information (e.g. research around a clinical forensic procedure) to inform cost-containing action and/or preliminary risk–benefit analysis.	Critically appraise information in making cost and risk–benefit decisions. Adopt strategies that decrease cost and risk, and optimize benefits for individuals and the justice system.	Integrate cost analysis into one's practice while minimizing risk and optimizing benefits for individuals and communities.
HA1. Advocate for justice - Articulate the social and political implications of crime and support justice	Recognise the social and political implications of crime and its application to practice of clinical forensic medicine.	Articulate the social and political implications of crime to legal/ police officers and public, analyse current policy.	Contribute to policy discussions on the social and political implication of crime.

HA2. Advocate for vulnerable populations - advocate for health promotion and the prevention of disease and injury in vulnerable populations	Apply principles of health promotion and disease prevention to identify the health needs of vulnerable populations.	Appraise available resources and partner with others in planning and service provision for health promotion and disease prevention in vulnerable populations.	Lead the implementation of health promotion and disease prevention programs and collaborate with others to improve the health of vulnerable populations.
HA3. Advocate for patient needs – Advocate for individual patient needs in communication with the healthcare team, including in care transitions	Recognise when it is necessary to advocate for individual patient needs and develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	Advocate with the healthcare team for needs of individuals and cohorts of patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	Contribute to a culture where team members value and advocate for patient needs in providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.

© January 2022 Royal College of Pathologists of Australasia

TL4. Working with respect – work respectfully and resolve conflicts in the team towards better patient outcomes	Recognise and respect the diversity of team member perspectives on clinical situations and their expert decisions.	Respond to team members with respect and appropriate assertiveness. Engage in respectful negotiations to optimise care.	Resolve potential conflicts in a manner that supports a collaborative culture and better patient outcomes.
TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities, and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc.) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP2. Ethical issues in training - appropriately respond to ethical issues encountered in varied academic and clinical practice contexts as a trainee	Recognise core ethical concepts to address ethical issues encountered in clinical and academic activities.	Manage ethical issues encountered in the clinical and academic setting appropriately.	Recognise and respond to ethical issues encountered in independent practice. Advise others on complex ethical issues.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.

EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.
TS2. Educating the public - Educate and/ or convey technical information to the public	Communicate at a level and in a manner appropriate for familiar audiences, understand the norms of communicating with the public, understand legal limitations to information sharing and communicating re: sub-judicial matters.	Communicate at a level and in a manner that can be comprehended by most audiences, promote an understanding of the subject.	Communicate at a level and in a manner that can be comprehended by the audience being addressed, promote a deep understanding and discussion.

© January 2022 Royal College of Pathologists of Australasia

Clinical Forensic Medicine EPA 5 - Fitness for Interview Assessment

EPA identification code: **EPA 5**	**Recommended training sites for entrustment:** **CFMUs** **Custodial Medicine Services**
EPA title	**Fitness for Interview Assessment of Persons Involved in the Legal System (all ages)**
Specification and any limitations (maximum 150 words)	Clinical Forensic Physicians entering unsupervised practice are able to: • Assess prospective interviewees of all ages in the legal system for fitness to be interviewed • Appraise the social, cultural, medical, psychiatric, cognitive/intellectual, legal and toxicological factors of the person in such assessments • Recognise the special considerations involved with interview of child and adolescent interviewees. • Following the assessment, provide an opinion to the relevant authorities (including police) regarding the person's suitability or otherwise for interview and advise regarding the disposition of the person • Assess a witness or defendant at court who claims to have an acute medical or other reason for not being able to participate in proceedings • Following the examination, give written or verbal evidence to the court regarding the fitness of the person to attend a legal hearing.
Key Competencies and sub-competencies related to this EPA* **there are no unique sub-competencies to this EPA*	CM1, CM2.1, CM2.4, CM3.1, CM4, CM5 ML1, ML2, ML3, ML4, ML5 EP1, EP3, EP4, EP5, EP6, EP7 EC1, EC2, EC3, EC5 CC1, CC2 TL3, TL6 HA3 QM1 IM1, IM2 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills
Required knowledge, skills and behaviour	*Core knowledge of:* • Psychology of interviews • Processes of interview • Jurisdictional legal processes and procedures involving interviews • Medical and other conditions affecting fitness • Ethical, legal and medical responsibilities in acute forensic setting

	• Jurisdictional custodial and supervisory policies e.g. use of independent third persons • Legislation, policies and procedures in relation to child and adolescent detainees • Differences between adult and adolescent/youth offending behaviour • Developmental aspects of forensic mental health *Skills:* • History taking • Interviewing • Use of interpreters • Obtain consent • Administering assessment tools such as MMSE, drug/alcohol withdrawal scores • General medical examinations • Mental state examination including ability to detect cognitive/intellectual disability • Assessment of suicidality • Assessment of drug and alcohol effects including withdrawal • Liaison with medical, social, and mental health workers, family members • Presenting succinct verbal (and/or written) opinions in acute setting *Attitudes/ behaviour:* • Establishing rapport with detainees • Treating detainees with respect • Liaison with police and courts
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Norfolk, G.A. (1997). 'Fitness to be interviewed' a proposed definition and scheme of examination. *Medicine, Science and the Law, 37(3),* 228-34. • Gall, J.A.M., & Freckleton, I. (1999). Fitness for interview: current trends, views and an approach to the assessment procedure. *Journal of Clinical Forensic Medicine, 6(4)*, 213-223. • Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer. • Payne-James, J, Busuttil, A. & Smock, W (Eds) (2003). *Forensic medicine: Clinical and pathological aspects*. California, USA: Greenwich Medical Media. • Gall, J.A.M., & J Payne-James (Eds) (2010). *Current practice in forensic medicine* (1st ed.). Wiley. • Gall, J.A.M., & Payne-James (Eds) (2016). *Current practice in forensic medicine* (2nd ed.). Wiley. • Byard, R., & Payne-James, J. (Eds) (2015). *Encyclopedia of forensic and legal medicine* (2nd ed.). Elsevier.

Recommended learning activities	Familiarity with literature on the subject. Observation of assessments by experienced physicians. Work based consultation on cases when seeing them in the field. Discussions at peer review meetings.
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	10 cases including at least one where FFI assessment evidence has been examined in court.
Estimated stage of training for entrustment	L4 entrustment by end of year 2 full time equivalent where primary training site offers services related to this EPA; by end of year 4 otherwise. Ad hoc entrustment permissible if necessary.

EPA 5 Fitness for Interview Assessment Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** *what is required for summative entrustment of EPAs and necessary to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations.	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour).	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.

CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that define victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM4. Prioritise care - Prioritise health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.

© January 2022 Royal College of Pathologists of Australasia

ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethical forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, drugs & Poisons, child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.
ML4. Giving an oral opinion – Communicate evidence in legal contexts effectively	Use accurate and proper English language and presentation skills at a standard appropriate for a healthcare professional.	Efficiently use specialised medicolegal vocabulary of CFM and accurate terms (anatomical/physiological/pathological). Accurately explain technical issues in court to lawyers, judicial officers and lay juries.	Synthesise and explain complex medical and technical concepts clearly and succinctly as a standard appropriate for an expert witness. Effectively use communication aids (e.g. diagrams, images, models) at court.
ML5. Medicolegal evidence – Apply knowledge of legal process to present factual evidence as a health professional in legal contexts	Identify the legal process, court procedures, roles of healthcare and legal officers, and structure and purpose of medico legal evidence. Give coherent and logical factual evidence at court.	Distinguish between the need for factual and expert evidence and give coherent and logical factual and limited opinion evidence at court.	Give coherent, appropriate and logical medicolegal evidence in varied legal contexts and for complex scenarios.

© January 2022 Royal College of Pathologists of Australasia

EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc.) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EP5. Evidence ethics - apply an understanding of the ethical obligations as an expert to the court in oral testimony situations as well as in providing an expert opinion	Recognise ethical principles on expert evidence (confidentiality, conflicts of interest, need for objectivity, remain within scope of expertise, request relevant information, sub-judicial issues etc.).	Maintain objectivity with professional disinterest in the legal outcome, without being influenced by potential outcomes or fiscal reward. Take appropriate action in potential conflict of interest situations; refer requests outside expertise appropriately.	Exhibit appropriate ethical behaviours in complex situations when providing expert evidence. Advise others on ethical issues around expert evidence during peer review.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.

© January 2022 Royal College of Pathologists of Australasia

EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC2. Communication with justice system - Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to manage healthcare concerns of persons in custody	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody against police/ custodians. Understand relevant police/ custodian procedures (i.e. communication, monitoring, protocols).	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision, address complaints against police/ custodians sensitively and effectively.	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
EC5. Handover communication - Communicate effectively with other healthcare	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse

professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.
CC1. Respect for diversity - Work effectively and respectfully with people of different cultural backgrounds (incl. aboriginal, Torres Strait Islander and Māori peoples) with cultural humility and awareness of cultural diversity	Acknowledge the range of backgrounds and cultures of complainants and suspects and the role of this diversity in effectiveness of the health care system. Recognise issues relating to health inequities and inequalities.	Integrate perspectives on cultural diversity and health inequities and inequalities appropriately in developing effective and culturally respectful care plans. Reflect patient differences and views in respectful communication with the patient and the healthcare team.	Engage in culturally sensitive shared decision-making with the individual and the healthcare team. Ensure that health inequities and inequalities are addressed and mitigated. Promote a culture of respect for diversity among other professionals in forensic settings.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting.	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination, and with cultural sensitivity, compassion and empathy.	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.

© January 2022 Royal College of Pathologists of Australasia

TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities, and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
HA3. Advocate for patient needs – Advocate for individual patient needs in communication with the healthcare team, including in care transitions	Recognise when it is necessary to advocate for individual patient needs and develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	Advocate with the healthcare team for needs of individuals and cohorts of patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	Contribute to a culture where team members value and advocate for patient needs in providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
IM1. Effective information flow - Facilitate secure and effective information flow including electronic health records	Organise information as per record keeping and information management guidelines in clinical forensic medicine and in local settings. Adapt use of the health record to the clinical context.	Document and share information to enhance personalised care and support justice. Adapt use of the health record to the patient's health literacy. Ensure patient confidentiality in information transfer.	Map information flow in the care of patients and suggest process changes for quality improvement. Review patient safety incidents involving suboptimal written, verbal, or electronic communication.
IM2. Handover information - Facilitate effective transitions of care including clinical handover using information technology	Understand the risks of incomplete documentation and information exchange, identify cognitive aids to use.	Share information through information technology to effectively co-ordinate inter-professional care in care transitions.	Analyse information exchange in care transfers at peer review, contribute to improvements in the use of information technology in handover.

Clinical Forensic Medicine EPA 6 - Healthcare assessment and provision in forensic settings

EPA identification code: **EPA 6**	**Recommended training sites for entrustment:** **Sexual Assault Services** **CFMUs** **Custodial Health Services** **Paediatric Forensic Services**
EPA title	**Healthcare assessment and provision in forensic settings**
EPA description	Across the diverse areas of practice, a Clinical Forensic Physician entering unsupervised practice is able to: • Provide healthcare in both an acute and ongoing basis to complainants and those in police custody and prisons, across the broad range of offences including interpersonal violence, sexual, drug and traffic offences. • Understand the demographics of the population with whom they are working, • Identify the particular health problems that are related to victimisation, social disadvantage and incarceration. • Work within operational frameworks and recognise the barriers to high quality clinical practice. • Advocate for best-practice medical care, health promotion and disease prevention • Communicate effectively with police, prison staff and health staff to achieve patient safety and high-quality care.
Key Competencies and their sub-competencies related to this EPA*	CM1, CM2.1, CM 2.2, CM 2.3*, CM 2.4, CM 2.5, CM4, CM5 ML1 EC1, EC3, EC4, EC5 QM1, QM5 HA2, HA3 EP7 TL1, TL6, TL7 IM1, IM2 LL3 CC1, CC2 *CM2.3 is unique to this EPA CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills
Required knowledge, skills and behaviour	*The following are applicable to both complainants and those in custodial settings unless otherwise specified:* *Knowledge of:* Management of acute drug/alcohol intoxication and withdrawal, acute and chronic mental illness and medical conditions

	Management of infectious disease and public health implications Relevant legislation and legal/ethical requirements in relation to patient confidentiality and consent, police/corrective service powers, mental health provisions, obligations to report. *Skills in:* Conducting a healthcare assessment, appropriately prioritising and managing identified issues Telephone consultation and provision of advice to nurses and police Appropriate triage and management of medical emergencies Primary care assessment and triage of acute and chronic mental health issues Monitoring and managing chronic medical conditions in custodial setting (e.g. diabetes) Assessment and management of drug/alcohol affected patients and patients in drug/alcohol withdrawal Assessment and management of acute injuries (including strangulation) Assessing risk for sexually transmitted infection in sex offence complainants, providing appropriate prophylaxis and treatment, and considering public health implications Accurate clinical documentation and confidential record management Communicating with police, solicitors, courts and other healthcare providers about health issues Assessing capacity to consent to examination Performing court-ordered prisoner disease tests (Qld) Conducting court-ordered prisoner fitness for custody/fitness to plead assessments Conducting court-ordered prisoner mental health assessments Responding to a prisoner complaint against police Health advocacy; disease prevention strategies *Attitudes/behaviour:* Awareness/acknowledgement of conflicting roles of healthcare provider/s, investigating police and custodians Understand the need to appropriately prioritise healthcare over forensic issues when necessary Understanding the effect of custody upon detainee ‘illness behaviour’; vulnerability, motivation etc. Separation of therapeutic and forensic role in patient consultations Awareness of need to balance confidentiality and duty of care

© January 2022 Royal College of Pathologists of Australasia

	Understanding the effect of violence upon a complainant's illness behaviour; ability to disclose symptoms, shame etc. Ethical obligations relating to separation of medical forensic and therapeutic role Recognition of authority of police custodian with respect to safety in custodial environment Recognition of challenges associated with telephone consultations Understand the importance of effective appropriate communication with other healthcare providers, investigating police and custodians Advocating for quality patient care
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Australian Institute of Health and Welfare (2015). *The health of Australia's prisoners.* Cat. no. PHE 207. Canberra: AIHW. Canberra: Australian Institute of Health and Welfare. • Murtagh, J. (2015). *John Murtagh's General Practice* (6th ed). North Ryde: McGraw-Hill Education. <u>Journal articles</u> • Hampton, S. et al., (2015). Prescribing for people in custody. *Australian Prescriber,* 38(5), 33-44. <u>Online Resource</u> • National Institute for Health and Care Excellence, 2016. *Physical health of people in prison*. Retrieved from https://pathways.nice.org.uk/pathways/health-of-people-in-the-criminal-justice-system.
Recommended learning activities	Case discussions Peer review Multidisciplinary meetings Clinical exposure/placements with emergency department, alcohol/drug services, mental health facilities Attending relevant educational seminars
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	*Complainants:*

	All trainees are expected to complete a minimum of 15 cases providing health care to a complainant to be considered for summative entrustment. It is recommended that trainees whose primary training site offer services related to this EPA routinely complete a minimum of 30 complainant cases *Custodial setting:* All trainees are expected to complete a minimum of 30 face-to-face custodial healthcare consultations and 30 telephone consultations to be considered for summative entrustment. It is recommended that trainees whose primary training site offer services related to this EPA routinely complete a minimum of 50 face-to-face custodial healthcare consultations and 50 telephone consultations.
Estimated stage of training for entrustment	L4 entrustment by end of year 2 full time equivalent (with ad hoc entrustment permissible if necessary)

EPA 6 Health Care Assessment and Provision in Forensic Settings Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace-based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations.	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour).	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.
CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.2. Clinical procedures - Perform and interpret non-invasive procedures and/or testing related to healthcare assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures /testing and recognise high risk states in forensic settings (e.g. STI, mental health).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM2.3. Chronic care - Manage chronic medical conditions including their treatment in forensic settings	Develop a basic and thorough management plan including essential treatments/therapies for common	Develops a tailored and holistic management plan according to patient response, including the balance of benefits	Develop a comprehensive management plan for complex or unusual cases. Develops a

	clinical presentations in forensic settings.	and side effects of treatments/therapies, and guide referral.	therapeutic alliance. Can predict potential problems arising during care.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM2.5. Public health - Manage public health issues in forensic settings	Advise and support individuals on disease prevention (e.g. prophylaxis) and health promotion.	Support individuals for disease prevention, health promotion with an understanding of wider systems. Recognise and take responsibility for situations where public health supersedes individual health.	Manage public health implications for individuals and communities effectively in forensic settings and wider systems.
CM4. Prioritise care - Prioritize health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision,	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect

manage healthcare concerns of persons in custody	against police/ custodians. Understand relevant police/custodian procedures (i.e. communication, monitoring, protocols).	address complaints against police/ custodians sensitively and effectively.	and facilitate systems to reduce this potential (i.e. access to health care).
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms, medical/legal vocabulary of forensic medicine.	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify problematic /less than ideal/ ambiguous documentation by others.
EC5. Handover communication - Communicate effectively with other healthcare professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
HA2. Advocate for vulnerable populations - advocate for health promotion and the prevention of disease and injury in vulnerable populations	Apply principles of health promotion and disease prevention to identify the health needs of vulnerable populations.	Appraise available resources and partner with others in planning and service provision for health promotion and disease prevention in vulnerable populations.	Lead the implementation of health promotion and disease prevention programs and collaborate with others to improve the health of vulnerable populations.
HA3. Advocate for patient needs – Advocate for individual patient needs	Recognise when it is necessary to advocate for individual patient needs	Advocate with the healthcare team for needs of individuals and cohorts of	Contribute to a culture where team members value and advocate for patient needs in

in communication with the healthcare team, including in care transitions	and develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
TL7. Teams and medical error – work effectively with other health professionals to mitigate medical error	Recognise the patient safety impact of inter-professional care in clinical forensic settings.	Dialogue with care team members to identify risk and prevention of medical error.	Partner with other healthcare professionals to identify, propose improvement opportunities for preventing medical error within the system.
IM1. Effective information flow - Facilitate secure and effective information flow including electronic health records	Organise information as per record keeping and information management guidelines in clinical forensic medicine and in local settings. Adapt use of the health record to the clinical context.	Document and share information to enhance personalised care and support justice. Adapt use of the health record to the patient's health literacy. Ensure patient confidentiality in information transfer.	Map information flow in the care of patients and suggest process changes for quality improvement. Review patient safety incidents involving suboptimal written, verbal, or electronic communication.
IM2. Handover information - Facilitate effective transitions of care including clinical handover using information technology	Understand the risks of incomplete documentation and information exchange, identify cognitive aids to use.	Share information through information technology to effectively co-ordinate inter-professional care in care transitions.	Analyse information exchange in care transfers at peer review, contribute to improvements in the use of information technology in handover.

© January 2022 Royal College of Pathologists of Australasia

LL3. Feedback and self-assessment - Incorporate feedback and self-assessment into learning and daily practice	Respond to others' point of view and incorporate feedback to regulate own actions.	Actively seek feedback, incorporate multiple feedback sources and insight on own actions in order to self-regulate and develop plans for improvement.	Engage in deliberate practice efficiently through continuous reflection, self-regulation and feedback.
CC1. Respect for diversity - Work effectively and respectfully with people of different cultural backgrounds (incl. aboriginal, Torres Strait Islander and Māori peoples) with cultural humility and awareness of cultural diversity	Acknowledge the range of backgrounds and cultures of complainants and suspects and the role of this diversity in effectiveness of the health care system. Recognise issues relating to health inequities and inequalities.	Integrate perspectives on cultural diversity and health inequities and inequalities appropriately in developing effective and culturally respectful care plans. Reflect patient differences and views in respectful communication with the patient and the healthcare team.	Engage in culturally sensitive shared decision-making with the individual and the healthcare team. Ensure that health inequities and inequalities are addressed and mitigated. Promote a culture of respect for diversity among other professionals in forensic settings.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination with cultural sensitivity, compassion and empathy.	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.

Clinical Forensic Medicine EPA 7 - Assessment of Fitness to Drive and medically related impairment

EPA identification code: **EPA 7**	**Recommended training sites for entrustment:** **CFMUs** **Rehabilitation Medicine and older persons medicine units**
EPA title	**Medical Impairment and Fitness to Drive Assessment**
EPA description (approx. 150 words)	Clinical Forensic Physicians entering unsupervised practice are able to undertake medical impairment and fitness to drive assessments including the ability to: • Recognise the complexity of the medical and psychosocial aspects of driving and crash risk. • Distinguish the medical standards regarding fitness to drive and the responsibilities on medical practitioners with respect to fitness to drive. • Analyse the effect of medical conditions and their treatments on fitness to drive. • Provide medical consultations regarding fitness to drive considering each aspect of the complex task of driving especially in those with co-morbidities. • Apply the medical standards regarding fitness to drive in a clinical setting. • Refer to appropriate rehabilitation and assessment on road services regarding vehicle modification. • Provide a medical review based on medical records with recommendations on fitness to drive. • Provide advice to the road transport authority on fitness to drive and at and any subsequent tribunal. • Write medico-legal reports and give evidence in court regarding fitness to drive aspects of crash investigation.
Key competencies and their sub-competencies related to this EPA* **there are no unique sub-competencies unique to this EPA*	CM2.1, CM5. FS4 ML2, ML6 EP1, EP3, EP4. EC1, EC4, QM1, QM3, QM4, QM5, QM 6. TS1, TS2 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills
Required knowledge, skills and behaviour	*Core knowledge of:* • Legal obligations of medical practitioners managing patients with medical conditions affecting fitness to drive.

	• Referral sources for fitness to drive assessments. • Resources to assist assessing fitness to drive (medical specialists, driver assessment and rehabilitation services). • Medical conditions affecting driving ability and increasing crash risk. • Factors involved in minimising crash risk and application to clinical cases (conditions on licences). • Principles of pharmacology and toxicology of medications, drugs, alcohol and other substances • Principles of geriatric medicine applicable to fitness to drive • Alternative transport options. *Practical skills in:* • History taking • Interviewing • General medical examinations • Cognitive examination • Breaking bad news Presenting succinct written opinions following fitness to drive assessment, this may be based on information without clinical consultation *Attitudes/ behaviour:* • Establishing rapport with patients. • Treating patients with appropriate respect whilst considering the community road safety aspects. • Liaison with road transport authorities.
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> Odell M. Older Road Users Myths and Realities, A Guide for Medical and Legal Professionals. Lawyers and judges Publishing Company. 2009. <u>Journal articles</u> Charlton, J. L., S. Koppel, et al., (2010). Influence of chronic illness on crash involvement of motor vehicle drivers Report #300. <u>Influence of chronic illness on crash involvement of motor vehicle drivers Report #300</u>. Monash University Accident Research Centre. <u>Guidelines/Protocols</u> Austroads. Assessing Fitness to Drive for commercial and private vehicle drivers. Medical Standards for licensing and clinical management guidelines. August 2017 update <u>Legislation</u>

	As per the appendices in Austroads. Assessing Fitness to Drive for commercial and private vehicle drivers. Medical Standards for licensing and clinical management guidelines. August 2017 update.
Recommended learning activities	Familiarity with literature on the subject. Observation of assessments by experienced physicians. Work based consultation on cases when providing consultations or without clinical consultation Discussions at peer review meetings
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	5 cases. It is preferable that this includes at least one case where FTD assessment or expert opinion evidence has been examined in court
Estimated stage of training for entrustment	End of fifth FTE year of training

EPA 7 Assessment of Fitness to Drive and Medically-related Impairment Milestone Matrix			
Sub-competencies	**Foundations for CFM** **Initial training**; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid-program examination or given RPL	**Core of CFM** **During core CFM training**; supervisor-lead workplace-based learning activities and assessments with progress to entrustment to perform the EPA independently.	**Transition to Fellowship** **Exit to Fellowship;** what is required for summative entrustment of EPAs and to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program Standardised Oral exit examination
CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.

CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.
FS4. Use of forensic toxicology - Apply knowledge of forensic toxicology and drugs of abuse and related skills in formulating forensic medical opinions	Apply knowledge of forensic toxicology and drugs of abuse (including pharmacokinetics, pharmacodynamics, interactions, analytical methods) in interpreting effects of common drugs in forensic medical situations.	Accurately interpret and document the effects of illicit and therapeutic drugs and their adverse reactions, perform accurate calculations, and formulate forensic medical opinions for various settings e.g. fitness for interview, capacity to consent	Accurately interpret and document effects of common and rare illicit and therapeutic drugs and formulate complex forensic medical opinions in varied situations (e.g. likely drug dosage, tolerance), advise others in peer review.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethical forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.
ML6. Expert evidence - Apply legal knowledge and an understanding of the expert status and its limitations to present expert evidence	Identify legal principles e.g. laws of evidence, requirements of the legal body seeking opinion, professional qualifications and skills needed, and limitations of expert evidence.	Qualify him/herself as an expert witness for limited types of cases and present evidence at court in that role effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status.	Qualify him/herself as an expert witness for any appropriate forensic case (or part thereof) and present evidence at court effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status. Advise counsel about interpretation and contentious areas of opinions or evidence given by others.
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale

© January 2022 Royal College of Pathologists of Australasia

	Describe ethical principles & legal process of obtaining/ documenting informed consent.	etc.) appropriately to ensure consent requirements have been met.	for, the proposed options. Use shared decision-making in the consent process.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms, medical/legal vocabulary of forensic medicine.	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify problematic /less than ideal/ ambiguous documentation by others.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.

QM3. Evidence-based quality improvement - Systematically analyse practice and implement/ advocate for evidence-based changes towards quality of a forensic service	Use strategies for reflection on clinical practice when encountering opportunities during casework. Identify the needs for quality review in health care and health care systems.	Engage in opportunities and methods for quality improvement based on reflection on both individuals and populations in clinical practice. Promote quality health care in own service.	Engage in continuous quality improvement activities efficiently. Use one's own successes to advocate for a culture that promote quality health care and optimal health care systems.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. at journal clubs.	Incorporate clinical evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
QM6. Risk–benefit analysis - Incorporate considerations of cost awareness and risk–benefit analysis in individual and/or population-based care as appropriate	Use externally provided information (e.g. research around a clinical forensic procedure) to inform cost-containing action and/or preliminary risk–benefit analysis.	Critically appraise information in making cost and risk–benefit decisions. Adopt strategies that decrease cost and risk and optimize benefits for individuals and the justice system.	Integrate cost analysis into one's practice while minimizing risk and optimizing benefits for individuals and communities.
TS1. Teaching - Participate in the formal and informal education of a variety of stakeholders including medical/other health/ forensic science professionals and trainees, and police, lawyers and other members of the justice system	Identify learner needs and select appropriate content in routine situations, initiate a safe learning environment, use a variety of teaching strategies.	Reflect on and prioritise learner needs in different groups, maintain a safe learning environment, use appropriate content effectively through varied teaching strategies.	Ensure a safe learning environment and patient safety, prioritise learner needs in different groups and different situations, adapt and use appropriate content and teaching/feedback strategies for different educational contexts.
TS2. Educating the public - Educate and/ or convey	Communicate at a level and in a manner appropriate for familiar audiences, understand the norms of communicating with the public,	Communicate at a level and in a manner that can be comprehended by most	Communicate at a level and in a manner that can be comprehended by the audience being

technical information to the public	understand legal limitations to information sharing and communicating re: sub-judicial matters.	audiences, promote an understanding of the subject.	addressed, promote a deep understanding and discussion.

Clinical Forensic Medicine EPA 8 - Injury Assessment and Interpretation

EPA identification code: **EPA 8**	**Recommended training sites for entrustment:** **CFMUs** **SARCs** **Paediatric Forensic Services** **Custodial Medicine services**
EPA title	**Injury Assessment and Interpretation**
EPA description (approx. 150 words)	Across the diverse areas of practice, a Clinical Forensic Physician entering unsupervised practice is able to: • Evaluate all types of injuries (both internal and external) encompassing mechanism, causation, and timing. • Recognise injury and patterns of injury. • Accurately describe and document injuries (including photography) for medicolegal purposes. • Use an appropriate evidence-base for interpretation of injury and injury patterns to provide a reasonable opinion regarding injury causation, timing and circumstances of occurrence. • Interpret injury and injury patterns in scenarios where there is no offence or obvious intention to harm by others (e.g. vehicle-collisions, police restraint, falls, thermal/fire related, explosions, electrocution, mass disasters, drowning, suffocation etc.). • Understand and consider medical conditions mimicking injury. • Understand and consider effects of medical conditions and medication on injury. • Understand and advise investigators in specific injury scenarios where forensic sampling may be of value (e.g. swabbing of bite-marks, sampling after explosion-related injury). • Undertake appropriate evidential sampling for injured clients that meets health care and justice requirements. • Differentiate injuries caused by assault-related trauma from accident-related trauma (where possible). • Appropriately prioritise health care needs in relation to forensic assessment of injury. • Acknowledge effect of health care intervention when interpreting injury and injury patterns. • Work as part of an integrated multidisciplinary investigation team including legal, medical, and law enforcement personnel.
Key competencies and their sub-competencies related to this EPA*	FS1, FS2, FS3, FS5 ML1, ML2, ML3 EC1, EC2

CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills

© January 2022 Royal College of Pathologists of Australasia

**there are no sub-competencies unique to this EPA*	EP1, EP4, EP6 TL1,TL2,TL3 QM4
Required knowledge, skills and behaviour	*Core knowledge of:* • Injury types, mechanism, causation and timing • Injury patterns and likely causative scenarios • Interpretation of photographs, radiology reports and surgical documentation in relation to injury. • Understanding different appearance of injury in living and deceased. • Accident-related trauma versus assault-related trauma • Pathology of traumatic injury to all parts of body including skin, subcutaneous tissue, and internal structures (bone, brain and internal organs) • Pathology of injury healing • Legislation relating to interpersonal harm related offences and severity of injury • Criminal and civil procedures in relation to injury related harm • Epidemiology of accidental trauma across the age span • Public health implications of accidental injury *Practical skills in:* • Injury documentation (including photography) • Injury interpretation • Describing injury in medico-legal reports and oral testimony *Attitudes/behaviour:* • Appropriate prioritisation of health care needs and forensic assessment of injury • Awareness of vicarious harm and PTSD in medical legal and law enforcement personnel • Awareness of self-welfare in relation to vicarious harm and PTSD • Cultural sensitivity related to the examination of clients
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Bilo, R.A.C., Robben, S.G.F. & van Rijn, R.R. (2010). *Forensic aspects of pediatric fractures: Differentiating accidental trauma from child abuse.* Springer. • Busuttil, A. & Keeling, J.W. (Eds.) (2009). *Paediatric Forensic Medicine & Pathology* (2nd ed.). Hodder Arnold.

© January 2022 Royal College of Pathologists of Australasia

	• Byard, R., & Payne-James, J. (Eds) (2015). *Encyclopedia of forensic and legal medicine* (2nd ed.). Elsevier. • DiMaio, V.J. & DiMaio, D. (2001). *Forensic pathology* (2nd ed.). CRC Press. • Dolinak, D., Matshes, E. & Lew, E. (2005). *Forensic Pathology: Principles and practice*. Elsevier Academic Press. • Saukko, P., & Knight, B. (2004). 'The pathology of wounds'. In *Knight's forensic pathology* (pp.153-166) (3rd ed.). CRC Press. • Payne-James, J, Busuttil, A. & Smock, W (Eds) (2003). *Forensic medicine: Clinical and pathological aspects*. California, USA: Greenwich Medical Media. • Girardin, B., Faugno, D., Seneski, P.C., Slaughter, L., & Whelan, M. (1997). *Color atlas of sexual assault*. Missouri: Mosby. • Thali, M.J., Dirnhoffer, R., Vock, P. (2009). *The virtopsy approach: 3D optical and radiological scanning and reconstruction in forensic medicine.* CRC Press. • Thali, M.J., Viner, M.D., & Brogden, B.G. (2011). *Brogden's forensic radiology (2nd ed.)*. CRC Press. • Levy, D.A. & Harcke, T.H. (2011). *Essentials of forensic imaging: A text atlas.* CRC Press. • Jenny, C. (Ed.) (2011). *Child abuse and neglect: Diagnosis, treatment, and evidence*. Missouri, USA: Elsevier, Saunders. <u>Journals</u> • Journal of Forensic and Legal Medicine • American Journal of Forensic Medicine and Pathology • Forensic Pathology Reviews • Forensic Science Medicine and Pathology • Traffic Injury Prevention • Accident Analysis and Prevention • Child Maltreatment (Journal of American Professional Society on the Abuse of Children) • APSAC Advisor (American Professional Society on the Abuse of Children) • Child Abuse Review <u>Guidelines/Protocols</u> • Faculty of Forensic and Legal Medicine (UK) (https://fflm.ac.uk/).

Recommended learning activities	Observe/assist in Emergency Departments Examination of police detainees with arrest-related injuries Observe/assist with autopsy of trauma cases Complete case-based discussions Attend and present cases at peer review meetings and programs Attend and contribute to case conferences Read medico-legal reports written by experts Attend conferences, workshops and seminars Use Webinars and CDROMS, podcasts Self-directed learning – read books and journals. Use web-based references such as UpToDate and Medscape Record cases in a log book – with exercises for reflective re practice and identification of new understandings
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	All trainees are expected to demonstrate competencies in assessment and interpretation of injury in at least 30 cases in order to be considered for summative entrustment.
Estimated stage of training for entrustment	Level 4 (unsupervised) for most routine assessments in second year of full time training with increasing expertise anticipated during the remaining 2 to 3 years Level 5 (teaching others) by the end of advanced training

EPA 8 Injury Assessment and Interpretation Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid-program examination or given RPL*	***Core of CFM*** ***During core CFM training****; supervisor-lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** *what is required for summative entrustment of EPAs as well as what is needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program Standardised Oral exit examination*
FS1. Injury interpretation - Apply knowledge of pathology of trauma in interpretation of injury (including genital)	Recognise and interpret basic injuries and injury patterns with a thorough understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH).	Interpret and evaluate complex injury patterns in limited forensic situations. Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re legal definitions.	Interpret and evaluate complex injury patterns in varied forensic situations including deceased persons, advises others on correct interpretation in peer review.
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly using general principles and appropriate terminology.	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner.	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records).
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained.	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination.	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site (e.g. semen positive swabs from genitalia), identify possible contamination.
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and clothing) with other health/legal professionals	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence.	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and ensure patient safety, prevention of contamination and chain of custody.	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/ rectify/ advise regarding possible compromise in patient safety, collection and handling of evidence.

© January 2022 Royal College of Pathologists of Australasia

ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethical forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, drugs & Poisons, child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.

processes (e.g. in writing an opinion)	gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	information appropriately and in a timely and considerate manner.	
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc.) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.

© January 2022 Royal College of Pathologists of Australasia

TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.

© January 2022 Royal College of Pathologists of Australasia

Clinical Forensic Medicine EPA 9 - Clinical Toxicological Assessments

EPA identification code: **EPA 9**	**Recommended training sites for entrustment:** **CFMUs** **Paediatric Forensic services** **Drug/Alcohol service (addiction medicine, rehab etc.)** **Medical Units with traffic medicine involvement** **Hospital Toxicology Services**
EPA title	**Clinical Toxicological Assessments**
EPA description (approx. 150 words)	Across the diverse areas of practice, a Clinical Forensic Physician entering unsupervised practice is able to conduct clinical toxicological assessments in relation to complainant and alleged perpetrator examinations (adult and paediatric), traffic offences, fitness for interview assessments and custodial health care, and is able to: • Assess the effect of alcohol/drugs on a person (including when taken in combination with other substances, and the effects of withdrawal) • Assess the degree of impairment in a person (including drivers) due to alcohol/drugs, and withdrawal • Consider alternative explanations for intoxication and impairment • Assess capacity to consent • Provide opinions about effect of drugs and alcohol on behaviour of forensic interest • Recognise and manage drug and alcohol intoxication, withdrawal and overdose emergencies • Advise on and carry out collection of appropriate samples for optimal toxicological analysis • Interpret toxicology analysis reports in the context of clinical assessment
Key competencies and their sub-competencies related to this EPA* **there are no sub-competencies unique to this EPA*	CM2.1, CM 2.4, CM 3.1, CM3.2, CM4, CM5 FS3, FS4 ML2, ML6 EP1 EC1, EC3, EC4, EC5 QM1 TS1, TS2 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills

Required knowledge, skills and behaviour	*Core knowledge of:* • Principles of pharmacology and toxicology of drugs, alcohol and other substances • Principles of addiction and drug abuse • Alcohol effects, metabolism, pharmacokinetics, interactions • Detailed knowledge of commonly prescribed and abused drugs including opioids, stimulants, benzodiazepines, cannabis and prescribed psychoactive drugs • Drug interactions • Epidemiology of accidental drug poisoning/ingestion • Legislation in relation to intoxication and impairment • Drug-facilitated crime • Basic knowledge of analytical methods and their limitations and causes of uncertainly *Practical skills in:* • History taking • Interviewing • General medical examinations • Mental state examination • Assessment of drug and alcohol effects including withdrawal • Recognition and management of emergency situations involving intoxication and withdrawal • Detecting/considering behaviour involving drug diversion in custodial setting • Presenting succinct verbal opinions in acute setting • Appropriate toxicological sample collection *Attitudes/ behaviour:* • Establishing rapport with patients/detainees • Liaising with healthcare professionals and police in relation to intoxication and capacity to consent to examination and sample collection • Acknowledge needs of investigators as well as ethical obligations to patient/detainee and requirements of legal system. • Prioritising health care needs in relation to forensic assessment where necessary
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Baselt, R.C. (Ed.) (2014). *Disposition of toxic drugs and chemicals in man* (10th ed.). California: Biomedical Publications. • Karch, S.B. & Drummer, O.H. (2016). *Karch's pathology of drug abuse* (5th ed.). Florida, USA: CRC Press.

	• Payne-James, J, Busuttil, A. & Smock, W (Eds) (2003). *Forensic medicine: Clinical and pathological aspects*. California, USA: Greenwich Medical Media. • Drummer, O.H. (2001). *The forensic pharmacology of drugs of abuse*. Arnold Publishers. • Stark, M.M. (Ed) (2020). *Clinical forensic medicine: A Physician's guide* (4th ed.). Springer. Journals • Journal of Analytical Toxicology • Journal of Forensic and Legal Medicine • Forensic Science International Guidelines/Protocols Faculty of Forensic and Legal Medicine (UK) (https://fflm.ac.uk/). Legislation Australasian Legal Information Institute (http://www.austlii.edu.au/)
Recommended learning activities	Familiarity with literature on the subject. Observation of assessments by experienced physicians. Observation of police road traffic operations; emergency department patients. Work based consultation on cases when seeing subjects in the field. Discussions at peer review meetings.
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	10 cases including at least one where toxicological assessment or expert opinion evidence has been examined in court
Estimated stage of training for entrustment	Level 4 (unsupervised) for most routine assessments in second year of full time training with increasing expertise anticipated during the remaining 2 to 3 years Level 5 (teaching others) by the end of advanced training

EPA 9 Clinical Toxicological Assessment Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During core CFM training****; supervisor-lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** *what is required for summative entrustment of EPAs and to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that define victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM3.2. Forensic procedures - Perform and interpret non-invasive procedures and/or testing for forensic medical assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures and testing and recognise high risk states in forensic settings (e.g. sexual assault).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM4. Prioritise care - Prioritise health & medicolegal issues, establish goals of care in forensic settings (in forensic medical	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.

© January 2022 Royal College of Pathologists of Australasia

examination and healthcare assessment)			
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained. Accurate recording of time of sampling	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination.	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site, identify possible contamination.
FS4. Use of forensic toxicology - Apply knowledge of forensic toxicology and drugs of abuse and related skills in formulating forensic medical opinions	Apply knowledge of forensic toxicology and drugs of abuse (including pharmacokinetics, pharmacodynamics, interactions, analytical methods) in interpreting effects of common drugs in forensic medical situations.	Accurately interpret and document the effects of illicit and therapeutic drugs and their adverse reactions, perform accurate calculations, and formulate forensic medical opinions for various settings e.g. fitness for interview, capacity to consent	Accurately interpret and document effects of common and rare illicit and therapeutic drugs and formulate complex forensic medical opinions in varied situations (e.g. likely drug dosage, tolerance), advise others in peer review.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethical forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.

© January 2022 Royal College of Pathologists of Australasia

ML6. Expert evidence - Apply legal knowledge and an understanding of the expert status and its limitations to present expert evidence	Identify legal principles e.g. laws of evidence, requirements of the legal body seeking opinion, professional qualifications and skills needed, and limitations of expert evidence.	Qualify him/herself as an expert witness for limited types of cases and present evidence at court in that role effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status.	Qualify him/herself as an expert witness for any appropriate forensic case (or part thereof) and present evidence at court effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status. Advise counsel about interpretation and contentious areas of opinions or evidence given by others.
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc.) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to manage healthcare concerns of persons in custody	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody against police/ custodians. Understand relevant police/custodians procedures (i.e. communication, monitoring, protocols).	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision, address complaints against police/ custodians sensitively and effectively.	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms,	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify problematic /less than ideal/ ambiguous documentation by others.

© January 2022 Royal College of Pathologists of Australasia

	medical/legal vocabulary of forensic medicine.		
EC5. Handover communication - Communicate effectively with other healthcare professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
TS1. Teaching - Participate in the formal and informal education of a variety of stakeholders including medical/other health/ forensic science professionals and trainees, and police, lawyers and other members of the justice system	Identify learner needs and select appropriate content in routine situations, initiate a safe learning environment, use a variety of teaching strategies.	Reflect on and prioritise learner needs in different groups, maintain a safe learning environment, use appropriate content effectively through varied teaching strategies.	Ensure a safe learning environment and patient safety, prioritise learner needs in different groups and different situations, adapt and use appropriate content and teaching/feedback strategies for different educational contexts.
TS2. Educating the public - Educate and/ or convey technical information to the public	Communicate at a level and in a manner appropriate for familiar audiences, understand the norms of communicating with the public, understand legal limitations to information sharing and communicating re: sub-judicial matters.	Communicate at a level and in a manner that can be comprehended by most audiences, promote an understanding of the subject.	Communicate at a level and in a manner that can be comprehended by the audience being addressed, promote a deep understanding and discussion.

Clinical Forensic Medicine EPA 10 - Provision of Medico-legal Opinions

EPA identification code: **EPA 10**	**Recommended training sites for entrustment:** **CFMUs** **Sexual Assault Services** **Paediatric forensic services**
EPA title	**Provision of Medico-Legal Opinions**
Specification and any limitations	Clinical Forensic Physicians entering unsupervised practice are able to write expert medico-legal opinions on subjects related to the following • clinical toxicology as it applies to forensic (medico-legal) practice – in most cases this will comprise the interpretation of toxicology findings in traffic, interpersonal violence and sexual assault cases. • interpretations of medical records and results of medical examinations by other health professionals e.g. non-specialist practitioners, nurses etc. • opinions for police/prosecutors/defence/coroners based on review and analysis of evidentiary and other material e.g. police statements, medico-legal reports, medical records, photographs, video recordings, evaluation of images/CCTV and the like.
Key Competencies and sub-competencies related to this EPA* **there are no sub-competencies unique to this EPA*	EP1, EP5 ML2, ML3, ML5, ML6 EC2, EC4 QM2, QM4 TS2 TL3 LL3 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills
Required knowledge, skills and behaviour	*Knowledge of:* Trauma pathology Clinical and forensic toxicology Signs & symptoms in physical & sexual assault Legal processes, role of other professionals, local policies and legislation

	Skills in: Writing clear and grammatical English Critical appraisal of relevant research *Attitudes/behaviour*: Confidentiality of case details Ensure all relevant information sought/provided Not exceeding limits of expertise; referring appropriately Willingness to ask for help in peer review
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Legislation</u> Refer to relevant legal definitions of injury, intoxication, drug/alcohol regulations, traffic law, crimes act, etc.
Recommended learning activities	Achieve defined level of case load, clinical meetings, supervision, journal club, competency in literature review
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	All trainees are expected to complete a minimum of 15 cases with at least one from each area of clinical practice to be considered for summative entrustment.
Estimated stage of training for entrustment	L4 entrustment by end of Year 2 full-time training Full L5 entrustment by end of last year of full time training

EPA 10 Provision of Medicolegal Opinions Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace-based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral*
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Describe ethical principles & legal process of obtaining/ documenting informed consent. Understands the need for informed consent for expert opinion and release of information.	Obtain/ document informed consent, before writing opinion. Liaise with requesting entity (police, OPP etc.) to obtain informed consent.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP5. Evidence ethics - apply an understanding of the ethical obligations as an expert to the court in oral testimony situations as well as in providing an expert opinion	Recognise ethical principles on expert evidence (confidentiality, conflicts of interest, need for objectivity, remain within scope of expertise, request relevant information, sub-judicial issues etc.).	Maintain objectivity with professional disinterest in the legal outcome, without being influenced by potential outcomes or fiscal reward. Take appropriate action in potential conflict of interest situations; refer requests outside expertise appropriately.	Exhibit appropriate ethical behaviours in complex situations when providing expert evidence. Advise others on ethical issues around expert evidence during peer review.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethically sound forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.
ML3. Legal Knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.

	offences, family violence, assaults, Drugs & Poisons, Child protection etc.		
ML5. Medicolegal evidence – Apply knowledge of legal process to present factual evidence as a health professional in legal contexts	Identify the legal process, court procedures, roles of healthcare and legal officers, and structure and purpose of medico legal evidence. Give coherent and logical factual evidence at court.	Distinguish between the need for factual and expert evidence and give coherent and logical factual and limited opinion evidence at court.	Give coherent, appropriate and logical medicolegal evidence in varied legal contexts and for complex scenarios.
ML6. Expert evidence - Apply legal knowledge and an understanding of the expert status and its limitations to present expert evidence	Identify legal principles e.g. laws of evidence, requirements of the legal body seeking opinion, professional qualifications and skills needed, and limitations of expert evidence.	Qualify him/herself as an expert witness for limited types of cases and present evidence at court in that role effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend him/herself against challenges to expert status.	Qualify him/herself as an expert witness for any appropriate forensic case (or part thereof) and present evidence at court effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend him/herself against challenges to expert status. Advise counsel about interpretation and contentious areas of opinions or evidence given by others.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek feedback, and manage clinical forensic tasks appropriately	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible)	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical and health care concerns.

EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms, medical/legal vocabulary of forensic medicine	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provide salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others. Identify vague/ ambiguous documentation by others.
TS2. Educating the public - Educate and/ or convey technical information to the public	Communicate at a level and in a manner appropriate for familiar audiences, understand the norms of communicating with the public; understand legal limitations to information sharing and communicating re: sub-judicial matters.	Communicate at a level and in a manner that can be comprehended by most audiences, promote an understanding of the subject.	Communicate at a level and in a manner that can be comprehended by the audience being addressed, promote a deep understanding and discussion.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
LL3. Feedback and self-assessment - Incorporate feedback and self-assessment into learning and daily practice	Respond to others' point of view and incorporate feedback to regulate own actions.	Actively seek feedback, incorporate multiple feedback sources and insight on own actions in order to self-regulate and develop plans for improvement.	Engage in deliberate practice efficiently through continuous reflection, self-regulation and feedback.

© January 2022 Royal College of Pathologists of Australasia

Clinical Forensic Medicine EPA 11 - Medicolegal Death Investigation

EPA identification code: **EPA 11**	**Recommended training sites for entrustment:** **Forensic Pathology service** **CFMUs involved in medicolegal death investigation**
EPA title	**Medicolegal Death Investigation**
Specification and any limitations	Clinical Forensic Physicians entering unsupervised practice are able to… • Certify death at a scene • Provide external clinical assessment of a deceased person to a high standard. • Produce high quality documentation in relation to examination of a deceased person. • Recognise and analyse relevant evidentiary material at scene of death. • Provide medicolegal reports about examination findings to inform and address the requirements of the police, coronial and appropriate legal systems in relation to death investigation. • Identify issues in the cause of death with public health implications. • Review and provide opinions in relation to clinical aspects of death investigation (e.g. health care, clinical toxicology). • Practically assist Forensic Pathologists in clinically relevant aspects of death investigation at autopsy.
Key Competencies related to this EPA*	FS1, FS2, FS3, FS4, FS5 EC2 ML2, ML3 QM1, QM2, QM5 TL1, TL2, TL4 EP3 CC3* CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills * *CC3 is unique to this EPA* *Note: In addition to those listed,* ***EPA 11*** *requires similar sub-competencies (EC and CM) to* ***EPA 6 Health care in forensic settings*** *in order to perform coronial death file review*
Required knowledge, skills and behaviour	*Knowledge of:* • Occupational health and safety legislation pertaining to attendance at scenes of death. • Procedures for death scene attendance and autopsy; roles of various personnel involved • Collection of evidence and post-mortem specimens at death scenes/autopsy • Post mortem changes and factors affecting their variability • Primary health care in community, hospital and custodial settings • Relevant coronial legislation and procedures *Skills in:* • Examination of a deceased person. • Certification of death at a scene

	• Documentation of findings at examination of deceased persons and scenes of death • Interpretation of post mortem specimen analysis results • Reviewing and summarising health care records • Identifying public health implications where relevant and advising re injury or illness prevention *Attitudes/ behaviour:* • Understanding the cultural and social aspects of death and responding in a respectful manner. • Understanding limitations of expertise in providing opinions in relation to death investigation
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Saukko, P., & Knight, B. (2004). *Knight's forensic pathology* (3rd ed.). CRC Press. • Saukko, P., & Knight, B. (2015). *Knight's forensic pathology* (4th ed.). CRC Press.
Recommended learning activities	• Attending death scenes and autopsies. • Participation in multidisciplinary case conferences. • Workshop, seminar and conference attendance with relevance to death scene investigation. • Webinars and CDROMS, podcasts • Self-directed learning – reading books and journals. Web-based references such as UpToDate and Medscape • Log books – with exercises for reflection re practice and understandings • Peer review programs • Read medico-legal reports written by experts • Observe others provide testimony at coronial inquests and courts
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	At least 5 death scene attendances At least 10 Coronial/death investigation review reports
Estimated stage of training for entrustment	By end of Year 4 full time training (depending on training site and caseload)

EPA 11 Medico-Legal Death Investigation Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid-program examination or given RPL*	***Core of CFM*** ***During core CFM training****; supervisor-lead workplace-based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** *what is required for summative entrustment of EPAs as well as what is needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program Standardised Oral exit examination*
FS1. Injury interpretation - Apply knowledge of pathology of trauma in interpretation of injury (including genital)	Recognise and interpret basic injuries and injury patterns with a thorough understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH).	Interpret and evaluate complex injury patterns in limited forensic situations. Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re legal definitions.	Interpret and evaluate complex injury patterns in varied forensic situations including deceased persons, advises others on correct interpretation in peer review.
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly as per rules and using appropriate terminology.	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner.	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records).
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained.	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination.	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site (e.g. semen positive swabs from genitalia), identify possible contamination.
FS4. Use of forensic toxicology - Apply knowledge of forensic toxicology and drugs of abuse and related skills in formulating forensic medical opinions	Apply knowledge of forensic toxicology and drugs of abuse (including pharmacokinetics, pharmacodynamics, interactions, analytical methods) in interpreting effects of common drugs in forensic medical situations.	Accurately interpret and document the effects of illicit and therapeutic drugs and their adverse reactions, perform accurate calculations, and formulate forensic medical opinions for various settings e.g. fitness for interview, capacity to consent	Accurately interpret and document effects of common and rare illicit and therapeutic drugs and formulate complex forensic medical opinions in varied situations (e.g. likely drug dosage, tolerance), advise others in peer review.
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence.	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/ rectify/ advise regarding possible compromise in

clothing) with other health/legal professionals		ensure patient safety, prevention of contamination and chain of custody.	patient safety, collection and handling of evidence.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethical forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, drugs & Poisons, child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek feedback, and manage clinical forensic tasks appropriately	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences.	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible).	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently.

© January 2022 Royal College of Pathologists of Australasia

QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. at journal clubs.	Incorporate clinical evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.
TL4. Working with respect – work respectfully and resolve conflicts in the team towards better patient outcomes	Recognise and respect the diversity of team member perspectives on clinical situations and their expert decisions.	Respond to team members with respect and appropriate assertiveness. Engage in respectful negotiations to optimise care.	Resolve potential conflicts in a manner that supports a collaborative culture and better patient outcomes.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
CC3 Cultural aspects of death and dying – Ensure knowledge of and respect for cultural issues related to death and dying.	Understand cultural differences with respect to death and dying.	Practically integrate knowledge of cultural differences in relation to death in medicolegal death investigations.	Understand implications for cultural differences with respect to death and dying, upon the process of medicolegal death investigation.

Clinical Forensic Medicine EPA 12 - Oral Testimony in court

EPA identification code: **EPA 12**	**Recommended training sites for entrustment:** **CFMUs** **Sexual Assault Services** **Paediatric Forensic Services**
EPA title	**Oral Testimony (criminal, civil, coronial)**
Specification and any limitations	Clinical Forensic Physicians entering unsupervised practice are able to present evidence in court on subjects related to the following • Their own cases in all areas of CFM practice • clinical toxicology as it applies to forensic (medico-legal) practice – in most cases this will comprise the interpretation of toxicology findings in traffic, interpersonal violence and sexual assault cases • interpretations of medical records and results of medical examinations by other health professionals e.g. non-specialist practitioners, nurses etc. • opinions for police/prosecutors/defence/coroners based on review and analysis of evidentiary and other material e.g. police statements, medico-legal reports, medical records, photographs, video recordings, evaluation of images/CCTV and the like • Miscellaneous medico-legal subjects within individual areas of competence
Key Competencies related to this EPA* **there are no sub-competencies unique to this EPA*	EC2 ML3, ML4,ML5, ML6 EP5 TL3 QM4 CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills
Required knowledge, skills and behaviour	*Knowledge of:* Legal definitions of clinically relevant offences. Legal definitions of injuries, intoxications, seriousness. Legal processes, local policies and legislation. Court procedures, summonses and subpoenas. Concept of “hot tubbing”. Evidence in chief, cross examination, expert evidence and qualification as an expert.

	Definition of perjury. Difference between civil & criminal jurisdictions, inquisitorial and adversarial systems. Courtroom tactics used by counsel. How to read legislation and judgements. *Skills in:* Writing and speaking clear and grammatical English. Ability to withstand cross examination. Using aids to communicate evidence in the courtroom (diagrams, models). *Attitudes/ behaviour:* Courtroom behaviour/etiquette and “court craft”.
Recommended learning activities	Familiarity with relevant legislation, observation of experienced practitioners in court, moot courts, lectures/tutorials from experienced practitioners and lawyers.
References/ resources	In addition to the CFM Trainee Handbook’s Resources list, the following are recommended: <u>Legislation</u> Relevant legislation including legal definitions of injury, intoxication, drug/alcohol regulations, traffic law, crimes act, etc.
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	Full entrustment can only occur once the trainee has attended at least 10 supervised court appearances.
Estimated stage of training for entrustment	This should have occurred by the end of Year 2 or Year 3 full time training depending on training site case load.

EPA 12 Oral Testimony Milestone Matrix

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid-program examination or given RPL*	***Core of CFM*** ***During core CFM training****; supervisor-lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** *what is required for summative entrustment of EPAs as well as what is needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program Standardised Oral exit examination*
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, Drugs & Poisons, Child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.
ML4. Giving an oral opinion – Communicate evidence in legal contexts effectively	Use accurate and proper English language and presentation skills at a standard appropriate for a healthcare professional	Efficiently use specialised medicolegal vocabulary of CFM and accurate terms (anatomical/physiological/pathological). Accurately explain technical issues in court to lawyers, judicial officers and lay juries.	Synthesise and explain complex medical and technical concepts clearly and succinctly as a standard appropriate for an expert witness. Effectively use communication aids (e.g. diagrams, images, models) at court.
ML5. Medicolegal evidence – Apply knowledge of legal process to present factual evidence as a health professional in legal contexts	Identify the legal process, court procedures, roles of healthcare and legal officers, and structure and purpose of medico legal evidence. Give coherent and logical factual evidence at court.	Distinguish between the need for factual and expert evidence and give coherent and logical factual and limited opinion evidence at court.	Give coherent, appropriate and logical medicolegal evidence in varied legal contexts and for complex scenarios.
ML6. Expert evidence - Apply legal knowledge and an understanding of	Identify legal principles e.g. laws of evidence, requirements of the legal	Qualify him/herself as an expert witness for limited types of cases and present evidence at	Qualify him/herself as an expert witness for any appropriate forensic case (or part

the expert status and its limitations to present expert evidence	body seeking opinion, professional qualifications and skills needed, and limitations of expert evidence.	court in that role effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status.	thereof) and present evidence at court effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status. Advise counsel about interpretation and contentious areas of opinions or evidence given by others.
EP5. Evidence ethics - apply an understanding of the ethical obligations as an expert to the court in oral testimony situations as well as in providing an expert opinion	Recognise ethical principles on expert evidence (confidentiality, conflicts of interest, need for objectivity, remain within scope of expertise, request relevant information, sub-judicial issues etc.).	Maintain objectivity with professional disinterest in the legal outcome, without being influenced by potential outcomes or fiscal reward. Take appropriate action in potential conflict of interest situations; refer requests outside expertise appropriately.	Exhibit appropriate ethical behaviours in complex situations when providing expert evidence. Advise others on ethical issues around expert evidence during peer review.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal systems to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal systems to support collaborative decision making for patient benefit and justice.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.

Clinical Forensic Medicine EPA 13 – Management and Leadership of a CFM service

EPA identification code: **EPA 13**	**Recommended training sites for entrustment** **CFMUs,** **Custodial Medicine Services,** **Paediatric Forensic Medicine Unit,** **Sexual Assault Service**
EPA title	**Management and Leadership of a Clinical Forensic Medicine Service**
EPA description (approx. 150 words)	Clinical Forensic Physicians entering unsupervised practice are able to: • Evaluate theories and practices in health management and leadership • Reflect on the application of these tools to support an effective and efficient workforce • Identify and address health workforce issues for effective performance in the workplace • Manage and review services to improve outcomes without reducing quality of service • Critically evaluate their own management and leadership approach to implement appropriate strategies at the individual, team and organisational level • Maintain an ethical decision making process • Understand how the CFM service contributes to public health, health promotion and the prevention of violence in the community
Key competencies and their sub-competencies related to this EPA	CM4, CM5 ML1, ML3 EP3, EP4, EP6, EP7 EC1, EC2, EC5 CC1, CC2 TL2, TL3, TL5* , TL6, TL7 HA3 QM1, QM3, QM4, QM5, QM6 IM1, IM2, IM3 *TL5 is unique to this EPA CM = Clinical Medicine; FS = Forensic Skills; ML = Medicolegal; EP = Ethical Practice; EC = Effective Communication; CC = Cultural Competence; TL = Teamwork and Leadership; HA = Health Advocacy; QM = Quality Management; IM = Information Management; TS = Teaching and Scholarship; LL = Lifelong Learning; RS = Research Skills
Required knowledge, skills and behaviour	*Core knowledge of:* • Variations in CFM service delivery models nationally and internationally • How CFM service delivery impacts stakeholders and other agencies • Theories of management and workplace issues

	Practical skills in: • Communication skills: internally with staff and externally with key stakeholders, partners, community • Resolving conflict and promoting good workplace relationships • Negotiation skills • Problem solving approach • Driving and managing change *Attitudes/ behaviour:* • Negotiation and mediation of good outcomes • Inspiring improvement in practice • Identifying and managing risk to staff and organisation • Engaging employees to contribute to the service at their highest possible level • Demonstrating ethical and legal decision making processes when problem-solving • Strategic planning to set goals to improve service delivery and effective management of resources • Ability to balance commitment to education and training with responsibility for service delivery • Encouraging and managing diversity • Lead cultural competency • Life- long learning practices that reflect on own practices, limits and assumptions.
References/ resources	In addition to the CFM Trainee Handbook's Resources list, the following are recommended: <u>Textbooks</u> • Carlopio, J., & Andrewartha G. (2008). Developing self-awareness. *In Developing management skills: A comprehensive guide for leaders*, (4th ed.), Chapter 2: pp54-660 and 103-106. Frenchs Forest, NSW: Pearson Education Australia. • Harris, M.G. and Associates (2006). *Managing health services concepts and practice* (2nd ed.) Sydney: MacLennan and Petty. • Lawson, J., Rotem, A., & Bates, P.W. (2003). *From clinician to manager: an introduction to hospital and health services management*. Sydney: McGraw-Hill. <u>Journal articles</u> • Prideaux, G. (1993). Making the transition from health professional to manager. *Australian Health Review, 16(1)*, 43-50.

	• Leggat, S. (2007). Effective healthcare teams require effective team members: defining teamwork competencies. *BMC Health Services Research*, *7(17)*. DOI: 10.1186/1472-6963-7-17 . • Michie, S., & West M.A. (2004). Managing people and performance: an evidence based framework applied to health service organisations. *International Journal of Management Reviews, (595)*, 91-111. • Rushermer, R., & Kelly, D. (2004). Introducing the learning practice – II Becoming a learning practice. *Journal of Evaluation in Clinical Practice, 10(3)*, 387-398. • Buell, J. (2009). Ethics and leadership: setting the right tone and structure can help others in their decision making. *Healthcare Executive, 24(3)*, 54-57. Guidelines/Procedures • Review by Peers - A guide for professional, clinical and administrative processes. Australian Commission on Safety and Quality in Health Care, July 2010. Retrieved from http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/37358-Review-by-Peers1.pdf • Health Workforce Australia (2013). Health LEADS Australia: The Australian Health Leadership Framework. Canberra: Health Workforce Australia. Retrieved from https://www.aims.org.au/documents/item/352
Recommended learning activities	Familiarity with literature on the subject. Observation of assessments by experienced physicians. Work based consultation on situations as they arise in the workplace. Discussions at peer review meetings. Discussions at policy review and business operations meetings.
Workplace-based Assessment (WBA) methods for summative entrustment decision	See Appendix 2
Case load for summative entrustment decision	N/A
Estimated stage of training for entrustment	Full entrustment by end of training

EPA 13 Management and Leadership of a CFM Service Milestone Matrix			
Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written Part 1 exam or given RPL*	***Core of CFM*** ***During core CFM training****; supervisor-lead workplace-based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** *what is required for summative entrustment of EPAs and necessary to be able to teach, contribute to policy/procedures etc. Standard of assessment in Part II exit Standardised Oral Examination*
CM4. Prioritize care - Prioritise health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals in peer review.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses,	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.

	definitions of sexual offences, family violence, assaults, drugs & Poisons, child protection etc.		
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.

EC2. Communication with justice system - Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC5. Handover communication - Communicate effectively with other healthcare professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.
CC1. Respect for diversity - Work effectively and respectfully with people of different cultural backgrounds (incl. aboriginal, Torres Strait Islander and Māori peoples) with cultural humility and awareness of cultural diversity	Acknowledge the range of backgrounds and cultures of complainants and suspects and the role of this diversity in effectiveness of the health care system. Recognise issues relating to health inequities and inequalities.	Integrate perspectives on cultural diversity and health inequities and inequalities appropriately in developing effective and culturally respectful care plans. Reflect patient differences and views in respectful communication with the patient and the healthcare team.	Engage in culturally sensitive shared decision-making with the individual and the healthcare team. Ensure that health inequities and inequalities are addressed and mitigated. Promote a culture of respect for diversity among other professionals in forensic settings.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination, and with cultural sensitivity, compassion and empathy.	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc.).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.

processes and optimise forensic outcomes			
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
TL5. Decentralised service provision - Manage a decentralised service provision model effectively	Recognise the requirement for sustainable rural and regional service provision and understand the elements of such a service including: recruitment, training, credentialing, quality control, management of remote examination facilities, liaison with local law enforcement and legal authorities, provision of consultant support, industrial issues e.g. contracts and remuneration.	Liaises with external practitioners, provides training, conferences, report reviews, remote advice. Works with administrative staff to facilitate this.	Competent management of a decentralised service including recruitment, policy making, liaison with central medico-legal, police and other involved parties etc. Negotiates contacts with providers, boundaries between different providers e.g. nurses, arranges remuneration packages and ensures QA activities are available.
TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
TL7. Teams and medical error – work effectively with other health professionals to mitigate medical error	Recognise the patient safety impact of inter-professional care in clinical forensic settings.	Dialogue with care team members to identify risk and prevention of medical error.	Partner with other healthcare professionals to identify, propose improvement opportunities for preventing medical error within the system.
HA3. Advocate for patient needs – Advocate for individual patient	Recognise when it is necessary to advocate for individual patient needs and develop a common	Advocate with the healthcare team for needs of individuals and cohorts of patients. Link patient and	Contribute to a culture where team members value and advocate for patient needs in providing inter-professional care, encourage engagement with advocacy groups.

needs in communication with the healthcare team, including in care transitions	understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	Provide guidance for health care professionals to balance healthcare needs and forensic requirements.
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
IM1. Effective information flow - Facilitate secure and effective information flow including electronic health records	Organise information as per record keeping and information management guidelines in clinical forensic medicine and in local settings. Adapt use of the health record to the clinical context.	Document and share information to enhance personalised care and support justice. Adapt use of the health record to the patient's health literacy. Ensure patient confidentiality in information transfer.	Map information flow in the care of patients and suggest process changes for quality improvement. Review patient safety incidents involving suboptimal written, verbal, or electronic communication.
IM2. Handover information - Facilitate effective transitions of care including clinical handover using information technology	Understand the risks of incomplete documentation and information exchange, identify cognitive aids to use.	Share information through information technology to effectively co-ordinate inter-professional care in care transitions.	Analyse information exchange in care transfers at peer review, contribute to improvements in the use of information technology in handover.
IM3. Information in learning and practice - Use information technology to optimise care delivery and learning	Understand the fundamentals of e-learning and clinical informatics and their application to clinical forensic tasks.	Use e-learning resources and electronic point of care reminders, decision support tools, etc. effectively.	Use digital technology to communicate effectively. Engage others in the adoption and refinement of health information technology.
QM3. Evidence-based quality improvement - Systematically analyse practice and implement/ advocate for evidence-based changes towards quality of a forensic service	Use strategies for reflection on clinical practice when encountering opportunities during casework. Identify the needs for quality review in health care and health care systems.	Engage in opportunities and methods for quality improvement based on reflection on both individuals and populations in clinical practice. Promote quality health care in own service.	Engage in continuous quality improvement activities efficiently. Use one's own successes to advocate for a culture that promote quality health care and optimal health care systems.

QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.
QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
QM6. Risk–benefit analysis - Incorporate considerations of cost awareness and risk–benefit analysis in individual and/or population-based care as appropriate	Use externally provided information (e.g. research around a clinical forensic procedure) to inform cost-containing action and/or preliminary risk–benefit analysis.	Critically appraise information in making cost and risk–benefit decisions. Adopt strategies that decrease cost and risk; and optimize benefits for individuals and the justice system.	Integrate cost analysis into one's practice while minimizing risk and optimizing benefits for individuals and communities.

RESEARCH AND SCHOLARLY ACTIVITIES

Critical appraisal and research skills

The Clinical Forensic Physician is expected to contribute to the advancement of knowledge and enhanced practice in clinical forensic medicine, and to plan and perform research using appropriate research tools and methodology.

By the end of training, trainees should be able to adhere to necessary ethics approval requirements and legislative restriction (including coronial) when conducting research, and be able to prepare reports and papers for publication that comply with conventions and guidelines for reporting clinical and biomedical research. Trainees should also have developed the self-discipline to support the habit of lifelong self-education, and be able to maintain professional competence throughout their career by keeping up to date with new knowledge in the field of clinical forensic medicine, and wider professional context, and to integrate this knowledge into their practice. Through personal experience and observation they should have sufficient understanding of teaching and learning to be able to mentor and supervise junior staff and also to conduct educational sessions for students, colleagues and for the general community.

The following list of learning outcomes which align with the Research Skills sub-competencies serve to guide what trainees should achieve by the end of training.

Outcomes:

- Critically evaluate medical and scientific literature;
- Apply statistical and epidemiological concepts (including distribution, mean, median, standard deviation, statistical significance, confidence intervals, correlation, sensitivity, specificity, predictive values, incidence and prevalence) to interpret scientific data in conducting or appraising research and in making clinical decisions;
- Apply appropriate research methodology and tools in conducting research studies and in appraising published studies;
- Comply with human research ethics approval requirements and legislative restrictions (including coronial when conducting research;
- Comply with medicolegal limitations relating to use of sub-judicial information when conducting research;
- Manage research data securely and efficiently, and maintain confidentiality;
- Prepare reports and papers for publication that comply with conventions and guidelines for reporting biomedical research and are of a publishable quality;
- Orally present research findings that comply with conventions for presenting clinical and biomedical research, with appropriate skills in presentation and discussion;
- Demonstrate an impartial and objective approach to research activities.

Activities:

In order to demonstrate achievement of these outcomes, Trainees are required to complete **three (3)** mandatory activities outlined below, log them in the 'Activities log' and document the evidence in the portfolio, plus submit **two Project Reports** for assessment as outlined in **Appendix 6.**

- **Published article** or **manuscript** accepted for publication in a peer reviewed journal where the trainee is the first or a major contributing author (Activity log code R 2)

- Presentation of an **oral paper** at a national or international meeting or conference where the trainee is a major contributor to the work being presented (Activity log code R 1)

- Presentation of a **poster** at a national or international meeting or conference where the trainee is a major contributor to the work being presented and is significantly responsible for the production of the poster (Activity log code R 1)

- Presentation of a **formal research proposa**l for original research in an area of clinical forensic medicine in a format that could be submitted to a research funding body. The trainee should be a major contributor to the work being proposed. The proposal should be reviewed by the primary supervisor (Activity log code R 3)

- **Oral presentation** by the trainee of a topic, or case / cases at a hospital meeting, clinical meeting, regional meeting or grand round where the trainee had a major contribution to preparing and delivering the presentation. This should include some critical appraisal of the topic. If more than one is submitted, each must deal with a different topic. (Activity log code R 4)

- Presentation of a **written report** on an **audit activity** developed by the trainee or with significant trainee intellectual input in the development. Please note: routine clinical or medicolegal audits do not count in this category. (Activity log code R 5)

- Presentation of a **written report** on a **complex case** in clinical forensic medicine with appropriate discussion of the relevant points and issues; worked up and reported by the trainee. If more than one is submitted, each must deal with a different topic. (Activity log code R 5)

In addition to the mandatory activities outlined above, trainees are also encouraged to undertake several of the following activities that establish knowledge and proficiency in research (N.B. these should be logged on the Activity log where applicable)

- Contribute to audit and research projects under supervision;
- Use clinical databases for audit and research to collect, organise and analyse data;
- Attend research meetings;
- Contribute to the writing of research proposals and ethics submissions;
- Use the research and scholarship resources in RCPA Education Online.

Self-Education and Continuing Professional Development

The Clinical Forensic Physician is a lifelong learner, and should inculcate skills to promote personal and professional development throughout training. These skills would also be critical for continuous professional development post Fellowship, including in maintaining proficiency in the EPAs that were entrusted during the training program.

The following list of learning outcomes which align with the Lifelong Learning sub-competencies serve to guide what trainees should achieve by the end of training.

Outcomes:

- As part of a personal continuing education strategy, practise the habit of identifying and documenting own learning needs, planning educational strategies to meet them, monitoring achievements through feedback, self-assessment and reflecting on the outcomes
- Identify personal learning preferences and reflect on how effective they are in developing competence

Activities:

In order to demonstrate achievement of these outcomes, Trainees are required to complete the lifelong learning activities listed below and where appropriate, log them in the 'Activities log' (where applicable, retain records for portfolio).

- Formulate a personal learning plan based on self-assessment and feedback (Activity log code L1);
- Complete an online learning style inventory and explore a variety of ways to learn;
- Apply various computer-based instructional tools, such as electronic tutorials for confirming or updating knowledge and skills (Activity log code L 2);
- Select relevant mentors to guide professional activities;
- Regularly review journals relevant to clinical forensic medicine and participate in or lead discussions on contemporary issues (Activity log code L 2);
- Participate in and present personal work at relevant educational meetings and journal clubs (Activity log code L 2).

Educating Colleagues and others

The Clinical Forensic Physician is expected to contribute to the education of colleagues, trainees and students in the medical profession, health professions and other related professions through formal teaching, clinical supervision, and mentoring. The Clinical Forensic Physician is also expected to convey technical information to the public and educate the public, and promote a wider understanding of clinical forensic medicine.

The following list of learning outcomes which align with the Teaching and Scholarship sub-competencies serve to guide what trainees should achieve by the end of training.

Outcomes:

- Contribute to the education of medical students, trainees, colleagues/peers, other health care professionals, police, scientists and legal professionals, by conducting educational sessions both formally and informally,
- Contribute to the understanding of clinical forensic medicine by the wider community
- Translate and convey concepts and information in an understandable manner to people without a background in clinical forensic medicine
- Supervise and mentor trainees and junior staff and engage in appropriate role modelling
- Prepare and deliver educational sessions incorporating the principles of adult learning, using effective oral, visual or written modes, and reflect on their effectiveness

Activities:

In order to demonstrate achievement of these outcomes, trainees are required to complete the Teaching and Scholarship activities listed below and where appropriate, log them in the 'Activities log' (where applicable, retain records for portfolio).

- Participate in and contribute to departmental teaching sessions, clinico-pathological meetings, conference presentations (Activity log code T 1-2);
- Supervise trainees and junior staff; advise on effective preparation for assessments/examination;
- Mentor junior staff and participate in mentoring programs;
- Plan, organise and review educational sessions for trainees, colleagues/peers, other health care professionals, police, scientists and legal professionals;
- Prepare educational sessions on emerging issues in clinical forensic medicine and present to peers and other health professionals (Activity log code T 1-2);
- Develop assessment or educational modules for RCPA (Activity log code T 3);
- Read journal articles on teaching strategies;
- Participate in training on effective teaching and supervision of adult learners in clinical settings e.g. *Teaching on the Run* program (Activity log code T 1-2);
- Seek evidence of own teaching effectiveness.

PEER REVIEW

Integral to the practice of Clinical Forensic Medicine is the peer review process. The Clinical Forensic Physician participates in peer review of forensic medical notes, medico-legal reports, court evidence and complex cases at clinical review meetings.

The following list of learning outcomes and activities serve to guide what trainees should achieve by the end of training.

Outcomes:

- Undertake clinical audit;
- Undertake medicolegal audit;
- Practice evidence-based forensic medicine;
- Understand the requirements of police, coronial and appropriate legal systems in relation to clinical forensic medical practice;
- Identify problematic documentation and record-keeping practices;
- Recognise and analyse relevant evidentiary material including injury interpretation; appropriate sampling and prioritisation of evidence;
- Critically appraise medicolegal reports to ensure logical, well ordered, readable, and informative, and address the requirements of the police, coronial and appropriate legal systems in relation to clinical forensic medical practice;
- Appraisal of oral testimony and assessment of communication skills and competence in court and legal hearings.

Activities:

In addition to the activities listed below, trainees *must satisfactorily complete peer review-specific assessment activities embedded within particular EPA's* (see EPA guidelines)

Select activities that establish knowledge and proficiency (where applicable, retain records for portfolio)

- Attendance at supervised clinical cases
- Attend clinical meetings with minutes
- Participate in case based discussions
- Participate in case conferences
- Participation in multidisciplinary case conferences
- Participate in peer review programs
- Produce medicolegal reports and undergo peer review with key learning points
- Read medico-legal reports written by experts
- Observe others provide testimony in court
- Presentation of clinical audit findings at meetings/ conferences/workshops/seminars
- Attend case meetings with stakeholders including police, coroners and legal officers (e.g. ODPP)

SECTION 3

APPENDICES

Appendix 1: EPA-Training Site Matrix 123
Appendix 2: Table of Workplace-based (WBA) assessments for each EPA 124
Appendix 3: Portfolio Requirements 129
Appendix 4: Mid-Program Examination 130
Appendix 5: End of Program Examination 131
Appendix 6: Clinical Forensic Medicine Project Reports 132
Appendix 7: Research, Peer Review and Scholarly Activity Log 135
Appendix 8: Workplace-based Assessment Forms and log templates 137
Appendix 9: Confirmation of Entrustment form 153
Appendix 10: Guidelines for completing the Supervisor report 154
Appendix 11: Key Competencies, Sub-competencies and Milestones, and EPAs 155

Appendix 1: EPA-Training Site Matrix

EPA Training site matrix			PRIMARY TRAINING SITE					
			CFMU	CFMU with traffic medicine clinic	CFMU with police custody service	Sexual Assault Service=SAS (complainant-only)	Paediatric Forensic Medical Service=PFMS (complainant-only)	Custodial Medicine (prison)
CLINICAL EPAs								
1	FME sexual offence complainant		PFMS	PFMS	PFMS	PFMS	SAS or CFMU	CFMU or SAS, and PFMS
2	FME non-sexual offence complainant		PFMS	PFMS	PFMS	PFMS	CFMU	CFMU and PFMS
3*	FME alleged perpetrator		✓	✓	✓	CFMU	CFMU	✓
4	Suspected abuse/neglect in forensic settings		PFMS	PFMS	PFMS	PFMS	CFMU	CFMU and PFMS
5	Fitness for interview assessment		✓	✓	✓	CFMU	CFMU	CFMU or SAS or PFMS
6	Healthcare assessment/provision in forensic settings		CM (prison) CFMU (police custody) PFMS	CM (prison) CFMU (police custody) PFMS	CM (prison) PFMS	CM (prison) CFMU (police custody) PFMS	CM (prison) CFMU (police custody) SAS	CFMU (police custody)
7**	Assessment of fitness to drive and medically related impairment		CFMU (with TM clinic)	✓	CFMU (with TM clinic)	CFMU (with TM clinic)	CFMU (with TM clinic)	CFMU (with TM clinic)
8	Injury Assessment and Interpretation		✓	✓	✓	CFMU (with ED placement)	✓	CFMU (with ED placement)
9	Clinical toxicological assessment		✓	✓	✓	✓	CFMU	✓
10	Provision of medicolegal opinions (excl. coronial opinions)		✓	✓	✓	✓	✓	CFMU
11***	Medicolegal death Investigation (incl. coronial opinions)	Death scene attendance	Forensic Pathology service	Forensic Pathology service	Forensic Pathology service	Forensic Pathology service	Forensic Pathology service	Forensic Pathology service
		Other						
12	Oral testimony		✓	✓	✓	✓	✓	CFMU
NON –CLINICAL EPA								
13	Management and leadership of a CFM service		✓	✓	✓	✓	✓	✓

Cells in white = entrustment (and exposure to different EPA contexts if applicable) possible at primary site

Cells in blue = entrustment possible at primary site, provided trainees gain exposure to different EPA contexts at other attachments. Suggested attachments are noted within the cell.

Cells in yellow = entrustment not possible at primary site, suggested secondary site necessary for entrustment

*EPA 3 may not be able to achieve entrustment in a ''complainant-only'' setting (i.e. must be competent to conduct an alleged perpetrator examination without supervision)
**EPA 7 will not be able to achieve entrustment in a setting other than a CFMU with a traffic medicine clinic
***EPA 11 will not be able to achieve entrustment in a setting other than a CFMU providing a Coronial service or a Forensic Pathology service providing a Coronial

Appendix 2: Table of Workplace-based (WBA) assessments for each EPA

EPAs			Workplace-based Assessments and other Portfolio requirements					
			Mini Clinical Evaluation Exercise (Mini-CEX)	**Directly Observed Procedural Skills (DOPS)**	**Case-based Discussions (CbDs)**	**Writing statements or reports for review**	**Supervisor reports**	**Other**
CLINICAL EPAs								
	1	FME sexual offence complainant (adult/adolescent/child)	** Post FME summary with patient and other stakeholders Initial assessment & approach - Consent, capacity and confidentiality, history taking Minimum 2	** Forensic specimen collection – DNA Forensic specimen collection – Toxicology Genito-anal examination and documentation Documentation of findings and photography Minimum 4	* Adolescent Male Female Observed in exposure to different context situations Minimum 4	* Minimum 5 including 1 peer-reviewed	*	Audit forensic sample quality
	2	FME non-sexual offence complainant (adult/adolescent/child)	** Post FME summary with patient + other stakeholders Initial assessment & approach - Consent, capacity and confidentiality, history taking	** Forensic specimen collection – DNA Forensic specimen collection – Toxicology Documentation of findings and photography	* Adolescent Male Female Observed in exposure to different context situations	* Minimum 2 including 1 peer-reviewed	*	

			Minimum 2	Minimum 3	Minimum 4			
	3	FME of alleged perpetrator	** Post FME summary with pt. + other stakeholders Initial assessment & approach - Consent, capacity and confidentiality, history taking Minimum 2	* Forensic specimen collection – DNA Forensic specimen collection – Toxicology Genital examination and documentation Documentation of findings and photography Minimum 4	** Adolescent Male Female Observed in exposure to different context situations Minimum 4	* Minimum 5 including 1 peer-reviewed	*	
	4	Assessment of suspected abuse/neglect in forensic settings	** Post FME summary with patient and other stakeholders Initial assessment & approach - Consent, capacity and confidentiality, history taking Minimum 2	**	* Minimum 2	* Minimum 2 including 1 peer-reviewed	*	Audit forensic sample quality
	5	Fitness for interview assessment (physical/mental health, drug and alcohol)	** Fitness for Interview case attendance		** Minimum 3 (drug or alcohol, mental health, physical health)	* Minimum 3 including 1 peer-reviewed	*	

			Minimum 1					
	6	Healthcare assessment/provision in forensic settings	** Mental health assessment – offender or complainant Sexual health assessment – sex offence complainant Pregnancy risk assessment – sex offence complainant General health assessment – offender Minimum 4	* Sexual health screening Pregnancy risk management Minimum 2	* 3 x sexual offence complainant – adolescent, adult/child, observed on exposure to other contexts 2 x offender – adult/child, observed on exposure to other contexts 1 x mental health Minimum 6	*(*clinical records incl. handover)* Minimum 2	**	
	7	Assessment of fitness to drive and medically related impairment	** Fitness to drive case attendance Minimum 1		** Minimum 3	* Minimum 3 including 1 peer-reviewed	*	
	8	Injury Assessment and Interpretation			* Minimum. 10 including vehicle-collisions, police restraint, falls, firearms/ explosions, thermal/fire related, electrocution, strangulation/ suffocation	** Minimum 10 including 1 peer-reviewed		

					Experienced or observed			
	9	Clinical toxicological assessment (alcohol/drug effects, driver impairment, capacity to consent)	** Drug and alcohol intoxication/ withdrawal assessment Minimum 2	*(blood/urine sampling) Forensic specimen collection – Toxicology Minimum 1		* Alcohol Poly substance Sexual offence complainant Traffic Minimum. 10 including 1 peer-reviewed	*	
	10	Provision of medicolegal opinions (toxicology, FME by others, evidentiary/ other material review)			*	** 2 x clinical toxicology 2 x interpretations of medical records and results of medical examinations by other health professionals 2 x opinions based on review and analysis of evidentiary and other material Minimum 6 including 1 peer-reviewed	*	Observing court defence of opinion
	11	Medicolegal death Investigation (death scene attendance, hospital deaths, coronial opinions, assisting forensic pathologists at autopsy)	* Assessment of scene of	* Genito-anal sample	* Hospital death review	* Death scene report	**	

			suspicious death Advising forensic pathologists at autopsy Minimum 2	collection and documentation	Coronial investigation opinion death scene attendance Minimum. 5	coronial report Minimum. 3 including 1 peer-reviewed		
	12	Oral testimony (criminal/civil/coronial)					**	Oral testimony observation and discussion x 5 Transcript of evidence review x 5
NON-CLINICAL EPA								
	13	Management and leadership of a CFM service (policy development, interagency partnerships, practitioner well-being)					**	A written reflection on how an issue was addressed with supporting evidence e.g. policy documents x 2 Case based discussion assessments.

Appendix 3: Portfolio Requirements

The portfolio is a record of activities undertaken by trainees associated with their daily work, including the workplace-based assessments. Portfolio activities are carried out in the workplace and provide evidence that the trainee is developing the technical skills and professional values, attitudes and behaviours that are not readily assessed by formal examinations. Workplace-based assessments to be recorded include Direct Observation of Practical Skills, Mini Clinical Evaluation Exercises, Case-based Discussions, Written statements or reports for review.

Unless otherwise indicated in the EPAs, *Appendix 8* contains the forms and detailed instructions for recording these workplace activities. Please file the (hard copy) forms in a portfolio folder with separate sections for each category of activity.

The ***case log book*** within the portfolio details the trainee's experience with a range of cases encountered in routine clinical forensic medical practice in different contexts as required for the clinical EPAs, as well as a substantive number of cases routinely seen in the trainee's primary training site. Documentation on each case includes an introduction, a report of the clinical findings obtained through history and examination, copies of medico-legal forms used, working notes, written reports if relevant, and a one-page summary and reflection.

The ***activity log*** recording research, scholarly activities, and peer review (detailed in Appendix 7) and the ethics & communication log, are to be included in the portfolio.

The portfolio summary spreadsheet (Excel file) may be downloaded from the RCPA website. It is the trainee's responsibility to keep both hard and soft copy records up-to-date.

The portfolio and summary spreadsheet must be provided to the supervisor in preparation for the supervisor report, as well as when making summative entrustment decisions in EPAs.

Trainees should start accumulating evidence for the portfolio from early in Year 1 and keep it until they complete training. ***The hard copy portfolio and summary spreadsheet will be checked for completeness by the supervisor before awarding summative entrustment in an EPA as well as before any formal examination***.

The portfolio summary spreadsheet should be printed and appended to the pre-exam supervisor report and submitted to the RCPA prior to the mid- and end-of-program examination at a time determined by the RCPA. The summary will be reviewed by the Registrar, Board of Education and Assessment and the Chief Examiner. The signatories and trainees may be contacted to confirm evidence of satisfactory completion.

The supervisor should review and sign off completed portfolio items on the annual, rotation and pre-exam supervisor report.

NOTE: The portfolio itself should not be sent to the College unless requested for audit.

Appendix 4: Mid-Program Examination

Examinations are prepared in accordance with RCPA Guideline 3/2015 Quality Framework for RCPA Examinations – Written, Practical and Oral.

Written Examination

This examination has an emphasis on the theoretical knowledge basis of clinical forensic medicine. It is taken during the second year FTE of training. No automatic exemptions are given for any component of the exam. Trainees who have completed approved academic programs in Clinical Forensic Medicine at the time of their training determination may receive exemptions from the whole or particular components of the examination. Trainees who are enrolled in such programs must provide evidence of completion before the deadline for examination registration in order to be considered for such exemptions.

The written examination addresses such issues as, but not necessarily limited to:

- Injury interpretation
- Medical evidence
- Ethics, medicine and law
- Basic pathological sciences relevant to the practice of clinical forensic medicine
- Forensic sciences relevant to the practice of clinical forensic medicine

Credit for passing the mid-program examination is carried over for a maximum of 5 years.

Supervisor Reports

Trainees must submit a supervisor report for each year of training, including periods of rotation. Trainees who are sitting the mid-program examination must submit an additional pre-examination supervisor report in the year of the examination. Please refer to *RCPA Trainee Handbook – Administrative Requirements* (on the RCPA website) for the due dates for these reports.

It is the trainee's responsibility to ensure that the pre-examination supervisor report is completed and submitted by the due date. Failure to do so may jeopardise the accreditation of training time or finalisation of examination results. The report form can be downloaded from the website: http://www.rcpa.edu.au/Trainees/Training-with-the-RCPA/Supervisor-Reports

Assessment Calendar

Examination timetables are published on the RCPA website: RCPA - Examinations

The Chief Examiner may determine the earliest date (year) in which trainees may sit exams

Appendix 5: End of Program Examination

Examinations are prepared in accordance with RCPA Guideline 3/2015 Quality Framework for RCPA Examinations – Written, Practical and Oral.

Standardised Oral Examination

In the Standardised Oral Examination candidates rotate through up to six (6) stations of 15 minutes each. The stations represent the various tasks encountered in the EPAs, and some may reflect challenging and important aspects not regularly encountered in routine practice. The stations may contain simulated patient encounters, simulated or real procedures, interpretation of data/images/reports, etc. The questions will consider issues in clinical forensic medicine and these issues may include quality assurance, patient safety, management, medico-legal issues, communication and teamwork as well as technical aspects related to the Clinical EPAs. Reading time will be allowed prior to and between stations as appropriate.

Supervisor Reports

Trainees must submit a supervisor report for each year of training, including periods of rotation. Trainees who are sitting the end-of-program examination must submit an additional pre-examination supervisor report with the appended print-out of the portfolio summary spreadsheet. Please refer to the *Trainee Handbook – Administrative Requirements* for key dates for submitting these reports.

It is the trainee's responsibility to ensure that the pre-examination supervisor report is completed and submitted by the due date. Failure to do so may jeopardise the accreditation of training time or finalisation of examination results.

Assessment Calendar

Please refer to Training Handbook – Administrative Requirements (on the RCPA website) for key assessment dates.

The Chief Examiner may determine the earliest date (year) in which trainees may sit exams

Appendix 6: Clinical Forensic Medicine Project Reports

Assessment of the Research component of the program requires two (2) Reports of 3000-5000 words each. These should be of a publishable standard.

The completed Reports can be submitted any time after year 2 FTE, but trainees are advised to submit the Reports early in order to receive feedback. The Reports will be graded by two members of the Clinical Forensic Medicine Examiners Panel independently as either *satisfactory* or *not satisfactory*. Candidates whose Reports are *not satisfactory* will be asked to re-submit.

Publications as first or lead author completed during training may be considered for the Report requirements. Such publications should be published in journals approved by the Chief Examiner. Letters to the editor or opinion pieces are not acceptable.

A candidate with a PhD or a Masters by research in Clinical Forensic Medicine may be exempt from the Report requirement at the discretion of the Chief Examiner. These exemptions will be considered at the time of the training determination.

Project Report Guidelines

The Clinical Forensic Medicine Project Reports should be of a standard publishable in a journal such as the *Journal of Forensic and Legal Medicine, Forensic Science International* or *International Journal of Legal Medicine*.

The focus of the Report could range from a single patient case or case series to a large population depending on complexity of the situation under investigation. The Reports should demonstrate the candidate's approach to analysing the scientific problem or issue in the case(s) or the population (including a relevant review of the literature) and follow up action/discussion based on principles of Evidence-based Practice. It is also expected that some Reports will demonstrate the candidate's ability to be innovative, assure quality and consider management issues.

Based on the above approach, following are some suggestions appropriate as Project aims:

- The introduction or development of a new technique/methodology and comparisons with current best practice
- Transference of an existing technique/methodology to a new context and comparing it to current practice
- A study that examines the sensitivity and specificity of a technique/methodology, including positive and negative predictive values in a particular population
- A detailed analysis of cumulative clinical data (including case series)
- A study comparing specialised populations

Please note that the above list is not exhaustive. If trainee(s) plan a different focus they should discuss with their supervisor and submit a brief proposal to the College administration well before commencing the work involved. The Chief Examiner will confirm the appropriateness.

Marking criteria

1. Demonstrates one or more of the Report aims
2. Demonstrates appropriate principles of Evidence Based Laboratory Practice
3. Introduction discusses the literature and placement of the study in context
4. Methodology is appropriate. Method described in sufficient detail to allow the study to be replicated; comments on method selection, method validation, method development and trouble-shooting
5. Analysis: Quantitative or qualitative
6. Results
7. Discussion
   i. Interpretation of results or critical analysis of literature

ii. Placement of results in context of the available literature
iii. Limitations of the study
iv. Lessons derived are adequately discussed; implications are related to the candidate's own situation and the broader context of the field

8. Format of the paper

i. Complies with the requirements for the journal *Pathology* http://edmgr.ovid.com/pat/accounts/ifauth.htm
ii. Reference List
iii. Writing style syntax, spelling/ typographical errors
iv. Graphs and tables

The Reports will be independently marked by two examiners and will be graded as either *Satisfactory or Unsatisfactory. Unsatisfactory reports will be returned to the candidate for revision, addressing of feedback, and resubmission to the RCPA for remarking*

Format

1. An electronic copy in pdf format should be submitted.
2. The first page should have the trainee's RCPA number and the word count (excluding references). For examination and feedback purposes page numbers should be provided for the whole document and line numbers should be provided for all text.
3. The trainee's name should NOT be displayed anywhere in the document.
5. Any information and contributions provided by others should be clearly identified. Do NOT give personal or institutional details of the individuals concerned. The Report submitted should be primarily the candidate's own work and any attribution of authorship should take place at the time of possible publication.
6. The manuscript and reference format should comply with the requirements for the journal Journal of Forensic and Legal Medicine (http://www.elsevier.comlocate/jflm)

Declaration of originality

Each Report must be accompanied by a signed declaration of originality. Please use the form on the next page and do NOT incorporate the form into the Report, to preserve anonymity. The College's policy is that Trainees who submit work that is not their own will fail and the matter will be referred to the Board of Education and Assessment.

Submitting the assignment and originality declaration

Please send one hard copy of the assignment and the print out of the declaration of originality to the RCPA Office. An e-copy of the assignment should be emailed to the College at **exams@rcpa.edu.au**. The declaration will be kept on file at the College. E-copies will be sent to examiners. Please refer to RCPA website for due dates.

RCPA
The Royal College of Pathologists of Australasia

Declaration for Clinical Forensic Medicine Project Reports

Trainee declaration:

I certify that this Report, titled:

……

……

……..

is my own original work and that the work documented was completed as part of my personal supervised practice during my accredited training. It has not been previously submitted for assessment and has not been used by any other trainee in this training location. I have read and understand RCPA Policy 10/2002 - Plagiarism and Cheating in Examinations.

Trainee Name ……RCPA ID ……

Trainee signature……date……

Supervisor declaration:

As the supervisor for …….....……, I certify that the work documented was completed personally by him/her during training. The Report is original and has not been used by any other trainee in this training location. I have reviewed this item and read the relevant RCPA requirements and believe it is suitable for submission to the RCPA examiners.

Supervisor name (print).....…….....……....

Supervisor signature…….....date……

Appendix 7: Research, Peer Review and Scholarly Activity Log

RCPA The Royal College of Pathologists of Australasia	**Clinical Forensic Medicine** **Activity log: Research, Scholarly activities, Peer review**

How to use this form

This form is to be used to record that the trainee has engaged in at least **one activity in each area** i.e. Lifelong learning (L), Peer review (P), Research (R), Teaching (T) **per FTE year** throughout training from the following list:

Code L 1 Self-assessment and formulating a personal learning plan. Attach a reflection on what you gained from the activity (max 1 page). **Minimum 2 before end-of-program.**

Code L 2 Formal self-education study, e.g., on-line educational modules, journal review of cases you have worked up. Attach a reflection on what you gained from the activity (max 1 page). **Minimum 1 before end of Year 2 FTE. Minimum 2 before end-of-program.**

Code L 3 Academic award courses. Attach a copy of transcript of results.

Code P 1 Participate in multidisciplinary case conferences or in case meetings with stakeholders including police, coroners and legal officers. Attach a reflection on what you gained in developing your peer review skills from the activity (max 1 page). **Minimum 1 before end of Year 2 FTE. Minimum 2 before end-of-program.**

Code P 2 Read medico-legal reports written by experts or observe others provide testimony in court. Attach a reflection on what you gained in developing your peer review skills from the activity (max 1 page). **Minimum 1 before end of Year 2 FTE. Minimum 2 before end-of-program.**

Code R 1 Oral or poster presentation at national or international scientific meeting where the trainee is the major contributor to the work. Attach a reflection on what you gained from the activity (max 1 page). **Minimum 1 before end-of-program.** Must participate in **an annual program** of national forensic bodies by **end of Year 2 FTE** and **2 annual programs** before **end-of-program**.

Code R 2 Publications, journal articles, book chapter, monograph, published or written to a standard suitable for publication. Cite the reference for published works. Attach the manuscript for unpublished works**.**

Code R 3 Presentation of a formal research proposal for original research in an area of clinical forensic medicine in a format that could be submitted to a research funding body. The trainee should be a major contributor to the work being proposed.

Code R 4 Oral presentation of a topic, or case / cases at a hospital meeting, clinical meeting, regional meeting or grand round where the trainee is the major contributor in preparing and delivering the presentation.

Code R 5 A written report on an audit activity which the trainee had developed or has had significant intellectual input in the development; or a written report on a complex case with appropriate discussion worked up and reported by the trainee.

Code T 1 Literature review and preparation of materials (e.g. photographs, PowerPoint presentations) to support teaching or conference presentation. Record the topic and list the references reviewed. **Minimum 2 before end-of-program.**

Code T 2 Present a teaching session (lecture, seminar) for medical students, scientists, police, legal professionals, GPs, etc. Attach a reflection on what you gained from the activity (max 1 page). **Minimum 1 before end of Year 2 FTE. Minimum 2 before end-of-program.**

Code T 3 Develop assessments or educational modules for RCPA. Attach a copy or synopsis of material developed. Limit of 2 during training.

For each activity, trainees must write a one-page (maximum) reflection on what they gained from the activity.

At the end of each year, this form, appended reflections and any other appended documentation should be sighted by the supervisor and signed off on the annual supervisor report.

Trainee name	**Trainee ID**	**Stage of training** Y1 Y2 Y3 Y4 Y5 if > Y5 please specify

	Date	**Code**	**Brief description of activity** (include meeting name, URL, etc. where relevant)	**Supervisor signature**

Appendix 8: Workplace-based Assessment (WBA) Forms and log templates

This section contains master copies of forms to be used to record activities for the portfolio. Make as many copies as you need and file the completed forms safely in the portfolio folder.

The forms include:

- Mini Clinical Evaluation Exercise (Mini-CEX) form
- Directly Observed Procedural Skills (DOPS)
- Case-based Discussion (CbD) form
- Case-based Discussion (CbD) on Management and Leadership form
- Assessment of Oral Testimony form
- Assessment of Medicolegal Statements and Reports form
- Significant Incident Report form
- Log for Casework
- Log for Ethics and Communication

.

Mini-Clinical Evaluation Exercise (Mini-CEX)

Instructions for Trainees and Supervisors

The process of directly observing a trainee in a focused actual patient encounter (typically for 10-15 minutes) for purposes of assessment is called a Mini-Clinical Evaluation Exercise (mini-CEX). The purpose of the mini-CEX assessment is to evaluate a trainee's skills in communicating with, examining, or handing over a patient; to demonstrate that they can safely manage such patient encounters in the different clinical forensic settings; and to provide feedback on the progress by highlighting strengths and areas for improvement, thereby encouraging their professional development.

It is important to observe the trainee doing the activity. Observations can be made by the supervisor and also by suitable qualified staff. Assessors need to be sufficiently familiar with the patient to enable them to critically judge the performance being reviewed.

Trainees should initiate the mini-CEX assessment by requesting an appropriate assessor to observe them when they are confident they can complete it satisfactorily. Trainees can engage in some practice assessments prior to participating in those that will be assessed. The trainee and assessor should select the expected stage of training before the activity.

The time taken will vary according to the task and approximately 30 minutes should be allocated for each assessment, to observe the encounter, complete the rating form and conduct a feedback session. If the encounter is part of a task with a number of components e.g. providing a post forensic examination summary for subject within a sexual offence forensic medical examination, all stages of the task should be observed but the form can be used to assess a particular part of the task, indicated within the form as 'focus encounter'.

Mini-CEX assessors should remain as unobtrusive as possible unless there are risks to patient safety. If an assessor identifies issues to follow-up with the patient (for example, check findings, refine a management plan), this should be done after the trainee has completed the encounter with the patient. The assessor should complete the mini-CEX form while the trainee is present and spend 5-10 minutes providing immediate feedback.

Grading, standards and outcome of assessment

Each aspect of the trainee's performance should be graded. The "n/a" option should be used if the assessor has not observed that aspect or is otherwise unable to comment.

The trainee's strengths as well as areas for improvement should be discussed with the trainee. Feedback should be given sensitively, in a suitable environment. An action plan for development should be identified, agreed and recorded on the mini-CEX form.

The overall standard of performance should be graded according to the level of supervision required. At the time of entrustment of the relevant EPA the level of competence should be that the trainee is able to perform all aspects of the encounter safely without supervision.

Together with the other workplace-based assessments the ratings recorded on the mini-CEX forms, when cumulated over multiple patients, multiple observers, and different clinical forensic settings will provide a defensible basis for a judgment of a trainee's level of entrustment in a given EPA. Over time the mini-CEX assessments at a minimum should address the WBA requirements specified in all relevant EPAs.

Record keeping

The mini-CEX forms must be fully completed, signed and dated by the trainee and the assessor. The forms must be retained by the trainee in his/her portfolio.

RCPA
The Royal College of Pathologists of Australasia

Clinical Forensic Medicine

Mini-Clinical Evaluation Exercise (Mini-CEX) Assessment Form

Trainee Name	**Year of Training** 1 2 3 4 5 if > 5, please specify
Trainee ID	**Expected Stage of Training** (please discuss with trainee and select) ☐ Foundations ☐ Core of CFM ☐ Transition to Fellowship
Assessor Name	**Assessor Position**

Clinical setting
☐ CFMU ☐ SARC ☐ Child protection unit ☐ Custodial facility ☐ Emergency department ☐ other…

This WBA is part of entrustment information for the following EPA (please tick one)
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 9 ☐ 11

Focus encounter (please tick one)
☐ Pre-forensic examination acute health care assessment (e.g. alleged perpetrator in police custody)
☐ Initial assessment and approach (including consent, capacity and confidentiality, interviewing)
☐ Forensic injury examination
☐ Post forensic examination summary for patient/subject, stakeholders as appropriate
☐ Mental health assessment –complainant or alleged perpetrator
☐ Sexual health assessment – sex offence complainant
☐ Pregnancy risk assessment–sex offence complainant, alleged perpetrator
☐ General health assessment – alleged perpetrator
☐ Drug and alcohol intoxication/ withdrawal assessment
☐ Scene of suspicious death assessment
☐ Assessment at point of autopsy (e.g. discussion with forensic pathologists)
☐ Case attendance (fitness to interview, fitness to drive)

Brief description of encounter to be observed and assessed (patient information and problem, complexity of case, etc.)

Trainee's performance is as expected for the stage of training (Foundations, Core or Transition to Fellowship) with reference to milestones	**Yes**	**No**	**n/a**
Medical interviewing skills			
Physical examination skills			
Clinical judgement and decision making			
Communication skills (e.g. providing information, health education)			
Professional approach and consideration of patient needs and cultural sensitivities			
Medical record keeping			
Recognising limitations and taking appropriate action (e.g. in referral, handover)			
Teamwork and clinical leadership			
Time management and organisational efficiency			

Please comment on what was effective (evidence for entrustment), aspects for improvement and agreed action.

Overall standard of performance (please tick one) ☐ Able to perform with direct, active full supervision ☐ Able to perform with indirect, readily available supervision ☐ Able to perform with distant supervisory oversight ☐ Ready to perform the encounter unsupervised	Minutes taken for observing……. Minutes taken for feedback……....

Signature of assessor	Signature of trainee	Date

Directly Observed Procedural Skills (DOPS)

Instructions for Trainees and Supervisors

The process of directly observing a trainee performance in a procedure on a real patient (typically for 10-15 minutes) for purposes of assessment is called a Direct Observation of Procedural Skills (DOPS). The purpose of the DOPS assessment is to evaluate a trainee's performance in investigative or therapeutic procedures in clinical forensic medicine including the skills of examination, collection, interpretation of information, and documentation; to demonstrate that they can safely manage such procedures in the different clinical forensic settings; and to provide feedback on the progress by highlighting strengths and areas for improvement, thereby encouraging their professional development.

It is important to observe the trainee doing the activity. Observations can be made by the supervisor and also by suitable qualified staff. Assessors need to be sufficiently familiar with the patient and procedure to enable them to critically judge the performance being reviewed.

Trainees should initiate the DOPS assessment by requesting an appropriate assessor to observe them when they are confident they can complete it satisfactorily. Trainees can engage in some practice assessments prior to participating in those that will be assessed. The trainee and assessor should select the expected stage of training before the activity.

The time taken will vary according to the procedure and approximately 30 minutes should be allocated for each assessment, to observe the procedure, complete the rating form and conduct a feedback session. If the procedure is part of a task with a number of components e.g. genito-anal examination within a sexual offence forensic medical examination, all stages of the task should be observed but the form can be used to assess a particular part of the task, indicated within the form as 'focus procedure'.

DOPS assessors should remain as unobtrusive as possible unless there are risks to patient safety. If an assessor identifies issues to follow-up with the patient this should be done after the trainee has completed the procedure with the patient. The assessor should complete the DOPS form while the trainee is present and spend 5-10 minutes providing immediate feedback. The feedback session provides an opportunity to explore the trainee's knowledge level related to the procedure, where appropriate.

Grading, standards and outcome of assessment

Each aspect of the trainee's performance should be graded. The "n/a" option should be used if the assessor has not observed that aspect or is otherwise unable to comment. Not all aspects need to be assessed on each occasion.

The trainee's strengths as well as areas for improvement should be discussed with the trainee. Feedback should be given sensitively, in a suitable environment. An action plan for development should be identified, agreed and recorded on the DOPS form.

The overall standard of performance should be graded according to the level of supervision required. At the time of entrustment of the relevant EPA the level of competence should be that the trainee is able to perform all aspects of the procedure safely without supervision.

Together with the other workplace-based assessments the ratings recorded on the DOPS forms, when cumulated over multiple procedures, multiple observers, and different clinical forensic settings will provide a defensible basis for a judgment of a trainee's level of entrustment in a given EPA. Over time the DOPS assessments at a minimum should address the WBA requirements specified in all relevant EPAs.

Record keeping

The DOPS forms must be fully completed, signed and dated by the trainee and the assessor. The forms must be retained by the trainee in his/her portfolio.

RCPA
The Royal College of Pathologists of Australasia

Clinical Forensic Medicine

Directly Observed Procedural Skill (DOPS) Assessment Form

Trainee Name	**Year of Training** 1 2 3 4 5 if > 5, please specify
Trainee ID	**Expected Stage of Training** (please discuss with trainee and select) ☐ Foundations ☐ Core of CFM ☐ Transition to Fellowship
Assessor Name	**Assessor Position**

Clinical setting
☐ CFMU ☐ SARC ☐ Child protection unit ☐ Custodial facility ☐ Emergency department ☐ other……

This WBA is part of entrustment information for the following EPA (please tick one)
☐ 1 ☐ 2 ☐ 3 ☐ 6 ☐ 8 ☐ 9 ☐ 11

Focus procedure (please tick one)
☐ Documentation of findings and photography
☐ Forensic specimen collection - DNA
☐ Forensic specimen collection - Toxicology
☐ Genito-anal examination and documentation - complainant
☐ Genital examination and documentation – alleged perpetrator
☐ Sexual health baseline screening
☐ Pregnancy risk management
☐ Genito-anal sample collection and documentation in death investigation

Brief description of situation in which procedure is to be observed and assessed (patient information and problem, complexity of procedure in given situation, etc.)

Trainee's performance is as expected for the stage of training (Foundations, Core or Transition to Fellowship) with reference to milestones	**Yes**	**No**	**n/a**
Understanding of indications, relevant anatomy, equipment, dual obligations			
Informed consent			
Pre-procedure preparation: decontamination, selection of samples to be taken			
Technical ability including technique, observing safety and use of equipment			
Managing evidence: chain of custody, labelling, cross-contamination risks			
Interpretation of findings and dealing with uncertainties, identifying high risk states			
Professional approach and consideration of patient needs and cultural sensitivities			
Medical record keeping			
Recognising limitations and taking appropriate action			
Time management and organisational efficiency			

Please comment on what was effective (evidence for entrustment), aspects for improvement and agreed action.

Overall standard of performance (please tick one) ☐ Able to perform the procedure with direct, active full supervision ☐ Able to perform with indirect, readily available supervision ☐ Able to perform with distant supervisory oversight and deal with complications ☐ Ready to perform the procedure unsupervised	Minutes taken for observing……. Minutes taken for feedback……....
Signature of assessor	Signature of trainee Date

Case-based Discussion (CbD)

Instructions for Trainees and Supervisors

The process of discussing the assessment and management of an actual patient, and reviewing related documentation, is called a Case-based Discussion (CbD). The purposes of CbD assessments are: (1) to evaluate the trainee's ability to apply medical and forensic knowledge to clinical findings and investigation results and make diagnostic and therapeutic decisions and decisions with ethical and legal dimensions; (2) to provide feedback to trainees by highlighting strengths and areas for improvement, thereby promoting strategies to improve their practice. Throughout training, trainees should seek opportunities to discuss cases with experienced colleagues and receive feedback. CbDs also serves as a method to document conversations about, and presentations of, such cases.

The trainee should initiate each CbD assessment. The trainee should select two recent cases in which s/he has played a significant role in clinical decision-making (investigation or management) and forensic aspects (interpretation of findings, medicolegal opinion, appropriate referral). In attachments where trainees gain exposure to different EPA contexts, trainees may select cases which they have observed. The trainee should select a suitable assessor, who should be an RCPA Fellow but does not need to be the listed supervisor. The trainee and assessor should select the expected stage of training before the activity.

The assessor should select one of the two cases for the trainee to present and discuss. Approximately 30 minutes should be allocated for each CbD assessment. The presentation, discussion and review of clinical and medicolegal documentation should take about 15-20 minutes. The assessor should complete the CbD form while the trainee is present and spend 5-10 minutes providing immediate feedback.

Assessors need to be sufficiently familiar with the case to enable them to critically judge the trainee performance. Trainees should initiate the CbD assessment when they are confident they can complete it satisfactorily. Trainees can engage in some practice case discussions with peers/other suitable qualified staff prior to participating in those that will be assessed.

Grading, standards and outcome of assessment

Each aspect of the trainee's performance should be graded. The "n/a" option should only be used if the assessor is unable to comment on that aspect after presentation and discussion. If needed assessors should use "what if" scenarios to probe trainee abilities in recognising limitations, risk management and ethical decision making in particular.

The trainee's strengths as well as areas for improvement should be discussed with the trainee. Feedback should be given sensitively, in a suitable environment. An action plan to improve practice should be identified, agreed and recorded on the CbD form.

The overall standard of performance should be graded according to the level of supervision required. At the time of entrustment of the relevant EPA the level of competence should be that the trainee is able to manage all aspects of the case safely and efficiently unsupervised.

Together with the other workplace-based assessments the ratings recorded on the CbD forms, when cumulated over multiple cases in different clinical forensic settings will provide a defensible basis for a judgment of a trainee's level of entrustment in a given EPA. Over time the CbD assessments at a minimum should address the WBA requirements specified in all relevant EPAs.

Record keeping

The CbD forms must be fully completed, signed and dated by the trainee and the assessor. The forms must be retained by the trainee in his/her portfolio.

RCPA
The Royal College of Pathologists of Australasia

Clinical Forensic Medicine Case-based Discussion (CbD) Assessment Form

Trainee Name	**Year of Training** 1 2 3 4 5 if > 5, please specify
Trainee ID	**Expected Stage of Training** (please discuss with trainee and select) ☐ Foundations ☐ Core of CFM ☐ Transition to Fellowship
Assessor Name	**Assessor Position**

Clinical setting
☐ CFMU ☐ SARC ☐ Child protection unit ☐ Custodial facility ☐ Emergency department ☐ other…

This WBA is part of entrustment information for the following EPA (please tick one)
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 11

Case for discussion (please tick one and circle appropriate sub-selections)
☐ Forensic medical examination of complainant – adult/ adolescent/ child male/ female
☐ Forensic medical examination of alleged perpetrator – adult/ adolescent male/ female
☐ Assessment of suspected neglect/ abuse
☐ Fitness for interview assessment - drug or alcohol/ mental health/ physical health
☐ Healthcare assessment/ provision – complainant/ alleged perpetrator adult/ adolescent/ child
☐ Healthcare assessment/ provision – mental health
☐ fitness to drive assessment
☐ Forensic injury assessment ……. (please specify situation)
☐ Hospital death review
☐ Coronial investigation opinions
☐ Death scene attendance

Brief summary of case (patient information, complexity of case, etc…)

Trainee's performance is as expected for the stage of training (Foundations, Core or Transition to Fellowship) with reference to milestones	**Yes**	**No**	**n/a**
Clinical and forensic assessment (examination notes, procedures/ investigations)			
Interpretation of findings			
Recommendations and management plan (including follow-up/ future plans)			
Recognising limitations and taking appropriate action (e.g. in referral, transfer of care)			
Medical record keeping			
Risk assessment and management			
Clinical and forensic judgement and decision making			
Ethical/ medicolegal decision making			
Professional approach and consideration of patient needs and cultural sensitivities			
Skills in presentation and discussion			

Please comment on what was effective (information towards entrustment)**, aspects for improvement and agreed action.**

Overall standard of performance (please tick one) ☐ Able to manage the case with direct, active full supervision ☐ Able to manage with indirect, readily available supervision ☐ Able to manage with distant supervisory oversight ☐ Ready to manage the case unsupervised	Minutes taken for discussion……. Minutes taken for feedback……....
Signature of assessor	Signature of trainee Date

Case-based Discussion on Management and Leadership of a CFM service (EPA13)

Instructions for Trainees and Supervisors

The Case-based Discussion (CbD) for EPA 13 is based around a case or problem where the discussion is focused less on the clinical elements but instead on the management and leadership issues highlighted. The purposes of this CbD assessment are:

(1) to evaluate the trainee's ability to apply knowledge of management and to improve CFM service models using skills in:
   a. communication, planning/evaluation, & problem solving
   b. decision making to effectively manage people and resources

(2) to provide feedback to trainees on strengths and areas for improvement, thereby promoting strategies to improve practice.

The trainee should initiate each assessment. The trainee should select a recent case or situation where he/she has been involved in a management role (e.g. rostering) or team leadership role (e.g. representing the service in a multidisciplinary meeting), but he/she does not have to specifically choose a case with leadership "issues". A clinical problem where the trainee participated in a clinical audit or a quality improvement initiative, or contributed to the development of a policy or a procedure/protocol, may also serve as a 'case'. The trainee should select a suitable assessor, for instance the head of their department. The trainee and assessor should select the expected stage of training before the activity.

Approximately 30-45 minutes should be allocated for each assessment. The presentation, discussion and review of documentation should take about 20-30 minutes. The assessor should complete the CbD form while the trainee is present and spend 5-10 minutes providing immediate feedback.

Assessors need to be sufficiently familiar with the case/problem to enable them to critically judge the trainee performance. Trainees should initiate this CbD assessment when they are confident they can complete it satisfactorily.

Grading, standards and outcome of assessment

Each aspect of the trainee's performance should be graded. The "n/a" option should only be used if the assessor is unable to comment on that aspect after presentation and discussion. Assessors should note that the case or problem may directly relate only to a limited number of leadership and management abilities, and should use "what if" scenarios if needed to probe other critical abilities e.g. articulating dual obligations, limitations, ethical requirements with a multidisciplinary team e.g. health professionals, police, coroners, legal officers.

The trainee's strengths as well as areas for improvement should be discussed with the trainee. Feedback should be given sensitively, in a suitable environment. An action plan to improve practice should be identified, agreed and recorded on the CbD form.

The overall standard of performance should be graded according to the level of supervision required. At the time of entrustment of EPA 13 the level of competence should be that the trainee is able to manage all aspects of the case/problem effectively and provide clinical leadership in similar situations.

The ratings recorded on the Management and Leadership CbD forms when cumulated over multiple cases in different clinical forensic settings will provide a defensible basis for a judgment of a trainee's level of entrustment in EPA 13. Over time the assessments at a minimum should address the WBA requirements specified in EPA 13.

Record keeping

The CbD forms must be fully completed, signed and dated by the trainee and the assessor. The forms must be retained by the trainee in his/her portfolio.

RCPA The Royal College of Pathologists of Australasia	**Clinical Forensic Medicine Management and Leadership (EPA 13) CbD Assessment Form**
Trainee Name	**Year of Training** 1 2 3 4 5 if > 5, please specify
Trainee ID	**Expected Stage of Training** (please discuss with trainee and select) ☐ Foundations ☐ Core of CFM ☐ Transition to Fellowship
Assessor Name	**Assessor Position**

Clinical setting

☐ CFMU ☐ SARC ☐ Child protection unit ☐ Custodial facility ☐ Emergency department ☐ other…

Case or problem for discussion (please tick one)

☐ Clinical case or problem with trainee in organizational management role
☐ Clinical case with trainee in team leadership role
☐ Clinical audit
☐ Quality improvement initiative
☐ Development of a policy/procedure/protocol
☐ Other …… (please specify situation)

Brief summary of case

Trainee's performance is as expected for the stage of training (Foundations, Core or Transition to Fellowship) with reference to milestones	**Yes**	**No**	**n/a**
Adapt to service provision structures (including decentralised CFM services)			
Maintain standards (clinical and safety standards, performance targets)			
Manage workload (prioritising, delegating, asking for help, backing up)			
Manage resources (cost consideration, risk-benefit analysis, anticipating issues)			
Negotiation and conflict resolution (shared goals of care, role clarity, respect)			
Decision making (team involvement, use of evidence, continuous review)			
Support staff working with victims/perpetrators of violence (e.g. vicarious traumatisation)			
Risk assessment and management			
Articulate dual obligations, limitations, ethical requirements with multidisciplinary team			
Advocate for the role of the CFM physician (e.g. impartiality) within multidisciplinary setting			
Manage change (systematic analysis, evidence-based change, evaluating impact)			
Skills in reflection and responding to feedback			

Please comment on what was effective, aspects for improvement and agreed action.

Overall standard of performance (please tick one) ☐ Able to manage the case, situation or activity with direct, active full supervision ☐ Able to manage with indirect, readily available supervision ☐ Able to manage with clinical oversight	Minutes taken for discussion… Minutes taken for feedback….
Signature of assessor	Signature of trainee Date

Assessment of Oral testimony

Instructions for Trainees and Supervisors

The process of evaluating trainee performance in presenting oral evidence of an actual CFM case is called an assessment of oral testimony. The purposes of these assessments are: (1) to evaluate the trainee's ability to present medical and forensic findings efficiently to diverse audiences in the legal and justice system; (2) to evaluate the trainee's ability to provide impartial and evidence-based factual and opinion evidence and defend opinions; (3) to provide feedback to trainees by highlighting strengths and areas for improvement, thereby promoting strategies to improve their practice. Throughout training trainees should seek opportunities to discuss oral evidence with experienced colleagues and receive feedback, and this assessment format also serves as a method to document such conversations.

The trainee should initiate each assessment. The trainee should select a suitable assessor, who should be an RCPA Fellow but does not need to be the listed supervisor. The trainee and assessor should select the expected stage of training before the assessment.

As one 'focus of assessment' the trainee should select a case in which s/he is presenting evidence (including defence of an opinion where relevant) at court. It is important to observe the trainee in court during the presentation of evidence. After the court appearance the assessor should spend 10-15 minutes with the trainee discussing the presentation.

As another 'focus of assessment' the trainee should select a case in which s/he has already presented evidence at court, and provide a transcript of the presentation. The assessor should allocate approximately 30-45 minutes to review the transcript and 10-15 minutes to discuss the transcript with the trainee.

The assessor should complete the assessment form while the trainee is present and spend 5-10 minutes providing immediate feedback. Assessors need to be sufficiently familiar with the case to enable them to critically judge the trainee performance. Trainees should initiate the assessment when they are confident they can complete it satisfactorily. Trainees may present evidence under observation or get transcripts of evidence reviewed by suitable qualified staff as practice assessments, prior to initiating those that will be assessed.

Grading, standards and outcome of assessment

Each aspect of the trainee's performance as evaluated through the observation or review should be graded. The "n/a" option should only be used if the assessor is unable to comment on that aspect after discussion. If needed assessors should use "what if" scenarios to probe trainee abilities e.g. in cross-examination, presenting concurrent expert evidence.

The trainee's strengths as well as areas for improvement should be discussed with the trainee. Feedback should be given sensitively, in a suitable environment. An action plan to improve practice should be identified, agreed and recorded on the assessment form.

The overall standard of performance should be graded according to the level of supervision required. At the time of entrustment of the relevant EPA the level of competence should be that the trainee is able to complete the report/statement efficiently without supervision.

Together with the other workplace-based assessments the ratings recorded on the oral testimony assessment forms, when cumulated over multiple types of evidence in different clinical forensic settings will provide a defensible basis for a judgment of a trainee's level of entrustment in a given EPA. Over time the assessments at a minimum should address the WBA requirements specified in EPA 12 (see Appendix 2).

Record keeping

The assessment forms must be fully completed, signed and dated by the trainee and the assessor. The forms must be retained by the trainee in his/her portfolio.

RCPA The Royal College of Pathologists of Australasia	**Clinical Forensic Medicine** **Assessment of Oral Testimony**
Trainee Name	**Year of Training** 1 2 3 4 5 if > 5, please specify
Trainee ID	**Expected Stage of Training** (please discuss with trainee and select) ☐ Foundations ☐ Core of CFM ☐ Transition to Fellowship
Assessor Name	**Assessor Position**

Clinical setting
☐ CFMU ☐ SARC ☐ Child protection unit ☐ Custodial facility ☐ Emergency department ☐ other…

Focus of assessment (please tick one)
☐ Observing an evidence presentation in court ☐ Reviewing a transcript of evidence

Nature of case (please tick one)
☐ Civil ☐ Criminal ☐ Coronial

Type of evidence (please tick one)
☐ Forensic medical examinations and other assessments conducted by self
☐ Opinions on toxicology findings in traffic, interpersonal violence and sexual assault cases
☐ Opinions on medical records and results of medical examinations by other health professionals
☐ Opinions based on review of evidentiary and other material (e.g. videotapes)

Brief summary of situation (nature of request to present evidence, complexity of case, etc.)

Trainee's performance is as expected for the stage of training (Foundations, Core or Transition to Fellowship) with reference to milestones	**Yes**	**No**	**n/a**
Adherence to legal obligations and legal/regulatory frameworks as expert witness			
Seeking, synthesising, and conveying all relevant information			
Explaining medical/ technical concepts–accuracy, logical interpretation, succinctness			
Maintaining impartiality and objectivity as a professional or expert witness			
Providing an evidence base for assertions in expert opinion			
Defence against challenges to expert status (e.g. accusations of bias)			
Recognising boundaries of expertise and taking appropriate action			
Working effectively with members of the law enforcement and the legal systems			

Please comment on what was effective (information towards entrustment)**, aspects for improvement and agreed action.**

Overall standard of performance (please tick one)	Minutes taken for review……
☐ Able to complete oral testimony with direct, active full supervision ☐ Able to complete with indirect, readily available supervision ☐ Able to complete with distant supervisory oversight ☐ Ready to complete oral testimony unsupervised	Minutes taken for feedback……..

N.B. trainees are legally required by court to give factual evidence, and sometimes opinion evidence, irrespective of the level of entrustment. Such circumstances necessitate 'ad hoc entrustment'. These standards however refer to assessor judgement on trainee ability to practice independently and competently in an oral testimony and contribute to 'summative entrustment' decisions.

Signature of assessor	Signature of trainee	Date

Assessment of Medicolegal Statements and Reports

Instructions for Trainees and Supervisors

The process of evaluating trainee performance in producing a medicolegal statement or report of an actual CFM task is called an assessment of medicolegal statements and reports. The purposes of these assessments are: (1) to evaluate the trainee's ability to report medical and forensic findings efficiently to diverse audiences in the legal and justice system; (2) to evaluate the trainee's ability to provide impartial and evidence-based factual and opinion evidence; (3) to provide feedback to trainees by highlighting strengths and areas for improvement, thereby promoting strategies to improve their practice. Throughout training, trainees should seek opportunities to discuss statements and reports with experienced colleagues and receive feedback; and peer review such documents themselves. This assessment format also serves as a method to document conversations about such reports.

The trainee should initiate each assessment. The trainee should select a case in which s/he has played a significant role in preparing the medicolegal report/statement. A limited number of these reports/statements must be submitted for formal peer review prior assessment (see Appendix 2: Table of WBAs for each EPA). The trainee should select a suitable assessor, who should be an RCPA Fellow but does not need to be the listed supervisor. The trainee and assessor should select the expected stage of training before the review.

The assessor should allocate approximately 30-45 minutes to review the report/statement, recognising that the time taken to review will vary according to the documentation. They must complete reviewing the report/statement within 2 days. Then the assessor should spend 10-15 minutes with the trainee discussing the report and providing feedback. The assessor should complete the assessment form immediately after the review and discussion.

Assessors need to be sufficiently familiar with the case to enable them to critically judge the trainee performance. Trainees should initiate the assessment when they are confident they can complete it satisfactorily. Trainees can get some practice reports/statements peer reviewed by suitable qualified staff prior to developing those that will be assessed.

Grading, standards and outcome of assessment

Each aspect of the trainee's performance as evaluated through the written documentation should be graded. The "n/a" option should only be used if the assessor is unable to comment on that aspect after review and discussion. If needed assessors should use "what if" scenarios to probe trainee abilities in recognising limitations, risk management and ethical decision making in particular.

The trainee's strengths as well as areas for improvement should be discussed with the trainee. Feedback should be given sensitively, in a suitable environment. An action plan to improve practice should be identified, agreed and recorded on the assessment form.

The overall standard of performance should be graded according to the level of supervision required. At the time of entrustment of the relevant EPA the level of competence should be that the trainee is able to complete the report/statement efficiently without supervision.

Together with the other workplace-based assessments the ratings recorded on the medicolegal statement or report assessment forms, when cumulated over multiple report types in different clinical forensic settings will provide a defensible basis for a judgment of a trainee's level of entrustment in a given EPA. Over time the types of reports at a minimum should address the WBA requirements specified in all relevant EPAs (see Appendix 2).

Record keeping

The assessment forms must be fully completed, signed and dated by the trainee and the assessor. The forms must be retained by the trainee in his/her portfolio.

RCPA The Royal College of Pathologists of Australasia	**Clinical Forensic Medicine** **Medicolegal Statements and Reports Assessment Form**
Trainee Name	**Year of Training** 1 2 3 4 5 if > 5, please specify
Trainee ID	**Expected Stage of Training** (please discuss with trainee and select) ☐ Foundations ☐ Core of CFM ☐ Transition to Fellowship
Assessor Name	**Assessor Position**

Clinical setting
☐ CFMU ☐ SARC ☐ Child protection unit ☐ Custodial facility ☐ Emergency department ☐ other…

This WBA is part of entrustment information for the following EPA (please tick one)
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11

Type of report (please tick one and circle appropriate sub-selections)
☐ Forensic medical examination – complainant/ alleged perpetrator sexual offence/ non-sexual offence
☐ Assessment of suspected neglect/ abuse
☐ Fitness for interview assessment
☐ Fitness to drive assessment
☐ Forensic injury assessment
☐ Clinical toxicological assessment – alcohol/polysubstance/sexual offence complainant/traffic medicine
☐ Medicolegal opinions – toxicology/ medical examinations by others/ review of evidentiary material
☐ Death scene report
☐ Coronial report

Brief summary of situation (nature of reporting request, complexity of case, etc.)

Trainee's performance is as expected for the stage of training (Foundations, Core or Transition to Fellowship) with reference to milestones	**Yes**	**No**	**n/a**
Adherence to legal obligations and legal/regulatory frameworks as expert witness			
Obtaining and documenting informed consent			
Seeking, reporting and explaining all relevant information			
Structure and language - format, terms/vocabulary, succinctness, completeness			
Documenting handling of evidence – collection, decontamination, chain of custody			
Presenting factual evidence - coherence, accuracy, impartiality, logical interpretation			
Providing expert opinion - decision-making skills, evidence base for assertions			
Identifying professional authority and addressing ethical and professional obligations			
Recognising boundaries of expertise and taking appropriate action			
Seeking and responding to feedback (e.g. in peer review)			
Time management and organizational efficiency (e.g. in taking notes, reviewing)			

Please comment on what was effective (information towards entrustment)**, aspects for improvement and agreed action.**

Overall standard of performance (please tick one)	Minutes taken for review…….
☐ Able to complete the statement or report with direct, active full supervision ☐ Able to complete with indirect, readily available supervision ☐ Able to complete with distant supervisory oversight ☐ Ready to complete the statement or report unsupervised	Minutes taken for feedback……..

Signature of assessor	Signature of trainee	Date

RCPA The Royal College of Pathologists of Australasia	**Clinical Forensic Medicine Significant Incident Report form**	
Trainee name	**Trainee ID (RCPA)**	**Year of training** 1 2 3 4 5 if > than 5, please specify
Nature of incident: what happened and why was it significant?		
What led to the incident?		
Action taken at the time of the incident. Could it have been handled differently?		
Review of similar incidents		
Actions taken (or needed) to prevent future similar incidents		
Reflection by trainee		
Supervisor name (print) and signature		**Date**

RCPA
The Royal College of Pathologists of Australasia

Clinical Forensic Medicine Casework log

How to use this form

During each year of training, trainees should log at least 20 cases i.e. minimum 100 cases to be logged by end of training. These should include a range of cases in different areas of practice addressing the Clinical EPAs.

Only cases that the trainee has reported should be logged. Cases that the trainee has merely observed or reviewed should **not** be included. Logged cases may be written up as cases for the Case log book.

At the end of the year, the supervisor should sight the log and sign off on the annual supervisor report.

Trainee name	**Trainee ID**	**Year of training** 1 2 3 4 5 if > 5, please specify

	Date	**Case ref number (e.g. patient ID)**	**Brief description of case**

Supervisor name (print) and signature	**Date**

RCPA
The Royal College of Pathologists of Australasia

Clinical Forensic Medicine
Ethics and Communication log

How to use this form

This form is to be used to record that the trainee has performed at least **2 different activities per FTE year** from the following list:

.

Code EC1 Undertake significant management roles, e.g., chairperson, secretary, treasurer of clinical forensic medicine related committees.
Code EC2 Complete an ethics related professional development course
Code EC3 Complete the eLearning modules in RCPA Online on Ethics and Cultural Competence and provide evidence of completion in the form of a workbook (ethics) or a certificate (cultural competence
Code EC4 Complete cultural competence training provided by your employer, if a registered health services provider
Code EC5 Other (please specify)

For each activity, trainees must write a one page (maximum) reflection on what they gained from the activity. At the end of each year, this form, appended reflections and any other appended documentation should be sighted by the supervisor and signed off on the annual supervisor report.

Trainee name	**Trainee ID**	**Year of training** 1 2 3 4 5 if > 5, please specify

	Date	**Code**	**Brief description of activity** (including committee name, location, where relevant)	**Supervisor signature**

Supervisor name (print) and signature	***Date***

Appendix 9: Confirmation of Entrustment form

RCPA The Royal College of Pathologists of Australasia	**Confirmation of Entrustment (CoE) form**

Please review the Candidate's workplace-based assessments, supervisor reports, and case log book before completing this form

Name of Candidate (please print) **RCPA ID no.**

EPA ID code	EPA title

Name of primary training site (also state any secondary training sites or attachments used in the entrustment decision making process for this EPA as per EPA-training site matrix)

Year of FTE training 1 2 3 4 5 If >5, (please specify)
In EPAs 1-4, 6, 10 and 12 it is recommended that trainees reach entrustment by end of 2 years FTE training.

EPA entrustment progress
Each level of entrustment reflects different authorisation to act:
L1 Observing the activity L2 Acting with direct supervision present in the room
L3 Acting with supervision available within minutes L4 Acting unsupervised (i.e. with clinical oversight)
L5 Providing supervision to juniors
EPAs are entrusted when **level 4** is reached, representing the privilege to work independently.

Outline any prior learning recognised towards entrustment by the Principal Examiner		
Timeline of entrustment progress	Month and year	Cumulative caseload
L1 entrustment		
L2 entrustment		
L3 entrustment		

Current cumulative caseload	List the WBAs completed to support EPA attainment*					Other entrustment evidence
	Mini-CEX	*DOPS*	*CbD*	*Written reports*	*Other (specify)*	

*The completion of the WBAs as a prerequisite has contributed to this entrustment decision.

Candidate declaration – I have completed the required WBAs and caseload (please PRINT name and sign)	Date
Entrusting Supervisor's declaration – In my opinion, the trainee can be trusted to perform this EPA independently with clinical oversight, and will seek help appropriately. (please PRINT name and sign)	Date
Principal Supervisor's declaration (if different from above) – I have checked the details provided in this form and agree with this entrustment decision. (please PRINT name and sign)	Date
Chief Examiner's declaration – I have checked the supervisor reports and any other necessary documents and agree with this entrustment decision. (please PRINT name and sign)	Date

Appendix 10: Guidelines for completing the Supervisor report

The role and responsibilities of supervisors are outlined in the following documents, which are available on the RCPA website:

- RCPA Induction Manual for Supervisors
- Policy on the Role of the Supervisor

Additional resources for supervisors are available in the supervisor section
http://www.rcpa.edu.au/Fellows/Supervisors

The Supervisor Report Form can be downloaded from the RCPA website:
http://www.rcpa.edu.au/Trainees/Training-with-the-RCPA/Supervisor-Reports

The form should be completed by the supervisor in consultation with other staff who have had a significant role in the trainee's training program and with reference to the trainee's portfolio.

Trainees must make their up-to-date portfolio available to the supervisor for the annual or rotation review. A print-out of the portfolio summary spreadsheet must also be made available for the pre-examination review.

The portfolio should include

- All completed forms for workplace-based assessments
- Copies of all Project Reports
- Evidence that the trainee has completed the minimum number of required other activities
- Copies of all previous supervisors reports

Trainees are responsible for the safe keeping of all these records and should not contact the College for the previous year's supervisor report.

Submitting the Supervisor Report

It is the trainee's responsibility to ensure that the form is completed and submitted by the due date.

At least one supervisor report is due annually and may be submitted with the annual registration for the subsequent year.

For trainees who participate in rotational programs, one report is required for each period of rotation at a different institution and should be submitted at the completion of the rotation.

For trainees sitting formal examinations, the additional pre-examination supervisor report and portfolio summary spreadsheet are due by the date specified in the RCPA *Trainee Handbook – Administrative Requirements* (on the RCPA website). Reports must be available for consideration at the examinations.

A print-out of the portfolio summary spreadsheet must be appended to annual and pre-examination reports.

Please post this form by the due date to

The Royal College of Pathologists of Australasia
207 Albion Street
Surry Hills NSW 2010 AUSTRALIA
Under development

Appendix 11: Key Competencies, Sub-competencies and Milestones, and EPAs

CM Clinical medicine

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Structured Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
CM1. Victim/suspect demographics - Apply knowledge of demographics and health/psychosocial issues for victims, suspects and offenders	Apply knowledge of victim, suspect and offender demographics in interpreting common forensic medical situations.	Analyse health/psychosocial issues for victims, suspects and offenders (e.g. effect of custody/ violence on a complainant's illness behaviour).	Integrates knowledge of demographics and health/psychosocial issues in managing complainants and suspects.
CM2.1. Clinical assessment - Perform appropriate clinical assessments for provision of healthcare	Perform focused clinical assessments with recommendations that are well-documented.	Perform clinical assessments that address the breadth of health issues in each forensic setting.	Perform appropriately timed clinical assessments addressing the breadth of health issues in forensic settings.
CM2.2. Clinical procedures - Perform and interpret non-invasive procedures and/or testing related to healthcare assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures /testing and recognise high risk states in forensic settings (e.g. STI, mental health).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM2.3. Chronic care - Manage chronic medical conditions including their treatment in forensic settings	Develop a basic and thorough management plan including essential treatments/therapies for common clinical presentations in forensic settings.	Develops a tailored and holistic management plan according to patient response, including the balance of benefits and side effects of treatments/therapies, and guide referral.	Develop a comprehensive management plan for complex or unusual cases. Develops a therapeutic alliance. Can predict potential problems arising during care.

CM2.4. Acute care - Manage medical emergencies in forensic settings	Recognize situations with a need for urgent or emergent medical care including life threatening conditions.	Initiate management and stabilize patients with emergent medical conditions.	Manage complex and rare emergencies and predict potential problems arising during care.
CM2.5. Public health - Manage public health issues in forensic settings	Advise and support individuals on disease prevention (e.g. prophylaxis) and health promotion.	Support individuals for disease prevention, health promotion with an understanding of wider systems. Recognise and take responsibility for situations where public health supersedes individual health.	Manage public health implications for individuals and communities effectively in forensic settings and wider systems.
CM3.1. Forensic assessment - Perform specialised assessments (adult/ adolescent/ child) in clinical forensic contexts	Perform accurate and appropriately thorough assessments.	Perform accurate, timely assessments that are targeted to the victim's issues.	Perform accurate, timely assessments that define victim's central issues with interpretation of sensitive information and unusual physical exam findings.
CM3.2. Forensic procedures - Perform and interpret non-invasive procedures and/or testing for forensic medical assessments	Safely perform basic non-invasive procedures and testing with attention to patient safety and comfort.	Perform routine non-invasive procedures and testing and recognise high risk states in forensic settings (e.g. sexual assault).	Proficiently perform and interpret specialised and complex non-invasive procedures and testing.
CM4. Prioritize care - Prioritise health & medicolegal issues, establish goals of care in forensic settings (in forensic medical examination and healthcare assessment)	Understand duty of care and legal responsibilities.	Provide immediate care and address the immediate forensic/ judicial concerns. Identify health issues/ problems needing involvement of other health professionals.	Manage urgent health issues and forensic/judicial concerns. Refer victims, suspects and offenders appropriately for their health issues.
CM5. Clinical handover concepts - Apply relevant clinical knowledge to manage effective transitions of care including clinical handover	Identify the current medical problems to note in transfer of care. Recognise the value of situational awareness in care transitions, risks of incomplete handover.	Ensure own situational awareness in evolving patient care situations. Recognise the clinical changes in patient, active medical problems and illness severity to emphasise in transfer of care. Identify the clinical issues likely to come up.	Develop action plans for active and/or complex medical problems and contingency plans for issues likely to come up. Implement practices in local setting to enhance the situational awareness of others in evolving patient care situations e.g. availability of test results.

FS Forensic skills

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
FS1. Injury interpretation - Apply knowledge of pathology of trauma in interpretation of injury (including genital)	Recognise and interpret basic injuries and injury patterns with a thorough understanding of pathology of trauma, legal definitions (e.g. wounding), and legal severity (e.g. GBH).	Interpret and evaluate complex injury patterns in limited forensic situations. Develop alternative hypotheses about causation and likelihood of presented scenario. Explain clinical reasoning for opinions re legal definitions.	Interpret and evaluate complex injury patterns in varied forensic situations including deceased persons, advises others on correct interpretation in peer review.
FS2. Injury documentation - Document injuries (including photography) in a comprehensive, timely and useful manner	Document basic injuries and injury patterns thoroughly as per rules and using appropriate terminology.	Document multiple and complex injury patterns in limited forensic situations including photography, in a comprehensive ordered manner.	Document complex injury patterns in varied forensic situations. Identify and explain vague/ ambiguous documentation by others (e.g. review of non-forensic healthcare records).
FS3. Sample collection - Collect forensic samples safely and securely (including DNA, toxicology) and interpret collected evidence appropriately	Collect forensic samples with attention to patient safety and comfort, and an understanding of how evidence is generated (e.g. Locard's principle) and how the chain of custody is maintained.	Safely collect forensic samples in complex situations, securely package and label, thoroughly documents and hand over evidence efficiently. Identify appropriate sampling in varied forensic situations, sources of contamination.	Safely collect, securely package and label, thoroughly documents and hand over evidence efficiently in complex situations. Accurately interpret analysed results with sample site (e.g. semen positive swabs from genitalia), identify possible contamination.
FS4. Use of forensic toxicology - Apply knowledge of forensic toxicology and drugs of abuse and related skills in formulating forensic medical opinions	Apply knowledge of forensic toxicology and drugs of abuse (including pharmacokinetics, pharmacodynamics, interactions, analytical methods) in interpreting effects of common drugs in forensic medical situations.	Accurately interpret and document the effects of illicit and therapeutic drugs and their adverse reactions, perform accurate calculations, and formulate forensic medical opinions for various settings e.g. fitness for interview, capacity to consent	Accurately interpret and document effects of common and rare illicit and therapeutic drugs and formulate complex forensic medical opinions in varied situations (e.g. likely drug dosage, tolerance), advise others in peer review.
FS5. Crime scene management – Contribute to managing the 'crime scene' (including death scenes, body of complainant/ suspect and clothing) with other health/legal professionals	Contribute to 'crime scene' management with an understanding of roles of health/ legal professionals involved and how they relate to patient safety, prevention of contamination, and securing of evidence.	Liaise with health/ legal professionals and integrate medical information with information from these sources to manage complex 'crime scenes' and ensure patient safety, prevention of contamination and chain of custody.	Evaluate interdisciplinary liaison and management of 'crime scenes' in varied forensic situations and identify/ rectify/ advise regarding possible compromise in patient safety, collection and handling of evidence.

© January 2022 Royal College of Pathologists of Australasia

ML Medicolegal

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
ML1. Legal aspects of care provision - Apply knowledge of laws and legal processes and engage with police and members of the justice system in provision of care relating to clinical forensic activities	Identify the legal and ethical requirements for medical practitioners (consent, confidentiality, dealing with mentally ill, reporting abuse), and powers and responsibilities of police/custodians in dealing with patients.	Engage with police/custodians/Courts to guide and ensure adherence to legal and ethical requirements when providing assessments and medical services (e.g. health care, psychological safety, child protection) to individuals in forensic settings.	Effectively manage complex scenarios involving provision of health care and ethical/legal issues with a comprehensive understanding of different contexts, advise other health/legal professionals.
ML2. Medicolegal report - Prepare expert medicolegal reports in a comprehensive, timely and useful manner	Report factually on clinical forensic encounters thoroughly as per local requirements and using appropriate terminology and accurate English language.	Report on complex clinical forensic encounters using specialised medicolegal vocabulary of CFM, describe clinical decision making and provide analysis and expert opinions with full explanation and references.	Produce detailed, unbiased, objective, disinterested and ethical forensic and medico-legal reports and statements on complex subjects within their area of expertise with full explanations, references. Provide peer review & training for others.
ML3. Legal knowledge – Use knowledge of relevant legislation and regulations to facilitate 'good clinical forensic practice'	Identify the appropriate local legislation and regulatory framework for medico-legal and forensic work in clinical forensic situations. e.g. Crimes Act, Traffic or Road Safety legislation, Evidence Act and rules relating to expert witnesses, definitions of sexual offences, family violence, assaults, drugs & Poisons, child protection etc.	Provide expert opinions and reports that address relevant medico-legal and forensic issues consistent with local laws, in civil and criminal cases.	Ensure that all forensic "output" whether oral or written is consistent with the appropriate legal and regulatory framework.

ML4. Giving an oral opinion – Communicate evidence in legal contexts effectively	Use accurate and proper English language and presentation skills at a standard appropriate for a healthcare professional.	Efficiently use specialised medicolegal vocabulary of CFM and accurate terms (anatomical/physiological/pathological). Accurately explain technical issues in court to lawyers, judicial officers and lay juries.	Synthesise and explain complex medical and technical concepts clearly and succinctly as a standard appropriate for an expert witness. Effectively use communication aids (e.g. diagrams, images, models) at court.
ML5. Medicolegal evidence – Apply knowledge of legal process to present factual evidence as a health professional in legal contexts	Identify the legal process, court procedures, roles of healthcare and legal officers, and structure and purpose of medico legal evidence. Give coherent and logical factual evidence at court.	Distinguish between the need for factual and expert evidence and give coherent and logical factual and limited opinion evidence at court.	Give coherent, appropriate and logical medicolegal evidence in varied legal contexts and for complex scenarios.
ML6. Expert evidence - Apply legal knowledge and an understanding of the expert status and its limitations to present expert evidence	Identify legal principles e.g. laws of evidence, requirements of the legal body seeking opinion, professional qualifications and skills needed, and limitations of expert evidence.	Qualify him/herself as an expert witness for limited types of cases and present evidence at court in that role effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status.	Qualify him/herself as an expert witness for any appropriate forensic case (or part thereof) and present evidence at court effectively. Take appropriate action when asked for an opinion outside area of expertise. Defend own self against challenges to expert status. Advise counsel about interpretation and contentious areas of opinions or evidence given by others.

EP Ethical Practice

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
EP1. Informed consent - obtain and document informed content effectively in clinical forensic situations	Understand the need for informed consent for examination, documentation, release of information and provision of expert opinion. Describe ethical principles & legal process of obtaining/ documenting informed consent.	Obtain/ document informed consent, before providing a forensic service. Liaise with requesting entity (police, ODPP etc.) appropriately to ensure consent requirements have been met.	Obtain and document informed consent in challenging contexts, explaining the risks, legal implications and benefits of, and the rationale for, the proposed options. Use shared decision-making in the consent process.
EP2. Ethical issues in training - appropriately respond to ethical issues encountered in varied academic and clinical practice contexts as a trainee	Recognise core ethical concepts to address ethical issues encountered in clinical and academic activities.	Manage ethical issues encountered in the clinical and academic setting appropriately.	Recognise and respond to ethical issues encountered in independent practice. Advise others on complex ethical issues.
EP3. Ethical decision-making - apply an understanding of ethical principles in ethical dilemmas (e.g. child abuse, death and dying, human reproduction)	Identify the relevant ethical principles in provision of health care and forensic services. Plan to resolve conflicting priorities in common situations.	Identify relevant ethical principles and resolve conflicting priorities in familiar yet increasingly complex situations, seek support where complexity exists.	Identify relevant ethical principles, can resolve conflicts in most situations. Identify and seek support, including peer review, to consolidate ethical decision making.
EP4. Dual obligations - appropriately manage the dual obligations of forensic and health care	Identify the dual obligations (duty of care and legal/forensic responsibilities) and the priorities to guide action.	Recognise and take responsibility for situations where individual health care needs supersede legal/forensic requirements.	Advise other health care and legal professionals on managing dual obligations and appropriately prioritising.

© January 2022 Royal College of Pathologists of Australasia

EP5. Evidence ethics - apply an understanding of the ethical obligations as an expert to the court in oral testimony situations as well as in providing an expert opinion	Recognise ethical principles on expert evidence (confidentiality, conflicts of interest, need for objectivity, remain within scope of expertise, request relevant information, sub-judicial issues etc.).	Maintain objectivity with professional disinterest in the legal outcome, without being influenced by potential outcomes or fiscal reward. Take appropriate action in potential conflict of interest situations; refer requests outside expertise appropriately.	Exhibit appropriate ethical behaviours in complex situations when providing expert evidence. Advise other health/legal professionals on ethical issues around expert evidence.
EP6. Professional conduct - demonstrate high ethical and professionalism standards across multiple clinical forensic settings and individual circumstances	Exhibit honesty and integrity with patients, prioritize the needs of patients, and manage forensic-specific issues of confidentiality. Reliably attend to required clinical responsibilities and ensure prompt completion of tasks.	Manage complex issues while preserving confidentiality, and acknowledging limitations of responsibility. Meet work demands responsibly and in a timely manner. Assist colleagues appropriately in the provision of duties.	Exhibit appropriate professional behaviours and relationships in complex and unfamiliar clinical situations, reflecting honesty, integrity, dedication, compassion, altruism, and maintenance of confidentiality. Help other team members with issues of professionalism.
EP7. Handover ethics – recognise own and others' responsibilities in care transitions and maintain an environment to ensure patient confidentiality	Understand professional responsibility in handover. Initiate handover in an environment where patient confidentiality can be maintained.	Recognise own responsibility and how responsibility is shared in different clinical forensic situations. Maintain patient confidentiality in implementing handover.	Internalise professional responsibility in handover. Ensure a suitable environment for handover at all times including adequate time/ provisions to ensure patient confidentiality.

EC Effective communication

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
EC1. Clinical consultation – Communicate effectively with complainants and suspects, families and the public in clinical consultations	Articulate dual responsibilities and the difference in health care and forensic role to complainants and suspects, and their families/ carers, in a consultation.	Provide appropriate advice regarding healthcare issues with an understanding of the forensic/legal context, to ensure appropriate outcomes and follow-up care.	Adapt a tailored approach in providing advice, appropriately manage scenarios involving conflict with patients and families/carers with respect to health care issues in forensic settings.
EC2. Communication with justice system -Communicate effectively with members of the justice system and the police in forensic medical situations to manage legal processes (e.g. in writing an opinion)	Understand the legal processes and roles of legal and police officers, and the potential sources of information that may assist in a case. Understand their perspectives and expertise in gathering and presenting information. Understand limitations of communication re: sub-judicial matters.	Seek and synthesise relevant forensic information from legal and police officers. Actively listen to, succinctly convey information, and respond to requests for forensic information appropriately and in a timely and considerate manner.	Efficiently utilise all sources of secondary data to inform a case. Share information that would support forensic/legal processes with due diligence to ethical, health care and legal concerns.
EC3. Healthcare communication in custody - Communicate effectively with custodial staff and the police to manage healthcare concerns of persons in custody	Understand the roles of police, custodians and health care practitioners in facilitating healthcare, including addressing health related complaints by persons in custody against police/ custodians. Understand relevant police/custodian procedures (i.e. communication, monitoring, protocols).	Take referral appropriately, seek and synthesise information on health status and care of persons in custody. Clearly convey medical information, respond to requests to improve healthcare provision, address complaints against police/custodians sensitively and effectively.	Engage in respectful shared decision-making and handover care to police/custodians where appropriate. Deal with potential conflicts arising from health care complaints against police/custodians with impartiality and respect and facilitate systems to reduce this potential (i.e. access to health care).
EC4. Clinical opinion - Develop and report a professional opinion (including consultation) in a comprehensive, timely and useful manner	Follow institutional procedures and local requirements to produce written information around individual patient care and systemic issues affecting communities in forensic settings. Accurately use anatomical terms,	Produce comprehensive documentation with appropriate content and rationale for decisions in both individual management plans and systemic interventions, tailor documentation to intended audience.	Produce complex documentation that provides salient and integrated information succinctly around complex individual presentations and systemic issues that can also be used by others.

	medical/legal vocabulary of forensic medicine.		Identify problematic /less than ideal/ ambiguous documentation by others.
EC5. Handover communication - Communicate effectively with other healthcare professionals and health-related agencies to transfer information and responsibility for care including in clinical handover	Recognise a standard structured template (e.g. ISBAR) and apply it to limited individual situations for synthesis and transfer of information provided during the handover. Provide accurate information for health care professionals. Allow for clarification and questions.	Adapt and apply a standard template to increasingly complex situations in a broad variety of settings. Provide accurate information succinctly. Express concern and urgency as needed. Engage in closed-loop communication by check-back/ repeat-back (provider), and confirmatory/ clarifying questions (receiver).	Adapt and apply a standard template appropriately for any setting, complexity or stage of care. Ensure closed-loop communication and solicit feedback. Analyse gaps in communication, role-model/ instruct effective communication with next caregiver(s) in care transitions. Contribute to process improvements in local handover practices.

CC Cultural competence

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
CC1. Respect for diversity - Work effectively and respectfully with people of different cultural backgrounds (incl. aboriginal, Torres Strait Islander and Māori peoples) with cultural humility and awareness of cultural diversity	Acknowledge the range of backgrounds and cultures of complainants and suspects and the role of this diversity in effectiveness of the health care system. Recognise issues relating to health inequities and inequalities.	Integrate perspectives on cultural diversity and health inequities and inequalities appropriately in developing effective and culturally respectful care plans. Reflect patient differences and views in respectful communication with the patient and the healthcare team.	Engage in culturally sensitive shared decision-making with the individual and the healthcare team. Ensure that health inequities and inequalities are addressed and mitigated. Promote a culture of respect for diversity among other professionals in forensic settings.
CC2. Culturally sensitive communication - Ensure effective communication with people of different cultural backgrounds in the forensic setting	Elicit an understanding of healthcare goals and needs of complainants and suspects through culturally appropriate interviewing skills.	Explore the perspectives of complainants and suspects in clinical assessment and forensic medical examination, and with cultural sensitivity, compassion and empathy	Facilitate discussions with complainants/ suspects and their families in a respectful, non-judgmental, and culturally safe manner.
CC3 Cultural aspects of death and dying – Ensure knowledge of and respect for cultural issues related to death and dying	Understand cultural differences with respect to death and dying.	Practically integrate knowledge of cultural differences in relation to death in medicolegal death investigations.	Understand implications for cultural differences with respect to death and dying, upon the process of medicolegal death investigation.

TL Teamwork and Leadership

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
TL1. Inter-professional health care - Work effectively as a member or leader of the healthcare team in appropriate role(s) to improve patient care quality and enhance patient safety	Identify the impact of inter-professional and trans-professional care on patient care quality in clinical forensic settings, understand own role and responsibilities in the healthcare team.	Adapt to varied roles in care provision in different clinical forensic situations and liaise with members of the healthcare team accordingly. Seek the input of other health professionals for appropriate issues.	Provide feedback on the performance of other team member/s in clinical forensic interactions. Explicitly match scope of practice and skills of each professional to the team tasks. Delegate clinical responsibility appropriately.
TL2. Working with forensic professions - work effectively with others in forensic disciplines to improve processes and optimise forensic outcomes	Recognise the roles and scopes of practice of others in the forensic professions (forensic pathology, forensic biology, forensic toxicology etc.).	Consult other colleagues in the forensic professions appropriately to improve forensic outcomes in routine clinical forensic situations.	Negotiate overlapping and shared clinical/legal responsibilities with other colleagues in the forensic professions in complex scenarios.
TL3. Liaising with justice system - work effectively with others in law enforcement and the legal system to improve processes and optimise forensic outcomes while ensuring access to health care	Recognise the roles and responsibilities of others in the law enforcement and the legal system (police, lawyers, judicial officers, coronial staff) in clinical forensic practice.	Liaise appropriately with members of the law enforcement and the legal system to ensure patients' access to health care while optimising forensic outcomes and legal processes.	Establish and maintain healthy relationships with members of the law enforcement and the legal system to support collaborative decision making for patient benefit and justice.
TL4. Working with respect – work respectfully and resolve conflicts in the team towards better patient outcomes	Recognise and respect the diversity of team member perspectives on clinical situations and their expert decisions.	Respond to team members with respect and appropriate assertiveness. Engage in respectful negotiations to optimise care.	Resolve potential conflicts in a manner that supports a collaborative culture and better patient outcomes.

© January 2022 Royal College of Pathologists of Australasia

TL5. Decentralised service provision - Manage a decentralised service provision model effectively	Recognise the requirement for a decentralised clinical forensic service and understand the elements of such a service including: recruitment, training, credentialing, quality control, management of remote examination facilities, liaison with local law enforcement and legal authorities, provision of consultant support, industrial issues e.g. contracts and remuneration.	Liaises with external practitioners, provides training, conferences, report reviews, remote advice. Works with administrative staff to facilitate this.	High level management of a decentralised service including recruitment, policy making, liaison with central medico-legal, police and other involved parties etc. Negotiates contacts with providers, boundaries between different providers e.g. nurses, arranges remuneration packages and ensures QA activities are available.
TL6. Care transitions with team – work effectively with other healthcare professionals, health-related agencies, and members of the justice system and police to ensure continuing care	Recognise roles and responsibilities of the immediate team and the extended team and the importance of a shared mental model in continuity of care particularly in care transitions.	Include other health and legal professionals and health/legal-related agencies appropriately in care transitions (between ED and custody, CFMU and custody, etc.). Share responsibility for care appropriately.	Ensure a shared understanding of own and others' responsibilities, and ensure continuity of care in all clinical forensic settings. Delegate appropriate responsibility in care co-ordination. Provide leadership and feedback on handovers.
TL7. Teams and medical error – work effectively with other health professionals to mitigate medical error	Recognise the patient safety impact of inter-professional care in clinical forensic settings.	Dialogue with care team members to identify risk and prevention of medical error.	Partner with other healthcare professionals to identify, propose improvement opportunities for preventing medical error within the system.

HA Health Advocacy

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
HA1. Advocate for justice - Articulate the social and political implications of crime and support justice	Recognise the social and political implications of crime and its application to practice of clinical forensic medicine.	Articulate the social and political implications of crime to legal/ police officers and public, analyse current policy.	Contribute to policy discussions on the social and political implication of crime.
HA2. Advocate for vulnerable populations - advocate for health promotion and the prevention of disease and injury in vulnerable populations	Apply principles of health promotion and disease prevention to identify the health needs of vulnerable populations.	Appraise available resources and partner with others in planning and service provision for health promotion and disease prevention in vulnerable populations.	Lead the implementation of health promotion and disease prevention programs and collaborate with others to improve the health of vulnerable populations.
HA3. Advocate for patient needs – Advocate for individual patient needs in communication with the healthcare team, including in care transitions	Recognise when it is necessary to advocate for individual patient needs and develop a common understanding of those needs with the healthcare team. Recognise and address situations where health care must be prioritised over forensic requirements.	Advocate with the healthcare team for needs of individuals and cohorts of patients. Link patient and caregivers to relevant advocacy groups. Act to limit compromise of forensic service when health needs must be prioritised (e.g. attendance to collect samples during emergency surgery).	Contribute to a culture where team members value and advocate for patient needs in providing inter-professional care, encourage engagement with advocacy groups. Provide guidance for health care professionals to balance healthcare needs and forensic requirements.

© January 2022 Royal College of Pathologists of Australasia

QM Quality Management

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
QM1. Patient safety - Enhance patient safety including through effective risk management and adverse incident reporting	Recognise the human and system factors affecting patient safety, and the occurrence of an adverse event or near-miss in the clinical forensic setting.	Use cognitive aids (e.g. checklists for procedures, structured communication tools) to prioritise patient safety in appropriate clinical encounters. Initiate response to adverse events and potential risks and disclose them appropriately.	Identify potential risks before reaching point of care/ legal consequences and identify potential improvements for the future. Implement strategies to mitigate negative human and system factors.
QM2. Recognising limitations - Recognise own strengths, deficiencies and limitations, seek feedback, and manage clinical forensic tasks appropriately	Use strategies for reflection in clinical practice, identify limitations (e.g. limited expertise, conflict of interest) in critical tasks and their consequences.	Engage in ongoing self-audit and seek supervision in a timely and efficient manner, address limitations or develop a safe alternative approach (e.g. reject inappropriate requests for an opinion, refer elsewhere if possible).	Safely operate within own scope of practice. Seek feedback and support from peers and other health/ forensic professionals efficiently.
QM3. Evidence-based quality improvement - Systematically analyse practice and implement/ advocate for evidence-based changes towards quality of a forensic service	Use strategies for reflection on clinical practice when encountering opportunities during casework. Identify the needs for quality review in health care and health care systems.	Engage in opportunities and methods for quality improvement based on reflection on both individuals and populations in clinical practice. Promote quality health care in own service.	Engage in continuous quality improvement activities efficiently. Use one's own successes to advocate for a culture that promote quality health care and optimal health care systems.
QM4. Managing bias – Understand and mitigate potential sources of bias in clinical forensic settings	Understand cognitive biases and bias in forensic sources (e.g. confirmation bias, self-report bias) on clinical decision making and medico-legal reporting.	Identify potential sources of bias in different clinical forensic situations appropriately. Engage in de-biasing techniques and other mitigating steps.	Effectively mitigate potential bias in clinical forensic settings and provide reports, interpretations and opinions as an expert witness who can defend accusations of bias.

© January 2022 Royal College of Pathologists of Australasia

QM5. Evidence-based Medicine - Critically evaluate and apply current scientific evidence (e.g. examination and sampling) to facilitate evidence-based clinical forensic practice	Use current clinical forensic practice information in response to external prompts, understand basic principles of Evidence-Based Medicine.	Identify knowledge gaps as learning opportunities, critically evaluate applicability of scientific literature, evidence and clinical/ forensic/ legal guidelines to individual contexts e.g. to support arguments in medicolegal reports	Incorporate clinical/forensic/legal evidence in regular practice for the benefit of individuals and communities, share findings with fellow learners, strive for change at the organizational level.
QM6. Risk–benefit analysis - Incorporate considerations of cost awareness and risk–benefit analysis in individual and/or population-based care as appropriate	Use externally provided information (e.g. research around a clinical forensic procedure) to inform cost-containing action and/or preliminary risk–benefit analysis.	Critically appraise information in making cost and risk–benefit decisions. Adopt strategies that decrease cost and risk, and optimize benefits for individuals and the justice system.	Integrate cost analysis into one's practice while minimizing risk and optimizing benefits for individuals and communities.

IM Information Management

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
IM1. Effective information flow - Facilitate secure and effective information flow including electronic health records	Organise information as per record keeping and information management guidelines in clinical forensic medicine and in local settings. Adapt use of the health record to the clinical context.	Document and share information to enhance personalised care and support justice. Adapt use of the health record to the patient's health literacy. Ensure patient confidentiality and adherence to legislative obligations in information transfer.	Map information flow in the care of patients and suggest process changes for quality improvement. Review patient safety incidents involving suboptimal written, verbal, or electronic communication.
IM2. Handover information - Facilitate effective transitions of care including clinical handover using information technology	Understand the risks of incomplete documentation and information exchange, identify cognitive aids to use.	Share information through information technology to effectively co-ordinate inter-professional care in care transitions.	Analyse information exchange in care transfers at peer review, contribute to improvements in the use of information technology in handover.
IM3. Information in learning and practice - Use information technology to optimise care delivery and learning	Understand the fundamentals of e-learning and clinical informatics and their application to clinical forensic tasks.	Use e-learning resources and electronic point of care reminders, decision support tools, etc., effectively.	Use digital technology to communicate effectively. Engage others in the adoption and refinement of health information technology.
IM4. Legislative obligations and limitations associated with information management	Understand and demonstrate ability to work according to obligations and limitations under health records and privacy legislation.	Demonstrate ability to work according to obligations and limitations under health records and privacy legislation.	Capable of explaining obligations and limitations under health records and privacy legislation to relevant stakeholders

TS Teaching and scholarship

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
TS1. Teaching - Participate in the formal and informal education of a variety of stakeholders including medical/other health/ forensic science professionals and trainees, and police, lawyers and other members of the justice system	Identify learner needs and select appropriate content in routine situations, initiate a safe learning environment, use a variety of teaching strategies.	Reflect on and prioritise learner needs in different groups, maintain a safe learning environment, use appropriate content effectively through varied teaching strategies.	Ensure a safe learning environment and patient safety, prioritise learner needs in different groups and different situations, adapt and use appropriate content and teaching/feedback strategies for different educational contexts.
TS2. Educating the public - Educate and/ or convey technical information to the public	Communicate at a level and in a manner appropriate for familiar audiences, understand the norms of communicating with the public, understand legal limitations to information sharing and communicating re: sub-judicial matters.	Communicate at a level and in a manner that can be comprehended by most audiences, promote an understanding of the subject.	Communicate at a level and in a manner that can be comprehended by the audience being addressed, promote a deep understanding and discussion.
TS3. Role modelling/ mentoring - Provide appropriate role modelling and mentoring	Identify behaviours associated with positive and negative role-modelling and the attributes of a successful mentor-mentee relationship.	Use strategies for deliberate and positive role-modelling and successful mentoring.	Engage in deliberate and positive role-modelling, promote a culture of learning and practice improvement through role-modelling and mentoring.

© January 2022 Royal College of Pathologists of Australasia

LL Lifelong learning

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
LL1. Self-directed learning goals - adapt a proactive approach for learning and set appropriate learning and improvement goals	Actively engage in proactively identifying learning goals for well-defined situations in clinical forensic settings.	Collaborate with supervisor(s) to develop reflective practices to evaluate ongoing learning, construct learning goals for complex situations.	Establish peer and mentoring relationships with colleagues and team members to promote a community of practice, construct learning goals for leadership in clinical forensic settings.
LL2. Self-directed learning process - Perform appropriate learning activities to guide personal and professional development, taking primary responsibility for learning	Engage in learning activities on the basis of readily available resources or curricular materials, seek help of others to identify learning needs.	Seek learning resources on the basis of learning needs assessment and subsequent constructed goals with self-efficacy, develop effective action plans.	Develop learning plans and evaluate one's own learning process with insight, share activities of value with others and seek input on additional learning activities.
LL3. Feedback and self-assessment - Incorporate feedback and self-assessment into learning and daily practice	Respond to others' point of view and incorporate feedback to regulate own actions.	Actively seek feedback, incorporate multiple feedback sources and insight on own actions in order to self-regulate and develop plans for improvement.	Engage in deliberate practice efficiently through continuous reflection, self-regulation and feedback.

RS Research skills

Sub-competencies	***Foundations for CFM*** ***Initial training****; what is required to work under direct supervision. Based on retrospective work experience, Master of Forensic Medicine, or other basic training. Assessed by written mid program examination or given RPL*	***Core of CFM*** ***During training****; supervisor -lead workplace based learning activities and assessments with progress to entrustment to perform the EPA independently.*	***Transition to Fellowship*** ***Exit to Fellowship;*** what is required for summative entrustment of EPAs and to pass Part II Standardised Oral Examination as well as what is *needed to be able to teach, contribute to policy/procedures etc. Standard of assessment in end of program exit Standardised Oral Examination*
RS1. Epidemiology and biostatistics -Apply knowledge and technical skills of epidemiology and biostatistics in research and clinical practice	Apply basic principles of biostatics and epidemiology to plan research and review epidemiological and statistical data on clinical decisions.	Use appropriate statistical methods and relevant epidemiological data to conduct research and inform clinical decisions for the benefit of individuals.	Critically review epidemiological data and apply specialised statistical methods to inform clinical decisions and research towards individual and community benefit.
RS2. Critical appraisal of research - Critically appraise and assimilate evidence from scientific studies for research purposes	Use current research evidence in response to external prompts, understand principles of research.	Identify research questions arising from knowledge gaps; appraise study design, conduct, and quantitative/ qualitative analysis in research papers.	Critically evaluate applicability of evidence to varied situations and cost-effectiveness of interventions, promote others' use of research for advancement of the discipline.
RS3. Research data management - Manage research data appropriately and effectively	Understand strategies to securely store and efficiently retrieve data.	Store and retrieve data efficiently while maintaining confidentiality.	Store and retrieve data efficiently from multiple sources ensuring confidentiality.
RS4. Research communication - Communicate research findings (e.g. presentation, writing skills)	Interpret and present study findings and their relevance to own practice, recognise the conventions of reporting biomedical research.	Clearly present study findings and their relevance for different audiences, comply with the conventions of reporting biomedical research.	Use effective presentation strategies and succinct arguments to articulate study findings and relevance to multiple stakeholders at scientific and public forums.

© January 2022 Royal College of Pathologists of Australasia

Appendix 12 Key Competency Domains and EPA Map

EPAs		Key competency domains [● = relevant ●● = critical]												
		Clinical Medicine	Forensic skills	Medicolegal skills	Heath Advocacy	Effective Communication	Ethical Practice	Information Management	Quality Management	Teamwork &Leadership	Cultural Competence	Research skills	Teaching &Scholarship	Lifelong Learning
EPAs														
1	FME sexual offence complainant	●	●●	●●	●	●●	●	●	●	●	●		●	●
2	FME non-sexual offence complainant	●	●●	●●	●	●●	●	●	●	●	●		●	●
3	FME vulnerable group abuse/neglect	●	●●	●●	●	●●	●	●	●	●	●		●	●
4	FME alleged perpetrator	●	●●	●●	●	●●	●	●	●	●	●		●	●
5	Fitness for interview assessment	●●	●	●	●●	●●	●	●	●	●	●		●	●
6	Healthcare in forensic setting	●●		●	●●	●●	●	●	●	●	●		●	●
7	Fitness to drive/medically related impairment	●●	●	●●		●●	●	●	●		●		●	●
8	Injury assessment and interpretation	●	●●	●●		●●	●	●	●		●		●	●
9	Clinical toxicological assessment	●	●●	●●			●	●	●		●		●	●
10	Provision of medicolegal opinions (excl coronial)	●	●	●●		●●	●●	●	●	●			●	●
11	Medicolegal death investigation (incl coronial)	●	●	●●		●●	●	●	●	●	●		●	●
12	Oral testimony			●●		●●	●●	●	●	●			●	●
13	Management and leadership CFM service	●	●	●	●	●	●●	●●	●●	●●	●	●●	●●	●

Debbie McDonald

From: Cathy Lincoln
Sent: Wednesday, 19 July 2017 9:40 AM
To: Adam Griffin; Paul Csoban
Cc: Nelle Van Buuren; Debbie McDonald
Subject: RE: Re: SAIK

Thanks Adam.

Yes, it is also our routine practice to ask police to bring SAIKs to examinations but as we've highlighted before, this does not always occur.

As long as you're aware of the situation, this issue is your call.

We'll make a note in the comments section on the examination stats sheets whenever there is a delay related to accessing a SAIK.

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit SER
[redacted]

From: Adam Griffin
Sent: Wednesday, 19 July 2017 9:29 AM
To: Cathy Lincoln; Paul Csoban
Cc: Nelle Van Buuren; Debbie McDonald
Subject: RE: Re: SAIK

Thanks Cathy,

Paul has asked me to respond to this.

I made a direct enquiry with Brian Codd, who confirmed with his staff that they had no difficulty in accessing SAIKs. As such, please confirm with requesting police officers when they call you that they have a kit (I usually ask them to bring two) in their possession for this purpose. This is consistent practice throughout the other regions. I could understand your concern if police indicated difficulty, but no such difficulty was communicated.

Kind regards,
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

[redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cathy Lincoln
Sent: Wednesday, 19 July 2017 9:10 AM
To: Paul Csoban
Cc: Adam Griffin; Nelle Van Buuren; Debbie McDonald
Subject: FW: Re: SAIK

Paul,

Debbie is finding it challenging to access SAIKs for SER FMOs to use in a situation when police do not bring one to the examination (see email thread below).

This has the potential to increase examination times for SER FMOs due to delays waiting for police to bring kits, as has already occurred.

If you consider this to be an administrative management issue rather than a clinical management issue, could you please address for us?

Thanks
Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit SER
[redacted]

From: Debbie McDonald
Sent: Wednesday, 19 July 2017 9:02 AM
To: Cathy Lincoln
Subject: FW: Re: SAIK

Hi Cathy

I haven't had any response from Adam in relation to these kits. He was going to arrange for QPS to get these but I have had no response. As you can see in the email trail below. Tasman asked me not to contact FSS directly. Nelle has none for this weekend so there may be extended delays in Sexual Assaults.

Thanks
Debbie

Debbie McDonald

Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

[redacted]
a | PO Box 755, Southport BC QLD 4215
w Queensland Health [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Debbie McDonald
Sent: Tuesday, 11 July 2017 9:13 AM
To: Adam Griffin
Cc: CFMU; Nelle Van Buuren; Cathy Lincoln
Subject: FW: Re: SAIK

Hi Adam

We still don't have any Sexual Assault kits down here. Can you please organise some to be sent to us? Just letting you know this will extend all sexual assault examination times when our doctors are waiting around for kits.

We have only received 10 kits this year.

Thanks
Debbie

Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

p [redacted]
a | PO Box 755, Southport BC QLD 4215
[redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Debbie McDonald
Sent: Tuesday, 20 June 2017 10:56 AM
To: Adam Griffin
Subject: RE: Re: SAIK

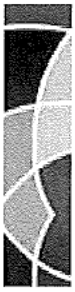
Hi Adam

I have attached an email from Tasman in relation to these kits. Cecilia Dal Santo arranged for me to access these through FSS so I arranged 30 to be delivered to your office back on 27/3/17.

I only received 10 on 8/5/17 and told to contact CFMU if I wanted these again. I always use to get these kits from the Southport District office but Lorraine Burkin rang last year and did not want to supply these anymore.

So if you can get QPS or FSS to supply us again that would be helpful.

Thanks
Debbie



Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

[redacted]
a | PO Box 755, Southport BC QLD 4215
[redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Adam Griffin
Sent: Tuesday, 20 June 2017 10:29 AM
To: Debbie McDonald
Subject: Re: SAIK

Hi Debbie,

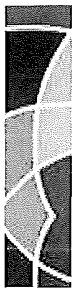
I understand you are reporting difficulty obtaining SAIKs through QPS. I will escalate to QPS.

Kind regards,
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

[redacted]
a | 51 Herschel St, Brisbane, 4000
[redacted]



HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

Debbie McDonald

From: [redacted]
Sent: Thursday, 14 July 2016 3:13 PM
To: Debbie McDonald
Subject: RE: re SAIKits

Debbie,

I was going to but realised we only have one left.
I ordered 15 for here (NIG) and 15 for Coomera office last week.
I was told they only had 10 available to supply to Coomera and they had to order more last Monday.

So as we are now, we still don't have any. Sorry but hopefully we'll have some soon.

Thanks

Matthew Ward | Acting Detective Inspector 9865 | Gold Coast Criminal Investigation Branch, Northern Crime Group.
[redacted] 68 Ferny Ave, Surfers Paradise, 4217 | PO Box 561, Surfers Paradise BC, Qld, 4217
[redacted]

From: Debbie McDonald [redacted]
Sent: Thursday, 14 July 2016 1:48 PM
To: Ward.MatthewB[SER] [redacted]
Subject: RE: re SAIKits

Hi Matt

I was told by Dr Sally Jacob's you were going to drop off some SA kits last week. Just thought I would see if they were still coming?

Thanks
Debbie

Debbie McDonald

Administration Officer

Clinical Forensic Medicine Unit
Health Support Queensland
Department of Health | Queensland Government
PO Box 755 Southport BC Qld 4215
[redacted] www.health.qld.gov.au

From: Sally Jacobs
Sent: Thursday, 7 July 2016 11:58 AM
To: [redacted]
Cc: Debbie McDonald
Subject: re SAIKits

Dear Matt,

I was contacted by a PCSC Spittle this morning in regard to some old SAIK's at Surfers CIB

I was advised that she should contact you in regard to her query about disposing of them.

Dr Lincoln also asked me to follow up with you regarding the new SAIK's.

Apparently we cannot order them ourselves - this needs to be done by police.

Dr Lincoln has had previous discussions with you and understood that you would order some kits and get them to us.

We don't have any in our office currently which may result in unnecessary delays when called out to do a sexual assault examination, as police also don't seem to have them.

Could you please liaise with Debbie about this as I am not in the office every day.

Regards

Sally

****

This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.

Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.

If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia +61 1800 198 175 or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

Although Queensland Health takes all reasonable steps to ensure this email does not contain malicious software, Queensland Health does not accept responsibility for the consequences if any person's computer inadvertently suffers any disruption to services, loss of information, harm or is infected with a virus, other malicious computer programme or code that may occur as a consequence of receiving this email.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

****

****

CONFIDENTIALITY: The information contained in this electronic mail message and any electronic files attached to it may be confidential information, and may also be the subject of legal professional privilege and/or public interest immunity. If you are not the intended recipient you are required to delete it. Any use, disclosure or copying of this message and any attachments is unauthorised. If you

Debbie McDonald

From: Debbie McDonald
Sent: Tuesday, 20 June 2017 10:56 AM
To: Adam Griffin
Subject: RE: Re: SAIK
Attachments: 20170620104940728.pdf

Hi Adam

I have attached an email from Tasman in relation to these kits. Cecilia Dal Santo arranged for me to access these through FSS so I arranged 30 to be delivered to your office back on 27/3/17.

I only received 10 on 8/5/17 and told to contact CFMU if I wanted these again. I always use to get these kits from the Southport District office but Lorraine Burkin rang last year and did not want to supply these anymore.

So if you can get QPS or FSS to supply us again that would be helpful.

Thanks
Debbie

Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

[redacted]
a | PO Box 755, Southport BC QLD 4215
[redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Adam Griffin
Sent: Tuesday, 20 June 2017 10:29 AM
To: Debbie McDonald
Subject: Re: SAIK

Hi Debbie,

I understand you are reporting difficulty obtaining SAIKs through QPS. I will escalate to QPS.

Kind regards,
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

[redacted]

a | 51 Herschel St, Brisbane, 4000
[redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

Debbie McDonald

From: CFMU
Sent: Monday, 8 May 2017 3:52 PM
To: CFMUSER
Cc: Debbie McDonald
Subject: Sexual Assault Kits_Delivery

Hi Debbie,

I just wanted to confirm with you that we will send some spare sexual assault kits via post to your office.

Please note that these are spares and only for occasions when QPS are unable to provide the kits themselves (as per their procedure demands of them).

Please contact either Megan or myself regarding any supply issues rather than Di at Coopers Plains. Megan and I will pass your concerns on to the appropriate parties (i.e. Adam and/or QPS).

Thanks,
Tasman

If you have received this email in error please notify this office immediately.

Clinical Forensic Medicine Unit
Administration

Clinical Forensic Medicine Unit,
Health Support Queensland, **Department of Health**

[redacted]
a | 51 Herschel Street, Brisbane, QLD, 4000
[redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

Debbie McDonald

From: [redacted]
Sent: Tuesday, 20 June 2017 10:59 AM
To: Adam Griffin
Cc: CFMU; CFMUSER
Subject: RE: Sexual Assault Investigation Kits
Attachments: image003.jpg

Thank Adam

It is good to hear from you and if you are ever down this way (Gold Coast) I would be keen to catch up.

I am not aware of any particular problem with the kits but will follow up with our Regional Crime Coordinator and get back to you asap.

Regards

***Brian Codd** APM*
Assistant Commissioner
South Eastern Region | Queensland Police Service
Surfers Paradise Police Centre, 68 Ferny Avenue, Surfers Paradise | PO Box 561 Surfers Paradise 4217
[redacted]

From: Adam Griffin [redacted]
Sent: Tuesday, 20 June 2017 10:35 AM
To: Codd.BrianJ[SER] [redacted]>
Cc: CFMU <[redacted]>; CFMUSER [redacted]>
Subject: Re: Sexual Assault Investigation Kits

Good morning Brian,

I hope you are travelling well. My apologies for bothering you with this: my colleagues in Southport have reported difficulty obtaining the investigation kits required to collect evidence in sexual assault matters in your Region. These are distributed to police and we need the investigating police to actually present with the kit to allow evidence to be collected.

This is done throughout the State and I am uncertain as to the specific difficulties that may be arising that are limiting local police access to these kits. I very much wish to assist in facilitating their access; if there is a difficulty then I am very happy to see what I can do from my end.

Kind regards,
Adam

Dr Adam Griffin

Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

[redacted]
a | 51 Herschel St, Brisbane, 4000
w [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

****

This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.

Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.

If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia +61 1800 198 175 or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

Although Queensland Health takes all reasonable steps to ensure this email does not contain malicious software, Queensland Health does not accept responsibility for the consequences if any person's computer inadvertently suffers any disruption to services, loss of information, harm or is infected with a virus, other malicious computer programme or code that may occur as a consequence of receiving this email.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

****

****

CONFIDENTIALITY: The information contained in this electronic mail message and any electronic files attached to it may be confidential information, and may also be the subject of legal professional privilege and/or public interest immunity. If you are not the intended recipient you are required to delete it. Any use, disclosure or copying of this message and any attachments is unauthorised. If you have received this electronic message in error, please inform the sender or contact [redacted]
This footnote also confirms that this email message has been checked for the presence of computer viruses.

****

Debbie McDonald

From: [redacted]
Sent: Thursday, 3 September 2015 2:32 PM
To: Cathy Lincoln; Debbie McDonald
Subject: RE: sexual assault kits for SER region CIB and CPIU

Thanks,
I'm happy for whatever system you believe will be the best fit for the situation.
Our priority is ensuring you have the kits available to you. The rest we can work around as it impacts most on your office anyway.

Matthew Ward | Detective Senior Sergeant 9865 | Gold Coast Criminal Investigation Branch, Northern Investigative Group.
[redacted]68 Ferny Ave, Surfers Paradise, 4217. | PO Box 561, Surfers Paradise BC, Qld, 4217.
[redacted]

From: Cathy Lincoln [redacted]
Sent: Thursday, 3 September 2015 9:13 AM
To: Ward.MatthewB[SER] [redacted]>; Debbie McDonald <[redacted]>
Cc: Anne-Louise Swain <[redacted]>; Christine Mirakian <[redacted]>; Nelle Van Buuren <[redacted] Sally Jacobs [redacted]
Subject: RE: sexual assault kits for SER region CIB and CPIU

Thanks Matt.

Deb, can you please organise 3 exercise books (one for each hospital site) and discuss with SER FMOs where these are best placed at each examination site to facilitate recording the information.

Given the multitude of forms we are already required to complete in relation to sexual assault examinations, these books should be highly visible and preferably placed somewhere to ensure there is a visible reminder for FMOs to complete them and also that they don't go missing. We can't have a non-secured list of complainant names which is accessible in the room for confidentiality reasons (cleaners; at Robina room is not dedicated to FMOs).

We will do this for sexual assault kits only at this stage. Until the current kit supply is finished, FMOs can write 'current stock' in column for 'date received'...is that okay Matt? Keeping tabs on the register, kit numbers and ordering will remain a challenge though as we have no forensic nurse support at CFMU SER.

I just had a thought; might it be easier for there to be one register book kept at CFMU SER office; after each sexual assault, FMOs would give Debbie a copy of the property receipt for the kit and details about police officer who provided the kit at which hospital, date etc..

I will leave with you to consider as I'm on leave for next 4 weeks; I have cc-ed the SER FMOs so they're in the loop. Debbie will keep them informed of the process.

Thanks again

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit, SER
[redacted]

e. [redacted] |

From: [redacted]
Sent: Thursday, 3 September 2015 7:36 AM
To: Debbie McDonald
Cc: Cathy Lincoln
Subject: FW: sexual assault kits for SER region CIB and CPIU

Hi Debbie,
Following on from the chain of e-mails below, I've suggested that we may overcome future concerns from the Brisbane Child and Sex Crimes Unit if we have some sort of transparent accountability measure in place at the examination rooms.
What I'm thinking of is a simple handwritten register whereby the following can be recorded within the columns;

- Kit serial number
- Date received
- Date used
- Dr name
- Patient name
- Identity of police officer taking possession.

So when say 10-15 kits are received they are immediately recorded in the register with the receipt date also referenced. At the appropriate time, the relevant doctor will then use a kit and record the remaining information. Identifying the police officer will be relevant for our continuity reasons, and therefore places all future responsibilities for the kit with police and not your office.

You could even do a separate register for the toxicology kits if you believe it's necessary, however I'm unaware of any issues here and it may be problematic if you've got a broader spread of doctors accessing these kits.

My thoughts are only something simple to keep track of usage. Might help too in predicting requests for future supplies.
This is just an idea, and I'll leave it with you for the finer details, but I think it would help with any future questions coming out of Brisbane.

Regards,

Matthew Ward | Detective Senior Sergeant 9865 | Gold Coast Criminal Investigation Branch, Northern Investigative Group.
[redacted] 68 Ferny Ave, Surfers Paradise, 4217. | PO Box 561, Surfers Paradise BC, Qld, 4217.
[redacted]

From: Ward.MatthewB[SER]
Sent: Thursday, 3 September 2015 7:24 AM
To: 'Cathy Lincoln' [redacted]>
Cc: Pearce.NicoleR[SER] [redacted]>
Subject: RE: sexual assault kits for SER region CIB and CPIU

Thanks Cathy. That makes sense. I get in touch with Debbie about what kind of format the records should be kept, but my thoughts were nothing formal and a notebook that stays with the received kits and records usage sounds ideal.

Nikki,
Cathy's mentioned you within the e-mails below. Do you see this as something that could fit into your

portfolio in terms of a liaison between Regional Office and the FMOs in ensuring the examination rooms are well stocked with sex assault kits and toxicology kits? Do you have the contacts in Logan and Robina?

Thanks

Matthew Ward | Detective Senior Sergeant 9865 | Gold Coast Criminal Investigation Branch, Northern Investigative Group.
68 Ferny Ave, Surfers Paradise, 4217. | PO Box 561, Surfers Paradise BC, Qld, 4217.

From: Cathy Lincoln
Sent: Wednesday, 2 September 2015 3:42 PM
To: Ward.MatthewB[SER] <; Thiesfield.MickJ[SER]
>
Cc: Debbie McDonald
Subject: RE: sexual assault kits for SER region CIB and CPIU

Sounds like a plan Matt.

Without sending someone around to each hospital we examine at (ie GCUH, Robina and Logan) to count them, I can only estimate how many are currently at each site; probably 5-10 at most.

Its difficult to predict the kit numbers we need; Gold Coast FMOs do 60-70 sexual assaults per year; over the last 6-12 months this has been roughly half at Logan and half on Gold Coast.

If you tell Debbie what information you want recorded at each site, she can draw up an exercise book to use as a register (unless you have something more 'official' in mind?).

While we're on this subject, is it worth discussing forensic toxicology kits as well? Currently we get a supply of these (free of charge) from Regional office as well.

If you think the same issue will come up in relation to these, we require 2 kits per each sexual assault case that you require complainant tox analysis done (one for urine; one for blood).

In the past the EDs have been supplied with these by police for traffic offences (note: FMOs no longer involved in these), to ensure there is always a supply at the hospital. I'm not sure if this is still the case.

However, in this new era of fiscal restraint, they may want police to bring a tox kit or kits to ED on a case-by-case basis as well? At GCUH, Nikki Pearce, Hospital Police Liaison officer may be able to advise, but not sure if anyone oversees this at LCH OR Robina.

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit, SER

From:
Sent: Wednesday, 2 September 2015 3:26 PM
To: Cathy Lincoln;
Cc: Debbie McDonald
Subject: RE: sexual assault kits for SER region CIB and CPIU

I understand. Thanks Cathy.
With this in mind, what Mick and I may need an understanding of what you currently have in stock at the various locations, and what you would be seeking by way of an order completed by us.
From my end, I'll arrange to get them into your hands to avoid the delays you reference.

To overcome the Child Abuse and Sex Crimes Unit concerns, and now manage suggested risk over misuse, could it be appropriate to have a simple handwritten register in each examination room documenting usage of individual kits, by referencing a serial number against a QPRIME reference number / name / date etc? I'm thinking that way if usage is ever raised again we can justify that usage.

Look forward to hearing back from you.
Thanks

Matthew Ward | Detective Senior Sergeant 9865 | Gold Coast Criminal Investigation Branch, Northern Investigative Group.
68 Ferny Ave, Surfers Paradise, 4217. | PO Box 561, Surfers Paradise BC, Qld, 4217.

From: Cathy Lincoln
Sent: Wednesday, 2 September 2015 3:08 PM
To: Thiesfield.MickJ[SER] <; Ward.MatthewB[SER]
>
Cc: Debbie McDonald <; Briggs.BarbaraJ[SCC]
<>
Subject: sexual assault kits for SER region CIB and CPIU

Matt and Mick,

I've had a call this afternoon from A/Det S/Sgt Barbara Briggs from Child Abuse and Sex Crimes Unit in Brisbane to tell me that we are no longer allowed to access sexual assault kits (free of charge) via SER Regional office as has been the arrangement in past years.

Her Unit is now provided with these (free of charge as I understand it) by Qld Health Forensic and Scientific Services (QHFSS) and is responsible for dissemination to CIBs and CPIUs around the State.

She's asked that in future, we access all kits from jurisdictional CIB/CPIUs in future, and has asked that you order them from her Unit and then pass them on to FMOs for use in forensic examinations.

There are various ways the transfer of these kits to FMOs can occur and I'm happy to discuss further if of this would be helpful.

However, should police decide to provide kits to FMOs on a case-by-case basis, FMOs will need to request police call them and confirm they are at the relevant hospital with a kit (in good condition), to avoid unnecessary delay for doctors called out to perform sexual assault forensic examinations. We've had unfortunate instances in the (now distant) past where police have experienced difficulties accessing these kits, resulting in cost to Qld Health for doctor call-out time.

I'll be on leave for most of Sept but please contact Nelle van Buuren or Sally Jacobs at Southport CFMU if you need more information – I have filled them in re this new process.

Thanks
Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit, SER
Forensic & Scientific Services | Health Support Queensland | Department of Health | Queensland Government
9 Bay St, Southport, Qld 4215
PO Box 755, Southport BC, Qld 4215

****

This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.

Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.

If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia +61 1800 198 175 or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

Although Queensland Health takes all reasonable steps to ensure this email does not contain malicious software, Queensland Health does not accept responsibility for the consequences if any person's computer inadvertently suffers any disruption to services, loss of information, harm or is infected with a virus, other malicious computer programme or code that may occur as a consequence of receiving this email.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

****

****

CONFIDENTIALITY: The information contained in this electronic mail message and any electronic files attached to it may be confidential information, and may also be the subject of legal professional privilege and/or public interest immunity. If you are not the intended recipient you are required to delete it. Any use, disclosure or copying of this message and any attachments is unauthorised. If you have received this electronic message in error, please inform the sender or contact securityscanner@police.qld.gov.au. This footnote also confirms that this email message has been checked for the presence of computer viruses.

****

Debbie McDonald

From: Cathy Lincoln
Sent: Thursday, 22 October 2015 2:57 PM
To: [redacted]
Cc: Debbie McDonald; Christine Mirakian; Nelle Van Buuren; Sally Jacobs
Subject: RE: Sexual Assault Kits for SER region

Thanks very much Maria – we greatly appreciate this.

I have cc-ed this email to the other SER FMOs; presumably after your meeting, Kristy will let us know where they will be stored and ensure hospital staff are aware.

Thanks again,

Cathy

From: [redacted]
Sent: Thursday, 22 October 2015 2:45 PM
To: Cathy Lincoln
Subject: Sexual Assault Kits for SER region

Good afternoon Dr Lincoln,

I have recently discussed with A/D/Inspector THIESFIELD the issues identified regarding sexual assault kits being made available to FMOs for forensic examinations in Logan District. I have now undertaken the responsibility of ordering and suppling kits for both Logan CIB and CPIU investigators.

In further consultation with the Sexual Assault Response Team at Logan Hospital, it has been decided that the kits will now be stored on a permanent basis at ED at LCH. It is envisaged that this will provide a more timely response by QPS to sexual assault investigations. I have established a register for the kits and will regularly monitor and replenish kits as required.

I am meeting with Senior Social Worker Kristy FITZGERALD tomorrow at LCH to deliver a bulk number of kits and implement this new process. I wanted to notify you of this new process and request that you please disseminate this email to your colleagues for their information. I am available on [redacted] if there are any issues that you wish to discuss?

Kind regards,
Maria ORESGANIN
D/Sgt 12910
Logan District SCAN

****
CONFIDENTIALITY: The information contained in this electronic mail message and any electronic files attached to it may be confidential information, and may also be the subject of legal professional privilege and/or public interest immunity. If you are not the intended recipient you are required to delete it. Any use, disclosure or copying of this message and any attachments is unauthorised. If you have received this electronic message in error, please inform the sender or contact securityscanner@police.qld.gov.au. This footnote also confirms that this email message has been checked for the presence of computer viruses.
****

Teamwork SA Interagency guidelines Ctte.
Strategic policy — Policy development
Louise Gottardo / Pippa Davie 28/7/22.
Helen Gregg.
Jacqui Thomson.
Todd Fuller
Otilie Mark (QCH)
Anna Morgan (VAQ)
AG

Taskforce report recent release
- medicare
- awaiting govt acceptance.
lose + add dis-done statut.
"interim" guidelines?
not static
"lingdocument"
taskforce input
other issues coming up. < FSS. SA/K review

OPG *

Want it out soon
Oct 2022.
Sensitive awareness
or mtg

QSAN 2 wks to review
wide diverse membership *
?approval - bureaucratic ie DG
(dept sym off.)
Ministerial.
- because so many depts involved.
'operational' vs 'guideline' aspect.
2 weeks feedback from group.
Helen Gregg - reference DNA aspect of SA/K.
- AG "where practical" ?oral assaults.
p29.
- operational issue.
- will be ~~X~~ oversun by SA/K review.

kikki.K

SUBJECT DATE

28/7/22 cont:-
future of interagency group (when guidelines finalised).
- may be best placed to deal with interagency issues at local levels.
- service issues
- bureaucratic
- if identify operational issues, they come to interagency Ctte ???
something that allows for 'rapid response' to issues.
? may be absorbed by Victim Commissioner or Ombudsman.
Also national initiatives underway (Louise G)

1/8/22 mtg c̄ Priya K, CPV
~~SWO~~
- DNA de-contamination protocol.
- room supplier list
- sawicloth etc.
Rooms.
RCPA training / Catherine Skellen.

kikki.K

The Royal College of Pathologists of Australasia
ABN 52 000 173 231

Durham Hall 207 Albion Street Surry Hills NSW 2010 Australia
Telephone 61 2 8356 5858 Facsimile 61 2 8356 5828

RCPA
The Royal College of Pathologists of Australasia

Position Statement

Subject:	**Role of the Specialist in Clinical Forensic Medicine**
Approval Date:	July 2019
Review Date:	July 2023
Reviewed By:	Faculty of Clinical Forensic Medicine Committee
Number:	5/2019

Clinical Forensic Medicine (CFM) is concerned with provision of forensic medical services primarily to the living, and the collection and interpretation of information for the purposes of criminal and civil law, the judiciary and the police. It is the branch of clinical medicine that deals with both the medical and legal aspects of patient care.

A broad scope of clinical experience, in particular, emergency medicine and primary care, provides the necessary foundation for doctors working in this field, who must be competent to manage acutely ill and injured patients. Forensic physicians also draw their clinical experience from a range of other areas such as paediatrics, gynaecology, psychiatry, addiction medicine and sexual health care.

Forensic physicians work closely with police, lawyers, coroners, forensic pathologists and forensic scientists; the scope of their work involves clinical examination of living persons, the provision of written reports and oral testimony in court and encompasses both forensic and health care roles; the forensic examination of complainants and alleged perpetrators to assist the legal process, and the provision of health care to patients in contact with the legal system. While the clinical forensic physician's responsibility to the courts demands independence and impartiality, his/her contact with vulnerable patient groups also requires health care advocacy and public health roles.

Clinical forensic medicine is both a clinical discipline and an information-based specialty which operates at the interface between medicine and the law in order to provide useful information to assist in the legal process. This process begins at the point of contact between the patient and health professional, and extends into domains such as record keeping, report writing and presentation of evidence in court.

Forensically trained doctors are familiar with the legal system and gain experience in dealing with police and lawyers and appearing in court. They are involved in preparing medical reports and expert opinions on a daily basis. They are familiar with relevant laws in sensitive areas such as interpersonal violence, sexual assault, custodial and traffic medicine, with respect to definitions of offences and legal issues surrounding examinations and specimen collection.

Across the full spectrum of interpersonal violence including homicide, physical assault, family violence, sexual assault, child and elder abuse, as well as drug and traffic offences, specific areas of expertise in clinical forensic medicine include:

- Examination of victims and alleged perpetrators in investigations of crimes against the person, evidence collection and the documentation and interpretation of injuries.

- Provision of healthcare in both an acute and ongoing basis, to victims of crime and those in police custody and prisons.
- Assessment and medico-legal opinions regarding the clinical effects and toxicology of alcohol and drugs.
- Assessment and medico-legal opinions involving traffic medicine including injury interpretation, drug and alcohol effects, medical causes contributing to crash causation and fitness to drive.
- Preparation of medico-legal reports and presentation of evidence in court.
- Assessment of persons involved in the legal system with respect to fitness for interview, fitness for custody and fitness to plead to charges.
- Education and research associated with the above areas.

Clinical forensic medicine is not a discipline that seeks to replace any existing hospital specialty or area of practice, nor is it primarily concerned with medical malpractice, misconduct, fraud or compensation-based civil litigation. It is not an alternative for specialist opinions in specific disciplines such as surgery, cardiology, obstetrics and gynaecology. Although there is some interface with psychiatry, it is not concerned with the responsibilities of forensic psychiatrists, namely the determination of criminal responsibility and care of criminal offenders in a psychiatric facility.

Whilst in some jurisdictions, forensic physicians assist with aspects of medicolegal death investigation such as provision of opinions in relation to clinical issues prior to death or attendance at death scenes, their work is not primarily concerned with pathology and the examination of deceased persons. Neither is clinical forensic medicine a forensic scientific laboratory discipline, although it deals with the specialised interpretation of results.

Key attributes necessary for the work of a forensic physician include;

- Broad general medical experience,
- Sound knowledge of the pathophysiology of disease and trauma, surface and internal anatomy, pharmacology of common drug classes, the natural and forensic sciences, the law and relevant legislation,
- A methodical and analytical approach,
- Competency in clinical reasoning, and the ability to formulate and articulate well-balanced views,
- Good interpersonal and communication skills (both oral and written).

Clinical forensic medicine is practised in different ways in the various Australasian jurisdictions and not all forensic physicians work across the full scope of the discipline. Several practice streams exist within the discipline including;

- sexual offence medicine,
- paediatric forensic medicine,
- custodial medicine and
- traffic medicine.

These practice streams may not be homogeneous, the nature of the work in each stream varying according to the environment in which the service is provided, whether it be a hospital emergency department, sexual assault service or prison facility. For this reason, credentialing of doctors working in clinical forensic medicine is necessarily task-focused.

Since the establishment of the Faculty of Clinical Forensic Medicine in 2014 and development of a competency-based training program in 2016, the pathway to Fellowship requires at least 3 years postgraduate experience, completion of the Master of Forensic Medicine degree (Monash University) or equivalent, participation in the training program and fulfilment of examination requirements.

FORENSIC SMO INDUCTION RECORD *updated 20072020*

FORENSIC EXAMINATIONS					
	Simulated/mock case	observed case (L1)	case (or mock case) done under observation (L2)	cases done at L3 entrustment	report/case discussion
Sexual assault complainant	date	date	date		date
		FMO	FMO		FMO
		type	type		
Strangulation complainant	date	date	date		date
		FMO	FMO		FMO
		type	type		
Forensic procedure (offender)	date	date	date		date
		FMO	FMO		FMO
		type	type		
Forensic examination advice/triage calls	Sexual assault Date	Strangulation date	FPO date		other
JICK discussion	Date discussed/observed				

WATCH HOUSE			
At least one day observation of FMO taking nurse calls	Date	FMO	Number of detainees
At least one day taking calls and discussing decisions with/review of notes by FMO	Date	FMO	Number of detainees
Southport watch house visit	Date	WHEN	Number of detainees seen (cell door, with nurse)
Observation of watch house COVID swabbing process	Date		
Beenleigh watch house visit	Date		
ORIENTATION OTHER FACILITIES			
Logan Hospital ED/forensic examination room	Date	FMO	
Robina Hospital ED/forensic examination set up	Date	FMO	

TRAINING DOCTOR/REGISTRAR SUPERVISION

Entrustment hierarchy

Level 1 Observing the activity

Level 2 Able to perform the activity with direct, active full supervision (ie supervising FMO in the room with training FMO)

Level 3 Able to perform the activity with indirect, readily available supervision (ie supervising FMO provides telephone support to training FMO)

In the context of *after-hours forensic examinations*, there are two stages of Level 3 entrustment:

Level 3a *'structured'*

- *Training FMO takes request call then rings supervising FMO to discuss*
- *Training FMO does case on their own*
- *Training FMO rings supervising FMO immediately after case to talk through to ensure that any errors/omissions can be rectified at the time.*
- *Case discussion next day with supervising FMO*

Level 3b *'trainee-initiated'*

Supervising FMO rostered on with training FMO to supervise that is, be available immediately for telephone advice.

Level 4 Able to perform with distant supervisory oversight; requires achievement of the following case numbers:

- forensic examination of complainants (at least 15 cases)
- forensic examination of offenders (at least 5 cases)
- clinical toxicology assessment (at least 10 cases),
- provision of health care in a forensic setting (at least 15 cases face-to-face and 30 telephone consults),
- fitness for custody/forensic examination/interview (at least 5 cases).

Level 5 Able to perform unsupervised and supervise training FMOs

Queensland Government

Gold Coast Hospital and Health Service

FORENSIC EXAMINATION ENTRUSTMENT FORM		
Training FMO name		
Supervising FMO name		
Date assessment		
Type of case	Sexual assault forensic examination (complainant)	
	Strangulation (complainant)	
	Forensic procedure order (suspect)	
	Other (specify)	
Brief description of case:		
Components reviewed:		
• Taking request call		
• Initial approach and assessment (incl consent, capacity, Orders)		
• Pregnancy and STI risk assessment		
• Setting up/decontamination examination room		
• Injury examination and documentation		
• Photography		
• Genito-anal examination and documentation		
• Forensic specimen collection/documentation – biology/DNA		
• Forensic specimen collection/documentation– toxicology		
• STI prophylaxis management and follow up referral		
• Liaison with treating ED team		
• Other (specify)		
Comments/feedback:		
Overall performance standard		
• Able to perform with direct, active full supervision (L2)		
• Able to perform with indirect, readily available supervision (L3a structured)		
• Able to perform with indirect, readily available supervision (L3b trainee-initiated)		
• Able to perform with distant supervisory oversight (L4)		
• Able to perform unsupervised/supervise training FMOs (L5)		
Signature of training FMO		
Signature of supervisor		
Date		

MEDICOLEGAL REPORT LOG			
	Type	**Date written**	**Reviewed by:**
Examination statement	Sexual assault		
	Strangulation		
	FPO		
	other		
Legal severity injury statement	Wounding		
	AOBH		
	GBH		
Interpretation injury statement			
Coronial report			
Toxicology*			
Traffic*			

**Monash Master of Forensic Medicine module or other relevant education required*

4.2

Queensland
Government

Health Support Queensland

Department of
Health

[redacted]

22 July 2019

Dr Debra Graves
Chief Executive Officer
The Royal College of Pathologists of Australasia
207 Albion Street
SURRY HILLS NSW 2010

[redacted]

Dear Dr Graves Debra

Improving access to victims disclosing recent sexual assault

Thank you for your letter dated 11 July 2019 to Dr Young, Chief Health Officer concerning Queensland's recent initiatives to improve access to victims disclosing recent sexual assault. As this matter currently lies with Health Support Queensland, I have been asked to respond.

To improve access throughout the state, Queensland Health has partnered with Central Queensland University to provide training to nurses to conduct forensic examinations relating to sexual assault. Please be assured the medical staff employed by Queensland Health at the Clinical Forensic Medicine Unit (CFMU) have been involved in the training's development and will be active in contributing to its rollout.

Queensland Health forensic physicians will also support clinical governance and the integrity of forensic examinations by conducting peer review of case records and providing continuous improvement feedback to sexual assault nurse examiners.

Whilst Hospital and Health Services are being supported in their provision of such services by a new nurse training course, continued training of doctors is also offered by the medical staff of CFMU. The Department would be interested in any ideas of assistance that could be provided by the College in regard to appropriate short-course style training of doctors.

Yours sincerely

[redacted]

Dr Peter Bristow FRACP, FCICM, FRACMA, GCM, GAICD
Chief Executive Officer

cc. Dr Jeannette Young, Chief Health Officer and Deputy Director-General Prevention Division, Department of Health
Mr Michel Lok, General Manager, Community and Scientific Services, Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
[redacted]
Website www.health.qld.gov.au

The Royal College of Pathologists of Australasia
ABN 52 000 173 231

Durham Hall 207 Albion Street Surry Hills NSW 2010 Australia
Telephone 61 2 8356 5858 Facsimile 61 2 8356 5828

RCPA
The Royal College of Pathologists of Australasia

11 July 2019

Dr Jeannette Young
Chief Health Officer
Department of Health
GPO Box 48
Brisbane QLD 4001

[redacted]

Dear Jeannette,

RE: Proposed state-wide sexual assault nurse examiner service

Thank you very much for meeting with Royal College of Pathologists of Australasia on 29th May 2019. Further to our discussion about the development of a state-wide sexual assault nurse examiner service, the College believes that an initiative of this nature could be a valuable addition to healthcare in Queensland but would require workplace-based training of nurses by appropriately trained forensic physicians and local supervision of the service by forensic physicians to ensure adequate clinical governance.

The Health Services Queensland (HSQ) proposal appears to suggest a 'nurse-lead' service with reference to protocol-based prescribing but lacks detail in relation to clinical supervision. While sexual assault health care issues could be addressed by nurse-protocols, without physician supervision and clinical governance, there is the potential for a two-tiered evidentiary approach in sexual assault trials (ie nurses vs doctors). To avoid this risk, doctor and nurse sexual assault services should be wholly integrated with sexual assault nurse examiners working collaboratively with forensic physicians rather than separately or in isolation. Nurse forensic examinations and the provision of evidentiary reports about these requires forensic physician oversight to maintain quality standards and avoid the potential for adverse medicolegal outcomes. Furthermore, the use of genito-anal photography should be employed in any service where nurses conduct forensic examinations without doctor supervision to provide the opportunity for review of findings and ensure evidentiary standards are met.

Whilst formal training by HSQ and/or an affiliated university would be welcome, practical workplace-based training of nurses with achievement of professional competencies, and ongoing supervision by forensically trained doctors would be necessary. The establishment of a network of interested Emergency Department nurses to work alongside forensic

physicians could create opportunity for practical workplace-based teaching of sexual assault nurse examiners. This would also reduce duration of examinations and address 'chaperone' issues for male forensic physicians.

Yours faithfully

Dr Debra Graves
Chief Executive Officer

FEMALE FORENSIC SWABS AND SPECIMENS

THIS COPY IS TO BE PLACED IN RED FORENSIC BIOLOGY ENVELOPE WITH SPECIMENS AND SEALED

DOCTORS NAME: _____ **CLIENTS NAME:** _____

PLEASE CIRCLE THOSE FORENSIC SPECIMENS TAKEN:

1. HEAD HAIRS - CUT
2. ORAL SWAB AND SMEAR
3. FINGERNAIL SCRAPINGS - RIGHT - LEFT
4. PUBIC HAIR - COMBINGS
5. PUBIC HAIRS - CUT
6. GAUZE SWAB - VULVA
7. LABIAL SWAB AND SMEAR
8. LOW VAGINAL SWAB AND SMEAR
9. HIGH VAGINAL SWABS X 2 AND SMEAR
10. ENDOCERVICAL SWABS X 2 AND SMEAR
11. GAUZE SWAB PERI-ANAL AREA
12. PERI-ANAL SWABS X 2 AND SMEAR
13. ANAL SWABS X 2 AND SMEAR

DATE AND TIME OF EXAMINATION

_____

(a) TYPE OF ASSAULT

_____

(b) LAST MENSTRUAL PERIOD

_____

(c) LAST INTERCOURSE BEFORE ASSAULT

_____

(d) NUMBER OF ALLEGED OFFENDERS

_____

(e) TIME ELAPSED SINCE ASSAULT

_____

(f) DOUCHED OR SHOWERED

_____

(g) OTHER RELEVANT INFORMATION

_____

14. RECTAL SWABS X2 AND SMEAR (taken via anoscope or proctoscope)
15. OTHER SWABS AND SMEARS (identify) _____
16. BLOOD - 5ml - EDTA X 1 (purple top)
17. CLOTHING (list) _____
18. OTHER (identify and list) _____

THESE SPECIMENS AND SAMPLES WERE TAKEN FOR FORENSIC EXAMINATION BY:-

NAME _____

RANK _____

NUMBER _____

SIGNED _____ **DATE AND TIME** _____

FORENSIC SERVICES - BIOLOGY
PATHCENTRE - NEDLANDS WA 6009

J Block,
Nedlands, Perth,
Western Australia 6009 [redacted]

FORENSIC BIOLOGY Reference No [redacted]

FROM: A-M Furmedge

ATTENTION: DR PAM McBRIDE

SEXUAL ASSAULT RESOURCE CENTRE
PO Box 842
SUBIACO, WA 6008

Client:

Samples: Swabs and Smears:

Endocervical swabs (x2) and smear
High Vaginal swabs (x2) and smear
Low Vaginal swab and smear
Labial swab and smear
Vulval wipe
Oral swab
Urine

RESULT:

The high vaginal, low vaginal and labial swabs gave a weak chemical reaction for semen when screened chemically. Spermatozoa were seen microscopically on the smears from the low vaginal and labial swabs.

[redacted]

A-M Furmedge B Sc (Med Sc)
Senior Scientist
Forensic Services - Biology
9 March 1999

METROPOLITAN SARC RESULTS: FORENSIC BIOLOGY

This form is to be completed on metropolitan cases only. A separate form exists for rural cases

Client Name: ___

Doctor's Name: Pam McBRIDE

Date of specimen collection by Doctor: 27.2.99

Date of analysis: 4.3.99 & 9.3.99.

SPECIMENS PROVIDED

	[Place a tick next to those specimens provided]	AP (90 sec)	PSA	Sperm – → +++	Blood	Saliva	Comments (incl. Sperm: intact or heads)	NT
1. ✓	Oral Swab and ~~Smear~~							
2.	Fingernail Scrapings – Right							
3.	Fingernail Scrapings – Left							
4. ✓	Pubic Hairs – Cut • Combings							
5. ✓	Gauze swab – Vulva	+/–		–				
6. ✓	Labial swab and smear	+		v occ			heads.	
7. ✓	Low vaginal swab and smear	+++		v. occ			heads.	
8. ✓	High vaginal swabs x 2 and smear	+++		–				
9. ✓	Endocervical swabs x 2 and smear	–		–				
10.	Gauze swab Peri-anal area							
11.	Peri-anal swabs x 2 and smear							
12.	Anal swabs x 2 and smear							
13.	Rectal swabs x 2 and smear							
14. ✓	Urine	–		–				
15.	Other swabs/Samples For ign Body Rt Lab Maj.							

16. Head Hair ☐ Examined Y N Pubic combings ✓ Examined Y (N) Comments ___

DNA Reference sample: Blood (EDTA) ☐ Buccal ✓ Other ___

Clothing (list) Bikini Top
Pjamas Top & Bottom.
Briefs

Which samples were sent for DNA analysis? (List #s): 7

NT = Not tested. AP (Acid Phosphatase) is a presumptive test for seminal fluid. Result reported after 90 seconds: A stronger reaction indicates the presence of greater levels of seminal fluid, but false-positives can occur (eg yeast). PSA = Prostate-specific antigen.

Quality of Specimens (Complete this section at the time of receipt)

	Poor		→		Good
Were the swabs and smears adequately dried?	☐	☐	☐	☐	☐
Were the specimens labelled clearly and correctly?	☐	☐	☐	☐	☐
Did the chain of evidence appear to have been maintained?	N				Y
Has adequate clinical information been provided?	☐	☐	☐	☐	☐

If not, what other information should have been included? ___

Other comments: ___

NOTE: Please return (by Mail, NOT Fax) this form to the relevant Doctor at:
SEXUAL ASSAULT RESOURCE CENTRE, PO BOX 842, SUBIACO, WA, 6008.
GRT-981216

BUREAU VERITAS
Certification

Certificate of Compliance

Awarded to

SANAX MEDICAL

15 EXHIBITION DRIVE, MALAGA, WA 6090
AUSTRALIA

Bureau Veritas certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards indicated below

STANDARD

ISO 18385:2016

SCOPE OF SUPPLY

PROVISION OF CLEAN ROOM PREPARED DNA AND EVIDENCE COLLECTION KITS

Original Approval Date: **21 November 2016**

Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: **20 November 2022**

To check the validity of this certificate please call tel. **1800 855 190**

Further clarification regarding the scope of this certificate and the applicability of the Management System requirements may be obtained by consulting the organisation.

Certificate Number: **AU003760-1**

[redacted]

Date: **22 November 2019**

Andrew Mortimore
General Manager - Bureau Veritas Certification

Managing office: Bureau Veritas Pty Ltd, 3/435 Williamstown Road, Port Melbourne, Victoria, 3207

Issuing office: Bureau Veritas Pty Ltd, 3/435 Williamstown Road, Port Melbourne, Victoria, 3207

BUREAU VERITAS

Queensland Government
Queensland Health

QUEENSLAND HEALTH

SEXUAL OFFENCES – MEDICAL PROTOCOL

Confidential

Please complete each page of this document, answering all questions

A triplicate is provided for pages 9 – 24. Use a ball-point pen to write.

The top copy of the protocol must be retained as part of the Hospital records or by the examining Medical Officer for reference in the preparation of statements for Police and the provision of evidence in any court proceedings which may result.

The second copy should be placed in the sealed transport pack with the specimens and handed to the investigating police officer for transfer to Queensland Health Scientific Services.

The third copy should be handed to the police for their records.

A separate record of general medical information (for duty of care), should be kept by the treating doctor. It will not be part of the forensic record.

All enquiries should be directed to the :-

Government Medical Officer	or	Forensic Biology/Toxicology
51 Herschel Street		QHSS
Brisbane QLD 4000		39 Kessels Road
		Coopers Plains QLD 4108

MEDICAL PROTOCOL

Copies. Please tear along serrated edge. Follow all instructions.
Original (white) kept for hospital/medical records.
First duplicate (pink) accompanies kit.
Second duplicate (blue) is handed to Police.

NOTES REGARDING USE

These kits have been assembled to assist in the forensic examination of victims of sexual assault and should be used according to instructions printed. Apart from ensuring that the patient is fully examined and laboratory specimens correctly collected, the medico-legal requirements will be fulfilled if all details are completed. Discard all unused material.

SECURITY

The flap of the transport envelope should be stuck down but not stapled. Place two seals provided over the flap.
Please sign full signature across the sealed flap.
Any blood samples taken for DNA or Toxicology should be placed in the transport envelopes or containers provided and sealed.
Reference samples must be kept separately from the medical evidence samples.

POLICE

The Police are responsible for rapid transport of medical specimens and duplicate Medical Protocol pages to Forensic Biology (and Forensic Toxicology if a sample taken).
Reference samples must be kept separate.

ENQUIRIES

Forensic Biology or Forensic Toxicology
John Tonge Centre
39 Kessels Rd
COOPERS PLAINS QLD 4108

IMPORTANT GENERAL INFORMATION

1. SPECULUM EXAMINATION

- Speculum use is advised unless contraindicated on medical grounds. Speculum examination must be done if genital injuries or the presence of a foreign body is suspected.
- It is preferable from a legal and laboratory perspective to take high vaginal (posterior fornix) or cervical os swabs while using a speculum. This will ensure that high vaginal swabs are not contaminated with semen from lower in the genital tract or external to the vagina.
- The legal issue is whether penetration has occurred.
- Swabs from the cervical os should be taken if the offence occurred more than 36 hours previously. Swabs should be considered up to 7 days after assault because although typing **sperm DNA** is difficult, after 36 hours a positive **semen** swab could confirm penetration and ejaculation.

2. SPECIAL NOTE

- Only cotton wool swabs should be used.
- After making smears, swabs are best left to air dry until dry
- **Do not use TRANSPORT MEDIA OR CHARCOAL OR SERUM SWABS for forensic testing.**

3. VAGINAL SWABS AND SMEARS

- To assist in confirming intercourse has taken place.
- To obtain material (semen) which will establish the DNA profile of the assailant and assist with identification.
- The smear enables the laboratory to quickly determine the presence or absence of spermatozoa on the swab.

4. VULVAL SWAB AND SMEAR

- Should always be taken because of its use in identifying “attempted rape” when penetration or ejaculation inside the vagina has not taken place. The use of a speculum in adult females assists separation of the samples.
- The smear enables the laboratory to quickly determine the presence or absence of spermatozoa on the swab.

5. ORAL SWAB AND SMEAR

- A swab and smear is taken only if the history indicates that oral sex has taken place.
- The smear enables the laboratory to quickly determine the presence or absence of spermatozoa on the swab.
- A buccal swab should not be used for reference DNA if oral sex has occurred or is suspected.

6. RECTAL SWAB AND SMEAR

- Only take if the history indicates anal intercourse has taken place.
- It is preferable to use a proctoscope to obtain rectal swabs.
- Again, the smear enables the laboratory to quickly determine the presence or absence of spermatozoa on the swab.

7. PERIANAL SWAB AND SMEAR

- Always take in case of alleged anal intercourse.
- As in vulval swabs it is probable that some seminal fluid could be deposited externally.

8. BLOOD

- The determination of DNA profiles of victims and assailants is of importance where blood and/or semen is detected either at the scene, or on clothing and particularly in the case of semen in the vagina. This is called the **Reference Sample**. Blood taken is placed into an EDTA specimen container and is used to determine the DNA profile of the victim. A buccal swab may also be used if there is difficulty taking a blood sample provided oral sex is not suspected. **FTA Paper** may be "spotted" with blood (two drops from the end of a needle is adequate) in lieu of providing blood in an EDTA specimen container. A finger-prick would suffice. Saliva/mouth swabs may also be placed upon FTA paper.

EXPLANATION

FTA paper is filter paper that has been impregnated with chemicals which preserve the biological material and extract DNA from cells. It need not be refrigerated. Police have supplies of FTA paper.

- Toxicology is performed only if the history indicates.10mls of blood into a green topped sodium fluoride/potassium oxalate container and a supervised urine sample (10mls) should be sent to Forensic Toxicology. The Queensland Police Service will provide separate kits (usually used for drink/drug driving) for the urine and blood tests.

9. HAIRS

- Remove any loose hairs and seal in a specimen bag as they may belong to the suspect.

10. NAIL CLIPPINGS OR SCRAPINGS

- Only take if the history indicates that the victim defended her/himself by scratching the assailant.
- The nails can be cut into the specimen bags provided (right and left hands). Nail clippings are preferable however scrapings or swabs may be taken with the orange sticks or swabs provided (moisten first and then air dry).

11. SKIN SWABS

- Take only if history indicates.
- If semen is thought to be on the skin, take two swabs (the first one moistened with water or 70% alcohol and the second one dry) and prepare smears. Air-dry the first swab.
- If licking or biting has occurred, again take two swabs (the first swab moistened with water OR 70%alcohol and the second one dry) from the area. A smear is not necessary.

12. LABELLING AND IDENTIFICATION

Every individual item must be identified using a biro (not a fountain pen) to write on the labels and including the following information:

- Name and date of birth of the victim.
- Name of the examining doctor
- Date and time that the specimen was taken
- Place from where the specimen was taken

When labelling the slides, use a pencil to write on the frosted side of the slide including the sample site and name of the victim. **Make sure that the smear is placed on the same side as the frosting.**

13. CROSS-CONTAMINATION

It is imperative that all specimens/ exhibits are taken, handled and transported in such a way that cross-contamination does *not* occur. *Legal outcomes may be affected* if cross-contamination occurs. **There must be full separation of the medical evidence samples and reference samples at all times.**

ALLEGED SEXUAL OFFENCES EXAMINATION PROTOCOL

SURNAME	OTHER NAMES
DATE OF BIRTH / /	SEX Male ☐ Female ☐
ADDRESS POSTCODE TELEPHONE NUMBER	HOSPITAL STICKER (If available)

DATE / /	TIME OF ARRIVAL am/pm	PLACE OF EXAMINATION

NAME OF EXAMINING DOCTOR ADDRESS OF EXAMINING DOCTOR CONTACT TELEPHONE NUMBER	NAME OF INVESTIGATING POLICE OFFICER POLICE STATION ADDRESS CONTACT TELEPHONE NUMBER
FIRST WITNESS TO EXAMINATION (if present)	SECOND WITNESS TO EXAMINATION (if present)
DATE OF ASSAULT / / TIME OF ASSAULT am/pm	PLACE OF ASSAULT

TYPE OF ALLEGED ASSAULT Rape ☐ Incest ☐ Indecent assault ☐ Other ☐

CONSENT

CONSENT TO THE MEDICAL EXAMINATION OF_____

(to be read to the patient by the doctor)

I hereby consent to

- a complete medical examination including a pelvic (internal) examination
- to the recording of the findings
- the collection of all necessary specimens for laboratory tests
- the taking of necessary photographs of injuries related to the reason for this examination.

Signature of patient or Authorised person_____

Signature of witness_____

Name (print)_____
Surname Other names

Date_____

CONSENT TO RELEASE OF INFORMATION TO THE POLICE

I hereby authorise the _____Hospital

or the examining doctor_____

to release a copy of the Sexual Offences Medical Protocol and any relevant laboratory reports to the Queensland Police Service or to the Office of the Crown Prosecutor, as requested, for medico-legal purposes.

Signature of patient_____

Signature of witness_____

Name (print)_____
Surname Other names

Date_____

I also request that results of any medical tests performed be sent to:

NAME_____

ADDRESS_____

_____

TELEPHONE_____

General practitioner ☐

Sexual Health Clinic ☐

Other ☐

Signature of patient _____

HISTORY OF ASSAULT

Include details such as oro-genital contact, ejaculation, positions used; any fear, threat or fraud; likely site of injury to person or clothing; defence used such as biting or scratching.

SURNAME	OTHER NAMES
MEDICAL OFFICER TREATING PATIENT	EMERGENCY MEDICAL TREATMENT ALREADY PERFORMED (e.g. by QAS or Emergency Dept) (If more space required, see page 23
CHECK LIST SINCE ASSAULT, HAS VICTIM NO YES ☐ Changed clothing ☐ ☐ Washed clothing ☐ ☐ Showered ☐ ☐ Bathed ☐ ☐ Douched (explain) ☐ ☐ Urinated ☐ ☐ Defaecated ☐ ☐ Vomited ☐ ☐ Washed out mouth ☐ ☐ Cleaned teeth ☐ ☐ Had drink / food ☐ L.M.P ____/____/_____ PREGNANT Yes ☐ No ☐ N/K ☐ (If yes consider referral to Obstetrician) Previous coitus Yes ☐ No ☐ Date and time of last coitus if within 7 days of the assault ____/____/_____ Was it with the suspect? Yes☐ No☐ Has the suspect been vasectomised? Yes☐ No☐ N/K ☐ **TYPE OF ASSAULT** Vaginal ☐ Anal ☐ Oral ☐ Use of object ☐ Use of weapon ☐ Use of condom ☐ Did ejaculation occur Yes ☐ No ☐ N/K ☐ Was a lubricant used Yes ☐ No☐ N/K☐	**HISTORY**

GENERAL EXAMINATION

SURNAME	OTHER NAMES

FOR FORENSIC PURPOSES WEAR LATEX GLOVES AT ALL TIMES. CHANGE THE GLOVES BETWEEN THE GENERAL EXAMINATION, GENITAL EXAMINATION AND ANAL EXAMINATION (IF PERFORMED)

- Clothing (if still wearing clothing worn during the assault) should be removed on a drop sheet in the presence of the examiner).
- Place each item in a separate identified bag until decision made regarding police action.
- Avoid further damage, if possible, when clothing is removed or during inspection.
- If possible dry wet clothing before bagging and use a paper bag rather than a waterproof bag.

APPEARANCE AND MOOD OF PATIENT
State of dress, hair and emotional state (observation not interpretation)

Clothing: General description of stains or damage.

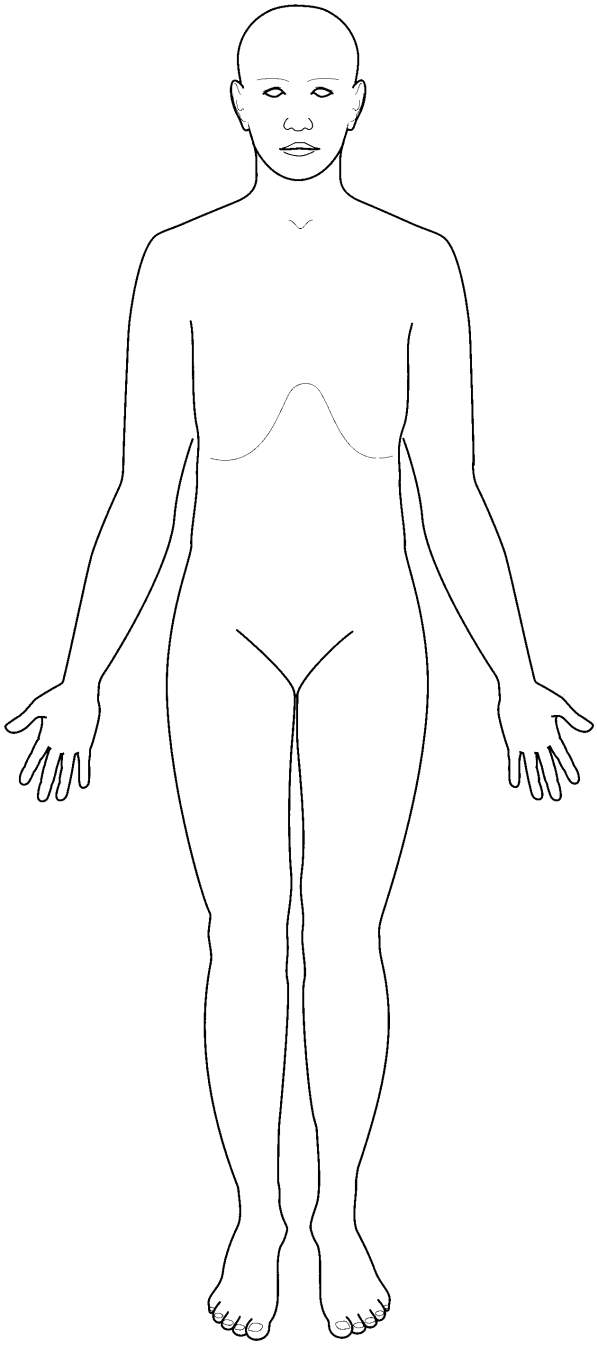
GENERAL EXAMINATION: Use the diagrams on pages (11 - 16) if required. Detail everything (all bruises, abrasions, lacerations, incised wounds, bites, tenderness, swelling). Use page 23 for recording extra information.

Normal		Abnormal (specify)	Note if *not* examined.
☐	Mouth	☐	_____
☐	Neck and throat	☐	_____
☐	Head and scalp	☐	_____
☐	Ears	☐	_____
☐	Hands and nails	☐	_____
☐	Arms	☐	_____
☐	Face	☐	_____
☐	Feet	☐	_____
☐	Legs	☐	_____
☐	Thorax (anterior)	☐	_____
☐	Thorax (posterior)	☐	_____
☐	Abdomen (anterior)	☐	_____
☐	Abdomen (posterior)	☐	_____
☐	Buttocks	☐	_____

GENERAL EXAMINATION (Continued)

SURNAME	OTHER NAMES

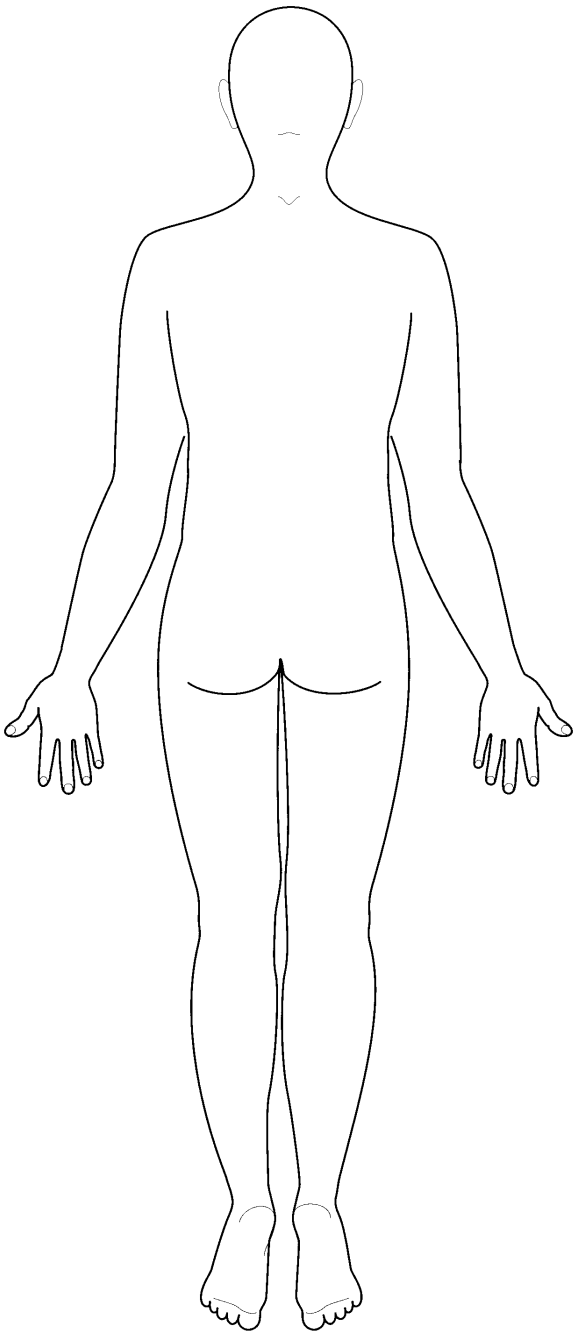
WHOLE BODY FRONT



GENERAL EXAMINATION (Continued)

SURNAME	OTHER NAMES

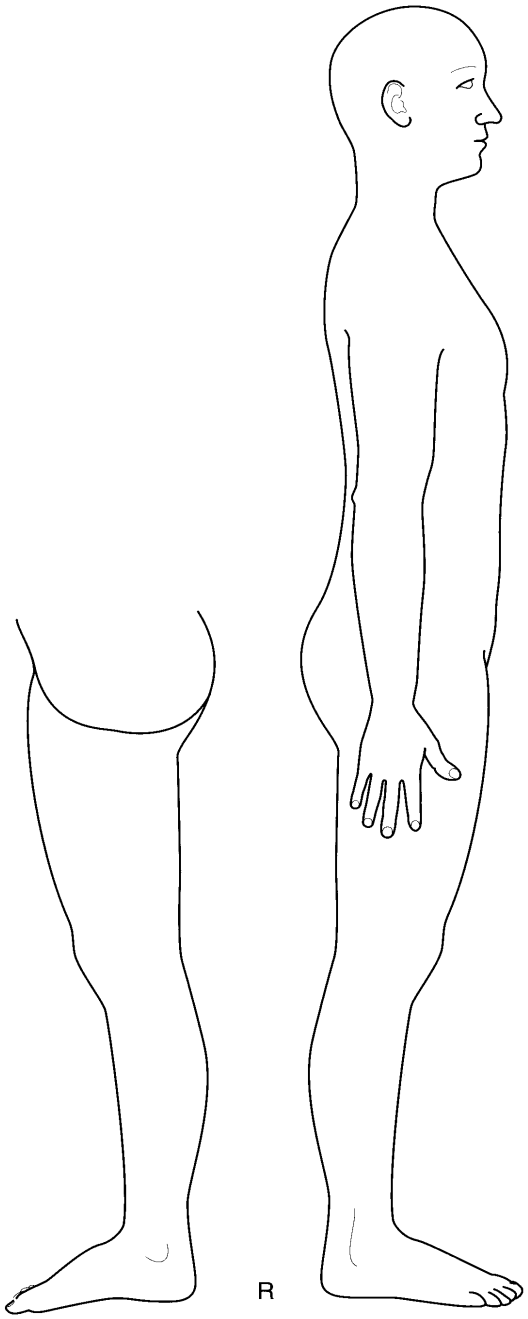
WHOLE BODY BACK



GENERAL EXAMINATION (Continued)

SURNAME	OTHER NAMES

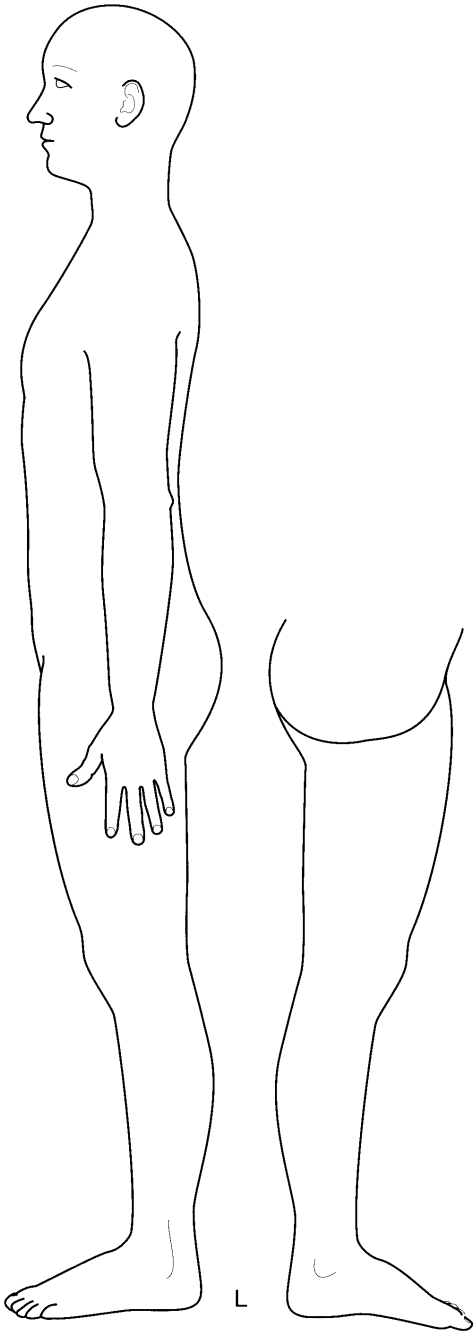
WHOLE BODY RIGHT SIDE AND INNER LEG



GENERAL EXAMINATION (Continued)

SURNAME	OTHER NAMES

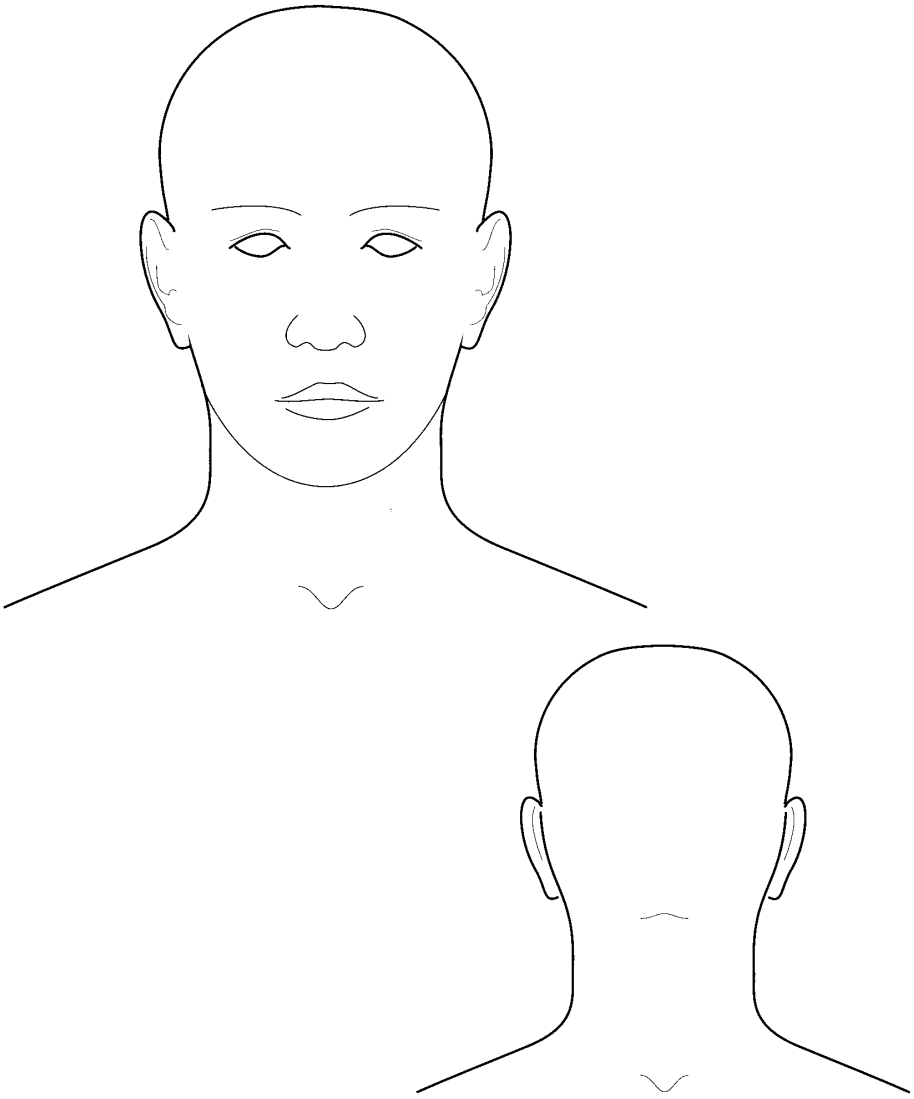
WHOLE BODY LEFT SIDE AND INNER LEG



GENERAL EXAMINATION (Continued)

SURNAME	OTHER NAMES

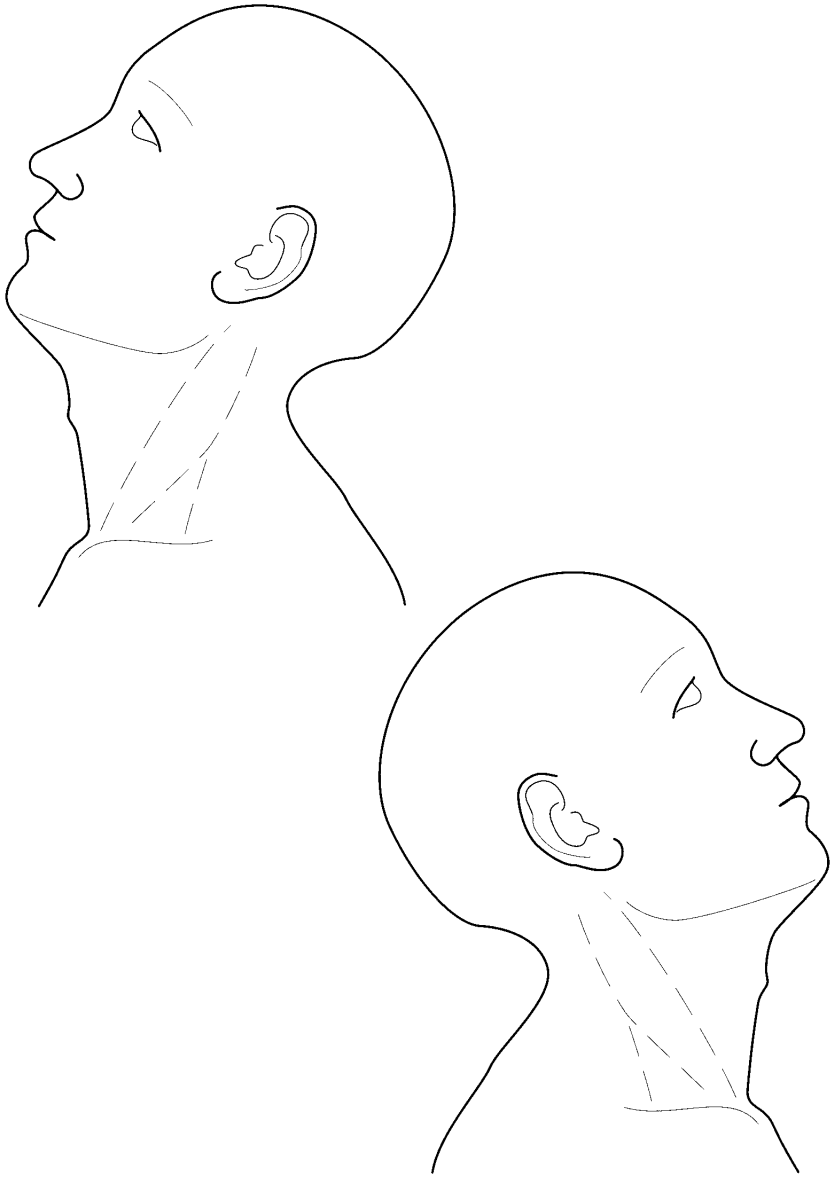
HEAD FRONT AND BACK



GENERAL EXAMINATION (Continued)

SURNAME	OTHER NAMES

NECK



FEMALE GENITAL EXAMINATION (include all signs of trauma)

SURNAME	OTHER NAMES

EXTERNAL EXAMINATION

VULVA Lubrication Dry ☐ Moist ☐ Blood ☐
Appearance of fluid or discharge

EXTERNAL GENITALIA Mature ☐ Pubertal ☐ Prepubertal ☐

EXAMINATION: record any pain or tenderness. **State if *not* examined**. Use the diagram on page 18 if required.

Normal		Abnormal	
☐	Mons	☐	_____
☐	Labia majora	☐	_____
☐	Labia minora	☐	_____
☐	Introitus	☐	_____
☐	Posterior fourchette	☐	_____
☐	Hymen	☐	_____
☐	Urethra	☐	_____
☐	Clitoris	☐	_____
☐	Inner thighs	☐	_____
☐	Perineum	☐	_____
☐	Anus	☐	_____
☐	Perianal skin	☐	_____

Swabs are taken to detect whether blood or semen is present. Slides are prepared to detect whether spermatozoa are present. Before proceeding with internal examination, take vulval and low vaginal swabs (in that order) for forensic and medical purposes (in the order listed on page 19, forensic categories 1-13, Hospital specimens as clinically indicated. Use a speculum for high vaginal swabs (posterior fornix or cervical os). Use proctoscope for rectal swabs. See general information pages 2-5

INTERNAL EXAMINATION

SPECULUM EXAMINATION (If performed) : See general information page 3

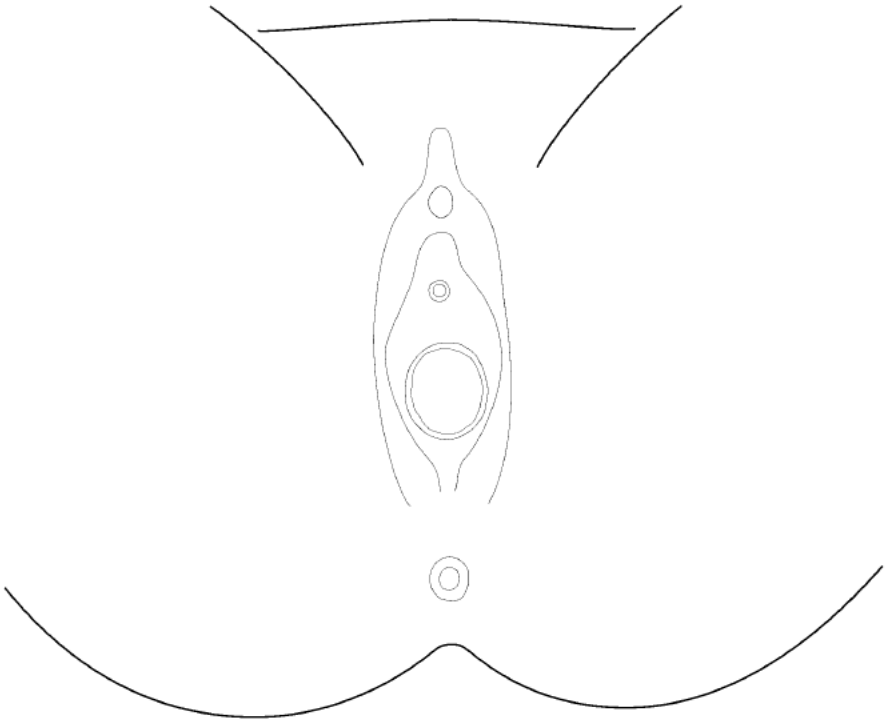
Normal		Abnormal (specify)	**State if *not* examined**
☐	Lower vagina	☐	_____
☐	Upper vagina	☐	_____
☐	Cervix	☐	

VAGINAL EXAMINATION (If indicated clinically)

RECTAL EXAMINATION (If indicated by history)

GENITAL EXAMINATION – FEMALE

SURNAME	OTHER NAMES



SPECIMENS AND INVESTIGATIONS – FEMALE

SURNAME	OTHER NAMES

- Examining doctor is required to identify all specimens including glass slides and packets
- Blood specimens are to be placed in the envelopes provided.
- Take hospital specimens after forensic biology specimens. (Optional)
- Examining doctor is to seal bag and envelope, after which doctor and police sign across seal.
- Tick boxes of specimens collected.

FORENSIC BIOLOGY SPECIMENS

1. ☐ Vulval swab and smear
2. ☐ Low vaginal swab and smear
3. ☐ High vaginal swab and smear
4. ☐ Cervical (> 3 days, < 7 days)
5. ☐ Perianal swab and smear
6. ☐ Rectal swab and smear
7. ☐ Oral swab and smear
8. ☐ Skin swabs and smears (if semen suspected)
9. ☐ Swab from bite or area licked (for saliva)
10. ☐ Nail clippings, swabs or scrapings (specify)
11. ☐ Other specimens (specify)

TAKE ONLY IF INDICATED BY HISTORY OF ASSAULT

All hospital laboratory specimens are to be forwarded directly to hospital pathology laboratory. Hospital is to provide swabs and media bottles.

CHANGE GLOVES TO TAKE BLOOD

11 ☐ Blood 5 mls for forensic biology, collected in EDTA tube, for DNA. Store at 4 °C.
A buccal swab may be taken for reference DNA if there is difficulty taking a blood sample and no history of oral sex..

12 ☐ Blood 10 mls for forensic toxicology only if indicated by the circumstances of the assault.

13 ☐ Urine 10 mls for urine drug screen only if indicated by the circumstances of the assault.

FORENSIC SAMPLES HANDED TO ☐ Police ☐ Other (specify)

NAME	DATE	TIME

SIGNATURE	STATION

FORENSIC PHOTOGRAPHY REQUESTED Yes ☐ No ☐

If photographed in surgery

NAME OF PHOTOGRAPER _____

DATE PHOTOGRAPHED _____/_____/_____

FORENSIC ODONTOLOGY REQUESTED Yes ☐ No ☐

MALE GENITAL EXAMINATION (include all signs of trauma)

SURNAME	OTHER NAMES

EXTERNAL EXAMINATION

EXTERNAL GENITALIA

Mature ☐ Pubertal ☐ Prepubertal ☐

EXAMINATION Record any pain or tenderness. Use the diagram on page 21 if required.

Normal		Abnormal
☐	Penis	☐ _____
☐	Foreskin	☐ Circumcised Yes ☐ No ☐ _____
☐	Scrotum	☐ _____
☐	Testes	☐ _____
☐	Perineum	☐ _____
☐	Anus	☐ _____
☐	Perianal skin	☐ _____

Swabs are taken to detect whether blood, semen or foreign cellular material is present. Slides are prepared to detect whether spermatozoa or how much other cellular material is present. Use proctoscope for rectal swabs See general information page 4.

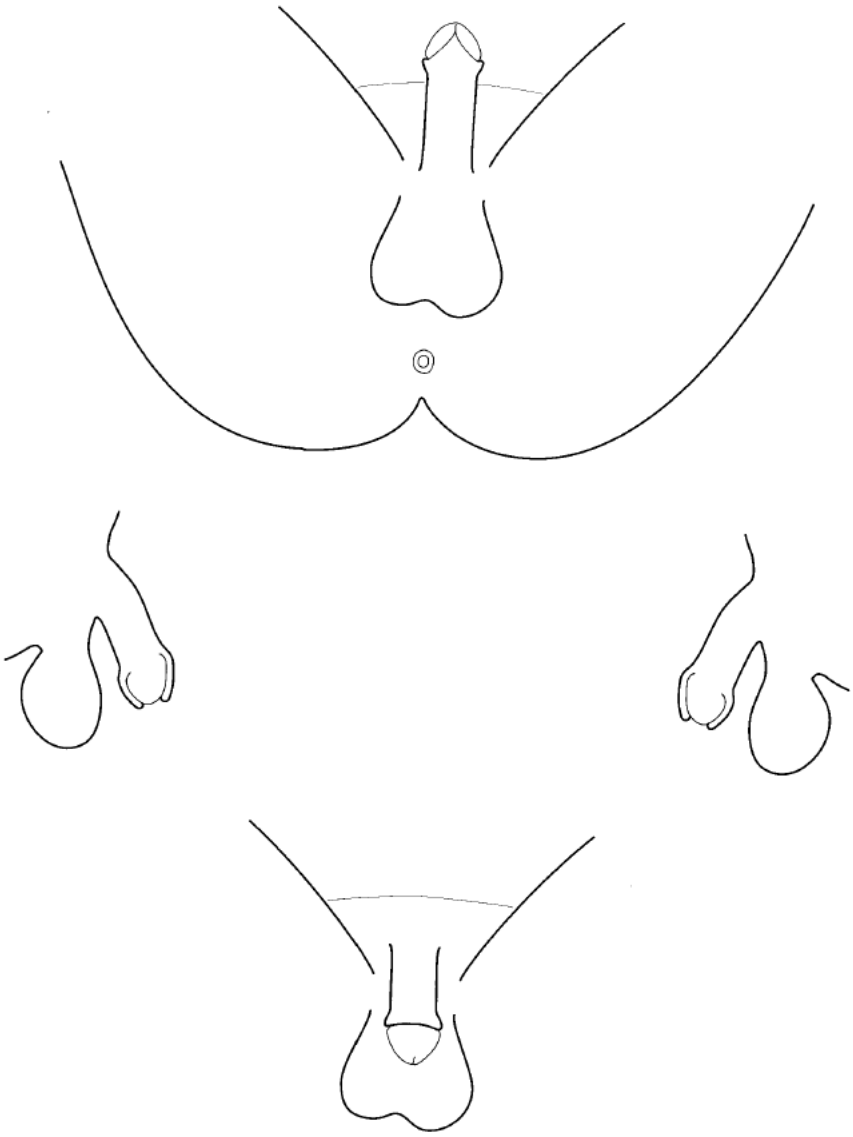
INTERNAL EXAMINATION

PROCTOSCOPE EXAMINATION (Describe all injuries)

RECTAL EXAMINATION (DIGITAL) (If indicated)

GENITAL EXAMINATION – MALE

SURNAME	OTHER NAMES



SPECIMENS AND INVESTIGATIONS – MALE

SURNAME	OTHER NAMES

- Examining doctor is required to identify all specimens including glass slides and packets
- Blood specimens are to be placed in the envelopes provided.
- Take hospital specimens after forensic biology specimens. (Optional)
- Examining doctor is to seal bag and envelope, after which doctor and police sign across seal.
- Tick boxes of specimens collected.

FORENSIC BIOLOGY SPECIMENS

1. ☐ Penile swab and smear (Base of penis)
2. ☐ Penile swab and smear (Glans penis)
3. ☐ Urethral swab and smear
4. ☐ Perianal swab and smear
5. ☐ Rectal swab and smear
6. ☐ Oral swab and smear
7. ☐ Skin swabs and smears (if semen suspected)
8. ☐ Swab from bite or area licked (for saliva)
9. ☐ Nail clippings or scrapings (specify)
10 ☐ Other specimens (specify)

TAKE ONLY IF INDICATED BY HISTORY OF ASSAULT

All hospital laboratory specimens are to be forwarded directly to hospital pathology laboratory. Hospital is to provide swabs and media bottles.

CHANGE GLOVES TO TAKE BLOOD

11 ☐ Blood 5 mls for forensic biology, collected in EDTA tube, for DNA. Store at 4 °C.
A buccal swab may be taken for reference DNA if there is difficulty taking a blood sample and no oral sex.

12 ☐ Blood 10 mls for forensic toxicology only if indicated by the circumstances of the assault

13 ☐ Urine 10 mls for urine drug screen only if indicated by the circumstances of the assault

FORENSIC SAMPLES HANDED TO ☐ Police ☐ Other (specify)

NAME	DATE	TIME

SIGNATURE	STATION

FORENSIC PHOTOGRAPHY REQUESTED Yes ☐ No ☐

If photographed in surgery

NAME OF PHOTOGRAPER _____

DATE PHOTOGRAPHED _____/_____/_____

FORENSIC ODONTOLOGY REQUESTED Yes ☐ No ☐

ADDITIONAL NOTES

SURNAME	OTHER NAMES

The anatomical figuring used in this protocol booklet has been taken from the Forensic Body Chart Resource Book by David Ranson, Honorary Clinical Associate Professor, Department of Forensic Medicine produced by the Victorian Institute of Forensic Medicine.

Dr Elizabeth Culliford
Government Medical Officer for Brisbane Ipswich and Logan.

Blood sample MUST be refrigerated at 4°C.
DO NOT FREEZE, unless long delivery time anticipated.

NAME: _____

DOCTOR: _____

Seal blood envelope.
Sign across seal of envelope.
Deliver immediately to the:

DNA Unit
C/- Central Property Point, FSS
39 Kessels Rd
Coopers Plains, Qld 4108

PUBIC HAIR (COMBINGS)
==========
NAME.....
DATE.....
DOCTOR.....TIME.....

FINGERNAIL CLIPPINGS
==========
NAME.....
DATE.....
DOCTOR.....

NAME.....
DATE.....
DOCTOR.....TIME.....

DROPSHEET
NAME
DATE
DOCTOR
TIME

Female

Sexual Assault Investigation

NAME OF PATIENT: _____

NAME OF DOCTOR: _____

POLICE OFFICER PRESENT AT EXAMINATION: _____

DATE: _____

ATTENTION DOCTOR

Procedure for handling Forensic Sexual Assault Investigation Kits (SAIKs)

1. Please fill out the enclosed Medical Protocol Examination Booklet. One copy is kept by the doctor, one copy is for the police and one copy must be included in the kit and returned to the DNA Analysis Unit via Central Property Point, Queensland Forensic and Scientific Services, Coopers Plains.

2. Please fill out the Sexual Assault Toxicology Form and place in the kit to be returned to the DNA Analysis Unit via Central Property Point, Queensland Health Forensic and Scientific Services, Coopers Plains.

3. Place blood tube in yellow envelope and seal. Sign over seal. Refrigerate whole blood at 4°C. **Do not include in the SAIK.**

4. Place all examination items in the padded envelope and seal by folding flap over and stapling several times. Place two white security stickers across the seal.

ATTENTION POLICE OFFICER

1. Sign across envelope seals on receipt from Doctor.

2. IMPORTANT:
Where possible maintain the sealed padded envelope in a frozen or refrigerated state. Refrigerate the blood sample at 4°C.

3. DELIVER padded envelope to:
Central Property Point
FSS
39 Kessels Road
Coopers Plains, Qld 4108
[redacted]

4. DELIVER blood sample to:
DNA Unit
C/- Central Property Point
FSS
39 Kessels Road
Coopers Plains, Qld 4108
[redacted]

Queensland
Government

QUEENSLAND HEALTH

SEXUAL OFFENCES – MEDICAL PROTOCOL

Confidential

Please complete each page of this document, answering all questions

A triplicate is provided for pages 9 – 24. Use a ball-point pen to write.

The top copy of the protocol must be retained as part of the Hospital records or by the examining Medical Officer for reference in the preparation of statements for Police and the provision of evidence in any court proceedings which may result.

The second copy should be placed in the sealed transport pack with the specimens and handed to the investigating police officer for transfer to Forensic and Scientific Services.

The third copy should be handed to the police for their records.

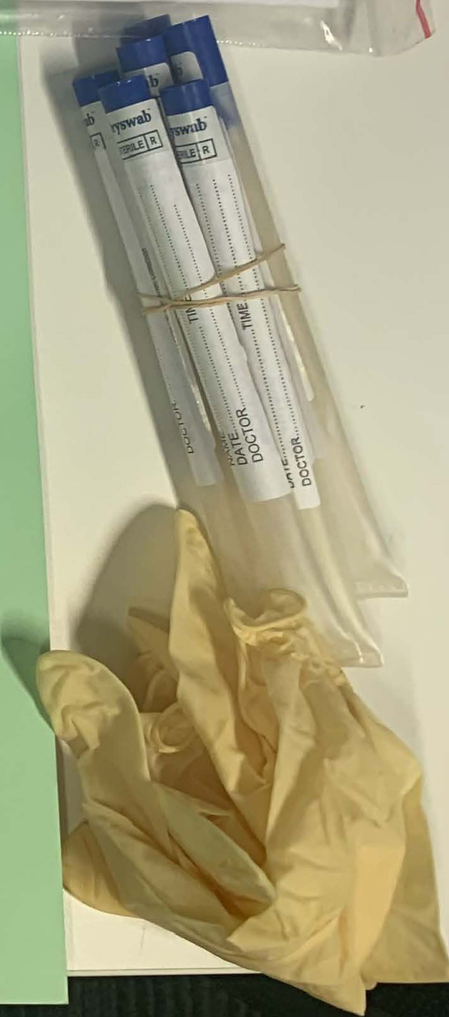
A separate record of general medical information (for duty of care), should be kept by the treating doctor. It will not be part of the forensic record.

All enquiries should be directed to the:-

Government Medical Officer
51 Herschel Street
Brisbane QLD 4000
[redacted]

or

DNA Analysis Unit/Toxicology
FSS
39 Kessels Road
Coopers Plains QLD 4108
[redacted]



Queensland Government
Queensland Health

Pathology & Scientific Services
Biomedical Technology Services

CHANGE PROPOSAL TEMPLATE

CHANGE PROPOSAL No: 17

TITLE: SAIK Improvement Project

PROJECT LEADER: Amanda Storer, Cathy Lincoln (FMO - Clinical Forensic Medicine Unit – Gold Coast)

Description of Change:

Packaging Changes

1. Pre-Printed Sticky Labels for all SAIK items (male, female, child)
2. Tamper evident clear plastic bag for entire SAIK (outer packaging)
3. Individual paper envelopes for each site swab/s
4. Inclusion of 2 x brown paper bag for intimate clothing and miscellaneous items
5. Change format for medical protocol (change to booklet) see attached photographs.

Process Changes

1. Taking 2 swabs from each site (as indicated from history)
2. No more smears to be performed by FMOs (to be made in-house)
3. Dacron Wedges to replace wooden sticks
4. No more ref blood in the SAIKs (to go through a separate process-separate Ref kit provided). Possibility of the inclusion of a fingerpick kit for Ref blood.
5. Inclusion of Feedback form

Justification of Change:

Feedback from Property Point regarding the possible contamination of SAIK contents when opening the SAIK in an uncontrolled environment has prompted a review of the SAIK process and the possible improvement of the current process.

Packaging Changes

1. Pre-Printed Sticky Labels for all SAIK items (male, female, child) – Feedback from FMOs has been that it is difficult and time consuming to write on the swab labeling. They have been including information as per the swab label that isn't even necessary for our purposes. Pre-printed labels will be more time efficient and allow more consistency between individual examiners.

2. Tamper evident clear plastic bag for entire SAIK (outer packaging) – This will allow property point to see the contents without opening the bags. This will minimise contamintion. This will also be space saving for storage as Jiffy bags are quite large and padded.

3. Individual paper envelopes for each site swab/s – Minimise contamination when sheath corner is removed. When 2 swabs are taken from the same site they can be stored in the same envelope.

4. Inclusion of 2 x brown paper bags for intimate clothing and miscellaneous items – Currently these are not included in the SAIKs would be useful for larger items such as intimate clothing and stop the FMOs from having to use the Drop Sheet plastic bag. Have been incidences where the drop sheet has not been included in a bag.

5. Change format for medical protocol (change to booklet) see attached photographs – Improved diagrams and layout of information, better instructions for the FMOs. There will be very minimal content change. To be derived from the NSW/Tasmanian Prorocols.

Process Changes
1. Taking 2 swabs from each site (as indicated from history) – Maximises evidentiary potential. There is the potential that the swabs can be pooled. At scientist's discretion.

2. No more smears to be performed by FMOs (to be made in-house) – Gives more quality control to the scientist to ensure that the smear is representative of the swab. Removes a W H & S issue from the kit (glass slide). Removes a step for the FMO's- no labelling etc to worry about.

3. Dacron Wedges to replace wooden sticks – Replicates the move to Dacron swabs by the QPS due to DNA processing issues. Wedges allow the FMOs to get under the nail better and are more comfortable for the patient due to cottontip. Cottontip can be easily cut away and submitted for DNA testing. No need for Nucleospin testing (problem previously due to possible inhibitors in wood). These will be tested for efficacy prior to implementation against wooden sticks.

4. No more ref blood in the SAIKs (to go through a separate process- separate Ref kit provided). Possibility of the inclusion of a fingerpick kit for Ref blood – This was the reason for the Jiffy packaging as the glass is a W H & S issue. Any reference samples must go through the DNA unit and as it is a separate process it makes sense to separate it from the SAIK so that the packaging does not have to be opened at Property Point to retrieve the sample etc. Buccal samples will be taken for any case where oral assault is not an issue. Finger prick method to be introduced for facilitate ref blood/FTA card collection – takes out the need for a vacutainer. These methods are less invasive than drawing blood.

5. Inclusion of Feedback form – The FMOs have advised that they would be better able to perform their duties with feedback on their collection methods. Provides a feedback mechanism for Biology staff to the FMOs.

Communication:

Draft & proof copies of the booklet contents and associated forms will be made available to all staff for feedback prior to implementation.

A presentation by the Project Leader of the intended changes will be made at a whole of Biology Staff Meeting.

Documentation Affected:

Document #	Document Title
????	SAIK Booklet (QIS documents for SAIK forms)
17032	Sexual Assault Investigation Kit (SAIK) Examination
XXXX	Feedback Form
XXXX	Labels

Impact Assessments: Proposed Implementation Date:

Major Crime: Good suggestions for improvement. There has been a few discussions regarding SAIK kits and EXR's – with regards to the swabs not being individually bar-coded. Could this also be considered in this change in process? i.e the swabs are bar-coded at the time of the examination by the FMO, these can then be passed to the QPS for input onto the Forensic Register.
Assessed by: SJC Date: 25/5/06

Analytical:
Assessed by: Date:

Results Management (Volume): This change has no impact on volume crime
Assessed by: SMJ Date:20/4/06

Quality:
Assessed by: Date:

Training:
Assessed by: Date:

O H & S:
Assessed by: Date:

Requisitions:
Assessed by: Date:

AUSLAB:N/A
Assessed by: Date:

QPSU:N/A
Assessed by: Date:

External Clients (QPS DNA Unit):
Assessed by: Date:

External Clients (Property Point) :
Assessed by: Date:

External Clients (FMOs):
Assessed by: Date:

Risk Assessments:

Risk Assessments completed for Risks Identified in Impact Assessments: Yes / Not Required
Risk Level: Risk Assessment/s Attached: Yes / N/A
Risk Comments/Justification:
Chief Scientist Approval:_____ (Required if Risk =>Moderate)
Sign/Date

IMPLEMENTATION PLAN:

Activities Required	Person/Area Responsible	Estimated Completion Date	Quality Officer Confirmation of Completion
Proofs and draft documents to be made available	AJS	01 – 06- 2006	
Validation Studies Wedges	AJS	01 – 06- 2006	
Training Session prior to implementation	AJS		

Project Leader: _____ _____
(Print Name) (Sign & Date)

DRAFT

Queensland Government
Queensland Health

GENERAL INFORMATION	
SURNAME	OTHER NAMES
DATE OF BIRTH / /	SEX Male ☐ Female ☐
ADDRESS TELEPHONE NO	HOSPITAL STICKER (If available)
NAME AND CONTACT DETAILS OF EXAMINING DOCTOR	NAME AND CONTACT DETAILS OF INVESTIGATING POLICE OFFICER

DATE OF EXAMINATION	PLACE OF EXAMINATION	START TIME

OTHERS PRESENT DURING EXAMINATION (IF APPLICABLE)	
INFORMATION PROVIDED BY POLICE	
DETAILS OF MEDICAL TREATMENT ALREADY RECEIVED	

NAME:
DRAFT

HISTORY OF INCIDENT			
DATE OF ASSAULT		TIME OF ASSAULT	
LOCATION OF ASSAULT		TYPE OF ENVIRONMENT	
CLOTHING WORN AT TIME OF INCIDENT:			
ASSAILANT DETAILS (eg male/female, characteristic features, known to have had vasectomy, other)	ASSAILANT 1		
	ASSAILANT 2		

DETAILS OF INCIDENT (quote where possible)

CHECKLIST FOR DETAILS OF INCIDENT (specify whether actual or attempted, which assailant)					
Vaginal penetration?	YES	NO	UNSURE	Penetrating object?	No of times?
Anal penetration?	YES	NO	UNSURE	Penetrating object?	No of times?
Oral penetration?	YES	NO	UNSURE	Penetrating object?	No of times?
Use of condom?	YES	NO	UNSURE	Details?	
Ejaculation?	YES	NO	UNSURE	Onto which part of body?	

NAME:
DRAFT

Lubricant used?	YES	NO	UNSURE	Type/likely to be on which part of body?
Oral contact by assailant?	YES	NO	UNSURE	Vaginal area?
				Anal area?
				Breasts?
				Other?
Hand-genital contact?	YES	NO	UNSURE	Details?
Use of weapon?	YES	NO	UNSURE	Type?
				Contact with which part of body?
Use of restraints?	YES	NO	UNSURE	Type?
				Contact with which part of body?
Physical assault?	YES	NO	UNSURE	Strikes/blows?
				Grabbed/held firmly?
				Kicked/kneed?
				Choked/strangled/smothered?
				Pushed against anything?
				Other?
Bite?	YES	NO	UNSURE	Which part of body?
Defence attempted?	YES	NO	UNSURE	Scratched the assailant?
				Bitten the assailant?
				Other?
Did the incident involve alcohol or drugs?	YES	NO	UNSURE	IF TOXICOLOGY IS RELEVANT, PLEASE TURN TO PAGE ( ) FOR NECESSARY HISTORY AND SAMPLES.
Was there a period of altered consciousness or memory loss?	YES	NO	UNSURE	

|

NAME: DRAFT

RELEVANT SEXUAL/GYNAECOLOGICAL HISTORY				
Currently menstruating?	YES	NO	Menstruating at time of assault?	
Date of last menstrual period?			Usual menstrual cycle?	
Vaginal sexual intercourse within previous week?	YES	NO	When?	
			With whom (assailant or other?)	
			Condom use?	

EVENTS OCCURRING SINCE INCIDENT (Give details if appropriate)			
Any symptoms?	YES	NO	Bleeding?
			Pain?
			Other?
Changed clothing?	YES	NO	
Bath/showered?	YES	NO	
Douched?	YES	NO	
Sanitary towel?	YES	NO	
Tampon used?	YES	NO	
Urinated?	YES	NO	
Bowels opened?	YES	NO	
Vomited?	YES	NO	
Washed mouth?	YES	NO	
Cleaned teeth?	YES	NO	
Food?	YES	NO	
Drink?	YES	NO	
Sexual intercourse since the incident?	YES	NO	With whom/type?
			Condom used?
			Vasectomy?

NAME:
DRAFT

CONSENT FORM
(Insert name of doctor/nurse) **……** **HAS EXPLAINED TO ME THE PROCEDURES OF EXAMINATION, EVIDENCE COLLECTION AND RELEASE OF FINDINGS TO POLICE AND/OR THE COURTS.** **I, (*insert patient's name)* …… AGREE TO THE FOLLOWING:** **OR** **I, (*insert parent/guardian's name)*……. ON BEHALF OF** ***(insert patient's name)*……AGREE TO THE FOLLOWING:**

TICK EACH BOX AS APPROPRIATE	
	Physical examination, including examination of the genital and anal area
	Recording of examination findings
	Photography of injuries
	Collection of specimens for possible criminal investigation and prosecution
	Release of specimens for possible criminal investigation and prosecution
	Provision of a verbal and written report to police and/or the courts
	Collection of specimens for medical tests if appropriate
	Release of results of medical tests; to whom: ***(insert name of GP, Sexual Health Clinic, other)*** …… …… ……

NAME: DRAFT

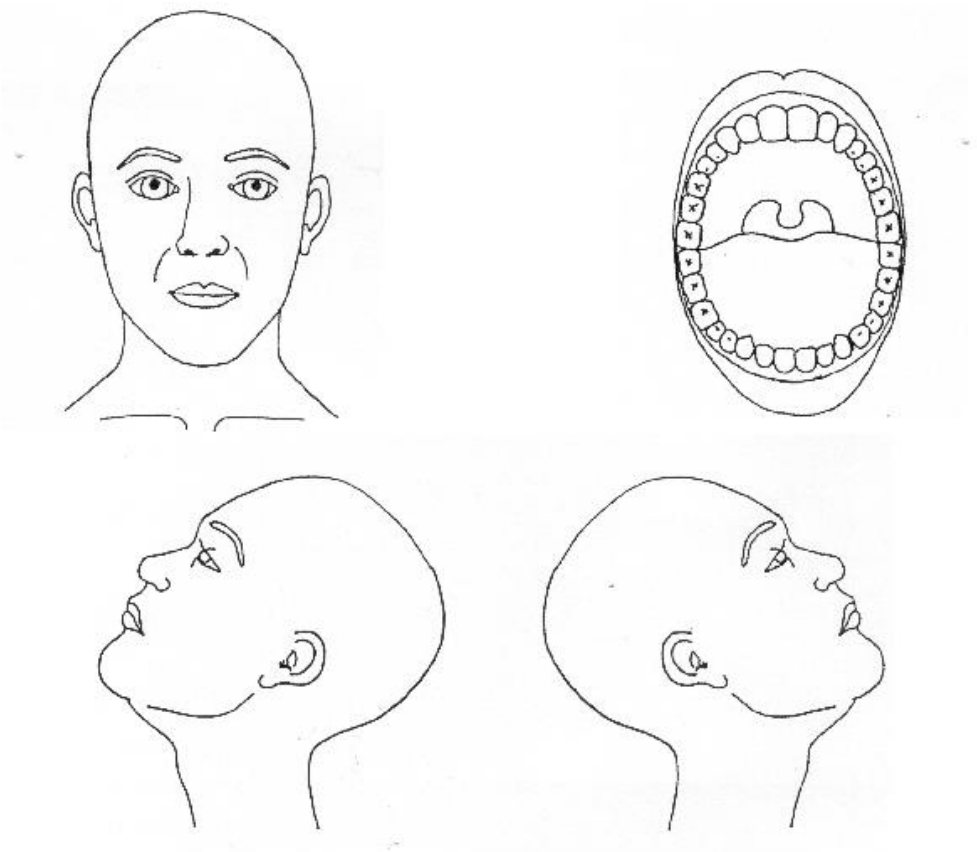
TOXICOLOGY (IF RELEVANT)				
Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss:				
Any symptoms possibly related to alcohol or drug ingestion reported by patient?				
Alcohol before the incident?	YES	NO	Type/amount/time of last drink before incident?	
Alcohol since the incident?	YES	NO	Type/amount/time of last drink before incident?	
Drugs prior to the incident?	YES	NO	Type/amount/how taken/time of last ingestion before incident?	
Drugs since the incident?	YES	NO	Type/amount/how taken/time of last drink before incident?	
Any prescription medications?	YES	NO		
Any 'over the counter'/herbal preparations?	YES	NO		
Any history of liver/kidney impairment?	YES	NO		
Weight of patient (kg)			Time and details of last meal?	

FORENSIC TOXICOLOGY SPECIMENS				
Collect blood and urine samples if incident occurred within previous 72 hours ASAP				
Use two separate toxicology kits (one for urine and one for blood)				
DATE AND TIME BLOOD SAMPLE COLLECTED		ID NUMBER OR STICKER BAR CODE		
DATE AND TIME URINE SAMPLE PASSED		ID NUMBER OR STICKER BAR CODE		

NAME:
DRAFT

GENERAL PHYSICAL EXAMINATION
DESCRIPTION OF CLOTHING if wearing same clothing worn at time of incident:
Place each item of clothing into a separate paper bag.
Include underpants worn since incident if vaginal or anal penetration.
DESCRIPTION OF DEMEANOUR:

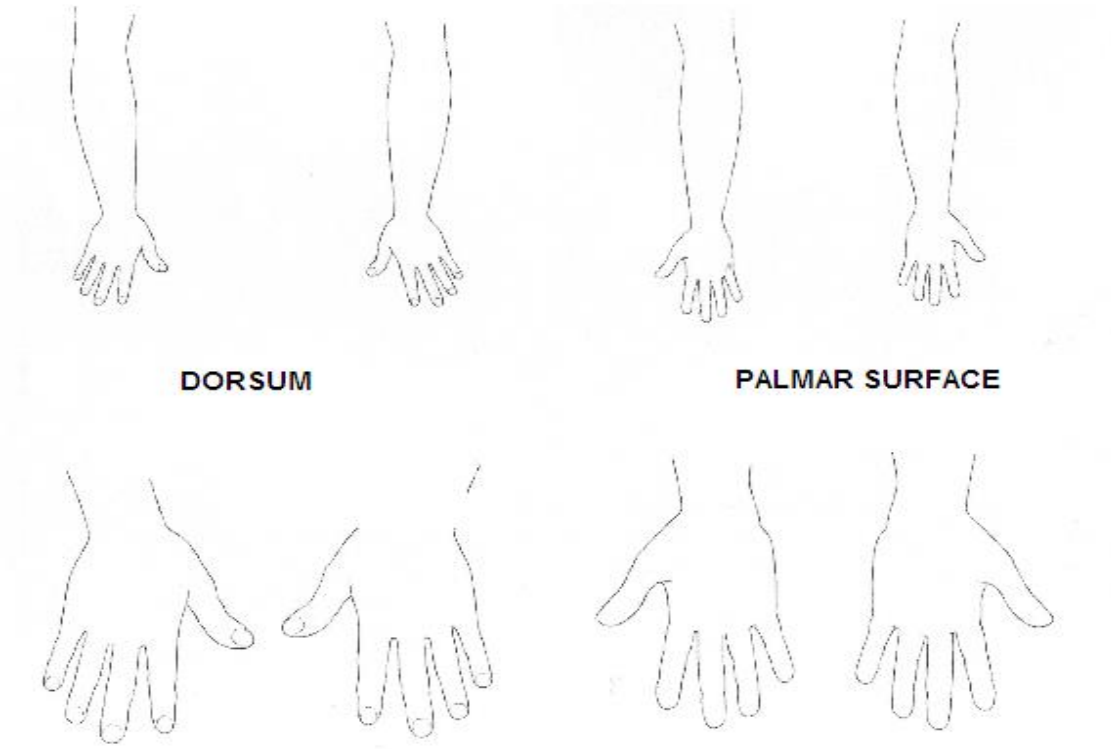
HEAD, NECK, FACE, MOUTH



NAME:

DRAFT

HANDS AND FOREARMS

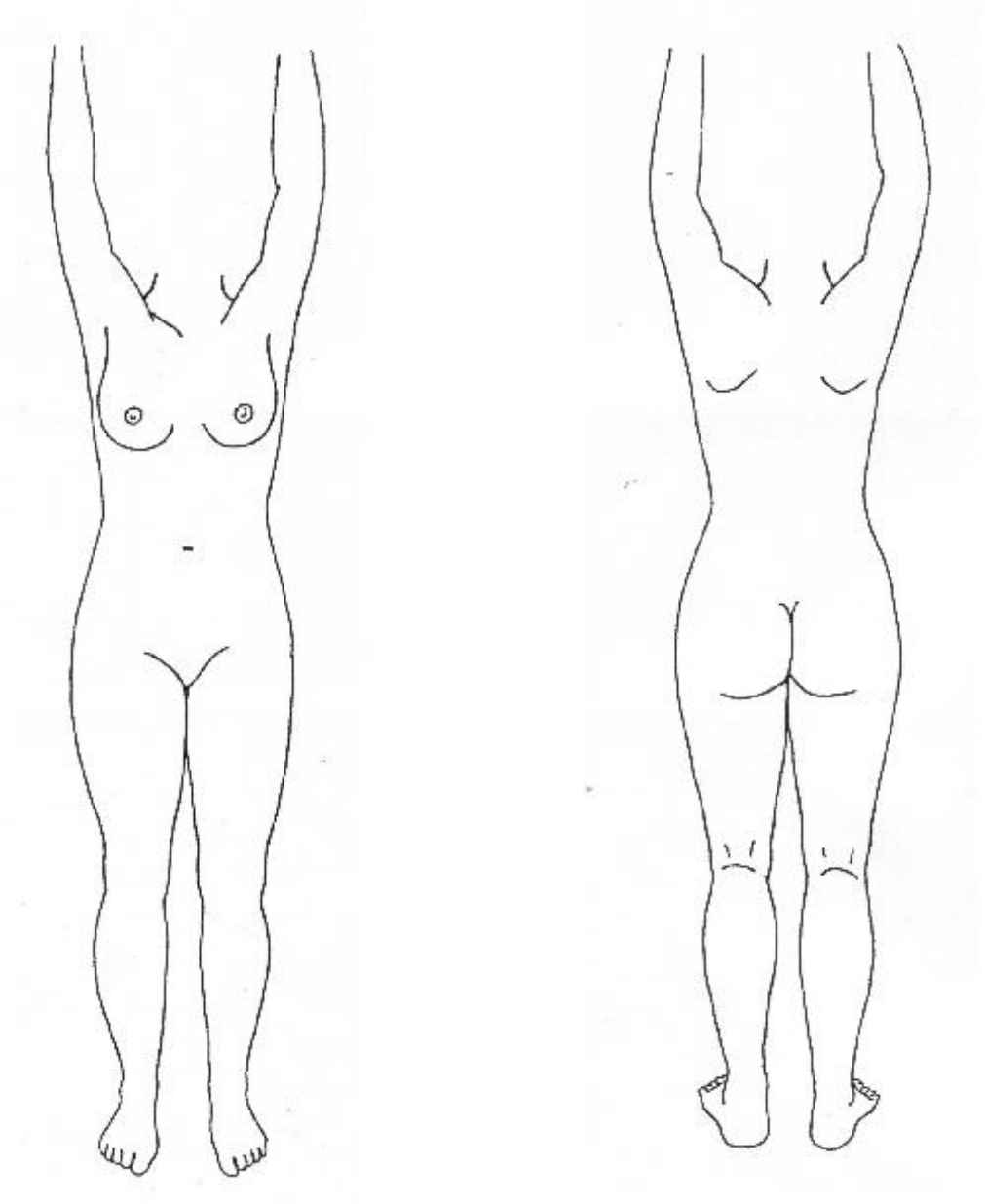


FEET

NAME:

DRAFT

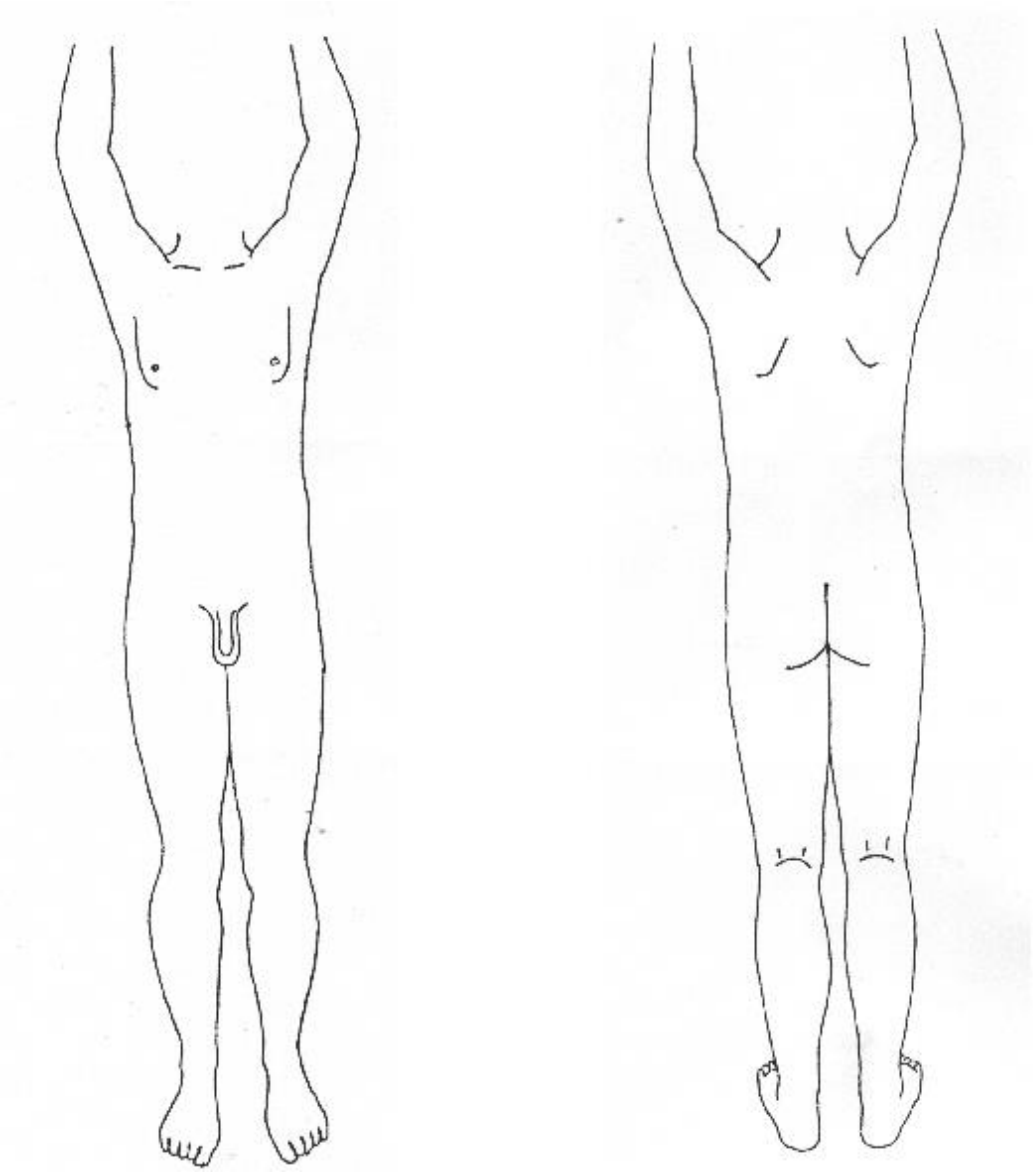
FEMALE BODY



NAME:

DRAFT

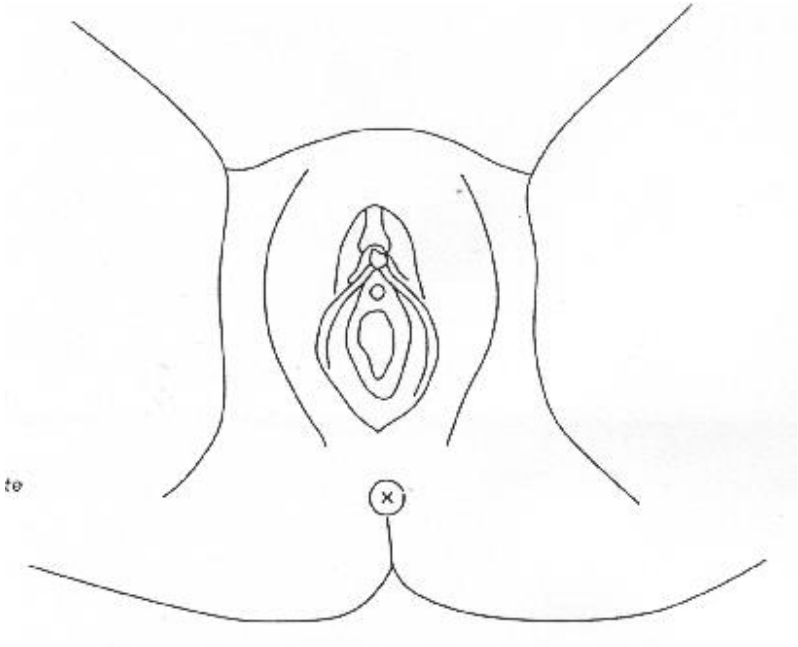
MALE BODY



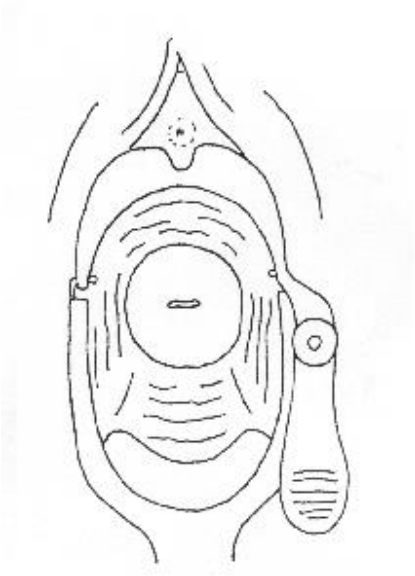
NAME: DRAFT

FEMALE GENITO-ANAL EXAMINATION

External genitalia and peri-anal area



Speculum examination

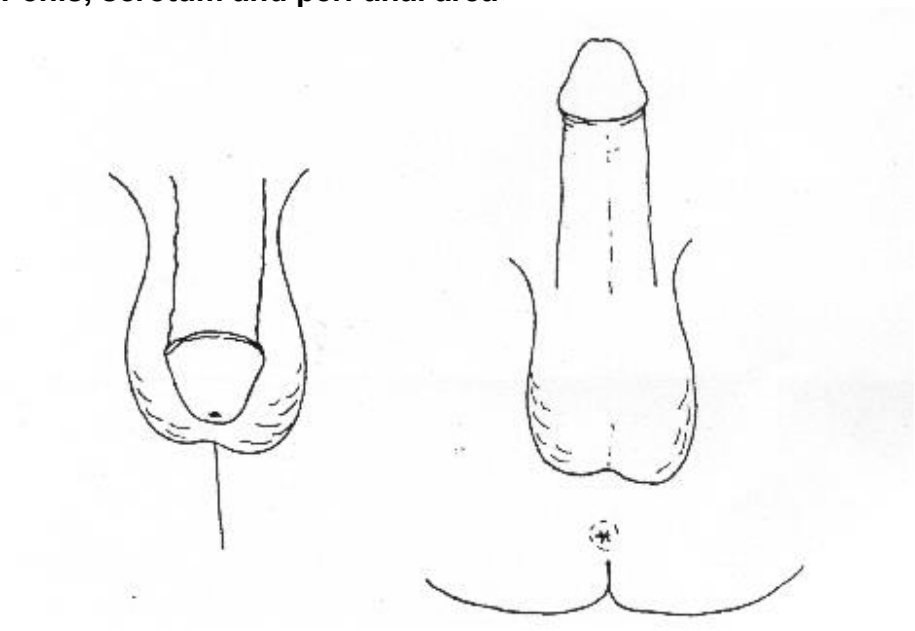


Proctoscopic examination (if appropriate)

NAME: DRAFT

MALE GENITO-ANAL EXAMINATION

Penis, scrotum and peri-anal area



Proctoscopic examination (if appropriate)

NAME: DRAFT

FORENSIC BIOLOGY SPECIMENS (Tick box if collected)			
REFERENCE DNA BUCCAL SAMPLE to be collected by police			
If swabbing an area which is relatively dry (eg skin, peri-anal, shaft penis), swab area with a moistened swab first followed by a dry swab for better yield.			
If history of patient SCRATCHING assailant	FINGER NAIL SCRAPINGS or SWABS	RIGHT HAND	
		LEFT HAND	
If possible SALIVA or BLOOD on skin	SKIN SWABS (specify site)		
If possible SEMEN on skin	SKIN SWABS AND SMEAR/S (specify site)		
If ORAL penetration	ORAL SWAB AND SMEAR		
If VAGINAL penetration	LABIAL SWAB AND SMEAR		
	LOW VAGINAL SWAB AND SMEAR		
	2 x HIGH VAGINAL SWABS AND SMEAR		
	2 x ENDOCERVICAL SWABS AND SMEAR		
	TAMPON/SANITARY PAD if during or after offence		
If ANAL penetration	PERI-ANAL SWAB AND SMEAR		
	ANAL SWAB AND SMEAR		
	2 x RECTAL SWABS AND SMEAR		

NAME: DRAFT

If assailant's mouth came into contact with MALE PATIENTS's genitalia (swab for possible saliva)	2 x GLANS PENIS SWABS (wet and dry, no smear)	
	2 x CORONAL SULCUS SWABS (wet and dry, no smear)	
	2 x SHAFT PENIS SWABS (wet and dry, no smear)	
If assailant's hand came into contact with MALE PATIENT's genitalia (swab for possible semen)	2 x GLANS PENIS SWABS (wet and dry) AND SMEAR	
	2 x CORONAL SULCUS SWABS (wet and dry) AND SMEAR	
	2 x SHAFT PENIS SWABS (wet and dry) AND SMEAR	
Any other relevant samples?		

CLOTHING ITEMS (separate paper bags)			
1		4	
2		5	
3		6	

FORENSIC SAMPLES AND CLOTHING ITEMS HANDED TO POLICE BY EXAMINING DOCTOR		
Date and time		
Name and signature of police officer		
Station		
ANY PHOTOGRAPHS OF INJURIES TAKEN BY EXAMINING DOCTOR?	YES	NO
WAS FORENSIC PHOTOGRAPHY BY POLICE RECOMMENDED?	YES	NO
WAS REVIEW BY FORENSIC DENTIST RECOMMENDED?	YES	NO

From: Cathy Lincoln
To: Jane Olsson
Date: 7/31/07 11:28am
Subject: Re: Adult sexual assault protocol

Hi Jane,

I passed on what I had completed of the SAEK protocol booklet to Bob Hoskins prior to your meeting a couple of months ago and hopefully it has found its way to you. My aim was to try to simplify the current booklet and make it easier to follow for people who do these examinations infrequently. I was also enthusiastic about suggestions from Forensic Biology that we might be able to 'do away' with smears which would significantly simplify the examination for the sexual assault examiners. However, we need to ensure we are not compromising evidence collection in doing so so it needed more discussion amongst the scientists first.

From my point of view, the text/layout is finished but as Bob mentioned, some input from a graphic artist is necessary as I have merely 'cut and pasted' various diagrams from other protocols. In addition, I think it would be of benefit to have some simple schematic diagrams illustrating exactly where each swab should be taken from (eg low vaginal, labial etc) to try to get some consistency between examiners - ideally these would be small diagrams placed next to the relevant swab in the forensic sample 'list' to avoid the examiner having to flip pages 'to and fro' within the booklet to find relevant information. The general idea was to have a booklet that was quite 'directive' which the examiner could work through page by page rather than have to look at a separate section with instructions. These sample site diagrams would have the added benefit that each copy of the protocol notes would then have an explanatory element for the police/lawyers.

If there are any 'general instructions' that don't fit easily within the flow of the booklet (although I think most of them will... eg *"clothing items to be bagged separately in paper bags"* etc), we could put them on one page in an easy to read 'dot-point' form on the fold-over cardboard leaf used to write on the carbon paper so that the examiner sees it every time they turn a page.

I have also addressed the practical aspects of a separate page for TOXICOLOGY samples and FORENSIC BIOLOGY samples so that these pages can easily be removed and put together with relevant samples when handed to police.

It's crucial that we correlate this protocol booklet with any decisions made in relation to modification of sample collection protocol (especially such issues as *whether examiners are required to make slides at time of collection of swab, the agreed upon method of collecting fingernail scrapings* etc). If we finalise the booklet, then decide to change to protocol there will be confusion and the exercise will have been pointless.

Lastly, it hasn't yet been sent around to examiners working in the field for comment and I think this would be of benefit. However, we need the final diagrams and also to make a decision re the sampling protocols before we can do this.

In summary, outstanding 'tasks' as I see them are as follows;
Meeting with graphic artist to finalise diagrams (I probably need to do this)Forensic Biology (and probably Forensic Chemistry) to confirm sample collection protocol (evidence-based if possible...Amand and I were looking at some simple in vitro experiments to decide re the slide/smear issue) Decide/agree on final 'structure' of the booklet ie carbon copies, fold over cardboard leaf or other ideas? etc (CFMU/Forensic Biology/Police/printers?) Forensic Biology to review/feedback re relevant aspects of booklet from their perspectiveReview of draft by group of examinersI'm somewhat 'time limited' over the next 2-3 months until new staff start in October but will make myself available if necessary (and possible).

Thanks
Cathy

Dr Cathy Lincoln
Clinical Forensic Medicine Unit
[redacted], Southport Central Building

CaSS | Clinical and Statewide Services
safe | sustainable | appropriate

SEXUAL ASSAULT TOXICOLOGY FORM

NAME:	DOB:

DIRECTIONS FOR THE COLLECTION OF TOXICOLOGY SPECIMENS

- Collect blood and urine samples ASAP if incident occurred within previous 72 hours.
- Use two separate police traffic (UIL/UID) toxicology kits; one for the blood and one for the urine and CLEARLY mark them *'Crime Scene Sample – not Traffic.'*
- ALWAYS collect the blood specimen in a Fluoride Oxalate tube. Urine specimens may be collected in a sterile container, a minimum of 20mLs is preferred.
- Complete the questionnaire and place this form inside the kits.

QUESTIONNAIRE

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss, and signs or symptoms of intoxication reported by the patient/subject:

Alcohol before the incident?	YES	NO	Type/amount/time of last drink before incident?
Alcohol since the incident?	YES	NO	Type/amount/time of last drink prior to sample collection?
Drugs prior to the incident?	YES	NO	Type/amount/how taken/time of last drug ingestion before incident?
Drugs since the incident (including those administered by QAS if known)?	YES	NO	Type/amount/how taken/time of any drugs ingested since the incident?
Any prescription medications?	YES	NO	Type/dose/when last taken?
Any 'over the counter'/herbal preparations?	YES	NO	Type/when last taken?
Any history of liver/kidney impairment?	YES	NO	
Weight of patient (kg)			Time and details of last meal?

DATE AND TIME BLOOD SAMPLE COLLECTED		STICKER BAR CODE	
DATE AND TIME URINE SAMPLE PASSED		STICKER BAR CODE	
Name of Examining Doctor		Signature of Doctor	

[redacted]

Approver/s: Lenore HADLEY

Queensland Government

HealthSupport Queensland

SEXUAL ASSAULT TOXICOLOGY FORM

NAME:	DOB:

DIRECTIONS FOR THE COLLECTION OF TOXICOLOGY SPECIMENS

- Collect blood and urine samples ASAP if incident occurred within previous 72 hours.
- Use two separate police traffic (UIL/UID) toxicology kits; one for the blood and one for the urine and CLEARLY mark them 'Crime Scene Sample – not Traffic.'
- ALWAYS collect the blood specimen in a Fluoride Oxalate tube. Urine specimens may be collected in a sterile container and then syringed into a 10mL Fluoride Oxalate tube.
- Complete the questionnaire and place it inside the kit.

QUESTIONNAIRE

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss, and signs or symptoms of intoxication reported by the patient/subject:

Alcohol before the incident?	**YES**	**NO**	Type/amount/time of last drink before incident?
Alcohol since the incident?	**YES**	**NO**	Type/amount/time of last drink prior to sample collection?
Drugs prior to the incident?	**YES**	**NO**	Type/amount/how taken/time of last drug ingestion before incident?
Drugs since the incident (including those administered by QAS if known)?	**YES**	**NO**	Type/amount/how taken/time of any drugs ingested since the incident?
Any prescription or herbal medications?	**YES**	**NO**	Type/dose/when last taken?
Time and details of last meal?			

DATE AND TIME BLOOD SAMPLE COLLECTED		**STICKER BAR CODE**	
DATE AND TIME URINE SAMPLE PASSED		**STICKER BAR CODE**	
Name of Examining Doctor/ Nurse		**Signature of Doctor/ Nurse**	
Name of Investigating Police Officer		**Station**	

- **Note for Qld Police: As well as this form, A QP127, Submission of Articles for Forensic Examination, is to also accompany the specimens.**

Queensland Health

Forensic and Scientific Services

Sexual Assault Investigation Kit (SAIK)

Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 [redacted]

SURNAME:	GIVEN NAMES:
DOB:	SEX: Male ☐ Female ☐
Examining Doctor / FMO / FNE: Address of examiner: E-mail address: Contact Phone Number:	Investigating Officer: Police Station: E-mail address: Contact Phone Number:
Date of SAIK Examination: Time of SAIK Examination:	Date of Assault: Time of Assault:

Sterilisation process complete for workspace & equipment Yes ☐ No ☐
Exam room details: (room number or location) _____

TYPE OF ASSAULT:	Digital	Penile penetration	Oral	Object penetration
Oral				
Vaginal				
Anal				
Penile				
Other	(please provide details in "Summary of Assault"):			

PREVIOUS SEXUAL ACTIVITY: Yes ☐ >7 days previous ☐
Date (if ≤ 7days) : _____
No ☐

Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐
Was condom used with previous coitus? Yes ☐ No ☐ Unknown ☐

For Female SAIK
Date of last LMP: _____

ASSAULT DETAILS

Was a condom used: Yes ☐ No ☐ Unknown ☐
Did ejaculation occur: Yes ☐ No ☐ Unknown ☐
Was a lubricant used: Yes ☐ No ☐ Unknown ☐
(if yes, please provide details in summary of assault details section)

How many offenders were involved: Male _____ Female _____
(if multiple offenders or if unknown, please detail within summary of assault details section)

SINCE THE ASSAULT, HAS THE PATIENT:

Changed Clothing: Yes ☐ No ☐ Douched: Yes ☐ No☐
Washed Clothing: Yes ☐ No ☐ Urinated: Yes ☐ No ☐
Showered / Bathed: Yes ☐ No ☐ Defecated: Yes ☐ No ☐
Washed Mouth: Yes ☐ No ☐ Vomited: Yes ☐ No ☐
Cleaned Teeth: Yes ☐ No ☐ Had drink / food: Yes ☐ No ☐

CASE HISTORY

Has the patient consumed a substance which may alter consciousness?
Yes ☐ No ☐ Unknown ☐

Can the patient recall and communicate the incident?
Yes ☐ No ☐ Unknown ☐

Did the assault involve any kissing / licking / biting?
Yes ☐ No ☐ Unknown ☐

If yes, locations: _____

Was there any genital / anal injury causing bleeding?
Yes ☐ No ☐

If yes, details: _____

SUMMARY OF ASSAULT DETAILS (please provide as much information as possible as this assists with DNA Analysis): _____

_____
_____
_____
_____
_____ (continue on next page)

Sexual Assault Investigation Kit (SAIK)

Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 [redacted]

SUMMARY OF ASSAULT DETAILS (continued from previous):

CLOTHING AND OTHER ITEMS

Item Clothing / Sanitary Items:
Details:

Worn pre-assault: ☐ Worn post-assault ☐ Worn pre- and post-assault ☐

Item Clothing / Sanitary Items:
Details:

Worn pre-assault: ☐ Worn post-assault ☐ Worn pre- and post-assault ☐

Blood sample taken for Toxicology? Yes ☐ No ☐ Urine sample taken for Toxicology? Yes ☐ No ☐

Sexual Assault Investigation Kit (SAIK)

Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 [redacted]

Please document the samples collected for DNA below

FEMALE SAIK SWABS:	
☐ High vaginal	☐ Low vaginal
☐ Vulval	☐ Cervical
☐ Perianal	☐ Rectal
☐ Oral	☐ Other
☐ Other	☐ Other
MALE SAIK SWABS:	
☐ Base of penis	☐ Shaft of penis
☐ Glans penis	☐ Scrotum
☐ Perianal	☐ Rectal
☐ Oral	☐ Other
☐ Other	☐ Other
BODY/SKIN SWABS: (please specify if biting, licking or kissing has occurred at site from which body swab was collected)	
☐ Location	☐ Location
☐ Location	☐ Location
☐ Location	☐ Location
☐ Location	☐ Location
☐ Location	☐ Location

FINGERNAIL CLIPPINGS/SCRAPINGS:		**DROP SHEET**
☐ Left Hand	☐ Right Hand	☐

Queensland Health
Forensic and Scientific Services

DROPSHEET
Patient Name: _____
Date: _____ Time: _____
Doctor: _____

Appendix C – Drop sheet cover sheet

DIRECTIONS FOR COLLECTION OF SAMPLES
PLEASE READ CAREFULLY BEFORE TAKING SAMPLES

DROP SHEET (A1 sheet paper)

The drop sheet is to be used for the purpose of collecting samples in the following way:

The sheet is spread out and placed on the floor. The person being medically examined stands on the sheet while undressing. Material dislodged from the person's clothes and body hairs i.e. hairs, fibres, plant material and foreign matter will drop on to the sheet.

The sheet is spread out on the examination couch beneath the buttocks of the patient. Material dislodged from the pubic and surrounding regions will drop onto the sheet.

On completion of the examination, the sheet should be carefully folded and placed in a plastic bag provided.

[redacted]
Valid From: 26/05/[redacted]
Approvers: Ca[redacted]LLEN

Queensland Government

Receipt
Date / /
Contents: _____
Please tear off the perforated receipt tab and retain as a record

A340408345

A340408345

DO NOT CUT HERE TO OPEN

TAMPER EVIDENT®
HIGHLIGHT UNAUTHORISED ACCESS

Tamper Evident Security Bag

Forensic DNA Analysis
Forensic & Scientific Services
Department of Health
PO Box 594
ARCHERFIELD QLD 4108
[redacted]
Please Store at 8 to -20 degrees C

Queensland Government

QPS Exhibit Barcode

SEXUAL ASSAULT INVESTIGATION KIT

Patient Name: _____

Doctor Name: _____

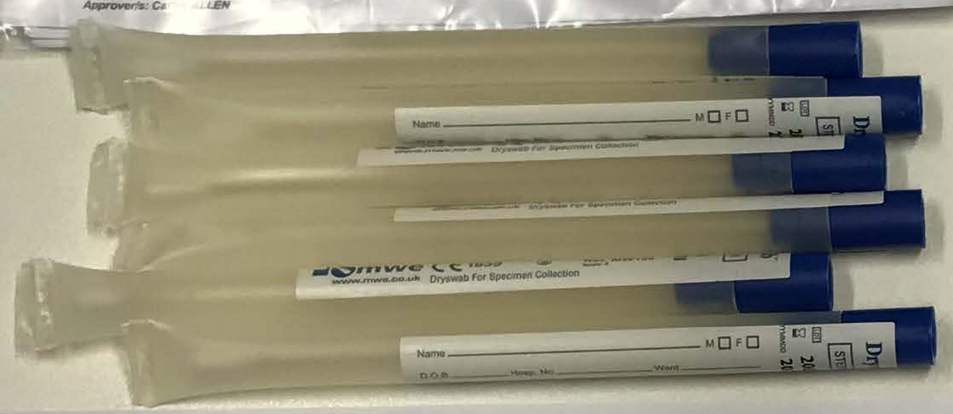
Officer Present: _____

Date of Exam : / /

www.tamperevident.com.au
[redacted]

TO REMOVE CONTENTS - CUT ALONG BOTTOM DOTTED LINE

TEB34



Forensic and Scientific Services
Prevention Division, Queensland Health

SEXUAL ASSAULT TOXICOLOGY FORM

NAME:	DOB:

DIRECTIONS FOR THE COLLECTION OF TOXICOLOGY SPECIMENS

- Collect blood and urine samples ASAP if incident occurred within previous 72 hours.
- Use two separate police traffic (UIL/UID) toxicology kits; one for the blood and one for the urine and CLEARLY mark them *'Crime Scene Sample – not Traffic.'*
- Preferably submit the blood and urine specimens to the laboratory in a **Fluoride Oxalate** tube. Urine specimens can be collected in a sterile container and then transferred to a 10mL F/Ox tube.
- Use of other types of storage may result in changes to alcohol or drug concentrations during storage and therefore affect the interpretation of the toxicological results.
- Complete the questionnaire and place this form inside the kits.

QUESTIONNAIRE

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss, and signs or symptoms of intoxication reported by the patient/subject:

Alcohol before the incident?	YES	NO	Type/amount/time of last drink before incident?
Alcohol since the incident?	YES	NO	Type/amount/time of last drink prior to sample collection?
Drugs prior to the incident?	YES	NO	Type/amount/how taken/time of last drug ingestion before incident?
Drugs since the incident (including those administered by QAS if known)?	YES	NO	Type/amount/how taken/time of any drugs ingested since the incident?
Any prescription or herbal medications?	YES	NO	Type/dose/when last taken?
Time and details of last meal?			

DATE AND TIME BLOOD SAMPLE COLLECTED		STICKER BAR CODE	
DATE AND TIME URINE SAMPLE PASSED		STICKER BAR CODE	
Name of Examining Doctor/ Nurse		Signature of Doctor/ Nurse	

Note for QPS Staff: A QP127 Submission of Articles for Forensic Examination must also accompany the specimens.

Page: 1 of 1
[redacted]
Valid From: 18/01/2022
Approver/s: Mark STEPHENSON

Queensland Government

Queensland Health
Forensic and Scientific Services

Sexual Assault Investigation Kit (SAIK)
Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 [redacted]

SURNAME:	GIVEN NAMES:
DOB:	SEX: Male ☐ Female ☐
Examining Doctor / FMO / FNE: Address of examiner: E-mail address: Contact Phone Number:	Investigating Officer: Police Station: E-mail address: Contact Phone Number:
Date of SAIK Examination: Time of SAIK Examination:	Date of Assault: Time of Assault:

Sterilisation process complete for workspace & equipment Yes ☐ No ☐
Exam room details: (room number or location) _____

TYPE OF ASSAULT:	Digital	Penile penetration	Oral	Object penetration
Oral				
Vaginal				
Anal				
Penile				
Other	(please provide details in "Summary of Assault"):			

PREVIOUS SEXUAL ACTIVITY: Yes ☐ >7 days previous ☐ Date (if ≤ 7days) : _____ No ☐

Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐
Was condom used with previous coitus? Yes ☐ No ☐ Unknown ☐

For Female SAIK
Date of last LMP: _____

ASSAULT DETAILS
Was a condom used: Yes ☐ No ☐ Unknown ☐
Did ejaculation occur: Yes ☐ No ☐ Unknown ☐
Was a lubricant used: Yes ☐ No ☐ Unknown ☐
(if yes, please provide details in summary of assault details section)

How many offenders were involved: Male _____ Female _____
(if multiple offenders or if unknown, please detail within summary of assault details section)

SINCE THE ASSAULT, HAS THE PATIENT:

Changed Clothing:	Yes ☐ No ☐	Douched:	Yes ☐ No ☐
Washed Clothing:	Yes ☐ No ☐	Urinated:	Yes ☐ No ☐
Showered / Bathed:	Yes ☐ No ☐	Defecated:	Yes ☐ No ☐
Washed Mouth:	Yes ☐ No ☐	Vomited:	Yes ☐ No ☐
Cleaned Teeth:	Yes ☐ No ☐	Had drink / food:	Yes ☐ No ☐

CASE HISTORY
Has the patient consumed a substance which may alter consciousness?
Yes ☐ No ☐ Unknown ☐
Can the patient recall and communicate the incident?
Yes ☐ No ☐ Unknown ☐
Did the assault involve any kissing / licking / biting?
Yes ☐ No ☐ Unknown ☐
If yes, locations: _____
Was there any genital / anal injury causing bleeding?
Yes ☐ No ☐
If yes, details: _____

SUMMARY OF ASSAULT DETAILS (please provide as much information as possible as this assists with DNA Analysis): _____

(continue on next page)

Page: 1 of 3
[redacted]
Valid From: 13/12/2021
Approver/s: Cathie ALLEN

Queensland Government

UN 3373
BIOLOGICAL
SUBSTANCE
CATEGORY B
TO: QUEENSLAND HEALTH
FORENSIC AND SCIENTIFIC
SERVICES
FORENSIC TOXICOLOGY SECTION
P.O. BOX 594
ARCHERFIELD
QLD 4108

Made in Malaysia
Сделано в Малайзии
Sterile unless this package is opened or damaged.
This product contains natural rubber latex which may
allergic reactions including anaphylactic responses.
LOT 20190625

DRAFT SPERM MICROSCOPY RESEARCH PROJECT

BACKGROUND:

The quality of clinician-made slide smears from swabs taken during forensic examination of sexual assault complainants has been found to be poor. This poor quality has the potential to compromise examination of the slide microscopically for sperm.

In addition, the making of smears which must be labelled and sealed by the examining clinician is time-consuming.

The possibility of making smears from swabs collected in sexual assault forensic examination in the laboratory rather than at the time of examination has been considered as part of a review of the Queensland SAEK protocol.

AIM:

To determine whether sperm microscopy could be improved and clinical forensic examination of sexual assault complainants could be simplified by omitting the requirement of examining clinician to make a smear on a slide at the time of swab collection by comparing three means of preparing a slide smear for sperm microscopy.

METHOD:

To compare three methods of making slides for sperm microscopy from swabs;-

1. Swab is dipped into container of fresh semen and clinician makes smear on slide with swab immediately afterwards. Smear is dried and then examined (a day/week later?...does this matter?) microscopically for sperm in the usual way.

2. Swab is dipped into container of semen and then dried/refrigerated. (A day/week later?...does this time period matter?), swab is moistened (with sterile water?) and used to make a smear on a slide by laboratory scientist for the purposes of examining microscopically for sperm.

3. Swab is dipped into container of semen and then dried/refrigerated. (A day/week later?...does this time period matter?), swab is cut into pieces and spun down in (….?solution). The resulting fluid is then used to make a smear on a slide for the purposes of examining microscopically for sperm.

Five (or more?) sets of three slides made as above are examined microscopically in the usual way and the results compared.

C Lincoln Dec 2009

EMAILS BETWEEN CFMU AND JTC RE NEED FOR SLIDES TO BE MADE FROM SWABS FOR SEMEN AT TIME OF SEXUAL ASSAULT EXAMINATION

December 2009

Hi Everyone,

Over the past year, we haven't had an instance of mould on SAIK swabs, so I think its appropriate not to prepare slides in all cases.

Regarding cross contamination questions - we answer these quite routinely. We advise that we are continuously improving our system as technology and knowledge increases. We try best to prevent or minimise the chance of cross contamination, however it is possible that human error could cause contamination. We have quality controls measures at particular points along our process to ensure that we can adequately check the procedure. On a monthly basis, we environmentally clean our lab - meaning, we take random samples from the lab area, then bleach all surfaces and instruments (including pens etc). We process the samples to see if our regular cleaning, performed prior to and post examination, is appropriate and we monitor it to ensure that DNA isn't building up in our environment. This gives us more information to provide to the court about cross contamination within the lab (from the infrastructure perspective).

My view is that the checklist could help with the level of confidence you have in the procedures that you've undertaken. I see this as especially helpful when court is probably more than 2 years from the time of the examination. We communicate to our staff that by undertaking the standard operating procedures, the court reporting scientists are able to demonstrate to the court that all samples are handled in the same manner, and with confidence regarding their quality.

Cross contamination is always a possibility, however standard procedures with gloves changes will help to minimise the risk. I was impressed with the procedure that Anne-Louise provided and its not much different to how we operate in the lab. After our environmental testing, we've been able to see that DNA has transferred from a glove onto a piece of tape, which has been used to sample an item. In this instance, a staff member's profile was found mixed with the complainant. We were able to go back and re-test the exhibit and found no contamination on the second sample from the same area. Staff are now more aware of their DNA being on the outside of gloves, so they often wipe their gloves over with an alcohol wipe if they are unsure.

All staff within DNA Analysis have been DNA tested and we compare their profiles against every sample tested in the lab. Most QPS Forensic Officers have also supplied their DNA and their samples are compared against crime scene profiles. I'm currently working on a procedure that we'd like to roll out to contractors, visitors and other forensic personnel that collect DNA evidence - including mortuary staff, pathologists and doctors. Its won't be compulsory, but it provides a level of protection.

Currently, IF a doctor accidently contaminated a DNA swab with their own DNA then the profile would be compared against profiles within the case and then put onto the National DNA database. So essentially the doctor's profile would be inadvertently on the database without their knowledge. Whereby if we had the doctor's profile on a separate database, we would be able to identify that it was potentially a contamination event and would be able to investigate. I've sort legal assistance with this procedure as there are a lot of implications to consider, so its a little way off yet. All staff being asked for their profiles would be consulted and provided with necessary information for them to make their own determination of the provision of their DNA.

Currently there is a review underway for the SAIKs, during this review, lab feedback to doctors will be discussed, with reference to what type of feedback would be most helpful.

I'd be happy to come along to a meeting to discuss any of the above with you.

Cheers,
Cathie

>>> Anne-Louise Swain 9/12/2009 8:27 am >>>

Dr Anne-Louise Swain
Clinical Forensic Medicine Unit
[redacted]
56 Scarborough Street
Southport 4215
[redacted]

>>> Catherine Lincoln 8/12/2009 12:36 pm >>>
Thanks Cathie,

That is indeed good news.

From now on, I will cease making slides from the swabs for semen I collect except perhaps in cases where I have a particularly 'wet/mucky' swab (eg HVS) which isn't likely to dry in the 30-45 minutes I usually leave them standing to air-dry before sealing and labelling. In this scenario, would you be happy if I made a slide just in case the swab goes mouldy?

I haven't been able to confirm this and don't know what goes on elsewhere, but in SER I think there are a fair few SAEKs that sit in the CIB property storage cupboard for an unknown period before they get up to JTC (ie SER FMOs do a significant number of examinations at the request of police where the decision to proceed with investigation is not made until later). We tell them to store the kits in the fridge but have no control over what happens after we hand them over. Do you think we need to take this into consideration or are you still happy we as a general rule, cease making slides?

(Sorry to labour all this but these examinations do take considerable effort and I'm loathe to do anything that might reduce their value)

Cathy

Dr Cathy Lincoln
Clinical Forensic Medicine Unit

Hi,

Generally we don't see mould on the swabs, so its not an issue. In the past, a few SAIKs may have been affected by mould, rendering the kits worthless from an evidentiary perspective. Generally, the kits that were affected by mould had been stored inappropriately (ie at room temperature for a prolonged period and situated in the northern regions of Queensland).

The main reason we highlight mould as being as issue is that once the swabs are affected by it, there is nothing we can do to obtain a DNA profile. We've tried numerous methods and all have been unsuccessful.

Allowing the swabs to dry is excellent. Also putting them at 4 degrees helps to prevent mould, however we are generally receiving kits within a short period of them being taken so that negates the mould aspect. We also are testing the kits within 24-48 hours.

I wouldn't recommend cutting the corners off the tubes, unless you put the swabs into separate envelopes. This would ensure the integrity of the swab whilst allowing it to dry - if you knew that storage and delivery would be a problem.

Cheers,
Cathie

Cathie Allen
A/Managing Scientist, DNA Analysis Unit, Forensic and Scientific Services

Clinical and Statewide Services Division | Queensland Health

PO Box 594
ARCHERFIELD Queensland 4108
[redacted]
Web: www.health.qld.gov.au/qhcss/

>>> Anne-Louise Swain 7/12/2009 5:47 pm >>>
Hi Cathie,

Thanks for that. I was just wondering about the mould issue....Are many of the swabs that you receive affected by mould? Do they come from any particular geographical area/doctor/nurse?

Is there anything we can do to prevent the mould growing? I try to ensure that the swabs are dry by letting them sit from when they are taken until I have finished all the paperwork etc. Would it be better to cut the corners of the tips of the tubes off to allow further drying just in case one of the swabs I package up is still wet? Would this cause problems with cross contamination?

als

Dr Anne-Louise Swain
Clinical Forensic Medicine Unit

>>> Cathie Allen 7/12/2009 5:38 pm >>>
Hi Everyone,

I've confirmed with the Senior Scientist looking after Evidence Recovery (team that process the SAIKs), who is also a Sexual Assault reporting scientist, that the preferred option is that slides are made in the laboratory.

There are a few advantages:
- preservation of biological material
- portion taken can be used for multiple tests if required, ie AP testing, slide, PSA testing
- labelling on slides not required by doctor

- removal of potentially hazardous items from the kits

One disadvantage is:
- if the swabs are affected by mould, we may not be able to produce a slide which could show that sperm was present. This would have been able to be done if the doctor had made a slide at the time the swab was taken

We have been making slides within the laboratory for some time now (as some kits arrive without slides, slides are not labelled etc) and haven't found any adverse effects. If we are in doubt about the slide, we will submit the sample for DNA testing anyway.

Cheers,
Cathie

Cathie Allen
A/Managing Scientist, DNA Analysis Unit, Forensic and Scientific Services

Clinical and Statewide Services Division | Queensland Health

PO Box 594
ARCHERFIELD Queensland 4108
[redacted]
Web: www.health.qld.gov.au/qhcss/

>>> Catherine Lincoln 7/12/2009 2:34 pm >>>
Thanks.

I'd still appreciate a senior scientist putting it in writing to us if possible, so that I know the decision to cease making slides at time of swab collection was made by someone with expertise in the field.

Cathy

Dr Cathy Lincoln
Clinical Forensic Medicine Unit

>>> Bob Hoskins 7/12/2009 1:38 pm >>>

A great many kits that have gone out over the last 12 months have had slides with no frosting which has eliminated the option for users of those kits - the lab have been quite happy.

Now that they are all opened within 48 hours I don't think dessication is the same issue (nor, presumably is the alleged growth of mold or mould). Interstate where the labs aren't as good as ours the issue may be different.

Bob Hoskins
Director, Clinical Forensic Medicine Unit

Clinical and Statewide Services Division | Queensland Health

51 Herschel Street
BRISBANE Queensland 4000
[redacted]

[redacted]
[redacted]
Web: www.health.qld.gov.au/qhcss/

>>> On 07/12/2009 at 1:10 pm, in message <[redacted]>, Catherine Lincoln wrote:

Bob,

With respect to the issue of no longer needing to make slides from swabs, have we had a written lab directive re that? My recollection was that when the issue of stopping making slides was last explored a few years ago, there was some question as to whether the making of a slide from a dried swab at an unspecified time after the examination may compromise the quality of the slide which as I understand it, is the crucial part of the lab's analysis process (ie swab only looked at if microscopy +ve).

I think a number of senior scientists from other States were canvassed about the idea and had reservations. I actually wrote a protocol for a simple lab study that would have proved or disproved this view, but it but it never got off the ground.
I would be very happy not to have to makes slides as slide labelling is a particularly onerous part of the process.

While we're on this subject, could we please re-visit (!) the issue of some sort of basic analysis results coming back to the examining doctor, at least so we can get some idea of the quality of our samples. Working in the current 'vacuum' that we do, we have no way of knowing whether our current practices pick up any DNA at all, let alone whether they are contaminated or not.

Cathy

Dr Cathy Lincoln
Clinical Forensic Medicine Unit

SAIK swab procedure FSS since cessation of slide in field (2011)

Preparation of slide from swab:

- Cut piece of swab tip, place in tube and add liquid
- Agitate
- Place a droplet of fluid mixture onto slide (150µl)
- Heat fix and stain (HHE)

Examine slide (microscopy)

If see sperm, the remining part of the swab and any others are sent to the DNA lab for analysis

In the DNA lab:

- Differential lysis process to separate epithelial fraction from sperm fraction (in a male sexual assault of female, epithelial fraction mostly female DNA but may include some male DNA)
- Both fractions are analysed for a DNA profile (run through *Profiler Plus*)
- Compare results with reference DNA profile

WIT.0043.0059.0001

Journal of Forensic and Legal Medicine 79 (2021) 102130

Contents lists available at ScienceDirect

Journal of Forensic and Legal Medicine

journal homepage: http://www.elsevier.com/locate/yjflm

Research Paper

Preparing semen slides in cases of sexual assault: Do they who smear first smear best?

Maria Nittis [a,*], Clint Cochrane [b], Rod Hughes [c], Michele Franco [b]

[a] Forensic Medical Unit (FMU), Western Sydney Local Health District (WSLHD), Blacktown Hospital, Marcel Crescent, Blacktown, 2141, Sydney, Australia
[b] NSW Forensic and Analytical Science Service (FASS), P.O. Box 162, Lidcombe, NSW, 2141, Sydney, Australia
[c] Primary Care and Community Health Services, Nepean Blue Mountains Local Health District (NBMLHD), Sydney, Australia

ARTICLE INFO

Keywords:
Sexual assault
Sperm
Forensic
Time since intercourse
Sperm morphology

ABSTRACT

When providing a forensic assessment for a victim of sexual assault, a smear is made from any swab that has been collected with the purpose of finding sperm. A smear is made to assist the laboratory identify the optimal swab for DNA testing, to aid in the selection of downstream DNA testing options, to evaluate morphology and quantity of sperm in order to provide time since intercourse assessments, and to contribute additional information to the crime scene case when trying to determine how an offender's DNA came to be at the site where it was located.

In the majority of Australian states, the forensic examiner makes the smear at the time of the forensic assessment (forensic history, examination, collection of specimens, documentation of injury and prophylactic treatment for sexually transmitted infections and pregnancy). The smear could be made, however, at a later time by forensic laboratory staff. There are some jurisdictions (for example in Queensland, Australia) where this is the preferred process. This research paper compared smear preparation by the forensic examiner with that prepared, at a later time, by the laboratory scientist. 143 pairs of high vaginal smears were analysed over a two and a half year period. Smears made by the examiner contained, for the most part, higher numbers of sperm, more background material and more intact sperm than smears made at a later date by laboratory scientific staff.

1. Introduction

In New South Wales (NSW), female patients alleging penile-vaginal sexual assault within the past 5 days (120 h) may present for forensic evidence collection as part of an overall forensic assessment. For this evidence collection, swabs from several areas of the female genitalia (including one or more from the vulval, low vaginal, high vaginal and endocervical areas) are collected. A forensic examiner (nurse or doctor), upon collecting a swab targeting sperm, will prepare a smear by rolling the swab over a small defined area (approximately 3 cm^2) in the centre of the slide. Both the swab and smear are then sent to the Forensic & Analytical Science Service (FASS), via NSW Police, for forensic analysis.

The main purpose of smears is for the detection of sperm. In NSW, this can help the forensic investigation in three main ways:

1. It allows the laboratory to identify an optimal sample for DNA testing and can assist with the selection of downstream DNA testing options. Semen is typically a DNA rich biological fluid. The presence of sperm may allow the scientist to preferentially select the differential extraction method. Although time intensive, it allows for the selective isolation of sperm from within the sample for autosomal DNA testing. This can be used to exclude a suspect or identify a possible offender. If sperm are not detected, a quicker non-differential extraction method may be chosen which does not separate the male cells but, instead, targets the male Y chromosome using a Y-STR typing kit. The result is less discriminating than the test using autosomal DNA, as there is little (if any) variation of the Y profile between males from the same paternal line. Therefore, by screening samples using sperm microscopy, the scientist may be able to use the most suitable DNA extraction method to obtain the maximum evidence.
2. Evaluation of the morphology and quantity of the sperm on a smear allows an estimate of the time period within which intercourse is likely to have occurred. This is referred to as a "time since intercourse" (TSI) estimation. It is based on a time dependent decrease in both sperm quantity and morphology (i.e. sperm break down and lose their tails with time).

* Corresponding author.
E-mail addresses: maria.nittis@vifm.org (M. Nittis), clint.cochrane@health.nsw.gov.au (C. Cochrane).

https://doi.org/10.1016/j.jflm.2021.102130
Received 28 August 2020; Received in revised form 28 January 2021; Accepted 31 January 2021
Available online 3 February 2021
1752-928X/Crown Copyright © 2021 Published by Elsevier Ltd. All rights reserved.

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

WIT.0043.0059.0002

3. Finding sperm might contribute additional information to the criminal case particularly when explanations for how an offender's DNA came to be deposited in a certain anatomical site are being argued before the court.

While the presence of a smear would appear to be beneficial, the optimal timing for preparation of the smear has been questioned. Should the smear be made by the forensic examiner at the time of the forensic medical assessment or later by the laboratory scientist during forensic analysis?

In most Australian states and territories, New Zealand and Northern Italy, smear preparation is done by the forensic examiner. The World Health Organisation's (WHO) guidelines for medico-legal care of victims of sexual violence (2003) advise an examiner to collect both the swab and slide.[1] In England and the South of France, the slide is generally made by forensic laboratory staff. In the United States, where the smear was traditionally made by the examiner, it has been recently suggested that the slide should be prepared by laboratory staff (see below).[2]

Reasons for considering the deferral of smear preparations to laboratory staff might include:

- Additional contamination risk - forensic examination sites don't typically employ the stringent DNA decontamination procedures used by forensic laboratories.
- Errors in smear preparation – An analysis of 1226 NSW sexual assault investigation kits revealed 159 cases (13%) that had an issue with slide collection. These included: no smear being submitted by the examiner when it should have been, a smear being made when it was not required, the smear being too large and a slide being submitted that appeared to have been unused.[3]

There is very limited evidence in the literature which adequately addresses the benefits or risks associated with either approach.

1.1. Aim

This research project examined the qualitative and quantitative differences between smears that had been prepared by forensic examiners and those smears prepared at a later time by forensic laboratory staff, using methods of preparation which matched each other as closely as practicable. The aim was to answer the question of whether a case could be made for deferring the preparation of a smear.

2. Method

2.1. Ethics

This was a joint research project between the Forensic Medical Units (FMU) Western Sydney Local Health District (WSLHD)/Nepean Blue Mountains Local Health District (NBMLHD) and the NSW Forensic & Analytical Science Service (FASS). It was approved by the NBMLHD Human Research Ethics Committee [LNR/15/NEPEAN/131].

2.2. Sampling/recruitment

Sexual assault complainants who presented for forensic medical examinations at either WSLHD FMU or NBMLHD FMU, requiring high vaginal samples as part of their forensic assessment, were sampled as per the NSW Guidelines for the collection of forensic specimens from complainants and suspects (NSW Health/NSW Police) - Version 10, Feb 2016. Forensic examiners with less than 12 months experience were not asked to participate in the research. Forensic examiners who did participate had a range of experience in sexual assault service provision and all were permanently employed by the FMU.

2.3. Procedure [forensic examiner]

For the purpose of this research, the forensic examination (including appropriate consents) was not altered in any way other than:

- Two swabs, bound together at their shafts, were used to collect a high vaginal sample (inserted at the same time) instead of the routine single high vaginal swab (see image 1 below). All forensic swabs used in NSW are made of rayon, 15 cm long and are rendered DNA free via ethylene oxide sterilisation.
- The high vaginal samples were taken, in the majority of cases, with the aid of a speculum (with appropriate consents). On a rare occasion it was collected without the aid of a speculum (due to lack of consent or discomfort).
- Once the high vaginal samples were collected, the examiner chose one swab at random from which to prepare a slide.
- A disposable paper template was placed under the slide to provide a standard sized target area (3 cm^2) for preparation of the smear (see image 2 below).
- This slide, and the swab used to prepare the slide, were labelled as per normal (with a unique patient identifier and site of swab i.e. HVS – High Vaginal Swab). The examiner then indicated, for the lab, the swab and slide pair.
- The second high vaginal swab was packaged and sent to the laboratory together with the standard samples.

2.4. Procedure [forensic laboratory]

All qualified FASS laboratory staff (approximately 10) who routinely perform sperm microscopy were involved in this study. The biologist testing the Sexual Assault Investigation Kit (SAIK) was responsible for preparing the laboratory made smear (with the same paper template as used by the examiner in order to guide the size of the smear) and then for examining both smears. Laboratory staff therefore knew which slide was created by the laboratory and which was created by the forensic examiner. They were blinded, however, to the purpose of the research.

The laboratory routine for examining each smear comprised:

- The smears were stained with Christmas tree staining.
- An examination of the entire smear using light microscopy (400X magnification) with sperm quantity and density rated according to the scale described in Section 2.5 below.
- Where sperm were not manually detected, the laboratory used a Zeiss-MetaSystems Axio Imager Z2 scanning microscope to perform automated sperm detection processing. Sperm Searcher automatically captures images of potential sperm, but a human operator needs to review the images to confirm (most captured images aren't actually of sperm). Therefore there is still subjectivity. Sperm Searcher was used in this study as a backup to second check negative slides, in case the operator missed one.

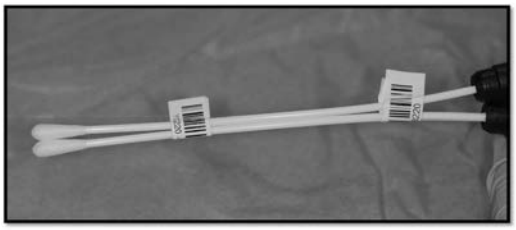


Image 1. two swabs bound together for insertion into the high vagina.

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

WIT.0043.0059.0003

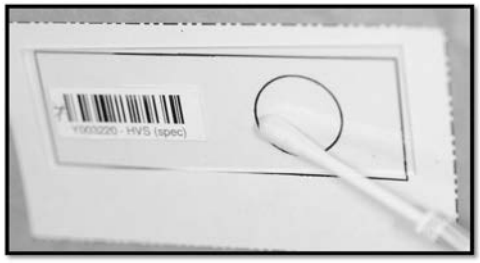


Image 2. slide with the template beneath.

2.5. Measures

2.5.1. Sperm density

Sperm density was recorded for each smear on a 7-point scale normally employed in NSW by the examining biologist as follows:

0 No sperm seen
≤5 ≤ 5 sperm seen in total
±6 or more sperm sporadically spread over the whole slide
+ Few in some fields
++ Some in some fields
+++ Many in some or most fields
++++ Many in every field

2.5.2. The proportion of intact sperm

The proportion of intact sperm was estimated by the biologist based on the number of complete sperm [head and tail intact] divided by the total number of sperm identified. Clearly this could only be determined when sperm were present and was less precise when many sperm could be observed.

2.5.3. Background

This describes the amount of other biological material [cells other than sperm] present on the slide. This is an ordinal variable with three levels: Light [few cells], Medium [medium to numerous cells] and Heavy [heavy density of cells].

2.5.4. Time since intercourse (TSI)

Three estimates of time since intercourse were examined in this study:

- As reported by the victim.
- As estimated by laboratory biologists from the slide [HV1] prepared by FMU examiners.
- As estimated by laboratory biologists from the slide [HV2] subsequently prepared by FASS biologists at the laboratory.

Time since intercourse estimations present the maximum expected timeframes that sperm will persist in the body cavity for a normal active individual (i.e. not prone or immobile). In preparing estimates, laboratory staff took account of both the sperm density and the proportion of intact sperm, resulting in four TSI categories: <24 h, <48 h, <72 h and, lastly, less than seven days.

FASS (NSW) have their own TSI estimate guidelines (2012),[4] based on a review of scientific research and an assessment of case samples from their own laboratory. Scores greater than "+" sperm made intercourse more likely to have occurred within the previous 24 h. Many complete sperm increased the likelihood of intercourse having taken place within the previous 12 h. Complete sperm suggested that the sample was unlikely to be > 48 h.

It is acknowledged, as this research was performed on swabs taken from patients alleging sexual assault, that there will always be a degree of uncertainty regarding whether penetration actually occurred as described, whether ejaculation occurred and whether the penetrative event occurred at the time stated by the victim.

2.6. Data analysis

For categorical data, differences in paired proportions [presence versus absence of sperm, presence versus absence of intact sperm, whether TSI estimates as derived from slide preparations accorded with patient report] were compared using McNemar's Test. In the case of background material, which could be classified as light, medium or heavy, an exact test for symmetry was employed owing to the small counts in some cells [see Table 3]. Wilcoxon's Signed Rank test was employed to compare differences in sperm density and proportions of intact sperm for individual pairs of slides. In addition, Cohen's Kappa coefficient was calculated as a measure of agreement between the findings from the two slides; this was weighted when ordinal data were compared as in the case of background material. Analyses were performed using SPSS Statistics Version 25 [IBM] and the R Project for Statistical Computing for the exact test of symmetry.[5] For all analyses, HV1 refers to the slide prepared at the hospital-based FMU. HV2 refers to the slide prepared at a later time by FASS.

3. Results

3.1. Participants

High vaginal samples were collected from 143 women from February 2016 until October 2018. Participants ranged in ages from 14 years to 83 years. Patient reported TSI ranged from 3 to 128 h with half [n = 72] presenting for a forensic examination within 24 h of the alleged sexual assault. 34 [23.8%] reported that the assault had occurred between 24 and 48 h previously while 17 participants [11.9%] indicated that it had occurred between 48 and 72 h previously. The remaining 14% [n = 20] said that more than 72 h had elapsed since the assault.

3.2. Sperm

3.2.1. Presence of sperm

In the majority of cases no sperm were seen on either smear [n = 104 or 72.7%]. Some sperm were detected on both smears in 30 cases [21%]. There were 7 cases in which the presence of sperm was detected only on HV1. There were 2 cases where the reverse was true, that is where the presence of sperm was detected on HV2 but not on the corresponding HV1 slide. This difference in proportions was not statistically significant [p = 0.18].]. If using a slide purely to determine the presence of sperm, both slides provided the same result (negative or positive) in 134 cases (n = 134/143, 93.7%) indicating a high level of agreement [none vs some; kappa k = 0.83; 95% CI: 0.72 to 0.93.]

3.2.2. Sperm density

Differences in sperm density ratings for individual pairs of slides are summarised in Table 1. Higher densities [more sperm] were apparent on HV1 [the examiner prepared slides] in 23 cases, yielding a negative difference score, compared to 3 cases where the difference favoured HV2. This difference was statistically significant [p < 0.05].

Table 1
Differences in sperm density ratings for individual pairs of slides.

HV2-HV1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
−3	1	0.7	1	0.7
−2	8	5.6	9	6.3
−1	14	9.7	23	16.0
0	118	81.9	141	97.9
1	2	1.4	143	99.3
2	1	0.7	144	100.0

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

WIT.0043.0059.0004

3.3. Proportion of intact sperm

The proportion of intact sperm could be compared for 31 pairs of slides. In these cases, 71% of HV1 slides [22 out of 31] had intact sperm compared to only 42% percent of HV2 slides [13 out of 31]. This difference in proportions was statistically significant [$p = 0.016$]. There were 10 cases [32%] where intact sperm were found on HV1 but not on HV2. There was only one case [3.2%] where the reverse was true. The differences in proportions of intact sperm between these individual pairs of slides are summarised in Table 2. Higher proportions of intact sperm were seen on HVI in 17 cases, yielding a negative difference score, and HV2 in 4 cases [$p < 0.05$].

Of note was the finding that intact sperm were found on HV1 slides from 3 h post intercourse to 45 h (patient reported TSI). On HV2 slides it ranged from 4 h to 17 h (patient reported TSI).

3.4. Assessment of background

Slides differed substantially in the amount of background material (cellular material other than sperm) as indicated by the poor level of agreement between the ratings [Weighted kappa: $k = 0.14$] and in the lack of symmetry in the distribution of frequencies [exact test of symmetry, $p < 0.001$]. For example, as illustrated in Table 3, there were only 11 samples where the Background was rated 'Light' based on HV1 and 54 such cases based on HV2. There were 23 cases where the Background received a rating of 'Heavy' based on HV1 and only one such case based on HV2.

3.5. Time since intercourse

Estimates of TSI could only be derived from the slides in the presence of sperm, noting the majority of smears collected during this study were devoid of sperm irrespective of whether they had been prepared at the time of the examination or in the forensic laboratory. The total number of estimates of TSI that could be made from either slide preparation decreased dramatically with the time that had elapsed between the alleged incident, as reported by the victim, and the time of the forensic examination. Where sperm were present, the patient had mostly reported that intercourse had occurred in the previous 24 h and almost always within 48 h [Fig. 1].

For the patient group as a whole, 37 estimates could be made from HV1 smears [25.6%]. 92% of these [$n = 34$] were derived from cases where the patient-reported TSI was 48 h or less. 32 estimates could be made from HV2 smears [22.4%]. 97% [31 out of the 32 estimates] came from slides where the patient reported TSI was 48 h or less. Many of these estimates, as derived from the slides, lacked precision irrespective of when the slide was prepared, often determining TSI as within 72 h or even 7 days [Fig. 2].

Among this patient group [those reporting a TSI of 48 h or less], there were 29 cases in which estimates could be derived from both HV1 and HV2. There was moderate agreement between these estimates [kappa = 0.603; 95% CI 0.32–0.89] as to whether TSI was less than 48 h. However, when HV1 was used, 18 out of the 29 estimates [62%] fell in the <48 h category, therefore coinciding with the patient's own report. For those derived from HV2, the corresponding figures were 12 out of 29 [41%]. This difference in proportions was statistically significant [$p = 0.031$].

Table 2
Differences in proportions of intact sperm for individual pairs of slides.

HV2-HV1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
−0.7	1	3.23	1	3.2
−0.55	1	3.23	2	6.5
−0.5	1	3.23	3	9.7
−0.4	1	3.23	4	12.9
−0.33	1	3.23	5	16.1
−0.3	2	6.45	7	22.6
−0.25	3	9.68	10	32.3
−0.2	1	3.23	11	35.5
−0.15	3	9.68	14	45.2
−0.1	2	6.45	16	51.6
−0.05	1	3.23	17	54.8
0	10	32.26	27	87.1
0.1	1	3.23	28	90.3
0.16	1	3.23	29	93.5
0.2	1	3.23	30	96.8
0.95	1	3.23	31	100.0

Table 3
Association between HV1 and HV2 background assessment.

HV1 Background	HV2 Background			
	Light	Medium	Heavy	Total
Light	9	2	0	11
Medium	41	68	0	109
Heavy	4	18	1	23
Total	54	88	1	143

4. Discussion

Slides made by the forensic examiner, immediately after collection of a high vaginal swab, more often resulted in greater quantity of sperm, higher percentages of intact sperm (heads and tails attached) as well as more dense additional cellular material/debris being found. Moreover, estimates of TSI, made from the examiner's slide, bore a stronger and more discerning relationship with the account given by the patient than the estimate derived from the laboratory prepared slide.

4.1. Slide preparation

This research compared characteristics of smears created by forensic examiners and forensic biologists respectively, while trying to minimise other variables. Effort was made to replicate, in the laboratory, the process used by a forensic examiner when they create a smear. Not all published papers on sperm morphology or persistence, however, base their conclusions on smears that have been prepared using consistent methodology.

Much of the earlier published literature has emanated from the Metropolitan Police Forensic Science (MPFS) Laboratories in the United Kingdom where smears were created by laboratory staff. Various methods have been described e.g. soaking the swab head in distilled water and using a few drops of the liquid plated onto a slide,[6] placing the swab head in distilled water, centrifuging the fluid, removing the supernatant and placing 3 drops onto various positions of the slide[7] and, lastly, cutting off ¼ of the swab head, placing it into distilled water, agitating the contents, taking one drop of the fluid and plating onto a slide.[8]

Given that much of the literature about sperm persistence and morphology has been from observations made on laboratory prepared smears, some caution should be exercised when attempting to extrapolate the results to a jurisdiction when smears are made in a different way. Further research may be needed to establish the replicability of TSI estimates when using different smear preparation methods.

4.2. Sperm density and background density

Sperm density and cell density were both higher on smears prepared at the time of collection by the examiner. Potential reasons for this may include:

- A forensic examiner is more adapt at smear preparation (thought by the authors to be unlikely).

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

WIT.0043.0059.0005

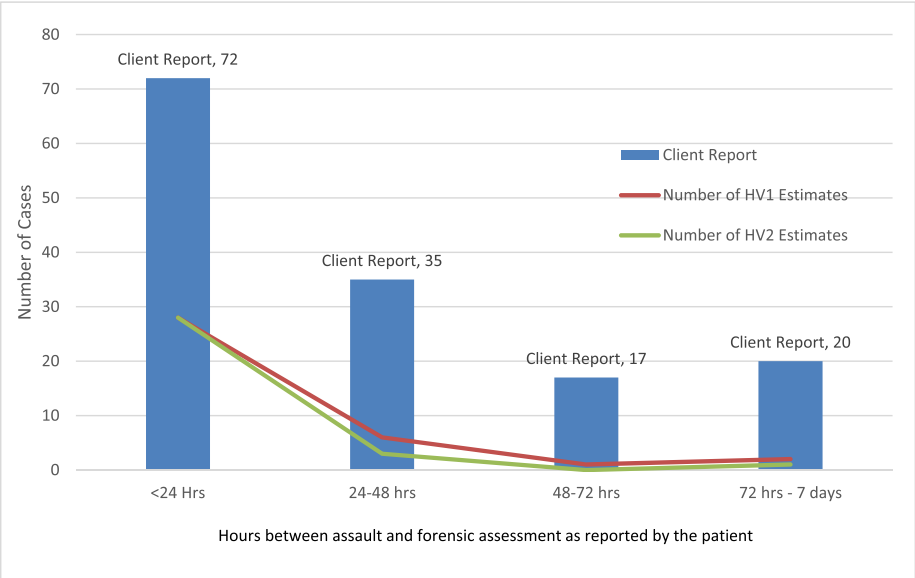


Fig. 1. Number of TSI estimates that could be made.

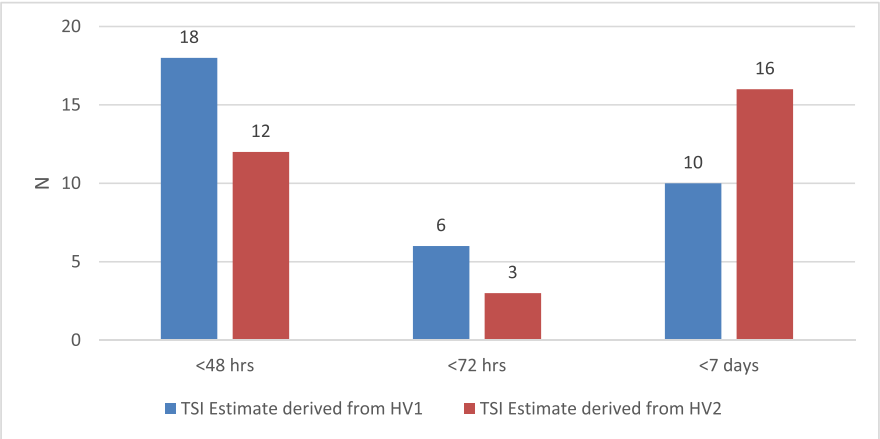


Fig. 2. Distribution of TSI estimates [where client reported TSI was <48 h].

- The biological fluid that dries on the swab head can get quite hydrophobic making it more resistant to "wetting" effectively at a later time.
- Sperm can bury itself into fibres of the swab. This may be more of a problem in a swab that has been completely dried, than in one that is still moist.
- Sperm on a swab head degrades with the passage of time.

Further research might be needed to explore these possibilities.

While more sperm on a slide is good for microscopy, it logically follows that less sperm will remain on the swab head. In NSW, typically the DNA profiling of the sperm donor is the paramount consideration within the forensic investigation, with the confirmation of the presence of sperm and TSI secondary considerations. Partially this is due to legislation which recognises any non-consensual penetration of a person's vagina to be a sexual assault, regardless of whether the penetrating object was a finger, penis, tongue or other object. It is recognised that in other jurisdictions this may not be the case. In the United Kingdom, for example, rape is limited to non-consensual penetration with a penis whereas assault by penetration occurs when the penetrative object is anything other than a penis. In these jurisdictions, the presence of sperm may help differentiate the charge (although both carry the same maximum penalties).[9]

The benefits gained from seeing sperm morphology/density on the smear might have to be counterbalanced against disadvantages stemming from the potential removal of DNA from the swab. This study did not, however, extend to an examination of comparative success rates for DNA profiling from each of the two swabs.

The Scientific Working Group on DNA Analysis Methods (2016),[2] comprised of a group of scientists representing Federal, State and Local forensic laboratories in the United States and Canada, observed similar findings to this study with regards to the presence of cellular background debris. This resulted in a recommendation that, if identification of sperm was deemed necessary the laboratory staff prepare the slide, as slides prepared by the lab staff have "less epithelial cells, bacteria and other debris" concentrated on a "more discrete area for microscopic examination".

4.3. Time since intercourse

TSI estimates have variously relied upon the detection of prostatic specific antigen (PSA), acid phosphatase (AP), density of sperm and/or

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

WIT.0043.0059.0006

the presence of intact sperm (sperm with tails). Only the last two of these estimation methods were considered in this research.

Calculation of sperm density is done in many countries using an ordinal scale. While there is a variation in the categories used by different laboratories there has been very little deviation in how these numbers are determined over the last 40 years.[10] The literature has consistently shown that sperm density decreases with time and terms such as 'few' and 'many' remain somewhat subjective and often ill--defined.[10] This no doubt contributes to a degree of variability in sperm density estimates.

The second component required for TSI estimates is the prevalence, or lack thereof, of intact sperm [tails attached to heads]. Persistence of intact sperm has been examined in several papers, many of them now quite dated. An early UK paper (1974) observed that intact sperm were commonly found up to 16 h post intercourse after which they were rarely seen up until 72 h.[6] Another UK paper (1982) found intact sperm from vaginal swabs up to 26 h.[8]

Casey et al.,[11] reviewing over 930 vaginal smears that were positive for sperm, found that intact sperm were seen up to 48–72 h post intercourse, with a marked drop off in percentage as time progressed. Even when collected between 0 and 12 h later, 85% of the smears had sperm without tails. When collected 12–24 h later 91% of smears had sperm with no tails. In our study, when patient estimates of TSI were less than 24 h and sperm were seen [HV1], intact sperm were seen in 20 of the 28 cases (71%).

In this research, and from observations based on HV1, categories greater than + sperm (i.e. category 4) were encountered only in cases where the patient's estimate of TSI was under 24 h except for one case where they stated it had been 45 h post intercourse. Intact sperm, likewise, were found when the patient's TSI was <24 h except for 2 cases. In one case, the patient provided a TSI of 28 h and in another a TSI of 45 h. Similar results were found for HV2. Categories greater than + sperm were observed exclusively in cases where TSI was less than 24 h, and there was only one case with intact sperm where the patient reported TSI was >24 h.

In this NSW study, the forensic scientists' estimates of TSI were more consistent with patient report when based on observations of the slide made by the forensic examiner, compared to those made in the laboratory. Given that these estimates are most discriminating when sperm are intact and a high quantity of sperm are seen, this is not surprising. The relationship observed, however, was modest at best and timeframes quite regularly became more conservative than the TSI given by the patient. It should be considered that conservative TSI estimates increase the range of time in which intercourse may have occurred, but concordance between patient and laboratory TSI estimates may be compromised. For example, a lab TSI of <7 days will be correct irrespective of whether the patient reported TSI was <24 h, <48 h, < 72 h or < 7 days.

5. Conclusion

Who then should prepare the vaginal smear in sexual assault cases, or when should they be prepared?

This research suggests that an examiner prepared smear will have more sperm as well as a higher proportion of intact sperm and thereby provide a more discriminating TSI estimate than smears prepared at a later time by lab staff, even when the smear is prepared in virtually the same manner. For the minority of cases where this is important, only by the examiner preparing the smears will this benefit be realised.

Conversely, the differences between the examiner prepared smear and lab prepared smear were insignificant when detecting the presence of sperm as the majority of cases were sperm negative.

This study highlighted the potential for future research looking into whether or not preparation of a smear might adversely affect DNA concentration and, hence, the subsequent DNA profiling from the swab sample.

6. Limitations

- Unfortunately there were only a limited number of slides that were positive for sperm. These findings must remain tentative until verified in other studies and with larger sample sizes.
- Like other studies in this area, there were inherent limitations with using casework samples. The veracity of the history and time of intercourse provided by the victim cannot be independently substantiated.
- The time period between forensic smear preparation and the lab smear preparation was not recorded. This may have provided further relevant information with regards to sperm degradation as a function of time elapsed.

At this stage the uncertainty (and variability) of examiners needs to be weighed against TSI estimation benefits to determine when (and by whom) the smear should be made. If future research were to demonstrate that the deposition of sperm in a smear compromised DNA profile recovery from the swab, the scales would be tilted in favour of the laboratory preparing the smear.

Author statement file

Maria NITTIS: Conceptualization of the project, Methodology, Analysis, Project Administration, Resources, Writing of Original Draft.

Clint COCHRANE: Methodology, Project Administration, Resources, Writing of Original Draft, Data curation.

Rod HUGHES: Project Administration, Writing of Original Draft, Formal analysis.

Michele FRANCO: Project administration, Review of paper.

Submission declaration

This paper has not been published elsewhere nor is it currently being considered for publication elsewhere. All cited authors are happy for the Journal of Forensic and Legal Medicine to consider it for publication and, if accepted, the authors agree that it will not be published elsewhere in the same form without agreement from the copyright holder.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

Declaration of competing interest

None.

Acknowledgements

We would like to acknowledge staff at both FASS and the FMU (doctors and nurses) who contributed to the project. We would also like to extend our sincerest gratitude to Associate Professor Andrew Martin, Principal Research Fellow in Biostatistics University of Sydney, for his expert guidance in the statistical analyses.

References

1. World Health Organization Guidelines for medico-legal care of victims of sexual violence. P.59 https://apps.who.int/iris/bitstream/handle/10665/42788/924154628X.pdf; 2003. jsessionid=F78B0470D4B320DB765F9D63D09E1DFE?sequence=1 Accessed on 22/04/2020.
2. Scientific Working Group on DNA Analysis Methods. *Recommendations for the efficient processing of sexual assault evidence kits (North America)*; 2016. http://www.swgdam.org/publications. Accessed on 25/07/2019.
3. Nittis Maria, Stark Margaret. Evidence based practice: laboratory feedback informs forensic specimen collection in NSW. *J Forensic Leg Med*. 2014;(25):38–44.

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

WIT.0043.0059.0007

4. Division of Analytical Laboratories (Now Known as Forensic and Analytical Science Service). *Information Sheet – Persistence of Semen in the Human Body*. 2012. Private correspondence.
5. R Core Team. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing; 2020. The exact text is described at https://www.R-project.org/. http://rcompanion.org/handbook/H_05.html. Accessed on 27/01/2021.
6. Davies A, Wilson E. The persistence of seminal constituents in the human vagina. *Forensic Sci Int*. 1974;3:45–55.
7. Keating SM, Allard JE. What's in a name – medical samples and scientific evidence in sexual assault. *Med Sci Law*. 1994;34(3):187–201.
8. Willott GM, Allard JE. Spermatozoa- their persistence after sexual intercourse. *Forensic Sci Int*. 1982;19:135–154.
9. Petition: change the legal definition of rape in the UK to include female on male rape. https://petition.parliament.uk/archived/petitions/124524. Accessed on 06/01/2021.
10. Tobe SS, Dennany L, Vennemann M. An assessment of the subjectivity of sperm scoring. *Forensic Sci Int*. 2015;251:83–86.
11. Casey DG, Domijan K, MacNeill S, Rizet D, O'Connell D, Ryan J. The persistence of sperm and the development of time since intercourse (TSI) guidelines in sexual assault cases at forensic science Ireland, Dublin, Ireland. *J Forensic Sci*. 2017;62(3):585–592.

Downloaded for Anonymous User (n/a) at Queensland Health Clinical Knowledge Network from ClinicalKey.com.au by Elsevier on March 30, 2021.
For personal use only. No other uses without permission. Copyright ©2021. Elsevier Inc. All rights reserved.

IMPORTANT INFORMATION

This letter is intended for all Forensic Medical Officers (FMO) performing medical examinations on victims of alleged sexual assault within Queensland. It contains information to all applicable officers of the changes to be implemented to the sexual assault investigation kit (SAIK) over a period of 6 months.

Currently, the SAIK is composed of a variety of consumables and a medical protocol, "Queensland Health Sexual Offences – Medical Protocol". The medical protocol is a 24 page document, in triplicate, which provides information on how to perform the recovery of DNA and other physical evidence from victims involved in sexual crime.

In recent times, a review of the medical booklet and consumables was held with representatives from the Queensland Police Services (QPS), the Clinical Forensic Medical Unit (CFMU) and the DNA Analysis Unit of the Queensland Health Forensic and Scientific Services. This review resulted in amendments to the medical booklet and contents of the SAIK.

<u>What changes are coming?</u>

1. Removal of the following consumables from the SAIK
    a. EDTA blood tubes
    b. Gloves
    c. Pubic combing kits
2. Amendment to the medical booklet and SAIK
    a. Medical booklet will no longer contain carbon copies to give to other facilities; part of phase 2 (detailed below)
    b. Swabs will no longer be pre-labelled and it is up to the FMO to complete the labelling
3. Additions to the SAIK
    a. DNA form "Medical Examination Information form - DNA" - specifically used to gather notes for DNA analysis use to replace the carbon copy currently returned with the SAIK
    b. Barcodes to individually label samples collected during the medical examination

<u>Use of the DNA form</u>

The DNA form, "Medical Examination Information form - DNA" is to be filled out in addition to the examination notes the GMO makes for them selves. The form is user friendly in that the majority of sections are tick boxes.
The "DNA Specimen" section located on page 2 of this form, is a table for recording the samples collected. This is the only area on the form the FMO will associate barcodes to each sample they collected (reference samples and articles of clothing are excluded). The same barcode placed onto the labelled consumable will be affixed to the form by the GMO with a small description of the sample collection location; eg, High vaginal, Joanne Bloggs; DOB
Reference samples and articles of clothing are to be barcoded by the QPS.

Implementation program

The following three step implementation plan has been established, in consultation with the Director of CFMU, Adam GRIFFIN and looks at implementing the changes in a staged approach over a number of months.

Phase 1 :
The supplied SAIK contains the same consumables and medical protocol. It however contains this communication letter explaining the impending change and a 2 page DNA form, "Medical Examination Information form - DNA". The DNA form is available for you, the GMO, to look at and get familiar with. At this stage, you do not have to use this form. Simply continue with the current protocol.
We estimate based on current SAIK levels, there would be about 2-3 months supply of the phase 1 kits in circulation.

Phase 2 – denoted by green "Sexual Assault Investigation" form on kit
The supplied SAIK contains the same consumables but the medical booklet is now a printed single use copy to record your examination notes only; this is your copy to keep. If you need to provide a copy to another agency, you will need to make the necessary copying arrangements. The SAIK contains this communication letter and DNA form "Medical Examination Information form – DNA" which is required to be filled out and within the SAIK.

Phase 3: - denoted by orange "Sexual Assault Investigation" form on kit
The supplied SAIK contains this communication letter, a revised amount of consumables and associated barcodes for labelling and the DNA form "Medical Examination Information form – DNA" to be completed and returned within the SAIK. Please note the medical booklet is no longer contained within the SAIK and is the responsibility of the FMO to supply.

Catherine Lincoln - Re: Fwd: FW: New SAIK packaging

From: Cathie Allen
To: Catherine Lincoln
Date: 15/01/2014 12:30 PM
Subject: Re: Fwd: FW: New SAIK packaging
CC: Adam Griffin
Attachments: SAIK packaging.jpg; SAIK contents.jpg; Sexual Assault Investigation Form - DNA.doc; Sexual Assault Toxicology Form.doc; Cathie Allen.vcf

Hi Cathy

Whilst I'd be happy to send you a SAIK, the changes are with the paperwork, which was previously supplied.

The changes are:

- new packaging (a transparent plastic bag instead of a jiffy bag), which are attached
- the sticker on the front is different from the jiffy bag, which is attached and visible in the photos you supplied
- the swabs are no longer pre-labelled
- a new 'Sexual Assault Investigation kit form' is provided for DNA samples (see attached)
- a new 'Sexual Assault Toxicology form' is provided for Tox samples (see attached)
- the following are no longer supplied: gloves, glass slides, small clipseal plastic bags, cotton balls, syringe and vacutainer, comb, antiseptic swabs or medical booklet (electronic copy with Adam)

We have been supplying new kits to the QPS since about July 2013, so I'm guessing that QPS have stockpiles of old kits and it will take some time before you see the new kits. We are encouraging the QPS to use up the old kits prior to the new kits, otherwise this is a waste of resources.

Cheers
Cathie

Cathie Allen BSc MSc (Forensic Science)
Managing Scientist for Forensic DNA Analysis and Forensic Chemistry
Police Services Stream
Forensic and Scientific Services

Health Services Support Agency | **Department of Health**

PO Box 594
ARCHERFIELD Queensland 4108
[redacted]
Web: www.health.qld.gov.au/hssa/

Think before you print

>>> Catherine Lincoln 9/01/2014 5:04 pm >>>
Cathie,

One of the Southport FMOs had an after hours call over the Xmas/NY period from a SOCO in Bundaberg seeking advice in relation to one of your new SAIKs. Unfortunately she had never seen one and so wasn't able to be of much help.

The police officer later forwarded her this email from you back in July last year with attached photos of the kits.

Would it be possible for us to have a couple of these kits sent down to CFMU Southport office so we could familiarise ourselves with them before we get asked to use one when we attend to do a sexual assault complainant forensic examination?

Can you tell me if they have been disseminated across the State as yet - most CIB down this way don't seem to be aware of them and continue to bring the old ones.

Thanks in anticipation,

Cathy

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit (SER)

Health Services Support Agency Department of Health
PO Box 755
Southport BC Queensland 4215
[redacted]

>>> Sally Jacobs 3/01/2014 10:57 AM >>>

FYI

Dr Sally Jacobs
Forensic Medical Officer,
Clinical Forensic Medicine Unit

Clinical and Statewide Services Division | Queensland Health

PO Box 755
SOUTHPORT BC Queensland 4215
[redacted]

>>> <[redacted] 1/01/2014 6:05 pm >>>
Dr, Please find attached the photographs of the new kits and the forms associated with the kits.

This is all the associated paperwork with the kits.

Justin CRAWLEY
Sgt OIC
Bundaberg Scenes of Crime

Any details within this document are private and confidential and are meant for intended recipient only. If you are not the intended recipient for this email then please delete without forwarding this information. All opinions within this document are those of the author and do not reflect the opinions of the Queensland Police Service.

-----Original Message-----
From: Neville.DavidH[OSC]
Sent: Friday, 26 July 2013 3:55 PM
To: Arthy.LloydF[OSC]; Baker.PaulL[OSC]; Bland.JohnE[OSC]; Chan.LeoHo[ICTD]; Coronial Support Unit; DNA Management Section; DNA Profile Management Team; DNA Quality Management Unit; DNA Results Management Unit; DNA Sample Liaison Team; DNA Sample Management Unit; DNA Sample Person Management Team; FPBPhotosuite.FSB; FSB Electronic Recording Section; FSB Fingerprint Bureau; FSB Fingerprint Bureau Training; FSB Photographics Section; FSB Quality Management; FSB State SOC Coord; FSB Workplace Health and Safety OSC; Hall.StephenM[OSC]; Harland.JohnS[OSC]; Keller.MichaelB[OSC]; Morgan.Ben[ICTD]; OIC SOC Bundaberg; OIC SOC Caboolture; OIC SOC Cairns; OIC SOC Charleville; OIC SOC Dalby; OIC SOC Emerald; OIC SOC Gladstone; OIC SOC Gold Coast; OIC SOC Gympie; OIC SOC Hendra; OIC SOC Indooroopilly; OIC SOC Innisfail; OIC SOC Ipswich; OIC SOC Logan; OIC SOC Mackay; OIC SOC Mareeba; OIC SOC Maryborough; OIC SOC Metro North; OIC SOC Mt Isa; OIC SOC Newfarm; OIC SOC Oxley; OIC SOC Redcliffe; OIC SOC Rockhampton; OIC SOC Roma; OIC SOC South Brisbane; OIC SOC Sunshine Coast; OIC SOC Toowoomba; OIC SOC Townsville; OIC SOC Warwick; OIC SOC Wynnum; O'Malley.TroyS[OSC]; Pilotto.AndrewT[OSC]; Pobar.DarrenJ[OSC]; Rach.KennethR[OSC]; Sargood.DarrenM[MNR]; 'Sci Physical Evidence Unit'; Scientific Admin; SCIENTIFIC ALL QPS; Scientific Analytical Services Unit; Scientific Ballistic Unit; Scientific Cairns; Scientific Document Examination Unit; Scientific Fire Examination Unit; Scientific FSB Brisbane; Scientific Mackay; Scientific Major Crime Unit; Scientific Quality Management; Scientific Rockhampton; Scientific SER; Scientific Townsville; Scientific Training Officer; SOC Admin Oxley; SOC Bundaberg; SOC Caboolture; SOC Cairns; SOC Dalby; SOC Emerald; SOC Gladstone; SOC Gold Coast; SOC Gympie; SOC Hendra; SOC Indooroopilly; SOC Innisfail; SOC INTEL Metro North; SOC INTEL South Brisbane District; SOC Ipswich; SOC Kingaroy; SOC Logan; SOC Longreach; SOC Mackay; SOC Mango Hill North Lakes; SOC Mareeba; SOC Maryborough; SOC Metro North; SOC Mt Isa; SOC New Farm; SOC Oxley; SOC Redcliffe; SOC Rockhampton; SOC South Brisbane; SOC Sunshine Coast; SOC Toowoomba; SOC Townsville; SOC Whitsunday; SOC Wynnum; Support Officer FSB; Van Panhuis.Arthur[OSC]
Subject: FW: New SAIK packaging

Dear Forensic Staff,

Please be advised that QHFSS has altered the construction of their Sexual Assault Investigation Kits. Forwarded for you information.

David Neville

-----Original Message-----
From: Carstensen.AnthonyL[OSC]
Sent: Thursday, 25 July 2013 8:38 AM
To: Neville.DavidH[OSC]
Cc: McLaren.ScottA[OSC]; Holden.PatriciaM[OSC]
Subject: FW: New SAIK packaging

Dave,
For your information and dissemination as you feel is required.

Cheers

Tony Carstensen

Inspector
DNA Management Section
Forensic Service Branch
OPERATIONS SUPPORT COMMAND
[redacted]

-----Original Message-----
From: Cathie Allen [redacted]
Sent: Wednesday, 24 July 2013 3:00 PM
To: Adam Griffin; Catherine Skellern; FSS Forensic Property Point; Carstensen.AnthonyL[OSC]
Cc: Allan McNevin; Amanda Reeves; Andrea Norton; Emma Caunt; Justin Howes
Subject: New SAIK packaging

Hi Everyone

DNA Analysis have purchased new bags to package Sexual Assault Investigation Kits in. These news kits are now being produced.

Please find attached photos of what the new packaging. Could you please advise appropriate staff on these changes.

Cheers
Cathie

Cathie Allen BSc MSc (Forensic Science)
Managing Scientist, DNA Analysis,
Forensic and Scientific Services

Health Services Support Agency|Department of Health

PO Box 594
ARCHERFIELD Queensland 4108
[redacted]
Web: www.health.qld.gov.au/hssa/
P Think before you print

****
****
This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.
Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.
If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia +61 1800 198 175 or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.
If not an intended recipient of this email, you must not copy,

distribute or take any action(s) that relies on it; any form of
disclosure, modification, distribution and/or publication of this email
is also prohibited.
Although Queensland Health takes all reasonable steps to ensure this
email does not contain malicious software, Queensland Health does not
accept responsibility for the consequences if any person's computer
inadvertently suffers any disruption to services, loss of information,
harm or is infected with a virus, other malicious computer programme or
code that may occur as a consequence of receiving this email.
Unless stated otherwise, this email represents only the views of the
sender and not the views of the Queensland Government.
****
****

****
CONFIDENTIALITY: The information contained in this
electronic mail message and any electronic files attached
to it may be confidential information, and may also be the
subject of legal professional privilege and/or public interest
immunity. If you are not the intended recipient you are
required to delete it. Any use, disclosure or copying of
this message and any attachments is unauthorised. If you
have received this electronic message in error, please
inform the sender or contact securityscanner@police.qld.gov.au.

This footnote also confirms that this email message has
been checked for the presence of computer viruses.
****

Forensic and Scientific Services
TAMPER EVIDENT®
HIGHLIGHT UNAUTHORISED ACCESS
Tamper Evident
Security Bag
SEXUAL ASSAULT IDENTIFICATION KIT
Patient Name:
Doctor Name:
Officer Present:
Date Of Exam: / /
www.tamperevident.com.au
DROP SHEET
PLEASE READ CAREFULLY BEFORE TAKING SAMPLES
PUBLIC COVERINGS
NAIL CLIPPINGS

A34UT2/Y4Y

TAMPER EVIDENT®

HIGHLIGHT UNAUTHORISED ACCESS

Tamper Evident Security Bag

DNA Analysis
Forensic & Scientific Services
Department of Health
PO Box 594
ARCHERFIELD QLD 4108
[redacted]
Please Store at 8 to -20 degrees Celcius

Queensland Government | Forensic & Scientific Services | HSSA | Health Services Support Agency

QPS Exhibit Barcode

SEXUAL ASSAULT IDENTIFICATION KIT

Patient Name:_____

Doctor Name:_____

Officer Present:_____

Date Of Exam: / /

www.tamperevident.com.au

1300 726 711

DO NOT CUT HERE TO OPEN

BAG. TEB 340

Forensic and Scientific Services

HSSA | Health Services Support Agency

Sexual Assault Investigation Kit (SAIK)

DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd; Coopers Plains QLD 4108. [redacted]

SURNAME:	OTHER NAMES:
DOB:	SEX: Male ☐ Female ☐
EXAMINING DOCTOR: ADDRESS OF EXAMINING DOCTOR: E-MAIL ADDRESS: CONTACT PHONE NUMBER:	INVESTIGATING OFFICER: POLICE STATION: E-MAIL ADDRESS: CONTACT PHONE NUMBER:
DATE SAIK EXAMINATION: TIME SAIK EXAMINATION:	DATE OF ASSAULT: TIME OF ASSAULT:

STERILISATION PROCESS COMPLETED FOR WORKSPACE & EQUIPMENT Yes ☐ No ☐
EXAM ROOM DETAILS: Room Number or Location_____

TYPE OF ASSAULT:	Digital	Penile Penetration	Oral	Object Penetration
Oral				
Vagina				
Anus				
Penis				

Other (details in Summary of Assault Details):
_____

PREVIOUS SEX ACTIVITY: Yes ☐ Date if < 7 days ago:_____
No ☐
Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐
Use of condom with previous coitus Yes ☐ No ☐ Unknown ☐

ASSAULT DETAILS:

Was a condom used:
Yes ☐ No ☐ Unknown ☐

Did ejaculation occur:
Yes ☐ No ☐ Unknown ☐

Was a lubricant used:
Yes ☐ No ☐ Unknown ☐

How many offenders were involved in the assault*:
Male ____ Female ____

** If multiple offenders please detail each persons involvement in the Summary of Assault Details.*

For Female SAIK
Date LMP:_____

SINCE THE ASSAULT HAS THE PATIENT:

Changed Clothing: Yes ☐ No ☐
Washed Clothing: Yes ☐ No ☐
Showered/Bathed: Yes ☐ No ☐
Douched: Yes ☐ No ☐
Urinated: Yes ☐ No ☐
Defecated: Yes ☐ No ☐
Vomited: Yes ☐ No ☐
Washed Mouth: Yes ☐ No ☐
Cleaned Teeth: Yes ☐ No ☐
Had drink/food: Yes ☐ No ☐

CASE HISTORY:

Has the Patient consumed a substance which may alter consciousness :
Yes ☐ No ☐ Unknown ☐

Can the Patient recall and communicate the incident:
Yes ☐ No ☐ Unknown ☐

Did the assault involve any kissing/licking/biting
Yes ☐ No ☐
If yes give details of locations_____

Was there any genital/anal injury causing bleeding
Yes ☐ No ☐
If yes give details _____

SUMMARY OF ASSAULT DETAILS_____

[redacted]
Valid From: 07/06/2013
Approver/s: Cathie ALLEN

Queensland Government

SUMMARY OF ASSAULT DETAILS (continued)

CLOTHING AND OTHER ITEMS

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ☐ Worn post-assault ☐ Worn both pre-assault and post-assault ☐

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ☐ Worn post-assault ☐ Worn both pre-assault and post-assault ☐

REFERENCE SPECIMENS: Please package in a separate envelope within the SAIK kit:

FTA Sample (preferred)	Yes ☐	No ☐	Cells ☐	Blood ☐
Blood Reference Sample	Yes ☐	No ☐	5ml EDTA tube	
Oral Reference Swab	Yes ☐	No ☐	May be used only if no allegation of oral assault or loss of consciousness	

Blood Sample taken for toxicology Yes ☐ No ☐ Urine Sample taken for toxicology Yes ☐ No ☐

PLEASE DOCUMENT THE SPECIMENS COLLECTED FOR DNA BELOW:			
FEMALE SAIK SWABS			
☐	High Vaginal UNIQUE IDENTIFIER	☐	Low Vaginal UNIQUE IDENTIFIER
☐	Vulval UNIQUE IDENTIFIER	☐	Cervical UNIQUE IDENTIFIER
☐	Perianal UNIQUE IDENTIFIER	☐	Rectal UNIQUE IDENTIFIER
☐	Oral UNIQUE IDENTIFIER	☐	Other: UNIQUE IDENTIFIER
☐	Other: UNIQUE IDENTIFIER	☐	Other: UNIQUE IDENTIFIER
MALE SAIK SWABS			
☐	Base of Penis UNIQUE IDENTIFIER	☐	Shaft of Penis UNIQUE IDENTIFIER
☐	Glans Penis UNIQUE IDENTIFIER	☐	Rectal UNIQUE IDENTIFIER
☐	Perianal UNIQUE IDENTIFIER	☐	Scrotum UNIQUE IDENTIFIER
☐	Oral UNIQUE IDENTIFIER	☐	Other: UNIQUE IDENTIFIER
☐	Other: UNIQUE IDENTIFIER	☐	Other: UNIQUE IDENTIFIER
BODY/SKIN SWABS (please specify if biting, licking or kissing has occurred at site from which body swab was collected)			
☐	Location: UNIQUE IDENTIFIER	☐	Location: UNIQUE IDENTIFIER
☐	Location:: UNIQUE IDENTIFIER	☐	Location: UNIQUE IDENTIFIER
☐	Location: UNIQUE IDENTIFIER	☐	Location: UNIQUE IDENTIFIER
☐	Location: UNIQUE IDENTIFIER	☐	Location: UNIQUE IDENTIFIER
☐	Location: UNIQUE IDENTIFIER	☐	Location: UNIQUE IDENTIFIER

FINGERNAIL CLIPPINGS/SCRAPINGS		DROP SHEET
☐ **LEFT HAND** UNIQUE IDENTIFIER	☐ **RIGHT HAND** UNIQUE IDENTIFIER	☐ UNIQUE IDENTIFIER

Forensic and Scientific Services
HSSA | Health Services Support Agency

SEXUAL ASSAULT TOXICOLOGY FORM

NAME:	DOB:

DIRECTIONS FOR THE COLLECTION OF TOXICOLOGY SPECIMENS

- **Collect blood and urine samples ASAP if incident occurred within previous 72 hours.**
- **Use two separate police traffic (UIL/UID) toxicology kits; one for the blood and one for the urine and CLEARLY mark them '*Crime Scene Sample – not Traffic.*'**
- **ALWAYS collect the blood specimen in a Fluoride Oxalate tube. Urine specimens may be collected in a sterile container, a minimum of 20mLs is preferred.**
- **Complete the questionnaire and place this form inside the kits.**

QUESTIONNAIRE

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss, and signs or symptoms of intoxication reported by the patient/subject:

Alcohol before the incident?	YES	NO	Type/amount/time of last drink before incident?	
Alcohol since the incident?	YES	NO	Type/amount/time of last drink prior to sample collection?	
Drugs prior to the incident?	YES	NO	Type/amount/how taken/time of last drug ingestion before incident?	
Drugs since the incident (including those administered by QAS if known)?	YES	NO	Type/amount/how taken/time of any drugs ingested since the incident?	
Any prescription medications?	YES	NO	Type/dose/when last taken?	
Any 'over the counter'/herbal preparations?	YES	NO	Type/when last taken?	
Any history of liver/kidney impairment?	YES	NO		
Weight of patient (kg)			Time and details of last meal?	

DATE AND TIME BLOOD SAMPLE COLLECTED		STICKER BAR CODE	
DATE AND TIME URINE SAMPLE PASSED		STICKER BAR CODE	
Name of Examining Doctor		Signature of Doctor	

Sexual Assault Investigation Kit (SAIK)

DNA Analysis Unit, Forensic and Scientific Services, Queensland Health
39 Kessels Rd; Coopers Plains QLD 4108. [redacted]

SURNAME:	OTHER NAMES:
DOB:	SEX: Male ☐ Female ☐
EXAMINING DOCTOR: ADDRESS OF EXAMINING DOCTOR: E-MAIL ADDRESS: CONTACT PHONE NUMBER:	INVESTIGATING OFFICER: POLICE STATION: E-MAIL ADDRESS: CONTACT PHONE NUMBER:
DATE SAIK EXAMINATION: TIME SAIK EXAMINATION:	DATE OF ASSAULT: TIME OF ASSAULT:

DNA FREE WORKSPACE Yes ☐ No ☐ **DNA FREE EQUIPMENT** Yes ☐ No ☐
EXAM ROOM DETAILS: Room Number or Location

TYPE OF ASSAULT:	Digital Penetration	Penile Penetration	Oral	Object Penetration
Oral				
Vaginal				
Anal				

Other (details in additional information):

PREVIOUS SEX ACTIVITY: Yes ☐ Date if < 7 days ago:_____
No ☐
Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐
Use of condom with previous coitus Yes ☐ No ☐ Unknown ☐

ASSAULT DETAILS:

Was a condom used:
Yes ☐ No ☐ Unknown ☐

Did ejaculation occur:
Yes ☐ No ☐ Unknown ☐

Was a lubricant used:
Yes ☐ No ☐ Unknown ☐

How many offenders were involved in the assault*:
Male ____ Female ____

** If multiple offenders please detail each persons involvement in Additional Information Section*

For Female SAIK
Date LMP:_____

SINCE THE ASSAULT HAS THE PATIENT:

Changed Clothing: Yes ☐ No ☐
Washed Clothing: Yes ☐ No ☐
Showered/Bathed: Yes ☐ No ☐
Douched: Yes ☐ No ☐
Urinated: Yes ☐ No ☐
Defecated: Yes ☐ No ☐
Vomited: Yes ☐ No ☐
Washed Mouth: Yes ☐ No ☐
Cleaned Teeth: Yes ☐ No ☐
Had drink/food: Yes ☐ No ☐

CASE HISTORY:

Has the Patient consumed a substance which may alter consciousness :
Yes ☐ No ☐ Unknown ☐

Can the Patient recall and communicate the incident:
Yes ☐ No ☐ Unknown ☐

Did the assault involve any kissing/licking/biting
Yes ☐ No ☐
If yes give details of locations_____

Was there any genital/anal injury causing bleeding
Yes ☐ No ☐
If yes give details _____

ADDITIONAL INFORMATION_____

DRAFT

DNA SPECIMENS:

STANDARD SAIK SWABS:

Unique Ident — Cervical Swab Yes ☐ No ☐	Unique Ident — Perineum Swab Yes ☐ No ☐
Unique Ident — High Vaginal Swab Yes ☐ No ☐	Unique Ident — Urethral Swab Yes ☐ No ☐
Unique Ident — Low Vaginal Swab Yes ☐ No ☐	Unique Ident — Penile Swab Yes ☐ No ☐
Unique Ident — Vulval Swab Yes ☐ No ☐	Unique Ident — Other: Details_____

ADDITIONAL SAIK SWABS (as appropriate for history):

Unique Ident — Oral Swab Yes ☐ No ☐	Unique Ident — Skin Swab : Details_____
Unique Ident — Perianal Swab Yes ☐ No ☐	Unique Ident — Skin Swab : Details_____
Unique Ident — Rectal Swab : Yes ☐ No ☐	Unique Ident — Other Swab : Details_____
Unique Ident — Other Swab : Details_____	Unique Ident — Other Swab : Details_____

DROP SHEET

Unique Ident — Yes ☐ No ☐

PUBIC COMBINGS

Unique Ident — Yes ☐ No ☐

FINGERNAIL CLIPPINGS/SCRAPINGS

Unique Ident — **LEFT HAND** Yes ☐ No ☐

Unique Ident — **RIGHT HAND** Yes ☐ No ☐

DRAFT

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ☐ Worn post-assault ☐ Worn both pre-assault and post-assault ☐

Item Clothing/ Sanitary Items:
Details:

Worn pre-assault ☐ Worn post-assault ☐ Worn both pre-assault and post-assault ☐

REFERENCE SPECIMENS: Please package in a separate envelope within the SAIK kit:

FTA Sample (preferred) Yes ☐ No ☐ Cells ☐ Blood ☐

Blood Reference Sample Yes ☐ No ☐ 5ml EDTA tube

Oral Reference Swab Yes ☐ No ☐ May be used only if no allegation of oral assault

Blood Sample taken for toxicology Yes ☐ No ☐ Urine Sample taken for toxicology Yes ☐ No ☐

Examining Officer:

Name:_____

Sign:_____ Date:_____

Collecting Officer (QPS):

Name:_____

Sign:_____ Date:_____

DRAFT

Forensic and Scientific Services
TAMPER EVIDENT®
HIGHLIGHT UNAUTHORISED ACCESS
Tamper Evident
Security Bag
SEXUAL ASSAULT IDENTIFICATION KIT
Patient Name:
Doctor Name:
Officer Present:
Date Of Exam: / /
www.tamperevident.com.au
PLEASE READ CAREFULLY BEFORE TAKING SAMPLES
DROP SHEET
PUBIC COMBINGS
NAIL CLIPPINGS

HealthSupport
Queensland
Forensic and Scientific Services

QUEENSLAND HEALTH

SEXUAL OFFENCES – MEDICAL PROTOCOL

Confidential

NOTES REGARDING USE

These kits have been assembled to assist in the forensic examination of victims of sexual assault and should be used according to instructions printed. Apart from ensuring that the patient is fully examined and laboratory specimens correctly collected, the medico-legal requirements will be fulfilled if all details are completed. Discard all unused material.

SECURITY

The silver tape of the transport bag should be removed and the edges of the tamper-proof bag stuck down. Blood and/or urine taken for toxicology must be placed in Police Traffic transport kits. Reference samples must be kept separately from the medical evidence samples.

POLICE

The Police are responsible for rapid transport of medical specimens and duplicate Medical Protocol pages to DNA Analysis Unit (and Forensic Toxicology if a sample taken).
Reference samples must be kept separate.

ENQUIRIES REGARDING SAIK CONTENTS:

DNA Analysis Unit or Forensic Toxicology
39 Kessels Rd
COOPERS PLAINS QLD 4108

[redacted]

ENQUIRIES REGARDING SAIK PROCEDURES:

Clinical Forensic Medicine Unit
51 Herschel Street
BRISBANE QLD 4000

[redacted]

After Hours: Please Contact local Police Communications to speak with the on-call FMO or FNE for advice

1. ROOM CLEANING

- On arrival for the purpose of a sexual assault examination the Forensic Examiner should perform a routing clean of the work area including work benches/trolley and examination couch to minimize the risk of DNA contamination.
- This should include initial spraying of the work areas with 0.05% bleach solution which should be left for 5 minutes before wiping down with a clean disposable paper towel. This is followed by spraying with 70% ethanol solution to dry bleach residue, followed by wiping down with a clean disposable paper towel.

2. CONSENT

- Consent for a sexual assault examination is not implied and needs to be obtained. Do not assume that the complainant fully understands what the examination entails. Discuss all aspects of the examination such as history, general physical examination, genital examination, the taking of forensic specimens and photographing of injuries as well as obtaining consent for release of protocol and specimens to police and therefore for Court purposes. Where possible consider whether de-identified material from the examination may be valuable for research purposes.
- Consent must be given freely and be valid (capacity to give consent); furthermore the complainant needs to know that consent may be withdrawn at any stage.
- If there are concerns that the complainant does not have capacity to consent a Statutory Health Attorney or the Office of the Public Guardian may be contacted to obtain consent.
- Obtain the name and signature of the witness to the examination (preferably same sex as complainant, and unrelated to the complainant).

3. HISTORY

- Elements of history are recorded on pages 1 and 2 of the SAIK examination sheets. This will need to be photocopied for your records as the originals are placed in the sealed SAIK bag that is sent for DNA analysis.
- Record your details and those of requesting police officer. Date and time of alleged assault and date and time of examination; type of assault; previous/ relevant sexual history of the complainant; date of last menstrual period etc., as well as whether complainant has subsequently showered, douched, cleaned teeth etc.
- A brief summary of the assault can then be recorded, remembering that this is a contemporaneous summary for subsequent provision of a statement. Record all elements of the assault that will direct you to where you will examine for injury and take specimens.

4. EXAMINATION - GENERAL

- The complainant is directed to the examination room and asked to disrobe onto a dropsheet if clothing is required for forensic examination. Clothing is then placed one item at a time into paper bags which are sealed and identified. The dropsheet is then folded inwards and placed into the plastic bag provided.
- A head to toe general examination is made documenting any acute injuries Note the mood and demeanour of the complainant and if clothing is damaged or stained. If the history suggests kissing/biting/licking or if ejaculate was alleged to have been deposited on the skin then the relevant area needs to be swabbed (wet and dry). A swab is moistened with sterile water and rolled across the area. The swab is placed inside its sheath but not immediately sealed. A second (dry) swab is then rolled over the area. All swabs should be sealed before packaging.
- Specific areas that should be observed are scalp, inner oral mucosa, behind ears and hands/wrist areas looking for defensive injuries**.** Fingernail scrapings may be taken if the complainant reports scratching their alleged attacker.
- Injuries can be detailed on the general examination page and body charts are provided in the appendix to graphically document injuries.

5. EXAMINATION – GENITAL

- **Female genital examination** needs to record whether the external genitalia is mature, pubertal or prepubertal and whether there is any blood, discharge or lubrication present on inspection.
- Inspect the mons and labia majora looking for injuries; separate the labia majora and inspect the labia minora, hymen and posterior fourchette areas looking for injuries such as abrasions and tears. Note any injuries to clitoris and urethral areas. Examine the inner thighs looking for injuries such as bruising; as well as perineal area. An anatomical diagram is provided in the appendix to assist with documenting genital injury.
- Swabs are taken from inner labia majora (formerly recorded as 'vulval'); lower vaginal area (just inside labia minora) and high vaginal area (preferably from the posterior fornix under direct vision with the aid of a speculum, or cervical os swab if assault greater than 3 days and less than 7 days). Swabs are best performed in a rolling action of the cotton tip. The external labia majora area should be swabbed in the case of attempted penetration/sexual assault.
- **Male genital examination** includes examination of the external genitalia for signs of injury as well as anal/rectal area as dictated by the history of the alleged assault.
- In cases where examination is of an alleged offender, wet and dry swabs are obtained of the shaft of the penis; the base of the penis and the glans penis including coronal sulcus under the glans.

6. ANORECTAL EXAMINATION

- Inspect the perianal area for recent or old injuries including bruising and abrasions noting any tears and their position, likely age, tenderness etc. A dry swab can be obtained remembering that in females ejaculate can migrate from the vulvovaginal area.
- Inspect the anal canal for tears, abrasions and bruises, if possible with the aid of a proctoscope.
- Inspection of the rectum can only occur via a proctoscope. A rectal swab can be taken via the proctoscope avoiding contact with the wall of the instrument.

7. OTHER SPECIMENS

- Swabs may be taken from the oral mucosa if there is a history of penile penetration with or without ejaculation. The swab should cover all areas of the oral mucosa, particularly in the gutter between the inner cheek and lower molars and under the tongue.
- In the absence of oral penetration and if the complainant has full recall of the incident a reference DNA swab may be taken from the mouth of the complainant.
- Fingernail scrapings or clippings may be taken if the history suggests that the complainant scratched the alleged offender. These can be arranged through QPS Scenes of Crime Officers.
- At the end of the examination it is recommended that a swab be taken of the work surface to exclude potential DNA contamination.

8. TOXICOLOGY

- Use police traffic kits: one for blood and one for urine. Complete details in the Sexual Assault Toxicology Form and only use the tubes provided.
- For blood tests, take 5ml blood and place in the small blood tube. Write the complainant's name, date of birth, time and date as well as collector's name on tube. Affix barcode label from the kit to "barcode" space on Sexual Assault Toxicology Form. Sign the seal and attach to lid of blood tube, then place small tube into medium tube, and thence into the large tube.
- For urine tests, place urine into medium tube. Write the complainant's name, date of birth, time and date as well as collector's name on tube. Affix barcode label from the kit to "barcode" space on Sexual Assault Toxicology Form. Sign the seal and attach to lid of medium tube, then place into the large tube.
- Photocopy the Sexual Assault Toxicology Form and place a copy into each box. Seal the boxes with the Yellow "Infectious Hazard" sticker.
- Write on the outer box "DFSA – Not Traffic".
- The original Sexual Assault Toxicology Form remains in the SAIK with the other specimens and documents. Ensure you take a photocopy yourself for your record.

9. OTHER BLOOD TESTS

- A blood sample may be collected specifically for comparative interpretation of DNA profiles rather than a buccal swab, particularly if the complainant has little recollection of events or if oral penetration has occurred. Blood taken is placed into an EDTA specimen container and is used to determine the DNA profile of the victim.
- **FTA Paper** may be "spotted" with blood (two drops from the end of a needle is adequate) in lieu of providing blood in an EDTA specimen container. A finger-prick would suffice. Saliva/mouth swabs may also be placed upon FTA paper.
- If any concerns, instruct QPS to collect a reference sample the following day.

10. COMPLETING THE EXAMINATION

- At the completion of the examination the specimens are labeled with date, time, examiner and anatomical location of swabs. It is hoped in time there will be unique barcodes available for such labeling purposes. The swabs are then sealed and placed in the tamper-proof evidence bag along with the SAIK and toxicology paperwork (4 pages) and dropsheet if used.
- The SAIK bag is then sealed and handed to police along with any other specimens (toxicology, clothing etc.).
- Use the front page of SAIK kit to obtain signature of handover of custody of specimens to police noting the police officer's name and station as well as date and time of handover.
- At the completion of the examination, another clean of the work area should be performed (as in 1 above) to minimize the risk of DNA contamination.

11. AFTER CARE (see Referral letter, Appendix 1).

- If the complainant has not been taking contraception or if in any doubt, they should be given a stat dose of Postinor-1.
- Consideration needs to be given to sexually transmitted infection and need for PEP (post-exposure prophylaxis for HIV) and referral to a Sexual Health Clinic for follow up. We recommend discussion with the local HHS Infectious diseases team. Information is also available at: http://www.health.qld.gov.au/sexhealth/

Sexual Assault Investigation Kit (SAIK)		
SURNAME:	OTHER NAMES:	
DOB:	SEX: Male □ Female □	
FORENSIC EXAMINER: ADDRESS OF FORENSIC EXAMINER: E-MAIL ADDRESS: CONTACT PHONE NUMBER:	INVESTIGATING OFFICER: POLICE STATION: E-MAIL ADDRESS: CONTACT PHONE NUMBER:	
DATE SAIK EXAMINATION: TIME SAIK EXAMINATION:	DATE OF ASSAULT: TIME OF ASSAULT:	
FORENSIC SAMPLES HANDED TO POLICE		
NAME	DATE	TIME
SIGNATURE	STATION	

CONSENT

CONSENT TO THE MEDICAL EXAMINATION OF _____

(to be read to the client by the forensic examiner)

I hereby consent to

- a complete medical examination including a pelvic (internal) examination
- to the recording of the findings
- the collection of all necessary specimens for laboratory tests
- the taking of necessary photographs of injuries related to the reason for this examination.

Signature of client or Authorised person_____

Signature of witness_____

Name (print) _____
Surname Other names

Date_____

CONSENT TO RELEASE OF INFORMATION TO THE POLICE AND RESEARCH

I hereby authorise the _____Hospital

or the forensic examiner_____

to release a copy of the Sexual Offences Medical Protocol and any relevant laboratory reports to the Queensland Police Service or to the Office of the Crown Prosecutor, as requested, for medico-legal purposes; I also consent for material from this examination and protocol to be de-identified and made available for research purposes.

Signature of client_____

Signature of witness_____

Name (print) _____
Surname Other names

Date_____

Sexual Assault Investigation Kit (SAIK)

DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains QLD 4108 [redacted]

SURNAME:

OTHER NAMES:

DOB:

SEX: Male ☐ Female ☐

FORENSIC EXAMINER :

ADDRESS OF FORENSIC EXAMINER :

E-MAIL ADDRESS:

CONTACT PHONE NUMBER:

INVESTIGATING OFFICER:

POLICE STATION:

E-MAIL ADDRESS:

CONTACT PHONE NUMBER:

DATE SAIK EXAMINATION:

TIME SAIK EXAMINATION:

DATE OF ASSAULT:

TIME OF ASSAULT:

TYPE OF ASSAULT	Digital	Penile Penetration	Oral	Object Penetration
Oral				
Vagina				
Anus				
Penis				

Other (details in Summary of Assault Details):

Examination Location:

PREVIOUS SEX ACTIVITY:

Yes ☐ Date if < 7 days ago: _____

No ☐

Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐

Use of condom with previous coitus Yes ☐ No ☐ Unknown ☐

ASSAULT DETAILS:

Was a condom used:

Yes ☐ No ☐ Unknown ☐

Did ejaculation occur:

Yes ☐ No ☐ Unknown ☐

Was a lubricant used:

Yes ☐ No ☐ Unknown ☐

How many offenders were involved in the assault*:

Male _____ Female _____

** If multiple offenders please detail each person's involvement in the Summary of Assault Details.*

For Female SAIK:

Date LMP: _____

SINCE THE ASSAULT HAS THE PATIENT

Changed Clothing: Yes ☐ No ☐

Washed Clothing: Yes ☐ No ☐

Showered/Bathed: Yes ☐ No ☐

Douched: Yes ☐ No ☐

Urinated: Yes ☐ No ☐

Defecated: Yes ☐ No ☐

Vomited: Yes ☐ No ☐

Washed Mouth: Yes ☐ No ☐

Cleaned Teeth: Yes ☐ No ☐

Had drink/food: Yes ☐ No ☐

SUMMARY OF ASSAULT DETAILS

CASE HISTORY:

Has the Patient consumed a substance which may alter consciousness :

Yes ☐ No ☐ Unknown ☐

Can he Patient recall and communicate the incident? :

Yes ☐ No ☐ Yes ☐ No ☐ Unknown ☐

Did the assault involve any kissing/licking/bi ing? :

Yes ☐ No ☐

If yes, give details of locations: _____

Was there any genital/anal injury causing bleeding? :

Yes ☐ No ☐

If yes, give details _____

SUMMARY OF ASSAULT DETAILS (continued)

CLOTHING AND OTHER ITEMS

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ❑ Worn post-assault ❑ Worn both pre-assault and post-assault ❑

Item Clothing/Sanitary Items:
Details:

Worn pre-assault ❑ Worn post-assault ❑ Worn both pre-assault and post-assault ❑

REFERENCE SPECIMENS: Please package in a separate envelope within the SAIK kit:

FTA Sample (preferred) Yes ❑ No ❑ Cells ❑ Blood ❑

Blood Reference Sample Yes ❑ No ❑ 5ml EDTA tube

Oral Reference Swab Yes ❑ No ❑ May be used only if no allegation of oral assault or loss of consciousness

Blood Sample taken for toxicology Yes ❑ No ❑ Urine Sample taken for toxicology Yes ❑ No ❑

PLEASE DOCUMENT THE SPECIMEN COLLECTED FOR DNA BELOW:			
FEMALE SAIK SWABS			
☐ High Vaginal	UNIQUE IDENTIFIER	☐ Low Vaginal	UNIQUE IDENTIFIER
☐ Inner L Majora	UNIQUE IDENTIFIER	☐ Cervical	UNIQUE IDENTIFIER
☐ Perianal	UNIQUE IDENTIFIER	☐ Rectal	UNIQUE IDENTIFIER
☐ Oral:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
☐ Other:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
MALE SAIK SWABS			
☐ Base of Penis	UNIQUE IDENTIFIER	☐ Shaft of Penis	UNIQUE IDENTIFIER
☐ Glans Penis	UNIQUE IDENTIFIER	☐ Rectal	UNIQUE IDENTIFIER
☐ Perianal	UNIQUE IDENTIFIER	☐ Scrotum	UNIQUE IDENTIFIER
☐ Oral:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
☐ Other:	UNIQUE IDENTIFIER	☐ Other:	UNIQUE IDENTIFIER
BODY/SKIN SWABS (please specify if biting, licking or kissing has occurred at site from which body swab was collected)			
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
☐ Location:	UNIQUE IDENTIFIER	☐ Location:	UNIQUE IDENTIFIER
FINGERNAIL SCRAPINGS		**DROPSHEET**	
☐ Right Hand: **(Refer SOCO)**	☐ Left Hand: **(Refer SOCO)**	☐	UNIQUE IDENTIFIER

SEXUAL ASSAULT TOXICOLOGY FORM

NAME:	DOB:

DIRECTIONS FOR THE COLLECTION OF TOXICOLOGY SPECIMENS

- **Collect blood and urine samples ASAP if incident occurred within previous 72 hours.**
- **Use two separate police traffic (UIL/UID) toxicology kits; one for the blood and one for the urine and CLEARLY mark them *'Crime Scene Sample — not Traffic'***
- **ALWAYS collect the blood specimen in a Fluoride Oxalate tube. Urine specimens may be collected in a sterile container, a minimum of 20mLs is preferred.**
- **Complete the questionnaire and place this form inside the kits.**

QUESTIONNAIRE

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss, and signs or symptoms of intoxication reported by the patient/subject:

Alcohol before the incident?	YES	NO	Type/amount/time of last drink before incident?	
Alcohol since the incident?	YES	NO	Type/amount/time of last drink prior to sample collection?	
Drugs prior to the incident?	YES	NO	Type/amount/how taken/time of last drug ingestion before incident?	
Drugs since the incident (including those administered by QAS if known)?	YES	NO	Type/amount/how taken/time of any drugs ingested since the incident?	
Any prescription medications?	YES	NO	Type/dose/when last taken?	
Any 'over the counter'/herbal preparations?	YES	NO	Type/when last taken?	
Any history of liver/kidney impairment?	YES	NO		
Weight of patient (kg)			Time and details of last meal?	

DATE AND TIME BLOOD SAMPLE COLLECTED		STICKER BAR CODE	
DATE AND TIME URINE SAMPLE PASSED		STICKER BAR CODE	
Name of Forensic Examiner		Signature of Forensic Examiner	

GENERAL EXAMINATION

SURNAME	OTHER NAMES

FOR FORENSIC PURPOSES WEAR GLOVES AT ALL TIMES. AS A MINIMUM CHANGE THE GLOVES BETWEEN THE GENERAL EXAMINATION, GENITAL EXAMINATION AND ANAL EXAMINATION (IF PERFORMED)

- Clothing (if still wearing clothing worn during the assault) should be removed on a drop sheet in the presence of the examiner).
- Place each item in a separate identified bag until decision made regarding police action.
- Avoid further damage, if possible, when clothing is removed or during inspection.
- If possible dry wet clothing before bagging and use a paper bag rather than a waterproof bag.

APPEARANCE AND MOOD OF PATIENT
State of dress, hair and emotional state (observation not interpretation)

Clothing: General description of stains or damage.

GENERAL EXAMINATION: Use the diagrams in appendix if required. Detail everything (all bruises, abrasions, lacerations, incised wounds, bites, tenderness, and swelling).

Normal		Abnormal (specify)	Note if *not* examined.
☐	Mouth	☐	_____
☐	Neck and throat	☐	_____
☐	Head and scalp	☐	_____
☐	Ears	☐	_____
☐	Hands and nail	☐	_____
☐	Arms	☐	_____
☐	Face	☐	_____
☐	Feet	☐	_____
☐	Legs	☐	_____
☐	Thorax (anterior)	☐	_____
☐	Thorax (posterior)	☐	_____
☐	Abdomen (anterior)	☐	_____
☐	Abdomen (posterior)	☐	_____
☐	Buttocks	☐	_____

FEMALE GENITAL EXAMINATION

SURNAME	OTHER NAMES

EXTERNAL EXAMINATION

VULVA Lubrication Dry ☐ Moist ☐ Blood ☐

Appearance of fluid or discharge _____

EXTERNAL GENITALIA Mature ☐ Pubertal ☐ Prepubertal ☐

EXAMINATION: record any pain or tenderness. **State if *not* examined**. Use the diagram in appendix if required.

Normal		Abnormal	
☐	Mons	☐	_____
☐	Labia majora	☐	_____
☐	Labia minora	☐	_____
☐	Introitus	☐	_____
☐	Posterior fourchette	☐	_____
☐	Hymen	☐	_____
☐	Urethra	☐	_____
☐	Clitoris	☐	_____
☐	Inner thighs	☐	_____
☐	Perineum	☐	_____
☐	Anus	☐	_____
☐	Perianal skin	☐	_____

Swabs are taken to detect whether blood, semen or foreign cellular material is present. Before proceeding with internal examination, take internal labia majora and low vaginal swabs (in that order) for forensic and medical purposes Use a speculum for high vaginal swabs (posterior fornix or cervix). Use proctoscope for rectal swabs. See general information.

INTERNAL EXAMINATION

SPECULUM EXAMINATION (If performed)

Normal		Abnormal (specify)	**State if *not* examined**
☐	Lower vagina	☐	_____
☐	Upper vagina	☐	_____
☐	Cervix	☐	_____

VAGINAL EXAMINATION (If indicated clinically)

RECTAL EXAMINATION (If indicated by history)

MALE ANO-GENITAL EXAMINATION (include all signs of trauma)

SURNAME	**OTHER NAMES**

EXTERNAL EXAMINATION

EXTERNAL GENITALIA

Mature ☐ Pubertal ☐ Prepubertal ☐

EXAMINATION Record any pain or tenderness. Use the diagram in appendix if required.

Circumcised Yes ☐ No ☐

Normal		Abnormal	
☐	Penis	☐	_____
☐	Foreskin	☐	_____
☐	Scrotum	☐	_____
☐	Testes	☐	_____
☐	Perineum	☐	_____
☐	Perianal skin	☐	_____

Swabs are taken to detect whether blood, semen or foreign cellular material is present. Use proctoscope for rectal swabs See general information.

INTERNAL EXAMINATION

PROCTOSCOPE EXAMINATION (Describe all injuries)

RECTAL EXAMINATION (DIGITAL) (If indicated)

☐ **Forensic Medical Officer** ☐ **Forensic Nurse Examiner/SANE** ☐ **GMO**

Date:....

REFERRAL TO: ☐ **Sexual Health Clinic** ☐ **GP**

EXAMINING PRACTITIONER:

Name: ..... **Place of Examination:**

Dear Doctor,

Re:

Name: DOB :__/__/____

Address:

Affix Hospital Label

I have performed a forensic medical examination in relation to an alleged sexual assault.
Thank you for seeing this patient for follow-up with regard to sexual health management and ongoing care.

DETAILS OF INCIDENT:

Date:....

Type of assault: (brief description):

POST-COITAL CONTRACEPTION GIVEN	POST EXPOSURE PROPHYLAXIS GIVEN
☐ Postinor . Time Taken:	☐ Azithromycin: 1 gram stat (2 tablets)
☐ Other:	☐ Ciprofloxacin: 500mg stat
	☐ Hepatitis B (HBV) Immunoglobulin
	☐ HIV PEP

Please do not hesitate to contact me should you have any queries.

Yours sincerely,

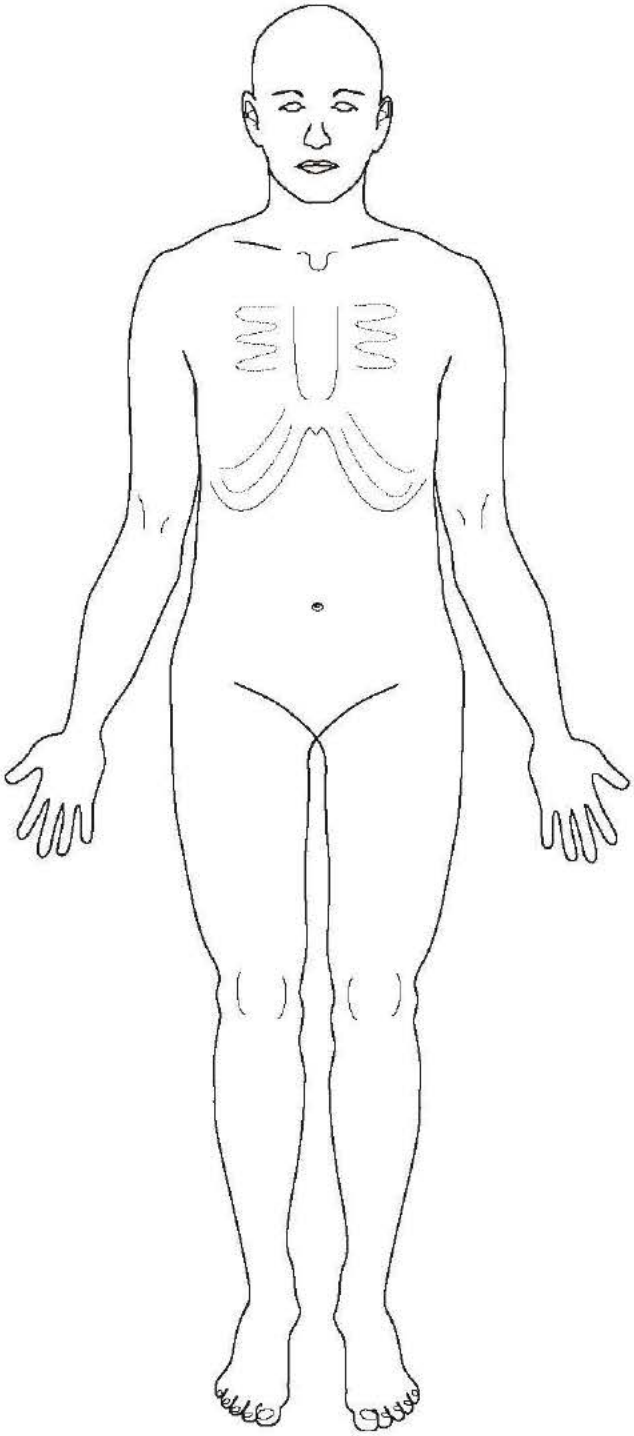
(signed)

Stamp *or;*
Write FMO/FNE Details *or;*
Attach Business Card

GENERAL EXAMINATION

SURNAME	OTHER NAMES

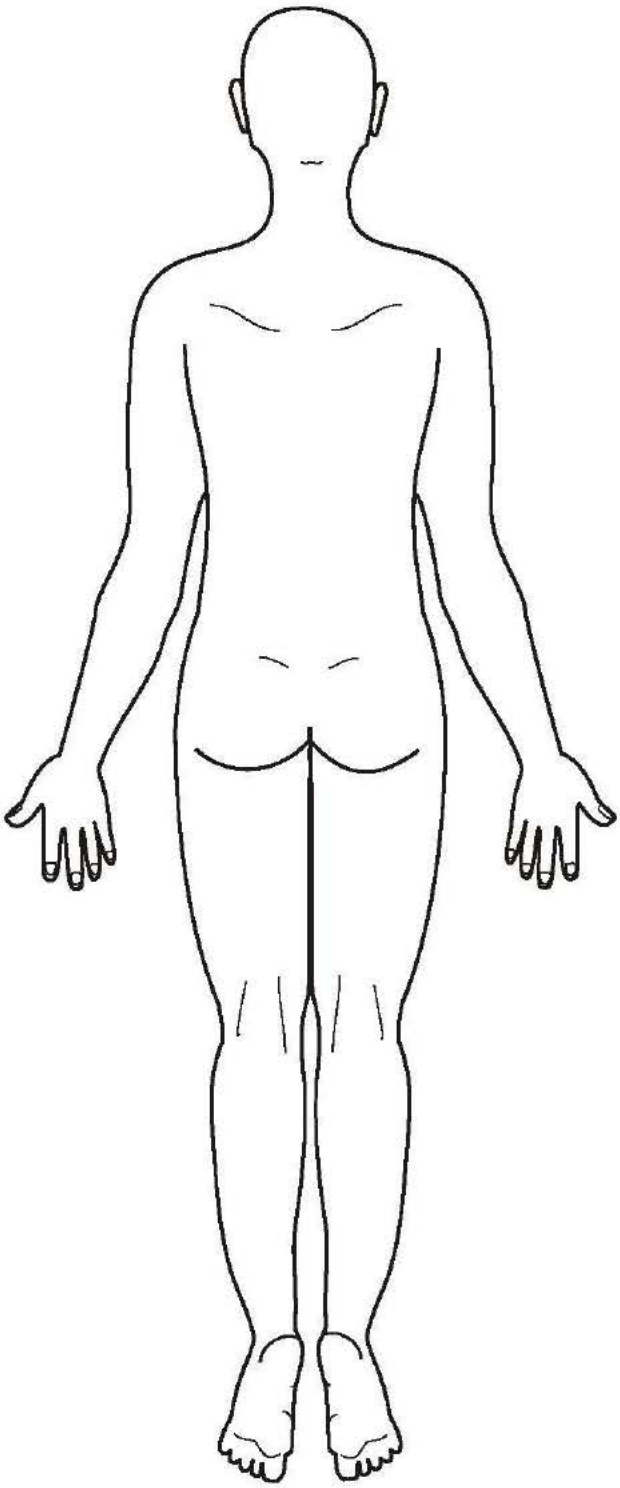
WHOLE BODY FRONT



GENERAL EXAMINATION

SURNAME	OTHER NAMES

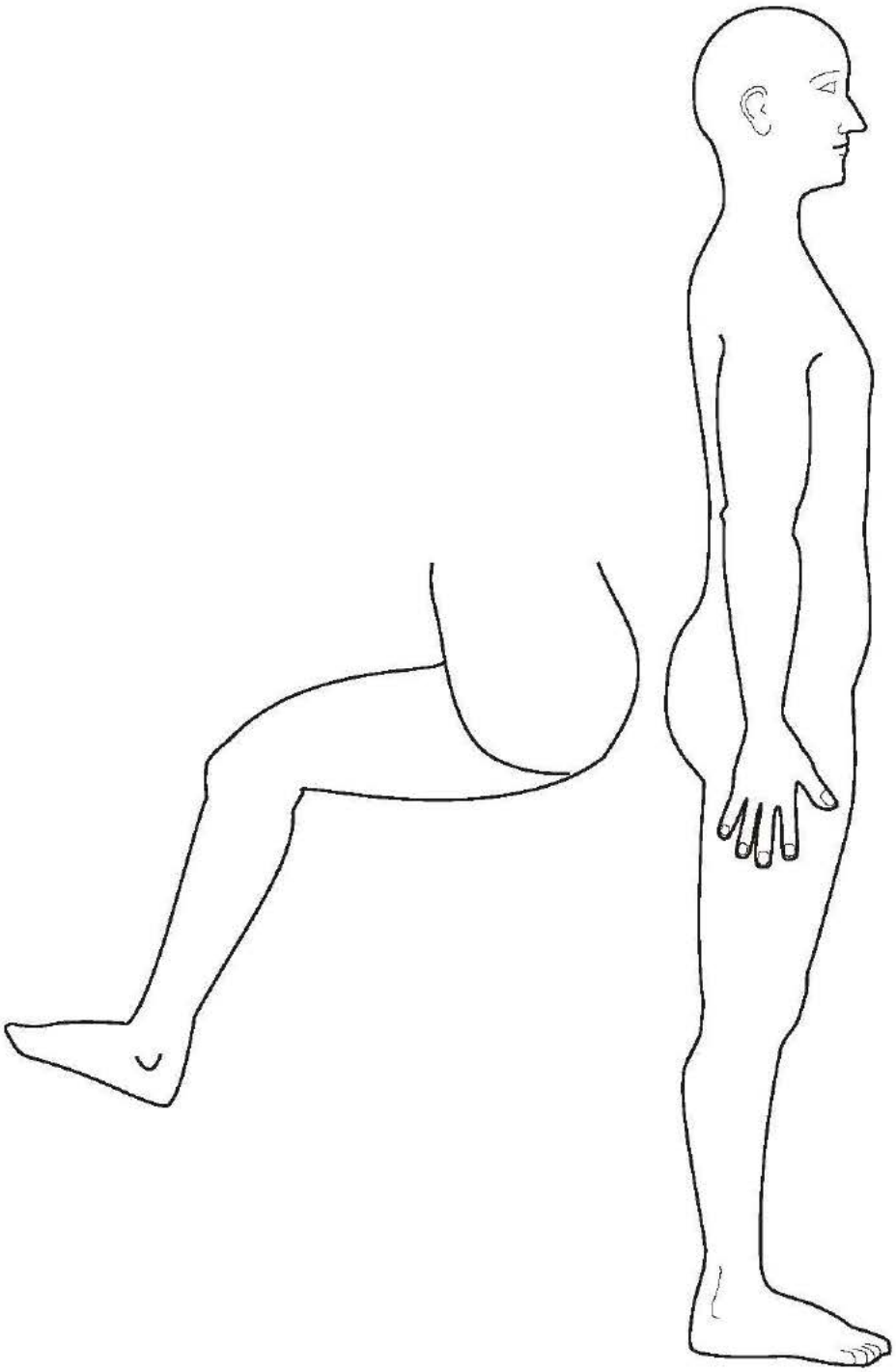
WHOLE BODY BACK



GENERAL EXAMINATION

SURNAME	OTHER NAMES

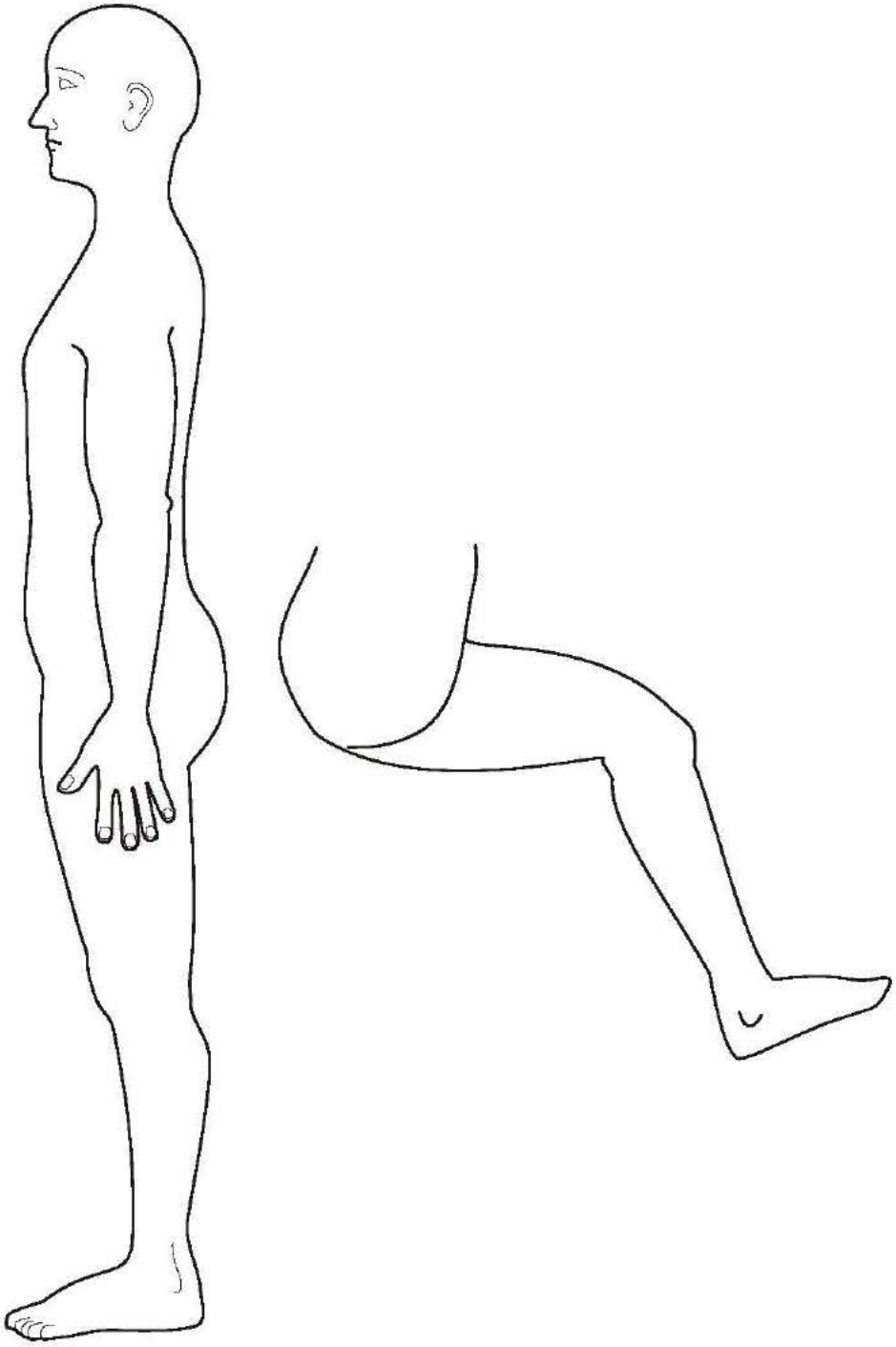
WHOLE BODY RIGHT SIDE AND INNER LEG



GENERAL EXAMINATION

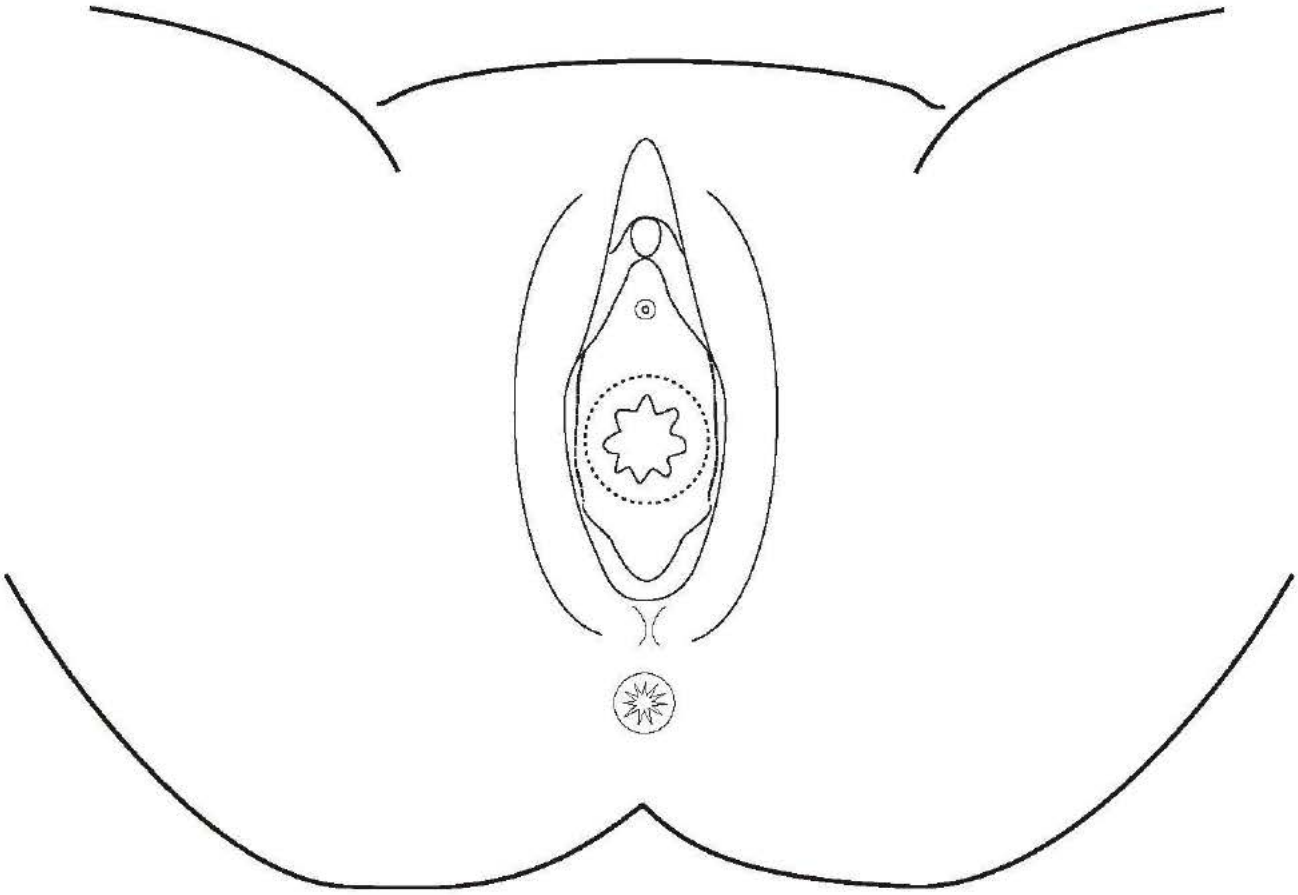
SURNAME	OTHER NAMES

WHOLE BODY LEFT SIDE AND INNER LEG



GENITAL EXAMINATION - FEMALE

SURNAME	OTHER NAMES



GENITAL EXAMINATION - MALE

SURNAME	OTHER NAMES

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

Victorian Institute of Forensic Medicine Forensic Medical Examination Record

Confidential

EXAMINER DETAILS			
LAST NAME		FIRST NAME	
DESIGNATION	REGISTRAR ☐	FMO ☐	VIFM SENIOR ☐
	SENIOR REGISTRAR ☐	NURSE ☐	OTHER

SENIOR EXAMINER DETAILS (if required)			
LAST NAME		FIRST NAME	
CONTACTED	DATE	TIME	
COMMENTS			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

INFORMANT DETAILS

FAMILY NAME		FIRST NAME	
RANK		VP NUMBER	
UNIT		DX	
PHONE		OTHER	

CALL DETAILS

DATE		TIME	
REQUIRED MORE INFORMATION	YES ☐ NO ☐	TIME INFORMATION RECEIVED	

BACKGROUND INFORMATION

ASSAULT DETAILS

DATE		TIME	
If uncertain of exact time, please provide a possible time range			
DATE FROM		TIME FROM	
DATE TO		TIME TO	

COMMENTS

DATE ARRIVED AT EXAM

TIMES		
LEFT FOR EXAM	ARRIVED AT EXAM	
COMMENCED EXAM	COMPLETED EXAM	
LEFT EXAM SITE	ARRIVED BACK / AT NEXT JOB	

COMMENTS

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

CASE TYPE

SEXUAL ASSAULT ☐	COMPLAINANT ☐	OFFENDER ☐
	JUST IN CASE ☐	FAMILY VIOLENCE YES ☐ NO ☐
PHYSICAL ASSAULT (non family violence) ☐	COMPLAINANT ☐	OFFENDER ☐
PHYSICAL ASSAULT (family violence) ☐	COMPLAINANT ☐	OFFENDER ☐
POLICE ASSAULT ☐	ON POLICE OFFICER ☐	BY POLICE OFFICER ☐
	FAMILY VIOLENCE YES ☐ NO ☐	
OTHER		

ASSESSMENT TYPE

INJURY DOCUMENTATION ONLY	YES ☐ NO ☐	COMMENTS:
BIOLOGICAL SPECIMENS ONLY	YES ☐ NO ☐	COMMENTS:
BOTH	YES ☐ NO ☐	COMMENTS:
OTHER	YES ☐ NO ☐	COMMENTS:

FACILITY VIFM ☐

CRITICAL CARE UNIT	SECASA MONASH ☐	CASA HOUSE ROYAL WOMEN'S ☐	ECASA MAROONDAH ☐
	NCASA AUSTIN ☐	WCASA SUNSHINE ☐	
MULTIDISCIPLINARY CENTRE (MDC)	DANDENONG ☐	WYNDHAM ☐	FRANKSTON ☐
	GEELONG ☐	BENDIGO ☐	MILDURA ☐
	MORWELL ☐	BARWON ☐	
HOSPITAL	NAME		SUBURB
POLICE STATION	NAME		SUBURB
OTHER FACILITY	NAME		SUBURB

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

This is a Just in Case (JIC) Assessment ☐

CONSENT FOR EXAMINATION

- This examination is for medical purposes and to gather evidence that might inform a police investigation
- The examiner will explain each part of the examination and you can decline any part of the examination at any time
- Information provided and examination findings may form the basis of a report to police
- The information provided with your consent, will be stored securely by the Victorian Institute of Forensic Medicine (VIFM)
- Information (including images) may be viewed by other VIFM staff for purposes of peer review or by authorised staff in accordance with VIFM's privacy policies
- There is no guarantee that any of the findings / evidence collected will benefit your case
- Information and evidence collected will be handed to police (if you consent to this) and may then be taken to a forensic laboratory for testing
- The information that you provide, the examination findings and any other evidence gathered may be used in court
- Undertaking this examination does not oblige you to continue with police or legal action

I consent to:	Tick if appropriate	Initial
A physical examination	☐	
Collection of forensic samples	☐	
Release of information / samples to police and consent to have those samples tested	☐	
Sharing of any information with relevant agencies with regards to either my health or investigation of the alleged incident	☐	
The use of non-identifying data for purposes of teaching and education	☐	

The patient did / does not consent to:

SIGNATURES

LAST NAME	FIRST NAME	
SIGNATURE	IF NOT PATIENT ☐	DATE
EXAMINER SIGNATURE		DATE
INTERPRETER YES ☐ NO ☐	ID	
INTERPRETER LAST NAME	FIRST NAME	
SIGNATURE		

Consent provided by / discussed with:

PATIENT	☐		APPOINTED MEDICAL TREATMENT DECISION MAKER (AMTDM)	☐	
GUARDIAN with authority to make medical decisions (VCAT)	☐		VCAT (VCAT)	☐	
PATIENT'S SPOUSE OR DOMESTIC PARTNER (Spouse)	☐		PRIMARY CARER (PC)	☐	
ADULT CHILD / PARENT / ADULT SIBLING (AC/P/AS)	☐				
TREATING PSYCHIATRIST (Psych)					
TREATING DOCTOR (Doctor)					

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

This is a Just in Case (JIC) Assessment ☐

CONSENT FOR IMAGING

- The best way to document injuries is to provide a written description, draw them on a diagram and image them.
- Any images that are taken, with your consent, will be stored securely by the Victorian Institute of Forensic Medicine (VIFM).
- Images may be viewed by other VIFM staff for purposes of peer review or by authorized staff in accordance with VIFM's privacy policies
- Any images collected may be sent to police as part of the evidence collected from your examination.
- Images may subsequently also be viewed by lawyers, judge, jury (or other parties legitimately involved in any subsequent court case / investigation)
- Even if you consent to images being taken, you can choose to not have images taken of certain parts of your body. You will let the examiner know and this will be noted

I consent to:	Tick if appropriate	Initial
Images being collected	☐	
The use of non-identifying images for purposes of teaching and education	☐	

SIGNATURES

LAST NAME	FIRST NAME	
SIGNATURE	IF NOT PATIENT ☐	DATE
EXAMINER SIGNATURE		DATE
INTERPRETER YES ☐ NO ☐	ID	
INTERPRETER LAST NAME	FIRST NAME	
SIGNATURE		

Consent provided by / discussed with:

PATIENT	☐		APPOINTED MEDICAL TREATMENT DECISION MAKER (AMTDM)	☐	
GUARDIAN with authority to make medical decisions (VCAT)	☐		VCAT (VCAT)	☐	
PATIENT'S SPOUSE OR DOMESTIC PARTNER (Spouse)	☐		PRIMARY CARER (PC)	☐	
ADULT CHILD / PARENT / ADULT SIBLING (AC/P/AS)	☐				
TREATING PSYCHIATRIST (Psych)					
TREATING DOCTOR (Doctor)					

Additional Comments

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

PATIENT DETAILS	
SEX	FEMALE ☐ MALE ☐ OTHER ☐
ADDITIONAL INFO (If "Other")	
CONTACT DETAILS	PHONE 1: PHONE 2:
	EMAIL:
	ADDRESS:
	Safe to leave message on phone / email or to mail: ☐

MEDICAL AND SURGICAL HISTORY

CURRENT MEDICATIONS

ALLERGIES	YES ☐ NO ☐
MEDICATION	REACTION

CONTRACEPTION INFORMATION

IMMUNISATION INFORMATION	
Hepatitis B	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

PRESENT AT HISTORY

NAME	ROLE

HISTORY PROVIDED page one

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HISTORY PROVIDED page two

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

TECHNOLOGY FACILITATED VIOLENCE (TFSV) YES ☐ NO ☐

Medium used	Dating App ☐	Social Media ☐	Other ☐
Name of medium (if known)			
How long ago was first online contact		Was this the first physical meeting	Yes ☐ No ☐
If not, how long between first online contact and first meeting in person?		If they have met in person before, how many prior face to face meetings	

Strangulation occurred: YES ☐ NO ☐

STRANGULATION CHECKLIST	YES	NO	UNSURE	STILL PRESENT	ADDITIONAL INFORMATION
Loss of consciousness or memory	☐	☐	☐	☐	
Difficulty or pain with breathing after assault	☐	☐	☐	☐	
Incontinence of urine / faeces	☐	☐	☐	☐	
Cough after assault	☐	☐	☐	☐	
Vomiting after assault	☐	☐	☐	☐	
Nose bleed after assault	☐	☐	☐	☐	
Tinnitus after assault	☐	☐	☐	☐	
Tender throat (internal) after assault	☐	☐	☐	☐	
Tender neck (external) after assault	☐	☐	☐	☐	
Trouble swallowing after assault	☐	☐	☐	☐	
Swelling neck / tongue	☐	☐	☐	☐	
Injury inside mouth from assault	☐	☐	☐	☐	
Limb weakness / Paraesthesia after assault	☐	☐	☐	☐	

Change in voice No Change ☐ Croaky ☐ Hoarse ☐ Breathy ☐ Unable to project ☐ Voice cuts out ☐

If any symptoms were present, indicate for how long they lasted after the assault and whether or not they are still present

Additional Comments

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

SUMMARY OF NON-CONSENSUAL ACTS Patient has no recollection of assault: ☐

ASSAILANT ONE - Referred to in history as:

COMPLAINANT ANATOMY	OFFENDER ANATOMY				
	PENIS	CONDOM	EJACULATION	DIGIT	TONGUE / MOUTH
VAGINA	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
ANUS	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
MOUTH	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
PENIS		Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
Comments:					

ASSAILANT TWO - Referred to in history as:

COMPLAINANT ANATOMY	OFFENDER ANATOMY				
	PENIS	CONDOM	EJACULATION	DIGIT	TONGUE / MOUTH
VAGINA	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
ANUS	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
MOUTH	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
PENIS		Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
Comments:					

ASSAILANT THREE - Referred to in history as:

COMPLAINANT ANATOMY	OFFENDER ANATOMY				
	PENIS	CONDOM	EJACULATION	DIGIT	TONGUE / MOUTH
VAGINA	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
ANUS	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
MOUTH	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
PENIS		Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
Comments:					

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

POST ASSAULT ACTIVITY

Activity	Once	More than once	No	Not relevant	Comment
Used sanitary tampon / pad / menstrual cup	☐	☐	☐	☐	
Showered / bathed / swam	☐	☐	☐	☐	
Douched	☐	☐	☐	☐	
Cleaned teeth / mouth	☐	☐	☐	☐	
Urinated	☐	☐	☐	☐	
Defaecated	☐	☐	☐	☐	
Vomited	☐	☐	☐	☐	
Eaten food	☐	☐	☐	☐	
Drank	☐	☐	☐	☐	
Changed Clothes	YES	☐	NO	☐	

Gynaecological Information	Yes	No	Not Sure	Comment
Menstruating at time of assault	☐	☐	☐	
Menstruating at time of exam	☐	☐	☐	
Reached menopause	☐	☐	☐	
Date of last menstrual period			Estimated time if actual date not known:	
Patient Pregnant	☐	☐		How many weeks:

Recent Relevant Sexual Activity

No recent relevant sexual activity ☐ **Not asked** ☐

			Barrier used	When
Receptive Penile Oral (last 24 hours)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Receptive Penile Vaginal (last 4 days)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Receptive Penile Anal (last 2 days)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Insertive Penile Oral	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Insertive Penile Anal (last 3 days)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

TOXICOLOGY COLLECTED	YES ☐	NO ☐	
EXAMINER DETAILS			
LAST NAME		FIRST NAME	
ORGANISATION	CFM (VIFM) ☐		
DESIGNATION	REGISTRAR ☐	FMO ☐	VIFM SENIOR ☐
	SENIOR REGISTRAR ☐	NURSE ☐	OTHER
POLICE OFFICER DETAILS			
LAST NAME		FIRST NAME	
RANK		VP NUMBER	
UNIT		DX	
PHONE		OTHER	

TOXICOLOGY SAMPLE COLLECTION			S:	
SAMPLE	DATE	TIME	COLLECTOR	VIFM SECURITY SEAL
URINE				
BLOOD				
COMMENTS:				

REASON FOR SAMPLING					
Were the drugs / alcohol all voluntarily consumed / Was there a suspected spiking incident / Was the patient forced / coerced into taking any of the drugs or alcohol (involuntary)?					
ALL VOLUNTARY	☐	SUSPECTED SPIKING	☐	INVOLUNTARY	☐

ALCOHOL CONSUMPTION PRIOR TO ASSAULT (provide best estimations or time ranges)			
Date drinking started		Time drinking started	
Date drinking finished		Time drinking finished	
Additional Comments			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HISTORY REQUIRED FOR ALCOHOL BACK CALCULATION

Weight of patient (kg)	Height of patient (cm)

Additional info:

Please indicate if any alcohol was consumed **within 12 hours** after the assault: Provide further details e.g. amount, when drinking started and stopped. YES ☐ NO ☐

DRUGS THAT POTENTIALLY MIGHT BE FOUND IN TOX SAMPLES

GHB SUSPECTED: YES ☐ **NO** ☐ **DIDN'T ASK** ☐

Please provide information regarding drugs / medications taken within the last 72 hours Include amount, date and last time consumed, mode of administration etc. if known

Name drug / medication	
Name drug / medication	
Name drug / medication	
Name drug / medication	
Name drug / medication	
Name drug / medication	

Additional Comments:

CANNABIS USED IN LAST 2 WEEKS: YES ☐ **NO** ☐ **DIDN'T ASK** ☐

Additional information e.g. last taken date and time

SYMPTOMS THAT MAY INDICATE DRUG AFFECT AT TIME OF ASAULT

Slurred speech ☐	Difficulty Walking ☐	Vomiting ☐	Memory Loss ☐
Weakness ☐	Difficulty Speaking ☐	Difficulty Moving ☐	Dizziness ☐
Blurred Vision ☐	Difficulty Concentrating ☐	Confusion ☐	Falls / Accidents ☐
Increased Sociability ☐	Increased Sweating ☐		

ADDITIONAL COMMENTS:

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

PRESENT AT EXAMINATION

NAME	ROLE

GENERAL OBSERVATIONS

TRIAGE DATA	**Not triaged** ☐		Unable to obtain triage data ☐	
Blood Pressure	Pulse Rate	GCS	Oxygen Sat	Temp

CONTAMINATION REDUCTION ISSUES

IMAGES

Images Taken YES ☐ NO ☐	FIRST IMAGE	LAST IMAGE

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

FORENSIC SAMPLES **IS THIS A JUST IN CASE KIT? YES ☐ NO ☐**

SAMPLES COLLECTED YES ☐ NO ☐	EASY COLLECT REFERENCE SWAB TAKEN ☐ Ensure this is packaged separately
TIME PERIOD BETWEEN INCIDENT AND SAMPLING	

ORAL SAMPLES YES ☐ NO ☐

			Looking for DNA from			
Peri-oral (around lips)	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Oral rinse			☐			
	☐	☐	☐	☐	☐	☐

FEMALE GENITAL SAMPLES YES ☐ NO ☐

			Looking for DNA from			
External Labial	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Vulval	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Low Vaginal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Transvaginal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
High Vaginal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Endocervical	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐

ANAL SAMPLES YES ☐ NO ☐

			Looking for DNA from			
Perianal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Anal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Rectal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐

VI FM **VICTORIAN INSTITUTE OF FORENSIC MEDICINE**

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

SKIN SAMPLES YES ☐ **NO** ☐

Site			Looking for DNA from			
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐

MALE GENITAL SAMPLES YES ☐ **NO** ☐

Circumcised	Yes ☐	No ☐	Looking for DNA from			
Penile Shaft	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Coronal Sulcus	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Glans	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐

FINGERNAIL SAMPLES YES ☐ **NO** ☐

RIGHT HAND				LEFT HAND			
Thumb ☐	Swab ☐	Clipping ☐		Thumb ☐	Swab ☐	Clipping ☐	
Index ☐	Swab ☐	Clipping ☐		Index ☐	Swab ☐	Clipping ☐	
Middle ☐	Swab ☐	Clipping ☐		Middle ☐	Swab ☐	Clipping ☐	
Ring ☐	Swab ☐	Clipping ☐		Ring ☐	Swab ☐	Clipping ☐	
Little ☐	Swab ☐	Clipping ☐		Little ☐	Swab ☐	Clipping ☐	

ADDITIONAL ITEMS YES ☐ **NO** ☐

Item	Description	Bag number
Sanitary Product	Tampon ☐ Pad ☐ Cup ☐	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

UNDERPANTS YES ☐	NO ☐	
Collected in FMEK ☐	Collected for police ☐	Police had already collected them ☐
Description		
When were they worn? (e.g. during / immediately after)		
Did the offender touch them	Yes ☐	No ☐
	Not Certain ☐	
Where were they touched		

BRA YES ☐	NO ☐	
Collected in FMEK ☐	Collected for police ☐	Police had already collected the ☐
Description		
When were they worn? (e.g. during / immediately after)		
Did the offender touch them	Yes ☐	No ☐
	Not Certain ☐	
Where were they touched		

ADDITIONAL CLOTHING YES ☐	NO ☐	
Item	Description	Specific area where touched, if known.

HANDOVER TO POLICE YES ☐ NO ☐ **HANDOVER TO COUNSELLOR** YES ☐ NO ☐

FMEK No YES ☐ NO ☐

TOX No YES ☐ NO ☐

CLOTHING BAGS No YES ☐ NO ☐

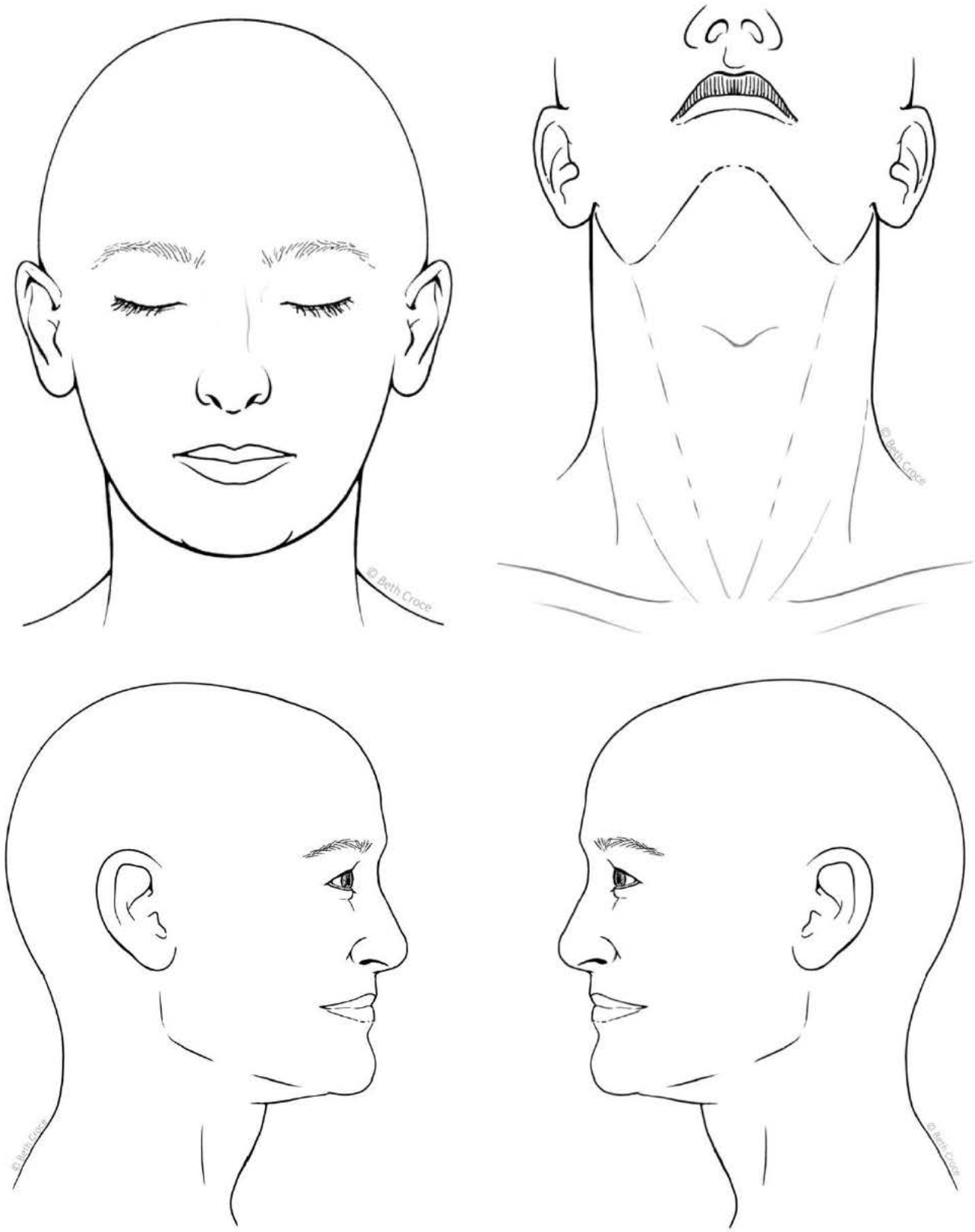
HANDED TO

DATE AND TIME: **SIGNED:**

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HEAD

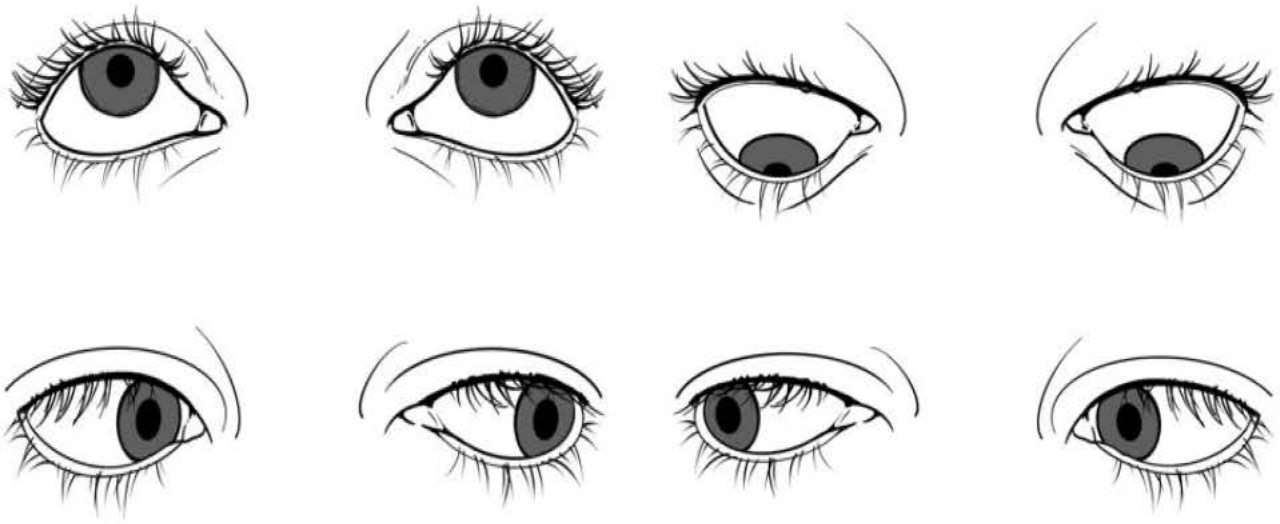


AREAS EXAMINED	SCALP ☐	FACE ☐	INSIDE MOUTH ☐	NECK ☐	OUTER EARS ☐

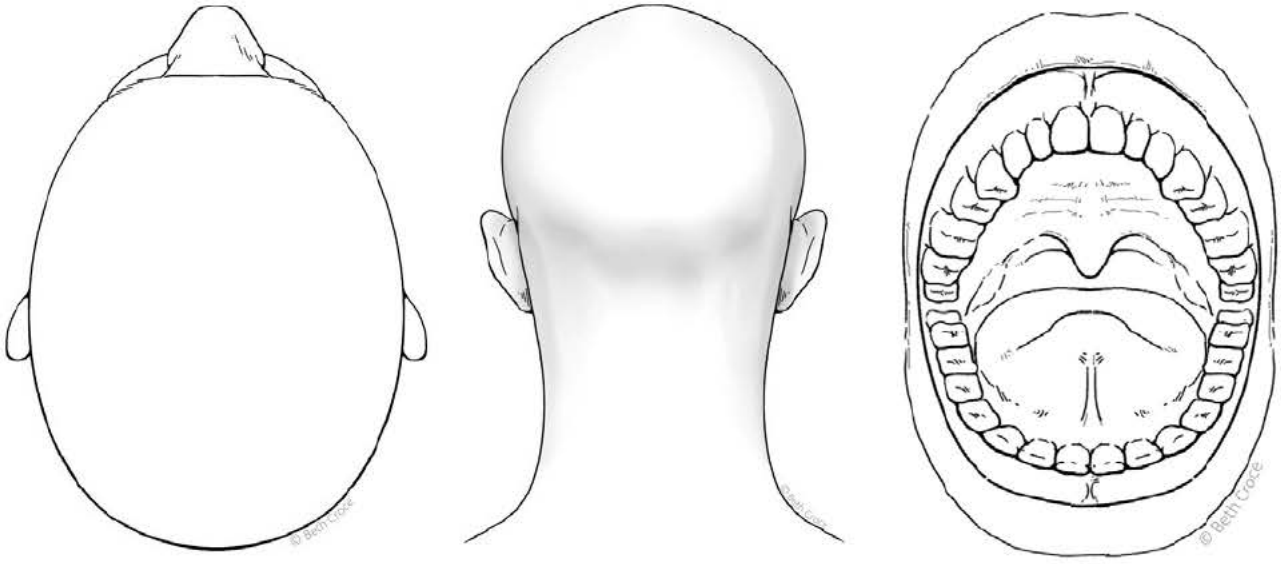
VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HEAD



Ophthalmoscope findings **Otoscope findings**



VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

STRANGULATION EXAM **UNDERTAKEN** ☐ **NOT UNDERTAKEN** ☐

SIGN	YES	NO	ADDITIONAL INFORMATION
Drooling	☐	☐	
Stridor	☐	☐	
Dyspnoea	☐	☐	
Clearing throat	☐	☐	
Obvious change to voice	☐	☐	
Ongoing cough	☐	☐	
Injury to neck - especially bruises and abrasions	☐	☐	
Petechiae seen Yes ☐ No ☐	External auditory cana ☐ Tympanic membrane ☐ Face ☐ Neck ☐ Upper chest ☐ Conjunctiva ☐ Soft palate ☐		
Subconjunctival haemorrhage	☐	☐	
Tender laryngeal cartilage	☐	☐	
Loss of laryngeal click	☐	☐	
Subcutaneous crepitus	☐	☐	
Haemotympanum or perforation	☐	☐	
Paraesthesia / weakness	☐	☐	

If symptoms present, indicate for how long they lasted after the assault and whether or not they are still present

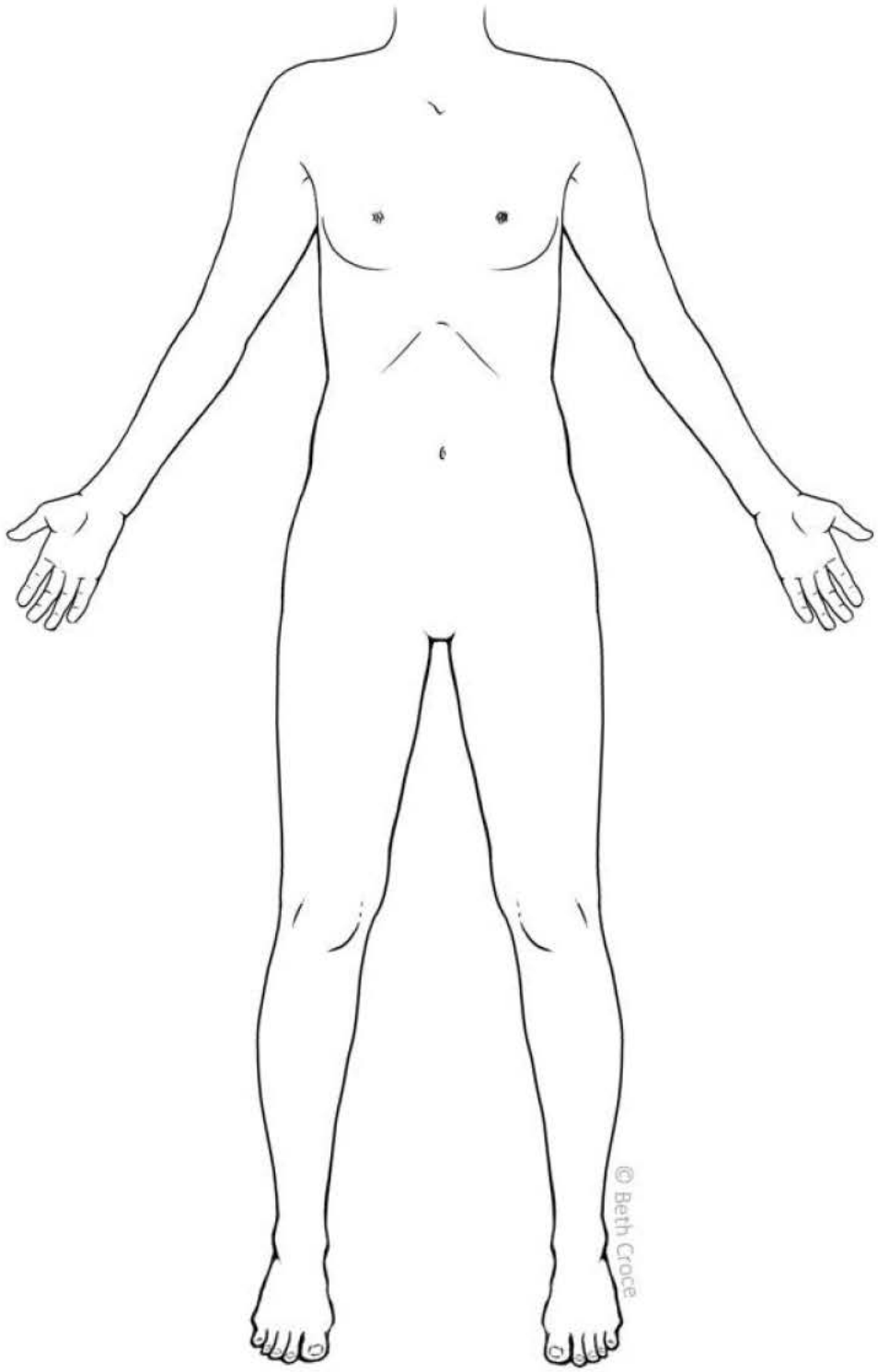
Additional Notes

If patient requires referral for additional tests, please note here:

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

FRONT OF BODY

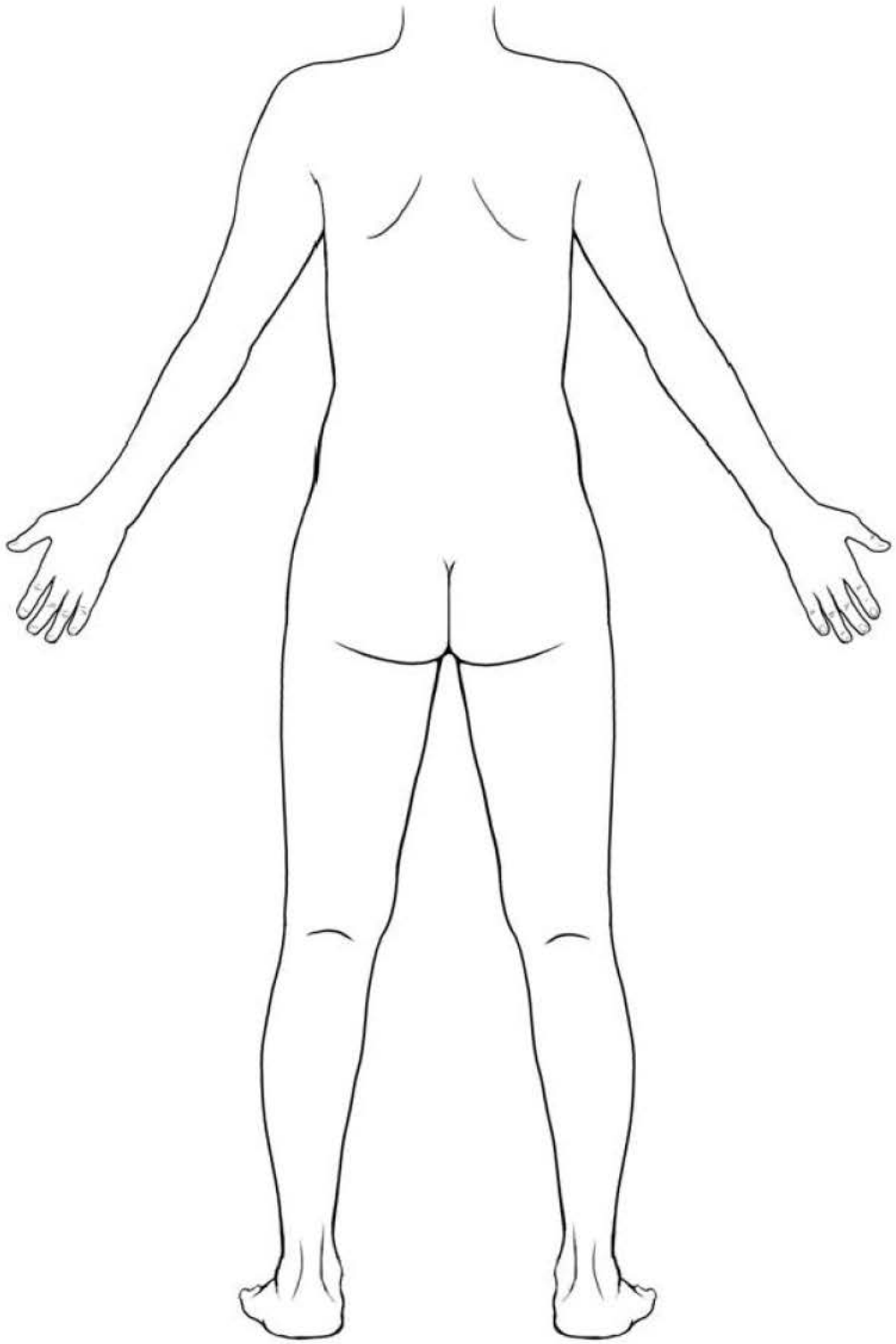


AREAS EXAMINED	CHEST ☐	ABDOMEN ☐	ARMS FRONT ☐	LEGS FRONT ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

BACK OF BODY



AREAS EXAMINED	UPPER BACK ☐	LOWER BACK ☐	BUTTOCKS ☐	ARMS BACK ☐	LEGS BACK ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

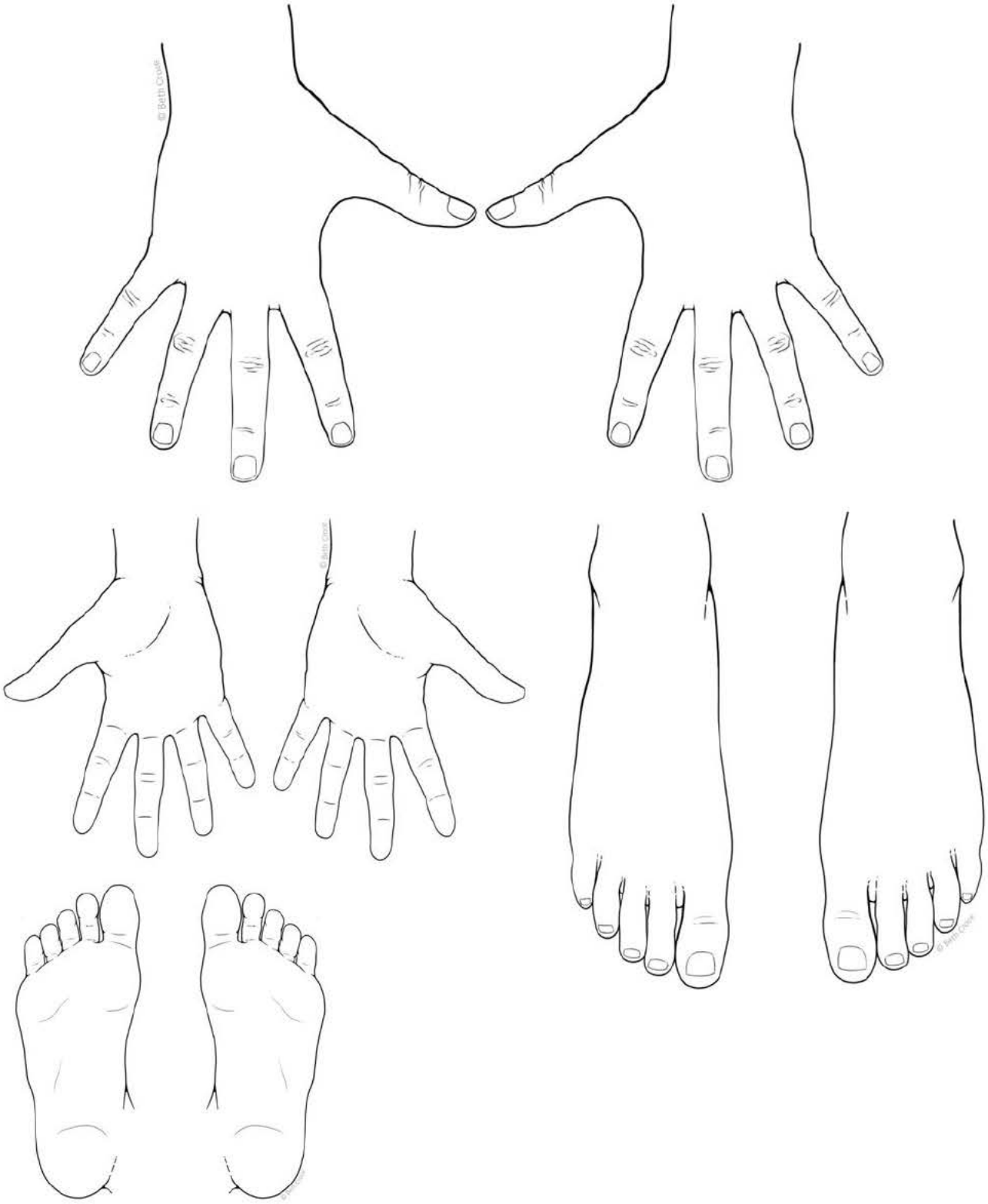
BREASTS

AREAS EXAMINED	BREASTS ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HANDS and FEET

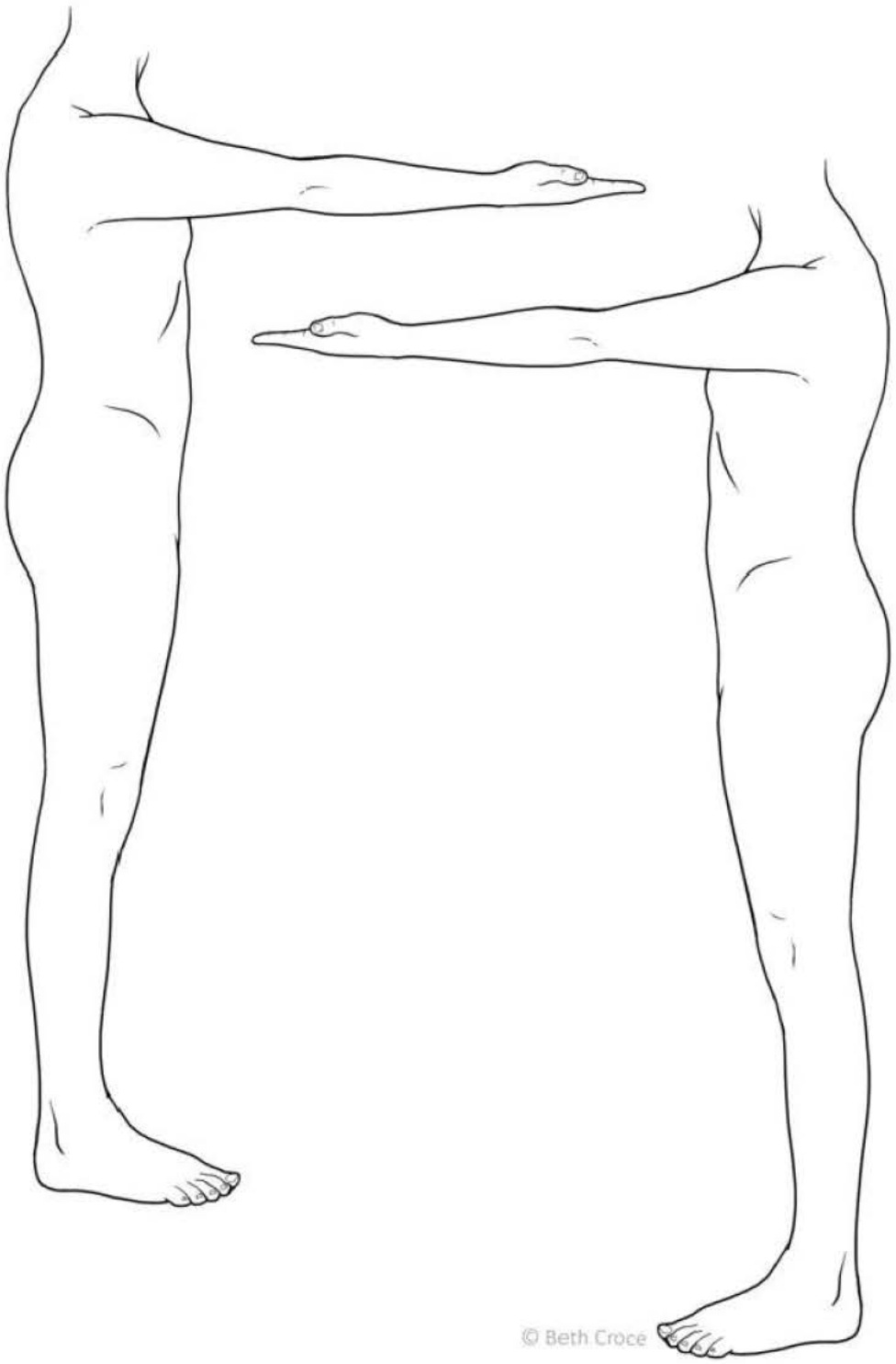


AREAS EXAMINED	BACK HANDS ☐	PALMS ☐	TOP FEET ☐	SOLES FEET ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

OUTER BODY

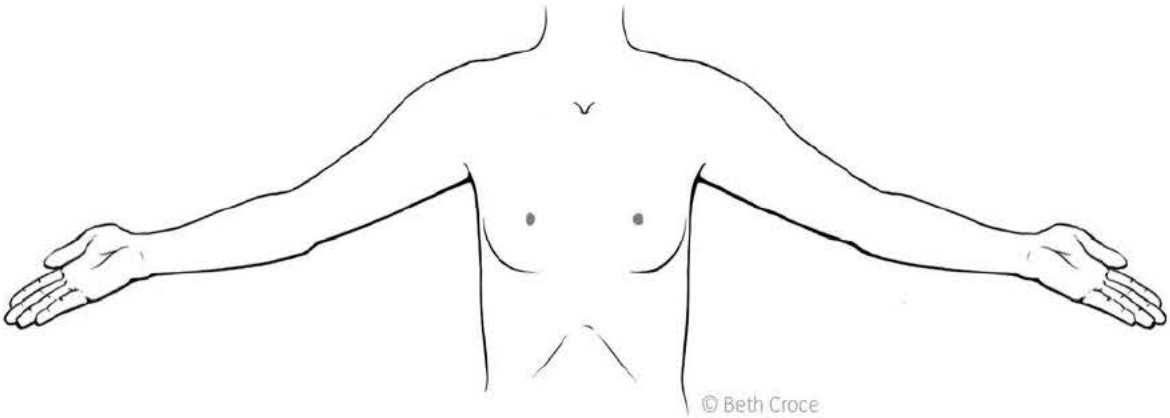


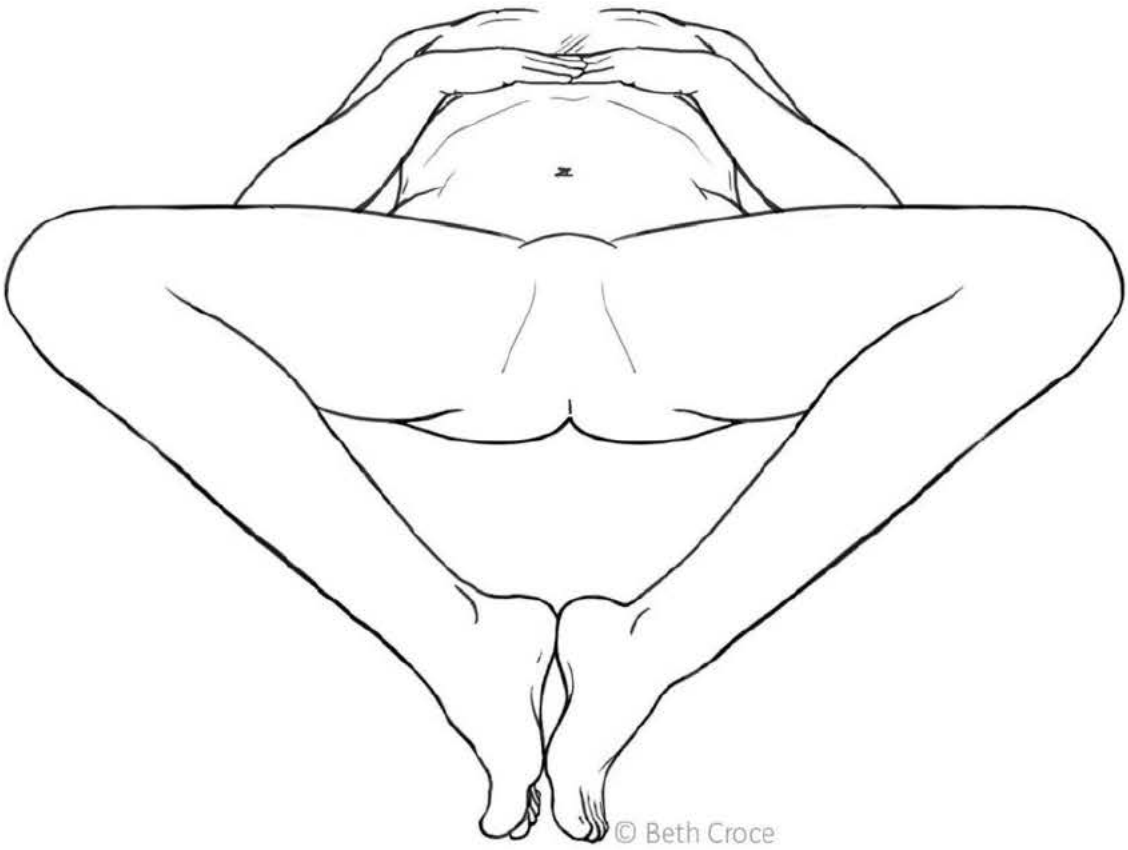
AREAS EXAMINED	OUTER ARMS ☐	SIDES OF CHEST ☐	HIPS ☐	OUTER LEGS ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

INNER ARMS / LEGS / BREASTS



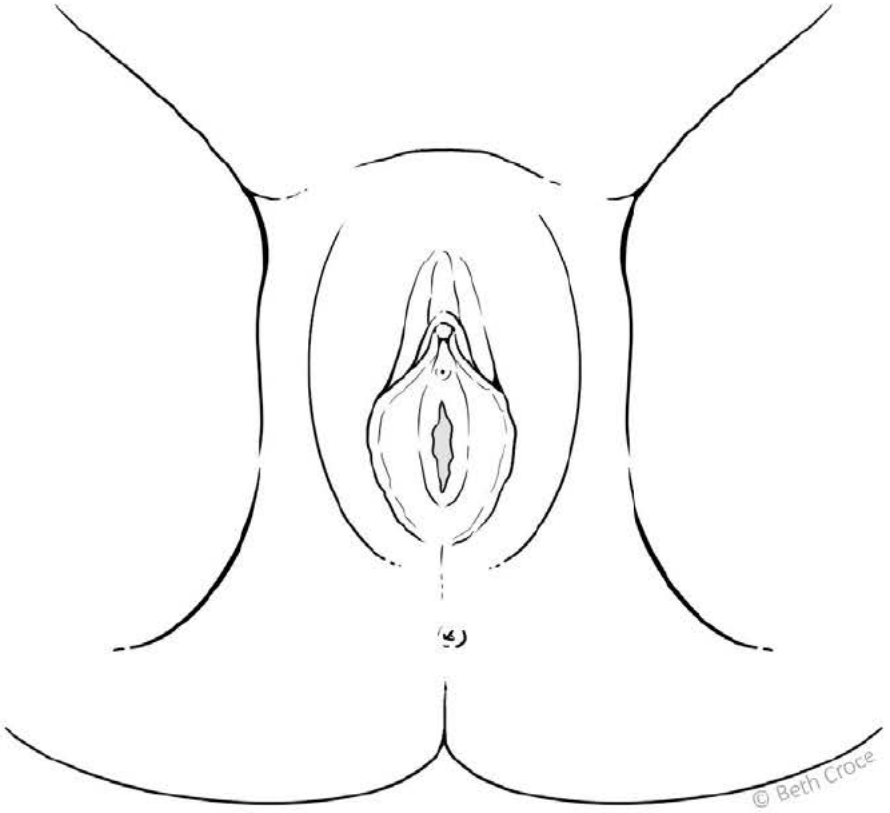


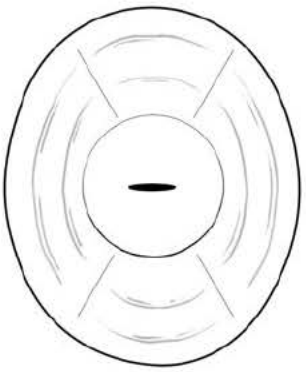
AREAS EXAMINED	INNER ARMS ☐	INNER LEGS ☐	

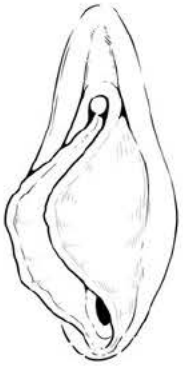
VICTORIAN INSTITUTE OF FORENSIC MEDICINE

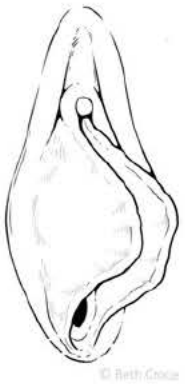
FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

FEMALE GENITALIA









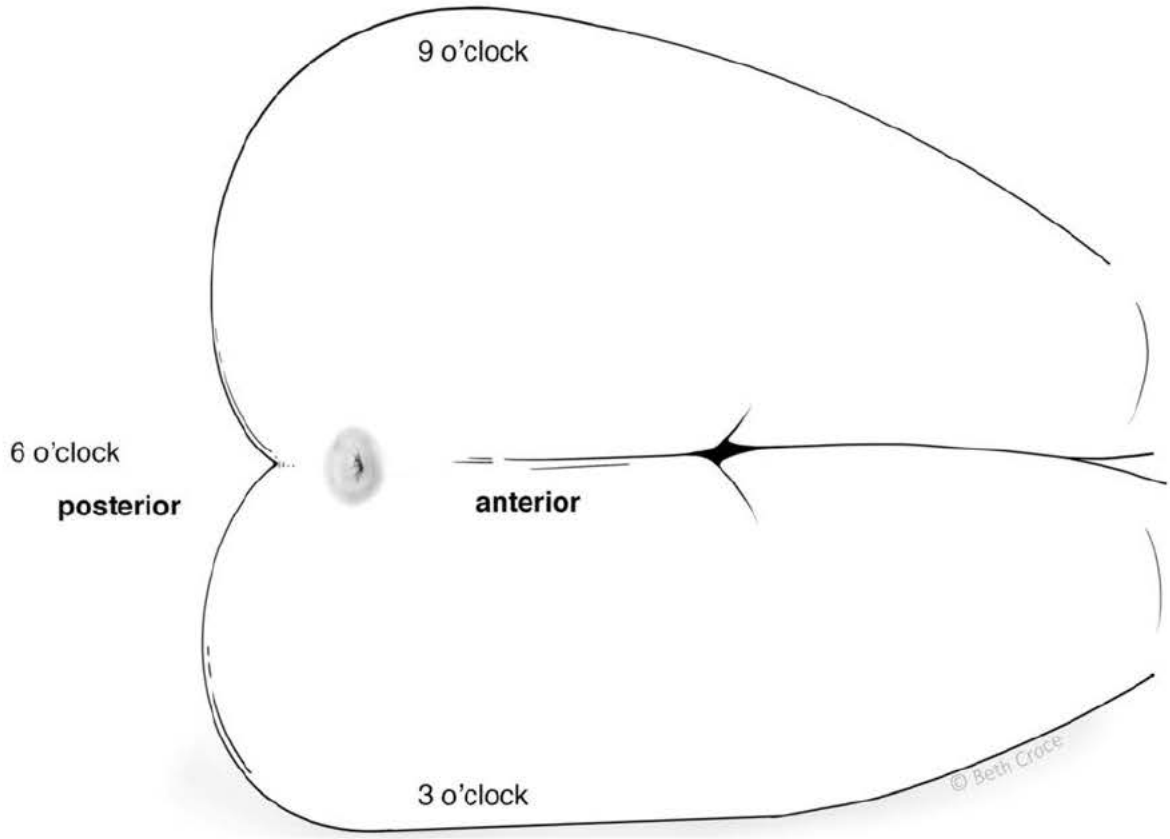
SPECULUM	COMPLETE ☐	INCOMPLETE ☐	NOT PERFORMED ☐
REASON:			

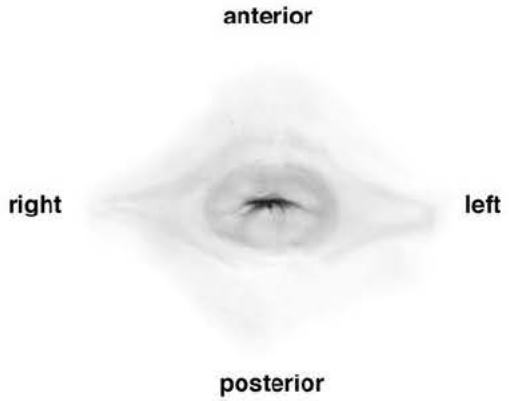
AREAS EXAMINED	MONS ☐	LABIA MAJORA ☐	LABIA MINORA ☐	FOSSA NAVICULARIS ☐
	URETHRA ☐	CLITORIS ☐	HYMEN ☐	POSTERIOR FOURCHETTE ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

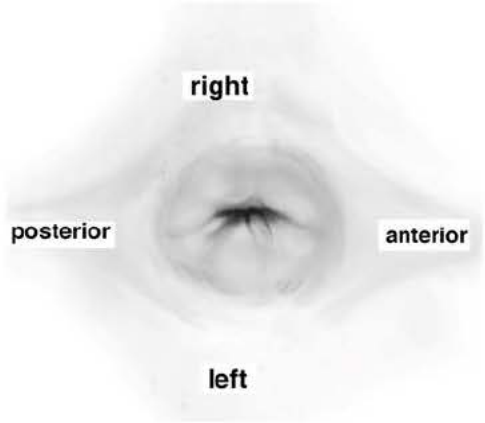
FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

ANUS and PERIANAL AREA





Patient Lying on Back



Patient in Left Lateral Position

PROCTOSCOPY	COMPLETE ☐	INCOMPLETE ☐	NOT PERFORMED ☐

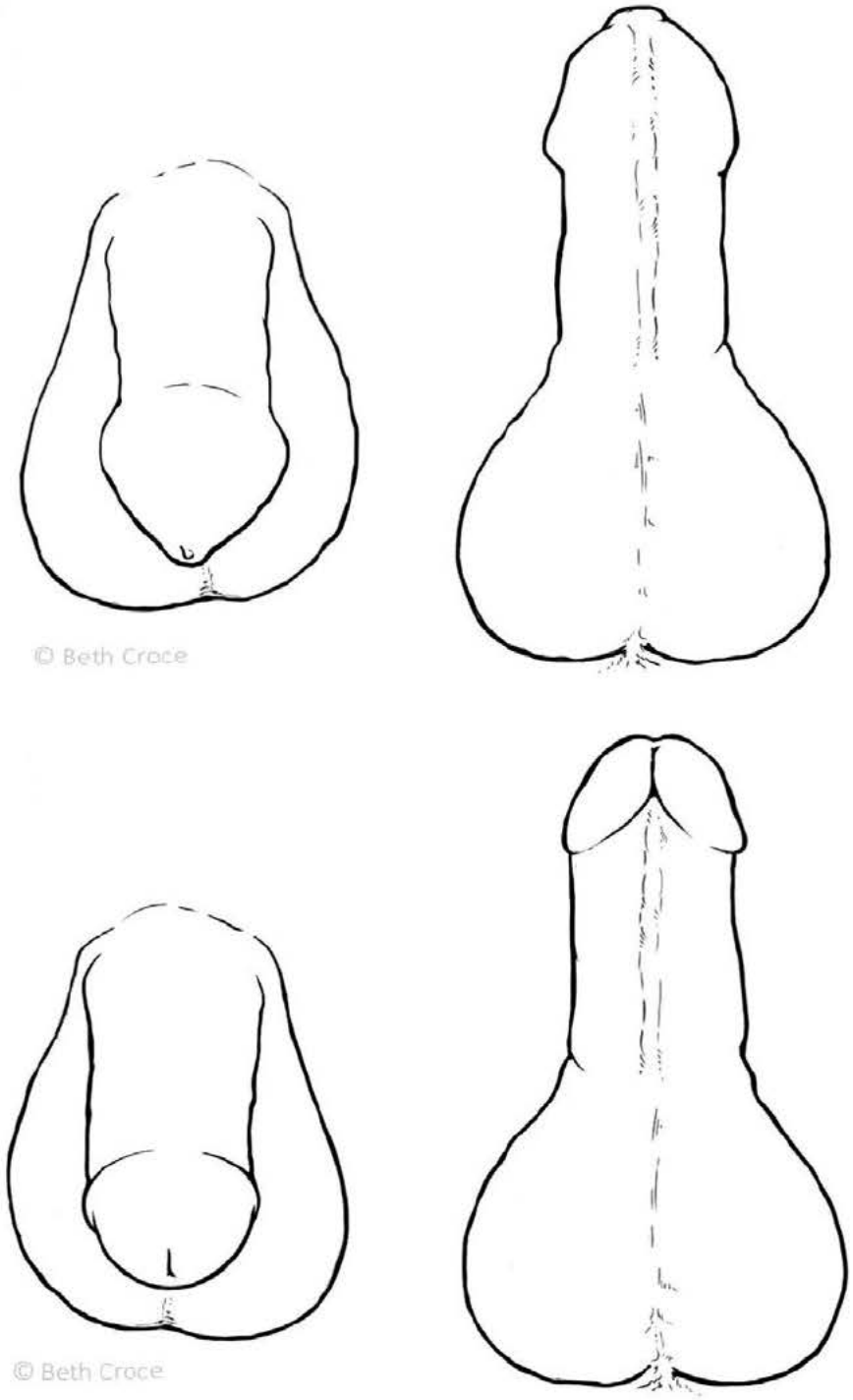
FINDINGS

AREAS EXAMINED	PERIANAL ☐	ANUS ☐	RECTUM ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

MALE GENITALIA



CIRCUMCISED	☐
NOT CIRCUMCISED	☐

AREAS EXAMINED	PENIS ☐	FORESKIN ☐	SCROTUM ☐	TESTICLES ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	
DOB	UNKNOWN ☐

Referral Letter to Health Services - Assault			
DATE PRESENTATION		TIME PRESENTATION	
PRESENTED TO		FACILITY	
FORENSIC EXAMINER		DESIGNATION	
DATE / TIME OF ALLEGED ASSAULT			
DETAILS OF ALLEGED ASSAULT	Receptive Anal ☐ Receptive Vaginal ☐ Receptive Oral ☐ Other		
INJURIES OF SIGNIFICANCE			
OTHER ISSUES OF CONCERN			
SEXUAL HEALTH FOLLOW UP RECOMMENDED (2 weeks, 3 months +/- 6 months)			
Medications provided	Levonorgestrel ☐	Azithromycin ☐	HIV NPEP ☐
	Hepatitis B immunisation ☐		
Other			
Baseline tests taken today	FBC ☐ UEC ☐ LFT ☐		
	Hep B (sAg, sAb, cAb) ☐ HIV screen ☐ Syphilis screen ☐		
	Urine Chlamydia PCR ☐ Urine Gonorrhoea PCR ☐		
HIV Risk Factors	MSM ☐	High prevalence country of origin ☐	Known HIV ☐
Would you please send me a copy of any unexpected outcomes with your patient's permission?			
EXAMINER SIGNATURE			
Forensic Medical Officer / Nurse Examiner—Victorian Institute of Forensic Medicine—Phone (03) 9684 4480			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

ISSUES and OTHER NOTES

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

TELEPHONE ASSESSMENT FOR THOSE PATIENTS BEING SENT TO AN MDC			
	YES	NO	INFORMATION
Will the assessment start at 20:00 or earlier	☐	☐	
Has there been a head injury	☐	☐	
Is the patient pregnant	☐	☐	
Has there been a history of memory loss	☐	☐	
Has there been a history of loss of consciousness	☐	☐	
Is there confusion	☐	☐	
Is there significant intoxication	☐	☐	
Is the re significant drowsiness	☐	☐	
Has there been strangulation	☐	☐	
Has there been significant smothering or mechanical chest or abdomen compression	☐	☐	
Is there a history of seizures	☐	☐	
Is there bleeding from injuries including anal or genital	☐	☐	
Is the victim of sexual assault male	☐	☐	
Is the alleged offender from an area of high HIV prevalence	☐	☐	
Is the patient immunized against Hepatitis B	☐	☐	
Is the patient able to walk unaided	☐	☐	
Are there acute signs of mental health issues e.g. agitated, delusional, suicidal, selfharm, auditory hallucinations,	☐	☐	
Is there significant intellectual delay?	☐	☐	
Other concerns?	☐	☐	

Based on the above, has a decision been made to go to the hospital instead? YES ☐ NO ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	
DOB	UNKNOWN ☐

MEDICAL CERTIFICATE	
DATE	
This is to certify that:	
Is / has been suffering from a medical condition and will be / has been unfit for work / school	
Condition (optional):	
From (Date):	
To (Date): (inclusive)	
Examiner's name:	
Examiner's signature	

EXAMINER's CONTACT DETAILS	
C/O Clinical Forensic Medicine Unit, Victorian Institute of Forensic Medicine, 65 Kavanagh Street, Southbank. 3006.Melbourne.	
Phone:	[redacted]
Email address:	

From: Helen Gregg
Sent: Monday, 8 August 2022 7:28 PM
To: Cathy Lincoln; Jacqui Thomson; Adam Griffin
Subject: Re: Proposed edit to interagency guidelines

I like it!

Thank you. I will submit this as our final feedback

Regards
Helen

Helen Gregg
A/Executive Director
Forensic and Scientific Services
Prevention Division, Queensland Health
[redacted]
a 39 Kessels Road, Coopers Plains, QLD 4107
[redacted] w www.health.qld.gov.au

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cathy Lincoln [redacted]
Sent: Tuesday, 2 August 2022 3:17 PM
To: Helen Gregg [redacted] Jacqui Thomson [redacted]; Adam Griffin [redacted]
Subject: RE: Proposed edit to interagency guidelines

Thanks Helen,

…what about:

Reference sampling involves the collection of a person's DNA for comparison against forensic samples. The reference sample will be collected at the time of forensic examination. The same must be collected in a distinct and discrete process, packaged separately to the Sexual Assault Investigation Kit, with clear guidelines to mitigate the risk of collecting a mixed sample at the time of forensic examination."

Cathy

Dr Cathy Lincoln
Forensic Physician
Deputy Director Forensic Medicine
Emergency Dept
Gold Coast University Hospital
[redacted]

From: Helen Gregg [redacted]
Sent: Monday, 1 August 2022 11:08 AM
To: Jacqui Thomson <[redacted]; Adam Griffin [redacted]; Cathy Lincoln [redacted]
Subject: RE: Proposed edit to interagency guidelines
Importance: High

Thanks for the feedback. How about.....

Reference sampling involves the collection of a person's DNA for comparison against forensic samples. The reference sample will be collected at the time of forensic examination. The same must be collected in a distinct and discrete process, packaged separately to the Sexual Assault Investigation Kit, to mitigate the risk of collecting a mixed sample at the time of forensic examination."

@Adam Griffin – I would be particularly interested in your feedback

---

From: Jacqui Thomson [redacted]>
Sent: Friday, 29 July 2022 5:34 PM
To: Helen Gregg [redacted]>; Adam Griffin <[redacted]>; Cathy Lincoln <[redacted]
Subject: Re: Proposed edit to interagency guidelines

Hello Helen
Thank you for inviting comment. I think the last sentence needs to be clearer. States 'barriers', but only one provided.
Kind regards
Jacqui

Get Outlook for iOS

From: Helen Gregg <[redacted]>
Sent: Friday, July 29, 2022 11:54:23 AM
To: Adam Griffin <[redacted]>; Cathy Lincoln [redacted]; Jacqui Thomson [redacted]>
Subject: Proposed edit to interagency guidelines

Good afternoon All,

I am following up on the action from yesterdays interagency guideline meeting. Based on the conversation around DNA reference samples, I understand the agreed change from Adam's proposal was;

Reference sampling involves the collection of a person's DNA for comparison against forensic samples. The reference sample will be collected at the time of forensic examination. The same must be collected in a distinct and discrete process, packaged separately to the Sexual Assault Investigation Kit. Barriers to collection include risk of collecting a mixed sample at the time of forensic examination."

i.e. taking out the 'where practical and with patient consent' as this was believed to be 'operational' in nature.

Pippa requested that we agree on wording as an agency prior to submitting our feedback. Could you please replay all with your comments as to whether this wording is acceptable?

Thanks
Helen

Helen Gregg
A/Executive Director
Forensic and Scientific Services
Prevention Division, Queensland Health
[redacted]

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

Response to sexual assault and child~~hood~~ sexual abuse

Queensland Government Interagency Guidelines for responding to children, young people and adults who have experienced sexual assault or childhood sexual abuse

~~Last updated~~Interim Guidelines: ~~March~~ July 2022

DRAFT

These guidelines have been reviewed through a strong collaborative approach by the Queensland Government Interagency Working Group for Responding to Sexual Assault, including representatives from:

- Department of Justice and Attorney-General (DJAG)
  - Office for Women and Violence Prevention
  - Office of the Director of Public Prosecutions
  - ~~Office of the Public Guardian~~
  - ~~Queensland Courts~~
  - Victim Assist Queensland
- Department of Children, Youth Justice and Multicultural Affairs (DCYJMA)
- Queensland Health (QH)
  - Clinical Forensic Medicine Unit, Health Support Queensland
  - Child Protection and Forensic Medical Service, Children's Health Queensland Hospital and Health Service
  - Strategic Policy and Legislation Branch, Strategy Policy and Planning Division
- Queensland Police Service (QPS)

The guidelines outline key principles and a best practice framework for government agencies working with children, young people and adults who have experienced sexual assault and/or chil~~dhood~~d sexual abuse, noting that people may have experienced both forms of violence on the same or separate occasions.

This version of the guidelines, as at July 2022, are being published as interim guidelines. This is in recognition of the need to have contemporary guidelines available to agencies as soon as possible, while also acknowledging the recommendations of the *Women's Safety and Justice Taskforce: Hear Her Voice – Report 2* which relate to these guidelines and to policy and practice to support people who have experienced sexual violence. The Queensland Government is currently considering these recommendations. Further changes may need to be made to the guidelines to incorporate changes implemented as a result of the recommendations in coming months and years. As a result, the guideline will need to exist as a living document, reviewed regularly.

The government agencies primarily responsible for the development of this document (DJAG, QPS QH and DCYJMA) have committed to the principles, roles, approaches and procedures articulated in the guidelines. This commitment aims to ensure that individuals who have experienced sexual assault and/or child sexual abuse are provided with timely, sensitive, trauma-informed, high quality and coordinated service delivery responses appropriate to their needs, and appropriate to the role played by these agencies.

Key service providers are encouraged to use this document as a framework to develop local level arrangements and protocols to ensure best practice, quality service and support to people who have experienced sexual assault or sexual abuse.

The government agencies responsible for the development of the guidelines would like to thank all key government and non-government stakeholders who kindly contributed their knowledge and expertise.

~~The term victim is used throughout the document where there is reference to specific legislation and where the person has experienced sexual assault and/or sexual abuse, regardless of their age or gender. The term sexual assault includes any sexual act that occurs without all involved persons~~

DRAFT

~~giving their consent. The term childhood sexual abuse is used when referring to any act by an adult involving a child in sexual activity which they can't understand or goes against accepted community standards. The term youth sexual violence and abuse is used to refer to circumstances where a young person under the age of eighteen has involved a child or young person in sexual activity which they don't have the capacity to consent to, or which goes against accepted community standards.~~

Commented [PD1]: Confirm agreed preferred definition noting this is inconsistent with definition provided below under key terminology

~~The government agencies primarily responsible for the development of this document (DJAG, QPS QH and DCYJMA) have committed to the principles, roles, approaches and procedures articulated in the guidelines. This commitment aims to ensure that individuals who have experienced sexual assault and/or childhood sexual abuse are provided with timely, sensitive, high quality and coordinated service delivery responses appropriate to their needs, and appropriate to the role played by these agencies.~~

1. signature blocks for;
    a. ~~Dr John Wakefield~~Shaun Drummond, Acting~~,~~ Director-General, Queensland Health
    b. David Mackie, Director-General, Department of Justice and Attorney-General
    c. Katarina Carroll, Commissioner of Police, Queensland Police Service
    d. Deidre Mulkerin, Director-General, Department of Children, Youth Justice and Multicultural Affairs
2. Month and year of publication

DRAFT

Acronyms and abbreviations

CPA	*Child Protection Act 1999*
DCYJMA	Department of Children, Youth Justice and Multicultural Affairs
DJAG	Department of Justice and Attorney-General
DFVPA	*Domestic and Family Violence Protection Act 2012*
EA	*Evidence Act 1977*
FME	Forensic Medical Examination
FP	Forensic Physician
FNE	Forensic Nurse Examiner
Framework	*Prevent. Support. Believe. Queensland's Framework to address Sexual Violence*
HHS	Hospital and Health Service
JIC FME	Just In Case Forensic Medical Examination
ODPP	Office of the Director of Public Prosecutions
OPG	Office of the Public Guardian
OFWVP	Office for Women and Violence Prevention
QH	Queensland Health
QPS	Queensland Police Service
SAIK	Sexual Assault Investigation Kit
SANE	Sexual Assault Nurse Examiner
VAQ	Victim Assist Queensland

DRAFT

Contents

Acronyms and abbreviations ..... *i*

Preface *1*

Section 1: Introduction *3*

Purpose of the guidelines **3**

Scope **3**

Audience **4**

Governance **4**

Key terminology ..... **5~~4~~**

Sexual assault ..... 5~~4~~

Child~~hood~~ sexual abuse 5

Responding to a disclosure of sexual assault **5**

Responding to a disclosure of sexual assault or sexual abuse of a child or young person ..... **6~~5~~**

Children displaying problematic or harmful sexual behaviours 6

Domestic and Family Violence ..... **7~~6~~**

Domestic Violence Protection Orders ..... 7~~6~~

Domestic and Family Violence Information Sharing Guidelines 7

Charter of Victims' Rights **7**

Section 2: Guiding principles *9*

Overarching principles **9**

Child and youth specific practice principles **9**

Informed Consent **11**

Consent, and authority to consent, for an adult with impaired decision-making capacity **11**

Consent, and authority to consent, for children and young people **12**

Section 3: Role of Key Government Agencies *12*

Queensland Police Service (QPS) **12**

Queensland Health (QH) **13**

Department of Justice and Attorney-General (DJAG) **14**

Office of the Director of Public Prosecutions 14

Office of the Public Guardian ..... 14~~15~~

Victim Assist Queensland ..... 15~~16~~

Queensland Courts 16

Office for Women and Violence Prevention (OFWVP) 17

Non-government organisations 17

Department of Children, Youth Justice and Multicultural Affairs (DCYJMA) **18**

After hours support 18

Section 4: Interagency approach *19*

DRAFT

Teamwork 19

Training 19

Confidentiality ..... 19~~20~~

Access, availability and promotion of services 20

Referrals 20

Feedback 20

Responsiveness to diverse needs 20

Aboriginal and Torres Strait Islander people 21

People with disability 21

People from culturally and linguistically diverse backgrounds 21

Lesbian, gay, bisexual, transgender, intersex, queer or otherwise diverse in gender, sex or sexuality (LGBTIQ+) people 21

Older people 21

Sex workers ..... 21~~22~~

Communication 22

Information provision 22

Translating and interpreter services 22

Section 5: Localised interagency responses ***24***

Steps to establishing a sexual assault response network (SARN) at the local level 24

Section 6: Interagency procedures ***25***

Crisis intervention 25

Presentation at a health facility 25

Victim attending with police 26

Presentation at a health facility by a child or young person 26

Service providers and diverse needs 26

Medical examination and treatment 26

Comprehensive medical assessment of a child or young person 26

Forensic medical examinations 27

Just in Case Forensic Medical Examination 28

Forensic medical examinations and informed consent for a child under 14 years of age 28

Who is skilled to perform a forensic medical examination? 28

Forensic Medical Examination process 29

Victim DNA reference samples 29

Timing and nature of the forensic medical examination 29

Consent to release information and evidence 29

Chain of evidence 29

Drug-facilitated sexual assault 29

Support person during medical and forensic examinations 30

Notifying the police 30

DRAFT

Initial report to police....30
Police interviews with children and young people....30
Support person during the police interview....30
Reporting child protection concerns....31
Queensland Police Service and Child Safety joint investigations....3334
Section 7: Other issues for consideration....35
Access to sexual assault counselling records....35
Discontinuance of police action before a proceeding has commenced....35
Follow up and registration on the Victims Register....35
Appendices....36
Appendix 1: Glossary....36
Appendix 2: Guidelines history....37
Appendix 3: Process for updating the Guidelines....38

DRAFT

Preface

These guidelines are designed to promote whole-of-government interagency cooperation and service coordination with the aim of improving government agency responses to victims of sexual assault or child~~hood~~ sexual abuse. The guidelines were first developed in 2001, recognising the benefit of coordinated responses to people who have experienced sexual assault or abuse. The 2014 guidelines incorporated responses to both child and adult victims. These guidelines aimed to facilitate best practice, quality service and support to people who have experienced sexual assault or child~~hood~~ sexual abuse.[1]

The guidelines have been updated to reflect current Queensland Government legislation, policy and practices related to responding to victims of sexual offences, including children and young victims of sexual abuse.

Legislation relevant to and defining sexual assault or child~~hood~~ sexual abuse includes, but is not limited to:

- *Human Rights Act 2019*
- *Mental Health Act 2016*
- *Public Guardian Act 2014*
- *Aboriginal and Torres Strait Islander Peoples Recognition (Sunset Extension) Act 2015*
- *Domestic and Family Violence Protection Act 2012*
- *Hospital and Health Boards Act 2011*
- *Victims of Crime Assistance Act 2009*
- *Public Health Act 2005*
- *Police Powers and Responsibilities Act 2000*
- *Guardianship and Administration Act 2000*
- *Child Protection Act 1999*
- *Criminal Law (Sexual Offences) Act 1978*
- *Evidence Act 1977*
- *Health Act 1937* & associated regulations
- Criminal Code

Relevant policies and guidance documents include, but are not limited to:

- Prevent. Support. Believe. Queensland's Framework to address Sexual Violence
- Working Together Changing the story: Youth Justice Strategy 2019–2023
- Queensland Government Domestic and Family Violence Prevention Strategy 2016-2026
- Queensland Government Response to the Royal Commission into Institutional Responses to Child Sexual Abuse
- Queensland Government response to the report of the Special Taskforce on Domestic and Family Violence in Queensland
- Queensland Government Response to the Youth Sexual Violence and Abuse Steering Committee's Final Report
- Domestic and Family Violence: Information Sharing Guidelines
- Information Sharing Guidelines: To meet the protection and care needs and promote the wellbeing of children

[1] See Appendix 2.

DRAFT

- Queensland Language Services Policy
- Queensland Multicultural Action Plan

The policies and guidance documents should be read in conjunction with internal agency procedures such as the:

- Health Service Directive: Caring for People Disclosing Sexual Assault
- Queensland Health Guideline: Guideline for the Management of care for people 14 years and over Disclosing Sexual Assault
- Department of Health Guideline: Conducting Child Sexual Assault Examinations
- Office of the Director of Public Prosecutions Director's Guidelines
- Queensland Police Service Operational Procedures Manual
- Child Safety Practice Manual
- Queensland Child Protection Guide 2.0
- Victim Assistance Unit Director-General Guidelines
- Youth detention operational policies

Commented [PD2]: VAQ – is this the right title? It sounds like it is guidelines for the Director-General?

In addition to legislation, policies, guidance and procedures, the Queensland Government joins with governments around Australia in the implementation of the *National Plan to Reduce Violence against Women and their Children 2010-2022* and the upcoming *National Plan to End Violence against Women and Children 2022-2032* and the recommendations of the *Royal Commission into Institutional Responses to Child Sexual Abuse*.

Each government agency has a complementary and essential role in ensuring that everyone has access to effective, timely and appropriate information, trauma-informed support, care and treatment following a sexual assault or sexual abuse.

Given the nature of the crime, sexual assault and sexual abuse are areas of legal and social complexity. The guidelines are designed to help government agencies to work together to respond to a person who has experienced sexual assault or child~~hood~~ sexual abuse, irrespective of their age or gender, through better understanding of one another's roles and responsibilities.

The Queensland Government encourages reporting of criminal activity and prosecution of offender(s) where possible.

DRAFT

Section 1: Introduction

The 2016 Australian Bureau of Statistics' (ABS) Personal Safety Survey results indicate that, nationally, one in five women (18% or 1.7 million women) and one in 20 men (4.7% or 428,800 men) had experienced sexual violence since the age of 15.[2] These rates are higher for people with one or more risk factors, including disability, Aboriginal and Torres Strait Islander status, cultural background, or diverse sexuality or gender identity.

In Queensland, the number of recorded victims of sexual assault increased for the eighth consecutive year to 4,859 victims in 2019, a rate of 95 victims of sexual assault per 100,000 persons. More than four in five victims (85%) of sexual assault were female (4,115 victims). More than a third of sexual assault victims (35%) were aged under 15 (1709 victims). In 2019, the majority (70%) of sexual assaults were experienced at a residential location (3411 victims), often the victim's home. Almost three-quarters of victims knew the offender (73% or 3526 victims).[3]

Children, young people and adults who experience sexual assault or sexual abuse may feel a range of emotions including shock, fear, guilt, shame, depression and an inability to trust others. The social stigma attached to sexual assault and sexual abuse can heighten these feelings and increase the trauma experience. There may be significant emotional, physical, financial and social costs, not only to those directly affected, but for the community as a whole.

Community education can encourage family and friends to respond supportively and appropriately to a disclosure of sexual assault or abuse. In order to assist their recovery, victims may also need access to a range of personal support services including counselling, medical services and assistance to report the crime to the police.

It is therefore imperative that when presenting, disclosing or reporting a sexual assault or child~~hood~~ sexual abuse, people receive an effective, high-quality, trauma-informed, accessible and appropriate response from the agencies to which they report.

Purpose of the guidelines

- The guidelines set out the roles, procedures and shared principles that QPS, QH, DJAG, and DCYJMA have committed to using when responding to children, young people and adults who have experienced sexual assault or child~~hood~~ sexual abuse.
- The guidelines set the minimum standard for responses to disclosures of sexual assault or child~~hood~~ sexual abuse.
- The guidelines set out how agencies will work together at a local level to ensure that individuals who have experienced sexual assault or child~~hood~~ sexual abuse are provided with timely, sensitive, coordinated service responses that are appropriate to their needs and the role played by each agency.

Scope

- The guidelines outline the recommended, and in some instances the required, agency response to presentations and disclosures of recent or historical sexual assault or sexual abuse by children, young people and adults of all ages and genders.
- Some content in the guidelines will be more applicable to victims of recent sexual assault or sexual abuse (e.g. content relating to a victim's immediate medical needs and conducting

[2] Australian Bureau of Statistics, 2017. *4906.0 – Personal Safety, Australia, 2016.* [Online] Available at: http://www.abs.gov.au/ausstats/abs@.nsf/mf/4906.0 [Accessed 3 December 2018]. In this dataset, sexual violence is defined as both sexual assault and sexual threats.

[3] Australian Bureau of Statistics, 2020. *4510.0 – Recorded Crime – Victims, Australia, 2019.* [Online] Available at: https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4510.0~2018~Main%20Features~Queensland~9 [Accessed 7 May 2021].

DRAFT

forensic medical examinations). Other content (e.g. regarding referral to specialist services, reports to Police, support to seek justice system responses) will be applicable to both recent and historical sexual assaults and sexual abuse.

- The guidelines are not intended to cover ongoing or longer-term service provision to victims and survivors (e.g. case management, counselling).
- While it is recognised that sexual harassment is also a form of sexual violence and is prohibited under the *Anti-Discrimination Act 1991*, responses to people who have experienced sexual harassment are not explicitly included as a part of these guidelines.

Audience

- This guideline provides information for employees of Queensland Government agencies who respond to presentations or disclosures of sexual assault or child~~hood~~ sexual abuse; specifically, QPS, QH, DJAG, and DCYJMA.
- The guidelines are available to other Queensland Government agencies and the community services sector to help them understand the roles each ~~agency~~of those agencies plays and the procedures and policies in place.
- It is noted that while other agencies may have a role in supporting with people who may have experienced sexual assault, including dealing with disclosures (for example, Department of Education, Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships, and Department of Communities, Housing and Digital Economy), the guidelines are written for those agencies who have a specific role in the immediate crisis response to people who have experienced sexual assault or child sexual abuse and to inform how they work with other agencies in that role.
-

Governance

The government agencies responsible for delivering a service to victims of sexual assault or sexual abuse, in accordance with relevant legislation, whole-of-government policy and internal departmental procedures, are responsible for the ongoing governance of these guidelines. The guidelines are underpinned by each government agency's own internal policies and procedures which they are obligated to adhere to. Each government agency has a formal complaints mechanism which is accessible to members of the public.

The Government Interagency Working Group Responding to Sexual Assault and Child~~hood~~ Sexual Abuse will meet, at a minimum, bi-annually to review the guidelines and consider matters of particular concern for people impacted by sexual assault or child~~hood~~ sexual abuse and to consider the impact of any legislative change.

Commented [PD3]: For further discussion re: who takes primary carriage of the Secretariat function going forward

The information in the guidelines is intended to provide a strategic overview to support the development of policies and procedures at a local level. Local level procedures may differ in their specifics according to the nature of the service system in each area.

The establishment of a local Sexual Assault Response Network, which includes representatives from QPS, DJAG, QH and DCYJMA and specialist non-government sexual assault or sexual abuse services is strongly encouraged. The purpose of these networks is to develop and implement local level policies and procedures.

DRAFT

Key terminology

Sexual assault

Sexual assault refers to any sexual act performed on a person without their consent. It is a crime, and includes when an offender indecently assaults a person (e.g. groping and inappropriate touching of a sexual nature) or procures them to perform sexual acts on a person without their consent. Where sexual assault includes sexual intercourse, oral sex or any form of penetration of the vulva, vagina or anus without consent, it is referred to as rape.

Consent to sexual activity must be freely and voluntarily given, and as such there are a number of situations where consent cannot be given (e.g. if the victim is asleep or unconscious, threatened or forced, unable to consent due to age or functional capacity or in some instances if they are under the influence of drugs or alcohol). Further, consent cannot be taken to be given because the person does not say or do anything to communicate that they do not consent to the act. Consent is a continuous communication and may be withdrawn at any time during the sexual act itself and any continuation of a sexual act after consent is withdrawn may constitute rape or sexual assault.

For the purposes of these guidelines, sexual assault refers to both sexual assault and rape.

Child~~hood~~ sexual abuse

Child~~hood~~ sexual abuse is any incident where an adult, young person or child engages a child or young person (under the age of 16 years) in a sexual act or exposes the child or young person to inappropriate sexual behaviour or material. This can include threats, manipulation and physical force. Child~~hood~~ sexual abuse can include sexually coercive behaviour without physical contact.

Harmful sexual behaviour

Formatted: Heading 3, Space Before: 6 pt

Harmful sexual behaviour is any behaviour of a sexual nature by or between children and young people that is outside of normal developmental behaviour, is aggressive or violent or causes harm to the child or others, or where there is a substantial difference in age or developmental ability of the children or young people involved.

Victim

The term victim is used throughout this document to describe a person who has experienced sexual assault or sexual abuse. It is acknowledged that some people who have experienced sexual violence may prefer to be referred to as victim-survivor, or survivor. 'Victim' is used in this context as a term which refers to a person who has experienced a sexual violence crime and requires immediate support by agencies, as per the intent of these guidelines. Many victims may go on to identify as 'survivors' as they move through their physical and emotional recovery.

Responding to a disclosure of sexual assault

After disclosure of a sexual assault, the following needs of the victim should be addressed:

- immediate safety needs
- immediate health needs (including medical and psychosocial needs)
- options for pursuing justice, including immediate police reporting or a 'just in case' forensic examination
- ongoing emotional needs for longer term wellbeing.

In order to avoid secondary traumatisation and mitigate the risk of negative, long term outcomes, responses to victims of sexual assault must be trauma-informed, sensitive, empathetic and effective. This involves listening to and believing the victim, emphasising that it is not the victim's fault, not

DRAFT

blaming the victim, providing emotional support and staying calm. Victims are less likely to disclose if they feel they will not be believed, expect a negative reaction or response, or believe the disclosure will have negative consequences for them. Victims may also not disclose if the behaviour is normalised in their environment or they don't know how to disclose.

The responses need to take into account the diversity of the victim, including their cultural and linguistic background, abilities, cognitive impairments, sexual orientation, gender identity, age and geographical location. In addition to assisting recovery, more sensitive and effective responses may also lead to an increase in reporting rates.

Responding to a disclosure of sexual assault or sexual abuse of a child or young person

When a child or young person under the age of consent discloses sexual abuse (including allegations of sexual assault), the recipient of the disclosure must report this event and take action in accordance with their organisation's procedures, their role, any mandatory reporting obligations and the requirements to report and protect in the criminal code (unless they have a reasonable excuse). Where a mandatory reporting obligation exists, there is no need to make a duplicate report to police under the Criminal Code requirements, as they will have a reasonable excuse. Where possible, the individual should support the child or young person by reassuring them, listening, and assessing and supporting the child's physical and emotional safety.

Disclosure may be verbal or non-verbal, accidental or intentional, partial or complete. Children or young people who have been sexually abused may exhibit a range of physical, behavioural and emotional indicators that could suggest distress, trauma and abuse. Service providers and practitioners need to be aware of and alert to these possible indicators of sexual abuse.

When responding to a disclosure of sexual assault or sexual abuse by a child or young person, the response must be appropriate to the age and developmental stage of the child or young person. The response should be warm and empathetic. As with adults, the provision of emotional support involves listening to and believing the child or young person, emphasising that it is not their fault and not blaming them or using language which could cause them to feel responsible. Families, carers and other support people perform an important role in assisting children and young people to understand sexual safety messages and encourage disclosure when incidents of sexual abuse or assault occur.

Children and young people are less likely to disclose if they feel they will not be believed, expect a negative reaction or response, or believe the disclosure will have negative consequences for them, their families or their communities.

Investigating allegations of sexual abuse is not the responsibility of the person being disclosed to. Investigations into sexual abuse are the responsibility of QPS.

Children displaying ~~problematic or~~ harmful sexual behaviours

In some cases, it may be difficult to distinguish age appropriate sexual behaviours in children and young people from those that may be problematic or harmful. In these situations, it may be useful to use an evidence based tool. ~~such as the "Traffic lights: sexual behaviours in children and young people" guide, developed by TRUE Relationships and Reproductive Health. TRUE have developed training packages and professional development information to support implementation of this approach.~~

Commented [PD4]: Note: we have removed referral to TRUE below as link is broken and TRUE now licenses this as a commercial product. CYJMA – do you have a view on what we could include here to replace the reference or how we could reword the section?

When supporting children and young people with problematic or harmful sexual behaviours, the priority remains the safety of the victim. Agencies supporting children and young people with problematic or harmful sexual behaviours must take appropriate action to promote the safety of all children within the home or other settings, such as schools.

DRAFT

Domestic and Family Violence

Sexual assault is one form of domestic and family violence. Research has found that most sexual ~~violence~~ assault committed against adults is perpetrated by a person known to the victim, most commonly an intimate partner or previous intimate partner.

People responding to victims of intimate partner sexual violence should prioritise the safety of the victim and where appropriate, victims should be referred to a specialist domestic violence service for support and assistance. This includes referral to emergency accommodation where this is required. Note, consent for referrals should always be sought where it is safe to do so. Refer to the Queensland Domestic and Family Violence Information Sharing Guidelines for further information (see below).

Sexual violence should be considered among other risk factors in determining a person's level of risk of harm from further violence. Sexual assault is considered to be a high risk factor for severe harm or death under the Queensland Domestic and Family Violence Common Risk and Safety Framework.

Information and advice is available from DVConnect Womensline on 1800 811 811, or DVConnect Mensline on 1800 600 636. Extensive information is also available on the Queensland Government DFV Portal (https://www.qld.gov.au/community/getting-support-health-social-issue/support-victims-abuse/domestic-family-violence).

Health staff can also refer to the DFV clinician training resources for further advice on supporting women who have experienced DFV: Queensland Health's DFV Toolkit of Resources.

Domestic Violence Protection Orders

Where the sexual assault has occurred within an intimate partner relationship, family relationship or an informal care relationship, the victim should be informed of their option to seek protection under the DFVPA. In situations where domestic violence has occurred and where protection is needed to prevent further violence, a domestic violence order can be applied for by the victim, by police on behalf of the victim or by another person authorised by the victim. This is done through the Magistrates Court. More information can be found on the courts website (https://www.courts.qld.gov.au/going-to-court/domestic-violence/domestic-violence-orders).

Domestic and Family Violence Information Sharing Guidelines

The DFVPA includes provisions for information sharing between government and non-government agencies to improve the safety of victims of domestic and family violence and better hold perpetrators to account.

To support practitioners in the field of domestic and family violence, such as specialist services, police and doctors, to appropriately share information, Domestic and Family Violence Information Sharing Guidelines have been developed. These Guidelines provide information about what is permitted under the legislation, who is allowed to share information, what circumstances allow information sharing without consent to ensure the safety of victims and children, and what information can be shared. The guidelines are available at: https://www.justice.qld.gov.au/initiatives/end-domestic-family-violence/our-progress/strengthening-justice-system-responses/domestic-family-violence-information-sharing-guidelines.

Charter of Victims' Rights

The Charter of Victims' Rights (the Charter), set out in Chapter 2 of the amended *Victims of Crime Assistance Act 2009* (VOCAA), describes the treatment victims can expect to receive from

DRAFT

Queensland Government agencies, their officers and funded non-government agencies that provide services to victims of crime.[4]

A full description of the rights identified in the Charter are found in VOCAA. Relevant to this document, rights include:

Respect, courtesy, compassion and dignity

A victim will be treated with courtesy, compassion, respect and dignity, considering the victim's needs.

Privacy

A victim's personal information, including the victim's address and telephone number, will not be disclosed unless authorised by law.

Information about services

A victim will be informed, at the earliest practicable opportunity, about services and remedies available to the victim.

Information about the criminal process and the criminal justice system

The victim will be informed about the investigation, prosecution and other court matters, including bail applications, the role of a witness, protection of victim at court and making a Victim Impact Statement.

Post-conviction information about the offender

Eligible victims can register to receive information about the offender's period of imprisonment or detention, or if the offender has escaped or is unlawfully at large.

A right to complain about a contravention of a right under the charter

If a victim of crime feels they have been treated unfairly or without respect or that a government agency, person or persons within the agency have engaged in conduct that is not consistent with the Charter, they have the right to make a complaint. A friend or family member may also make the complaint for the victim, with their permission.

Victims can access information about making a complaint by calling Victim Assist Queensland (VAQ) on 1300 546 587 or online at https://www.qld.gov.au/law/your-rights/victim-rights-and-complaints/victim-complaints.

DRAFT

[4] Source: https://www.qld.gov.au/law/crime-and-police/victims-and-witnesses-of-crime/agency-training-funding-and-research/rights-of-victims.

Section 2: Guiding principles

Overarching principles

Government responses to disclosures of sexual assault or sexual abuse should be guided by trauma-informed practices and framed by the following overarching principles:

- responses to victims will be consistent at all times with human rights as established under the *Human Rights Act 2019*
- all agencies will focus on the physical and psychological needs of the victim, and ensure that interpersonal interactions are trauma-informed and promote a sense of safety
- the victim's right to privacy and confidentiality will be respected at all times unless disclosure is required by another law
- comprehensive information about all processes and options will be offered in a way which is non-judgmental, appropriate, clear and sensitive to the victim in terms of language, cultural background, age, abilities, cognitive impairments, sexual orientation, gender identity and intersex status, and location
- the victim's informed decision will be respected at every stage of the process, and agencies will take a 'partnership' approach to level the power differences between agencies and victims
- the victim's sense of personal control will be supported and encouraged by maximising opportunities for control and choice
- all relevant agencies will work collaboratively to respond to sexual assault or sexual abuse to provide clear, up to date and comprehensive information about other agencies and services and facilitate access to appropriate agencies and services
- all agencies will ensure documentation and records are prepared in accordance with individual agency requirements and respect confidentiality, privacy, security and choice
- systems and services are accessible, integrated, trauma-informed and culturally responsive
- all agencies will provide responses that take into account the diversity of victims, including but not limited to cultural background, socio-economic status, abilities, age, cognitive impairments, sexual orientation, and gender identity
- all agencies demonstrate an understanding of the victim and their physical, behavioural and emotional indicators in the context of their life experiences and cultural background
- all agencies' operations and decisions are conducted with transparency and a focus on building and maintaining trust with victims, and amongst agencies and others involved in responding to sexual assault and/or sexual abuse.

Commented [PD5]: VAQ – are you comfortable that this inclusion in the overarching principles covers off on the need to explicitly reference human rights? I think it sits better here.

Child and youth specific practice principles

Children and young people have a right to be heard, express their views and be involved in decision-making in a manner appropriate to their age and maturity level. Circumstances may arise, however, where the wishes of a child or young person need to be overridden to ensure action is taken in their best interests and their physical and emotional safety is secured and in accordance with the law. In supporting children and young people, it is important that we make sure that they have at least one "believing adult" as part of their network of support.

Wherever possible, family members or caregivers should be involved in the decision-making process. This can include kinship carers, guardians or where appropriate, another trusted person.

DRAFT

Core principles guiding Government responses to children and young people, informed by the National Principles for Child Safe Organisations, include:

- the safety, wellbeing and best interests of children/young people are paramount
- services are culturally appropriate, equity is upheld, and diverse needs are respected
- families and communities are informed and involved in promoting child safety and wellbeing
- people working with children and young people are suitable
- physical and online environments promote safety and minimise the opportunity for children and young people to be harmed
- agencies are accountable for the safety and wellbeing of the children they are in contact with.

All agencies should work collaboratively to provide responses that are trauma-informed, including to:

- maximise a child/young person's sense of safety
- assist children in reducing overwhelming emotion
- help children make new meaning of their trauma history and current experiences
- address the impact of trauma and subsequent changes in the child's behaviour, development and relationships
- coordinate services within health facilities including information sharing and with other agencies, reducing the need for the child to tell their story multiple times
- utilise comprehensive assessment of the child/young person's trauma experiences and their impact on the child/young person's development and behaviour to guide services
- support and promote positive and stable relationships in the life of the child/young person, which may include extended safety and support networks, schools, sporting clubs – whatever avenues for continuity are available
- provide support and guidance to the child/young person's family and caregivers
- manage professional and personal stress.[5]

Confidentiality cannot be guaranteed where a child or young person is believed to be in need of protection from harm or child sexual abuse. To meet the best interests of that child or young person and to comply with mandatory reporting requirements, information may need to be exchanged between departments and other key stakeholders, including police. It is best practice for the child or young person to be advised that a report to DCYJMA and the police may take place. Certain circumstances may restrict the information provided to the child and their family about information provided to the police and/or to DCYJMA.

It is important to note that the new offence of *Failure to report belief of child sexual offence committed in relation to child* in section 229BC of the Criminal Code creates an obligation on all adults to report a belief that a child sexual offence has been or is being committed, unless they have a reasonable excuse. A reasonable excuse includes, amongst other things, making another report to police or DCYJMA under other mandatory reporting obligations. More information about this obligation and the reasonable excuse is set out below.

[5] See Quadara, A. and Hunter, C. 2016. *Principles of trauma-informed approaches to child sexual abuse: A discussion paper,* Sydney: Royal Commission into Institutional Responses to Child Sexual Abuse; see also, Australian Institute of Health and Welfare, 2011. *Young Australians: Their health and wellbeing,* Canberra: Australian Institute of Health and Welfare.

DRAFT

Wherever possible, family members should be included in decision-making and be provided with education and support. Service providers should aim to promote the relationship between the child and safe family members, wherever possible.

Support and education should be given to family members on how to best support their child and rebuild and strengthen their family unit.

Informed Consent

A person who has been sexually assaulted or abused has the right to determine their own path to recovery and should be supported in making an informed decision about whether they would like to proceed in a legal or medical process. Informed consent reflects a legal and moral principle whereby the victim has the right to decide what is appropriate for them. It is the responsibility of the treating clinician to assess a person's capacity to consent. If an adult patient lacks capacity to make a decision about their health care, health staff will refer to section 2.2 of the *Queensland Health Guide to Informed Decision-Making in Health Care* and contact the relevant substitute decision maker.

To ensure victims are supported in making decisions about legal or medical processes, any party to whom a sexual assault or sexual abuse is disclosed should provide information about the processes involved, including options available, such as police reporting, the benefit of reporting early, just in case forensic examinations and their rights as a victim of crime. Further information on these matters can be provided to the victim by more specialised parties such as sexual assault/sexual abuse workers or social workers, Police, or Forensic Physicians/Forensic Nurse Examiners as relevant.

Victims will be encouraged to report the assault to police. However, where a victim with the capacity to consent is not certain that they want police involved at the time of disclosure or presentation to hospital, they may choose to have a 'Just in Case' forensic examination. This may include a child aged 14 – 17 years of age who has parental consent for the examination and/or is a Gillick-competent child.

The victim should be made aware that they may withdraw their consent at any time to any procedure, or any aspect of the examination.

Consent, and authority to consent, for an adult with impaired decision-making capacity

It is the responsibility of the medical and forensic staff to assess capacity to consent. If an adult victim lacks capacity to make a decision about their health care (excluding forensic examinations), health staff will refer to section 2.2 of the Queensland Health Guide to Informed Decision-Making in Health Care – available at https://www.health.qld.gov.au/__data/assets/pdf_file/0019/143074/ic-guide.pdf – and contact the relevant substitute decision maker.

Health care providers are obliged to seek consent to carry out health care for adults with impaired decision-making capacity. This consent can be provided under an advance health directive, from a guardian or attorney, or from a statutory health attorney of last resort.

The Public Guardian is the health care decision maker of last resort and operates a health care consent phone service for all health care professions. This line operates Monday–Friday 7am-7pm and Saturday, Sunday and public holidays 9am-5pm. Requests for information made through the health care consent phone service will only be responded to within business hours.

The Public Guardian may consent to the forensic examination of an adult with impaired decision-making capacity. This consent may relate to alleged sexual assault or abuse of an adult who does not have capacity to consent to the examination themselves.

If at any point there is a possibility that the victim's guardian, attorney or support person is identified as, or suspected to be, the offender, the matter should be referred to the Office of the Public Guardian (OPG) for investigation into the victim's decision-making arrangements. The OPG's investigations

DRAFT

statutory function focuses on whether or not the decision-making arrangements for the adult with impaired decision-making capacity are adequate and appropriate.

Consent, and authority to consent, for children and young people

Consent and authority to consent is required prior to the provision of general medical assessment and treatment, and/or a forensic medical examination (FME), depending on the age and ability of the child or young person. The definition of consent must be inclusive of the provision of the information required to make an informed decision.

For a general medical assessment including genital examination, verbal consent is obtained from the child, if of sufficient age or Gillick competence to provide valid consent, or the guardian.

For a child or young person up to the age of 16 years, guardianship of the child or young person will be established. Generally, young people aged 16 years and over are able to provide consent to general medical care and FME.

Where clinicians are not able to gain the consent of a guardian to receive general medical assessment and treatment, and/or a FME, Gillick competence can be assessed to determine if the child or young person is able to provide consent.[6]

In circumstances where the suspected offender is the child or young person's guardian, the chief executive or authorised officers of DCYJMA can make a legal request for medical care and/or FME as per Sections 14 and 97 of the *Child Protection Act 1999*. This request can be made for children up to the age of 12 and for young people for whom Gillick competence has not been established.

Section 3: Role of Key Government Agencies

Queensland Police Service (QPS)

QPS has three main functions in relation to sexual assault or sexual abuse cases:

1. Investigate complaints of sexual assault or sexual abuse and establish whether an offence of sexual assault or sexual abuse has been committed.
2. Protect victims of sexual assault or sexual abuse.
3. Identify, apprehend and prosecute offenders.

In carrying out this role, the police should:

- observe QPS Operational Procedures Manual
- observe QPS local procedures or instructions
- observe legislative requirements
- observe the Charter of Victim's Rights
- provide victims with information regarding the investigation and prosecution
- provide protection to victims at immediate risk of sexual assault or sexual abuse
- provide victims with information about support services.

QPS maintains an online resource for Adult Sexual Assault to provide victims with information about their options following rape or sexual assault to assist in making informed decisions, including advice

[6] For definition of Gillick competence, see Appendix 1. For more information, see QH's *Guide to Informed Decision-making in Health Care*, 2nd edition, 2017, available at: https://www.health.qld.gov.au/__data/assets/pdf_file/0019/143074/ic-guide.pdf (accessed 8 April 2019)

DRAFT

on issues such as: myths and facts; reporting to police; alternative reporting options; support services; and the court process.

The resource is available at: https://www.police.qld.gov.au/programs/adultassault/default.htm

Queensland Health (QH)

Queensland Health, Hospital and Health Services provide 24 hour access to clinical and psychosocial care and forensic examinations (including Just in Case[7] examinations), These responses are provided by medical officers, nurses and social workers at public hospitals, Forensic Physicians and Government Medical Officers, and may involve specialist sexual assault teams. The extent and nature of this care varies across hospital and health services (HHS) in accordance with local procedures and resources.

Assistance and care in the acute phase includes:

- medical treatment
- acute psychosocial support
- information about options for FMEs and reporting the assault to the police, including the benefits of early reporting.
- provision of forensic examinations to victims of sexual assault and abuse where consent is given
- adherence to informed consent for all aspects of caring for people disclosing sexual assault, including clinical treatment, forensic examinations, evidence collection and storage, police involvement, referrals and the release of information to third parties.
- provision of clear information about the storage, access and destruction of forensic examination samples to victims of sexual assault who have a forensic examination but choose to defer the decision to report the assault to police
- provision of information, including about sexual health, victims' rights, reporting to police, legal processes, and support networks and services
- referral with consent and/or information provided regarding sexual assault counselling and support services

In addition to the above, when responding to sexual abuse and/or sexual assault of a child or young person QH will:

- ensure sufficient history is taken to enable an appropriate clinical and forensic examination
- manage child protection concerns in a timely manner
- undertake a FME, if required.

Whilst the definition of a child is a person aged up to 18 years, QH has several age distinctions relevant to responding to the health needs of children and young people who have experienced sexual abuse/assault:

- For children and young people under 14 years of age, medical examinations for sexual assault must be performed by a medical officer or nurse with appropriate paediatric skills, including child protection and/or sexual assault medical examination training or skills.

[7] Just in case examinations are discussed in greater detail on page 27

DRAFT

- For young people aged 14 years and over a generalist medical officer can provide emergency medical assessment and treatment. Registered nurses and medical officers who have received specific forensic training can perform a holistic assessment and FME.
- For young people aged 16 years and under who present to a paediatric hospital or are being treated by a paediatrician in a general health facility, where a FME is required, the health facility will have trained clinicians to undertake a holistic assessment including FME.

Department of Justice and Attorney-General (DJAG)

The Office of the Director of Public Prosecutions (ODPP), the Office of the Public Guardian (OPG), Victim Assist Queensland (VAQ), Queensland Courts and the Office for Women and Violence Prevention (OFWVP) fall within the responsibilities of DJAG. The following provides an overview of each of these agencies.

Office of the Director of Public Prosecutions

The ODPP represents the Crown in criminal proceedings against persons accused of committing serious criminal offences including sexual assault and sexual abuse. Criminal proceedings include:

- the committal hearing, before a Magistrate in Brisbane Central, Ipswich and Southport Magistrates Courts. In other centres, this hearing is conducted by prosecutors within QPS
- trials before a judge alone or a judge and jury
- sentencing hearing before a judge
- any appeals arising from the trial or sentence.

In addition to prosecuting matters in court, the ODPP is responsible for:

- assisting victims by providing information about the progress of a prosecution, the victim's role as a witness, and how the victim can inform the court of the impact of the crime by providing a victim impact statement
- giving victims reasons for decisions made in relation to proceedings which directly affect them
- taking into account the wishes of a victim who does not wish to proceed with a prosecution for any reason
- providing information about the availability of other resources and processes that may assist victims
- requesting that the court give sexual assault or sexual abuse matters appropriate priority
- ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building
- liaising with other relevant agencies to ensure that the victim and family members understand the legal and procedural issues which may impact them.

In carrying out the role of the ODPP, all officers are obliged to comply with the Director's Guideline No. 25 as at 2016, available at: https://www.justice.qld.gov.au/corporate/justice-agencies/office-of-the-director-of-public-prosecutions. This aims to ensure that the Charter of Victim's Rights, as set out in the amended *Victims of Crime Assistance Act 2009*, are complied with.

Office of the Public Guardian

The OPG is an independent statutory office established to protect the rights, interests and wellbeing of adults with impaired decision-making capacity, and children and young people in the child protection system or staying at a visitable site. This includes children and young people in out-of-

DRAFT

home care, such as a foster home, the home of a kinship carer, a residential care facility, a youth detention centre, disability service or mental health facility.

The OPG is a mandatory reporter under the *Child Protection Act 1999* and must report to the Chief Executive of Child Safety any reasonable suspicions that a child or young person has suffered, is suffering, or is at unacceptable risk of suffering significant harm caused by physical or sexual abuse, and the child or young person does not have a parent able and willing to protect the child or young person from harm.

The OPG provides individual advocacy to children and young people who may be the victims of sexual abuse or sexual assault through the following functions:

- the child community visiting and advocacy function, which monitors and advocates for the rights of children and young people in the child protection system including out-of-home care (foster and kinship care), or at a visitable site (residential facilities, youth detention centres, authorised mental health services, and disability funded facilities), and

- the child advocacy function, which offers person-centred and legal advocacy for children and young people in the child protection system and elevates the voice and participation of children and young people in decisions that affect them.

For adults with impaired decision-making capacity who may be victims of sexual assault or sexual abuse, the OPG performs the following statutory functions:

- the adult community visiting and advocacy function independently monitors visitable sites (authorised mental health services, community care units, government forensic facilities, disability services and locations where people are receiving NDIS supports, and level 3 accredited residential services), to inquire into the appropriateness of the site and facilitate the identification, escalation and resolution of complaints by or on behalf of adults with impaired decision-making capacity staying at those sites.
- the guardianship function undertakes both supported and substituted decision-making in relation to legal, personal and health care matters, supporting adults to participate in decisions about their life and acknowledging their right to live as a valued member of society. This includes providing consent to forensic examination if appointed as guardian (by order of the Queensland and Civil Administrative Tribunal) or attorney (as appointed under an Enduring Power of Attorney) or as statutory health attorney of last resort.
- the investigations function investigates complaints and allegations that an adult with impaired decision-making capacity is being neglected, exploited or abused or has inappropriate or inadequate decision-making arrangements in place. The investigative function of the OPG is different to the criminal investigative function of the QPS. The OPG's investigative function is focused on determining whether the adult's decision-making arrangements (for example an Attorney under a Power of Attorney document) are lawful, appropriate, and do not expose the adult to abuse, neglect or exploitation. The OPG does not investigate whether or not a criminal offence has been committed. The OPG has an interagency reporting arrangement to report allegations of abuse including sexual assault to the QPS.

Victim Assist Queensland

VAQ provides information, referrals to specialised support services and financial assistance for victims of personal acts of violence including sexual assault or sexual abuse. This may include court support or advice about Victim Impact Statements.

Irrespective of age or gender, victims of any sexual offence that has occurred in Queensland are eligible to apply for financial assistance through VAQ.

DRAFT

Under VOCAA, a victim is considered a *Special Primary Victim* if any of the following apply:

- They were the victim of a sexual offence
- The offender was in a position of power, authority or trust
- The act of violence was domestic violence that occurred after 1 July 2017
- They were a child when the act of violence occurred
- They had or have an impaired capacity
- They are being or have been threatened or intimidated by the offender or someone else.

For the purposes of applying for financial assistance, a Special Primary Victim can report the violence to either:

- A police officer
- Their counsellor, psychologist or doctor, or
- A domestic violence service.

Special conditions apply if the victim is a child or young person (under 18).

- The crime must be reported; either to police or an appropriate doctor, psychologist or counsellor.
- In most cases the victim's parent or legal guardian completes the application for financial assistance on behalf of the victim.
- If the parent or legal guardian is unable or unwilling to complete the form (including if the child is subject of a Child Protection Order), the victim or their doctor, psychologist, counsellor or support person should contact VAQ for advice.
- If the young person is over the age of 12 years and they would like to apply independently, a lawyer can help the young person with their application. The young person should contact VAQ and request a referral to an appropriate free legal service.
- If a child or young person is granted financial assistance, any lump sum payments (e.g. recognition payments) must be paid to the Public Trustee to be held in trust for the benefit of the child or young person.

VAQ provides information, referrals and support (which may include court support) to victims~~, and assistance in making a victim impact statement if the victim chooses to make one~~.

VAQ provides education and training to government and non-government agencies, with an aim to broaden community knowledge of the rights and needs of victims of crime, including sexual offences.

Queensland Courts

Queensland Courts afford victims of sexual offences, affected child witnesses and special witnesses protections when proceeding through court. These are detailed in the *Evidence Act 1977* (EA) and the *Criminal Law (Sexual Offences) Act 1978*.

Section 21A of the EA outlines the protections for special witnesses and affected child witnesses.[8] When the court hears evidence from special witnesses, there are a range of options to assist the witness. These include ensuring the victim has minimal contact with or exposure to the offender during court proceedings or in the court building. Where the witness is an affected child witness, there are further protections in place.

In addition, the DFVPA affords special protections to victims who are deemed 'protected witnesses. This is relevant for cases where sexual violence has occurred in the context of domestic or family violence.

[8] For definitions, see Appendix 1.

DRAFT

Section 150 states that victims, children and relatives or associates of the aggrieved (that is, named in the application that relates to the proceedings) are a protected witness for the purpose of giving evidence under the Act. This section allows the court to consider whether orders should be made as to how the protected witness gives evidence, including:

- Video link
- Pre-recorded evidence
- A screen, glass or partition in the court room
- The respondent be held in a separate room while the witness is giving evidence
- Allowing support persons
- If a person with disability, that the protected witness can give evidence in any particular way specified by the Court that will, in the court's opinion minimise the protected witness's distress
- Any other alternative arrangement the court considers appropriate.

Section 151 seeks to restrict cross-examination in person by self-represented respondents. The court, on its own initiative or on application of a party to the proceeding, may order that the respondent may not cross-examine a protected witness in person if the cross-examination is likely to cause the protected witness to suffer emotional harm or distress, or be so intimated as to be disadvantaged as a witness.

For further information refer to the Supreme and District Courts Criminal Directions Bench Book available at: https://www.courts.qld.gov.au/court-users/practitioners/benchbooks/supreme-and-district-courts-benchbook

Office for Women and Violence Prevention (OFWVP)

Office for Women and Violence Prevention is responsible for policy and program management for domestic and family violence, sexual violence and women's support. OFWVP works to enable women and families to be safe and to prevent and respond to violence and abuse.

OFWVP has policy responsibility for the implementation of *Prevent. Support. Believe. Queensland's Framework to Address Sexual Violence* (the Framework). The Framework addresses all forms of sexual violence, including sexual assault and sexual abuse. Priority areas 2 and 3 of the Framework are particularly relevant to these Guidelines: *Support and healing*; and *Accountability and justice*. The Framework is available at: https://www.justice.qld.gov.au/about-us/services/women-violence-prevention/violence-prevention/sexual-violence-prevention/framework.

OFWVP also has policy responsibility for the development and management of these guidelines, coordinating on behalf of all responsible agencies.

Non-government organisations

OFWVP funds non-government organisations to assist people who have experienced sexual assault and children and young people who have been sexually abused in accessing the necessary services and support they need to rebuild their lives. These services are a critical part of the government's response to sexual assault and sexual abuse. Sexual violence support services offer flexible, holistic and ongoing support and counselling in a culturally appropriate manner and in a safe environment.

The range of support provided by these services includes:

- provision of information, advice and referral
- needs assessment and development of case/service plans
- individual advocacy
- trauma-informed counselling, including crisis counselling, for victims and survivors of sexual assault or sexual abuse

DRAFT

- victim support groups and community education.

The role each sexual violence support service takes within the service system is influenced by local service arrangements. Government agencies should liaise and work with non-government service providers as a critical stakeholder in formulating local responses to sexual assault and sexual abuse where possible.

For more information about access to sexual assault or sexual abuse services in local areas, contact the Sexual Assault Helpline on 1800 010 120 or online at: https://www.qld.gov.au/community/getting-support-health-social-issue/support-victims-abuse/sexual-abuse-assault/sexual-abuse-assault-getting-help

A number of other government departments also provide grant funding to non-government organisations to deliver a range of specialist sexual assault and sexual abuse services. Local procedures and service agreements in relation to services provided by these organisations should be adhered to.

Department of Child Safety, Youth Justice and Multicultural Affairs (DCYJMA)

DCYJMA is responsible for a range of services and responses across the areas of child and family support, child protection~~, youth services~~ and youth justice. DCYJMA works to enable children, young people and families to be safe and to thrive in culture and communities, and to prevent and respond to violence, abuse and neglect.

DCYJMA is dedicated to protecting children and young people who have been harmed, or are at risk of harm. It is the role of DCYJMA to intervene in cases of child sexual abuse when a parent is not willing and~~or~~ able to protect the child from harm. In these situations, professionals should immediately report their concerns to DCYJMA (see section on reporting child protection concerns).

DCYJMA has a legislative responsibility to ensure the safety, wellbeing and best interests of a child or young person in out-of-home care and to report any alleged harm to a child or young person involving the commission of a criminal offence to QPS.

DCYJMA has a responsibility to provide a response to children and young people who have been sexually abused whilst in out of home care, irrespective of who is responsible for the sexual abuse. The DCYJMA policy is available at: https://www.cyjma.qld.gov.au/resources/dcsyw/child-family/foster-kinship-care/response-children-young-people-sexually-abused-oohc-627.docx.

DCYJMA is leading the Queensland Government's participation in the National Redress Scheme for people who have experienced institutional child sexual abuse. The National Redress Scheme has been developed in response to the Royal Commission into Institutional Responses to Child Service Abuse. More information about the National Redress Scheme may be found at: www.nationalredress.gov.au or by calling 1800 737 377.

After hours support

The Child Safety After Hours Service Centre (formerly Crisis Care) is a statewide service that provides after hours responses to clients of DCYJMA, members of the public and staff from government departments and community agencies in relation to child protection matters. If there is a problem or concern that an agency or service provider may have about the wellbeing and safety of a child or young person they may contact the Child Safety After Hours Service Centre on 07 3235 9999 or 1800 177 135 (Queensland only).

Youth Justice

DRAFT

DCYJMA is responsible for youth justice to protect the community from offending while upholding the rights of children, keeping them safe and promoting their well-being. The goal of youth justice is to provide a fair and balanced response to young people in contact with the youth justice system. This response holds young people accountable for their actions, encourages their reintegration into the community and promotes community safety.

DCYJMA has legislative responsibility to ensure the safety and wellbeing of young people within youth detention centres, which includes reporting any harm a young person has suffered whilst detained, and has an associated operational policy for identifying and reporting harm in a youth detention centre. DCYJMA must also report disclosures of harm that are alleged to have occurred prior to admission to relevant agencies for assessment and action.

DCYJMA is also responsible for Restorative Justice processes for young offenders, which is an alternative process to a matter being dealt with by a court, if appropriate. These processes include a restorative justice conference which is a meeting between a child or young person who has committed a crime and the people most affected by that crime to discuss what happened, the effects of the offence, and repairing the harm caused to the victim. To safeguard the victim, additional procedures are adopted before a conference for a sexual assault or for sexual abuse, including referring the victim to a counselling service as well as compulsory attendance of the juvenile offender in a specialist treatment service.

DCYJMA oversees implementation of *Working Together Changing the story: Youth Justice Strategy Action Plan 2019–2023* and *Action Plan 2019-2021*. The Action Plan is available at: *https://www.cyjma.qld.gov.au/youth-justice/reform/youth-justice-strategy-action-plan-2019-2021*. A section Action Plan is expected to be published in the second half of 2022.

Section 4: Interagency approach

Given the often violent and complex nature of sexual assault and sexual abuse, an interagency approach is essential. QPS, QH, DJAG and DCYJMA each have a different but fundamental role in responding to sexual assault and sexual abuse. Each of these agencies should assist each other in understanding and supporting their role and be familiar with, and sensitive to, their differing and complementary roles. An interagency approach provides opportunities to discuss and address issues of mutual concern across departments.

Teamwork

Quality of care depends on partnership between different agencies. Each agency should establish local procedures to facilitate improved liaison and coordination between services. These procedures should include systems the sharing of authorised information and conflict resolution.

To improve the overall wellbeing and outcomes for victims of all ages and genders, all involved agencies should focus on a multi-agency response that provides wrap-around services which are trauma-informed, victim-centred, and responsive to local needs and service context.

Training

Joint training can contribute to achieving interagency objectives and allow those working in the field to understand how best practice is achieved. Training and orientation should be ongoing and could include input from relevant local services.

Confidentiality

Confidentiality, privacy of information and security of records is imperative when working with people who have experienced sexual assault or sexual abuse. It is a fundamental principle in treating victims with dignity and respect.

DRAFT

Access to and disclosure of personal information regarding the assault or abuse must conform to legal requirements and be limited to people directly involved in the case. Except where legal obligations exist, information will not be released without the prior informed consent of the person involved. This includes names and identifying information.

Access, availability and promotion of services

Agencies should offer all victims information about medical, counselling, police and legal services. In some cases, people who have experienced a sexual assault or sexual abuse may need encouragement to access services due to a range of cultural, historical or personal factors (e.g. due to inappropriate past service responses). Where possible, services that are tailored to the individual and cultural needs of victims should be offered.

Referrals

Relevant referral procedures and guidelines between police, health and justice services should be observed.

Staff of government agencies should be familiar with local specialist services and actively support people of all ages who have experienced sexual assault or sexual abuse to access appropriate supports available in their community.[9] In addition, relevant health, welfare and legal services likely to be accessed by victims will need to develop local strategies and procedures to ensure that referral processes are appropriate and coordinated. These services should also be aware of the admission procedures and location of the nearest health facility and police station.

Referrals for children and young people presenting with family should consider the needs of the family as a whole and, where available, refer the family to an appropriate family support service.

The Queensland Government maintains webpages with listings of specialist sexual assault services across the state, such as hospital-based sexual assault services, helplines, and funded sexual assault support services for diverse population groups, which may assist in providing referrals to appropriate services. For information see: https://www.qld.gov.au/community/getting-support-health-social-issue/support-victims-abuse/sexual-abuse-assault/sexual-abuse-assault-getting-help; and https://www.health.qld.gov.au/sexualassault/html/contact

Commented [PD6]: Note, links will be reviewed for consistency with accessibility guidelines.

Feedback

Quality of care is essential in ensuring that people are referred to the appropriate service. QPS, QH, DJAG and DCYJMA should ensure that local interagency links and procedures operate in a coordinated manner. Mechanisms for giving feedback about service delivery should also be in place and observed.

Responsiveness to diverse needs

Procedures need to be flexible and sensitive in order to respond to diverse needs, including: cultural background; language; gender identity or intersex status; ability; religion; sexual orientation; and geographical location. Procedures also need to be sensitive and responsive to children with a history of trauma, such as child abuse, neglect or interactions with child protection. Furthermore, it is important to understand how these needs impact access to and utilisation of appropriate services.

All agencies should ensure that procedures and facilities provide safe, appropriate access to culturally responsive services for Aboriginal and Torres Strait Islander people, people of non-English speaking backgrounds, people with disability, including physical and cognitive impairments and mental illness, LGBTIQ+ people, older people, and sex workers.

It is imperative that, with consent, interpreter services are provided.

[9] For examples of available services, see Appendix 3.

DRAFT

Aboriginal and Torres Strait Islander people

Service provision should reflect the cultural needs of Aboriginal and Torres Strait Islander people.

Agencies should have a referral mechanism to facilitate access to culturally responsive, safe and appropriate information for Aboriginal and Torres Strait Islander people. Where there is consent and it is appropriate to do so, Aboriginal and Torres Strait Islander liaison workers may be offered to assist people during the process.

Agencies responding to disclosures of sexual abuse from an adult, child or young person who identifies as Aboriginal or Torres Strait Islander should, where possible, offer services tailored to support their cultural needs.

People with disability

Services and agencies should facilitate access to appropriate support workers and interpreters for people with disability. Disability may include physical, cognitive, sensory, psychiatric or neurological impairment, mental illness or a combination of these, resulting in a substantial reduction in the person's capacity to make informed decisions or communicate.

Services should provide support to persons with impaired cognitive capacity to help them understand and participate in response processes following a sexual assault or sexual abuse.

With the person's informed consent, and when it is safe and appropriate to do so, services should also consult with relevant people involved in that person's life such as carers, advocates, support persons, guardians, attorneys and specialist agencies or departments.

People from culturally and linguistically diverse backgrounds

Service provision should be responsive to, and respect the cultural and religious background and language needs of the person who has experienced sexual assault or sexual abuse. Where communication in English is difficult or where requested, accredited interpreters and cultural support workers should be used to assist in both eliciting information from, and providing information to the person who has experienced sexual assault or abuse.

Lesbian, gay, bisexual, transgender, intersex, queer or otherwise diverse in gender, sex or sexuality (LGBTIQ+) people

LGBTIQ+ people can experience marginalisation, stigma, discrimination, social exclusion and prejudice which may make victims of sexual assault hesitant to seek help from police, hospitals, sexual assault services, or other supports. Service providers should equip themselves with the knowledge required to support all people, including LGBTIQ+ people, who have experienced sexual assault or child~~hood~~ sexual abuse. Services and agencies may demonstrate the fact that they welcome diversity through, for example, displaying of rainbow signage. Stigma and discrimination should be reduced through the delivery of sensitive, discreet and confidential care in settings that are familiar and friendly towards specific groups.

Older people

Older people can face barriers to reporting sexual assault or historical sexual abuse, including shame and guilt, and fear of not being believed. Agencies should have a referral mechanism to facilitate access to age-appropriate and safe services, particularly for those with cognitive impairment and where the ill-treatment is by a family member, or where they are dependent on the abuser for care.

Sex workers

Sex workers may face stigma, discrimination and not being taken seriously when reporting sexual assault to police. When reporting sexual assault, sex workers should be believed and treated with sensitivity and understanding in a safe and welcoming environment and reassured that what happened was not their fault.

DRAFT

Children and young people with a history of trauma

Children and young people with a history of trauma, such as child abuse, neglect or interactions with child protection are a particularly vulnerable cohort in need of targeted support when reporting sexual assault. Given many have had negative experiences with adult care givers, they may have an inherent distrust of the people and agencies designed to protect them, deterring them from reporting any sexual abuse they experience. Agencies should have referral mechanisms to child appropriate support services and adopt a trauma-informed approach to ensure children and young people with trauma histories feel safe and supported.

Communication

Agencies should be aware of and take into consideration factors which impact on communication with a person after a disclosure of sexual assault or sexual abuse. Factors may include: age; cultural and/or religious background; language; sexual orientation; gender identity or intersex status; abilities; cognitive impairment; community and social factors; and reluctance to disclose abuse or access formal responses because of past negative experiences with statutory systems and institutions.

Children and young people who have experienced sexual assault or sexual abuse benefit from the support of protective family members and carers in recovering from their experiences. Where appropriate, Government agencies and non-government organisations should endeavour to communicate with the child or young person together with their supports.

This supports safety of the child or young person and enables informed decision making about health care, and investigative and legal processes for both the victim and agency.

Information provision

Police officers, doctors, social workers, health workers and legal officers should provide people with relevant, age appropriate and understandable information, which may include written material. This information should be offered in a way which is non-judgmental, appropriate, clear and sensitive to the victim in terms of language, cultural background, age, abilities, cognitive impairment, sexual orientation, gender identity and intersex status, and location.

People should be made aware of their rights as a victim of crime and be given an opportunity to discuss and consider the implications of proceeding with medical, investigative and legal processes so that they can make informed decisions. These decisions must be respected. It should be noted however that the decision whether or not an investigation should proceed rests primarily with police.

Translating and interpreter services

The Queensland Government recognises that a significant number of people may require interpreter services or an advocate or support person, as well as culturally appropriate support, in order to adequately disclose and report a sexual assault or sexual abuse, and make informed decisions about the support and options available to them.

All reasonable steps will be taken by government agencies and funded non-government organisations providing sexual assault and sexual abuse responses to ensure fair and equitable access to accredited interpreting and translating services that are appropriate and of high quality.

An accredited interpreter should be available in all situations where an interpreter and/or translator is required, unless there are extenuating circumstances that genuinely prevent an interpreter from being used. This may include, for example, a medical emergency or where a language or cultural group is very small and confidentiality is a concern for the victim, or where no interpreter is available for that language group. All agencies will take into consideration the wishes of the person who has been impacted by the sexual assault or sexual abuse in relation to the use of an interpreter.

DRAFT

Each government agency is required to observe its own policies and procedures in relation to the use of interpreters. These internal procedures should align with the Queensland Language Services Policy available at: https://www.dlgrma.qld.gov.au/multicultural-affairs/policy-and-governance/language-services-policy.html.

DRAFT

Section 5: Localised interagency responses

As noted in the previous section, an effective, appropriate, trauma-informed response depends on partnership between different agencies. Localised responses are particularly important to facilitate liaison and coordination not only between government agencies but also with non-governmental sexual assault support service providers. The establishment of a local integrated response such as a sexual assault response network or team (SARN/SART) is encouraged.

Essential to an effective localised response is the maintenance of current referral information on appropriate support and other community services available, and the development of referral pathways and protocols between key service providers to ensure timely referral for those in need of support. Local procedures should ensure that services are accessible and coordinated, and written information and community education materials are appropriate to the local context.

Where they are active, local sexual assault response networks should work collaboratively with domestic and family violence High Risk Teams and/or other local DFV networks to ensure holistic support for potential overlapping client bases.

Steps to establishing a sexual assault response network/team (SARN/SART) at the local level

- Identify a multidisciplinary, multi-agency group of specialist professionals to work with victims after disclosure of sexual assault and/or sexual abuse to provide victim-centred and trauma-informed responses.
- Develop a Terms of Reference for the SARN, relevant to the local context and guided by the principles outlined in these Interagency Guidelines, covering issues such as:
    - Goals and vision of SARN
    - Membership of SARN
    - Coordination
    - Protocols and procedures, including practice framework, referral pathways and procedures for information sharing
    - Roles and responsibilities of members
    - Working methods, including meeting schedule
    - Monitoring and reporting
- Undertake advocacy and awareness raising in the community on the support and services available through the SARN.

DRAFT

Section 6: Interagency procedures

Irrespective of where sexual assault and/or sexual abuse is first reported, the top priority is to ensure the safety and welfare of the victim.

Crisis intervention

Agencies should follow local procedures in the management of disclosures of sexual assault or sexual abuse. Where they are available, all efforts should be made to contact the designated sexual assault or sexual abuse response network/team (as discussion in Section 5).

Regardless of the person's age or gender, the purpose of intervention by a designated sexual assault/sexual abuse worker is to:

- provide immediate assistance, stabilisation and trauma-informed emotional support to assist the person to return to their level of functioning before the assault or abuse occurred
- provide information about the health and justice options available, as well as the procedures of the designated local health facility
- provide an opportunity for the person to express their concerns and feelings
- offer practical support, including contacting family members or support persons where appropriate and with the consent of the victim
- talk to family members or support persons (if present) about how best to support the victim
- coordinate the interagency response and facilitate patient care and treatment, and provide information in relation to available community support resources.

If information or clarification about police procedures is requested, the sexual assault/sexual abuse worker will, with the victim's consent, arrange for police to provide this information.

A referral for follow-up support and care should be made as soon as possible.

Adults, children, young people and family members presenting to a QH facility will be offered a referral to a social worker and/or a community-based sexual assault counselling service who can coordinate follow up care and support them to access support services suitable to their needs and circumstances. Based on the psychosocial needs of the victim and/or family members, information and/or a referral ~~with consent~~ may be provided to other support services such as Family and Child Connect (FACC) services, Intensive Family Support, or Aboriginal and Torres Strait Islander Family Wellbeing Services.

Commented [PD7]: Note, reference to referral with consent has been removed at request of CYJMA noting that under the CPA such a referral can be made without consent. It is noted that consent should be obtained where possible, appropriate and safe. Further discussion to occur around appropriate wording to be used here.

At any stage throughout this process, a victim can have a support person present. The support person should not adversely influence the process. Agencies should be aware of potential complex power dynamics between victims and support persons, and victims should choose or consent to their support person, rather than it being assumed that a particular person will fill the role.

Wherever possible agencies should ensure children and young people in out-of-home care have a support person available throughout the response to the sexual assault or sexual abuse. Agencies are encouraged to contact DC~~S~~YJMA for professional guidance where there are concerns or complex situations requiring practice support.

Presentation at a health facility

Health facilities, such as hospitals, are often the first place where a person will disclose a sexual assault. When this happens, nursing and medical staff will assess the general medical condition of the person and provide the appropriate treatment and care. Assessment of a person's need for medical treatment is always the first priority.

DRAFT

It is the health staff or the sexual assault/sexual abuse team's role to coordinate an immediate response, offer practical and emotional support, assess the person's immediate physical and emotional safety and recognise the potentially traumatic nature of the assault.

Medical assessment will be conducted in accordance with local procedures.

Victim attending with police

Where a victim arrives at the health facility with police, procedures outlined with regard to referral to the local sexual assault/sexual abuse team should still be followed by health staff.

Presentation at a health facility by a child or young person

Children or young people who may have experienced sexual abuse/assault could present for a health response when:

- a request for examination is made by QPS
- a child or young person presents to a health facility with a caregiver following a disclosure and/or injury, prior to a report being made to QPS
- a young person presents to a health facility without a caregiver
- behavioural or physical indicators have been identified by a caregiver, teacher or health professional (e.g. general practitioner) that warrant further assessment.

Children under the age of 14 years who have experienced sexual abuse/assault are to be referred to a paediatrician for medical care. An on-call paediatrician should be available at the nearest hospital facility that admits paediatric patients, closest to the child's residence.

Service providers and diverse needs

Agencies should take all reasonable steps to meet a victim's gender, cultural, religious and social needs. This may include, for example, ensuring that male staff are not assigned to support a victim where that victim has indicated they would prefer to be treated by female staff.

Medical examination and treatment

Presentations at a hospital's emergency department will usually involve nursing triage to assess injuries and vital signs and arrange a medical examination where indicated. Clinical interventions will take priority over forensic examination.

Where possible, people presenting at emergency departments with suspected or reported sexual assault or abuse will be prioritised for triage and examination away from public waiting areas.

A general medical assessment will be undertaken by a health care professional with the aim of:

- assessing, treating and documenting injuries
- reassuring victim about their physical welfare, including giving information on, and providing treatments to reduce the risks of pregnancy and/or sexually transmitted infections (STI)
- providing advice and referral options for follow up medical care.

A medical examination should include sexual health intervention as per the QH sexual health guidelines available at: https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/guidelines.

Comprehensive medical assessment of a child or young person

When a medical assessment is conducted on a child or young person following a disclosure or allegation of sexual abuse/assault, the paediatrician and/or forensic physician/nurse should explain

DRAFT

that any information or findings from the assessment may later be requested by QPS for forensic purposes in legal proceedings.

Sexual abuse/assault places children and young people at risk of pregnancy and/or contracting STIs. For children under 14 years of age, the clinician will consider STI testing and treatment, and if post menarche, will consider pregnancy prophylaxis. For young people 14 years and older, the physician will consider STI testing and treatment, pregnancy prophylaxis and follow up with their local sexual health service or GP.

Forensic medical examinations

Informed consent reflects a legal and moral principle whereby the victim has the right to decide what is appropriate for them. This includes the right to accept or to decline a forensic examination and to change that decision.

In order for a victim to exercise this right, they require access to information that is relevant to them. An explanation about the nature of the forensic examination must be given by the examiner and when involved, police also need to inform the victim about police investigation processes.

Under the *Guardianship and Administration Act 2000*, the decision to undergo a forensic examination is a personal matter, and legislation and policy around informed decision-making for personal matters applies.

If an adult is deemed by health staff not to have capacity to consent to a forensic examination, the Public Guardian may consent if it is reasonably considered to be in the adult's best interests *and* any of the following apply:

i. there is no guardian or attorney appointed for the adult or available to consent for the adult to the examination, *or*
ii. the guardian or attorney for the adult has failed to consent, *or*
iii. the Public Guardian reasonably considers the adult's interests would not be adequately protected if the consent of any guardian or attorney for the adult were sought.

Doctors or nurses conducting forensic examinations will follow documentation contained in the Sexual Assault Investigation Kit and the Sexual Offences Medical Protocol. All health staff state-wide have access to 24 hour telephone support from a Forensic Physician from the Clinical Forensic Medical Unit.

All patients presenting at a hospital and disclosing an alleged sexual assault will be offered psychosocial support in a private environment, where available, and be provided with information to help them decide whether to have a forensic examination and/or involve police.

The forensic examination consists of obtaining a history as to the nature of the assault/abuse in order to guide the subsequent physical examination. It also includes documentation of injuries and the collection of forensic evidence as it relates to the alleged sexual assault or sexual abuse.

Unconscious patients who are admitted to hospital with a suspicion of sexual assault will be assessed and treated as medical emergencies.

If at any point during the process of progressing consent for a forensic medical examination, there is a possibility that the victim's guardian, attorney or support person is identified as the offender, the matter should be referred to the OPG for investigation into the victim's decision-making arrangements. The OPG's investigations statutory function focuses on whether or not the decision-making arrangements for the adult with impaired decision-making capacity are adequate and appropriate. The OPG does not investigate whether or not a criminal offence has been committed. The OPG has an interagency reporting arrangement to report allegations of abuse, including sexual assault, to the QPS.

DRAFT

'Just in case' Forensic Medical Examination

The timely involvement and reporting of a sexual assault complaint to police provides the best chance of achieving a successful investigation and prosecuting alleged offenders. Given the invasive nature of the forensic examination, it is preferred that it is only done when intended to support police with this task.

However, for a range of reasons, some victims of sexual assault may choose to delay their decision whether or not to report their assault to police.

Since July 2019, QH has provided victims the option of having a FME and storing their DNA samples for up to 12 months, 'just in case' a victim chooses to report their assault to police at a later time. This has become known as a 'just in case' examination.

Prior to commencing the forensic medical examination, victims choosing to undergo a 'just in case' FME will need to consent to the examination and acknowledge they understand that:

- delayed reporting of an assault to QPS may reduce the opportunity to obtain evidence and other information needed for a police investigation.
- they can report their assault to police at later date.
- only DNA samples are collected – these will be held for up to 12 months and there is a small chance of deterioration in sample quality over time.

Completed Sexual Assault Investigation Kits (SAIKs) will be securely held at the hospital's laboratory before being transferred to QH Forensic and Scientific Services for storage to maintain the chain of custody of evidence.

Samples and the completed Sexual Offences Medical Protocol will only be released to QPS after a victim has reported their assault and provided consent to release this information.

Forensic medical examinations and informed consent for a child under 14 years of age

Where a child presents within 72 hours of an alleged sexual assault/abuse, a FME may be warranted. This will ideally occur following a police interview, with QPS providing the forensic kit. The clinician will complete the kit with adherence to forensic principles ensuring chain of evidence with the attending police officer.

Findings will be documented in the medical record, in keeping with QH standards and requirements, for later forensic purposes.

Who is skilled to perform a forensic medical examination?

Adult FMEs will usually be conducted at a public hospital by a Senior Medical Officer or a nurse who has received training in forensic procedures, or by a Forensic Physician, Forensic Nurse Examiner, Sexual Assault Nurse Examiner or a Government Medical Officer (GMO).

A framework is in place to provide telehealth support, 24 hours a day, to doctors practicing in regional and remote areas to undertake a FME, guided by an expert Forensic Physician from the Clinical Forensic Medicine Unit.

In the case of children under 14 years, a medical officer or nurse with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills is essential.

DRAFT

Forensic Medical Examination process

Victim DNA reference samples

DNA reference samples (usually a blood sample or mouth swab) should **not** be taken routinely as part of the FME.

Commented [PD8]: Proposed change – Adam Griffin "Reference sampling involves the collection of a person's DNA for comparison against forensic samples. Where practical and with patient consent, the reference sample will be collected at the time of forensic examination. The same must be collected in a distinct and discrete process, packaged separately to the Sexual Assault Investigation Kit. Barriers to collection include risk of collecting a mixed sample at the time of forensic examination."

Timing and nature of the forensic medical examination

In determining the timing and nature of the FME a number of factors will be considered, including the time since the sexual assault or sexual abuse took place, the physical and emotional state of the victim, and their account of the sexual assault or sexual abuse. Specific factors may be discussed with the on call Forensic Physician from the Clinical Forensic Medicine Unit.

This process, particularly if it involves an internal gynaecological or anal examination, can be distressing, and the examination may need to be delayed or discontinued on account of the victim's physical and emotional state. Adhering to trauma-informed practice and respecting the victim's choice whether to continue with the examination is essential.

Consent to release information and evidence

Where a victim has agreed to report the assault to police, the doctor or nurse conducting the FME will only release the SAIK to police with the signed consent of the victim or their appointed decision maker. Access to health records, including counselling notes, are confidential. However, the victim should be notified that some records can be subject to a subpoena or other court-related mechanisms.

Chain of evidence

The chain of evidence and the need for 'contemporaneous recollection of facts' to aid an investigation is essential. The chain of evidence involves not only the examination of the victim, but includes the geographic location where the assault/abuse occurred, the identification and interview of witnesses and identification of relevant additional evidence. Evidence collected needs to be stored and transported in approved and standardised ways as outlined in police procedures to ensure the utility in a court proceeding.

Storage and transportation issues need to be considered when undertaking an examination as the inability to safely and correctly store and transport evidence may damage the evidence or make it inadmissible in court in the later stage of an investigation and prosecution.

Where a victim has already made the decision to report to police, the doctor or nurse conducting the forensic examination should discuss the case with the police before the FME takes place. This is to ensure that:

- all necessary evidence is collected
- a re-examination is prevented
- unusual evidence is not overlooked.

Drug-facilitated sexual assault

Where the administration of drugs in the sexual assault is suspected, testing to maximise the chances of detecting these substances should be administered in a timely fashion. However, the decision to test remains a clinical one which is made by the FP or FNE. Decision making around timing and sample site (blood, urine or hair) may be discussed with the on call Forensic Physician at the Clinical Forensic Medicine Unit.

DRAFT

Support person during medical and forensic examinations

Regardless of age, and/or if a person has decided to report to police or have a Just in Case FME, a person is entitled to have a support person of their choice present during the medical examination and FME. This may include a friend or family member, a nurse, health care worker, social worker, or sexual assault/sexual abuse worker, who is not a potential witness.

A person with a disability or cognitive impairment may need specialised support during the medical and/or forensic examination.

There is no legal requirement for a police officer to be present during the medical examination or FME. However, if a victim requests the presence of police, the police officer is to be the same gender as the victim.

In the instance that a victim has made the decision to report to police, a police officer must be present to receive all evidence collected during the FME immediately after the procedure to maintain continuity of the evidence for any potential court proceeding.

Notifying the police

Where possible, the sexual assault/sexual abuse team worker or the health staff supporting the victim should discuss available reporting options with the victim. If the victim requests to speak to police, it is the role of the sexual assault/sexual abuse team worker or health staff to notify the police as soon as possible to ensure all evidence, including the crime scene, can be secured. Notification and initial reporting to police does not mean an investigation will automatically take place.

Commented [PD9]: Content to be reconsidered in the context of failure to report if the victim is a child

If the adult victim does not wish to make a formal complaint to police, they should be offered the option to complete the QPS Alternative Reporting Options (ARO) form, an on-line reporting process available at: https://www.police.qld.gov.au/programs/adultassault/altReportOpt.htm. A victim can also choose to undergo a Just in Case FME at a public hospital if they have yet to decide to make a formal complaint.

Where police are operating under time constraints, they should inform health staff. Working together to meet time constraints will directly impact the quality of the outcome for the victim.

Initial report to police

Police receiving a report of a sexual assault or sexual abuse will act on the information received. The police should inform the victim of relevant decisions made and where necessary, obtain the victim's informed consent. In certain cases police may choose not to seek the consent of a victim before pursuing an investigation or laying charges, for example, where the victim is a child or young person, or where police consider there is a serious risk to the life or wellbeing of a victim.

Police interviews with children and young people

The initial information obtained from a child is critical in the prosecution process and therefore, as best practice, only investigators who have completed ICARE training should interview children to ensure admissibility of the statement. ICARE trained investigators understand the process for eliciting the best evidence from children in an environment where the child is assured of their safety and not re-traumatised.

Support person during the police interview

Police should inform victims that they may be accompanied by a support person while their statement is being taken. However, the victim must be advised that:

- the support person may not participate in the interview
- the support person may not directly or indirectly influence the interview

DRAFT

- a potential witness may not act as a support person.

Reporting concerns

Sexual offences against Children – Criminal Code

Children need the adults around them to take action to protect them from sexual abuse. Previously only certain adults had legal obligations to report suspected harm to children (including suspected sexual abuse). The law has now been strengthened to increase protection of children from the risk of sexual abuse.

New laws that commenced on 5 July 2021 increase protection of children from the risk of sexual abuse by requiring that:

- all adults report sexual offending against children to the police unless they have a reasonable excuse
- adults in an institutional setting (e.g. a school, church or sporting club) protect children from the risk of a sexual offence being committed against them.

These offences target behaviour that ignores or hides the sexual abuse of children.

For these laws, *child* means a person under 16 or a person under 18 with an impairment of the mind.

Failure to report offence

The Royal Commission into Institutional Responses to Child Sexual Abuse (Royal Commission) found that failing to report child sexual abuse to appropriate authorities allowed it to continue and prevented children from accessing the support they needed.

The QPS and the DCYJMA act on reports of sexual offending against children. They are committed to making the community safer for children and ensuring that children and young people are safe from harm.

To do this vital work, these services need adults to report sexual offending against children.

In a number of their case studies, the Royal Commission heard of circumstances where abuse was not reported to police or where steps were not taken to protect children. Reporting a belief that sexual abuse against a child has occurred or is occurring allows police to investigate and respond to child sexual offences.

Under section 229BC of the Criminal Code all adults (18 years and over) are now required to report to the police a reasonable belief that a child is being or has been the victim of sexual abuse by another adult – unless they have a reasonable excuse.

This law enshrines the moral responsibility that all adults have to protect the children around them from child sexual abuse.

A reasonable belief is a belief that a reasonable person would form in the same position and with the same information. Whether a reasonable belief would be formed will always depend on the circumstances. For example, a reasonable belief could be formed if either:

- a child states that they have been sexually abused
- the child has signs of sexual abuse.

An adult with a reasonable belief that a child has experienced sexual abuse or is at risk of sexual abuse, must report it to the police—unless there is a reasonable excuse for not doing so.

A reasonable excuse includes if the adult:

- has already reported the offence to an appropriate authority (e.g. DCYJMA) or know another person has or will report it—for example, if they are
  - a nurse and have already reported it to DCYJMA

DRAFT

- a teacher and the school principal or another teacher has already reported the offence according to other laws (such as mandatory reporting requirements)
- believes the information has already been given to a police officer
- received information about the victim who is now an adult and they reasonably believe the victim does not want to reveal it to the police
- believes reporting the offence would endanger them or another person (other than the alleged offender) and that failure to give the information to police is reasonable.

However, a "reasonable excuse" is not defined exhaustively and may include other circumstances.

The new law specifies that information about a sexual offence against a child that has been gained during, or in connection with, a religious confession, must be reported to police. Despite the express provisions relating to religious confessions, the offence is not intended to override privilege, including legal professional privilege and sexual assault counselling privilege.

To report an offence, contact PoliceLink on 131 444.

If it's an emergency, phone Triple Zero (000).

Failure to protect

The laws also impose a legal duty on certain adults to protect children from sexual offending. Adults in responsible positions in institutions will have an obligation to protect children in their care from known significant risks of sexual abuse.

Under section 229BB of the Criminal Code it is an offence to fail to protect a child from a sexual offence in an institutional setting.

This law imposes a legal duty on certain adults to protect children from sexual offending. Adults in responsible positions in institutions will have an obligation to protect children in their care from known significant risks of sexual abuse.

If there is a significant risk that another adult associated with an institution will sexually abuse a child, it is not enough to wait until sexual offending occurs to inform the police. This legal duty to protect focusses on preventing sexual abuse of children.

The intention behind this law is to ensure individuals in institutions take proactive action to reduce or remove known risks to children. The law attaches a criminal penalty to wilful or negligent failures to do so.

More information about both offences can be found at: https://www.qld.gov.au/protectchildren.

Harm to child- *Child Protection Act 1999*

If individuals have any reason to suspect a child in Queensland is experiencing harm, or is at risk of experiencing harm or being neglected, they should contact DCYJMA and talk to someone about their concerns:

- During normal business hours – contact the Regional Intake Service.
- After hours and on weekends – contact the Child Safety After Hours Service Centre on 1800 177 135 or (07) 3235 9999.

Notifiers will be asked to provide information to help work out the best way to respond to the situation. It is important for notifiers to report concerns and provide as much detail as possible. Notifier details are kept confidential and their identity is strictly protected.

All government agencies and non-government organisations responding to children and young people should have policies and procedures in place for reporting suspected child abuse and neglect. ~~Where sexual abuse or assault is suspected, a notification to DCYJMA does not take the place of a police report.~~

DRAFT

The *Child Protection Act 1999* (CPA) requires certain professionals, referred to as 'mandatory reporters', to make a report to DCYJMA if they form a reasonable suspicion that a child has suffered, is suffering or is at an unacceptable risk of suffering significant harm caused by physical or sexual abuse, and may not have a parent able and willing to protect them.

Mandatory reporters should also report to DCYJMA a reasonable suspicion that a child is in need of protection caused by any other form of abuse or neglect.

Under the CPA, mandatory reporters are:

- teachers (approved teachers under the *Education (Queensland College of Teachers) Act 2005*, employed at a school)
- medical officers, doctors and registered nurses (employed in the public or private health sectors)
- police officers with child protection responsibilities
- a person performing a child advocate function under the *Public Guardian Act 2014*
- early childhood education and care professionals
- DCYJMA employees and employees of licensed care services.

DCYJMA will provide notifiers from government agencies and non-government organisations with feedback about the response to the child protection concerns reported. The notifier will be asked whether they require feedback at the time of the initial contact with the department. If the notifier requests feedback, DCYJMA will:

- provide information about the departmental response, the rationale for the decision and the likely timeframes for any departmental contact with the child or family
- provide the feedback either at the time of the initial contact by the notifier, if the departmental response is apparent, or by a follow up phone call, facsimile, email or letter, once the information has been screened and the departmental response has been determined.

For Queensland Health staff, Child Protection Liaison Officers and Child Protection Advisors are available during business hours for consultation when QH staff are formulating a reasonable suspicion of child abuse and neglect. After-hours it is possible for QH staff to contact the after-hours nurse manager, refer to the online Child Protection Guide, or contact Child Safety After Hours Service to discuss the case further.

If protection concerns are about an Aboriginal or Torres Strait Islander child or young person, an independent Aboriginal or Torres Strait Islander entity (independent person) may be involved. An independent person is someone the child or young person and their family chooses to support them in their communication with DCYJMA and to meaningfully participate in significant decisions that may have an impact on the child or young person.

It is important to note that where a report has been made to DCYJMA under mandatory reporting obligations, there is no need to make a duplicate report to police under the Criminal Code obligations to report a reasonable belief of child sexual abuse as you will have a reasonable excuse for not reporting.

Queensland Police Service and Child Safety joint investigations

If it is suspected that a child may be the victim of intra-familial sexual abuse, or it is suspected that there is no parent willing and able to protect the child, police and DCYJMA may initiate a joint investigation to work collaboratively, exchange relevant information and determine the best way forward to respond to the child's protective needs. This assists both agencies to undertake their

DRAFT

respective investigative responsibilities, and reduces the number of times the victim needs to share their story.

The QPS Operational Procedures Manual, Child Safety Practice Manual and Child Protection Joint Response Teams Operational Guidelines support the use of joint investigations for matters which will benefit from a joint agency response.

DRAFT

Section 7: Other issues for consideration

Access to sexual assault counselling records

Division 2A of the *Evidence Act 1977* (EA) provides protections for certain sexual assault counselling communications to significantly limit how and when they may be included in a court proceeding. Counselling Notes Protect is a free service provided by Legal Aid Queensland and Women's Legal Service to provide advice, assistance and representation to victims of sexual offences.

Care needs to be taken to ensure counselling communications embedded within Departmental and other records are correctly identified, and the victim provided with the opportunity to exercise the right to claim this privilege.

Discontinuance of police action before a proceeding has commenced

Where the victim does not wish to proceed with further police action, police should:

- make clear that following the withdrawal of the complaint, no further police action will be taken
- note the reasons for withdrawing as they may impact on the decision to provide financial assistance through Victim Assist Queensland
- attempt to obtain a signed withdrawal of complaint
- inform the adult victim (18 years and over) of the Alternative Reporting Option and online reporting option for sexual assault available at: https://www.police.qld.gov.au/units/victims-of-crime/support-for-victims-of-crime/adult-sexual-assault/alternative-reporting and https://forms.police.qld.gov.au/launch/SexualAssault.

If a proceeding has commenced, the victim's wishes will be taken into account when deciding if the matter will continue.

Commented [PD10]: QPS, we need advice from you regarding this statement as it is inconsistent with other statements above about investigations continuing even after the victim withdraws consent.

Commented [PD11]: VAQ – for further advice and confirmation that this should be included

Follow up and registration on the Victims Register

After the trial and/or sentence, the victim will have the opportunity to talk to the case lawyer about the outcome of the case and the sentence imposed, if any. This opportunity may arise immediately after the trial and/or sentence concludes or at a later time by telephone.

If the offender is imprisoned, either in custody or in the community, the victim may be eligible to register their details on the Victims Register which is administered by Queensland Corrective Services. A victim and/or their family or nominee can register to be kept informed about the offender's imprisonment, movement between locations, parole eligibility dates and certain other information in accordance with legislation. In most circumstances, victims will also be given the opportunity to make submissions to the parole board when offenders apply for parole.

Where the offender is a young person, the Victim Information Register may be utilised. This register is administered by Youth Justice within DCYJMA. A victim and/or their family or nominee can register to be kept informed about the young person's detention, movement between locations and supervised release dates.

If the offender appeals against their conviction and/or sentence, or the Attorney-General appeals against the leniency of the sentence, the victim will be kept informed by the ODPP about the progress and outcome of the appeal and any consequential matters arising from the appeal.

DRAFT

Appendices

Appendix 1: Glossary

Affected child	A child who is a witness in a relevant proceeding and who is not a defendant in the proceeding.
Gillick competence	Term used in medical law to decide whether a child (under 16 years of age) is able to consent to his or her own medical treatment, without the need for parental permission or knowledge.
Medical examination	A physical, psychiatric, psychological or dental examination, assessment or procedure and includes forensic examination and an examination or assessment carried out by a health practitioner.
Sexual Assault Investigation Kit (SAIK)	Commonly known as a 'Rape Kit'. This kit is used by specially trained doctors or nurses to collect 'forensic' evidence after a sexual assault including swabs of various body parts, blood and urine pathology results and notes by the examining doctor.
Special witness	a) a child under 16 years; or b) a person who, in the court's opinion – i. would, as a result of a mental, intellectual or ii. physical impairment or a relevant matter, be likely iii. to be disadvantaged as a witness; or iv. would be likely to suffer severe emotional trauma; or v. would be likely to be so intimidated as to be disadvantaged as a witness; if required to give evidence in accordance with the usual rules and practice of the court; or c) a person who is to give evidence about the commission of a serious criminal offence committed by a criminal organisation or a participant in a criminal organisation; or d) a person – i. against whom domestic violence has been or is alleged to have been committed by another person; and ii. who is to give evidence about the commission of an offence by the other person.
Trauma-informed	Trauma-informed services actively ensure they do not re-traumatise or blame victims for their efforts to manage their traumatic reactions. They recognise that trauma may be a factor for people in distress, that the impact of trauma may be lifelong, and that trauma can impact the person, their emotions and their relationships with others.

DRAFT

Appendix 2: Guidelines history

2001	*Response to sexual assault: Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault*
2014	*Response to sexual assault: Queensland Government Interagency Guidelines for Responding to People who have Experienced Sexual Assault (2nd Edition)*
2020	*Response to sexual assault and sexual abuse: Queensland Government interagency guidelines for responding to children, young people and adults who have experienced sexual assault or child~~hood~~ sexual abuse*

DRAFT

Appendix 3: Process for updating the Guidelines

Should a decision be made by Government or by a majority of members of the Working Group that a full review and update of the Guidelines is required, this will be undertaken in collaboration with all agencies. Approval of the revised Guidelines is required by all responsible Directors-General (or equivalent) before they may be finalised and released for use.

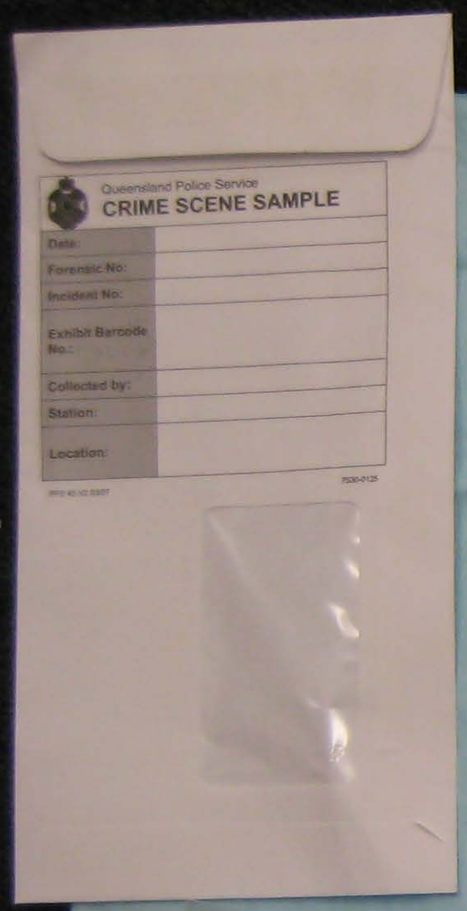
Should minor amendments to the Guidelines be required to update details, for example:

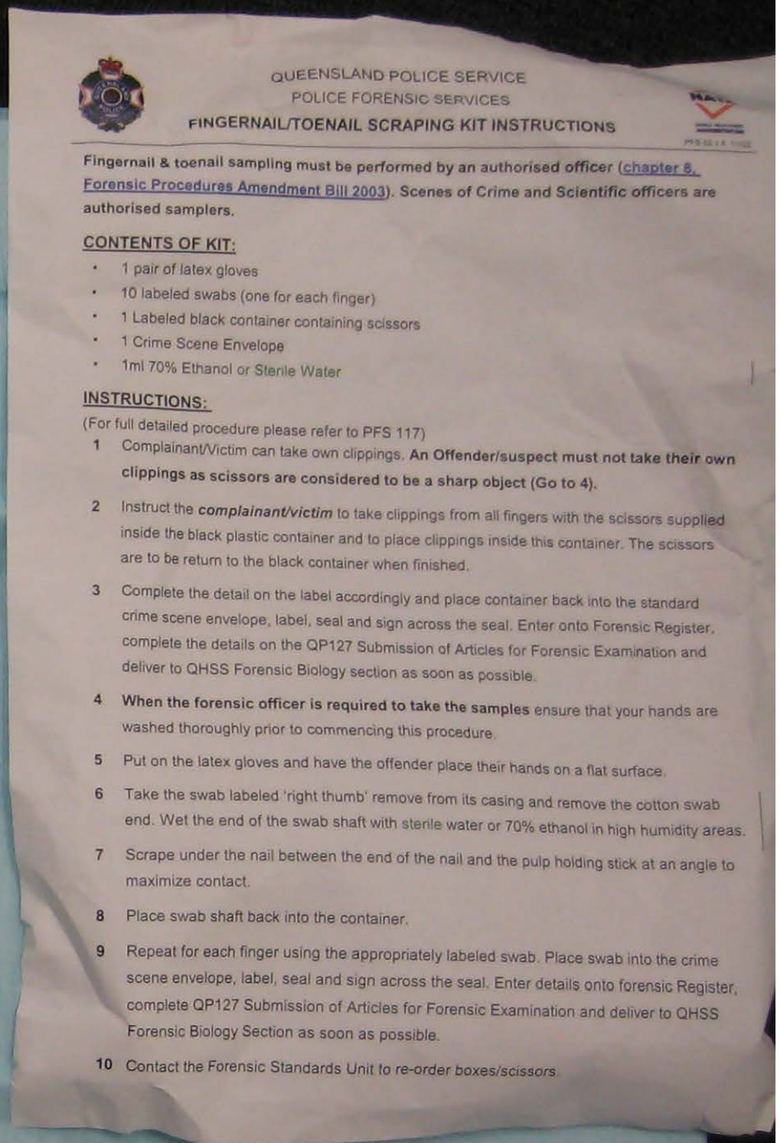
- the name or responsibilities of agencies signatory to the Guidelines or other agencies
- updates to legislation (either wholly or in part)
- updates to policies, practice guides or websites

these may occur with the approval of the relevant Director-General or Directors-General, following approval of the amendments by the Working Group. In these cases, a full review and approval by all Directors-General who are signatory to the Guidelines is not required.

If a technical update to the Guidelines is required, please contact Office for Women and Violence Prevention, DJAG at xxx@justice.qld.gov.au.

DRAFT





QUEENSLAND POLICE SERVICE
POLICE FORENSIC SERVICES

FINGERNAIL/TOENAIL SCRAPING KIT INSTRUCTIONS

Fingernail & toenail sampling must be performed by an authorised officer (chapter 8, Forensic Procedures Amendment Bill 2003). Scenes of Crime and Scientific officers are authorised samplers.

CONTENTS OF KIT:

- 1 pair of latex gloves
- 10 labeled swabs (one for each finger)
- 1 Labeled black container containing scissors
- 1 Crime Scene Envelope
- 1ml 70% Ethanol or Sterile Water

INSTRUCTIONS:

(For full detailed procedure please refer to PFS 117)

1. Complainant/Victim can take own clippings. **An Offender/suspect must not take their own clippings as scissors are considered to be a sharp object (Go to 4).**
2. Instruct the ***complainant/victim*** to take clippings from all fingers with the scissors supplied inside the black plastic container and to place clippings inside this container. The scissors are to be return to the black container when finished.
3. Complete the detail on the label accordingly and place container back into the standard crime scene envelope, label, seal and sign across the seal. Enter onto Forensic Register, complete the details on the QP127 Submission of Articles for Forensic Examination and deliver to QHSS Forensic Biology section as soon as possible.
4. **When the forensic officer is required to take the samples** ensure that your hands are washed thoroughly prior to commencing this procedure.
5. Put on the latex gloves and have the offender place their hands on a flat surface.
6. Take the swab labeled 'right thumb' remove from its casing and remove the cotton swab end. Wet the end of the swab shaft with sterile water or 70% ethanol in high humidity areas.
7. Scrape under the nail between the end of the nail and the pulp holding stick at an angle to maximize contact.
8. Place swab shaft back into the container.
9. Repeat for each finger using the appropriately labeled swab. Place swab into the crime scene envelope, label, seal and sign across the seal. Enter details onto forensic Register, complete QP127 Submission of Articles for Forensic Examination and deliver to QHSS Forensic Biology Section as soon as possible.
10. Contact the Forensic Standards Unit to re-order boxes/scissors.

WIT.0043.0074.0001

WIT.0043.0075.06

WIT.0043.0076.0001

AS ISO 18385:2017
ISO 18385:2016

AS ISO 18385:2017

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

Australian
STANDARD

Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes—Requirements

STANDARDS
Australia

This Australian Standard® was prepared by Committee CH-041, Forensic Analysis. It was approved on behalf of the Council of Standards Australia on 1 February 2017.
This Standard was published on 24 February 2017.

The following are represented on Committee CH-041:

- Australian and New Zealand Policing Advisory Agency
- Australian Association of Forensic Physicians
- Australian Federal Police
- National Association of Testing Authorities Australia
- National Council of the Australian and New Zealand Forensic Science Society
- NSW Police Force
- Queensland Police Service
- Victorian Institute of Forensic Medicine
- WA Forensic Science Laboratory
- Western Australia Police
- Western Sydney University

This Standard was issued in draft form for comment as DR AS ISO 18385:2016.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

WIT.0043.0076.0003

AS ISO 18385:2017

Australian Standard®

Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes—Requirements

Originated as AS 5483—2012.
Revised and redesignated as AS ISO 18385:2017.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 676 7

WIT.0043.0076.0004

PREFACE

This Standard was prepared by the Standards Australia Committee CH-041, Forensic Analysis, to supersede AS 5483—2012, *Minimizing the risk of contamination in products used to collect and analyse biological material for forensic DNA purposes*, three years from the publication of this Standard. For this period, either Standard may be used. At the end of three years, it is anticipated that AS 5483—2012 will be withdrawn.

The objective of this Standard is to specify requirements for the production of products used in the collection, storage and analysis of biological material for forensic DNA purposes, but not those consumables and reagents used in post-amplification analysis.

This Standard is identical with, and has been reproduced from ISO 18385:2016, *Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes—Requirements*.

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text 'this International Standard' should read 'this Australian Standard'.

(b) A full point substitutes for a comma when referring to a decimal marker.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

WIT.0043.0076.0005

CONTENTS

1 Scope ... **1**

2 Terms and definitions ... **2**

3 Abbreviated terms ... **5**

4 Types of products ... **5**
- 4.1 General ... 5
- 4.2 Products that come into direct contact with biological stains or material potentially containing human DNA ... 5
- 4.3 Chemicals, reagents, solvents, and some disposables involved in the analysis of human DNA ... 6
- 4.4 Protective barrier products that are used during the collection and analysis of biological material ... 6

5 Quality management systems ... **6**
- 5.1 General ... 6
- 5.2 Documents and records ... 6
- 5.3 Authorization ... 7
- 5.4 Subcontracting of work and purchase of components ... 7
- 5.5 Control of nonconforming product ... 7
- 5.6 Corrective and preventive action ... 8
- 5.7 Staff contamination detection provision ... 8

6 Human DNA contamination risk management ... **8**
- 6.1 General ... 8
- 6.2 Risk assessment ... 8
- 6.3 Risk mitigation ... 10
- 6.4 Risk control measures ... 10
  - 6.4.1 Equipment ... 10
  - 6.4.2 Personnel ... 10
  - 6.4.3 Cleaning and maintenance ... 10

7 Environmental human DNA monitoring ... **11**

8 Requirements for products subject to post-production treatment ... **11**

9 Requirements for products not subject to post-production treatment ... **12**
- 9.1 Product testing ... 12
- 9.2 Batch records ... 12

10 Product packaging, labelling, and documentation ... **12**

Annex A (normative) **Compliance testing** ... **13**

Annex B (informative) **Guidance on the effectiveness of post-production treatments currently used in the manufacture of products** ... **15**

Annex C (informative) **Relevant markers for DNA profiling** ... **17**

Bibliography ... **18**

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

WIT.0043.0076.0006

INTRODUCTION

This International Standard was produced with the aim to create global standards for manufacturers of forensic products used in human DNA analysis. Inadvertent contamination by manufacturers of consumables and reagents, when combined with the improved sensitivity of DNA testing methods, increasingly interferes with forensic analysis.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

WIT.0043.0076.0007

AUSTRALIAN STANDARD

Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes—Requirements

WARNING — This International Standard calls for the use of procedures that may be a health hazard or cause injury if adequate precautions are not taken.

1 Scope

This International Standard specifies requirements for the production of products used in the collection, storage, and analysis of biological material for forensic DNA purposes, but not those consumables and reagents used in post-amplification analysis.

The consumables and reagents covered by this International Standard include those used for evidence collection (sampling kits), such as swabs, containers, and packaging, and also products used in the analysis of DNA samples, such as tubes and other plasticware, disposable laboratory coats, gloves, and other consumables.

This International Standard applies to the production of consumables and reagents which do not require cleaning for continued use. This International Standard does not cover technical product specifications (i.e. product design).

This International Standard excludes microbiological testing.

This International Standard specifies a requirement for manufacturers to minimize the risk of occurrence of detectable human nuclear DNA contamination in products used by the global forensic community.

An overview of the International Standard is provided in Figure 1.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0008

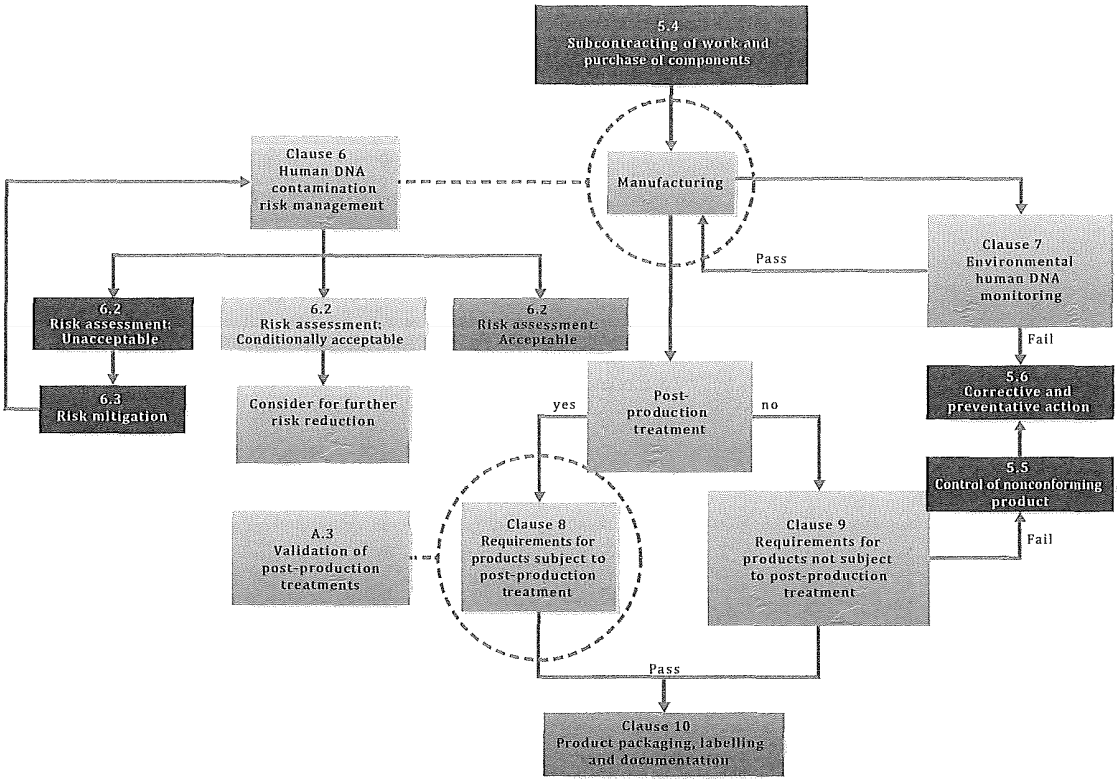


Figure 1 — Overview of the processes covered by this International Standard

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
allele
one of a number of alternatives at a specific location on an individual's DNA

2.2
amplification
process of copying segments of the DNA sequence exponentially

Note 1 to entry: This is also called Polymerase Chain Reaction (PCR).

2.3
amplification negative control
sample with no DNA material used to verify that the *amplification* (2.2) is free of *contamination* (2.7)

2.4
amplification positive control
sample with known DNA material used to verify that the *amplification* (2.2) works

2.5
analytical threshold
relative fluorescence unit value at which a laboratory has determined to call a peak an *allele* (2.1)

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0009

2.6
batch release test
test performed by or on behalf of the *manufacturer* (2.15) on a batch of components, which has to be satisfactorily completed before the batch can be released

[SOURCE: ISO/TS 21003-7:2008, 3.1.9]

2.7
contamination
introduction of detectable nuclear DNA or human cellular material during the manufacturing or assembly processes that would compromise the forensic human DNA analysis

2.8
contamination detection limit
value at or above which human DNA is deemed to be 'detected' and below which the compound is deemed to be 'not detected'

2.9
DNA reduction factor
ratio of the DNA quantity of an untreated cell-spiked sample to the DNA quantity of an identical cell-spiked sample that has undergone appropriate post-production treatment

2.10
eluate
solution resulting from the DNA extraction process

2.11
extraction negative control
sample with no cellular or DNA material used to verify that the DNA extraction is free of *contamination* (2.7)

2.12
extraction positive control
sample with known cellular or DNA material used to verify that a DNA extraction works

2.13
ISO 18385 forensic DNA grade
label given to products that have been produced in accordance with this International Standard

2.14
kit
set of consumables and/or chemicals (or reagents), and instructions for use, packaged together and intended for use as specified by the *manufacturer* (2.15)

2.15
manufacturer
organization that produces and/or packages the product

2.16
manufacturing environment
area, room, or space identified for the production and/or packaging of products used to collect and analyze biological materials

2.17
out-of-specification
test results that do not comply with the product specification

2.18
person reference sample
biological material taken from a known source with the purpose of creating a DNA profile for comparison

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0010

2.19
post-production treatment
contamination (2.7) reduction treatment conducted after *primary packaging* (2.20) to ensure that any human DNA contaminants above the *contamination detection limit* (2.8) are physically destroyed or not accessible to DNA *amplification* (2.2)

2.20
primary packaging
packaging designed to come into direct contact with the product

[SOURCE: ISO 21067:2007, 2.2.2]

2.21
primary transport container
product designed to transport the sample

EXAMPLE Envelopes, evidence bags, specimen jars, swab boxes, and collection devices with integrated transport mechanisms.

2.22
product
consumables and reagents which do not require cleaning for continued use and are used to collect, store, and analyze biological material for forensic purposes, but not used in post-amplification analysis

2.23
production
process or method for the manufacture of products

2.24
sample
portion of biological material or collected item, on which the test or analysis is carried out

2.25
validation
confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled

Note 1 to entry: The term "validated" is used to designate the corresponding status.

Note 2 to entry: The use conditions for validation can be real or simulated.

[SOURCE: ISO 9000:2015, 3.8.13]

2.26
verification
confirmation, through the provision of objective evidence, that specified requirements have been fulfilled

Note 1 to entry: The term "verified" is used to designate the corresponding status.

Note 2 to entry: Confirmation can comprise activities such as

— performing alternative calculations,

— comparing a new design specification with a similar proven design specification,

— undertaking tests and demonstrations, and

— reviewing documents prior to issue.

[SOURCE: ISO 9000:2015, 3.8.12]

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0011

3 Abbreviated terms

bp	Base pair
DNA	Deoxyribonucleic acid
EO	Ethylene oxide
HEPA	High efficiency particulate air
PCR	Polymerase chain reaction
QA	Quality assurance
qPCR	Quantitative PCR
STR	Short tandem repeat

4 Types of products

4.1 General

For the purposes of this International Standard, the products used in the collection, storage, and analysis of biological material for forensic DNA purposes are as outlined below. These products include, but are not limited to, the examples listed in 4.2, 4.3, and 4.4.

4.2 Products that come into direct contact with biological stains or material potentially containing human DNA

These products are considered to be high risk because the contaminating biological material or DNA is likely to be transferred. As a result, they should undergo post-production treatment provided it does not damage the product.

These products include, but are not limited to, the following examples:

a) gloves;

b) paper substrates onto which samples are deposited from persons;

c) plate seals/covers/strips;

d) plates;

e) primary transport container;

f) sampling kits;

g) spin baskets;

h) swabs;

i) tapes for sample recovery;

j) tips;

k) tubes.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0012

4.3 Chemicals, reagents, solvents, and some disposables involved in the analysis of human DNA

These products are considered high risk because contaminating biological material or DNA is likely to generate a profile. If post-production treatment is not possible and batch release testing is unlikely to detect contamination due to the heterogeneous nature of the material, the stringency of anti-contamination measures adopted during manufacture shall be considered during the risk assessment as outlined in Clauses 6 and 7.

These products include, but are not limited to, the following examples:

a) DNA extraction kits;

b) DNA microconcentrators;

c) PCR amplification kits;

d) other chemicals and reagents used to identify, recover, and analyze biological material.

4.4 Protective barrier products that are used during the collection and analysis of biological material

These products are not specifically designed to come in contact with biological material and are generally protective barriers used to prevent contamination by forensic examiners.

These include, but are not limited to, the following protective clothing:

a) facial hair covers;

b) hairnets;

c) lab coats;

d) masks;

e) scene suits;

f) shoe covers;

g) sleeve guards.

5 Quality management systems

5.1 General

A documented quality management system shall be in place. The quality management system shall comply with a relevant quality-based standard.

NOTE ISO 9001 is an example of a relevant quality-based standard.

5.2 Documents and records

Documented procedures shall be established and maintained for the manufacture of products relevant to this International Standard, and for the creation and monitoring of the manufacturing environments. If applicable, documented procedures shall also define the post-production treatment and testing, and where required, any corrective actions. These documents shall be version controlled and have specific effective dates.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0013

Records of the products shall include details that allow traceability to their component materials and shall include the control numbers that allow the identification of the date of production and the associated manufacturing location.

Documents and records required by this International Standard shall be maintained for a minimum of five years.

NOTE Five years has been nominated as most critical consumables would have expiry dates within this period. Legislation requirements in some countries can require longer periods. Consumers of these products can choose to include details for longer document retention periods in tender documents.

5.3 Authorization

The responsibilities and authority for implementing, performing, and monitoring the procedures and requirements described in this International Standard shall be specified and documented.

5.4 Subcontracting of work and purchase of components

The manufacturer shall evaluate and select suppliers and sub-contractors based on their ability to supply product in accordance with the manufacturers' requirements that assist the manufacturer in meeting this International Standard. Criteria for selection, evaluation, and re-evaluation shall be established. Records of the results of evaluations and any necessary actions arising from the evaluation shall be maintained.

The manufacturer shall retain responsibility for all components of their products.

5.5 Control of nonconforming product

The manufacturer shall ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. A documented procedure shall be established to define the controls for dealing with nonconforming product.

Where applicable, the manufacturer shall deal with nonconforming product by one or more of the following ways:

a) by taking action to eliminate the detected nonconformity;

b) by authorizing its use, release, or acceptance under concession by a relevant authority and, where applicable, by the customer;

c) by taking action to preclude its original intended use or application;

d) by taking action appropriate to the effects, or potential effects, of the nonconformity when nonconforming product is detected after delivery or use has started.

When nonconforming product is corrected, it shall be subject to re-verification to demonstrate conformity to the requirements.

Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained, shall be maintained.

Manufacturers shall establish procedures to notify customers who purchased released products subsequently found to have failed the product specifications or where the quality of the product has been impacted.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0014

5.6 Corrective and preventive action

Documented procedures shall be established to investigate quality issues identified through environmental monitoring (see Clause 7), batch release testing (see Clause 9), or customer complaints relating to product contamination. This shall include recording the following:

— nature and extent of the issue;

— investigation to determine the root cause of the issue;

— corrective and preventive action taken;

— review of the effectiveness of the corrective action.

5.7 Staff contamination detection provision

Manufacturers shall document and implement a policy for the collection of relevant voluntary reference samples from personnel involved in the production of products.

NOTE 1 Refer to legislative or regulatory restrictions or preclusion in your jurisdiction regarding the collection of voluntary reference samples from staff.

A voluntary reference sample should be collected, with written permission, from personnel who have the potential to introduce DNA into the product. Personnel included in the staff contamination detection system should be determined based on risk. If a sample is provided, a relevant DNA profile (see Annex C) shall be generated and recorded for quality assurance purposes. Information on the staff contamination detection system shall be documented.

NOTE 2 Humans are constantly shedding DNA and the inadvertent contamination of product is a constant and unavoidable risk regardless of control measures implemented. When staff contamination of a product occurs, it can lead them to being erroneously linked by police to a crime or a series of crimes. A staff contamination detection system is used to detect the occurrence of contamination and protect against an erroneous linkage.

NOTE 3 The International Commission on Missing Persons provides a secure platform as a repository for DNA profiles of employees of manufacturing companies (www.ic-mp.org).

6 Human DNA contamination risk management

6.1 General

Risk management occurs across the product lifecycle. For the purposes of this International Standard, the scope of risk management is limited to risks that can introduce human DNA contamination into products used to collect, store, and analyze biological material for forensic purposes. The manufacturer shall establish, document, and maintain an on-going process for identifying, estimating, and evaluating the risks (see 6.2), controlling these risks (see 6.3 and 6.4), and monitoring the effectiveness of controls (see Clauses 7 and 9). The manufacturer shall collect and periodically review relevant product and process information (e.g. analysis of data, customer complaints, and corrective and preventive actions) to evaluate if any previously unrecognized risks are present or if a previously identified risk is no longer acceptable. If either of these occurs, the impact on previously implemented risk assessment and control measures shall be evaluated and the risk control measures updated as necessary. The results of the periodic reviews shall be recorded.

6.2 Risk assessment

The manufacturer shall perform and maintain a documented risk assessment evaluating identified risks for the probability of a potential human DNA contamination event occurring and the severity of that event if it were to occur. The risk assessment shall cover all stages of the manufacturing process for products listed in Clause 4.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0015

Underlying assumptions and results of the risk assessment should be supported by corresponding data, quality control history, information, and/or research. When assessing the risk of a contamination event, the decision making process shall take into account the product's intended use and the ability of the manufacturer to detect the contaminant. Other factors influencing the risk event such as existing contamination controls should also be taken into account. These other factors include, but are not limited to, the following:

a) product protection (e.g. handling of open, primary packed or secondary packed product);

b) human product interaction (e.g. manual handling, semi-automated or fully automated process);

NOTE 1 Consideration can be given to the areas where there is a high risk of human DNA transfer or accumulation to the product, for example, a bench top where items are assembled or there is a high level of human-to-product interface.

c) personnel gowning (e.g. clothes, shoes, hairnet, mask, gloves, sleeve guards);

d) design of manufacturing environment (e.g. housing, cabinets, laminar airflow units);

e) design of room (e.g. floor, wall and ceiling surfaces, ventilation, HEPA filtration, positive air pressure, cleanroom);

f) design of workflow (e.g. unidirectional workflow, frequency of product batch production, other products produced in the same environment);

g) secondary contamination risk (e.g. contamination of equipment, secondary contamination of gloves, glove change rules);

h) personnel training (e.g. training in contamination prevention techniques);

i) room access (e.g. limited access to authorized and trained personnel);

j) cleaning regime (e.g. cleaning procedures, targeted surfaces, and frequency);

NOTE 2 Dust can be one of numerous significant contamination sources of human DNA.

k) staff and equipment changes;

l) the type of products (e.g. products that come into direct contact with biological stains or material potentially containing human DNA (see 4.2);

m) post-production treatment (e.g. EO treatment after production step);

n) systematic or sporadic contamination (e.g. bulk material or piece goods);

o) inspection and sampling plan for quality testing, including

— criteria for product acceptance, and

— sensitivity of applied DNA detection method.

NOTE 3 Final product testing cannot provide a high level of assurance of absence of DNA, where contamination is sporadic. If DNA contamination is extensive and homogeneous, product/component testing can identify DNA contamination if sensitive test methods are used.

The manufacturer shall have a documented procedure for determining risk acceptability. Each risk is evaluated for acceptability based on that procedure. Contamination risks are classified as acceptable (negligible risks), conditionally acceptable (minor risks), or unacceptable (significant risks), based on the manufacturer's documented risk acceptability criteria.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0016

6.3 Risk mitigation

Unacceptable contamination risks shall be eliminated or reduced by implementation of additional contamination prevention measures such as those listed in 6.2 a) to o).

Conditionally, acceptable risks should be considered for further risk reduction. If the risk cannot be reduced further, a conditionally acceptable risk is considered acceptable.

If the risk classification is conditionally acceptable or unacceptable, the following risk reduction measures shall be considered, if they are not already in place:

a) personnel gowning including appropriate clothes, shoes, hairnet, mask, gloves, sleeve guards;

b) in areas of open product handling:

— unidirectional workflow;

— HEPA filters over air inlets;

— positive air pressure;

c) laminar airflow units where technically feasible.

6.4 Risk control measures

6.4.1 Equipment

All equipment in direct contact with or that might contaminate the product shall be identified and recorded.

To minimize the risk of contamination, the production processes should be automated where technically and financially feasible.

6.4.2 Personnel

Access to the manufacturing environment shall be restricted. All authorized personnel entering the manufacturing environment shall be provided with appropriate training regarding DNA contamination risk reduction techniques. All training shall be documented.

6.4.3 Cleaning and maintenance

A cleaning schedule shall be established based on risk. The schedule shall take into account the environment and production conducted, and target surfaces and areas for potential human contamination. The cleaning procedure shall be appropriate and effective, documented and shall include a procedure for decontamination of surfaces and areas contaminated with human biological material. Records shall be maintained to demonstrate that appropriate cleaning has been undertaken in accordance with the established schedule.

NOTE As part of the demonstration of appropriateness and effectiveness of a cleaning regime, the manufacturer can use decontaminants and decontamination procedures that have been proven by others to be effective against the substances which would constitute contamination. The initial research data can be included as part of the manufacturer/assembler's documentation.

The documented procedure shall include any requirements for protective clothing to be worn by personnel undertaking maintenance in the manufacturing environment. In addition, any requirements for the cleaning of the equipment or environment following any maintenance shall be documented in the procedure. Records shall be maintained to demonstrate that appropriate cleaning was undertaken in accordance with the documented procedure.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0017

7 Environmental human DNA monitoring

The determination of the need for environmental monitoring and where in the process it is required should be based on risk (see 6.2).

Where required, environmental monitoring shall be performed according to an approved and documented policy and procedure.

The procedure for monitoring shall include locations tested, number of samples per location tested, test method, detection limits, and should also include acceptance levels and testing intervals (in accordance with Annex A). Monitoring shall also be conducted following any clean-up procedure pursuant to any known human DNA contamination events.

All monitoring tests and results shall be documented and the records retained to identify any systemic issues. Data from the monitoring of the environment shall be trended regularly and used as an input into the risk management process. Environmental monitoring warning and action levels shall be determined based on risk and reviewed based on trending data.

A procedure regarding measures that shall be taken with batches of products produced in an environment that has failed the QA monitoring (i.e. DNA contamination is detected) shall be developed and documented.

If the pass parameter is not met, the appropriate action shall then be taken as per documented procedure.

8 Requirements for products subject to post-production treatment

Post-production treatment should be conducted on the products listed under 4.2, so long as the products are not damaged and it does not affect the product specifications. Post-production treatment may be considered for items listed in 4.3 and 4.4. If no post-production treatment is performed or the criteria in Clause 8 cannot be met, then Clause 9 shall apply.

NOTE 1 A method can impact chemical and physical properties of treated products which might interfere with downstream applications (e.g. effects on stability and integrity of purified DNA).

NOTE 2 An example of a product damaged by EO post-production treatment are products containing desiccant.

Safety considerations need to also be addressed when using any post-production treatments, e.g. removal of EO residuals to a safe level.

Post-production methods shall be effective, for guidance see Annex B.

Validation of post-production treatments shall demonstrate that the treatment is effective at reducing amplifiable human DNA contamination using cell spiked samples resulting in a DNA reduction factor of at least 1 000 (see Annex A) and does not introduce interference or negatively impact the performance of products, and that products are safe for human contact.

It is recognized that some components of products may be adversely affected by post-production treatment. Therefore, in these cases, it may only be appropriate to treat individual components of the product.

Manufacturers shall monitor and record compliance with the documented post-production treatment process.

A verification process shall be conducted of the post-production treatment. The frequency shall be determined based on risk. Revalidation should be performed if necessary (e.g. equipment change or material modification).

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0018

9 Requirements for products not subject to post-production treatment

9.1 Product testing

Manufacturers shall establish batch release testing that includes testing of the product for the presence of detectable human DNA using current forensic methods (see Annex A). Manufacturers shall develop a batch testing plan and procedure based on risk.

The test method used shall be validated and be sensitive enough to demonstrate conformity to this International Standard (see Annex A).

NOTE ISO/IEC 17025 and ISO 15189 provide guidance in the validation of test methods.

9.2 Batch records

The following information shall be recorded:

a) a lot or batch number;

b) a description of the quality test conducted;

c) limit of detection and/or acceptance criteria for the characteristics tested for;

d) results of the quality tests.

In the case of any out-of-specification result, the nature of the issue, any subsequent actions taken, and justification for what if any additional testing was performed and, if appropriate, how the product was determined to be conforming shall be documented (see 5.5 and 5.6).

10 Product packaging, labelling, and documentation

Products shall be packaged in a manner that maintains their integrity in reference to the requirements within this International Standard.

Manufacturers shall clearly identify when their products have been produced in accordance with this International Standard.

NOTE 1 An example of product identification/labelling can be "ISO 18385 Forensic DNA Grade".

NOTE 2 The ISO 18385 forensic DNA grade label is given to products that have been produced in accordance with this International Standard.

The manufacturer should also indicate any method of post-production treatment used.

A product that includes multiple components shall be labelled so as to be clear which components adhere to this International Standard.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0019

Annex A
(normative)

Compliance testing

A.1 General

The goal of compliance testing is to show the absence of amplifiable human nuclear DNA fragments that are of sufficient size and/or quantity to interfere with current forensic DNA analysis methods.

Test methods shall include extraction positive and negative controls as well as amplification positive and negative controls where appropriate.

Details of the methods and DNA analysis kits used may be obtained from the relevant forensic laboratories and the manufacturers of the kits.

A.2 Test procedures for environmental monitoring

The areas sampled for environmental monitoring should be swabbed with slightly moistened cotton swabs or equivalent sampling material (e.g. adhesive tape). The size and location of the sampling area of the equipment and/or production surface shall be documented and be appropriate for the item being tested.

It is recommended that each sampling area be 10 cm × 10 cm where possible.

The extraction method used shall be appropriate for samples containing low levels of DNA. The amount of total extracted DNA shall be analyzed using an appropriate real time qPCR test that can detect human DNA or other comparable tests.

The test procedure used shall be validated and be appropriate to demonstrate conformity to this International Standard. All tests shall be conducted by trained and competent personnel and training records maintained.

The results of tests shall be recorded and as a minimum include the following:

a) date testing performed;

b) test sample locations;

c) testing equipment and methods;

d) details to identify the testing laboratory (whether in-house or external);

e) analytical controls;

f) testing results (including pass/fail).

A.3 Validation of post-production treatments

This process shall include samples spiked with the same known quantity of human cellular material, such as cultured cells or white blood cells, in a sufficient quantity to extract human DNA from treated versus untreated samples and quantitate the DNA by qPCR, or a comparable quantitative method of equivalent or better sensitivity, to demonstrate the required DNA reduction-factor of 1 000.

NOTE 1 10 000 cells is a sufficient quantity and is approximately 67 ng of DNA.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0020

Details about types of samples, analysis conditions and interpretation of results shall be recorded and maintained.

NOTE 2 The analysis of samples by qPCR can be established in-house or is available from commercial suppliers such as forensic laboratories and paternity testing laboratories.

A.4 Product testing

A.4.1 Testing of amplification kits

Amplification kits shall be tested to show absence of amplifiable human DNA within the reagents. qPCR quantification kits and STR PCR kits shall be tested using samples containing no template DNA and conducted according to manufacturer recommendations as a minimum.

For qPCR quantification kits, a result above the limit of detection of the assay shall be considered a fail.

For STR PCR kits, a result shall be determined by replicate testing. If 2 of 4 replicates (or equivalent) display 1 or more alleles over the analytical threshold within a read region, it is considered a fail.

A.4.2 Testing of DNA extraction kits

For DNA extraction kits, extraction negative controls shall be tested in accordance with A.4.3.

A.4.3 Testing of other products

Appropriate samples shall be tested. The identified sample (e.g. complete swab tip) shall be used in the DNA extraction method where applicable. The extraction method used should be appropriate for samples containing low levels of DNA. The input volume of eluate should be optimized to maximize sensitivity.

NOTE A suitable volume of eluate is 25 µl to 100 µl.

For the purposes of product testing, one of the following methods shall be used.

a) A DNA analysis kit containing 14 or more relevant STR markers (see Annex C) and conducted according to manufacturer recommendations as a minimum.

   If 2 or more allele/peaks appear above the analytical threshold in the read region, further investigation should be undertaken to determine if it is the result of contamination (e.g. replicate or qPCR testing). A result shall be considered a fail if more than 4 allele/peaks appear over the analytical threshold within the read region.

b) A qPCR system with a limit of detection of at least 0,5 pg/µl, using human inclusive primers, shall be used. A result should be determined by replicate testing. A result equivalent to a concentration of 50 pg or more in an elution volume of 100 µl shall be considered a fail.

c) Or other tests where equivalent or better sensitivity is demonstrated.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0021

Annex B
(informative)

Guidance on the effectiveness of post-production treatments currently used in the manufacture of products

B.1 General

Each manufacturer needs to determine the effectiveness, suitability, and safety for the post-production treatment of their products. All methods can have an impact on chemical and physical properties of treated products which might interfere with downstream applications. Table B.1 provides information on commonly available treatments.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0022

Table B.1 — Suitability for DNA reduction for commonly available post-production treatments

Method	Description	Suitability for DNA reduction	Literature
Electron beam	High-energy electrons from accelerators, products have to pass the electron beam for efficient sterilisation; either direct damaging effect on DNA or produce intracellular radicals that lead to microbial kill	Only the amplification of larger targets are affected, therefore not useful for the treatment of forensic consumables	[30],[32],[37],[39]
Ethylene oxide	Highly reactive cyclic ether; mechanism is alkylation of the amine groups of DNA causing mutations and strand breaks; direct effect on DNA in vitro and in vivo, therefore possible prevention of amplification in a PCR reaction	Effective decrease of the amount of PCR-amplifiable DNA, therefore suitable for the treatment of forensic consumables	[30],[33],[34],[36],[37],[39]
Gamma irradiation	Generated from radioactive decay of a cobalt-60 source; emitted gamma photons have a large penetration capacity, allowing for batch sterilisation; either direct damaging effect on DNA or produce intracellular radicals that lead to microbial kill	Only minor effects on cell-associated DNA, therefore not useful for the treatment of forensic consumables	[30],[31],[37],[39]
Heat/steam sterilization	Denaturation of enzymes and structural proteins, oxidation of cell constituents	Effective decrease of the amount of PCR-amplifiable DNA only with extended autoclaving procedures. Therefore partially suitable for the treatment of forensic consumables	[38]
Hydrogen peroxide gas	Dispersion of hydrogen peroxide solution, oxidizes key cellular components, which inactivate microorganisms.	Effectiveness unknown	
Hydrogen peroxide plasma	Dispersion of hydrogen peroxide solution in vacuum chamber, creating plasma cloud, oxidizes key cellular components, which inactivate microorganisms.	Effectiveness unknown	[35]
UV-light	Optimum wavelength 260 nm; effect on DNA (dimerization of pyrimidines, which prevent elongation during PCR)	Poor penetrability, therefore very limited suitability for the treatment of forensic consumables	[37],[39]

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0023

Annex C
(informative)

Relevant markers for DNA profiling

The DNA markers relevant for comparison differ slightly in different regions around the world and between countries. The list below shows examples of the markers generally used in forensic DNA analysis. A relevant DNA profile would consist of 14 of the following markers:

— CSF1PO;

— D1S1656;

— D2S1338;

— D2S441;

— D3S1358;

— D5S818;

— D7S820;

— D8S1179;

— D10S1248;

— D12S391;

— D13S317;

— D16S539;

— D18S51;

— D19S433;

— D21S11;

— D22S1045;

— FGA;

— SE33

— TH01;

— TPOX ;

— vWA.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0024

Bibliography

[1] ISO 3696, *Water for analytical laboratory use — Specification and test methods*

[2] ISO 9001, *Quality management systems — Requirements*

[3] ISO 10993, *Biological evaluation of medical devices*

[4] ISO 10993-7, *Biological evaluation of medical devices — Part 7: Ethylene oxide sterilization residuals*

[5] ISO 11135, *Sterilization of health-care products — Ethylene oxide — Requirements for the development, validation and routine control of a sterilization process for medical devices*

[6] ISO 11137,[1] *Sterilization of health care products — Requirements for validation and routine control — Radiation sterilization*

[7] ISO 11137-2, *Sterilization of health care products — Radiation — Part 2: Establishing the sterilization dose*

[8] ISO 13485, *Medical devices — Quality management systems — Requirements for regulatory purposes*

[9] ISO 14644, *Cleanrooms and associated controlled environments*

[10] ISO 14644-1, *Cleanrooms and associated controlled environments — Part 1: Classification of air cleanliness*

[11] ISO 14644-2, *Cleanrooms and associated controlled environments — Part 2: Specifications for testing and monitoring to prove continued compliance with ISO 14644-1*

[12] ISO 14644-4, *Cleanrooms and associated controlled environments — Part 4: Design, construction and start-up*

[13] ISO 14644-5, *Cleanrooms and associated controlled environments — Part 5: Operations*

[14] ISO 14644-7, *Cleanrooms and associated controlled environments — Part 7: Separative devices (clean air hoods, gloveboxes, isolators and mini-environments)*

[15] ISO 14644-8, *Cleanrooms and associated controlled environments — Part 8: Classification of air cleanliness by chemical concentration (ACC)*

[16] ISO 14698, *Cleanrooms and associated controlled environments — Biocontamination control*

[17] ISO 14937, *Sterilization of health care products — General requirements for characterization of a sterilizing agent and the development, validation and routine control of a sterilization process for medical devices*

[18] ISO 14971, *Medical devices — Application of risk management to medical devices*

[19] ISO 15189, *Medical laboratories — Requirements for quality and competence*

[20] ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

[21] ISO 17665, *Sterilization of health care products — Moist heat*

[22] ISO 31000, *Risk management — Principles and guidelines*

[23] ISO/IEC 31010, *Risk management — Risk assessment techniques*

[24] AAMI TIR 17:2008, *Compatibility of materials subject to sterilization*

1) Replaced by ISO 11137-1, ISO 11137-2 and ISO 11137-3.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0025

[25] AAMI TIR 52, *Environmental monitoring for terminally sterilized healthcare products*

[26] GILL P., GUSMAO L., HANED H., MAYR W.R., MORLING N., PARSON W. Recommendations on the evaluation of STR typing results that may include drop-out and/or drop-in using probabilistic methods. *Forensic Sci. Int. Genet.* 2012, **6** pp. 679–688

[27] PUCH-SOLIS R. A dropin peak height model. *Forensic Sci. Int. Genet.* 2014, **11** pp. 80–84

[28] TOOTHMAN M.H., KESTER K.M., CHAMPAGNE J., DAWSON CRUZ T., SCOTT STREET W., BROWN B.L. Characterization of human DNA in environmental samples. *Forensic Sci. Int.* 2008, **178** pp. 7–15

[29] UNODC, *Guidelines on Representative Drug Sampling, ISBN 978-92-1-148241-6*

[30] LAMBERT B.J., MENDELSON T.A., CRAVEN M.D. Radiation and ethylene oxide terminal sterilization experiences with drug eluting stent products. *AAPS PharmSciTech.* 2011, **12** pp. 1116–1126

[31] HOILE R., BANOS C., COLELLA M., WALSH S.J., ROUX C. Gamma irradiation as a biological decontaminant and its effect on common fingermark detection techniques and DNA profiling. J. *Forensic Sci.* 2010, **55** pp. 171–177

[32] BERGEN A.W., QI Y., HAQUE K.A., WELCH R.A., GARCIA-CLOSAS M., CHANOCK S.J. Effects of electron-beam irradiation on whole genome amplification. *Cancer Epidem Biomark.* 2005, **14** pp. 1016–1019

[33] NYGREN J., CEDERVALL B., ERIKSSON S., DUSINSKA M., KOLMAN A. Induction of DNA strand breaks by ethylene oxide in human diploid fibroblasts. *Environ. Mol. Mutagen.* 1994, **24** pp. 161–167

[34] BHANOT O.S., SINGH U.S., SOLOMON J.J. The role of 3-hydroxyethyldeoxyuridine in mutagenesis by ethylene oxide. *J. Biol. Chem.* 1994, **269** pp. 30056–30064

[35] MIOSAN M., BARBEAU J., CREVIER M., PELLETIER J., PHILIP N., SAOUDI B. Plasma sterilization. Methods and mechanisms. *Pure Appl. Chem.* 2002, **74** pp. 349–358

[36] ARCHER E., ALLEN H., HOPWOOD A., ROWLANDS D. Validation of a dual cycle ethylene oxide treatment technique to remove DNA from consumables used in forensic laboratories. *Forensic Sci. Int. Genet.* 2010, **4** pp. 239–243

[37] SHAW K., SESARDIC I., BRISTOL N., AMES C., DAGNALL K., ELLIS C. Comparison of the effects of sterilisation techniques on subsequent DNA profiling. *Int. J. Legal Med.* 2008, **122** pp. 29–33

[38] GEFRIDES L.A., POWELL M.C., DONLEY M.A., KAHN R. UV irradiation and autoclave treatment for elimination of contaminating DNA from laboratory consumables. *Forensic Sci. Int. Genet.* 2010, **4** pp. 89–94

[39] NEUREUTHER K., ROHMANN E., HILKEN M., SONNTAG M.L., HERDT S., KOENNECKE T. Reduction of PCR-amplifiable DNA by ethylene oxide treatment of forensic consumables. *Forensic Sci. Int. Genet.* 2014, **12** pp. 185–191

[40] TAYLOR D., BRIGHT J.-A., MCGOVEN C., HEFFORD C., KALAFUT T., BUCKLETON J. Validating multiplexes for use in conjunction with modern interpretation strategies. *Forensic Sci. Int. Genet.* 2016, **20** pp. 6–19

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

 © Standards Australia

WIT.0043.0076.0026

NOTES

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

Standards Australia

Standards Australia develops Australian Standards® and other documents of public benefit and national interest. These Standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth Government, Standards Australia is recognized as Australia's peak non-government national standards body.

For further information visit **www.standards.org.au**

Australian Standards®

Committees of experts from industry, governments, consumers and other relevant sectors prepare Australian Standards. The requirements or recommendations contained in published Standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian Standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

International Involvement

Standards Australia is responsible for ensuring the Australian viewpoint is considered in the formulation of International Standards and that the latest international experience is incorporated in national Standards. This role is vital in assisting local industry to compete in international markets. Standards Australia represents Australia at both the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

Sales and Distribution

Australian Standards®, Handbooks and other documents developed by Standards Australia are printed and distributed under licence by SAI Global Limited.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

For information regarding the development of Standards contact:
Standards Australia Limited
GPO Box 476
Sydney NSW 2001
Phone: 02 9237 6000
Fax: 02 9237 6010
Email: mail@standards.org.au
Internet: www.standards.org.au

For information regarding the sale and distribution of Standards contact:
SAI Global Limited
Phone: 13 12 42
Fax: 1300 65 49 49
Email: sales@saiglobal.com

STANDARDS
Australia

ISBN 978 1 76035 676 7

This page has been left intentionally blank.

Accessed by GOLD COAST HOSPITAL AND HEALTH SERVICE on 09 May 2019 (Document currency not guaranteed when printed)

Guideline - Assessment of Capacity to Consent to Examination and Forensic Procedures
Guideline - Cleaning/Decontamination of Forensic Examination Suites
Guideline - Clinical Forensic Assessment and Management of Non-Fatal Strangulation
Guideline - Compulsory and/or Intimate Body Examinations of Persons in Custody
Guideline - Evidence Based Forensic Sampling Standards
Guideline - Medical Review of Clinical Forensic Medical Reports
Guideline - Photography for Clinical Forensic Medicine
Guideline - The Presence of Chaperones during Intimate Forensic Medical Examinations.
Guideline - Sexually Transmitted Infection Management in Patients Who Have Experienced Sexual Violence

The Royal College of Pathologists of Australasia
ABN 52 000 173 231

Durham Hall 207 Albion Street Surry Hills NSW 2010 Australia
[redacted]

RCPA
The Royal College of Pathologists of Australasia

Guideline

Subject:	**Evidence Based Forensic Sampling Standards**
Approval Date:	February 2018
Review Date:	February 2022
Review By:	Faculty of Clinical Forensic Medicine Committee
Number:	2/2018

(This page is deliberately left blank)

Table of Contents

Buccal 3
Oral Swab 3
Oral Rinse 4
Oral Saliva 4
Peri-oral swab 5
Chewing gum 5
Dental floss 6
Oral References 6
External Labial 6
Vulval 7
Low Vaginal 9
High Vaginal 9
Transvaginal (blind) 10
Endocervical 12
Female Genital References 13
Penile Shaft 13
Penile Glans / Sulcus 14
Penile References 15
Perianal swab 16
Anal Swab 16
Rectal swab 17
Anal / Rectal References 18
Skin for epithelial cells 18
Skin for semen 19
SKIN for blood and other stains 19
SKIN for saliva 20
Skin References 21
Subungual and fingernail 21
Nail References 22
Oral rinse, urine for both forensic biology and for toxicology, vulval gauze wipe, perianal gauze wipe, penile gauze wipe, blood for toxicology 23
EEK References: 25
Toxicology: Urine, Blood, Oral fluid (saliva), Hair, Other 25

Please find a list of possible biological evidence collection methods that might be utilised in criminal cases to provide evidence of an assault.

Disclaimer: This is meant to be a guideline only for Australian New Zealand (ANZ) forensic examiners. Local evidence collection guidelines may proscribe different collection methods or different cut-off time periods. As these are often informed by analysis of forensic samples in your jurisdictional area, they should be consulted in the first instance.

ORAL SAMPLES

Name of Collections	**ORAL**
Name of Sample	**Buccal**
Methods of Collection	A swab is used to sample the mucosal cells from the inside of the cheeks
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Unlimited
Comments • Used for the collection of a baseline / reference DNA sample from either a complainant or person of interest. • Unpublished review of these collections (NSW) shows that success rate is high for the collection of sufficient DNA for creating full profiles. • DNA profiles can also be collected via a blood sample. No ANZ jurisdiction currently uses blood for reference sampling routinely.	
Relevant References	

Name of Collections	**ORAL**
Name of Sample	**Oral Swab**
Methods of Collection	A swab is used to sample the upper and lower mouth, around the teeth and gingivial recesses, under the tongue and back of the throat. Some services will use a single swab to sample both the upper mouth and the lower mouth. Other services may use two swabs: one for the upper and one for the lower mouth.

Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Range from 12 hours to 48 hours after penile oral assault
Comments • Poor pickup rate for DNA. No longer used as a sampling method in NSW.	
Relevant References 1, 2, 3, 4, 5, 6, 7, 8, 9	

Name of Collections	**ORAL**
Name of Sample	**Oral Rinse**
Methods of Collection	Sterile water is used (amount is variable). Patient is asked to swish water around the mouth, back of throat (gargle) and through teeth. The water is then spit into a collection jar for transfer to the laboratory.
Suggested Storage	Liquid samples should be refrigerated unless there is likely to be early transport to the forensic laboratory i.e. within 5 days.
Collection Time Periods	Range from 12 hours to 48 hours after penile oral assault.
Comments • Oral rinses are often available as part of an Early Evidence Kit.	
Relevant References 5	

Name of Collections	**ORAL**
Name of Sample	**Oral Saliva**
Methods of Collection	Saliva is spit into a collection jar. If saliva is being collected it is generally collected prior to oral swabbing or rinsing.
Suggested Storage	Liquid samples should be refrigerated unless there is likely to be early transport to the forensic laboratory i.e. within 5 days.
Collection Time Periods	Range from 12 hours to 48 hours after penile oral assault

Comments
• Not frequently collected as part of ANZ oral collections
Relevant References
1,2

Name of Collections	ORAL
Name of Sample	**Peri-oral swab**
Methods of Collection	A moistened swab is used to sample the outer aspect of the lips and adjacent skin. A second dry swab can be used after this. There is some suggestion that the second swab may increase DNA pickup rates from skin.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Up to 72 hours after penile oral assault or kissing
Comments	
• A positive perioral swab does not prove penetration but may support the history of ejaculation and may help provide a profile of the alleged assailant. • Wet and Dry swabs are no longer used in NSW. This has been replaced by a single moistened swab.	
Relevant References	
5	

Name of Collections	ORAL
Name of Sample	**Chewing gum**
Methods of Collection	Complainant is asked to chew gum which is then collected for analysis.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	
Comments	

• Need to ensure your local laboratory has the ability to test this type of sample.
Relevant References

Name of Collections	**ORAL**
Name of Sample	**Dental floss**
Comments: • The use of dental floss may result in bleeding from the gum, thereby providing a potential portal of entry for sexually transmitted infections. It is therefore not recommended.	
Relevant References 9	

Oral References

1. Willott GM, Crosse MA. The detection of spermatozoa in the mouth. J Forensic Sci Soc. 1986 Mar-Apr;26(2):125-8. PubMed PMID: 3711852. Epub 1986/03/01. eng.
2. Allard JE. The collection of data from findings in cases of sexual assault and the significance of spermatozoa on vaginal, anal and oral swabs. Sci Justice. 1997 Apr-Jun;37(2):99-108. PubMed PMID: 9206315. Epub 1997/04/01. eng.
3. Tucker S, Ledray LE, Werner JS. Sexual Assault Evidence Collection. Wisconsin Medical Journal. 1990;89(7):407-11.
4. Janisch S, Meyer H, Germerott T, Albrecht UV, Schulz Y, Debertin AS. Analysis of clinical forensic examination reports on sexual assault. Int J Legal Med. 2010 May;124(3):227-35. PubMed PMID: 20182738. eng.
5. Nittis M, Franco M, Cochrane C. New oral cut-off time limits in NSW. Journal of forensic and legal medicine. 2016 Sep 22;44:92-7. PubMed PMID: 27697690.
6. Enos WF, Beyer JC. Spermatozoa in the anal canal and rectum and in the oral cavity of female rape victims. J Forensic Sci. 1978 Jan;23(1):231-3. PubMed PMID: 570593. Epub 1978/01/01. eng.
7. Faugno D, Girardin B, Radoff A. The Myths and Legends of Sperm, Sexual Assault, Sex and Contraception 2003. Available from: www.forensicnursing.com/articles/391clinical.html.
8. Nittis M, Stark M. Evidence based practice: laboratory feedback informs forensic specimen collection in NSW. Journal of forensic and legal medicine. 2014 Jul;25:38-44. PubMed PMID: 24931859.
9. Nittis M. Evidence Collection in Cases of Sexual Assault. In: Beran RG, editor. Legal and Forensic Medicine. Berlin: Springer-Verlag; 2013. p. 1335-58.

FEMALE GENITAL SAMPLES

Name of Collections	**FEMALE GENITAL**
Name of Sample	**External Labial**
Methods of Collection	Collect swab in location of contact as indicated by complainant.

	As a general rule, the swab is taken from the external aspects of both labia majora. If also sampling the mons, this should be clearly recorded. First swab is moistened with a few drops of sterile water. This may be followed with a second dry swab. Swabs may be labelled to indicate order of collection.
Suggested Storage	These samples generally do not need to be refrigerated if dry.
Collection Time Periods	1. **Penis vagina, ejaculation onto vulva/perineum, anal intercourse:** Ranges from 48 hours (2 days) to 168 hours (7 days) Up to 72 hours if anal intercourse (UK recommendations) 2. **Digital penetration:** Up to 12 hours (not washed) to 48 hours (UK). N.B: UK may change to 72 hours based on new research [1]. 3. **Cunnilingus:** 24 to 72 hours Should swab even when client has showered [2].
Comments • There appears to be less research available for this type of forensic collection than for other female genital collections.	
Relevant References 1,2, 5	

Name of Collections	**FEMALE GENITAL**
Name of Sample	**Vulval**
Methods of Collection	Swabs are taken of the vulval area, generally agreed to include both the inner surface of the labia minora and the fossa navicularis. Some

	jursidictions will swab only the lower half of the labia minora, others may include the entire inner surfaces. The swab may be moistened if the area is thought to be dry. Swabs for aromatic oils/lubricant: Collect the swab from the area of contact indicated by the client. Snap the swab shaft to fit in the small glass vial which is used specifically for this purpose. Replace the airtight lid on the vial. Collect after swabs for semen (if indicated) and contact DNA.
Suggested Storage	These samples generally do not need to be refrigerated if dry.
Collection Time Periods	1. **Penis Vagina:** From 24 to 72 hours pre-pubertal 120 (5 days) to 168 hours (7 days) for post pubertal 72 hours if anal intercourse (UK) 1. **Digital penetration:** 12 hours (not washed) to 72 hours (regardless of whether or not washing has occurred). UK may change from 48 to 72 hours based on new research [1]. 2. **Cunnilingus:** 24 hours to 72 hours Should swab even when client has showered [2]. 3. **Swabs for aromatic oils/lubricant:** Nil evidence re timing.
Comments • Ensure you are clear as to the suggested limits of a vulval swab in your jurisdiction as these may not be consistent across Australia New Zealand.	
Relevant References **1, 2, 5**	

Name of Collections	FEMALE GENITAL
Name of Sample	**Low Vaginal**
Methods of Collection	Part labia majora and minora to view the opening of the vaginal canal. Insert the swab 2 to 3cm, past the hymen, being careful to avoid touching labia and vestibule. This same swab may be used to view the edges of the hymen. The swab may be moistened if the area being sampled might be dry. Swabs may be labelled to indicate order.
Suggested Storage	These samples generally do not need to be refrigerated if dry.
Collection Time Periods	**1. Penis Vagina:** From 24 to 72 hours pre-pubertal 120 (5 days) to 168 hours (7 days) for post pubertal 72 ours if anal intercourse (UK) **2. Digital penetration:** Ranges from not collected, in some jurisdictions, up to 48 hours (UK). UK may change to 72 hours based on new research [1]. **3. Cunnilingus:** Low vaginal swabs are not recommended for cunnilingus
Comments • Some jursidictions do not collect a separate low vaginal swab	
Relevant References 1	

Name of Collections	FEMALE GENITAL
Name of Sample	**High Vaginal**
Methods of Collection	**1. For semen**

	Part labia majora and minora to view the opening of the vaginal canal. A speculum may be inserted un-lubricated, lubricated with water or lubricant*, being careful to avoid contact with labia and vestibule. Open the bills and insert swab through the bills into the posterior fornix, being careful to avoid touching the speculum blades. Sweep the swab around the fornix and include the pool of secretions in the fornix. **2. Swabs for aromatic oils/lubricant:** Collect a whole vagina swab. Snap the swab shaft to fit in the small glass vial. Replace the airtight lid on the vial.
Suggested Storage	These samples generally do not need to be refrigerated if dry.
Collection Time Periods	**1. Penis Vagina:** 120 days) to 168 hours (7 days) for post pubertal 72 hours if anal intercourse (UK) **2. Digital penetration:** Ranges from not collected, in some jurisdictions, up to 48 hours (UK). UK may change to 72 hours based on new research [1]. **3. Cunnilingus:** Low vaginal swabs are not recommended for cunnilingus
Comments • A speculum must be used to collect a high vaginal swab. • A blind swab, without a speculum, can be used but this can only collect a "transvaginal" sample (see next table).	
Relevant References 1	

Name of Collections	**FEMALE GENITAL**
Name of Sample	**Transvaginal (blind)**

Methods of Collection	If the woman declines the offer of a speculum examination, carefully insert the swab through the vaginal opening up to the high vagina and sweep around the upper vagina and include the pool of secretions in the posterior fornix. At least one Australian jurisdiction recommends the collection of a transvaginal swab before insertion of a speculum. Swabs for aromatic oils/lubricant: Collect a whole vagina swab. Snap the swab shaft to fit in the small glass vial. Replace the airtight lid on the vial. Swabs may be labelled to indicate order.
Suggested Storage	These samples generally do not need to be refrigerated if dry.
Collection Time Periods	1. **Penis Vagina:** From 24 to 72 hours pre-pubertal 120 (5 days) to 168 hours (7 days) for post pubertal 121 ours if anal intercourse (UK) 2. **Digital penetration:** 12 hours (not washed) to 48 hours (UK). UK may change to 72 hours based on new research [1]. 4. **Cunnilingus:** Low vaginal swabs are not recommended for cunnilingus
Comments • A speculum must be used to collect a high vaginal swab. • A blind swab, without a speculum, can be used but this can only collect a "transvaginal" sample.	
Relevant References 1	

Name of Collections	**FEMALE GENITAL**

Name of Sample	**Endocervical**
Methods of Collection	Part labia majora and minora to view the opening of the vaginal canal. A speculum may be inserted un-lubricated, lubricated with water or lubricant*, being careful to avoid contact with labia and vestibule. Open the bills and insert swab through the bills into the posterior fornix, being careful to avoid touching the speculum blades. Sweep the swab around the fornix and include the pool of secretions in the fornix. Swabs for aromatic oils/lubricant: Collect a whole vagina swab. Snap the swab shaft to fit in the small glass vial. Replace the airtight lid on the vial.
Suggested Storage	These samples generally do not need to be refrigerated if dry.
Collection Time Periods	1. **Penile Vaginal** Up to 120 hours (5days) to 168 hours (7 days) or post pubertal Some suggestion that this should be extended to 10 days post penetration or to the end of next menses [3]. 2. **For penile anal intercourse:** 72 hours if anal intercourse (UK) – particularly important if intercourse has occurred more than 24 hours previously.

Comments

- A speculum must be used to collect a high vaginal swab. A blind swab, without a speculum, can be used but this can only collect a “transvaginal” sample (see next table).
- As there is a tendency to forget to collect endocervical samples, on occasion, there has been argument to include it as part of the routine genital sample collection, allowing the laboratories to determine which samples are analysed i.e. taking an endocervical sample with the understanding it is only likely to be tested if more than 24 (or 48) hours has passed since assault.

Relevant References

3

Female Genital References

1. Sween KRMS, Quarino LAP, Kishbaugh JMMS. Detection of Male DNA in the Vaginal Cavity After Digital Penetration Using Y-Chromosome Short Tandem Repeats. *Journal of Forensic Nursing*. 2015;11(1):33(18)
2. Williams S, Panacek E, Green W, Kanthaswamy S, Hopkins C, Calloway C. Recovery of salivary DNA from the skin after showering. *Forensic Science Medicine and Pathology.* 2015; 11: 29-34
3. Speck P, Ballantyne J. Post-coital DNA Recovery Study. *US Department of Justice Document No. 248682*, March 2015
4. Loeve A, Bilo R, Emirdag E, Sharify M, Jansen FW, Dankelman J. In vitro validation of vaginal sampling in rape victims: the problem of Locard's principle *Forensic Science Medicine and Pathology.* 2013 9: 154-162
5. 27. Keating, S.M. The laboratory's approach to sexual assault cases. Part 1: sources of information and acts of intercourse. J Forensic Sci Soc. 1988; 28:35-7

PENILE SAMPLES

Name of Collections	**PENILE**
Name of Sample	**Penile Shaft**
Methods of Collection	A swab moistened with water is rolled along the shaft of the penis on the upper and lower sides and then replaced into its sheath. The process may be repeated with a dry swab.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	1. **Saliva, vaginal fluids, rectal fluids, blood or semen** Up to 72 hours for all biological fluids: Some jurisdictions will sample the penis for biological fluids after washing and others will not. 2. **For penile contact with skin** Some jurisdictions will sample up to 72 hours and others up to 12 hours. No jurisdiction will sample the penis for skin contact after washing. 3. **Non-biological trace evidence and lubricant** May also be detected on the penis and collection may be considered up to the point of washing or timeframe determined by the relevant interpersonal contact.
Comments • Semen is not usually a relevant specimen to collect from the penis in cases of sexual assault and therefore in jurisdictions where the laboratory requires the practitioner	

	to prepare a slide at the time of collection this is generally not required for penile samples. However each case should be considered on its own merits. • The laboratory may not identify cell types or the anatomical area of origin of any foreign DNA found. • This sample should be collected in all cases of reported or suspected sexual assault in a male including in victims where memory is deficient or absent. • Comment should be made as to whether the penis is circumcised or not
Relevant References 1, 2, 3, 4, 5, 6, 7, 8, 9	

Name of Collections	**PENILE**
Name of Sample	**Penile Glans / Sulcus**
Methods of Collection	A swab moistened with water is rolled around the tip (glans) of the penis (including the sulcus and meatus and any piercing). The glans penis is swabbed around the coronal sulcus and onto the glans and urethral meatus. This can be done using one swab or a swab each for the glans and coronal sulcus. The foreskin (if present) should be retracted and the internal surface swabbed (this should be done in conjunction with the coronal swab). Special attention should be paid to collecting specimens from a folded area or an area of attachment such as the frenulum. The swab is then replaced into its sheath. The process may be repeated with a dry swab.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	1. **Saliva, vaginal fluids, rectal fluids, blood or semen** Up to 72 hours for all biological fluids: Some jurisdictions will sample the penis for biological fluids after washing and others will not. 2. **Penile contact with skin** Some jurisdictions will sample up to 72 hours and others up to 12 hours. No jurisdiction will sample the penis for skin contact after washing.

	3. **Non-biological trace evidence and lubricant** May also be detected on the penis and collection may be considered up to the point of washing or timeframe determined by the relevant interpersonal contact.

Comments

- Biological fluids may collect under the foreskin (if present), sulcus, meatus and in recesses around any piercings or around any folded areas of attachment such as the frenulum.
- Semen may not be a relevant specimen to collect from the penis in cases of sexual assault and therefore in jurisdictions where the laboratory requires the practitioner to prepare a slide at the time of collection this may not be required for penile samples. However each case should be considered on its own merits.
- The laboratory may not identify cell types or the anatomical area of origin of any foreign DNA found.
- This sample should be collected in all cases of reported or suspected sexual assault in a male including in victims where memory is deficient or absent.

Relevant References

1-9

Penile References

1. Collins KA, Cina SJ, Pettanati MJ, Fitts M. Identification of Female Cells in Postcoital Penile Swabs using Fluorescence In Situ Hybridization. Archives of Pathology & Laboratory Medicine. 2000 July; 124(7): 1080.
2. Cina SJ et al. Isolation and identification of female DNA on postcoital penile swabs. American Journal of Forensic Medicine and Pathology 2000; 21(2): 97-100.
3. Farmen RKB, Haukeli I, Ruoff P, Froyland ES. Assessing the presence of female DNA on post-coital penile swabs: relevance to the investigation of sexual assault. Journal of forensic and legal medicine. 2012 Oct; 19(7): 386-9.
4. Janisch S, Meyer H, Germerott T, Albrecht UV, Schulz Y, Debertin AS. Analysis of clinical forensic examination reports on sexual assault. Int J Legal Med. 2010 May; 124(3):227-35. PubMed PMID: 20182738. eng.
5. Kaarstad K, Rohde M, Larsen J, Eriksen B, Thomsen JL. The detection of female DNA from the penis in sexual assault cases. 2007; 14: 159-160.
6. Keating SM. Inforamtion from penile swabs in sexual assault cases. Forensic Science Inernational. 1989; 43: 63-81.
7. Kennedy KM. Letter to the editor: Response to “Assessing the presence of female DNA on post-coital penile swabs: relevance to the investigation of sexual assault” published in the October 2012 edition of the Journal of Forensic and Legal Medicine. Journal of forensic and legal medicine. 2013 July.; 20(5) 559
8. Nittis M, Stark M. Evidence based practice: laboratory feedback informs forensic specimen collection in NSW. Journal of forensic and legal medicine 2014 July 25: 38-44
9. Tucker S, Ledray LE, Werner JS. Sexual Assault Evidence Collection. Wisconsin Medical Journal. 1990;89(7):407-11.

ANAL / RECTAL SAMPLES

Name of Collections	ANAL / RECTAL SAMPLES
Name of Sample	**Perianal swab**
Methods of Collection	A swab is used to sample the perianal area i.e. the area outside the anal verge. This should be done prior to collection of an anal or rectal swab. The swab may need to be moistened if the area is dry.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	If washing or wiping after defaecation has **not** occurred, there may be a yield of useful DNA from spermatozoa for some days. 1. **Penile Anal** Generally not collected after 72 hours (ANZ). 2. **Digital Anal** Varies from 12 hours (with no history of defaecation) to 72 hours. 3. **As an adjunct to penile vaginal penetration** May be taken up to 168 hours (7 days) (UK recommendations)
Comments A perianal swab may detect spermatozoa leakage from deposition in the vagina or the anal area.	
Research:	

Name of Collections	ANAL / RECTAL
Name of Sample	**Anal Swab**
Methods of Collection	A swab is used to obtain a sample from the anal canal
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	1. **Penile Anal** Generally not collected after 72 hours (ANZ). 2. **Digital Anal**

	Varies from 12 hours (with no history of defaecation) to 72 hours. **3. As an adjunct to penile vaginal penetration** If taken after complaint of penile vaginal assault, may be taken up to 168 hours (7 days) (UK recommendations)

Comments

- The yield of useful DNA falls off rapidly after 24 hours and the expectation of finding spermatozoa after 48 hours is very low. The chance of successfully obtaining sufficient DNA to produce a profile might be reduced if defaecation has occurred.
- The amount of trace DNA residual from digital penetration is low and the chances of retrieval extremely low. If there has been washing, or wiping the specimen will not be useful.
- In some jurisdictions, advice for the timelines for these specimens has been extrapolated from studies of vaginal Y DNA retrieved following digital penetration. There are no published studies to assist forensic practitioners in this area.
- It is not difficult to introduce external DNA from the perianal area into the anus and beyond. Special care, therefore, must be taken when collecting both anal and rectal samples to ensure this is not done, if at all possible.

Relevant References

5.

Name of Collections	**ANAL / RECTAL**
Name of Sample	**Rectal swab**
Methods of Collection	A swab is used via a proctoscope to sample the rectal wall
Suggested Storage	The sample needs to be aerated but not refrigerated.
Collection Time Periods	Range from 12 hours to 72 hours after penile anal penetration

Comments

- The yield of DNA falls off rapidly after 24 hours. It is possible that Y-filer analysis may find useful DNA profiles at extended time intervals. The chance of successfully obtaining sufficient DNA to produce a profile might be reduced if defaecation has occurred.

Relevant References

Anal / Rectal References

1. Gingras F, Paquet C, Bazinet M, Granger D, Marcoux-Legault K, Fiorillo M, Séguin D, Baltzer F, Chamberland C, Jolicoeur C. Biological and DNA evidence in 1000 sexual assault cases. Forensic Science International: Genetics Supplement Series. 2009 Dec 31;2(1):138-40.
2. Nittis M, Stark M. Evidence based practice: Laboratory feedback informs forensic specimen collection in NSW. Journal of forensic and legal medicine. 2014 Jul 31;25:38-44.
3. Ingemann-Hansen O, Charles AV. Forensic medical examination of adolescent and adult victims of sexual violence. Best Practice & Research Clinical Obstetrics & Gynaecology. 2013 Feb 28;27(1):91-102.
4. Casey, David G., et al. "The persistence of sperm and the development of time since intercourse (TSI) guidelines in sexual assault cases at forensic science ireland, Dublin, Ireland." *Journal of forensic sciences* (2016).
5. Nittis M. Chapter: Evidence Collection in Cases of Sexual Assault in Beran RG. Ed. *Legal and Forensic Medicine, Springer-Verlag Berlin Heidelberg, 2013. Pp1335-1358*

SKIN

Name of Collections	SKIN
Name of Sample	**Skin for epithelial cells**
Methods of Collection	A moistened DNA free swab is used to sample the area indicated in the assault. The swab is moistened ideally with sterile water (not saline). Sufficient pressure should be applied to remove any foreign cells from the surface of the skin. Some jurisdictions recommend a moistened swab followed by a second dry swab.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Ranges from up to 12 hours to 72 hours after assault and only if the person has not washed.
Comments: • NSW no longer recommends a two swab method.	
Relevant References	

1, 2, 3, 4

Name of Collections	SKIN
Name of Sample	**Skin for semen**
Methods of Collection	A moistened DNA free swab is used to sample the area indicated in the assault. The swab is moistened ideally with sterile water (not saline). Tap water can be used, if sterile water is not available. Sufficient pressure should be applied to remove any foreign cells from the surface of the skin. Some jurisdictions recommend a moistened swab followed by a second dry swab. If you are working in a jurisdiction where a slide is made for semen samples, you would also need to make a slide from the swab collected.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Up to 72 hours following an assault. This time might be extended if the complainant has not washed or the history warrants a prolonged collection period.
Comments: • NSW no longer recommends a two swab method.	
Relevant References 5, 6	

Name of Collections	SKIN
Name of Sample	**SKIN for blood and other stains**
Methods of Collection	A moistened DNA free swab is used to sample the area indicated in the assault. The skin should be sampled for blood if blood (or what is thought to be blood) is still visible on the skin.

	The swab is moistened ideally with sterile water (not saline). Sufficient pressure should be applied to remove any foreign cells from the surface of the skin. Some jurisdictions recommend a moistened swab followed by a second dry swab.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Skin can be sampled for blood for as long as blood / blood stain / what is thought to be blood is still visible. Otherwise consider sampling up to 48 hours and possibly longer if not washed and indicated by the history.
Comments: • NSW no longer recommends a two swab method.	
Relevant References 7	

Name of Collections	**SKIN**
Name of Sample	**SKIN for saliva**
Methods of Collection	A moistened DNA free swab is used to sample the area indicated in the assault. The swab is moistened ideally with sterile water (not saline). Sufficient pressure should be applied to remove any foreign cells from the surface of the skin. Some jurisdictions recommend a moistened swab followed by a second dry swab.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	Up to 48 hours after assault
Comments: • Consider sampling for amylase / DNA if there has been a history of licking, biting, sucking • NSW no longer recommends a two swab method.	

Relevant References
6, 8, 9, 10

Skin References

1. Wiegand, P. and M. Kleiber, *DNA typing of epithelial cells after strangulation.* Int J Legal Med, 1997. **110**(4): p. 181-3.
2. Rutty, G.N., *An investigation into the transference and survivability of human DNA following simulated manual strangulation with consideration of the problem of third party contamination.* Int J Legal Med, 2002. **116**(3): p. 170-3.
3. Maguire, S., et al., *Retrieval of DNA from the faces of children aged 0-5 years: a technical note.* Journal of forensic nursing, 2008. **4**: p. 40-44.
4. Graham, E.A.M. and G.N. Rutty, *Investigation into Normal Background DNA on Adult Necks: Implications for DNA profiling of Manual Strangulation Victims.* Journal of Forensic Science, 2008. **53**(5): p. 1074 - 1082.
5. Gabby, T., et al., *Sexual Abuse of Children: The detection of Semen on Skin.* AJDC, 1992. **146**: p. 700-703.
6. Nittis, M. and M. Stark, *Evidence based practice: laboratory feedback informs forensic specimen collection in NSW.* J Forensic Leg Med, 2014. **25**: p. 38-44.
7. Tonkin, M., et al., *The effect of environmental conditions on the persistence of common lubricants on skin for cases of sexual assault investigation.* J Forensic Sci, 2013. **58 Suppl 1**: p. S26-33.
8. Sweet, D. and G. Shutler, *Analysis of Salivary DNA Evidnece from a Bite Mark on a Body Submerged in Water.* Journal of Forensic Science, 1999. **44**(5): p. 1069-1072.
9. Kenna, J., et al., *The recovery and persistence of salivary DNA on human skin.* J Forensic Sci, 2011. **56**(1): p. 170-5.
10. Williams, S., et al., *Recovery of salivary DNA from the skin after showering.* Forensic Sci Med Pathol, 2015. **11**(1): p. 29-34.

FINGERNAIL

Name of Collections	FINGERNAIL
Name of Sample	**Subungual and fingernail**
Methods of Collection	**1. Fingernail Cuttings** If fingernails are to be cut, a DNA free pair of scissors / nail clippers should be used, if available. Failing this, consideration should be given to a single use pair of scissors / clippers or sterilised scissors / clippers. Clipping should occur over a DNA free sheet, to prevent losing the nails. Generally the nails of one hand are collected and combined in a single transport pot. The nails of the other hand are likewise combined and put in a second pot. **2. Fingernail Swabbings** A fine / small moistened DNA free swab is used to sample the area beneath the nails. Different jurisdictions have different

	methodologies which range from using a single swab for each nail sampled, to using a single swab for each hand. The swab is moistened ideally with sterile water (not saline). It can be used to sample beneath the nail and, if required, can also sample the outer surface of the nail itself and adjacent skin. Some jurisdictions will collect a moist and dry swab for each collection. **3. Fingernail Scrapings** Ideally a blunt, DNA free instrument (e.g. plastic spatula) is used to dislodge any collected DNA from beneath the nail, without dislodging cells from the donor's nails.
Suggested Storage	These samples generally do not need to be refrigerated.
Collection Time Periods	DNA has been recovered up to 48 hours after assault, even after handwashing. [1.] It is proposed that useful DNA might be retrieved via nail swabbing of the nails of alleged perpetrators who digitally assault their female victims up to at least 18 hours later.[4.]
Comments: • If people cohabitate it is important to recognise that a low level of foreign DNA may already be present beneath the fingernails. [2, 3] • There is no research showing the preferable method of collecting subungual evidence or, if more than one method was to be used (e.g. swabbing and cutting) which should go first. [5.]	
Relevant References **1, 2, 3, 4, 5**	

Nail References

1. Lederer, T; Betz, P; Seidl, S. DNA analsysis of fingernail debris using different multiplex systems: a case report. Int J Legal Med. 2001; 114(4-5):263-6
2. Cook, O; Dixon, L. The prevalence of mixed DNA profiles in fingernail samples taken from individuals in the general population. Forensic Sci. Int. Genet. 2007; 1(1):62-8
3. Malsom, S; Flanagan, N; McAlister, C; Dixon, L. The precalence of mixed DNA profiles in fingernail samples taken from couples who co-habit using autosomal and Y-STRs. Forensic Sci Int Genet. 2009; 3(2):57-62
4. Flanagan, N; McAlister, C. The transfer and persistence of DNA under the fingernails following digital penetration of the vagina. Forensic Science International: Genetics [in press] 2010.
5. Nittis M. Chapter: Evidence Collection in Cases of Sexual Assault in Beran RG. Ed. *Legal and Forensic Medicine, Springer-Verlag Berlin Heidelberg, 2013. Pp1335-1358*

EARLY EVIDENCE KIT COLLECTIONS

Name of Collections	EARLY EVIDENCE KIT – OVERVIEW OF ALL SPECIMENS
Types of potential EEK samples	**Oral rinse, urine for both forensic biology and for toxicology, vulval gauze wipe, perianal gauze wipe, penile gauze wipe, blood for toxicology**
Methods of Collection	1. **Urine for Forensic Biology (for detection of sperm, DNA)** **Indication** Females: Following penetration / attempted penetration of vagina by penis (even if no ejaculation), finger Males – Following the patient's penis being in contact with a mouth, body part or cavity. **Method** Collect the first portion when passing urine, it does not have to be the first time that the patient passes urine after the alleged assault. Self-collected by patient in bathroom using equipment from the EEK kit. 2. **Vulval Gauze** **Indication** Following penetration / attempted penetration of vagina by penis (even if no ejaculation), finger **Method** Self-collected by patient in bathroom using equipment from the EEK kit. Patient puts on gloves. Patient then uses gauze to very gently wipe/dab vulva and places gauze in the collection pot and replaces the top. 3. **Perianal Gauze**

	Indication If patient needs to open bowels following penetration / attempted penetration of anus by penis (even if no ejaculation), finger, object **Method** Patient puts on gloves, moistens gauze with water and wipes gently around the outside of the anus prior to defecation and places this gauze in the collection pot and replaces the top.
Suggested Storage	Specimens placed into tamper-evident bag, signed and sealed. 1) If EEK "collected" by police then the EEK is handed over directly to police. 2) If EEK "collected" by ED nurse / doctor then: - If police involved and present in ED then handover immediately to police with patient informed consent - If no police involved yet or police not present or patient unable to consent e.g. intoxicated, then the bag is stored until it is able to be handed over. It may be stored securely in a variety of places including: with the patient, within the ED or within a sexual assault unit. Please consult local guidelines to ascertain secure options. Best to freeze or refrigerate if there is a delay in handover.
Collection Time Periods	Whenever there is likely to be a delay in having a full forensic assessment and evidence is likely to be compromised by the delay.
Comments: • Prevents loss of potentially forensically significant material if there is a delay before full forensic exam e.g. if essential medical procedures required before a formal sexual assault examination or if patient has to travel large distance to exam. • Also allows for patient comfort as they can drink, pass urine and open bowels with less concern for loss of forensic evidence.	

- Can be performed by non-forensically trained staff, i.e. those who have had an in-service training.
- EEK is an adjunct to the full forensic kit and should not be used instead of or to delay full forensic collection.

  With the exception of the oral rinse the EEK specimens cannot indicate penetration because they are external samples, but they may be useful in determining that sexual activity took place and for identification (DNA profile).
- Consent is **very** important. If the patient is intoxicated (alcohol or drugs) and thus incapable of consenting at that moment and there is an allegation or strong suspicion of sexual assault, specimens can be collected with their assent (if conscious) or to prevent loss of evidence (e.g. prior to catheterisation if unconscious). Specimens are NOT handed to police until formal, written, informed consent has been obtained from the patient.
- Anecdotally the EEK samples, and in particular the urine and vulval gauze samples, have continued to yield good results in Western Australia. EEK samples and forensic results appear to have been accepted by WA courts. WA is unaware of any challenges to date.

Relevant References:

1, 2, 3, 4, 5

EEK References:

1. Australian Standards on Forensic Kits
2. WA SARC EEK paper - Smith DA, Webb LG, Fennell AI, Nathan EA, Bassindale CA, Phillips MA. Early evidence kits in sexual assault: an observational study of spermatozoa detection in urine and other forensic specimens. Forensic Sci Med Pathol. 2014 Sep;10(3):336-43.
3. Finnish paper - Joki-Erkkilä M, Tuomisto S, Seppänen M, Huhtala H, Ahola A, Karhunen PJ. Urine specimen collection following consensual intercourse - A forensic evidence collection method for Y-DNA and spermatozoa. J Forensic Leg Med. 2016 Jan;37:50-4. doi: 10.1016/j.jflm.2015.10.008. Epub 2015 Nov 2.
4. Newton M. The forensic aspects of sexual violence. Best Prac Res Clin Obstet Gynaecol. 2013;27:77–90.
5. Anna-Marie Ashley, Scientist in Charge, Forensic Biology, PathWest LMWA. Personal communication

TOXICOLOGY

Name of Collections	OVERVIEW OF COLLECTION
Types of potential Toxicology samples	**Toxicology: Urine, Blood, Oral fluid (saliva), Hair, Other**

Methods of Collection (consent from the subject and consultation with the local toxicology laboratory is essential)	1. **Urine for Toxicology (for detection of drugs and metabolites)** **Indication** All patients: Following recent (up to 4-5 days) drug use or covert administration **Method** Collect a sample of urine into a clean unused jar. It does not have to be a first pass or midstream specimen. If the specimen is from a victim, it can be self-collected by patient (or parent) in bathroom. If the specimen is from a perpetrator, prisoner or suspect it should be collected using procedures defined in the appropriate Standard which is AS 4308:2008 2. **Blood** **Indication** All patients: Following recent (1-2 days) drug use or covert administration **Method** Consent from the patient is essential. Once consent is obtained approximately 5 ml of blood is collected by venepuncture into a sterile tube with fluoride/oxalate preservative. Suitable tubes that can be used in hospital if a dedicated toxicology kit is not available include blood sugar tubes or those from police traffic blood kits. 3. **Oral fluid (saliva)** **Indication** All patients: Following recent (hours) drug use or covert administration **Method**

	Other than Police traffic screening when special devices are used, these specimens are rarely required for other forensic purposes. In the event that an oral fluid specimen might be required for other toxicological purposes, advice should be sought from the local toxicology laboratory. **4. Hair** **Indication** All patients: for investigation of historical cases of drug administration **Method** Local toxicology laboratories will have their own requirements for hair sampling and may have produced kits for this purpose. The general principle is that a tuft of hair about the diameter of a pencil is cut from an unobtrusive area such as the nape of the neck as close to the scalp as possible. Clean disposable scissors should be used and the collector should be gloved. The specimen is wrapped in aluminium foil with the cut end clearly identified and then packed in a suitable envelope. **5. Other** **Indication** A great many other body tissues and fluids may be useful for toxicological analysis in unusual circumstances. These include faeces, placental tissue, meconium, breast milk, finger and toe nails, deciduous or permanent teeth, vomitus, sweat, sebum or any other available substance. **Method** Local toxicology laboratories should be consulted regarding requirements for unusual types of samples.

Suggested Storage	Specimens must be labelled with the patient's name, DOB and time and date of collection, and placed into tamper-evident bag, signed and sealed. An information sheet or form should be included with details of the case to guide the laboratory. Important information for the laboratory includes: • Identification of the patient and other relevant people such as police and the collector • What specimens have been collected • Time of collection • Time of suspected drug use (if known) • Specific drugs that are suspected (if known) • Prior use of alcohol, medications and drugs Blood collected into fluoride oxalate tubes does not require refrigeration but should be transported to the laboratory as soon as possible. Urine or other body fluid samples should be frozen or refrigerated if there will be a delay of more than about a day in handover to the laboratory.
Collection Time Periods	Blood specimens are useful if collected within about 24 hours of an incident. Urine specimens can be collected up to several days after suspected drug use. These intervals may vary according to the specific drug and local laboratory requirements. Advice should be sought accordingly.
Comments: • Consent is very important. If the patient is intoxicated or otherwise incapable of consenting at that moment and there is an allegation or strong suspicion of drug involvement, specimens can be collected with their assent (if conscious) or to prevent loss of evidence (e.g. prior to catheterisation if unconscious). Specimens are NOT handed to police until formal, written, informed consent has been obtained from the patient.	

Cellmark Forensic Services College of Policing Key Forensic Services Ltd Eurofins Forensic Services National Police Chiefs' Council
Scottish Police Authority The UK Association of Forensic Nurses and Paramedics Analytical Services International

Faculty of Forensic & Legal Medicine

Recommendations for the collection of forensic specimens from complainants and suspects

Jul 2022 Review date Jan 2023 – check www.fflm.ac.uk for latest update

The medico-legal guidelines and recommendations published by FFLM are for general information only. Appropriate specific advice should be sought from your medical defence organisation or professional association. FFLM has one or more senior persons from each of the three medical defence organisations on its Board, but for the avoidance of doubt, endorsement of the medico-legal guidelines or recommendations published by FFLM has not been sought from any of the medical defence organisations.

Instructions for use – PLEASE READ BEFORE REFERRING TO TABLE

- In this document the words complainant, subject, detainee, suspect, and patient will be referred to as examinee, unless a distinction between detainee and complainant needs to be made.
- Forensic specimens should be taken as soon as practicable (for complainants see Relevant Flowchart '*Sexual Offences Post-pubertal and Pre-pubertal*'). The timescales stated are based on the maximum seen in published persistence data to date. There must be a discussion with the examining clinician/person in order to make a decision on a case by case basis, as exceptions are possible; for example, if the examinee has been bed-bound or has not washed since the incident. Information from other sources will inform the decision regarding which samples are relevant. Officers submitting samples may have further information regarding the circumstances which will direct the forensic strategy and assist with decisions regarding the relevance and submission of items for forensic analysis.
- Double, non-sterile gloves must be worn throughout the sampling process and when handling specimens (including exhibit bags) in order to minimise DNA transfer and contamination. Change outer gloves when sampling different body areas. Unless specified below, retain and exhibit gloves only if there is obvious material on them. Everyone involved in the process (i.e. preparing the sampling kit prior to use, the specimens when taken and exhibit bags) should wear double gloves.
- Best practice would always be for a clinician to take intimate samples but if the complainant/complainer will only consent to taking self-swabs, s/he must wear double gloves & be advised how the sample should be taken; the forensic practitioner should witness the sample being taken if the examinee agrees. It must be made clear on the FME/FSP forms what was done and by whom. Retain the outer gloves used during this component of the examination and package in separate tamper-evident bag. These samples remain the practitioner's exhibits.
- Retention of water vials or moist control swabs is not necessary, but in their absence, the module batch number, expiry date and supplier should be recorded, if available.
- Where a moistened swab is required, drip 3 or 4 drops of water on to a swab. Care must be taken not to over-moisten the swabs used for sampling; all the water should be absorbed by the swab head, rather than the swab head be so wet that it will drip.
- Clothing should be taken as per local policy.
- Several commercial lubricants are available including Aquagel, KY Jelly, Gelcat, Pedicat; specify the lubricant used on the FME form.
- Where the order of sampling is given, it is very important that it is followed, and if for any reason it is not, then this must be clarified on the associated documentation e.g. exhibit list, or forensic medical examination (FME) form (see: *Proforma – Forensic Medical Examination Form*).
- Reasonable steps to minimise contamination must be taken.
- When a urine sample is obtained, if the examinee uses toilet tissue (which may be provided in the kit) to wipe afterwards, this should also be retained and exhibited separately to the urine sample itself; as it is a biological sample, it is stored frozen and not sent for toxicology.
- Consideration should be given to the double-swabbing of or around body piercing sites, where relevant.
- Swabs with wooden shafts must not be introduced into any orifice.
- For guidance on labelling forensic samples, please refer to FFLM's Recommendations – *Labelling Forensic Samples*
- For information on the required performance and manufacture of consumables used in the collection, preservation and processing of material for forensic analysis, please refer to ISO18385.
- Record the batch number on the forensic medical examination form for each module used, in addition to the kit module expiry date.
- It is recommended the associated documents e.g. FME forms, are exhibited once completed to ensure the forensic scientist has all the relevant information when analysing the samples.
- Biological samples will degrade if not kept cool. Therefore samples should be stored and transported appropriately, e.g. in a cool box.
- A control swab is no longer required.
- You may use a couch cover but you do not have to exhibit it.
- In relation to ground sheet/seat cover, you can exhibit it if there is visible material on it.

NB clinicians: Forensic samples are only one consideration in deciding upon the merits of undertaking a medical examination. Opportunities to recover other forensic evidence, such as presence of injuries and their sequelae, as well as an evaluation of therapeutic issues for the examinee must be considered. Although the guidelines refer to specific timespans, it should be appreciated that this will vary on a case-by-case basis where discussion may be beneficial.

Recommendations for the collection of forensic specimens from complainants and suspects

SAMPLE TYPE	REASON FOR ANALYSIS	METHOD OF SAMPLING	PACKAGING AND STORAGE
Samples from hands	Recovery of body fluids, cellular material, lubricant and other visible trace evidence, (e.g. soil). Limited data on persistence. Obtain if incident has occurred within the preceding 2 days (48 hours). However, if the examinee has not washed, then sample the relevant area of skin up to 7 days (168 hours) (inclusive) post incident.	Using moderate pressure, roll a moistened swab over each hand covering the front and the back including all fingers and web areas. Roll second dry swab over the whole hand; ensure separate moistened swabs are taken of any finger or fingers believed to have been used in the alleged offence being investigated. Where individual finger(s) have obvious evidence on them, consider sampling and exhibiting separately using the moist/dry technique.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
Fingernails **For Toxicology see page 7**	Recovery of body fluids/DNA/other material within 48 hours or comparison with fingernail(s) broken at scene (if the circumstances suggest this as a possibility).	**Fingernail collection kit and Swab collection kit (water and swabs) if not in the fingernail kit** Swab under the fingernails, on the surface of the nails and around the cuticles. The first swab should be moistened, the second dry. If comparison with fragment nail is required, broken nail must be cut, and sent separately and unbroken if possible. Clip the fingernails only if visible material is seen. Take hand swabs as above in all cases where fingernails are swabbed.	Place in tamper-evident bag. Include any clippers used to sample fingernails in the bag with the clippings. **Freeze**
Swabs from the lips of the mouth & around its opening (peri-oral)	Recovery of semen if oral penetration within 2 days (48 hours). ***First mouth sample***	**Mouth collection kit** Using moderate pressure roll a moistened swab over the external (darker pigmented area of the lips) part of the lips, including the junction of the lip and the skin of the face (vermillion border), immediately roll a second dry swab, over the same area.	Plain swab. Place immediately in swab sheath/tube and then in a tamper-evident bag. **Freeze**
Mouth swab(s) (1 or 2) Note: Some kits may contain only 1 swab; in some kits no control swab is provided	Recovery of semen if oral penetration within 2 days (48 hours). ***Second mouth sample***	**Mouth collection kit** Rub one dry swab all around the inside of mouth, including over and under the tongue, all sides of the teeth and gums and inside cheeks, including: dentures, dental fixtures and any oral piercing. Repeat with second dry swab (if available). Label the swabs to indicate the order in which they were obtained, e.g. DJR1/A and DJR1/B.	Plain swab. Place immediately in swab sleeve/tube and then in tamper- evident bag. Swabs from the same site can be packaged in a single tamper-evident bag. **Freeze**
Mouth rinse	Recovery of semen if oral penetration within 2 days (48 hours). ***Third mouth sample***	**Mouth collection kit** Rinse mouth with sterile water and retain washings in polypot. Examinee must wear gloves whilst handling polypot.	Polypot placed in tamper-evident bag. The gloves worn by the examinee during the examination do not need to be retained and exhibited. **Freeze**
Control skin swab	Recovery of background DNA and/or other material – to aid interpretation when its presence in a specific area is significant e.g. visible injury or bite on the skin. Ensure relevant background area is sampled.	Using moderate pressure, roll a moistened swab over relevant area of skin. Repeat the process with a dry swab for the site being sampled. If multiple areas of skin are sampled, take appropriate multiple controls.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**

Please ensure you have read the instructions on page 1 before referring to the table.

SAMPLE TYPE	REASON FOR ANALYSIS	METHOD OF SAMPLING	PACKAGING AND STORAGE
Skin swabs (minimum 2 per relevant area) See hand section	As per Hand swabs Sites one might consider to be relevant due to prolonged skin-to-skin contact and/or drainage: mons pubis, inner thigh, groin crease, buttocks, scrotum.	**Swab collection kit** Using moderate pressure, roll a moistened swab over the relevant area of skin. Roll second dry swab over the same area. If skin is moist prior to sampling, both swabs should be dry. Sample with more than two swabs if staining remains visible after initial sampling (repeat moist/dry cycle if skin is dry). Label the swabs to indicate the order in which they were obtained, e.g. DJR4/A and DJR4/B. If multiple areas of skin are sampled, take appropriate multiple controls.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
Vulval swabs (2) ***First female genital sample***	Recovery of body fluids/DNA/other material if: • vaginal intercourse (even if condom purported to have been used) within 7 days (168 hours); • digital vaginal penetration within 48 hours; • anal intercourse (even if condom purported to have been used) within 3 days (72 hours); • ejaculation onto vulva/perianum/perineum within 7 days; • contact (touch) with outside areas (skin) within 48 hours.	**Swab collection kit** Roll one moistened swab over the vulva and perineum. Repeat with second dry swab. If vulval skin (or visible stain) is moist prior to sampling, both swabs may be dry. Sample with more than two swabs if staining remains visible after initial sampling (repeat moist/dry cycle). Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
Low vaginal swabs (2) ***Second female genital sample***	Recovery of body fluids/DNA/other material if: • vaginal intercourse (even if condom purported to have been used) within 7 days (168 hours); 3 days (72 hours) if examinee is pre-pubertal and **in exceptional cases** (e.g. the child is under a general anaesthetic) it is possible to pass a swab; • digital vaginal penetration within 48 hours; • anal intercourse (even if condom purported to have been used) within 3 days (72 hours); • ejaculation onto vulva/perianum/perineum within 7 days; • contact (touch) with outside areas (skin) within 48 hours.	**Swab collection kit** Insert a dry swab approximately 3-5cm into the vagina (reduce as appropriate if examinee is pre-pubertal). Use gentle rotational movements to sample the lower half/third of the vagina. Repeat with second dry swab. If the vaginal mucosa is markedly dry, the first swab can be moistened with sterile water (see instructions for use). Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
High vaginal swabs (2) ***Third female genital sample***	Recovery of body fluids/DNA/other material if: • vaginal intercourse (even if condom purported to have been used) within 7 days (168 hours); 3 days (72 hours) if examinee is pre-pubertal and **in exceptional cases** (e.g. the child is under a general anaesthetic) it is possible to pass a swab; • digital vaginal penetration within 48 hours; • anal intercourse (even if condom purported to have been used) within 3 days (72 hours); • ejaculation onto vulva/perianum/perineum within 7 days; • contact (touch) with outside areas (skin) within 48 hours.	**Swab collection kit** Pass a lubricated, single use suitably sized speculum (specify lubricant used), and sample beyond the tip of the speculum. Roll two dry swabs, one at a time, over the mucosa of the unsampled upper two thirds/half of the vagina, making sure the fornices are sampled. **If it is not possible to pass a speculum in the post pubertal, attempt to obtain two 'blind' high vaginal swabs instead, and label as such.** Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. If fluid has been accumulated within/on the speculum, swab the collection of fluid and label as 'speculum swab(s)'. Swab the outside and inside of the blades of the speculum (1 dry swab) and place the swab(s) in the swab sleeve(s)/tube(s) and then in a tamper-evident bag. Submit opened tube/sachet of lubricant. **Freeze**

Please ensure you have read the instructions on page 1 before referring to the table.

SAMPLE TYPE	REASON FOR ANALYSIS	METHOD OF SAMPLING	PACKAGING AND STORAGE
Endocervical swabs (2) ***Fourth female genital sample (post-pubertal only)***	Recovery of body fluids/DNA, if endocervix is visible and it is possible to pass a swab: • vaginal intercourse (even if condom purported to have been used) within 7 days (168 hours) or; • anal intercourse (even if condom purported to have been used) within 3 days (72 hours).	**Swab collection kit** With the speculum in place, use two dry swabs, one at a time, to sample the endocervix. When sampling the endocervix, always keep the proximal end of the swab in view. Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
Perianal swabs (2) ***First anal sample***	Recovery of body fluids/DNA/other material if: • vaginal intercourse with or without anal intercourse (even if condom purported to have been used) within 7 days (168 hours). or; • anal intercourse* (even if condom purported to have been used) within 3 days (72 hours) or; • digital anal penetration within 48 hours. • ejaculation onto/penile contact with vulva/perianum/perineum within 7 days (168 hours). *In a female alleging anal intercourse only, please seek consent to take the full sequence of genital samples in addition to ano-rectal swabs	**Swab collection kit** Using moderate pressure, roll a moistened swab over the perianal skin in an area of 3cm radius from the anus; roll second dry swab over the same area. If skin is moist, both swabs should be dry. Recover on more than two swabs if staining remains visible after initial sampling (repeat moist/dry cycle if skin dry). Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper evident bag **Freeze**
Anal canal swabs (2) ***Second anal sample***	Recovery of body fluids/DNA/other material if: • anal intercourse* (even if condom purported to have been used) within 3 days (72 hours) or; • digital anal penetration within 48 hours. *In a female alleging anal intercourse only, please seek consent to take the full sequence of genital samples in addition to ano-rectal swabs	**Swab collection kit** Insert a moistened swab 2-3cm through the anal orifice. Use gentle rotational movements to sample the anal canal. Thereafter, the process is repeated with a second dry swab. Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
Rectal swabs (2) ***Third anal sample***	Recovery of body fluids/DNA/other material if: • anal intercourse * (even if condom purported to have been used) within 3 days (72 hours) or; • digital anal penetration within 48 hours. *In a female alleging anal intercourse only, please seek consent to take the full sequence of genital samples in addition to ano-rectal swabs	**Swab collection kit** Pass a lubricated, single-use proctoscope (specify lubricant used) at least 3-4cm into the anus, remove the obturator and sample the mucosa of lower rectum using two dry swabs. The average anal canal is about 3cm long in the adult (range 1.4 – 3.8cm, in males and 1.0 – 3.2cm in females). The mucosa of the upper anal canal is a deep purple colour, which readily distinguishes it from the red/pink mucosa of the lower rectum. **If it is not possible to pass a proctoscope, try to obtain two 'blind' anal canal/rectum swabs, and label as such.**	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. If fluid has been accumulated within/on the proctoscope, use one dry swab on the outside and the inside of the proctoscope and label as 'proctoscope swab'. Swab the proctoscope & place the swab(s) in the swab sleeve(s)/tube(s) and then in a tamper-evident bag. Submit opened tube/sachet of lubricant. **Freeze**

Please ensure you have read the instructions on page 1 before referring to the table.

SAMPLE TYPE	REASON FOR ANALYSIS	METHOD OF SAMPLING	PACKAGING AND STORAGE
Penile swabs **Shaft and external foreskin (if present) (2)** **Coronal sulcus and internal foreskin and Glans (2)**	Recovery of body fluids/DNA/other material (even if condom purported to have been used) if intercourse within 3 days (72 hours).	If the examinee is handling his penis, he must be wearing gloves. **Swab collection kit** **Shaft** – Using moderate pressure, roll a moistened swab over the skin of the shaft and, if present (i.e. uncircumcised), the external foreskin covering the glans. Roll second dry swab over the same area. **Coronal sulcus and internal foreskin (if present) and glans** – Retract the foreskin (if possible) and using moderate pressure, roll a moistened swab around the coronal sulcus and the internal foreskin now lying over the shaft; roll second dry swab over the same area. Sample with more than two swabs if staining remains visible after initial sampling (repeat moist/dry cycle). Label the swabs to indicate the order in which they were obtained.	Plain swab. Place immediately in swab sleeve/tube and then in tamper-evident bag. **Freeze**
Hair **head, pubic and body hair as appropriate e.g. facial** **FOR TOXICOLOGY SEE PAGE 7**	**A.** Recovery of foreign particles, e.g. glass, fibres, hairs. **B.** Recovery of body fluids/contact DNA (e.g. from pulling)/other material up to 72 hours **C.** Control sample for hair comparison: take from complainants and suspects where relevant, e.g. unknown assailant	**Hair Collection Kit** **A.** Recover visible foreign particles with disposable forceps and collect in paper sheet/drape. **B.** Swab and/or cut relevant area and collect in paper sheet/drape. If hair is dry, use moistened swab then dry swab (see instructions for use). **This should be done before combing/gloving/plucking.** Once the above has been considered, it may be relevant to use low-adhesive tape collected onto acetate sheets (available from Crime Scene Investigator (CSI) or gentle combing of the head or pubic area (see below). If acetates are not available, stick onto a tamper-evident bag. **C.** Comb hair using normal hair comb - not a nit comb. If <5 roots are yielded, put on standard gloves and run fingers though hair and collect in paper sheet/drape. **D.** Cut hair close to skin for comparison and collect in paper sheet/drape.	Fold paper sheets/drapes securely with upper sides inwards to retain debris. Place each type of sample in separate tamper-evident bag (include scissors, forceps and/or comb in the bag, if used). Stick low-adhesive tape onto acetate sheet and then place (tape & acetate, or tape and tamper-evident bag) into tamper-evident bag. Biological samples (e.g. ejaculate in hair) should be frozen. Non-biological samples, e.g. glass fragments, must be placed in a **DRY STORE at normal room temperature**. **Other samples should be frozen.** **FOR TOXICOLOGY SEE PAGE 7**
Buccal scrapes (2)	Reference sampling for DNA profiling after any relevant forensic oral samples are taken (see page 2).	**Elimination DNA Sampling kit (for complainants)** **PACE DNA sampling kit (for detainees)** Take one buccal scrape from the inside of each cheek at least 20 mins after examinee has had a drink, food or a cigarette (in cases involving oral sex within 48 hours, consider an additional sample at least two days [48 hours] after incident).	Place in plastic tubes then into a tamper-evident bag. **Freeze** Retain under CPIA for future YSTR. Download the document at: https://www.gov.uk/government/publications/access-and-use-of-dna-samples-profiles-and-associated-data

Please ensure you have read the instructions on page 1 before referring to the table.

SAMPLE TYPE	REASON FOR ANALYSIS	METHOD OF SAMPLING	PACKAGING AND STORAGE
Condoms	Recovery of body fluids/DNA/other material if in situ or after incident.	Condom collection kit Secure the open end of condom (do NOT knot). Place in plastic container with minimum handling. It is preferable to use disposable forceps to handle a condom when packaging it. The forceps should be provided in the kit.	Place in plastic container/pot in tamper-evident bag. **Freeze**
Sanitary towels/ tampons/ other sanitary wear/ incontinence pads/ nappies/ toilet tissue	Recovery of body fluids/DNA/other material, if in situ or after incident.	Retain intact.	Place in plastic container then into tamper-evident bag or straight into tamper-evident bag, e.g. for toilet tissue. **Freeze**
Gunshot residue (GSR)	Recovery of gunshot residues (GSR) if gun thought to have been in contact with, or fired within 3m of skin or hair surfaces. Persistence up to approx. 4 hours – hands, 6 hours – face, 12 hours – hair.	Contact your CSI/local provider for advice if asked to take samples for GSR as this is an infrequent request and requires specific methodology.	Place samples and completed 'Sampling Report' (in the kit) in labelled tamper-evident bag. **Store at normal room temperature.**
Urine (plain or with preservative)	Recovery of body fluids/DNA up to 7 days (168 hours); or 3 days (72 hours), as shorter period is recommended for pre-pubertal children.	Take a urine sample in **exceptional circumstances** when no medical examination has been carried out for females (complainants and suspects). Ideally the sample should be split into two equal parts as a separate sample is required for toxicology (see below) unless it is of a small volume where it should be retained as a single sample. When a urine sample is obtained, if the examinee uses toilet tissue, (which may be provided in the kit), to wipe afterwards, this should also be retained and exhibited.	Place tubes inside sealed plastic containers and then into tamper-evident bags. **Freeze**

Toxicology

SAMPLE TYPE	REASON FOR ANALYSIS	METHOD OF SAMPLING	PACKAGING AND STORAGE
Blood preserved (at least 1.5% sodium fluoride + potassium oxalate or EDTA)	Take a sample for drugs and/or alcohol if incident occurred within **3 days (72 hours)**.	Approximately 7.5 ml into 10ml/2x5ml tubes (no more than ¾ full, preferably glass). Ideally, if volatile analysis* required, a second sample should be taken similar to the first (no more than ¾ full). **Blood samples for volatile analysis must be frozen ideally within the hour and kept frozen in transit.** *e.g. from solvent abuse or solvent inhalation	**Blood and Urine** Place tubes inside sealed plastic containers and then into tamper-evident bags. Ideally samples should be refrigerated, but if no refrigerator available, they can be frozen as long as the sample tubes are **no more than ¾ full (no more than 20mls of urine)**. **REFRIGERATE (up to 4 weeks) OR FREEZE (for longer term storage)** Samples should be sent for analysis as soon as possible otherwise some drugs could be undetectable due to instability. Place toilet tissue into labelled, tamper-evident bag. Exhibit as a biological forensic sample (not a toxicology sample) as per condom/sanitary towel. **FREEZE (Toilet tissue)**
Urine preserved (at least 1.5% sodium fluoride)	Take a sample for drugs and/or alcohol if incident occurred **within 5 days (120 hours)**. Should be obtained if incident is a suspected drug-facilitated crime within preceding 14 days. If incident happened 3 days or more ago, it is recommended that a hair sample should be taken as per the guidance below (note this should only be taken a minimum of 4–6 weeks after the date of interest). In this instance, it is advisable for any urine samples to be stored and analysed later, if applicable, following the results from the hair analysis. Consider taking a hair sample for quickly eliminated drugs (e.g. GHB/GBL) if incident is a suspected drug-facilitated crime, even if a urine sample is taken.	Take two urine samples if the incident occurred in the preceding 24 hours. If the incident occurred more than 24 hours ago, only one sample is required Take the first sample as soon as practicable after the incident, and the second should be the next urination after the first sample and ideally within an hour of the first if possible. Take the second consecutive urine sample, even if not within an hour. Decant ideally 20 ml of urine into a tube, preferably of glass, of at least 25ml in capacity (i.e. fill tube just over ¾ full). Both specimens can be taken prior to full medical examination. Urine from complainants does not need to be witnessed. When a urine sample is obtained, if the examinee uses toilet tissue, (which may be provided in the kit), to wipe afterwards, this should also be retained and exhibited.	
Hair (normally only head hair suitable)	Drugs are eliminated from the body at varying rates, resulting in detection times in urine from 12 hours to over 3 weeks after use/ingestion (depending on the drug type). Drugs are stored and therefore can be detected in hair for much longer periods of time. Therefore, if the incident occurred up to 6 months prior to the examination and there is a possibility that drugs may have been eliminated from the urine, a sample of hair may be the best possibility for drug detection. It is of note that a cut hair sample is required and that it takes at least a few weeks for hair to emerge above the skin, so a sample of hair should only be collected a minimum of 4-6 weeks after the date of interest. If in doubt consult the laboratory for advice.	Follow instructions in specific kit from specialist laboratory. See *Collecting Hair Samples for Toxicology* for further guidance. **Should only be taken a minimum of 4-6 weeks after date of interest.** Examinee should be requested not to cut or chemically treat (dye, bleach or perm) their hair in the intervening period.	Hair samples should be packaged as described in the specific hair testing kit. They should then be placed in tamper-evident bags. Hair samples for toxicology must not be frozen or refrigerated. **They must be STORED DRY at normal room temperature.**
Nail clippings	Fingernail (or toenail) clippings can be used for drugs analysis, especially as an alternative when the individual has no, or a limited amount of, head and body hair.	Follow instructions in specific kit from specialist laboratory, if available. See *Collecting Nail Clippings for Toxicology* for further guidance. Clippings should be taken a minimum of 4 weeks after the date of interest.	Nail clippings should be enclosed in suitable packaging (e.g. as described in the specific testing kit; folded clean paper secured with tape) and then placed in a tamper-evident bag. Nail clippings for toxicology must not be frozen or refrigerated. **They must be STORED DRY at normal room temperature.**

Please ensure you have read the instructions on page 1 before referring to the table.

Produced by Prof Margaret Stark and the Forensic Science Subcommittee on behalf of the Faculty of Forensic & Legal Medicine

© Faculty of Forensic & Legal Medicine Jul 2022 Review date Jan 2023

Send any feedback and comments to [redacted]

Faculty of Forensic & Legal Medicine

Recommendations for the collection of forensic specimens from complainants and suspects – the evidence

Jul 2022 Review date Jan 2023 – check www.fflm.ac.uk for latest update

The medico-legal guidelines and recommendations published by the Faculty are for general information only. Appropriate specific advice should be sought from your medical defence organisation or professional association. The Faculty has one or more senior representatives of the MDOs on its Board, but for the avoidance of doubt, endorsement of the medico-legal guidelines or recommendations published by the Faculty has not been sought from any of the medical defence organisations.

Toxicology samples
(blood, urine and hair)

General advice

Some drugs can adhere or 'stick' to plastic and therefore glass tubes are recommended for toxicological samples.

Drug-facilitated crime

UNODC. (2011)
Guidelines for the forensic analysis of drug facilitating sexual assault and other criminal acts
Accessed 02/01/2019

Detection times for drugs

Moffat AC., Osselton MD., Widdop B. & Watts J. Eds.
Clarke's Analysis of Drugs and Poisons. 4th ed
London, Pharmaceutical Press, 2011.

Baselt RC.
Disposition of Toxic Drugs and Chemicals in Man, 11th ed
Biomedical Publications, Seal Beach, CA, 2017

Urine collection up to 14 days in DFSA cases

Negrusz A., Moore C., Stockham TL., & Levy NA.
Elimination of 7-Aminoflunitrazepam and Flunitrazepam in urine after a Single Dose of Rohypnol®
Journal of Forensic Sciences 2000: 45(5): 1031-40

Biological Samples

Double gloving with changing of gloves with different body areas

Margiotta, G., Tasselli, G., Tommolini, F., Lancia, M., Massetti S., Carnevali, E.
Risk of DNA transfer by gloves in forensic case work.
Forensic Science International: Genetics Supplement Series 2015: 5; e527-e529
(It is imperative to change gloves every time after touching items or surfaces, prior to touching the exhibit. It is desirable to wear multiple layers of gloves to avoid skin exposure during the changing of gloves.)

Double swabbing

Sweet , D., Lorente, M., Valenzuela, A., Vilanueva, E.
An improved method to recover saliva for human skin: the double swab technique
J Forensc Sci 1997: 42(2): 230-2
(Use of the double swab technique increased the recovery of saliva from human skin and therefore DNA evidence.)

Pang, BCM., & Cheung, BKK.
Double swab technique for collecting touched evidence
Legal Medicine 2007: 9; 181-184
(The double swab technique improves the quality of the resulting DNA profiles.)

Oral samples

Allard, J. E.
The collection of data from findings in cases of sexual assault and the significance of spermatozoa on vaginal, anal and oral swabs
Sci. Justice 1997: 37; 99– 108 (maximum persistence of sperm in the oral cavity recorded as 28-31 hours)

Nittis M., Franco M., Cochrane C.
New oral cut-off time limits in NSW
Journal of Forensic and Legal Medicine 2016: 44; 92-97
(oral rinse and perioral (lip) swab recommended in cases of oral assault)

Saliva on skin

Kenna J., Smyth M., McKenna L., Dockery C. & McDermott SD.
The recovery and persistence of salivary DNA on Human Skin
J Forensic Sci. 2011: 56; 1; 170-175
(showed persistence of salivary DNA up to 96 hours when not washed in 3 volunteers with saliva on their legs)

Hair

Salter, M.T., Cook, R.
Transfer of fibres to head hair, their persistence and retrieval
Forensic Science International 1996: 81; 2; 211–221
(hair style and activity are major factors in affecting persistence; taping is more efficient than combing)

Exline, D.L., Smith, F.P., Drexler, S.G.
Frequency of pubic hair transfer during sexual intercourse
J Forensic Sci: 1998; 43; 505-508
(important to collect pubic hair combings from the male suspects as well as from female victims, provided the time interval is not extreme)

Fingernail swabbing

Dowlman EA., Martin NC., Foy MJ., Lochner T. & Neocleous T.
The prevalence of mixed DNA profiles on fingernails swabs
Sci. Justice 2010: 50; 64-71
(looking at the persistence of DNA profiles after intimate contact)

Flanagan N. & McAlister C.
The transfer and persistence of DNA under the fingernails following digital penetration of the vagina
For Sci International: Genetics 2011: 5; 479-483
(DNA profiles maybe obtained up to 18 hours post digital penetration)

Oz C. & Zamir A.
An Evaluation of the Relevance of Routine DNA Typing of Fingernail Clippings for Forensic Casework
Journal of Forensic Science 2000: 45(1):158-160
(clippings from 6 volunteers did not reveal donor profile – hence swabbing might be more effective)

Lederer, T., Betz P. & Seidl S.
DNA analysis of fingernail debris using different multiplex systems: a case report
Int J Legal Med 2001: 114(4-5): 263-6
(showed that a victim's DNA might be accessed from fingernail scrapings from an assailant (using a small plastic spatula) two days after an assault and after the assailant had admitted to washing his hands several times)

Foran D., Hebda L., Doran A.
Trace DNA from Fingernails: Increasing the Success Rate of Widely Collected Forensic Evidence December 2015
Accessed 05/01/2016
(double swabbing of nails best in the living)

Female genitalia

Davies A. & Wilson E.
The Persistence of Seminal Constituents in the Human Vagina
Forensic Science 1974:3: 45-55
(spermatozoa found up to 3 days post intercourse and occasionally up to 6 days)

Graves H. C. B., Sensabaugh G. F. & Blake E. T.
Postcoital detection of a male-specific semen protein: application to the investigation of rape
N. Engl. J. Med. 1985: 312; 338–340
(spermatozoa isolated from endocervix 17 days after intercourse)

Astrup B.S., Thomsen J.L., Lauritsen J., Ravn P.
Detection of spermatozoa following consensual sexual intercourse
Forensic Science International 2012: 221; 137-141
(spermatozoa best recovered from the posterior fornix)

Wilson, E. M.
A comparison of the persistence of seminal constituents in the human vagina and cervix
Police Surg. 1982: 22; 44–45
(more chance of finding spermatozoa on cervical rather than vaginal swabs)

Owers R., McDonald A., Montgomerie H., & Morse C.
A casework study comparing success rates and expectations of detecting male DNA using two different Y-STR multiplexes on vaginal swabs in sexual assault investigations where no semen has been detected
Forensic Science International: Genetics 2018: 37: 1–5
(demonstrates the value of using more recently developed Y-STR multiplexes to detect male DNA on vaginal swabs in sexual assault investigations where no semen has been detected)

Hanson EK. & Ballantyne J.
A Y-short tandem repeat specific DNA enhancement strategy to aid the analysis of late reported (≥6 days) sexual assault cases
Med Sci Law 2014; 54: 4: 209-218
(semen donor Y-STR profiles found in post-coital samples collected 6-9 days after intercourse)

Sween, Kayla R., Quarino, Lawrence A., Kishbaugh, Janine M.
Detection of Male DNA in the Vaginal Cavity After Digital Penetration Using Y-Chromosome Short Tandem Repeats
Journal of Forensic Nursing 2015; 11: 1: 33–40
(viable possibility exists that probative Y-STR profiles can be obtained from vaginal swabs taken from subjects exposed to digital penetration at time intervals up to 72 hours post penetration)

Speck P. & Ballanytne J.
Post-coital DNA Recovery Study
NIJ, Washington, DC, March 2015
Accessed 21/12/2015
(provides strong pilot data to collect samples in females from the cervix and posterior fornix through their first menses for forensic laboratory analysis)

Ballantyne J.
DNA Profiling of the Semen Donor in Extended Interval Post-Coital Samples
NIJ, Washington DC, June 2012
Accessed 14/06/2016
(using a combination of novel methods to selectively enhance male DNA fractions the ability to obtain male donor profiles in extended interval post-coital samples collected 6 to 9 days after intercourse was demonstrated)

Paediatrics

Christian C., Lavelle J., DeJong A., Loiselle J., Brenner L.& Joffe M.
Forensic Evidence Findings in Prepubertal Victims of Sexual Assault
Pediatrics 2000: 106(1): 100-104
(medical records of 273 children under the age of 10 were reviewed. All children had forensic evidence collected within 44 hours of an alleged sexual assault. No swabs taken from the child's body were positive for blood after 13 hours or sperm/semen after 9 hours)

Giardet R., Bolton K., Lahoti S., Mowbray H., Giardino A., Isaac R., Arnold W., Mead B & Paes N.
Collection of Forensic Evidence from Paediatric victims of sexual assault 2011
Paediatrics 2011: 128; 2
(body samples should be considered for children beyond 24 hours although the yield is limited)

Penile

Please note that collective experience from forensic scientists in the UK has shown that positive results of female DNA on penile swabs can be obtained after 48 hours.

Cina S.J., Collins K. A., Pettenati M. J. & Fitts M.
Isolation and identification of female DNA on post-coital penile swabs
Am. J. Forensic Med. Pathol. 2000: 21; 97–100
(female DNA profiles obtained on penile swabs up to 24 hours post coitus)

Farmen RKB., Haukeli I., Ruoff P., Froyland E.
Assessing the presence of female DNA on post-coital penile swabs: Relevance to the investigation of sexual assault
Journal of Forensic and Legal Medicine 2012: 19; 386-389
(female DNA was recovered on all post-coital penile swabs taken at 5-24 hours; volunteer study)

Anal

Wilson GM. & Allard JE.
Spermatozoa – their persistence after sexual intercourse
For Sci Int 1982: 19; 135-154
(maximum recorded interval between the act of anal intercourse and the identification on a rectal swab is 96 hours)

Janisch S., Meyer H., Germerott T., Albrecht U., Schultz Y. & Debertin A.
Analysis of clinical forensic examination reports on sexual assault
Int J Legal Med 2010: 124(3); 227-35
(found that only 7 anal swabs out of 37 (18.9%) were positive for sperm, when taken within 24 hours of assault)

Tucker S., Ledray LE., & Werner JS.
Sexual Assault Evidence Collection
Wisconsin Medical Journal 1990: 89(7); 407-411
(1007 sexual assault examination laboratory results were reviewed in 1990. Of the 210 cases with anal involvement, sperm was only found in 4 cases (2%). These exams were completed within 4 hours of rape)

Time since intercourse

Dziak R., Parker L., Collins V. & Johnston S.
Providing Evidence Based Opinions on Time Since Intercourse (TSI) Based on Body Fluid Testing Results of Internal Samples
Canadian Society of Forensic Science Journal 2011: 44; 2; 59 to 69
Accessed 21/12/2015

Owers R., Davidson G., McDonald A., Morgan R., O'Rourke P.
Time since intercourse (TSI) data from a large-scale casework study of penile–vaginal penetration allegations using Sperm Elution.™
Forensic Science International 2018; 288:10-13
(TSI data is significantly affected by the sperm recovery method used. Using Sperm Elution improves the amount of spermatozoa recovered from vaginal swabs and the length of time to detect spermatozoa on swabs).

Urine for DNA (in exceptional circumstances)

Smith D.A., Webb L.G., Fennell A.I., Nathan E.A., Bassindale C.A., Phillips M.A.
Early evidence kits in sexual assault: an observational study of spermatozoa detection in urine and other forensic specimens
Forensic Science, Medicine, and Pathology. 2014;10: 3: 336–343
(the first void urine from an early evidence kit can be analysed for spermatozoa (within 20 hours) prior to testing for toxicology)

Joki-ErkkilaM., TuomistoS., Seppala M., HuhtalaH., Ahola A., Karhunen PJ.
Urine specimen collection following consensual intercourse – A forensic evidence collection method for Y-DNA and spermatozoa
Journal of Forensic and Legal Medicine 2016;37:50-54
(urine specimen may be useful (up to 24 hours) for detection of Y-DNA and spermatozoa following penile-vaginal penetration)

Produced by Prof Margaret Stark
on behalf of the Faculty of Forensic & Legal Medicine
© Faculty of Forensic & Legal Medicine, Jul 2022 Review date: Jan 2023
Send any feedback and comments to [redacted]

Faculty of Forensic & Legal Medicine

Recommended equipment for obtaining forensic samples from complainants and suspects

Jul 2021 Review date Jan 2022 - check www.fflm.ac.uk for latest update

The medico-legal guidelines and recommendations published by the Faculty are for general information only. Appropriate specific advice should be sought from your medical defence organisation or professional association. The Faculty has one or more senior representatives of the MDOs on its Board, but for the avoidance of doubt, endorsement of the medico-legal guidelines or recommendations published by the Faculty has not been sought from any of the medical defence organisations.

General Guidance[1]

- The individuals taking samples and handling modules must wear double gloves throughout the whole procedure. Change outer gloves when sampling different body areas.
- The examiner should wear disposable barrier clothing to minimise the risk of contamination. This barrier clothing should cover exposed skin and the examiner's own clothing thereby minimising the transfer of DNA/other evidence.
- Cleaning of the area/equipment (as appropriate) to be used for the examination, e.g. couch, table, etc. should be carried out using a suitable cleaning agent such as 10% sodium hypochlorite (bleach, Presept™) solution, 1% Solution Rely+On™, Virkon® , Chemgene, Microsol (10%), and Distel (1%) (Trigene Advance).
- A disposable, single use, couch cover should be used. For those who conduct examinations with patients in lithotomy position there should be covers for the leg/feet supports.
- Single use consumables should be used and where this is not possible equipment should be decontaminated between each examination, e.g. colposcope.
- The examiner should complete the *FME form* (complainant or suspect as appropriate) (or equivalent) regarding the samples and exhibit with any samples taken.
- Swabs with wooden shafts **must not** be introduced into any orifice.
- Each modular kit should have specific instructions.
- Ideally there should be a pre-printed sheet of relevant swab labels.
- There should be access to the latest *FFLM Recommendations for Sampling* document.
- Use of kit modules should reduce overall cost and reduce risk of contamination. The outer packaging of each kit should be a tamper evident bag.
- The Kit should be ISO18385 Forensic DNA Grade (FDG) when being used to retrieve DNA.
- The following kits should be available:
  - Early Evidence Kit
  - Contamination reduction kit
  - Equipment cover kit
  - Couch cover kit
  - Patient clothing collection kit
  - Alcohol/drug blood collection kit
  - Alcohol/drug urine kit
  - Mouth collection kit
  - Swab collection kit
  - Hair collection kit (separate kits required for head and pubic hair collection)
  - Fingernail swabbing/clipping kit
  - Hair for toxicology kit
  - Nails for toxicology kit

Once opened, the remaining unused contents of any module/kit should be discarded.

1. Contamination reduction kit

The specifications for an examinee's gown are:

- unisex
- not transparent
- loose or short sleeves, i.e. not elasticated
- non-shedding
- soft, with tie to close at neck and around middle
- various sizes suitable for size of examinee.

If this needs to be exhibited, it should be placed in a tamper-evident, **breathable** (usually paper) **bag**.

Sheet for examinee to stand on when undressing

- 'Sterile' white paper sheet at least 90cm by 90cm (FDG)
- Tamper-evident bag

HCP Clothing kit should include a face mask, mobcap and gown/lab coat.

2. Equipment cover kit

Covers to cover colposcope and related equipment (laptop, computer, monitor screen and trolley).

3. Couch cover

The specifications for a couch cover are:

- adjustable so appropriate size for couch (FDG)
- white
- single use.

4. Swab kits

At present, the Forensic Science Subcommittee is not able to recommend a particular composition of swab, however, swabs should have rounded heads and plastic shafts.

- Standard swabs (FDG)
- 5ml sterile water (FDG)
- Pre-printed labels
- Tamper evident bags

Different kits may be prepared with pre-labelled swabs (FDG):

- Generic x6 or x12
- Female genital (FDG): vulval x2, low vaginal x2, high vaginal x2, endocervical x2, perianal x2
- Anal (FDG): perianal x2, anal canal x2, rectal x2
- Right hand (FDG): x2
- Left hand (FDG): x2
- Penile (FDG): shaft x2; coronal sulcus, internal foreskin and glans x2

5. Blood

NB For RTA cases a RTA blood kit must be used.

- Single use, disposable tourniquets should be used
- Evacuated blood collection system or alternative safe collection system to allow collection of a total of 10ml of blood into **glass** vials with appropriate amount of sodium fluoride and potassium oxalate preservative.
- Safety needle/butterfly in various gauges, e.g. 21G, 23G; for use with evacuated blood collection system
- Needle holder for use with evacuated blood collection system
- Alcohol-free skin cleansing tissue
- One/two ball(s) of cotton wool
- Small plaster
- Suitable tamper-evident protective outer packaging/rigid container with padding to prevent bottle movement within container
- Pre-printed labels
- Tamper-evident bag x1
- See: *Health and Safety (Sharp Instruments in Healthcare) Regulations 2013*

6. Urine

NB For RTA cases a RTA urine kit must be used.

(2 x urine collection vials to be available per examinee, e.g. in cases of drug facilitated crime)

- Wide brim collection vessel x1
- **Glass** bottle to collect 20ml urine from the collection vessel with appropriate amount of sodium fluoride preservative x1
- Suitable tamper-evident protective outer packaging/rigid container with padding to prevent bottle movement within container
- Pre-printed labels
- Where available, toilet tissue (FDG) to be retained after wiping and frozen
- Exhibit toilet tissue separately to urine sample
- Tamper-evident bag x2

7. Mouth collection kit

- Standard swab(s) (FDG) (plastic shaft) x4 (perioral x2 and mouth x2)
- Sterile water (FDG) – single container of 10ml and single container of 5ml
- Wide-mouthed, sealable plastic pot (FDG) to collect mouth washings x1
- Gloves for examinee to hold pot x1 pair
- Tamper-evident bags as required

8. Fingernail Swabbing and Clippings Kits

NB Specialised kits required to collect nails for toxicology. See: *Recommendations for collecting nail clippings for toxicology*

- Taper-tipped mini swabs (FDG) x4
- 5ml sterile water (FDG) x1
- Nail clippers (FDG) that retain the clippings x2
- Sterile white paper sheet 50cm by 50cm (FDG)
- Tamper-evident bags as required

9. Hair collection kit

NB Specialised kits required to collect hair for toxicology. See: *Recommendations for collecting hair samples for toxicology*

- Comb (FDG) with medium spacing between teeth (i.e. not a nit comb) x1
- Disposable forceps (FDG) x1
- Sterile white paper sheet 50cm by 50cm (FDG) x3
- Scissors (FDG) x 1
- Tamper-evident bags as required
- Low-adhesive clear tape available from CSI

10. Gloves

- Non-sterile powder free, non-latex, single-use gloves, e.g. nitrile – of various sizes
- Complying with appropriate quality standards to address medical grade (e.g. EN455) and PPE (e.g. EN374) requirements

11. Lubricant

Several commercial lubricants are available including Aquagel, KY Jelly, Gelcat, Pedicat. (FDG)

Specify the lubricant used on the FME form

12. Vaginal specula and proctoscopes

- Various sizes of both to be available in the examination suites
- Single use
- Clear plastic
- Disposable (FDG)
- Tamper-evident bag (swab instrument and exhibit swab)

13. Disposable plastic aprons

- To protect the clothing of the HCP

14. Firearm discharge residue sampling

- Refer to local guidelines
- Specific FDR Kits are available

15. Condom collection kit

- Opaque containers (FDG)
- Plastic clip (FDG)
- Forceps (FDG)
- Pre-printed label
- Tamper-evident bag

16. Sanitary wear/nappy module/ products of conception

- Opaque containers (FDG)
- Pre-printed label to indicate tampon/panty-liner/sanitary towel/nappy
- Tamper-evident bag

17. Early evidence kit

- Contents to include equipment for a urine sample (urine and tissue) and a mouth collection kit as above, Standard swabbing kit (6) and a Fingernail Swabbing kit as above.

18. Paediatric swab collection kit

- Gown
- Butterfly infusion set
- Couch cover
- Colposcope cover
- Paediatric urine pouch
- Swabs x10
- Tamper evident bags x5

References

Forensic Science Regulator Guidance

The Control and Avoidance of Contamination in Forensic Medical Examinations FSR-G-207

Issue 2 2020

Guidance for the Assessment, Collection and Recording of Forensic Science Related Evidence in Sexual Assault Examinations FSR-G-212 Issue 1

2020

Codes of Practice and Conduct Sexual Assault Examination: Requirements for the Assessment, Collection and Recording of Forensic Science Related Evidence FSR-C-116 Issue 1

2020

FFLM Guidance

Operational procedures and equipment for clinical rooms in police stations

Operational procedures and equipment for clinical facilities in Sexual Assault Referral Centres

Produced by Prof Margaret Stark
on behalf of the Faculty of Forensic & Legal Medicine
© Faculty of Forensic & Legal Medicine, Jul 2021 Review date: Jan 2022
Send any feedback and comments to [redacted]

Faculty of Forensic & Legal Medicine

Forensic medical examination
Complainant

INFORMATION
page 1

Relevant sections of this form must be completed and a copy submitted with the samples. **Refer to the current FFLM recommendations regarding which samples are relevant.**
Please **print in capitals** in **black ink** using a ball-point pen and tick the appropriate boxes. Extra information can be included on **p4.**

GENERAL INFORMATION *circle or delete as appropriate*	
Name of examinee	Case reference number
Address of examination facility	Age Sex M F Transgender *clarify*
	Weight Height
Female Complainants Date of LMP	Pre-pubertal / Post-pubertal Pre-menopausal / Post-menopausal
Date & time of incident *24:00 format*	Date & time of examination
Date(s), time(s) of other relevant sexual activity within the previous 10 days *clarify type e.g VI, OI, AI*	
Items used in previous intercourse Condom ☐ Spermicide ☐ Lubricant ☐ Other *specify* ☐	
Contraception used None ☐ Hormonal ☐ IUD ☐	

SPECIFIC INFORMATION relating to the alleged offence *circle or delete as appropriate*				**Details**
Kissing / licking / biting / sucking / spitting?	N/K ☐	No ☐	Yes ☐	
Mouth to genitalia / anus?	N/K ☐	No ☐	Yes ☐	
Digit to vulva / vagina / anus?	N/K ☐	No ☐	Yes ☐	
Penis into vulva / vagina?	N/K ☐	No ☐	Yes ☐	
Penis into mouth?	N/K ☐	No ☐	Yes ☐	
Penis into anus?	N/K ☐	No ☐	Yes ☐	
Ejaculation?	N/K ☐	No ☐	Yes ☐	
Object to vulva / vagina / anus?	N/K ☐	No ☐	Yes ☐	
Other sexual / physical act(s) e.g. NFS	N/K ☐	No ☐	Yes ☐	
Injuries?	N/K ☐	No ☐	Yes ☐	
Ano-rectal / genital bleeding?	N/K ☐	No ☐	Yes ☐	Injury site(s)
If genital bleeding, is this menstrual type-bleeding?	N/K ☐	No ☐	Yes ☐	
Condom / lubricant / spermicide used	N/K ☐	No ☐	Yes ☐	
Weapon used?	N/K ☐	No ☐	Yes ☐	*specify*
The following removed / inserted	N/K ☐			Pad ☐ Tampon ☐ Sponge ☐ Diaphragm ☐
Showered / washed / bathed / douched	N/K ☐	No ☐	Yes ☐	
Genital / anal / relevant skin area wiped	N/K ☐	No ☐	Yes ☐	Tissue ☐ Moist wipe ☐ Other ☐ *specify*
Anal intercourse: defaecated since alleged offence	N/K ☐	No ☐	Yes ☐	
Oral intercourse: mouth cleansed or eaten or drunk since alleged offence	N/K ☐	No ☐	Yes ☐	Drink ☐ Mouthwash ☐ Toothbrush ☐ Eaten ☐

TOXICOLOGY INFORMATION				
Was alcohol consumed?	N/K ☐	No ☐	Yes ☐	
If yes, please specify				Prior ☐ During ☐ After ☐ offence
Start time of drinking	End time of drinking			
Quantity and type of alcoholic beverage consumed				
IMPORTANT: If known, please specify the time of previous urination (i.e. time of urination prior to urine sample 1 provided in this examination)				Date Time

Have any drugs (prescribed or otherwise) been used by/administered to the complainant within 14 days of the examination?
N/K ☐ No ☐ Yes ☐ *If yes, please specify* Prior ☐ During ☐ After ☐ offence

Give details

Are other substances suspected of having been used/administered, which could be relevant to the offence?
N/K ☐ No ☐ Yes ☐ *If yes, please specify* Prior ☐ During ☐ After ☐ offence

Give details

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

© Faculty of Forensic & Legal Medicine, Jul 2021 Review date Jul 2024

Faculty of Forensic & Legal Medicine

Forensic medical examination
Complainant

SAMPLES
page 2

GENERAL INFORMATION *circle or delete as appropriate*	
Name of examinee	Sex M F Transgender *clarify*
Case reference number	Venue Room
Examination start time finish time Date	

SAMPLES TAKEN		expiry date	batch* no./barcode	no. taken	item/ exhibit no.	TEB no.
Hand swabs usually (x2) 1 moist & 1 dry per hand, **but adapt as appropriate**						
	Right hand swabs (x2) 1 moist and 1 dry					
	Left hand swabs (x2) 1 moist and 1 dry					
Fingernail collection						
	Right fingernail cuttings					
	Right fingernail swabs (x2) 1 moist and 1 dry					
	Left fingernail cuttings					
	Left fingernail swabs (x2) 1 moist and 1 dry					
Mouth sample collection						
	Peri-oral swab (x2) 1 moist and 1 dry					
	Mouth swab(s) (dry)					
	Mouth rinse 10ml					
Skin swabs (x 2) 1 moist and 1 dry from each site						
	Right breast					
	Left breast					
	Upper/inner thigh					
	Other e.g. groin skin crease, mons pubis, scalp *please specify*					
	Skin control swab *specify site*					
Female genital samples						
	Vulva and perineum swabs (x2) 1 moist and 1 dry, as appropriate					
	Low vagina swabs (x 2)					
	High vagina swabs (x 2)					
	Endocervical swabs (x 2)					
	Vaginal speculum used: ☐ no ☐ yes					
	Speculum swab: ☐ no ☐ yes					
	Opened tube/sachet of used lubricant (type):					
Ano-rectal Samples						
	Perianal swabs (x2) 1 moist and 1 dry					
	Anal canal swabs (x2) 1 moist and 1 dry					
	Rectal swabs					
	Proctoscope used: ☐ no ☐ yes					
	Proctoscope swab ☐ no ☐ yes					
	Opened tube/sachet of used lubricant (type):					

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

© Faculty of Forensic & Legal Medicine, Jul 2021 Review date Jul 2024

Faculty of Forensic & Legal Medicine

Forensic medical examination
Complainant

SAMPLES
page 3

GENERAL INFORMATION	
Name of examinee	Case reference number

SAMPLES TAKEN		expiry date	batch* no./barcode	no. taken	item/ exhibit no.	TEB no.
Male genital samples (x2) 1 moist and 1 dry from each site						
	Swabs from Shaft + *external foreskin if present*					
	Swabs from Coronal sulcus and Glans + *internal foreskin if present*					
Hair collection						
	Head hair visible debris collect using forceps					
	Head hair swabs (x2) 1 moist and 1 dry, as appropriate					
	Head hair taping use low adhesive tape only					
	Head hair combings retain comb					
	Head hair reference sample minimum 25 - representative sample					
	Pubic hair visible debris collect using forceps					
	Pubic hair swabs (x2) 1 moist and 1 dry, as appropriate					
	Pubic hair combings retain comb					
	Pubic hair reference sample minimum 25 - representative sample					
	Hair for toxicology cut full-length lock, pencil width – see *FFLM recommendations*					
DNA reference samples						
	Elimination kit buccal scrapes (x 2) for DNA profiling tests *attach barcode*					
Examinee clothing	if examinee's own clothing, note on FME form page 4					
	Gown					
	Ground sheet					
Condom collection	note where found, e.g. in vagina, kept by examinee					
	Condom					
Sanitary wear collection	circle/delete as appropriate Tampon/sanitary towel/incontinence pad/nappy/toilet tissue/other _____ used before and/or after offence					
Other please specify						
Alcohol/Drug blood						
	Blood preserved (sodium fluoride/potassium oxalate) total 10ml (mix for 30 seconds)					
	Time taken:					
Alcohol/Drug urine where appropriate, take 2nd urine sample						
	Urine preserved (sodium fluoride) 20ml (mix for 30 seconds)					
	Urine sample 1 Time taken:					
	Urine sample 2 Time taken:					
	Tissue					
Urine for DNA (in exceptional circumstances)						
	Urine (as above)					

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

Early Evidence Kit utilised or other samples taken, prior to the medical examination ☐ N/K ☐ no ☐ yes	If yes, list (if possible)

© Faculty of Forensic & Legal Medicine, Jul 2021 Review date Jul 2024

Faculty of Forensic & Legal Medicine

Forensic medical examination
Complainant

ADDITIONAL INFORMATION

CONTINUATION SHEET

GENERAL INFORMATION	
Name of examinee	Case reference number

FURTHER INFORMATION
Can be used for further information e.g. further details or clarifications of the offence or examination; further exhibits e.g. clothing

Diagrams to show the site of skin swabbing

Body chart(s) attached

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

© Faculty of Forensic & Legal Medicine, Jul 2021
Review date Jul 2024 – check www.fflm.ac.uk for latest update
Send any feedback and comments to [redacted]

Faculty of Forensic & Legal Medicine

Forensic medical examination

Suspect

SAMPLES

page 1

Relevant sections of this form must be completed and a copy submitted with the samples. **Refer to the current FFLM recommendations regarding which samples are relevant.**

Please **print in capitals** in **black ink** using a ball-point pen and tick the appropriate boxes. Extra information can be included on **p3.**

GENERAL INFORMATION *circle or delete as appropriate*	
Name of examinee	Sex M F Transgender *clarify*
Case reference number	Venue
Examination start time finish time Date	Room

TOXICOLOGY INFORMATION
Alcohol, and some drugs, are eliminated relatively quickly from blood, it is recommended that **both blood and urine** are taken from suspects/ detainees with the appropriate authority.
Have any drugs (prescribed or otherwise) or alcohol been taken by the suspect in the past 5 days? N/K ☐ No ☐ Yes ☐
If yes, please specify

SAMPLES TAKEN		expiry date	batch* no./barcode	no. taken	item/ exhibit no.	TEB no.
Hand swabs usually (x2) 1 moist & 1 dry per hand, **but adapt as appropriate**						
	Right hand swabs (x2) 1 moist and 1 dry					
	Left hand swabs (x2) 1 moist and 1 dry					
Fingernail collection						
	Right fingernail cuttings					
	Right fingernail swabs (x2) 1 moist and 1 dry					
	Left fingernail cuttings					
	Left fingernail swabs (x2) 1 moist and 1 dry					
Mouth sample collection						
	Peri-oral swab (x2) 1 moist and 1 dry					
	Mouth swab(s) (dry)					
	Mouth rinse 10ml					
Skin swabs (x 2) 1 moist and 1 dry from each site						
	Right breast					
	Left breast					
	Upper/inner thigh					
	Other e.g. groin skin crease, mons pubis, scalp *please specify*					
	Skin control swab *specify site*					
Female genital samples						
	Vulva and perineum swabs (x2) 1 moist and 1 dry, as appropriate					
	Low vagina swabs (x 2)					
	High vagina swabs (x 2)					
	Endocervical swabs (x 2)					
	Vaginal speculum used: ☐ no ☐ yes					
	Speculum swab: ☐ no ☐ yes					
	Opened tube/sachet of used lubricant (type):					

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

© Faculty of Forensic & Legal Medicine, Jul 2021 Review date Jul 2024

Faculty of Forensic & Legal Medicine

Forensic medical examination
Suspect

SAMPLES
page 2

GENERAL INFORMATION	
Name of examinee	Case reference number

SAMPLES TAKEN		expiry date	batch* no./barcode	no. taken	item/ exhibit no.	TEB no.
Ano-rectal Samples						
	Perianal swabs (x2) 1 moist and 1 dry					
	Anal canal swabs (x2) 1 moist and 1 dry					
	Rectal swabs					
	Proctoscope used: ☐ no ☐ yes					
	Proctoscope swab ☐ no ☐ yes					
	Opened tube/sachet of used lubricant (type):					
Male genital samples (x2) 1 moist and 1 dry from each site						
	Swabs from Shaft + *external foreskin if present*					
	Swabs from Coronal sulcus and Glans + *internal foreskin if present*					
Hair collection						
	Head hair visible debris collect using forceps					
	Head hair swabs (x2) 1 moist and 1 dry, as appropriate					
	Head hair taping use low adhesive tape only					
	Head hair combings retain comb					
	Head hair reference sample minimum 25 - representative sample					
	Pubic hair visible debris collect using forceps					
	Pubic hair swabs (x2) 1 moist and 1 dry, as appropriate					
	Pubic hair combings retain comb					
	Pubic hair reference sample minimum 25 - representative sample					
	Hair for toxicology cut full-length lock, pencil width – see *FFLM recommendations*					
Other please specify						
Alcohol/Drug blood						
	Blood preserved (sodium fluoride/potassium oxalate) total 10ml (mix for 30 seconds)					
	Time taken:					
Alcohol/Drug urine where appropriate, take 2nd urine sample						
	Urine preserved (sodium fluoride) 20ml (mix for 30 seconds)					
	Urine sample 1 Time taken:					
	Urine sample 2 Time taken:					
	Tissue					
Urine for DNA (in exceptional circumstances)						
	Urine (as above)					

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

© Faculty of Forensic & Legal Medicine, Jul 2021 Review date Jul 2024

CONTINUATION SHEET

GENERAL INFORMATION	
Name of examinee	Case reference number

FURTHER INFORMATION
Can be used for further information e.g. further details or clarifications of the offence or examination; further exhibits e.g. clothing
Diagrams to show the site of skin swabbing
Body chart(s) attached

Print name of person undertaking medical examination	Contact telephone number
Signature of person undertaking medical examination/taking forensic samples	Regulatory Registration No.
	Date

© Faculty of Forensic & Legal Medicine, Jul 2021
Review date Jul 2024 – check www.fflm.ac.uk for latest update
Send any feedback and comments to [redacted]

Case Number Crime Reference Number Date

Faculty of Forensic & Legal Medicine

Pro Forma

Adult Forensic Sexual Assault Examination

May 2021 Review date May 2024 - check www.fflm.ac.uk for latest update

Note: This form has been designed to assist Forensic Clinicians in the assessment of an adult complainant of sexual assault. It is to be regarded as an aide-memoire and it is therefore not necessary for all parts of the pro forma to be completed. On completion this form is the personal property of the examining clinician. This form should not be used for the examination of suspects (use Fitness for Detention Pro forma).

Throughout the notes use 24 hour clock to avoid confusion

1. Initial Call

The initial call to attend a complainant of a sexual offence frequently comes from an individual with little information regarding the nature and timing of the allegation. Because such information will inform the decision regarding the venue and timing of the examination the Forensic Clinician (FC) should endeavour to speak directly with the officer who is with the complainant.

Date and time of initial call _____

Name of referrer (if police include collar number) _____

Contact telephone number of referrer _____

Name of sexual offence trained officer who will be attending with the complainant _____

Contact telephone number of attending officer _____

Name of complainant and DOB _____

Does the complainant have any known serious injuries or other acute medical problems? _____

_____

_____

The FC should ensure that the venue proposed for the examination is appropriate. It may be necessary to arrange for the complainant to be transferred, via an ambulance, to the nearest ED if she/he appears to have serious injuries or an altered level of consciousness. The FC should be willing to attend a hospital if required to.

When did the alleged incident take place (day / date / time)? _____

A decision with regard to the timing of the examination should be made after consideration of the persistence data regarding forensic evidence (see FFLM 'Recommendations for the collection of forensic specimens from complainants and suspects') and the medical needs of the complainant (e.g. HIV Post Exposure Prophylaxis, Hep B, emergency contraception, documentation of injuries).

What is the nature of the alleged sexual assault? _____

_____

If there is any suggestion that penis-mouth penetration (fellatio) may have taken place, or the nature of the sexual assault is not known, the referrer should be reminded to obtain urgently the oral samples i.e. two mouth swabs and mouth wash (see FFLM 'Recommendations for the collection of forensic specimens from complainants and suspects'). Police officers and civilian staff have access to an 'Early Evidence Kit' to sample a complainant's mouth.

Is there any suggestion that drugs or alcohol have been used to facilitate the sexual assault of the complainant (DFSA)?

_____

_____

In all cases, presenting within 14 days of the allegation the referrer should be reminded to access urgently a Urine Module/'Early Evidence Kit' and request a urine sample from the complainant. The time of the last urination (prior to the one yielding the sample) and the time that the sample was produced should be noted. Consideration should also be given to whether the complainant has capacity to consent to the examination.

Does the complainant have any known mental health problems? _____

_____

If yes, consideration should be given to arranging a person with prior knowledge of the complainant to attend with them.

Does the complainant have any known additional needs e.g. difficulty understanding English? _____

_____

If yes, consideration should be given to arranging an interpreter. Consider all other additional needs e.g. A signer for the deaf.

Agreed venue and time for examination _____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

2. Examination Details

Location _____

Date of examination _____

Time of arrival of complainant _____

Time FC introduced to complainant _____

3. Forensic Clinician Details

Name of FC _____

GMC / NMC number _____

Other clinicians *(if present)* _____

_____

4. Police Details

Crime Reference Number _____

Name and contact details of attending police officer (including collar number) _____

_____

Name and contact details of Officer in Case (including collar number) _____

_____

5. Crisis Worker Details

Name of Crisis Worker _____

Contact telephone number _____

6. Others Present

Social worker/ Care worker _____

Others *(relationship to examinee)* _____

7. Patient Details

Name _____

Address _____

Date of Birth _____ Age _____

Gender _____ Ethnicity _____

Self-referral case number *(if applicable)* _____

8. Reason for Referral

Briefing taken from _____

Contact details (if police include collar number) _____

_____

Names of persons present during briefing _____

_____

Location of alleged assault(s) _____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Brief history of assault (continue overleaf if necessary) _____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Brief history of assault (continued) _____

Number of alleged assailants _____

Prior knowledge of assailant(s) (details) _____

Last contact with alleged assailant(s) _____

Forensic samples taken before examination started (details) _____

By whom taken (if police include collar number) _____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

9. Consent to History, Examination and Report

I _____ consent to a forensic examination, as explained to me by

_____

I understand that the forensic examination will include (delete if not applicable):

a) A full medical history and complete examination recorded in writing

b) Collection of forensic samples

c) Collection of medical specimens

d) Taking of photographs/videos/digital images for recording and evidential purposes (including second opinions from medical experts and peer review). I have been told that any sensitive photographs, videos and/or digital images will be anonymised, encrypted and stored securely and only be made available to other non-medical persons on the order of a judge

e) I understand and agree that a copy of the medical notes may be given to professionals involved in the case (e.g. police or lawyers) and may be used in a court

f) I understand and agree that the Clinician will provide a statement/report for the police if requested to do so

g) I agree to the use of my anonymised photographs/videos/digital images/medical notes for teaching and research

h) I give permission for a letter to be written to my GP

i) I understand that I may strike out any of the above

j) I understand that my anonymised photographs/videos/digital images/medical notes will be used for audit

k) I understand that if this case goes to court the clinician may be required to be cross examined on this medical examination in court

l) I understand staff at the SARC have a duty of care and may have to inform social services and/or police

m) I have been advised that I may halt the examination at any time

Signed .....

Name printed ..... Date and time.....

Signature of FC who took consent .....

Name printed ..... Date and time.....

GMC/NMC Number.....

If verbal consent, signature of witness.....

Name printed ..... Date and time.....

GIVE A COPY OF THIS CONSENT FORM TO THE COMPLAINANT

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

10. Details of the Assault from Complainant

Kissing/licking/biting/ sucking/spitting?	YES / NO / NOT KNOWN	*(details, including sites)*
Mouth to genitalia/anus?	YES / NO / NOT KNOWN	*(details)*
Digit to vulva/vagina/anus?	YES / NO / NOT KNOWN	*(details)*
Penis into vulva/vagina?	YES / NO / NOT KNOWN	*(details)*
Penis into mouth?	YES / NO / NOT KNOWN	*(details)*
Penis into anus?	YES / NO / NOT KNOWN	*(details)*
Ejaculation?	YES / NO / NOT KNOWN	*(details, including sites)*
Object to vulva/vagina/anus?	YES / NO / NOT KNOWN	*(details)*
Other sexual/physical act(s)	YES / NO / NOT KNOWN	*(details)*
Injuries?	YES / NO	*(details)*
Ano-genital bleeding?	YES / NO	*(details)*
Violence used	YES / NO	*(details)*
Strangulation	YES / NO	*(details)*
Weapon used?	YES / NO / NOT KNOWN	*(details)*
Damage to clothing?	YES / NO	*(details)*
Additional Details		

Asked to direct forensic sampling and determine risk of STIs and pregnancy (see Medical Aftercare)

Confirmation / additions from complainant (verbatim & recorded contemporaneously) _____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

11. Post Alleged Assault *ask if relevant*

Eaten	YES / NO / NOT KNOWN
Drank	YES / NO / NOT KNOWN
Passed urine	YES / NO / NOT KNOWN *(note time)*
Bowels open	YES / NO / NOT KNOWN
Wiped / wash	YES / NO / NOT KNOWN *(specify site and disposal of e.g. cloth/tissue)*
Changed clothes	*(specify)*
Self harm	*(sites)(method)*
Circle:	Brushed: teeth / gums / dentures
	Mouth wash / spray used
	Washed / bathed / showered / douched
	Changed tampon / pad / sponge / diaphragm

12. Details of Alleged Assailant(s) *Asked to determine risk of STIs (see Medical Aftercare)*

Confirmation / additions from complainant (verbatim and recorded contemporaneously) _____

_____

_____

_____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

13. Direct Questions *ask if relevant*

	Since assault	Details	If yes, note if previously experienced the problem described
Abdominal Pain			
Urinary symptoms *e.g. dysuria, frequency, haematuria, incontinence, UTI*			
Genital symptoms *e.g. soreness, discharge, bleeding, dyspareunia, pruritis, injuries*			
Bowel symptoms *e.g. soreness, pain on defaecation, discharge, bleeding, change in bowel habit, incontinence, pruritis, injuries*			
Other symptoms (including intoxication with or withdrawal from drugs/alcohol)			

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

14. Sexual History *(note who was present when taken) Asked to assist with interpretation of forensic evidence and medical aftercare - for the latter the time frame may need to be extended to 'since last normal menstrual period'*

Dates and times of other relevant sexual activity within the previous 10 days _____

_____

_____

Items used in previous intercourse

Condom Yes ☐ No ☐ Not Known ☐ Spermicide Yes ☐ No ☐ Not Known ☐

Lubricant Yes ☐ No ☐ Not Known ☐ Other (specify)_____

If relevant, clarify types of intercourse in last 10 days only _____

_____

_____

_____

15. Drug and Alcohol Use in Relation To Alleged Assault

Did the alleged assailant consume alcohol? Yes ☐ No ☐ Not Known ☐

If yes, please specify Prior ☐ During ☐ After offence ☐

Start time of drinking _____ End time of drinking _____

Quantity and type of beverage consumed _____

Time last ate_____

Did the complainant consume alcohol? Yes ☐ No ☐ Not Known ☐

If yes, please specify Prior ☐ During ☐ After offence ☐

Start time of drinking _____ End time of drinking _____

Quantity and type of beverage consumed _____

Time last ate_____

Subjective sense of influence/ intoxication with alcohol _____

_____

Have any illicit drugs been used by / administered to the subject within 14 days of the examination? Yes ☐ No ☐ Not Known ☐

If yes, please specify Prior ☐ During ☐ After offence ☐

Give details_____

_____

Are any other substances suspected of having been used Yes ☐ No ☐ Not Known ☐

By / administered that could be relevant to the offence?

If yes, please specify Prior ☐ During ☐ After offence ☐

Give details_____

_____

If applicable - drugs/alcohol history_____

_____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

16. Medical History

General Health (including clotting disorders) _____

_____

_____

_____

Additional Needs _____

_____

Pre-existing skin problems *e.g. eczema, lichen sclerosus* _____

_____

Previous Illnesses _____

_____

_____

Operations _____

_____

_____

17. Mental Health

History of mental illness _____

_____

_____

_____

_____

_____

_____

_____

Hospital admissions (voluntary / involuntary) _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Care Plan _____

_____

_____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

18. Menstrual / Obstetric History

Periods *e.g. frequency / regularity / LMP*

Pre-existing menstrual problems *e.g. IMB and PCB*

How many times have you given birth?

Number of vaginal births

Birth weight of children

Episiotomy?

Any genital surgery (including piercings/FGM)

19. Medications and Allergies

Prescribed Medication *e.g. contraception (detail compliance), HRT*	
Other medication / remedies (e.g. OTC, vitamins, protein shakes etc.)	
Allergies	

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

20. Forensic Medical Examination

Start time _____ Finish time _____

21. Examination

Name(s) of person(s) present _____

_____

Height_____ Weight _____ BMI M^2/Kg _____

General appearance _____

_____

_____

_____

Skin (colour, gooseflesh diaphoresis etc.) _____

_____

_____

Hair *approximate time of any added hair dye (advise not to dye hair or cut hair whilst awaiting hair samples for toxicology at 4 - 6 weeks)*

_____

_____

Demeanour / behaviour _____

_____

_____

_____

_____

_____

Speech *(e.g. content, slurring)* _____

_____

_____

_____

Additional physical needs_____

_____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Injuries (fresh / healing or healed) / pathology / tattoos / piercings (indicate if self-harm)	Examined	Injuries	See Body Chart
Scalp/hair	Y / N	Y / N	
Face	Y / N	Y / N	
Eyes	Y / N	Y / N	
Ears	Y / N	Y / N	
Lips	Y / N	Y / N	
Inside mouth/palate (Note any foetor/frenulum)	Y / N	Y / N	
Teeth	Y / N	Y / N	
Neck	Y / N	Y / N	
Back	Y / N	Y / N	
Buttocks	Y / N	Y / N	
Arms: R L	Y / N Y / N	Y / N Y / N	
Hands/wrists: R L	Y / N Y / N	Y / N Y / N	Note if R or L handed
Fingers/nails: R L	Y / N Y / N	Y / N Y / N	Note if cut / broken / false
Front of chest	Y / N	Y / N	
Breasts	Y / N	Y / N	
Back of chest	Y / N	Y / N	
Abdomen	Y / N	Y / N	
Legs: R L	Y / N Y / N	Y / N Y / N	
Feet/ankles/soles: R L	Y / N Y / N	Y / N Y / N	
Additional details *e.g. jewellery, injection sites, self-harm, tattoos*			

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Systems Examination

CVS	Pulse rate/character _____ BP _____ Heart sounds _____ Other findings _____ _____ _____
RS	Trachea / Air entry / PN _____ Breath sounds _____ PEFR (if indicated) _____
Abdomen	L.K.K.S _____ Tenderness / Masses / Guarding / Rebound _____ _____ Bowel sounds _____
Neurology	Cranials _____ Pupil Size _____ Reaction to light _____ Accommodation _____ Tremor _____ Ataxia _____ Tone _____ Power _____ Reflexes _____ Sensation _____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

22. Genital and Anal Examination

Extra lighting ☐ Colposcope ☐ Additional magnification ☐

Position used

Left lateral	Yes ☐	No ☐	Supine	Yes ☐	No ☐
Separation	Yes ☐	No ☐	Traction	Yes ☐	No ☐

Details of Female Genital findings

Thighs

Mons pubis

Pubic hair *(e.g. shaved, cut)*

Labia majora

Labia minora

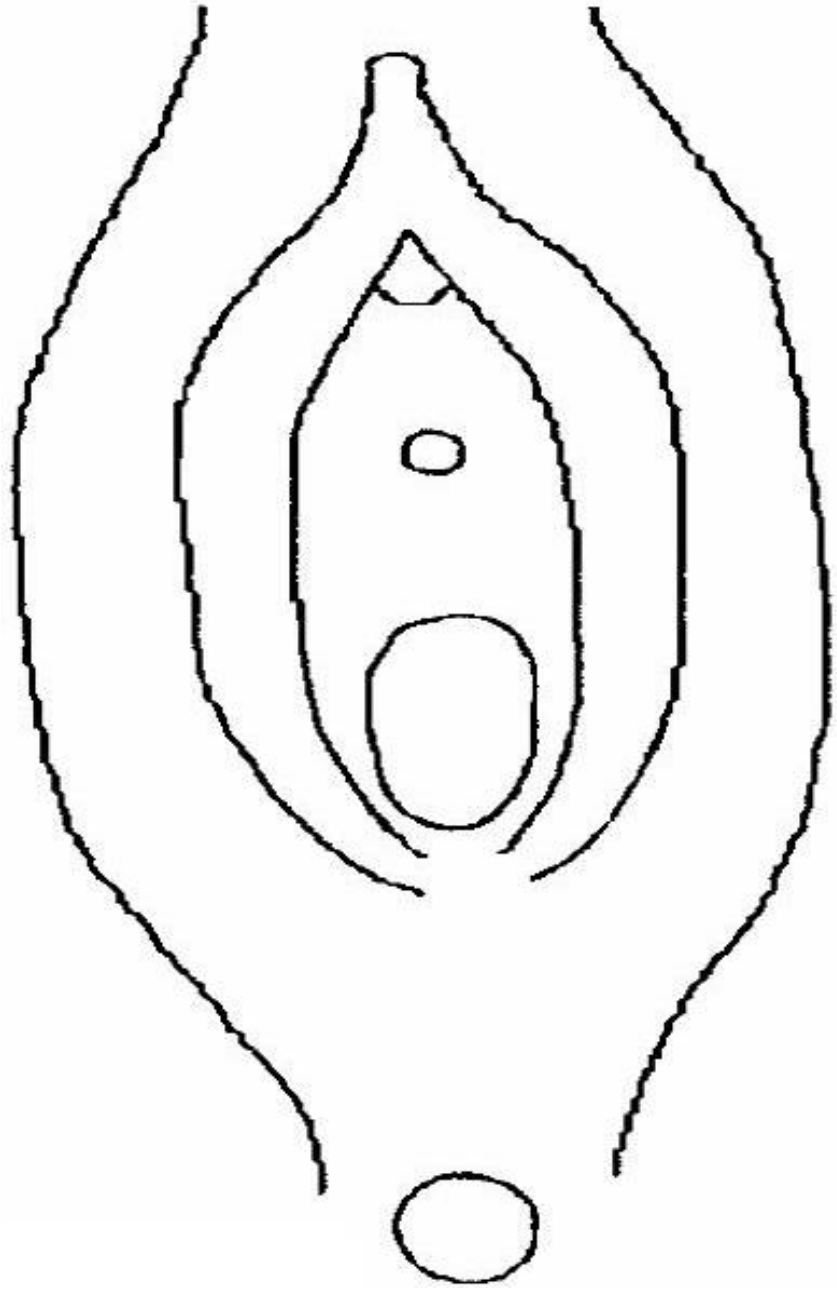
Clitoris

Fourchette

Fossa Navicularis

Vestibule

Hymen (diagram when indicated)



Internal findings (if applicable)
Vaginal wall

Cervix

Size and type of speculum used

Foley catheter used Yes ☐ No ☐

Amount of air in balloon Diameter of inflated balloon

Sterile water used Yes ☐ No ☐ Batch number and expiry date

Lubricant used Yes ☐ No ☐ Make

© Faculty of Forensic & Legal Medicine

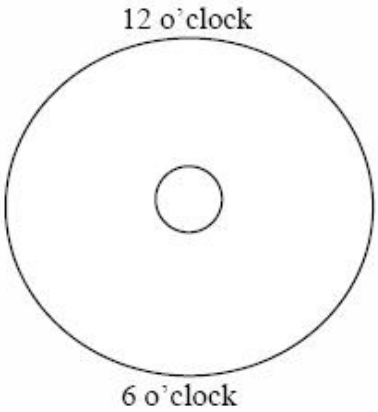
Case Number Crime Reference Number Date

Details of Anal findings

Natal fold

Perianal / Anal margin

Internal findings



Proctoscope used Yes ☐ No ☐

Size and type:

Sterile water used Yes ☐ No ☐ Batch Number _____ Expiry Date _____

Lubricant used Yes ☐ No ☐ Type:

Details of Male Genital Findings

Thighs

Pubic Area

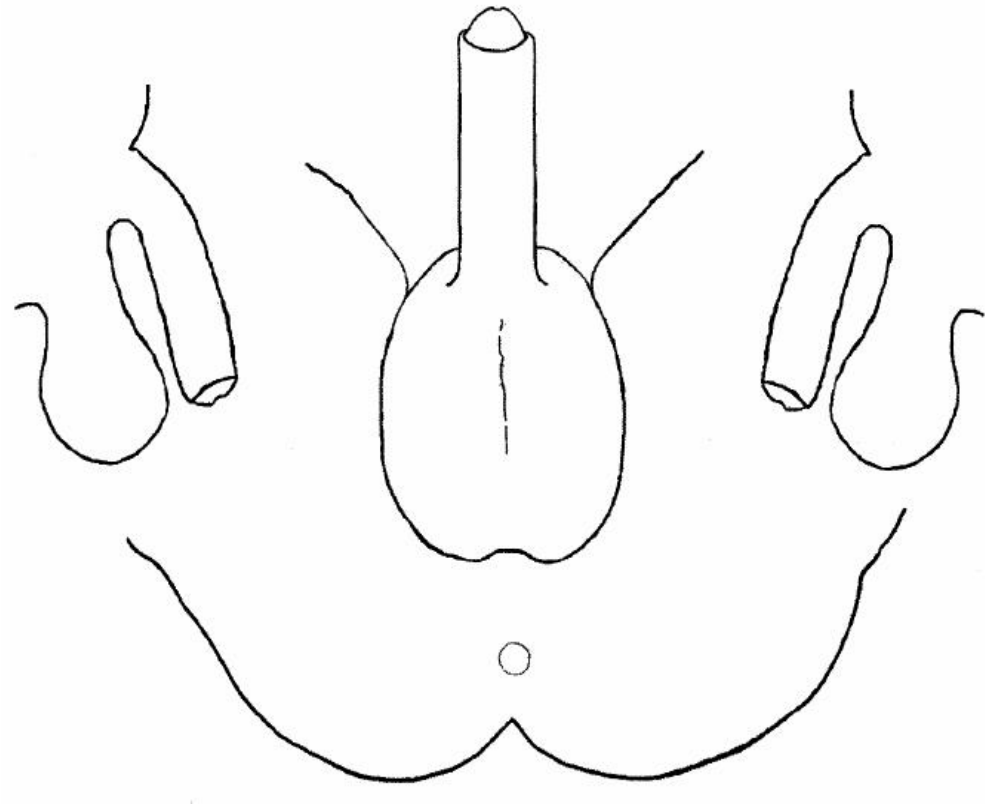
Pubic Hair

Scrotum

Testes

Penis

Foreskin



© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

23. Forensic Samples *(do not complete if FME forms are used)*

Start time _____ End time _____

	Identification number	Description of sample	Moistened Yes / No	Time Taken
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

To whom handed _____

Date and Time samples handed over _____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

24. Medical Samples

List any samples obtained _____

_____

_____

25. Photo documentation

List any photographs/videos/DVDs obtained *(incl. encryption code)* _____

_____

_____

_____

_____

_____

_____

_____

26. Conclusions / Advice Given to Police

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

27. Confidential Medical Aftercare *(can be detached)*

A. Risk of Sexually Transmitted Infections

The complainant's risk of contracting a sexually transmitted infection should be considered in every case. Local policy will determine what medication is available on site and what will be provided by other agencies. The following sections should be completed to demonstrate discussion and referral/treatment.

Detail of exposure:

Date / time of assault _____

Time interval to examination _____

Type of exposure: Anal receptive / vaginal receptive / oral receptive

Other_____

Ejaculation occurred?	Yes	☐	No	☐	Not known	☐
Condom used throughout?	Yes	☐	No	☐	Not known	☐
Aggravating factors e.g. mucosal breach	Yes	☐	No	☐		
Menstruating	Yes	☐	No	☐		

Suspect details:

Sexuality	Not known	☐	Heterosexual	☐	Bisexual MSM WSW	☐
IVDU	Yes	☐	No	☐	Not known	☐
UK-born	Yes	☐	No	☐	Not known	☐
Lived abroad	Yes	☐	No	☐	Not known	☐
Country	High risk	☐	Low risk	☐		
HIV status	Positive	☐	Negative	☐	Not known	☐

HIV positive - what is the viral load _____

_____

Ai. HIV PEP

According to SARC flowcharts / local policy HIV PEP is:

Not appropriate ☐ To be considered ☐ Recommended ☐

Is complainant:

<16 years old / pregnant / breast feeding / suffering serious medical condition / under 40kg? Yes ☐ No ☐

(If yes to any of these, discuss with GU on call and document outcome) _____

_____

_____

_____

Where PEP to be considered or recommended, either refer urgently to appropriate agency or follow local treatment guidelines.

If treatment to be given on site *discuss with complainant:*

Rationale / Potential side effects / Regime / Importance of compliance & follow up Yes ☐ No ☐

Starter pack given Yes ☐ Declined ☐

_____

Batch no _____ Expiry Date_____

Time of first dose PEP *(if given on site) or* referral to GUM / ED for PEP_____

Patient info sheet given Yes ☐ No ☐

GUM form faxed to GU clinic Yes ☐ No ☐

Name of clinic _____

Clinic contact number given to complainant Yes ☐ No ☐

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Aii. Hep B PEP

According to SARC flowchart / local policy Hep B PEP is: Not appropriate ☐ Recommended ☐

According to SARC flowchart / local policy Hep B PEP Immunoglobulin is: Not appropriate ☐ Recommended ☐

Where Hep B Pep is recommended either refer to appropriate agency or follow local treatment guidelines

Hep B Pep Yes ☐ Declined ☐

Name of injection _____

Site _____ Expiry Date _____

Batch No _____ Dose _____

Patient info sheet given Yes ☐ No ☐

Aiii. Safer Sex

Barrier methods advised for 3 months post assault discussed Yes ☐ No ☐

STI screening organised _____

_____

_____

B. Emergency Contraception

Pregnancy test at centre? Yes ☐ No ☐ Result _____

LMP _____ Hours post unprotected sexual intercourse (UPSI) _____

Other unprotected sexual intercourse since LMP? _____

Not appropriate _____

Declined _____

Other _____

Emergency contraceptive given Yes ☐ No ☐

Name _____ Batch Number _____ Expiry Date _____

Follow up advice Yes ☐ No ☐

IUCD Considered ☐ Discussed ☐ Recommended ☐

_____

C. Are they safe to leave?

Any specific concerns arisen regarding imminent risk of self-harm / suicide? Yes ☐ No ☐

Further information / action _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Psychological well-being / mental health follow up details _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

D. Safeguarding Referrals

Details_____

_____

_____

_____

Action Taken _____

_____

_____

_____

E. GP letter

Name of GP _____

Surgery address _____

Surgery telephone number_____

Permission to send letter Yes ☐ No ☐

Given to complainant Yes ☐ No ☐

Posted to GP Yes ☐ No ☐

GP / GUM Letter Given to Complainant ☐ Emailed ☐ To be posted ☐

Details_____

_____

_____

Clinic contact number given to complainant if attending GU clinic Yes ☐ No ☐

PLEASE REMEMBER TO KEEP COPY IN THE NOTES OF ANY LETTERS TO OTHER AGENCIES SUCH AS GP, GU CLINIC, ED etc.

© Faculty of Forensic & Legal Medicine

Case Number Crime Reference Number Date

Additional Notes *(use additional information page as required and tag to this form)*

Time notes concluded _____

Signature of Forensic Clinician _____

© Faculty of Forensic & Legal Medicine

References

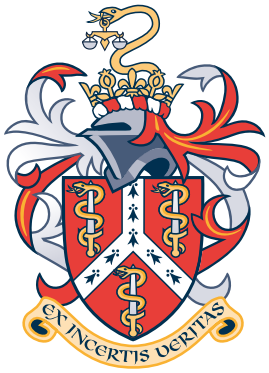
1. Recommendations for the Collection of Forensic Specimens from Complainants and Suspects FFLM
(Updated biannually, in January and July)

Dr Sheila Paul and Dr Marie-Elle Vooijs
On behalf of the Faculty of Forensic & Legal Medicine
© Faculty of Forensic & Legal Medicine, May 2021 Review date: May 2024
Send any feedback and comments to [redacted]

© Faculty of Forensic & Legal Medicine

RCPCH
Royal College of Paediatrics and Child Health
Leading the way in Children's Health

Royal College of
Paediatrics and Child Health



Faculty of Forensic & Legal Medicine

Sexual offences: POST-PUBERTAL complainants

May 2019 Review date May 2022 – check www.fflm.ac.uk for latest update

The medico-legal guidelines and recommendations published by the Faculty are for general information only. Appropriate specific advice should be sought from your medical defence organisation or professional association. The Faculty has one or more senior representatives of the MDOs on its Board, but for the avoidance of doubt, endorsement of the medico-legal guidelines or recommendations published by the Faculty has not been sought from any of the medical defence organisations.

The flow chart overleaf must only be used after consideration of the following:

If the complainant is a child, i.e. under 18 years of age, this flowchart is for the use of forensic physicians and paediatricians. It is also important to consider who holds parental responsibility.

If the complainant is an adult, i.e. over 18 years of age, this flowchart is for the use of forensic physicians or nurses.

It is intended to help the decision making process when deciding if a forensic medical examination is warranted between the hours of midnight and 7am, or can wait and be done by the day team.

It is intended that it is only a guide. Decisions must be made on a case-by-case basis as to whether an earlier examination is required, with consideration given to external factors as necessary.

Wherever there is doubt, a discussion should take place between the referring party (usually the investigating officer), the forensic physician on call and/or paediatrician, as appropriate, for a child or young person under 18 years, or with the forensic physician or nurse for an adult.

The needs of the child should always be paramount as is also the case for an adult complainant.

Sexual offences: POST-PUBERTAL complainants

May 2019 Review date May 2022 page 2

In all cases consideration must be given to:

1. General welfare of young person/complainant.
2. Medical needs including;
   a. Injuries
   b. Emergency contraception
   c. Post-exposure prophylaxis
   d. Advice on STI screening
3. Safeguarding issues including child protection issues.
4. Early evidence kits

Has a Sexual Offence Medicine (SOM) trained

- forensic physician/paediatrician for a child or young person < 18 years
- forensic physician or forensic nurse if complainant is an adult

considered these issues?

Yes

Has there been oral, vaginal or anal – penile or digital penetration or ejaculation on the body surface?

No → **Wait until the morning***

Yes → **Within the last 12 hours?**

No → **Wait until the morning***

Yes → **Reconsider these factors**

Is the complainant intoxicated?

Yes → **Wait until not intoxicated**
In the meantime consider other forensic opportunities such as EEK, clothing etc

No → **Examine out of hours**

*Providing that any delay does not push the examination outside any of the maximum time frames for relevant forensic samples as per the most recent FFLM Recommendations for the collection of forensic specimens from complainants and suspects.

Produced in Jan 2016 by Dr Catherine White
on behalf of the of the Faculty of Forensic & Legal Medicine
© Faculty of Forensic & Legal Medicine Reviewed and updated in May 2019
Send any feedback and comments to [redacted]
Adapted with kind permission of St Mary's SARC Manchester

WIT.0043.0086.0001

Clinical Forensic Medicine

A Physician's Guide

Margaret M. Stark
Editor

Fourth Edition

Springer

Clinical Forensic Medicine

WIT.0043.0086.0003

Margaret M. Stark
Editor

Clinical Forensic Medicine

A Physician's Guide

Fourth Edition

Springer

WIT.0043.0086.0004

Editor
Margaret M. Stark
Faculty of Forensic and Legal Medicine
Royal College of Physicians
London
UK

ISBN 978-3-030-29461-8 ISBN 978-3-030-29462-5 (eBook)
https://doi.org/10.1007/978-3-030-29462-5

© Springer Nature Switzerland AG 2000, 2005, 2011, 2020
This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.
The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.
The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Contents

1 **Clinical Forensic Medicine: History and Development** 1
J. Jason Payne-James and Margaret M. Stark

2 **Fundamental Principles** 23
Margaret M. Stark

3 **Sexual Assault Examination** 63
Maria Nittis

4 **Injury Assessment, Documentation, and Interpretation** 143
J. Jason Payne-James, Margaret M. Stark, Maria Nittis, and Douglas R. Sheasby

5 **Physical Child Abuse** 195
John A. M. Gall

6 **Chemical Crowd Control Agents** 239
Sarah L. Belsey and Steven B. Karch

7 **Medical Issues Relevant to Restraint** 255
Philip S. L. Beh and Margaret M. Stark

8 **TASER Conducted Electrical Weapons** 279
Rich Childers, Ted Chan, and Gary Vilke

9 **Care of Detainees** 313
Margaret M. Stark, Alex J. Gorton, and Patrick Chariot

10 **Infectious Diseases: The Role of the Healthcare Professional** 343
Felicity Nicholson

11 **Fitness to Be Interviewed and Fitness to Be Charged** 393
Margaret M. Stark and Keith J. B. Rix

12 **Substance Misuse** 421
Margaret M. Stark

WIT.0043.0086.0006

13 Deaths in Police Custody 469
Richard T. Shepherd

14 Traffic Medicine 495
Ian F. Wall and Margaret M. Stark

Index. 539

WIT.0043.0086.0007

Clinical Forensic Medicine: History and Development

1

J. Jason Payne-James and Margaret M. Stark

Learning Objectives

To describe the recent developments in the field of forensic and legal medicine.

To discuss the roles of the healthcare professional in general forensic medicine and sexual offence medicine.

Introduction

The term "forensic medicine" is now used to embrace all aspects of forensic work of a medical nature. In the past, the term was often used interchangeably with "forensic pathology"—the branch of medicine which investigates death. This is further confounded by the recognition of 'forensic & legal medicine' or 'legal and forensic medicine' as distinct areas of medical specialty practice. These terms now broadly embrace all aspects of medicine involving justice systems, and can vary around the world. The term "clinical forensic medicine" is however one that can be properly applied to that part of medical practice whose scope involves interaction between the law, the judiciary, and the police involving (generally) living persons.

Clinical forensic medicine is a term that has become widely used only in the last four decades or so, although the phrase has been used at least since 1951 in the UK, when the national Association of Police Surgeons (which became the Association of Forensic Physicians in 2003 until it in turn was replaced by the Faculty of Forensic & Legal Medicine of the Royal College of Physicians of London) was first established.

J. J. Payne-James (✉)
Forensic Healthcare Services Ltd, Southminster, UK

M. M. Stark
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK
e-mail: president@fflm.ac.uk

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_1

WIT.0043.0086.0008

The absence of a defined medical specialty of clinical forensic medicine has resulted in practitioners of clinical forensic medicine having different descriptive names over the years. The term "forensic physician" (FP) is now widely accepted internationally, although police surgeon, divisional surgeon, forensic medical officer (FMO) and forensic medical examiner (FME) are examples of other names or titles that have been used to describe those who practice in the specialty of clinical forensic medicine. Such names refer more to the appointed role than to the work done. Worldwide, there are many who are involved in both clinical and pathological aspects of forensic medicine, and increasing allied healthcare professionals (HCPs), such as nurses and paramedics, may play a role in the delivery of clinical forensic medicine.

Generally, however, a forensic pathologist does not deal predominantly with living individuals, and an FP does not deal with predominantly with the deceased. However there is substantial overlap in the clinical and pathological aspects of forensic medicine and the forensic sciences, and this is reflected in the history and development of the specialty as a whole and its current practice and literature today [1, 2].

Table 1.1 gives examples of roles that any HCP/FP may be asked to undertake in the UK [3]. The Table also includes examples of additional roles that more senior and experienced FPs may undertake. Some HCPs may only perform some of these roles—for example, focusing on general forensic medicine (GFM, custodial medicine) alone, or sexual offence medicine (SOM) alone, or child maltreatment, whereas others may play a more extended role, depending on geographic location (in terms of country and state), local statute and judicial systems. HCPs/FPs should have a good knowledge of medical jurisprudence—the application of medical science to the law within their own jurisdiction. The role and scope of the specialty of clinical forensic medicine remain ill-defined in global terms, unlike other established medical specialties such as gastroenterology, emergency medicine or cardiology. Often doctors practicing clinical forensic medicine may only take on these functions as subspecialties within their own general workload. Pediatricians, emergency medicine specialists, primary care physicians, psychiatrists, gynecologists and genitourinary medicine specialists are those who frequently have a part-time role as FPs and such work is commonly a feature of the increasing numbers of medical practitioners with portfolio careers.

Historical References

The origins of clinical forensic medicine go back millenia, and as Smith concluded in 1951 "forensic medicine [cannot be thought of] as an entity … until a stage of civilization is reached in which we have … a recognizable legal system … and an integrated body of medical knowledge and opinion" [4].

Forensic medicine developed in a number of jurisdictions in parallel and there is dispute as to when medical expertise in the determination of legal issues was first used. It is generally accepted that one of the earliest examples is that identified by Chinese archaeologists who (in 1975) discovered a number of bamboo pieces dating from about 220 BC (Qin dynasty) with rules and regulations for examining injuries

Table 1.1 Roles of an independent forensic physician [adapted from reference 3]

Part A
Specific functions
Detainee examinations: Custody officers (police officers tasked with the responsibility of welfare of detainees) are obliged to call an appropriately trained health care professional (HCP) when they suspect, or are aware of, any physical illness, mental health problem, or injury of the detainee. The HCP in attendance is responsible for the clinical needs of a detainee and should also consider their well-being (food, drink, rest, warmth etc.).
The HCP is often requested to provide an opinion on one or more of the following:
• Fitness to be detained in police custody (e.g. assessment of diabetic control, requirement for medication, referral to hospital)
• Fitness to be released (e.g. consideration of the medical and physical fitness to release safely, consideration of any risk to public safety, or the personal well-being of the detainee where there are suicidal thoughts or other vulnerabilities, pre-release risk assessment)
• Fitness to be charged (e.g. competent to comprehend charge, assessing mental capacity or vulnerability)
• Fitness to transfer, (e.g. when wanted on warrant elsewhere, possibly necessitating a long journey, or fitness to fly)
• Fitness to be interviewed by the police (see Chap. 11)
• Requirement of an appropriate adult (an appropriate adult in England & Wales law is someone tasked to support those with vulnerabilities—e.g. due to age, mental health conditions), support person, interview friend
• Assessment and management of alcohol and drug intoxication and withdrawal • Attendance at the hospital to take samples under the Road Traffic Act or where patients have been seriously assaulted
• Assess those detained under Road Traffic Act legislation (e.g. determining whether there is a "condition…might be due to a drug")
• Undertake intimate body searches for drugs or weapons (with consent and on premises with appropriate medical and resuscitation support) • Assessment of individuals subjected to restraint, including irritant sprays, batons, handcuffs, etc.
Detainee and complaint examinations:
The HCP is expected to
• Ensure the safeguarding of vulnerable adults and children, and to comply with safeguarding principles
• Put in place appropriate treatment/referral, including for emergency contraception, post-exposure prophylaxis and sexually transmitted infection (STI) screening
• Accurately assess, document (and with appropriate training interpret) injuries
• Take relevant forensic samples appropriate to police investigations
• Examine and treat police officers injured while on duty (e.g. needle stick injuries and other at-risk exposure)
• Confirm life extinct at a scene of death and give a preliminary opinion on whether there are any suspicious circumstances
• Give an opinion at certain scenes in relation to bony remains (e.g. are they human)
• Give advice to the police when requested
• Undertake mental state examinations

(continued)

WIT.0043.0086.0010

Table 1.1 (continued)

In addition, HCPs with sufficient training and experience may be requested to
• Examine adult complainants of serious sexual assault and the suspects
• Examine alleged child victims of neglect, physical or sexual abuse (doctors only)
• Conduct formal mental health assessments under the Mental Health Act (doctors only)
• Examine those detained under terrorism legislation and be responsible for leading a multidisciplinary team and setting a management plan (doctors only) • Assess a detainee who has been subjected to a conducted electrical weapon (CEW e.g. TASER®)
Part B
Senior forensic physicians and those with particular skills may also have other broad roles including:
Giving expert opinion in courts and tribunals
Death in custody investigation Assessments related to: • Victim of torture or cruel inhumane and degrading treatment • War crimes e.g. the physical capability of an individual to withstand trial • Female genital mutilation • Refugee medicine medical and forensic issues • Asylum seeker medicine medical and forensic issues
For all the examinations outlined above it is essential that the HCP accurately documents findings and when needed produce these as written reports for appropriate civil, criminal, coronial courts or other agencies such as disciplinary tribunals. The HCP must be able to present the information orally, clearly and concisely to a court, tribunal or other forum.

inscribed on them. Other historical examples of the link between medicine and the law can be found around the world. In the English language, the specific terms *forensic medicine* and *medical jurisprudence* (also referred to as juridical medicine) date back to the early nineteenth century. In 1840, Thomas Stuart Traill [5] made reference to the connection between medicine and legislation and stated "it is known in Germany….by the name of State Medicine, in Italy and France it is termed Legal Medicine; and with us [in the United Kingdom] it is usually denominated Medical Jurisprudence or Forensic Medicine".

Amundsen and Ferngren [6] in studies of physicians in legal settings concluded that forensic medicine was used by Athenian courts and other public bodies and that the testimony of physicians in matters of a medical nature was given particular credence although this use of physicians as expert witnesses was "loose and ill-defined" [7]. In the Roman Republic, the "Lex Duodecim Tabularum" (laws drafted on 12 tablets and accepted as a single statute in 449 BC) had minor references to medico-legal matters, including length of gestation (to determine legitimacy), disposal of the dead, punishments dependent on the degree of injury caused by an assailant, and poisoning [8]. Papyri related to Roman Egypt dating from the latter part of the first to the latter part of the fourth century AD contain information about forensic medical examinations or investigations [9].

The evidence for a relationship between medicine and the law in these periods is undoubted, but the specific definition and role of forensic medicine, as interpreted by historical documents, is imprecise, with the degree and extent of forensic medical input acknowledged depending on the particular historian undertaking the assessment or review.

WIT.0043.0086.0011

A specific role for the medical expert as a provider of impartial opinion for the judicial system appears to be identified clearly by the Justinian Laws between 529 and 564 AD. Traill [5] stated that "Medical Jurisprudence as a science cannot date farther back than the 16th century". He identified George, Bishop of Bamberg, who proclaimed a penal code in 1507, as the originator of the first codes in which medical evidence was a necessity in certain cases. The "Constitutio Criminalis Carolina", the code of law published and proclaimed in 1553 in Germany by Emperor Charles V, is considered by many to have formed the origin of Legal Medicine as a specialty: expert medical testimony became a requirement rather than an option in cases of serious crime such as murder, wounding, poisoning, hanging, drowning, infanticide and abortion. Medico-legal autopsies were well documented in parts of Italy and Germany five centuries before the use of such procedures by English coroners. The use of such expertise was not limited to deaths or to mainland Europe. Cassar [10], for example, describes the earliest recorded Maltese medico-legal report (1542): medical evidence established that the male partner was incapable of sexual intercourse and this resulted in a marriage annulment. Beck [11] identifies Fortunatus Fidelis as the earliest writer on medical jurisprudence—with his "De Relationibus Medicorum" which was published in Palermo, Italy in 1602. Subsequently Paulus Zacchias wrote "Quaestiones Medico-Legales" described by Beck as "his great work" between 1621 and 1635 and a facsimile version of that is still available (Fig. 1.1). Beck also refers to the

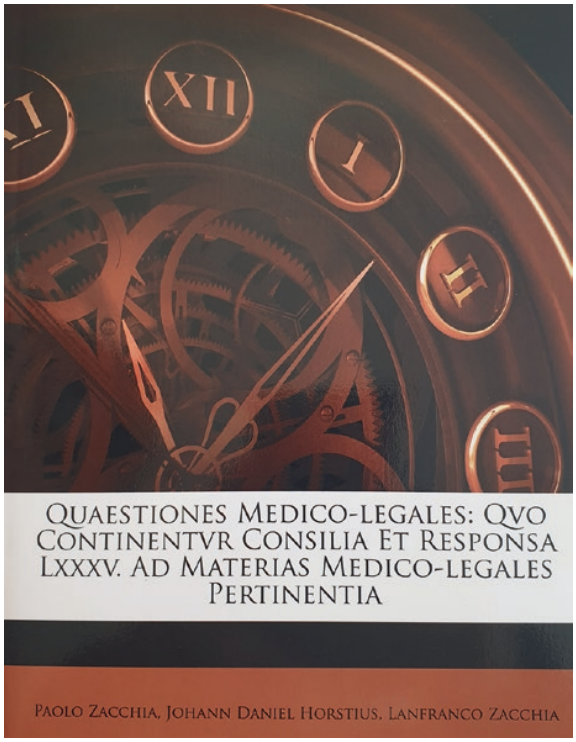


Fig. 1.1 Quaestiones Medico-Legales

WIT.0043.0086.0012

Pandects of Valentini published in Germany in 1702 which he describes as "an extensive retrospect of the opinions and decisions of preceding writers on legal medicine". In France in 1796 Fodere published the first edition in three octavo volumes of his work "Les Lois E'clairees par les Sciences Physique, ou Traite de Medicine Legale et d'Hygiene Publique".

Late Eighteenth Century Onwards

From the latter part of the eighteenth century, a number of books and treatises were published in the English language on the topics of forensic medicine and medical jurisprudence. What is remarkable is that the issues and subjects addressed by many of the authors remain current today, and often the principles remain unchanged. Table 1.2 shows the Table of Contents of John Gordon Smith's book ("The Principles of Forensic Medicine: Systematically Arranged") in 1821 [12] (see Fig. 1.2a–d).

In 1783 William Hunter [13] published an essay "On the Uncertainty of the Signs of Murder in the Case of Bastard Children"; this may well be the first true "forensic medicine" publication from England. The first large work was published in 1788 by Samuel Farr. John Gordon Smith writes in 1821 in the Preface to his own book [12] "The earliest production in this country, professing to treat of Medical Jurisprudence *generaliter* was an abstract from a foreign work, comprised in a very small space". It bears the name of "Dr Farr's Elements, &c and first appeared above thirty years ago". In fact that publication was translated from the 1767 publication Elemental Medicinae Forensis by Fazelius of Geneva. Davis [14] refers to these and to Remarks on Medical Jurisprudence by William Dease of Dublin, as well as the Treatise on Forensic Medicine or Medical Jurisprudence by O. W. Bartley of Bristol. Davis considered however that the "first original and satisfactory work" was George Male's Epitome of Juridical or Forensic Medicine, published in 1816. Male was a physician at Birmingham General Hospital and is often considered the father of English Medical Jurisprudence. Smith refers also to Male's book but also comments "to which if I may add a 'Treatise on Medical Police', by John Roberton, MD".

Texts on forensic medicine began to appear more rapidly and with much broader content. John Gordon Smith [12] stated that "Forensic Medicine—Legal, Judiciary or Juridical Medicine—and Medical Jurisprudence are synonymous terms". Having referred in the Preface to the earlier books, he notes, "It is but justice to mention that the American schools have outstripped us in attention to Forensic Medicine". By this he was probably referring in part to the writing of Theodric Romeyn Beck and others. Beck published the first American textbook 2 years later in 1823 and a third (London) edition had been published by 1829 [11]. Prior to this, in 1804 J. A. Stringham, who was trained in Edinburgh being awarded an MD in 1799, was appointed as a Professor in Medical Jurisprudence at the College of Physicians and Surgeons of New York and given a Chair in 1813.

John Gordon Smith [12] wrote that "Every medical practitioner being liable to a subpoena, should make it his business to know the relations of physiological and pathological principles to the facts on which he is likely to be interrogated, and

Table 1.2 Chapter contents of John Gordon Smith's 1821 "The principles of forensic medicine; systematically arranged"

Class I: Questions that regard the extinction of human life	
Section 1	Of sudden death in the healthy state
	Chapter 1
	Of the reality of death
	The phenomena of death
	States of the living body resembling death
	Tests of the reality of death
	Recapitulation of the phenomena
	Chapter 2
	Sudden death, without cause of crimination
	Sudden death from intrinsic or morbid causes
	Sudden death from external, but natural causes
Section 2	Death by personal agency or homicide
	Chapter 1
	Of poisoning
	Mineral poisons
	Vegetable poisons
	Animal poisons
	Occult poisoning
	Chapter 2
	Suffocation
	Noxious inhalation
	Drowning
	Hanging
	Strangling
	Smothering
	Chapter 3

(continued)

WIT.0043.0086.0013

Table 1.2 (continued)

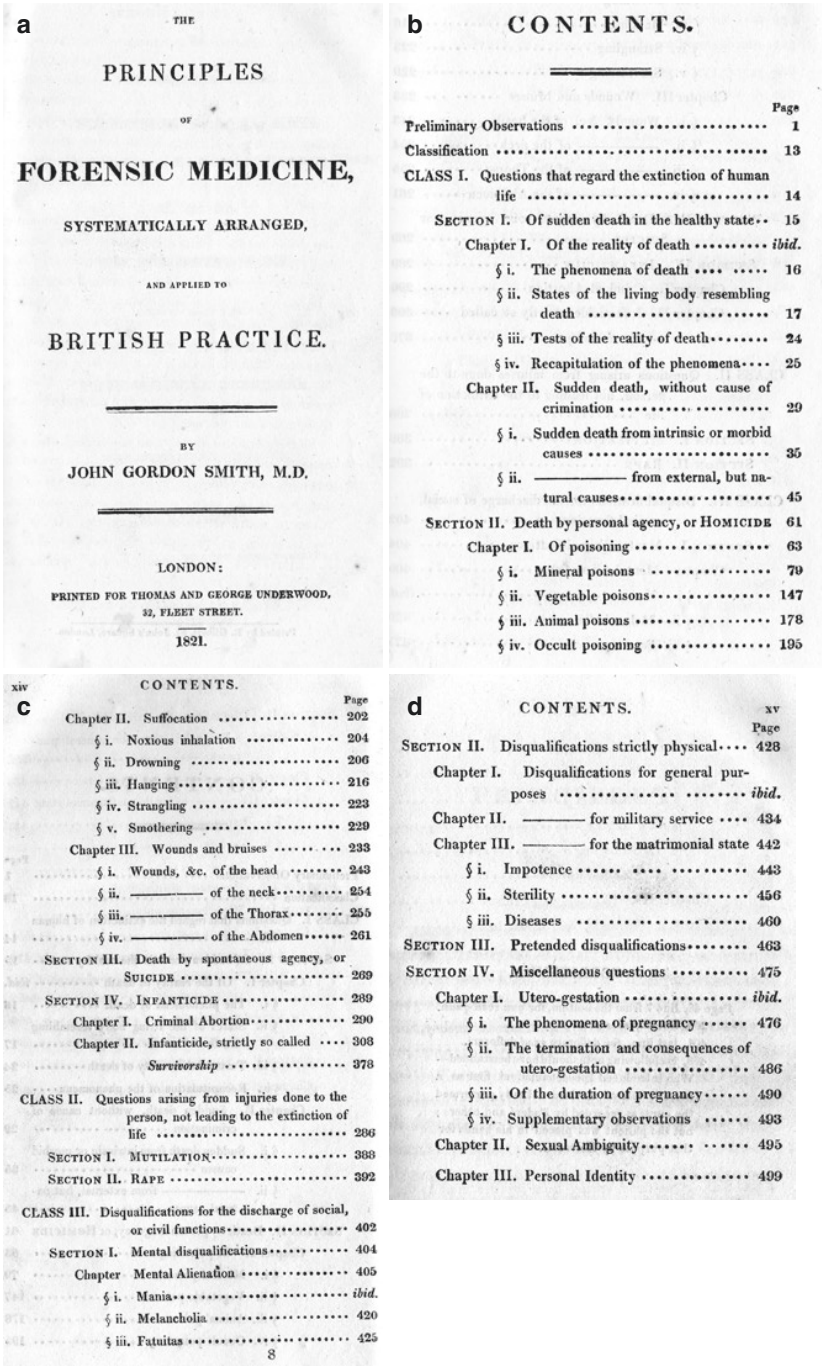
	Wounds and bruises
	Wounds etc. of the head
	Wounds of the neck
	Wounds of the thorax
	Wounds of the abdomen
Section 3	Death by spontaneous agency, or suicide
Section 4	Infanticide
	Chapter 1
	Criminal abortion
	Chapter 2
	Infanticide, strictly so called
	Survivorship
Class 2: Questions arising from injuries done to the person, not leading to the extinction of life	
Section 1	Mutilation
Section 2	Rape
Class 3: Disqualification for the discharge of social or civil functions	
Section 1	Mental disqualification
	Chapter
	Mental alienation
	Mania
	Melancholia
	Fatuitas
Section 2	Disqualifications strictly physical
	Chapter 1
	Disqualifications for general purposes
	Chapter 2
	Disqualifications for military service

WIT.0043.0086.0014

WIT.0043.0086.0015

	Chapter 3
	Disqualifications for the matrimonial state
	Impotence
	Sterility
	Diseases
Section 3	Pretended disqualifications
Section 4	Miscellaneous questions
	Chapter 1
	Utero-gestation
	The phenomena of pregnancy
	The termination and consequences of utero-gestation
	Of the duration of pregnancy
	Supplementary observations
	Chapter 2
	Sexual ambiguity
	Chapter 3
	Personal identity

WIT.0043.0086.0016



a

THE

PRINCIPLES

OF

FORENSIC MEDICINE,

SYSTEMATICALLY ARRANGED,

AND APPLIED TO

BRITISH PRACTICE.

BY

JOHN GORDON SMITH, M.D.

LONDON:

PRINTED FOR THOMAS AND GEORGE UNDERWOOD,
32, FLEET STREET.

1821.

b

CONTENTS.

Page

Preliminary Observations 1
Classification 13
CLASS I. Questions that regard the extinction of human life 14
SECTION I. Of sudden death in the healthy state .. 15
Chapter I. Of the reality of death ..... *ibid.*
§ i. The phenomena of death 16
§ ii. States of the living body resembling death 17
§ iii. Tests of the reality of death 24
§ iv. Recapitulation of the phenomena 25
Chapter II. Sudden death, without cause of crimination 29
§ i. Sudden death from intrinsic or morbid causes 35
§ ii. ——— from external, but natural causes 45
SECTION II. Death by personal agency, or HOMICIDE 61
Chapter I. Of poisoning 63
§ i. Mineral poisons 79
§ ii. Vegetable poisons 147
§ iii. Animal poisons 178
§ iv. Occult poisoning 195

c

xiv CONTENTS.

Page

Chapter II. Suffocation 202
§ i. Noxious inhalation 204
§ ii. Drowning 206
§ iii. Hanging 216
§ iv. Strangling 223
§ v. Smothering 229
Chapter III. Wounds and bruises 233
§ i. Wounds, &c. of the head 243
§ ii. ——— of the neck 254
§ iii. ——— of the Thorax 255
§ iv. ——— of the Abdomen 261
SECTION III. Death by spontaneous agency, or SUICIDE 269
SECTION IV. INFANTICIDE 289
Chapter I. Criminal Abortion 290
Chapter II. Infanticide, strictly so called 308
Survivorship 378

CLASS II. Questions arising from injuries done to the person, not leading to the extinction of life 286
SECTION I. MUTILATION 388
SECTION II. RAPE 392

CLASS III. Disqualifications for the discharge of social, or civil functions 402
SECTION I. Mental disqualifications 404
Chapter Mental Alienation 405
§ i. Mania ..... *ibid.*
§ ii. Melancholia 420
§ iii. Fatuitas 425

8

d

CONTENTS. xv

Page

SECTION II. Disqualifications strictly physical 428
Chapter I. Disqualifications for general purposes ..... *ibid.*
Chapter II. ——— for military service 434
Chapter III. ——— for the matrimonial state 442
§ i. Impotence 443
§ ii. Sterility 456
§ iii. Diseases 460
SECTION III. Pretended disqualifications 463
SECTION IV. Miscellaneous questions 475
Chapter I. Utero-gestation ..... *ibid.*
§ i. The phenomena of pregnancy 476
§ ii. The termination and consequences of utero-gestation 486
§ iii. Of the duration of pregnancy 490
§ iv. Supplementary observations 493
Chapter II. Sexual Ambiguity 495
Chapter III. Personal Identity 499

Fig. 1.2 Publication details and sample chapter contents from John Gordon Smith's 1821 book Forensic Medicine

WIT.0043.0086.0017

likewise the principal judiciary bearings of the case. The former of these are to be found in works on Forensic Medicine; the latter in those on Jurisprudence". Alfred Taylor [15] in "A Manual of Medical Jurisprudence" defined medical jurisprudence as "…that science, which teaches the application of every branch of medical knowledge to the purpose of law".

There was a clear demand for such books and Traill initially published in 1834 [16] and subsequently in 1840 [5] when Regius Professor of Jurisprudence and Medical Police at Edinburgh an "Outlines of a Course of Lectures on Medical Jurisprudence". The first Chair of Forensic Medicine had been established in the UK in Edinburgh in 1803—the appointee being Andrew Duncan, Junior, (although Andrew Duncan Senior had lectured there on forensic medicine topics since 1789 [17]). Subsequent non-professorial academic forensic medicine posts were set up at Guy's Hospital and Charing Cross Hospital, London. "Principles of Forensic Medicine" by William Guy [18], Professor of Forensic Medicine at King's College, London was published in 1844. At a similar period (in 1839 and 1875 respectively), academic chairs of medical jurisprudence were created in Glasgow and Aberdeen [19] emphasizing the importance of Scottish universities to the development and awareness of forensic medicine and medical jurisprudence.

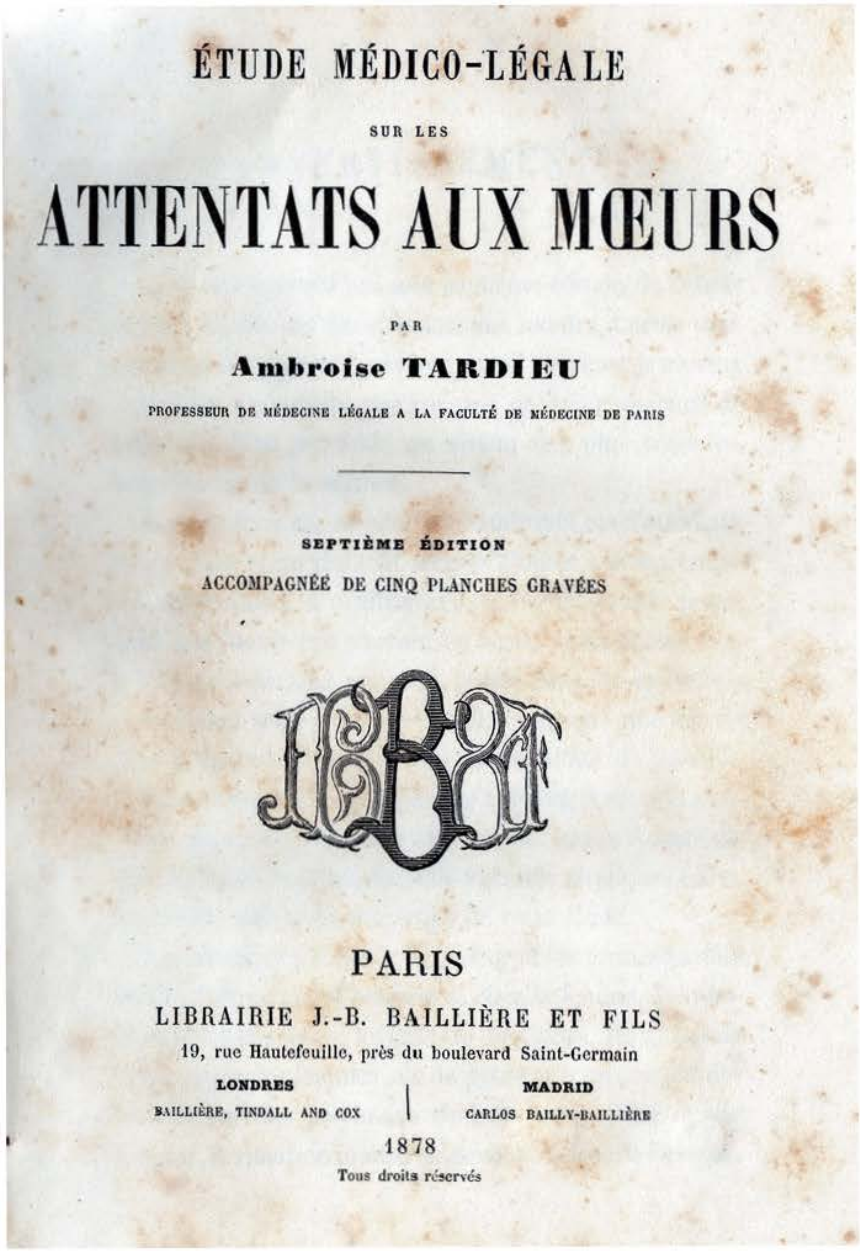
Over these periods, the relevant areas of interest to forensic medicine and medical jurisprudence were gradually becoming much better defined across Europe and an increasing number of textbooks were being published by those prominent in the field (e.g. those of Tardieu—see Fig. 1.3). Thus, by the end of the nineteenth century, a framework of forensic medicine that persists today had been established in Europe, the UK, America, and related jurisdictions.

Contemporary Clinical Forensic Medicine

The following working definition has been suggested as embracing all relevant aspects: "…clinical forensic medicine includes all medical [healthcare] fields which may relate to legal, judicial and police systems" [20]. Previously although medicine and law interact much more frequently in cases of living individuals, forensic pathology was considered as the academic basis for forensic medicine. In recent years it is clear that as the broad clinical and pathological nature of 'forensic medicine' has been redefined, that research and academic interest in clinical forensic medicine is an area of much more focused and extensive research.

This has been helped by much greater awareness of abuses of human rights and civil liberties, and the particular role that those practicing clinical forensic medicine play in the conditions of detention of prisoners and in the application of justice to both complainant and suspect. The care of detainees is one of the major difference in roles between HCPs and forensic pathologists, and a number of bodies nationally and internationally have reinforced the duties of doctors involved with detainees in this setting, variously emphasizing the duties of consent and confidentiality, and their responsibilities to the individual (not the state, or government or body for whom they may be acting or employed by). Publications are now available that directly address

WIT.0043.0086.0018



ÉTUDE MÉDICO-LÉGALE

SUR LES

ATTENTATS AUX MŒURS

PAR

Ambroise TARDIEU

PROFESSEUR DE MÉDECINE LÉGALE A LA FACULTÉ DE MÉDECINE DE PARIS

SEPTIÈME ÉDITION

ACCOMPAGNÉE DE CINQ PLANCHES GRAVÉES

PARIS

LIBRAIRIE J.-B. BAILLIÈRE ET FILS

19, rue Hautefeuille, près du boulevard Saint-Germain

LONDRES

BAILLIÈRE, TINDALL AND COX

MADRID

CARLOS BAILLY-BAILLIÈRE

1878

Tous droits réservés

Fig. 1.3 Publication details of Ambroise Tardieu's 1878 edition of Attentat Aux Moeuers

WIT.0043.0086.0019

the principles behind and the nature and delivery of such care [21–25], which may address broad principles from a national and international statutory basis, and provided specific guidelines on expected standards on a national and regional basis. There are many examples of injustice as a result of doctors and other healthcare professionals unaware of or failing to observe basic human rights or rights enshrined in statute. Such lack of knowledge or failure of medical professionals may be considered at least poor performance and at worst criminally negligent. High profile older cases such as the death of Steve Biko in South Africa, the conviction of Carole Richardson in England and the deaths of indigenous Australians in prisons are examples of many more injustices and inequalities. The potential conflicting needs and duties of those working in the judicial system are now well recognized, and it is difficult for any healthcare professional working in places of detention or others similar settings to claim that they are unaware of their professional, medical and ethical duties. In England and Wales, the Human Rights Act 1998—enacted in 2000—whose purpose is to make it unlawful for any public authority to act in a manner incompatible with a right defined by the European Convention of Human Rights—reinforced the need for doctors to be very aware of those human rights issues that touch on prisoners and that doctors can influence. It is worth noting that it took more than half a century after publication of the European Convention of Human Rights and Fundamental Freedoms for that law to be enacted in England and Wales.

The HCP has a number of roles that may interplay when assessing a prisoner or someone detained by the state or other statutory body. Three facets of medical care that may conflict have been identified: first, the role of medico-legal expert for a law enforcement agency; second, the role of a treating doctor; and third, the examination and treatment of detainees who allege that they have been mistreated by the police during their arrest, during interrogation or during the various stages of police custody [26]. This conflict is well recognized and not a new concept for HCPs. Grant [27] was a police surgeon appointed to the Metropolitan Police in the East End of London, UK, in September 1897, and recorded the following incident: "One night I was called to Shadwell [police] station to see a man charged with being drunk and disorderly, who had a number of wounds on the top of his head … I dressed them] … and when I finished he whispered 'Doctor, you might come with me to the cell door' … I went with him. We were just passing the door of an empty cell, when a police constable with a mop slipped out and struck the man a blow over the head … Boiling over with indignation I hurried to the Inspector's Office [and] told him what had occurred". Dr. Grant records that the offender was dealt with immediately. Dr. Grant clearly perceived that he had moral, ethical and medical duties to his patient, who was in this case the prisoner. Figure 1.4a, b show extracts from one of his publications [27] and shows that he (as a doctor) was clear about some basic principles, that may be considered still relevant today.

Dr. Grant was one of the pioneering "police surgeons" in England, the first "Superintending Surgeon" having been appointed to the Metropolitan Police

WIT.0043.0086.0020

a

PRACTICAL
FORENSIC MEDICINE

A POLICE-SURGEON'S EMERGENCY GUIDE

BY

C. GRAHAM GRANT, V.D.
L.R.C.P. & S. (EDIN.), LT.-COL. R.A.M.C. (T.)
BARRISTER-AT-LAW (GRAY'S INN);
EX-DIVISIONAL SURGEON, H AND THAMES DIVISIONS, METROPOLITAN POLICE;
EX-SURGEON POPLAR HOSPITAL, ETC.
CLERK OF ARRAIGNS, CENTRAL CRIMINAL COURT

THIRD EDITION

WITH WHICH IS A CHAPTER ON

FEES

BY

SIR HERBERT AUSTIN
BARRISTER-AT-LAW; CLERK OF THE COURT AND TAXING MASTER,
CENTRAL CRIMINAL COURT, ETC.

LONDON
H. K. LEWIS & CO. LTD.
1924

Fig. 1.4 Publications and sample pages from C Graham Grant's 1924 book - Practical Forensic Medicine - A Police Surgeon's Emergency Guide

WIT.0043.0086.0021

b POLICE-SURGEON'S EMERGENCY GUIDE

Outside Medical Men called.

Keep a box of dressings at the station for your own use and that of any other medical man who may be called in your absence. Do not quarrel with the authorities for the sake of an occasional dressing which facilitates their business and costs you a few pence; but if you find any medical man abusing your courtesy, ask him either to take his own dressings or send you the fee.

The author has devised a surgical emergency box (Messrs. Matthews Brothers, Oxford Street, W.), which contains the usual requirements for the police-station.

Conversation with Prisoners.

Inquire of the police whether your patient is a prosecutor or a prisoner, and if the latter, be careful not to put any question of an incriminating character. Rough characters will, however, frequently give you information—name, address, etc.—which they have refused to the police.

Trivial Injuries.

The authorities direct that 'a liberal interpretation' shall be put on regulations applying to the divisional surgeon, and therefore you will frequently be called to trifling injuries. In this connection it must be remembered that an inspector would be unwise to take responsibility where he is not called upon to do so, and that a bloodvessel which is not bleeding in the cold air may do so in a heated cell.

The regulation is that the cells are to be kept at a temperature of not less than 60° and not more than 63°.

POLICE CALLS 3

Injuries not to be touched until your Arrival.

Do not allow the constables to clean up wounds in anticipation of your arrival, because valuable information as to the position of the victim at the time of the infliction of the injury, and of the nature of the instrument used, may be destroyed.

For instance, a prosecutor informs you that 'he was knocked down, and kicked about the head when on the ground.' The appearance of mud, horse-dung, etc., and the direction the stream of blood has taken in the hair, will greatly assist your opinion. The author gave evidence in a case in which the prisoner, charged with biting a policeman's finger, asserted the injuries he himself had sustained were inflicted in the police-station. It was, however, possible to swear that such was not the case, as the *blood was caked about the wounds*, there was mud about them, and the man had not been in the station fifteen minutes before he was surgically treated.

When you have to undress a woman, have the matron present, and if that is not possible, leave the door partly open and stand a constable outside.

If you have to send a woman anywhere on an ambulance, advise that the matron should go with her.

Antiseptics.

Clean your instruments yourself. You cannot do major surgery in a police-station, but you *can*, and you ought to, be antiseptic in what you do.

The Surgeon's Report Book.

The divisional surgeon is required to make an entry in this book as a record of the case and to justify to

Fig. 1.4 (continued)

Force on 30 April 1830. The Metropolitan Police Surgeons Association was formed in 1888 with 156 members. In 1951, the Association was reconstituted as a national body under the leadership of Ralph Summers, so that improvements in the education and training for clinical forensic medicine could be made [28]. The Association of Forensic Physicians (formerly the Association of Police Surgeons) in the UK remained the leading professional body of FPs worldwide, until the formation of a new Faculty of the Royal College of Physicians of London—the Faculty of Forensic and Legal Medicine (FFLM) (www.ffflm.ac.uk) in 2005.

The Royal Commission on Criminal Justice in 1993 raised concerns about the lack of quality control of doctors working in the field of clinical forensic medicine [29]. Legislation in England and Wales, the Police and Criminal Evidence Act 1984, resulted in an enhanced role for the doctor [30]. Since the publication of the Royal Commission's report there have been repeated calls for a high quality professional medical service to assist the criminal justice system [31–33].

The FFLM [34] represents forensic physicians, medicolegal and dento-legal advisers (to the medical defense organizations), and medically qualified coroners and a range of other forensic practitioners, e.g. forensic pathologists and psychiatrists. The inaugural meeting was held in April 2006 and objectives confirmed [35]:

WIT.0043.0086.0022

- to promote for the public benefit the advancement of education and knowledge in the field of forensic and legal medicine; and
- to develop and maintain for the public benefit the good practice of Forensic and Legal Medicine by ensuring the highest professional standards of competence and ethical integrity.

These objectives may be simplified to 'Raising standards in forensic and legal medicine: protecting vulnerable people'. For many of its members, those objectives will be best served by a properly regulated specialty of clinical forensic medicine, subject to appropriate clinical governance and standards. In March 2009, the then Home Secretary of the UK Government stated "Guidance as to the level of professional and clinical qualification required for doctors or nurses is issued by the [FFLM]…. Responsibility for recruitment of healthcare professionals is a matter for individual chief police officers, and it is for each police force to make a decision on an individual basis against this guidance…. The FFLM will have an opinion as to what duties should, or should not, be performed by staff at each level in each professional role. There is no mandatory guidance from the police service" (http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090318/text/90318w0006.html). The FFLM has published a wide variety of quality standards documents and these are updated regularly. 'Quality Standards in Forensic Medicine', which recommended certain standards for those working in general forensic medicine and sexual offence medicine is one example [36].

Global Clinical Forensic Medicine

A number of studies have explored the practice of clinical forensic medicine across the world. Such studies are necessarily snapshots at a given time, as in any jurisdiction police, judicial, criminal and detention systems, and the oversight of those systems, changes. With these changes, come changes in the working practices of such practitioners [37, 38]. These studies have shown the close link between clinical forensic medicine and forensic pathology and how they inter-relate in many different ways. . Adaptations of these studies have been applied both nationally (in Australia) and regionally (across Europe) [39, 40]. The regulation of the clinical aspect of forensic medicine remains much less defined than that of forensic pathology, despite there being many more practitioners in clinical forensic medicine. This lack of internationally regulated standards may result in poor practice and lower standards of practice.

It is essential that doctors working in the field are properly trained [41–43], supervised and work within their scope of practice (see Chap. 2). There are a number of organizations that have been developed to support doctors working in these fields in the UK and Australia [44]. Initial training and continuing professional development are essential to ensure that practitioners have the core competencies to perform the roles required and remain up to date in this rapidly changing area.

A review of complaints against FPs and other HCPs within the UK showed how difficult it is to identify poor performance, simply because the data are not appropriately recorded by the respective healthcare regulators [45]. The nature of complaints made against those working in clinical forensic medicine in the UK is worrying, and the lack of proper oversight, standards and accountability may be responsible [46]. In the previous editions of this book, the following comments (repeated below) have been made about clinical forensic medicine. The italicized comments represent apparent changes that had been noted between the 1997 and 2003 surveys and in the previous edition of this book it was suggested that over a decade ago the 2007/2008 international survey suggested that from 1997–2008 that there were no additional substantial changes (i.e. advances!).

No clear repeatable patterns of clinical forensic medicine practice may be seen on an international basis—*but there appears to be an increase in recognition of the need to have appropriate personnel to undertake the roles required.*

Several countries have informal/ad hoc arrangements to deal with medical and forensic care of detainees and victims—*this still remains the case—often with large centres having physicians specially trained or appointed whilst rural or outlying areas are reliant on non-specialists.*

The emphasis in several countries appears to be on the alleged victim rather than the alleged suspect—*this remains the case although there are suggestions that this approach is being modified*.

The standard of medical care of detainees in police custody is variable—*there appears to be more recognition of the human rights aspects of care of those in police custody*.

There are no international standards of practice or training—*international standards are still lacking—but more countries appear to be developing national standards.*

There are apparent gaps in the investigation of police complaints in some countries—*this remains the case*.

Death in custody statistics are not always in the public domain—*this remains the case—and the investigation of deaths in police custody may still not be independently undertaken.*

In 2019 it would be fair to say that there have now been significant advances in a number of these areas. Perhaps the most important are those where clinical forensic medicine is recognized as an integral and important part of the broad aspects of 'forensic & legal medicine'. This is now being increasingly recognized as a specialty area of medicine, and when this happens, standards often improve. If such changes are supported by medical regulators or statute, then there are clear drivers for improvement. There now clear recognition of the roles and inter-relationship of FP and forensic pathology and forensic sciences, and indeed in many jurisdictions both clinical and pathological aspects of forensic medicine are undertaken by the same individual.

There is an acceptance in some countries for the use of appropriately trained allied healthcare professionals (e.g. nurses and paramedics) in some settings (notably some aspects of care of detainees in custody) [46]. This development may be

WIT.0043.0086.0024

influenced by the regional and local nature of specific healthcare problems of detainees and how such targeted healthcare is, or should be delivered [46–51].

There are very few academic centers of forensic medicine in the UK, and many of the posts that do exist are honorary rather than tenured. This situation is similar in many other countries. It is essential that governments and states are lobbied to recognize the societal importance of appropriate clinical forensic medicine with appropriate funding (including academic posts).

In the UK and Europe, after a prolonged period attempting to establish a mono-specialty of Legal Medicine, the European Council of Legal Medicine has established the principle of 'legal and forensic medicine' as a mono-specialty [52]. In the UK the Joint Royal Colleges of Physicians Training Board has established a Specialty Advisory Committee on 'Forensic & Legal Medicine'. There are now a handful of General Medical Council specialists in 'Forensic & Legal Medicine'. These developments are a great stimulus to FPs and to discipline of clinical forensic medicine.

There are many Diplomas and Masters degree courses that are appropriate to FPs [53], and the FFLM has an examination Membership of the Faculty of Forensic & Legal Medicine (MFFLM) which has the same rigor as other Faculties and Colleges such as the Royal College of Physicians [54, 55]. There are also qualifications suitable for nurses and paramedics working in the field.

The Royal College of Pathologists of Australasia established the Faculty of Clinical Forensic Medicine in 2014 (https://www.rcpa.edu.au/Trainees/Faculties/FCFM). They define clinical forensic medicine as that branch of medicine concerned with 'the provision of forensic medical services primarily to the living and the collection and interpretation of information for the purposes of civil and criminal law, the judiciary and the police. It is that branch of clinical medicine that deals with both the medical and legal aspects of patient care.'

The vision of the new Faculty is to pursue excellence in the discipline of Clinical Forensic Medical Services to contribute to the health, wellbeing and safety of the Australasian community. The Faculty's mission is to:

1. Provide professional standards for Australasian doctors who provide Clinical Forensic Medical services;
2. Promote and encourage education, research and training in the field of Clinical Forensic Medicine including ongoing professional development opportunities and maintenance of professional skills schemes;
3. Promote and facilitate greater co-operation between Clinical Forensic Medical practitioners with other participants involved in the legal system, such as the forensic scientists, legal practitioners, justice health providers and law enforcement;
4. Foster a better understanding of Clinical Forensic Medicine, both within the medical profession and among the general public; and
5. Seek and maintain formal recognition of Clinical Forensic Medicine as a specialty.

The RCPA (CFM) faculty is working towards specialist status for physicians in Australasia with appropriate training programs.

Conclusions

There are a number of key areas which must be prioritized in clinical forensic medicine:

1. Recognition that clinical forensic medicine is a distinct area of medicine that requires an appropriate career path, as part of a forensic & legal medicine specialty. This will require training in the same way as any other defined medical specialty.
2. Recognition that high quality clinical forensic medicine is essential to a fair society in order that proper justice may be achieved when medical issues are part of the legal process, and to protect the vulnerable.
3. Recognition that clinical forensic medicine at any level should be monitored and supervised in the same way as any other distinct specialty, such as cardiology or gastroenterology.

Clinical forensic medicine continues to develop, and when effective, supports and enhances judicial systems in the proper, safe and impartial dispensation of justice. Terrorist atrocities, torture and armed conflicts raise issues of human rights at high levels, and these often highlight the work of FPs and other HCPs. FPs and HCPs should ensure that no opportunity is missed to raise the profile of their work and develop appropriate recognition for the often unthanked and complex roles and tasks undertaken.

Key Points

- Both Australia and the UK have established Faculties representing clinical forensic medicine and are working towards specialist status.
- Healthcare professionals, doctors, nurses and paramedics, may provide a wide range of services for the criminal justice system. However they must ensure that they have the appropriate knowledge and skills for their roles and work within their individual scope of practice.

References

1. Payne-James JJ, Jones RM (2019) Simpson's Forensic Medicine, 14th edn. Taylor & Francis, London
2. Payne-James JJ, Byard RW (eds) (2016) Encyclopedia of Forensic & Legal Medicine, vol 4, 2nd edn. Elsevier, Amsterdam
3. FFLM (2019) The Role of the Healthcare Professional: GFM and SOM. https://fflm.ac.uk/wp-content/uploads/2019/02/RoleoftheHCP-Jan-2019.pdf. Accessed June 23 2019

4. Smith S (1951) The history and development of forensic medicine. BMJ 1:599–607
5. Traill TS (1840) Outlines of a Course of Lectures on Medical Jurispr Udence, 2nd edn. Adam & Charles Black, Edinburgh
6. Amundsen DW, Ferngren GB (1977) The physician as an expert witness in Athenian Law. Bull Hist Med 51:202–213
7. Amundsen DW, Ferngren GB (1977) Forensic role of physicians in Roman law. Bull Hist Med 53:39–56
8. Brittain RP (1967) Origins of legal medicine. Roman law: Lex Duodecim Tabularum. Med Leg J 35:71–72
9. Amundsen DW, Ferngren GB (1978) The forensic role of physicians in Ptolemaic and Roman Egypt. Bull Hist Med 52:336–353
10. Cassar P (1974) A medicolegal report of the sixteenth century from Malta. Med Hist 18:354–335
11. Beck TR, Darwall J (1829) Elements of Medical Jurisprudence, 3rd edn. Longman, London
12. Smith JG (1821) The Principles of Forensic Medicine Systematically arranged and applied to British practice. Thomas & George Underwood, London
13. Hunter W (1783) On the uncertainty of the signs of murder in the case of bastard children. London, 1821
14. Davis BT (1974) Edward Male, M. D., the father of English medical jurisprudence. Proc R Soc Med 67:117–120
15. Taylor AS (1844) A Manual of Medical Jurisprudence. John Churchill, London
16. Traill TS (1834) Outlines of a Course of Lectures On Medical Jurisprudence. Adam & Charles Black, Edinburgh
17. Cordner SM, Ranson DL, Singh B (1992) The practice of forensic medicine in Australasia: a review. Aust NZ J Med 22:477–485
18. Guy WA (1844) Principles of Forensic Medicine. Henry Renshaw, London
19. Gee DJ, Mason JK (1990) The Courts & the Doctor. Oxford University Press, Oxford
20. Payne-James JJ (1994) Clinical forensic medicine. J Clin Forensic Med 1:1
21. Payne-James JJ, Beynon J, Nuno Vieira D (2017) Monitoring Detention, Custody, Torture and Ill-treatment. A practical approach to prevention and documentation. CRC Press, Boca Raton
22. College of Policing. Authorised Professional Practice (2019) https://www.app.college.police.uk/app-content/detention-and-custody-2/?s=
23. Faculty of Forensic & Legal Medicine (2019) Quality standards for healthcare professionals working with victims of torture in detention. Faculty of Forensic & Legal Medicine, London
24. UN General Assembly resolution 37/194 Principles of Medical Ethics in the Protection of Prisoners and Detainees Against Torture & Other Cruel, Inhuman or Degrading Treatment, 1982
25. European Committee for the Prevention of Torture and Inhuman and Degrading Treatment or Punishment (CPT) (2009) http://www.cpt.coe.int. Accessed Dec 2009
26. Editorial (1993) Three-faced practice: doctors and police custody. Lancet 341:1245–1247
27. Grant G (1920) The Diary of a Police Surgeon. C. Arthur Pearson, London
28. Summers R (1988) History of the police surgeon. Association of Police Surgeons of Great Britain
29. The Royal Commission on Criminal Justice (1993) HMSO, London
30. Robertson G (1992) The Role of Police Surgeons. Research Study No 6. The Royal Commission on Criminal Justice. HMSO, London
31. Audit Commission (1998) The doctor's bill. The provision of forensic medical services to the police
32. Norfolk GA, Stark MM (1999) The future of clinical forensic medicine. BMJ 319:1316–1317
33. Home Office (2001) Police Leadership and Powers unit. Policing and Crime Reduction Group. Report of the Home Office Working Group on Police Surgeons. April 2001
34. Payne-James JJ, Norfolk GA, Seymour C, Burnham R (2006) Forensic and legal medicine – a new faculty: progress at last. BMJ careers 21st January
35. Norfolk GA (2006) New faculty of forensic and legal medicine. Clin Med 6:335–336

36. FFLM 2019 Quality standards in forensic medicine GFM and SOM; & Quality standards for nurses and paramedics GFM. https://fflm.ac.uk/resources/publications/. Accessed 24 June 2019
37. Payne-James JJ (1997) Questionnaire on 'Global Clinical Forensic medicine,' 4th Annual Clinical Forensic Medicine Postgraduate Conference, Louisville, KY, USA
38. Payne-James JJ (2005) Questionnaire on 'Global Clinical Forensic medicine'. In: Stark MM (ed) Clinical forensic medicine: a physician's guide, 2nd edn. Humana Press, Totowa, NJ
39. Stark MM, Payne-James JJ (2014) Provision of clinical forensic medical services in Australia: a qualitative survey 2011/12. J Forensic Legal Med 21:31–37. https://doi.org/10.1016/j.jflm.2013.10.019
40. Heide S, Chariot P, Green P, Fabian J, Payne-James J (2016) Healthcare and forensic medical aspects of police detainees, suspects and complainants in Europe. J Forensic Legal Med. https://doi.org/10.1016/j.jflm.2016.01.022
41. Stark MM (2000) The medical care of detainees and the prevention of tragedy – the role of the forensic medical examiner. Clin Risk 7:15–19
42. Wall I (2008) Lack of training in custody medicine in the UK – A cause for concern? J Forensic Legal Med 15:378–381
43. Smock WS (1994) Development of a clinical forensic medicine curriculum for emergency physicians in the USA. J Clin Forensic Med 1:27–30
44. Stark MM (2013) Legal and Forensic Medicine: UK and Australia. Chapter 26. In: Beran RG (ed) Legal and Forensic Medicine. Springer, Berlin
45. Payne-James JJ (2017) Healthcare and forensic medical services in police custody – to degrade or to improve? Clin Med (Lond) 17(1):6–7. https://doi.org/10.7861/clinmedicine.17-1-6
46. Kennedy K, Green P, Payne-James JJ (2017) Complaints against healthcare professionals providing police custodial and forensic medical/healthcare services and sexual offence examiner services in England, Wales and Northern Ireland. Med Sci Law 1:25802417691391. https://doi.org/10.1177/0025802417691391. [Epub ahead of print]
47. Payne-James JJ, Anderson W, Green PG, Johnston A (2009) Provision of forensic medical services to police custody suites in England & Wales: current practice. J Forensic Legal Med 16:189–195
48. Coudert C, Vidal C, Lefèvre T, Chariot P (2019) Adolescent arrestees detained in police cells: an observational study in the Paris, France, area. Int J Legal Med 133(4):1251–1258. https://doi.org/10.1007/s00414-018-1942-1. Epub 2018 Oct 15
49. Gandon V, Outh-Gauer S, Chariot P (2018) The health of female arrestees in police cells: a descriptive study. J Forensic Leg Med 57:86–90. https://doi.org/10.1016/j.jflm.2017.07.026. Epub 2017 Aug 1
50. Rekrut-Lapa T, Lapa A (2014) Health needs of detainees in police custody in England and Wales. Literature review. J Forensic Legal Med 27:69–75. https://doi.org/10.1016/j.jflm.2014.08.004. Epub 2014 Aug 29
51. Sondhi A, Williams E (2018) Health needs and co-morbidity among detainees in contact with healthcare professionals within police custody across the London Metropolitan Police Service area. J Forensic Legal Med 57:96–100. https://doi.org/10.1016/j.jflm.2017.07.012. Epub 2017 Jul 20
52. European Council of Legal Medicine. http://www.eclm.org
53. FFLM 2018 Advice on obtaining qualifications in clinical forensic medicine. https://fflm.ac.uk/wp-content/uploads/2018/08/Advice-on-obtaining-qualifications-in-clinical-forensic-medicine-Dr-M-Stark-Jan-2018.pdf. Accessed 23/06/2019.
54. Stark MM, Herring J, Norfolk GA (2009) Examination for membership of the faculty of forensic and legal medicine. J Forensic Legal Med 16:435
55. Payne-James JJ, Stark MM, Butler B, Seymour C (2018) So you want a career in forensic and legal medicine? Br J Hosp Med (Lond) 79(3):C38–C41. https://doi.org/10.12968/hmed.2018.79.3.C38

WIT.0043.0086.0028

Fundamental Principles

2

Margaret M. Stark

Learning Objectives

Ability to discuss consent in relation to therapeutic and forensic procedures.

Demonstrate the difference between a professional witness and an expert witness.

Illustrate the importance of documentation and record keeping in relation to clinical notes.

Management of the assessment of capacity and how this may impact on a decision to examine.

Introduction

From the time of Hippocrates, doctors have undertaken to practice medicine in accordance with ethical and professional codes of conduct. In addition, as with any other citizen, they are required to comply with the laws of the country in which they reside and practice and must understand the constraints and obligations these may impose on them. Laws will vary from one jurisdiction to another, although there may be some commonality, for example, secondary legislation deriving from European Union law and the influence of English common law on countries of the old Commonwealth. This chapter is written from the perspective of the law in England and Wales and should be read with that in mind.

Constantly legislation is enacted and amended that is relevant to medical practice. Ignorance of the law is no defense, and today's doctors, and other healthcare professionals (HCPs) (nurses and paramedics) are at risk of prosecution for breaches of the law and professional codes of conduct as no previous generation

M. M. Stark (✉)
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_2

has ever been. With the advent of the internet, patients have become increasingly well informed, have much higher expectations, and are more willing to challenge doctors than their predecessors. Today's doctors are under considerable pressure to keep up to date, not only with advancements in medical practice, but also with changes in the laws governing that practice. It is hoped that this chapter will help to highlight key areas of law with which doctors should be familiar, but this can only be an outline. For advice on individual cases or more detailed legal and ethical guidance, doctors are encouraged to approach their Defense Organizations (e.g. Medical Defence Union (MDU), Medical Protection Society (MPS), and the Medical and Dental Defence Union of Scotland (MDDUS)) in the UK. Similar arrangements operate in other jurisdictions, e.g. Avant in Australia, MPS in South East Asia, The Canadian Medical Protective Association (CMPA), or to refer to guidance from other sources such as the British Medical Association (BMA), the General Medical Council (GMC), the Australian Health Practitioner Regulation Agency (AHPRA) or the Royal College of Australasia Faculty of Clinical Forensic Medicine (RCPA CFM). For those doctors wishing to pursue a career in Forensic and Legal Medicine, the Faculty of Forensic and Legal Medicine (FFLM) of the Royal College of Physicians of London offers a higher professional examination. Membership of the Faculty of Forensic & Legal Medicine (MFFLM) [1] which addresses all the essential areas of law relevant to the practice of forensic medicine.

The GMC state that all doctors must make sure that they have adequate and appropriate insurance or indemnity arrangements in place covering the full scope of their medical practice in the UK [2]. If working for a NHS Trust or Board, or Health and Social Care body in Northern Ireland, the doctor will receive indemnity through a clinical negligence scheme. From April 2019, a new state-backed indemnity scheme will cover clinical negligence claims for all general practitioners and other staff delivering primary care. Doctors are individually responsible for ensuring they hold appropriate professional negligence indemnity for any work they undertake outside their NHS employment.

Doctors should also be aware that individual advice in relation to complaints handling, inquests, disciplinary action (whether by their employer or their regulatory body), and general ethical and professional matters do not fall within the scope of NHS indemnity. All doctors are therefore advised to join an appropriate Defense Organization to ensure they have access to medicolegal advice and representation whether or not their practice is confined to the NHS. The indemnity provided e.g. in an NHS employment, will not provide legal advice or support to the doctor, which may be essential should there be a conflict/tension between the interests/needs of the employer and the needs of the employee.

Increasingly doctors are working with other healthcare professionals (HCPs) in multidisciplinary teams proving clinical forensic medical services to those detained by the police and/or complainants/complainers of assault. Nurses and paramedics working in this field must ensure that they have appropriate indemnity for the role usually provided by their employer.

Scope of Practice

All HCPs must work within the scope of practice as determined by their relevant Regulatory body, e.g. General Medical Council (GMC), Nursing and Midwifery Council (NMC), and Health and Care Professions Council (HCPC).

The GMC in Good Medical Practice states that doctors [2]:

- must be competent in all aspects of your work, including management, research and teaching
- must keep professional knowledge and skills up to date
- must regularly take part in activities that maintain and develop competence and performance
- must recognize and work within the limits of your competence
- consult colleagues where appropriate

The NMC Code [3] states that nurses must recognize and work within the limits of their competence. To achieve this, they must, as appropriate:

- accurately identify, observe and assess signs of normal or worsening physical and mental health in the person receiving care
- make a timely referral to another practitioner when any action, care or treatment is required
- ask for help from a suitably qualified and experienced professional to carry out any action or procedure that is beyond the limits of your competence
- take account of your own personal safety as well as the safety of people in your care
- complete the necessary training before carrying out a new role

The Health and Care Professions Council defines a registrant's scope of practice as: [4]

'*Your scope of practice is the area or areas of your profession in which you have the knowledge, skills and experience to practise lawfully, safely and effectively, in a way that meets our standards and does not pose any danger to the public or yourself. We recognize that a registrant's scope of practice will change over time and that the practice of experienced registrant's often becomes more focused and specialized than that of newly registered colleagues. This might be because of specialization in a certain area or with a particular client group, or a movement into roles in management, education or research*'.

HCPs must introduce themselves to the detainee/police officer/complainant as a doctor, nurse, or paramedic, as appropriate.

Quality Standards now also exist to ensure that there is a competent workforce [5, 6]. The standards stress the need for appropriate recruitment, initial training and induction support, workplace-based supervision, continuing professional development and service level standards. All staff should be working for a higher qualification in the field of forensic and legal medicine [7].

Ethical Principles

Medical Professionalism has been defined as '*a set of values, behaviours and relationships that underpin the trust the public has in doctors*'. [8]

Healthcare professionals who practice as forensic physicians (FPs, forensic medical examiners FMEs, forensic medical officers FMOs, or police surgeons), nurses or paramedics, have a special responsibility towards detainees, who, having been deprived of their liberty, are potentially vulnerable, and unable to protect their own interests. Although human rights legislation is designed to protect those interests, the HCP is in a position to act as an advocate on behalf of a detainee and ensure that their rights are upheld in accordance with the relevant professional and ethical codes of conduct. If a HCP has reason to believe these rights are being ignored or abused, he/she may have a duty to raise these concerns with the appropriate authorities.

In December 2015, the UN General Assembly published revised rules: the United Nations Standard Minimum Rules for the Treatment of Prisoners [9], now known as The Nelson Mandela Rules, setting out what is generally accepted as being good principles and practice in the treatment of prisoners and prison management. These principles should cover those detained in police custody. The European Convention on Human Rights [10] is also of importance, with the following articles of particular relevance to HCPs in the forensic field:

- Article 2 right to life.
- Article 3 right to freedom from torture or inhuman or degrading treatment or punishment.
- Article 5 right to liberty and security.
- Article 6 right to fair trial.
- Article 9 freedom of thought, conscience and religion.

The European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) Standard [11] states that the detainee has '*the right of access to a doctor, including the right to be examined, if the person detained so wishes, by a doctor of his own choice (in addition to any medical examination carried out by a doctor called by the police authorities*).' Other rights are enshrined in the Standard and include the right of the person concerned to have the fact of his detention notified to a third party of his choice (family member, friend, consulate) and the right of access to a lawyer. These are outlined in the Codes of Practice to the Police and Criminal Evidence Act 1984 [12].

The Optional Protocol to the UN Convention Against Torture (OPCAT) [13] is an international human rights treaty designed to strengthen the protection of people deprived of their liberty. The UK ratified OPCAT in December 2003 and was required to establish a National Preventive Mechanism (NPM), set up in 2009, that regularly examines conditions of detention, the treatment of detainees, makes recommendations, and comments on existing or draft legislation with the aim of improving treatment and condition of detention [14]. The UK designated a number

of independent bodies already providing independent scrutiny rather than set up a single new NPM. For example in England, these include (among others) the Care Quality Commission, Her Majesty's Inspectorate of Constabulary and Fire and Rescue Services, and the Independent Custody Visiting Association. Not all countries have ratified OPCAT. As of January 2018, the Protocol has 75 signatories and 87 parties; Australia ratified OPCAT in December 2017.

Role of HCP in the Forensic Environment

HCPs working in this environment have two separate roles. In the first instance, they are independent clinical assessors of the complainants/complainers and suspects, and as such, no conventional therapeutic relationship exists. It is important, therefore, that detainees or complainants understand this and the potential ramifications, in order that valid, informed consent can be obtained prior to any examination being conducted. Second, a therapeutic relationship may arise where advice or treatment is offered to a detainee or complainant, but the nature of this relationship will be constrained by the circumstances and the HCP's obligation to pass on relevant information to the police officers responsible for the care and supervision of that individual. This dual accountability has certain parallels with that of occupational health physicians, their employers, and any employees they may be asked to examine or report on. Great care should be exercised when considering issues of consent and confidentiality in such circumstances. For doctors the elements of effective team working are set out by the GMC in *Good Medical Practice* [15] and include the following: effective communication within and outside the team, a respect for the skills and contributions of others, and an awareness of individual roles and responsibilities and lines of accountability. Doctors must take part in systems of quality assurance and quality improvement to promote patient safety, such as audit, responding constructively to the outcomes, taking steps to address any problems and carrying out further training where necessary. It is essential for doctors to regularly reflect on their standards of practice [16].

The GMC states that doctors should be willing to participate in the teaching and training of other doctors and students. As with any other professional duty, doctors who take on a teaching commitment are responsible for ensuring they develop the appropriate skills and competencies for the task. They must also ensure that all staff for whom they are responsible are properly supervised and any appraisal or assessments made are honest and objective.

Most of the ethical principles embodied in codes of professional conduct will be familiar to doctors the world over, although they may vary in the detail from one jurisdiction to another. This is the case in relation to guidance produced by regulatory bodies, medical associations, and boards, whereas other codes, for example the European Convention on Human Rights or declarations produced by the World Medical Association, by definition, transcend these geographical boundaries. Doctors and other HCPs should be familiar with the codes of conduct pertaining to the country in which they practise and should expect to abide by them. A breach of

professional ethics may lead to disciplinary action against the HCP and may call into question their registration and hence ability to practice.

The Nursing and Midwifery Council have issued a Code: Professional standards of practice and behavior for nurses, midwives and nursing associates practicing in the UK [3]. The Health and Care Professions Council also produce Standards of conduct, performance, and ethics for their registrants [4] covering the duty of registrants, which includes paramedics.

Consent

It is a long-established principle that an individual of sound mind has the right to determine what will be done with his own body, even if as a consequence of exercising that autonomy his life may be put at risk. This is often referred to as the principle of self-determination and was encapsulated by The House of Lords in its consideration of the seminal case of Airedale NHS Trust v Bland [17]. Lord Keith stated *"It is well established English law that it is unlawful, so as to constitute both a tort (a civil wrong) and the crime of battery, to administer medical treatment to an adult who is conscious and of sound mind without his consent. Such a person is completely at liberty to decline to undergo treatment even if the result of his doing so will be that he will die."*

This principle applies to mentally competent adults, but what of minors or the mentally incompetent adult? How does the law ensure their interests are protected? Case law has established that in these circumstances it is the doctor's duty to act in the best interests of his/her patient. Determining what constitutes a patient's best interests involves a holistic assessment of the individual's needs in the context of his/her circumstances, values, and beliefs. This can be particularly challenging when dealing with patients who have never had the capacity to express their own views. In circumstances in which an individual is temporarily incapacitated, for example, as a result of a road traffic collision, the HCP may do what is necessary in these circumstances to preserve life and prevent deterioration of the patient's condition without the express consent of the individual concerned. They may, however, do no more, and other less pressing decisions relating to medical care must be deferred until the patient has regained capacity to participate in the decision-making process. The Mental Capacity Act 2005 embodies in statute these common law principles and lays down the framework in which mental capacity is assessed. It goes beyond the common law in that it also makes provision to protect the interests of those without others to speak for them, through the appointment of Independent Mental Capacity Advocates (IMCAs).

Requisites for Consent

It has been established above that any intervention without consent may give rise to criminal and/or civil proceedings against the HCP. The minimum requirement in order to protect against a criminal charge is that the patient should understand in

broad terms, the nature, purpose, and effect of the proposed treatment. Any failure to provide sufficient information in relation to the risks or benefits of the proposed treatment would render the HCP potentially vulnerable to a civil claim in negligence. For consent to be deemed valid, the HCP should ensure that he is satisfied that the patient is capable of giving consent, has been sufficiently well informed about what is proposed and therefore able to give a true consent, and has then expressly and voluntarily consented to the proposed course of action. The GMC guidance "Consent: patients and doctors making decisions together" [18] sets out in some detail the professional obligations and good practice considerations with which all UK practicing doctors should be familiar and comply.

Capacity

All HCPs must understand the requisites for consent and be capable of determining where this may be in question. In such cases, a formal assessment of capacity should then be conducted as a priority, before any clinical intervention is contemplated. This is a situation the HCP is likely to face on a regular basis. In many cases, the HCP will have the requisite skills to make an assessment of capacity, but in more complex cases it may be necessary to refer the patient for a formal assessment by an independent psychiatrist. In England, this would ideally be a psychiatrist approved under Section 12 of the Mental Health Act 1983 [19]. In a few cases, capacity may still remain in doubt, and in these circumstances, it may be necessary to refer the matter to the courts. The courts will hear such matters as applications for Power of Attorney, for example, where an individual is deemed incapable of managing his or her property and financial affairs.

Understanding Risks and Warnings

There are three separate elements to valid consent, namely, the patient must have capacity, be sufficiently well informed to be capable of understanding that to which he or she is being asked to consent, and give the consent freely and without duress. To satisfy the first of these requirements, the HCP needs to establish that the patient is capable of the following:

1. comprehending and retaining the relevant information.
2. believes that information.
3. can weigh up the information in the balance and arrive at a choice [20].

From this it is clear that valid consent requires more than a signature on a form, and that the latter is of itself, insufficient evidence to mount a successful defense against a civil claim in negligence alleging lack of consent based on a failure to warn adequately. Such claims alleging that risks were not explained or adequate warnings given are arising more and more frequently in medical litigation. It is therefore essential for those seeking consent to spend adequate time explaining the

WIT.0043.0086.0035

nature and purpose of the proposed investigation or treatment and discussing any risks or adverse outcomes, as well as alternative treatment options available. The standard consent forms produced by the Department of Health provide a useful prompt to those completing them to help ensure that all these issues are considered. The patient's questions about the proposed intervention should be answered frankly and truthfully as was made clear by the courts in the case of Sidaway [21]. The discussions should be undertaken by those with the appropriate knowledge and experience to deal with them, and ideally, the individual who will be performing the procedure.

English law has been slow to follow other common law jurisdictions (e.g. Canada, Australia, and the United States) regarding the nature of the information that must be imparted for consent to be deemed valid. The law has shifted from a paternalistic approach, applying the "reasonable doctor" test based on the Bolam [22] principle of what a reasonable doctor in the circumstances would have told the patient, to a much more patient-focused approach, applying the "prudent patient" test, i.e., what a reasonable patient in those circumstances would want to know. For example, in the leading Australian case [23], the courts imposed a duty to warn of remote (1 in 14,000) but serious complications of elective eye surgery, even though professional opinion in Australia at the time gave evidence that they would not have warned of so remote a risk.

In the United States and Canada, the law about the duty to warn of risks has long been much more stringent. Many US courts recognize a duty on a doctor to warn a patient of the risks inherent in a proposed treatment. In the leading case [24], the District of Columbia appeals court imposed an objective "prudent patient" test and enunciated the following four principles:

1. Every human being of adult years and sound mind has a right to determine what shall happen to his or her body (the principle of self-determination).
2. Consent is the informed exercise of choice and that entails an opportunity to evaluate knowledgeably the options available and their attendant risks.
3. The doctor must therefore disclose all "material risks."
4. The doctor must retain "therapeutic privilege."

A "material risk" was held to be one that a reasonable person, in what the doctor knows, or should know to be the patient's position, would likely attach significance to in deciding whether to forego the proposed treatment- this test is what is known as the "prudent patient test." However, the court held that a doctor must retain therapeutic privilege by which he or she is entitled to withhold from the patient information about risk, which, if disclosed, would pose a serious threat of psychological harm to the patient. In the leading Canadian case [25], broad agreement was expressed with these propositions.

Until recently, English law continued to allow doctors' discretion in deciding what information should be imparted to the particular patient being advised. The cases of Sidaway and Bolitho [26] set the constraints under which this discretion was exercised, namely that the doctors must be supported by a body of medical

opinion that is not only responsible, but also stands up to logical and scientific analysis and scrutiny as applied by the courts. In English law, the pendulum has now swung fully in the direction of the "prudent patient," in line with other common law jurisdictions. Furthermore, in Chester v Afshar [27], the House of Lords effectively removed the requirement to prove a causal link between an alleged breach of duty (in this case, a failure to warn of a material risk) and the injury sustained. In March 2015, a unanimous decision in the United Kingdom Supreme Court (Montgomery v Lanarkshire Health Board [28]) made it clear that doctors must ensure their patients are aware of the risks of any treatments they offer and of the availability of any reasonable alternatives. This means that doctors can no longer rely on the support of a responsible body of medical opinion - the Bolam test - in deciding what information they should give to patients.

Hence, if a practitioner fails to warn of such a risk, and that risk eventuates, the practitioner is liable, regardless of whether or not the treatment is carried out negligently.

Patients' rights to self-determination and personal autonomy based on full disclosure of relevant information is the legal requirement for consent.

Voluntary Agreement

Consent given under duress, or where the patient's free choice may be influenced by others or by the circumstances in which the consent is obtained, is not valid. The HCP must be satisfied that a patient's consent is given of his own volition and as an expression of his personal autonomy to exercise his free choice about whether or not to undergo the proposed investigation, procedure, or treatment.

Consent may be implicit or explicit, verbal or written, the validity of each depending upon the circumstances and what is being proposed. Implied consent may be sufficient for some purposes, but not others: for example, a patient holding out her arm in response to a doctor's request to take a blood sample, or measure blood pressure. Where a more complex intervention is proposed, express consent will usually be necessary: for example, consent to undergo surgery. Express consent can be verbal or written. Again, a decision as to what is appropriate will depend upon the circumstances. Although verbal consent is legitimate, the advantage of written consent is evidential. Disputes may arise in the future about the nature and extent of the consent obtained, information given in relation to warnings of side effects or risks, and alternative treatment options. In the absence of a contemporaneous note, the courts will need to decide whose version of events is to be believed, often preferring the patient's recall of a significant life event over and above that of the HCP's recollection of a discussion that took place with one patient among many. Ideally, consent should be taken by the doctor who will be performing the procedure, but at the very least, must be someone with the appropriate level of knowledge and skills to be able to respond appropriately and knowledgeably to any questions the patient may have about what is proposed.

The contemporaneous note should record details of the nature, purpose, and effect of what is proposed, together with information about the relative risks and

benefits of treatment, likely success rate and alternative treatment options. For more complex interventions, it may be helpful to supplement these discussions with a printed information booklet or other resource, for example, a CD-ROM which the patient can take away and consider at leisure. Patients should be given time to reflect and discuss what they have been told with loved ones, should they wish to do so. This should be followed up with a further opportunity for the patient to ask questions before finally committing to the procedure.

Particular care should be taken when consent is being obtained in circumstances where the procedure has a forensic rather than a therapeutic purpose, and the HCP is not the patient's usual medical attendant, but may be carrying out tasks that may have a wider implication for the patient, for example, impacting on the liberty of that individual (as a HCP working in custody), or on his future financial security (in making an assessment for the purposes of a civil claim).

Adult Patients Who Lack Capacity

The Mental Capacity Act 2005, which came into effect in 2007 in England and Wales, gave statutory effect to previous common law principles and govern the decision making in relation to adults who lack capacity to consent.

The principles of the MCA 2005 include:

1. a person must be assumed to have capacity unless it is established that he lacks capacity
2. a person is not to be treated as unable to make a decision unless all practical steps to help do so have been taken without success
3. a person is not to be treated as unable to make a decision merely because he makes an unwise decision
4. an act done or decision made under this Act for on behalf of a person who lacks capacity must be done or made in his best interests
5. before the act is done or the decision is made regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action

Where capacity is temporarily impaired due to, for example, intoxication with alcohol and/or drugs, then decisions and procedures should wait till the patient can make the required decision. In an emergency anything done must be in the patient's best interests. If it is expected that the lack of capacity may persist a forensic medical examination may be performed in certain circumstances [29, 30], and consideration should be given to the following:

- Therapeutic care always takes priority
- Inform the consultant who is responsible for the medical care of the patient of the nature and purpose of the proposed examination to ensure that they have no objections to it being undertaken

- Speak with relatives/significant others about what is involved in the examination
- Consider taking advice from a senior clinician
- Consider taking advice from your medical defense organization
- Consider discussing with the hospital lawyers/lead for safeguarding/mental capacity lead
- Document all the steps taken in the decision that the patient lacks capacity and that an examination is their best interests
- The patient should be informed of what was done/not done and why (when appropriate).

Minors and Consent

In 1969, the Family Law Reform Act gave minors who had reached the age of 16 years or over the statutory right to consent to treatment without the requirement for the consent of a parent or guardian. The legal position relating to minors less than 16 years was established in the case of Gillick [31]. The House of Lords decided that valid consent could be given by minors under 16 years, provided they understood the issues involved. The particular case in question concerned the provision of contraceptive advice to girls less than 16 years in circumstances in which a parent objected. The House of Lords held that parental rights to determine whether a child under 16 years old received treatment terminated if and when the child achieved a sufficient understanding and intelligence to be able to comprehend the issues involved. The determinant factor is therefore the capacity to understand, rather than the age or status of the individual concerned.

The right of a minor to refuse treatment is much more complex. In order for treatment of a minor under the age of 18 years to be lawful, the consent is required of either the child concerned (if competent) or anyone with parental responsibility (including the courts). When a minor refuses treatment, it may still be lawful to proceed if the doctor has the requisite consent from any other person with authority to give it. Clearly there are practical as well as ethical issues in relation to compelling a minor to undergo treatment against their wishes. The doctor will need to make a judgment as to the relative seriousness of the issue in question and the potential consequences of proceeding or not proceeding with the treatment. In complex cases or where there is disagreement about what is the preferred course of action, it may be necessary to make an application to the courts to resolve this. Case law has shown that, in general, the courts are reluctant to allow a minor to refuse a course of treatment, in consequence of which, his life may be put at serious risk, preferring to err on the side of preserving life, at least until the child in question has attained adulthood at which point he may exercise his right to autonomy to refuse treatment.

In the custody environment the FFLM [32] has produced advice for HCPs in respect of forensic examinations. The rules with regard to obtaining intimate samples (see below) from a detained person require 'appropriate consent' in order for the intimate sample evidence to be admissible. 'Appropriate consent' with regard to

children and young people is defined in section 65 of the Police and Criminal Evidence Act (PACE), 1984, as meaning:

1. in relation to a person between their 14th and 18th birthday, the consent of that person and his parent or guardian; and.
2. in relation to a person who has not attained the age of 14 years, the consent of his parent or guardian.

Persons with parental responsibility include (this will vary between jurisdictions):

- Mother
  - automatically has parental responsibility (unless removed by a court)
- Father
  - acquires responsibility if he is married to the mother at the time of the child's birth or anytime thereafter
  - unmarried father if he is recorded on the birth certificate of the child from first December 2003 in England and Wales or from 14th May 2006 in Scotland
  - may still have parental responsibility by way of a court registered parental responsibility agreement even if birth registered before above dates
- Parental responsibility can be obtained by others with agreement or by court order (e.g. step-parents/adoptive parents)

Where the consent of a parent or guardian is required for these procedures, it is not necessary for the parent or guardian to be at the police station to give that consent. However, where the consent of the child or young person is required it must be obtained in the presence of an appropriate adult, who may be the parent or guardian or some other suitable person over the age of 18 years.

If a young person is arrested under the Road Traffic Act (RTA) and samples are required it is not necessary to seek consent from a parent or guardian as long as the young person consents. Both the police officer and the HCP need to be to be independently satisfied that the young person has consented to providing a blood sample. If the young person has the capacity to consent but refuses to do so in respect of providing a blood specimen then (subject to the statutory defense of reasonable excuse) they commit the offence contrary to section 7(6) (RTA).

The Professional Duty of Candour [33]

Every healthcare professional must be open and honest with patients when something that goes wrong with their treatment or care causes, or has the potential to cause, harm or distress. This means that healthcare professionals must:

- tell the patient (or, where appropriate, the patient's advocate, carer or family) when something has gone wrong

- apologise to the patient (or, where appropriate, the patient's advocate, carer or family)
- offer an appropriate remedy or support to put matters right (if possible)
- explain fully to the patient (or, where appropriate, the patient's advocate, carer or family) the short and long term effects of what has happened.

Healthcare professionals must also be open and honest with their colleagues, employers and relevant organisations, and take part in reviews and investigations when requested. They must also be open and honest with their regulators, raising concerns where appropriate. They must support and encourage each other to be open and honest, and not stop someone from raising concerns. A doctor must inform the GMC if, anywhere in the world:

1. they have accepted a caution from the police or been criticized by an official inquiry
2. they have been charged with or found guilty of a criminal offence
3. another professional body has made a finding against your registration as a result of fitness to practise procedures [34].

Whistleblowing

Whistleblowing refers to the act of a worker raising a concern about serious issues in the workplace, which may include malpractice or other serious health and safety concerns, which is done in the public interest [35]. The legal framework is set out in the Employment Rights Act 1996 (as amended by the Public Interest Disclosure Act 1998). The Act protects workers that disclose information about malpractice at their workplace, or former workplace, provided certain conditions in relation to the nature of the information disclosed and the person to whom it is disclosed, are met. The GMC is a Prescribed Person under the Public Interest Disclosure (Prescribed Persons) Order 2014 so those who make a whistleblowing disclosure to the GMC which is relevant to their statutory functions will receive legal protection provided they hold a reasonable belief that the information disclosed is true [36].

Illustrative case *A 15 year old boy is under arrest for murder and the police request intimate samples to be taken by the HCP. On discussion with the boy it is clear he is aware of proceedings, is Gillick competent, and consents to have the samples taken. Appropriate consent for the samples means that the HCP should speak to the person with parental responsibility. The mother of boy is contactable by telephone and the HCP discusses the situation with her. She has a serious mental illness but appears to understand the request for forensic samples, and provides her consent. An appropriate adult is called in view of the suspect being under 18 years of age. You ensure that you document all the steps in your decision-making.*

Intimate Samples and Intimate Searches

Section 62 of the Police and Criminal Evidence Act (PACE) 1984 provides that intimate samples can only be taken from an individual if authorized by a police inspector (or superintendent in the case of those detained under terrorism legislation) and if the requisite consent is obtained (see Chap. 3).

Section 55 of PACE provides that an intimate search of an individual may be conducted on the authority of a police officer of at least the rank of inspector only if there are grounds for suspecting that an individual is hiding an object that might be used to cause physical injury to himself or others and might do so while in detention or a class A controlled drug and was in possession of it with the appropriate criminal intent before his arrest.

A doctor or nurse called upon to conduct an intimate search will be wise to consider carefully whether a detainee is likely to be able to give a free and voluntary consent in such circumstances; an intimate search should not be conducted unless the doctor or nurse is thoroughly satisfied that the individual has given valid consent. An intimate search may, exceptionally, be conducted by a doctor or nurse if he believes it is necessary to remove a concealed object that is an immediate danger to the life or personal safety of those responsible for the detainee's supervision. It is essential that the doctor or nurse attends to discuss with the detainee the pros and cons of having drugs concealed.

The doctor or nurse will be guided by the authorities as to which orifice(s) to search. It is essential that the doctor or nurse has the appropriate knowledge and skills and is competent to perform the required clinical examination of the various orifices that may be used to conceal drugs/weapons [37].

Ideally, a chaperone should also be present in addition to the police officer.

The BMA and FFLM consider that such searches should be carried out by a healthcare professional only when the individual has given consent [38]. If consent is not given, the doctor or nurse should refuse to participate and have no further involvement in the search. In certain circumstances in relation to the concealment of Class A drugs the police may request x-rays and ultrasound scans to be taken of a detainee by a doctor or nurse in suitable medical premises. Once again, the detainee should give appropriate consent [39].

Video and Audio Recordings

The GMC [40] and BMA [41] have issued guidance requiring doctors to inform patients before making a video or audio recording and, except in situations in which consent may be understood by the patient's cooperation with a procedure (e.g. radiographic investigation), to obtain his or her explicit consent. Doctors may make recordings without consent in exceptional circumstances, such as when it is believed a child has been the victim of abuse.

If a recording has been made in the course of investigation or treatment of a patient, but the doctor now wishes to use it for another purpose, for example as a teaching or

training aid, or in research, the patient's consent must be obtained. Recordings may not be published or broadcast in any form without the explicit, written consent of the patient. Consent is required before recordings are published in textbooks or journals or before they enter the public domain. Consent is required whether or not the patient can be identified from the recording. Where a patient lacks capacity to make a decision, the relevant legislation must be considered. The doctor should be satisfied that making recordings of the patient for secondary purposes is necessary, and benefits the patient or is in their best interests and that the purpose cannot be achieved in a way that is less restrictive of the patient's rights and choices [40].

Specific care has to be taken with the recording, storage, and use of intimate images where the FFLM has produced joint guidance with RCPCH on the procedure to be followed in this respect [42].

Recording Telephone Calls

Many countries have laws or regulations that govern the electronic recording of telephone conversations, which are designed to protect individuals' rights [43]. Commonly, a provision will include stating that persons whose telephone calls are being recorded must be informed of that fact—the details of the provision varying from country to country.

A recording may be an invaluable aid for forensic evidence, or to help refute a complaint, or a claim for compensation, but practitioners who make electronic recordings of telephone calls must be familiar with, and comply with, local laws and codes of practice.

Emergencies

In a medical emergency in which a patient is unable to give or withhold consent as a result of their medical condition at the time (e.g. unconscious patients), and there is no known clear written instruction to the contrary in terms of a valid, extant advance directive made by the patient, treatment that is clearly essential to save life or to prevent serious harm may and indeed should be given. However, non-urgent treatment should be deferred until the patient is able to give consent. Patients with longstanding mental incapacity should be given treatment deemed to be in their best interests. Again, in an emergency situation, this should be limited to immediately necessary treatment and nonurgent interventions postponed until a more comprehensive assessment of the patient's best interests can be undertaken.

Confidentiality

> *And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets…* [44].

There continues to be a real concern across all sectors, but particularly in the health services, about the risk of breaching confidentiality or data protection law by sharing concerns about a child's safety.

Whilst the law rightly seeks to preserve individuals' privacy and confidentiality, it should not be used (and was never intended) as a barrier to appropriate information sharing between professionals. The safety and welfare of children is of paramount importance [45].

Information acquired by a medical practitioner and other HCPs from, or about, a patient in the course of their professional work is confidential and should not be released to any third party without the consent of the patient or without proper justification in accordance with professional guidance. This duty of confidence to a patient continues even after the patient's death.

The GMC has issued a comprehensive set of guidance documents [46] which set out the professional obligations of a doctor with reference to the statutory framework and gives examples of how and in what specific circumstances breaching a patient's confidence may be justified.

Doctors are responsible for the safekeeping of confidential information obtained in a professional capacity. Information thus obtained from a patient should not generally be disclosed to others without the patient's consent, except in certain specific circumstances. These include where there is a legal duty to do so or where there is an overriding public interest in disclosure, for example, where a failure to disclose the information could put others at serious risk. Most patients would expect information about them to be shared with other healthcare professionals involved in their care, and consent in these circumstances may be implied. Patients may not, however, be aware that information may be shared for other purposes, for example, service planning and financial audit. As a registered medical practitioner, you must be satisfied that patients have access to information about how their details may be used and their right to object. If patient identifiable data are to be disclosed, express consent should be sought and a patient's right to withhold consent should be respected unless disclosure without consent can be justified.

As a general rule, when making a disclosure of confidential information to a third party, only the minimum information necessary to achieve the objective should be disclosed. The doctor should be satisfied that the person(s) to whom the disclosure is made understands and respects that confidentiality. The NMC provides similar guidance [47]:

"*…share necessary information with other healthcare professionals and agencies only when the interests of patient safety and public protection override the need for confidentiality…*".

Death and Confidentiality

The doctor's duty of confidentiality extends beyond the death of the patient. The extent to which information can properly be disclosed after death depends on the circumstances. The GMC (section 135) [46] has provided the following guidance where relevant information about a patient who has died must be disclosed:

- when disclosure is required by law
- to help a coroner, procurator fiscal or other similar officer with an inquest or fatal accident inquiry
- on death certificates, which you must complete honestly and fully
- when a person has a right of access to records under the *Access to Health Records Act 1990* or the *Access to Health Records (Northern Ireland) Order 1993*, unless an exemption applies
- when disclosure is necessary to meet a statutory duty of candour.

If in doubt about the appropriateness of making a disclosure relating to a deceased patient, the doctor should contact his defense organization for further advice. If the doctor is aware of any information held about the deceased that the deceased had previously expressly indicated should not be shared after his death, then these wishes should be respected. Information may also be withheld, if in the opinion of the holder of the record, disclosure would cause serious harm to the mental or physical welfare of another person.

The BMA's guidance [48] recommend that HCPs *should counsel their patients about the possibility of disclosure after death and solicit views about disclosure where it is obvious that there may be some sensitivity. Such discussions should be recorded in the records*.

Detention and Confidentiality

The HCP should exercise particular care over confidentiality when examining persons who are detained in custody. When taking a medical history and examining a detainee, it is common for a police officer or other detaining official to be in attendance, sometimes in the role of a "chaperone," or possibly simply posted nearby where they can overhear the conversation. Such officials will not owe the detainee a duty of confidence in the same way a HCP does, nor will they be subject to professional sanctions for breaching that confidence.

In considering the presence of a chaperone the CPT Standards state [11]:

'All medical examinations of persons in police custody must be conducted out of the hearing of law enforcement officials and, unless the doctor concerned requests otherwise in a particular case, out of the sight of such officials.'

Although the standard cites doctors only, it is also the expected standard for all healthcare professionals working in the custody environment. The GMC [49] recommends the use of a chaperone when undertaking intimate examinations and this applies whether or not the doctor is the same gender as the patient, ideally the chaperone should be another trained HCP. Where the doctor's own safety is at risk the chaperone/observer should be trained in control and restraint. In such cases, the presence of custodial staff in close proximity to the patient/detainee may be unavoidable. Certain legal procedures, e.g. an intimate search of a juvenile or vulnerable person, require the presence of a same sex appropriate adult (Annex A) [12].

The HCP called upon to examine a detainee must take great care to ensure that the person being examined understands the role of the HCP and the implications for confidentiality. The detainee must understand and agree to the terms of the consultation before any medical information is obtained, preferably by giving written consent.

In the rest of this chapter, only the central issues can be highlighted; local rules and circumstances dictate how these may be resolved in individual circumstances.

Exceptions to the General Duty of Confidentiality

Under certain circumstances, a doctor may disclose confidential information obtained about a patient. For a full consideration of these, please refer to the latest GMC guidance [46] or equivalent locally relevant guidance.

With the Patient's Consent

The patient may agree to confidential information about him being shared with others in a number of situations. The most usual of these is where information is shared with other HCPs involved in the care and treatment of the patient. Consent to disclosure in these circumstances may be implied. All doctors in clinical practice have a duty to participate in local clinical audit and in National Confidential Inquiries. Patients should be made aware that their information may be used in this way and that they have the right to object. A patient may also consent to the release of information for employment or insurance purposes, housing and welfare benefits, and references and legal proceedings. In these circumstances, care should be taken to ensure that the patient is aware of the nature and extent of the proposed disclosure and to whom the disclosure will be made and agrees to it. Information may not normally be released to these parties without the patient express consent.

Illustrative case *The police contact you to request the 'body diagrams' from an assessment you performed one month ago. At that time the police asked you to see the detainee to document the injuries he sustained in the incident leading to his arrest. On review of your notes you realise that the detainee did not sign the consent form for the release of records. Therefore you ask the police to obtain up-to-date consent from the detainee for the release of the body diagrams which are part of the medical records. You advise that on receipt of the consent to release you would prepare a professional witness statement which would provide a clear account of your assessment and the interpretation of the injuries.*

Disclosures Required by Law

The doctor must disclose information about a patient where this is specifically required by law. Registered doctors in the UK have a statutory duty to notify suspected cases of certain infectious diseases. A doctor who performs a termination of

pregnancy must notify the appropriate chief medical officer within 7 days of the termination. In relation to the management of controlled drugs there are regulations where responsible bodies are required to cooperate with each other in relation to the handling of and acting on shared information in relation to the management and use of controlled drugs. As a matter of good practice, wherever practicable, you should inform patients of your obligations and advise them what information will be disclosed and to whom, unless this would undermine the purpose of the disclosure.

There are a number of statutory bodies that have powers to access patients' records as part of their duty to investigate complaints, criminal activities (e.g. fraud), or healthcare professionals' fitness to practice. You should comply with such requests provided you are satisfied that the disclosure is required by law or that it can otherwise be justified. You may wish to ask the relevant body to provide you with details of the statutory requirement on which they are relying and seek advice from your defense organization if in doubt. Most such statutory bodies will have Codes of Practice which set out how they will access and use personal information. You need to be clear that where information is requested but not required by law, you should seek the patient's consent before disclosure unless you consider the disclosure can be justified in the public interest.

Disclosure of confidential information during the course of judicial proceedings should only be made either with the express consent of the patient, or if the presiding judge directs the doctor to do so. If you are called to give evidence in court and you do not have the patient's consent to release information about them, you should explain this to the judge or presiding officer of the court. The judge will then decide whether the interests of justice in making the disclosure outweigh the patient's interests in keeping the information confidential. You must comply with a direction from a judge to disclose confidential information. Failure to do so may otherwise put you at risk of being held in contempt of court, the penalties for which may include a fine and/or a custodial sentence. Requests for information from the police or solicitors acting on behalf of the patient or a third party normally require the patient's consent, unless the disclosure can be justified in the public interest (see below).

Statutory Restrictions on Disclosing Information about Patients

The GMC [46] outline a number of statutory restrictions on disclosing information about patients:

Gender Recognition Act 2004 (UK)

Section 22 of the Act makes it an offence to disclose 'protected information' when that information is acquired in an official capacity. 'Protected information' is defined as information about a person's application for gender recognition and a person's gender history after that person has changed gender under the Act.

Human Fertilisation and Embryology Act 1990 (UK)

Section 33A protects the confidentiality of information kept by clinics and the Human Fertilisation and Embryology Authority. Information may be accessed or disclosed only in the specific circumstances set out in the Act. Disclosing information that identifies the patient in other circumstances without the patient's prior consent is a criminal offence.

The National Health Service (Venereal Diseases) Regulations 1974 (Wales) and the NHS Trusts and Primary Care Trusts (Sexually Transmitted Diseases) Directions 2000 (England)

These regulations provide that any information capable of identifying an individual who is examined or treated for any sexually transmitted disease, including HIV, shall not be disclosed, other than to a medical practitioner in connection with the treatment of the individual in relation to that disease or for the prevention of the spread of the disease.

Medical Teaching, Research, and Audit

As a general rule, where possible, patient data used for teaching, audit, or research purposes should be anonymized and express consent should be obtained before identifiable patient data are used in this way. For the purposes of local clinical audit, it is sufficient that patients are made aware their data may be used in this way and of their right to object. Disclosure of personal information without consent is permitted or has been approved under section 251 of the *National Health Service Act 2006* (which applies in England and Wales) or the *Health and Social Care (Control of Data Processing) Act (Northern Ireland) 2016*. These pieces of law allow the common law duty of confidentiality to be set aside for defined purposes where it is not possible to use anonymized information and where seeking consent is not practicable.

Disclosures in the Public Interest

As with all disclosures made without consent of the patient, the doctor should consider whether the proposed disclosure is necessary for the intended purpose and whether this could be achieved if the information were to be disclosed in anonymized or coded form. Disclosure of identifiable patient information may be justified where a failure to do so could put individuals other than the patient at risk of death or serious harm. Examples would include a disclosure to the DVLA about a patient who continues to drive against medical advice, or who places others at risk by failing to disclose a serious communicable disease. Each case must be judged on its

individual merits, and if in doubt, doctors should seek specialist advice from their defense organization.

Another circumstance in which a disclosure without consent may be justified is to assist the police in the investigation, prevention, or prosecution of a serious crime. There is no agreed definition of what constitutes "serious crime," although it is generally accepted that these usually refer to crimes against the person (such as murder, rape, assault) and serious harm to the state or to public order. Crimes against property (with the exception of arson where there may be a risk to life) and financial crimes, unless substantial, are not usually considered to fall into this category. Doctors should also consider the circumstances in which the request is being made. For example, a doctor may be persuaded to release information to assist the police in apprehending a murder suspect who is still at large, and hence, where there is still a risk to the public, but not to release information about a suspect who is already in custody without either the patient's consent or an order from the court.

A patient who is violent or dangerous poses particular dilemmas for the doctor. In the course of a consultation, a patient may tell a doctor that he or she intends to perpetrate some serious harm on another person. Each case must be assessed on its own facts; however, under some circumstances, the doctor may be sufficiently concerned for the welfare of the third party to disclose information to the intended victim or to the police or other person in authority with the power to take appropriate action. Indeed a failure to act in such circumstances could lead to criticism by the court, as happened in the case of Tarasoff [50] in California, in which a specialist psychologist failed to warn the girlfriend of a patient who threatened to kill her, and subsequently carried out the threat. The court determined that while there was no general duty to protect or warn third parties, a special relationship may impose such a duty. In the United Kingdom, a psychiatrist was sued by a patient with a history of violence, for releasing a report about him, prepared at the request of his solicitors in connection with an application for release from detention, without his consent [51]. The psychiatrist advised against release and the patient's solicitors therefore decided not to use the report. The doctor, however, was so concerned about his findings that he released a copy of the report to the relevant authorities, as a consequence of which, the patient's application for release was refused. The patient subsequently filed a civil claim for compensation but this failed, the court holding that the psychiatrist was entitled, under the circumstances, to put his duty to the public above the patient's right to confidentiality.

The GMC provides an annex outlining the key legislation in relation to confidentiality [52]. Under the Terrorism Act 2000 (s.38B) it is a criminal offence for a person to fail to disclose information to the police that they know, or believe might be relevant, in preventing an act of terrorism or securing the arrest, prosecution or conviction of a person for a terrorist act. In relation to traffic offences all citizens must give the police on request any information which they have that may identify a driver alleged to have committed a traffic offence (Road Traffic Act 1988). The Crime and Disorder Act of 1998 (s.115) permits disclosure to organizations such as the police local authorities and probation services but this is not a legal obligation. Information should be disclosed if the patient consents or there is an overriding

public interest or in response to a court order. Section 26 of the Counter-Terrorism and Security Act 2015 requires those working in health authorities to have 'due regard to the need to prevent people from being drawn into terrorism', the Prevent duty. All HCPs should have level 3 child safeguarding and adult safeguarding training which should cover this duty.

Duty to Report Gunshot and Knife Wounds

The GMC provide guidance to doctors in relation to reporting gunshot and knife wounds [53]. The police should be informed whenever a patient presents with a gunshot wound or a wound that may have been inflicted by a knife or other sharp instrument, other than self-inflicted wounds or those sustained by accident. Personal information should not be disclosed to the police at the initial stage. On the attendance of the police, as long as the patient's clinical condition permits, consent should be sought from the patient to speak to the police. The consequences of a refusal of consent should be clearly explained to the patient, but the patient's decision should nevertheless be respected. Any subsequent decision to disclose information without consent must be justified by the doctor in the usual way, for example, to assist the police in the investigation of a serious crime. The information disclosed should be the minimum necessary to achieve the objective of the disclosure. If there is any doubt about whether disclosure without consent is justified, the decision should be made by, or with the agreement of, the consultant in charge or the healthcare organization's Caldicott or data guardian. If a child, under 18 years of age, attends for treatment for a gunshot wound or a wound from an attack with a knife, blade or other sharp instrument then there would be concerns regarding child safeguarding and appropriate steps should be taken [54].

Disclosures to Protect the Patient

If a doctor considers disclosure of confidential information is necessary for the protection of the patient, he should explain his reasons for this and encourage the patient to consent to the disclosure. However, a doctor should normally abide by a competent patient's refusal to consent, even if the disclosure leaves him or her, but no one else, at risk of serious harm. Disclosure may be justified if it is not practicable to seek consent, for example, where doing so would prejudice the purpose of the disclosure.

HCPs working in the police custodial environment, or within a sexual assault referral center, may come across vulnerable adults and children who need to be referred for safeguarding. For example child sexual exploitation (CSE) is a type of child abuse where a young person is encouraged, or forced, to take part in sexual activity in exchange for something. Cases of forced marriage where one

or both people do not consent to the marriage and pressure or abuse is used. This is a form of domestic/child abuse and a serious abuse of human rights. There is a mandatory duty to report Female Genital Mutilation IN the UK if it appears to have been carried out on a girl under the age of 18 (Female Genital Mutilation Act 2003 [55].

Disclosures to Protect Others

Disclosure of identifiable confidential patient information may be justified without consent if in the doctor's judgement, a failure to make the disclosure could put others at risk of serious harm. In these cases, the doctor must weigh the patient's interest in keeping the information confidential against the public interest, or the interests of another individual, in releasing it. This is dealt with more fully in the section on Public Interest disclosures above.

Disclosures About Patients Who Lack the Capacity to Consent

Where a patient is incapable of consenting to disclosure of information about him, either because of a disorder or arrested development of the mind, or because of temporary incapacity for example, unconscious patients, or because the patient is a minor and lacks the maturity to reach a decision, a doctor must either obtain consent from someone with the authority to act on the patient's behalf, or if this is not possible, do what he considers necessary and in the best interests of his patient. In relation to safeguarding adults the Care Act 2014 (England) requires 'relevant partners' to cooperate with local authorities making enquiries about adults at risk unless to do so would be incompatible with their own duties, or would otherwise have an adverse effect on the exercise of its functions [52].

For a fuller discussion of those with authority to consent on behalf of minors and incapacitated adults, see the section on consent above. In making an assessment of best interests, the doctor should take into consideration the views of relatives and carers and any previously known wishes of the patient including the existence of a valid advance directive.

Where there are potential child protection/safeguarding concerns, doctors should be aware of their statutory duties under relevant legislation including, for example, the Children Act 1989 and 2004, to make the best interests of the child their paramount consideration and to share relevant information with other agencies. In situations involving vulnerable adults, for example where the doctor is concerned the patient may be the victim of neglect or abuse, and the doctor believes the disclosure is in the patient's best interests and or is necessary to protect others from risk of serious harm, he should pass relevant information promptly to an appropriate authority.

Record Keeping

All HCPs should keep objective, factual records of their consultations with patients and of other professional work where the information recorded should be relevant to the purpose for which the note was made. Not only is this desirable per se, but it is a professional requirement. Current GMC guidance [2] states that, in providing care, doctors should keep clear, accurate, and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment. Further, the records should be made at the same time as the events being recorded or as soon as possible thereafter. These standards apply to both paper and electronic records. Where retrospective entries need to be added to the record, these should be clearly recorded as such and dated and timed accordingly. Audit trails allow the exact time an amendment is made in electronic records to be identified and a failure to flag an entry as retrospective could call into question the motivation of the maker of the record.

When handling patient identifiable information there are a number of fundamental principles known as the Caldicott principles to bear in mind.

The Caldicott Principles (2013) Are as follows [56]

Principle 1 - Justify the Purpose(s) for Using Confidential Information

Every proposed use or transfer of personal confidential data within or from an organisation should be clearly defined, scrutinised and documented, with continuing uses regularly reviewed, by an appropriate guardian.

Principle 2 - Don't Use Personal Confidential Data unless it Is Absolutely Necessary

Personal confidential data items should not be included unless it is essential for the specified purpose(s) of that flow. The need for patients to be identified should be considered at each stage of satisfying the purpose(s).

Principle 3 - Use the Minimum Necessary Personal Confidential Data

Where use of personal confidential data is considered to be essential, the inclusion of each individual item of data should be considered and justified so that the minimum amount of personal confidential data is transferred or accessible as is necessary for a given function to be carried out.

Principle 4 - Access to Personal Confidential Data Should Be on a Strict Need-to-Know Basis

Only those individuals who need access to personal confidential data should have access to it, and they should only have access to the data items that they need to see. This may mean introducing access controls or splitting data flows where one data flow is used for several purposes.

Principle 5 - Everyone with Access to Personal Confidential Data Should Be Aware of their Responsibilities

Action should be taken to ensure that those handling personal confidential data - both clinical and non-clinical staff - are made fully aware of their responsibilities and obligations to respect patient confidentiality.

Principle 6 - Comply with the Law

Every use of personal confidential data must be lawful. Someone in each organisation handling personal confidential data should be responsible for ensuring that the organisation complies with legal requirements.

Principle 7 - The Duty to share Information Can Be As Important as the Duty to Protect Patient Confidentiality

It is essential that HCPs have the confidence to share information in the best interests of their patients within the framework set out by these principles. Clinical governance systems should be in place with policies and procedures to support HCPs.

The General Data Protection Regulation (GDPR) is an EU Regulation in place in the UK since 25 May 2018. The GDPR and Data Protection Act 2018 (DPA) replace 1998 Data Protection Act but the key principles of the original Act remain and apply to doctors working in the NHS in the UK (in primary or secondary care) or private practice. GDPR applies to both digital and physical (paper) records and information is subject to confidentiality obligations that already exist, e.g. between a doctor and patient.

Compliance must be actively demonstrated, for example it will be necessary to keep and maintain up-to-date records of the data flows from a practice and the legal basis for these flows; and have data protection policies and procedures in place. Furthermore more information is required in ‘privacy notices’ for patients; there is legal requirement to report certain data breaches; significantly increased financial penalties for breaches as well as non-compliance; no charge allowed for patients to access medical records (save in exceptional circumstances); designation of Data Protection Officers [57].

Particular care must be taken to ensure appropriate measures are in place to ensure confidentiality of electronic records, for example having restricted access levels for different users according to need, password protection, and encryption of portable data, for example, memory sticks. HCPs are encouraged to seek advice on specific issues relating to record keeping from their defense organization or local Caldicott guardian.

The Information Commissioner's Office (ICO) is the authority responsible for upholding information rights in the UK. Detailed guidance on complying with the data protection law is available on the ICO website: https://ico.org.uk/ HCPs who handle personal data must be registered with the IC unless covered by their employer. For doctors, and other HCPs, working in the NHS there are well established arrangements for the management and storage of clinical notes. Doctors and other HCPs who are independent practitioners, or who work for private companies commissioned to provide clinical forensic medical services, whether employed or self-employed, should be aware of appropriate policies and procedures to manage notes and computerized records. Notes should be stored securely whether this is the physical storage of records as well as electronic security. Material stored on electronic devices (especially portable devices) should be password-protected and properly encrypted, and of course electronic records should be backed up regularly (and backups encrypted and stored securely – preferably away from the main site) [58].

Comprehensive notes assist in the care of the patient, especially when HCPs work in teams or partnership and share the care of patients with colleagues. Notes then help to keep colleagues well informed. Good notes are invaluable for forensic purposes; there may be a substantial delay in requests for statements or court appearances. When the HCP faces a complaint, a claim for compensation, or an allegation of serious professional misconduct or poor performance, comprehensive notes are invaluable when defending such cases. The medical defense organizations have long explained that an absence of adequate notes may render indefensible that which may otherwise have been defensible. The existence of full and accurate contemporaneous notes is often the key to preparing and mounting a successful defense to allegations against a doctor or the institution in which he or she works.

Notes should record facts objectively and dispassionately; they must be devoid of pejorative comment, wit, invective, or defamation. Patients and their advisers now have increasing rights of access to their records and rights to request corrections of inaccurate or inappropriate information.

Access to Health Records

Access to medical and other health records, which is provided for by statute law, varies considerably from one jurisdiction to another. A health record exists to provide an account of a patient's contact with the healthcare system and consists of information relating to the physical or mental health or condition of an individual made by a health professional in connection with the care of that individual [48]. Under the DPA 2018, patients have the right to request access to their own medical

records under a Subject Access Request (SAR) without charge, including situations where they give consent for a third party, such as a solicitor or insurer, to access the data. Unfortunately, space considerations do not permit an explanation of the detailed statutory provisions; readers are respectfully referred to local legal provisions in their country of practice. The BMA have produced comprehensive guidance for health professionals in the UK on managing requests for access to health records [48].

Preparation of Reports

HCPs regularly receive requests to produce reports for medicolegal reasons. They should understand the basis for this and what is required—a simple report of fact based on their professional involvement in a case, a condition and prognosis report after a medical examination, an expert opinion, or a combination of these. Although the HCP may possess certain expertise, this does not necessarily mean the court will designate him an expert on every occasion.

A report may be required for a variety of reasons, and its nature and content must be directed to the purpose for which it is sought. Is it a report of the history and findings on previous examination because there is now a criminal prosecution or civil claim? Is an expert opinion being requested based on the clinical notes made by others? Is it a request to examine the patient and to prepare a report on present condition and prognosis? Is it a request for an expert opinion on the management of another practitioner for the purposes of a medical negligence claim?

The request should be studied carefully to ascertain what is necessary and clarification sought where necessary in the case of any ambiguity. The fee or at least the basis on which it is to be set should also be agreed in advance of the preparation of the report. If necessary, the appropriate up-to-date consents should be obtained and issues of confidentiality addressed.

Reasonable care must be taken in the preparation of any report. Any dishonesty in a signed statement amounts to perjury and may lead to prosecution. A medicolegal report may affect an individual's liberty in a criminal case or compensation in a personal injury or negligence action. A condemnatory report about a professional colleague may cause great distress and a loss of reputation; prosecuting authorities may even rely on it to decide whether to bring homicide charges for murder ("euthanasia") or manslaughter (by gross negligence). Reports must be fair and balanced. Any expert should be independent and impartial. The HCP is not an advocate for a cause, but should see their role as assisting the court in determining the outcome of a case by clarifying the relevant medical issues. It must always be considered that a report may be disclosed in the course of legal proceedings and that the author may be cross-examined about its content, on oath, in court, and in public. A negligently prepared report may lead to proceedings against the author, perhaps even referral to the regulatory body and criminal proceedings in exceptional cases. Certainly, a civil claim can be brought if a plaintiff's action is settled on disadvantageous terms as a result of a poorly prepared opinion. There is also the attendant risk of adverse

judicial comment and as a result, a requirement to report oneself to the GMC [34]. Press publicity which may significantly affect that doctor's status in respect to any future instruction.

The form and content of the report will vary according to circumstances, but it should always be well presented with relevant dates and details carefully documented in objective terms. Care should be taken to address the questions posed in the letter of instructions from those who commissioned it. It is acceptable for the report to be submitted in draft form before it is finalized, but the HCP must always ensure that the final text represents his or her own professional views and must avoid being persuaded by counsel or solicitors to make amendments which he believes cannot be justified: it is the HCP who will have to answer questions in the witness box which may be felt as the loneliest place in the world if he or she makes claims outside the area of expertise or in any way fails to "come up to proof" (i.e., departs from the original statement).

Health care professionals (doctors, nurses and paramedics) working in the fields of general forensic medicine and sexual offence medicine will commonly be asked to provide professional witness statements following their examination of a detainee, complainant/complainer, or police officer. It is essential that the statement details the history and examination findings and provides an appropriate opinion dependent on the significance of the clinical findings and the knowledge, skills, experience and qualifications of the HCP. The language used should be understandable to a lay person sitting in the jury. The FFLM recommends that HCPs state in their professional witness statements:

'*This is a professional witness statement of fact. I am able/unable to provide expert opinion evidence in relation to this matter and will be happy to do so on supply of all relevant documentation*' [59].

Five categories of evidence have been outlined [60]:

- expert evidence of opinion on facts produced before the court;
- expert evidence to explain technical subjects or the meaning of technical words;
- evidence of fact given by an expert the observation comprehension and description of which require expertise; (often referred to as professional witness evidence)
- evidence of fact given by an expert which does not require expertise for its observation, comprehension, and description, but which is necessary preliminary to the giving of evidence in the other four categories;
- admissible hearsay of the specialist nature.

In England and Wales those who are required to give, or prepare, expert evidence for the purposes of criminal proceedings must do so in accordance with the Criminal Procedures Rules and the Criminal Practice Directions [61]. The Practice Direction states that an expert report should include the following declaration:

'I confirm that I have acted in accordance with the code of practice or conduct for experts of my discipline, namely [identify the code].'

The FFLM has produced a Code for their Members [62]. The GMC also provides guidance for doctors "Acting as a Witness in Legal Proceedings" [63]. Guidance has been provided for all healthcare professionals by the Academy of Medical Royal Colleges [64].

Expert Statements/Certificates - Maria Nittis

"The overriding objective of this procedural code is that criminal cases be dealt with justly. Dealing with a criminal case justly includes acquitting the innocent and convicting the guilty, dealing with the prosecution and the defence fairly, recognising the rights of the defendant…" [65].

The primary duty of an expert witness is to the court and never as a patient advocate. The goal for the expert should not be to win the case, assist the prosecution or thwart the defense (or vice versa). The expert should be mindful that their role is to assist the court in understanding what happened, what was found, and what can be reasonably concluded from those findings.

Legislation relating to expert evidence, and the admission thereof, is likely to differ between jurisdictions. In the United States, it is largely derived from two landmark cases in 1923 and 1993. In 1923, a significant decision was made in *Frye v. United States* [66]. Evidence, in the form of a lie detector test that measured systolic blood pressure, was rejected because the court reasoned that the principle being used must be recognized and "sufficiently established to have gained general acceptance in the particular field in which it belongs." [67] (p88).

Seventy years later, in 1993, in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* [68], it was decided that for scientific testimony or evidence to be admitted it had to not only be relevant but reliable [67] (p.90). In using this as an evidentiary standard, courts should consider whether a theory or technique has been tested, subject to peer review and publication, there is a known rate of error in the scientific technique, there are standards controlling the technique's operation and there is a degree of acceptance within a relevant scientific community [67] (p 91). In 2000 this was amended. Commentary accompanying the revised evidentiary rules stated that:

"*If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise, if* (1) *the testimony is based upon sufficient facts or data* (2) *the testimony is the product of reliable principles and methods and,* (3) *the witness has applied the principles and methods reliably to the facts of the case*" [69].

The *Daubert* decision observed that '*there are important differences between the quest for truth in the courtroom and the quest for truth in the laboratory. Scientific conclusions are subject to personal revision. Law, on the other hand, must resolve disputes finally and quickly*' [68].

Herein, no doubt, lies many of the difficulties forensic examiners face when attending Court as Experts.

While a considerable amount of the layout, content and expectations for these expert statements is legislated or governed by professional codes [70] there are some common themes that should be considered when preparing a statement or expert report/certificate.

Edmond et al. [71] have suggested that the expert should consider four things when writing a statement: disclosure, transparency, epistemic modesty, and impartiality. The article was aimed at forensic science practitioners but is nonetheless applicable to other areas of expertise such as the forensic HCP.

"*Reports and testimony should be transparent. They should enable others, both the technically proficient and the technically challenged, to review and understand how the evidence was collected, processed and analyzed, how particular conclusions were reached, and provide insight into uncertainties and limitations with these processes and conclusions*" [71].

"*An expert report should be sufficient to enable another expert or scientist to make a clear assessment of the analysis and conclusion*" [71].

The authors go on to recommend that opinions of forensic practitioners should be epistemologically modest, avoid over-claiming or exaggerating performance, and act in a way that is consistent with "demonstrated ability". Examiners should concede limitations and uncertainties.

The examiner must not select findings or results to support their opinion or otherwise "*misrepresent, or mislead as to, individual findings or overall conclusions*" [62].

"*In the absence of scientific research, there will normally be a widespread need for caution—a need to moderate confidence and strength of opinion*" [71].

In most Australian jurisdictions expert evidence admissibility is regulated by uniform evidence legislation which requires firstly that the witness has specialized knowledge based on their training, study or experience and secondly that their opinion is based "wholly or substantially" on that knowledge [71]. Each Expert report, therefore, should address both aspects of this requirement.

The forensic examiner should be engaged in a process of continuing professional development in order to demonstrate continued competency in their area of expertise [62].

There must be regard to any potential conflict of interest and instructing parties must be informed of this as soon as practicable [62].

Bias - Maria Nittis [72]

At least 24 different cognitive biases have been identified. Cognitive bias is where a subjective assumption is made based on one's own perception of reality. They can often be unconscious. Every HCP who works at the medicolegal interface should be aware of the relevant ones as they can influence decision making and opinions. As discussed previously, an Expert's opinion should be based on facts, data, reliable principles and methods. Below are only a few of the identified cognitive biases:

- Confirmation bias: Looking for ways to justify existing beliefs. We are primed to see and agree with ideas that fit our preconceptions. It is important to try and identify preconceptions and whether they are based on available evidence.
- Dunning-Kruger effect: the more you know the less confident you will be. The opposite, however, is often true. A person can be over-confident when they only have a simple idea of how things are.
- Just world hypothesis: a preference for a just world makes you presume that it exists e.g. all complainants tell the truth, all accused are guilty, all injuries are from non-consensual activities, all police are hard-working, objective and honest etc.
- Halo effect: Your judgement of another can be influenced by how much you like them or how attractive they are e.g. they are professionals with good jobs and highly respected in the community therefore they must be telling the truth. Alternatively, they are a drug using sex-worker and so their history is questionable.
- Availability heuristic: Recent, emotionally powerful or unusual memories can seem more relevant and cause you to apply them too readily i.e. you place greater value on things that come to your mind more readily.
- Group think: Dissent can be uncomfortable and dangerous to one's social standing and so often the most confident or first voice will determine group decisions.
- Affinity bias: leads us to favour people who are like us
- Misinformation effect: this is the tendency for post-event information to interfere with the memory of the original event. Your memory can be influenced by what you hear about the event from others.

Peer Review

Peer review has been defined as the evaluation of work or performance by colleagues in the same field in order to maintain or enhance the quality of the work or performance in that field [73]. In the context of peer review, peer is used to refer to people in the same profession who are of the same or higher ranking.

The expectation that there should be peer review of a statement, prior to its submission to court, is likely to increase. Peer review may occur in different ways. A reviewer may read a statement and offer comments about grammar, spelling and the opinion reached based on the evidence cited in the certificate / statement. A reviewer may, however, additionally review contemporaneous material collected at time of examination, for example original injury diagrams, patient histories and photographs. It is the latter, arguably, which could allow the reviewer to reach an independent assessment of the information that was available to the primary examiner. If a statement has been peer reviewed, should this be identified within the statement? Should a list of the materials reviewed be specified? Should difference of opinions be recorded for the court and when should this be done? Should reviewed drafts of statements be kept and presented to court upon demand? It is likely that examiners who work within sexual assault units will need to consider the pros and cons of each

WIT.0043.0086.0059

course of action and develop guidelines for staff to ensure a consistent and transparent approach.

There are clear benefits for healthcare professional working in the forensic environment to discuss cases and learn from others but there are also legal implications which will vary in different jurisdictions and HCPs need to be aware of the requirements in relation to the disclosure of unused material [73].

Attendance at Court

Generally, courts consist of two types: criminal and civil. Additionally, the HCP will encounter the Coroners Court (or the Fatal Accident Inquiry at the Sheriff Court in Scotland), which is, exceptionally, inquisitorial and not adversarial in its proceedings. A range of other special courts and tribunals exists, from ecclesiastical courts to social security tribunals; these are not described here.

It is possible for a HCP to be called to any court to give evidence. The type of court is likely to depend on the HCP's practice, specialty, and seniority. The HCP may be called to give purely factual evidence of the findings made in the course of his practice, in which case the HCP is simply a professional witness of fact, or to give an opinion on some matter, in which case the HCP is an expert witness. Sometimes, the HCP will be called to give both factual and expert evidence.

Normally, an HCP will receive adequate notice that attendance in court is required and he or she may be able to negotiate with those calling him or her concerning suitable dates and times. Many requests to attend court will be made relatively informally, but more commonly a witness summons will be served. It is essential to cooperate with police and police staff in relation to attending court as any reluctance to attend court may well result in a formal summons, which compels the HCP to attend or to face arrest and proceedings for contempt of court if the HCP refuses.

If the HCP is reasonable and responsible it is likely that there will be sympathetic understanding and cooperation of the lawyers and the court in arranging a time to give evidence that least disrupts clinical practice. However, any exhibition of belligerence by the HCP can induce a rigid inflexibility in lawyers and court officials – who always have the ability to "trump" the doctor by the issuance of a summons, so be warned and be reasonable.

Evidence in court is given on oath or affirmation. The HCP will usually be allowed to refer to any notes made contemporaneously to "refresh the memory," although it is courteous to seek the court's agreement.

Demeanor in Court

The limited space available does not permit more than to outline good practice when giving evidence. Court appearances should be taken seriously as an individual's liberty may be at risk or significant damages and costs may rely on the evidence

given. The HCP's dress and demeanor should be appropriately professional, and he or she should speak clearly and audibly.

Before attending court ensure that you have your notes, statement/report and any other relevant paperwork relating to the case. Review the notes and statement/report considering the key strengths and weaknesses. Whether it be evidence in chief or cross-examination, it is worth listening attentively to the questions posed. Consider carefully the proposed response prior to speaking. Answer the question asked (not the one you think it should have been) concisely and carefully, and then wait for the next question. The role of the HCP is not to fill a gap in the conversation; the judge and others will be making notes, and it is wise to keep an eye on the judge's pen/keyboard and adjust the speed of your words accordingly. Pauses between questions allow the judge to finish writing or counsel to think up his or her next question. If anything you have said is unclear or more is wanted from you, be assured that you will be asked more questions. If there is a straightforward answer, then give it unless the outcome would mislead the court. Brevity has much to commend it, although answering in monosyllables is unlikely to help the court. Be calm and patient, and never show a loss of temper or control regardless of how provoking counsel may be. An angry or flustered witness is a gift to any competent and experienced counsel, as is a garrulous or evasive witness. It is perfectly permissible to ask for a question to be repeated as long as this strategy is not repeated ad nauseam.

Try to use simple language devoid of jargon, abbreviations, and acronyms. Stay well within your area of skill and expertise and do not be slow to admit that you do not know the answer. Your frankness will be appreciated, whereas an attempt to bluff or obfuscate or overreach yourself will almost certainly be detrimental to your position.

HCPs usually seek consensus and try to avoid confrontation (at least in a clinical setting). They should remember that lawyers thrive on the adversarial process and are out to win their case, not to engage on a search for truth. Thus, lawyers will wish to extract from witnesses answers that best support the case of the party by whom they are retained. However, the medical witness is not in court to "take sides," but rather to assist the court, to the best of the expert witness' ability, to do justice in the case. Therefore, the witness should adhere to his or her evidence where it is right to do so, but must be prepared to be flexible and to make concessions if appropriate, for example, because further evidence has emerged since the original statement was prepared, making it appropriate to cede points. The HCP should also recall the terms of the oath or affirmation—to tell the truth, the whole truth, and nothing but the truth—and give evidence accordingly.

The Duties of Expert Witnesses

Pitfalls

There are many potential pitfalls in forensic medical practice and while most may be avoided by an understanding of the legal principles and forensic processes, this

WIT.0043.0086.0061

is now a topic of postgraduate rather than undergraduate education. The typical "doctor–patient" relationship does not apply; the detainee needs to understand the role of the doctor or other HCP and the relevant explanation provided to ensure any consent is informed in nature.

Meticulous attention to detail and a careful documentation of facts are required at all times. You will never know when a major trial will turn on a small detail that you once recorded (or, regrettably, failed to record). Your work will have a real and immediate effect on the liberty of the individual and may be highly influential in assisting the prosecuting authorities to decide whether to charge the detained person with a criminal offense.

As an HCP you clearly owe a duty of care to those who engage your services, for that is well-established law. The issue of whether a forensic physician (FP/FME forensic medical examiner) owes a wider duty to the victims of alleged crime was decided in the English Court of Appeal during 1999 [74]. A doctor working as an FME examined the victim of an alleged offense of rape and buggery (sodomy). The trial of the accused offender was fixed, and all prosecution witnesses were warned and fully bound, including the FME.

The trial was scheduled to begin on December 7, and on December 6, the FME was warned that she would not be required to attend on the first day of trial but would be needed some time after that. The trial commenced on December 7, and the accused pleaded not guilty. On Friday, December 8, the FME was told that she would not be needed that day but would be required the following week. She did not state that this would cause any problem. However, on December 11, the FME left the country for a vacation. On December 14, the police officer in charge of the case spoke by telephone with the FME. She said she could not return to give evidence before December 19. The remainder of the prosecution case was finished on December 14. The trial judge refused to adjourn the case until December 19. On December 20, the judge accepted a defense submission of no case to answer and directed the jury to return a verdict of not guilty. A few weeks later, the FME was convicted of contempt of court for failing to attend court to give evidence, and she was fined.

The female victim commenced civil proceedings against the FME, alleging negligent conduct in failing to attend, as warned, to give evidence. In her claim, the claimant asserted that if the FME had given evidence (presumably in accordance with her witness statement), the trial judge would have refused the defense submission of no case to answer. The claimant also contended that on the balance of probability, the accused would have been convicted because the FME's evidence would have undermined the credibility of the accused's defense that no anal interference had occurred. The claimant claimed that the FME owed her a duty of care to take all reasonable steps to provide evidence of the FME's examination in furtherance of the contemplated prosecution and to attend the trial of the accused as a prosecution witness when required. She claimed to suffer persistent stress and other psychological sequelae from failing to secure the conviction of her alleged assailant and knowing that he is still at large in the vicinity.

The claimant did not contend that there was any general duty of care on the part of a witness actionable in damages at the suit of another witness who may suffer

loss and damage through the failure of the first witness to attend and give evidence in accordance with his or her witness statement.

When the case came before the Court of Appeal, Lord Justice Stuart-Smith stated that the attempt to formulate a duty of care as pleaded,

> is wholly misconceived. If a duty of care exists at all, it is a duty to prevent the plaintiff from suffering injury, loss or damage of the type in question, in this case psychiatric injury. A failure to attend to give evidence could be a breach of such duty, but it is not the duty itself.

Later, Lord Justice Stuart-Smith stated:

> it is quite plain in my judgment that the defendant, in carrying out an examination at the behest of the police or Crown Prosecution Service, did not assume any responsibility for the plaintiff's psychiatric welfare; the doctor/patient relationship did not arise.

He concluded his judgment:

> it is of no assistance to the plaintiff here in trying to construct a duty of care to attend court to give evidence which, as I have already pointed out, could amount to breach of a wider duty which is not alleged and could not be supported.

The other two Lords Justice of Appeal agreed. Lord Justice Clarke observed that:

> In (the circumstances of the case) any duty of care owed (by the FME) must be very restricted. It seems to me that she must have owed a duty of care to carry out any examination with reasonable care, and thus, for example, not to make matters worse by causing injury to the plaintiff. It also seems to me to be at least arguable that where an FME carries out an examination and discovers that the person being examined has, say, a serious condition which needs immediate treatment, he or she owes a duty to that person to inform him or her of the position.

The claimant's action against the FME for damages was dismissed, and it was confirmed that there was no duty of care owed by the FME to the victim to attend the trial as a prosecution witness when required.

Key Points

- Ensure that you keep clear, detailed, contemporaneous notes of your interaction and assessment with any patient. Your notes will be essential should there be a complaint about a patient's care, for writing a statement based on your assessment, and if you have to attend court as a professional witness
- Before attending court review your notes and statement/report considering the key strengths and weaknesses

Self-Assessment Exercises

1. When can a health care professional breach patient confidentiality?
2. What are the five statutory principles set out in the Mental Capacity Act?

3. Who has parental responsibility for a child?
4. How may bias affect decision making?

Acknowledgement Acknowledgement to Dr. Maria Nittis for sections on Expert Statements/Certificates and Bias.

With Acknowledgement to the previous authors Dr. Janet Page & Dr. George Fernie not involved in this edition.

References

1. https://fflm.ac.uk/exams/mfflm/
2. GMC. 2019 Good Medical Practice. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/good-medical-practice. Accessed 22 June 2019 and see for specific advice https://www.gmc-uk.org/registration-and-licensing/managing-your-registration/information-for-doctors-on-the-register/insurance-indemnity-and-medico-legal-support. Accessed 22 June 2019
3. NMC (2018) The Code. Professional standards of practice and behaviour for nurses, midwives and nursing associates. https://www.nmc.org.uk/standards/code/. Accessed 22 June 2019
4. HCPC. Standards of conduct performance and ethics. Your duties as a registrant. https://www.hcpc-uk.org/globalassets/resources/standards/standards-of-conduct-performance-and-ethics.pdf. Accessed 22 June 2019
5. Wall I, Stark MM (2019) Quality standards in Forensic Medicine: GFM and SOM. FFLM
6. Cladingboel J, Smith J, Stark MM, Wall I (2019) Quality standards for nurses and paramedics GFM. FFLM. www.fflm.ac.uk
7. Stark MM (2018) Advice on obtaining qualifications in Clinical Forensic Medicine. FFLM. https://fflm.ac.uk/wp-content/uploads/2018/08/Advice-on-obtaining-qualifications-in-clinical-forensic-medicine-Dr-M-Stark-Jan-2018.pdf. Accessed 18 June 2019
8. RCP (2005) Doctors in society: medical professionalism in a changing world. RCP, London
9. https://undocs.org/A/RES/70/175. Accessed 22 June 2019
10. European Convention on Human Rights. https://www.echr.coe.int/Documents/Convention_ENG.pdf
11. https://www.coe.int/en/web/cpt/standards. Accessed 22 June 2019
12. Police and Criminal Evidence Act 1984 Codes of Practice. https://www.gov.uk/guidance/police-and-criminal-evidence-act-1984-pace-codes-of-practice. Accessed 22 June 2019
13. OPCAT. https://www.ohchr.org/EN/HRBodies/OPCAT/Pages/OPCATIndex.aspx. Accessed 19 June 2019
14. https://www.nationalpreventivemechanism.org.uk/
15. GMC (2014) Good Medical Practice. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/good-medical-practice. Accessed 15 June 2019
16. GMC The reflective practitioner - guidance for doctors and medical students 2018. https://www.gmc-uk.org/education/standards-guidance-and-curricula/guidance/reflective-practice/the-reflective-practitioner%2D%2D-guidance-for-doctors-and-medical-students. Accessed 23 June 2019
17. Airedale NHS Trust v Bland (1993) AC789, 857 per Lord Keith of Kinkel
18. GMC. 2008 Consent: patients and doctors making decisions together. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/consent. Accessed 22 June 2019
19. St George's Healthcare NHS Trust v S (No 2): R v Louise Collins & Ors Ex parte S (No 2) (1998) (Guidelines issued by the Court of Appeal as to steps to be taken when patient refuses consent to necessary treatment)
20. In re C (1994) 1WLR 290

21. Sidaway v Board of Governors of the Bethlem Royal and Maudsley Hospitals (1985) AC 871; [1985] 1 AllER 643
22. Bolam v Friern Hospital Management Committee (1957) 2 AllER 118; [1957] 1 WLR 582
23. Rogers v Whitaker (1992) 175 CLR 479; [1992] AMLD 6993; 16 BMLR, 148 (Australian High Court)
24. Canterbury v Spence (1972) 464 F2d 772 (US App DC)
25. Reibl v Hughes 114 DLR 3d 1 (Canadian Supreme Court 1980); (1980) 2 SCR 880
26. Bolitho v City & Hackney Health Authority (1998) AC 232; [1998] 1 Lloyd's Rep. Med. 26
27. Chester v Afshar (2004) UKHL 41
28. Montgomery v Lanarkshire Health Board [2015] SC 11 [2015] 1 AC 1430
29. FFLM 2018 Consent from patients who may have been seriously assaulted. https://fflm.ac.uk/wp-content/uploads/2018/12/Consent-from-patients-who-may-have-been-seriously-assaulted-FFLM-Dec-2018.pdf. Accessed 22 June 2019
30. Rogers JE, Odell MS, Schreiber JR (2018) Sexual assault examination of the unconscious patient: a legal, ethical and professional Grey-area for the forensic physician. J Law Med 26(1):265–273
31. Gillick v West Norfolk & Wisbech Area Health Authority (1984) AC 112
32. FFLM (2019) Consent from children and young people in police custody in England and Wales for medical examinations. https://fflm.ac.uk/wp-content/uploads/2019/03/Consent-from-children-and-young-people-in-police-custody-England-Wales-FFLM-RCPCH-Jan19.pdf. Accessed 22 June 2019
33. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/candour%2D%2D-openness-and-honesty-when-things-go-wrong. Accessed 16 June 2019
34. GMC. 2013 Reporting criminal and regulatory proceedings. https://www.gmc-uk.org/-/media/documents/reporting-criminal-and-regulatory_pdf-58841314.pdf. Accessed 23 June 2019
35. BMA (2018) Guide to raising concerns Whistleblowing. https://www.bma.org.uk/advice/employment/raising-concerns/guide-to-raising-concerns. Accessed 19 June 2019
36. GMC (2018) GMC Policy on Whistleblowing. https://www.gmc-uk.org/-/media/documents/dc5900-whistleblowing-guidance_pdf-57107304.pdf. Accessed 19 June 2019
37. Stark MM (2016) Body cavity searches: practical issues and consent. In: Payne-James J, Byard RW (eds) Encyclopedia of forensic and legal medicine, vol 1, 2nd edn. Elsevier, Oxford, pp 433–436
38. Recommendations for healthcare professionals asked to perform intimate body searches. Guidance for doctors from the British Medical Association and the Faculty of Forensic & Legal Medicine 2017 https://fflm.ac.uk/publications/recommendations-healthcare-professionals-asked-to-perform-intimate-body-searches/. Accessed 17 June 2019
39. Annex K of Codes of Practice
40. General Medical Council (2011) Making and using visual and audio recordings of patients. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/making-and-using-visual-and-audio-recordings-of-patients. Accessed 17 June 2019
41. British Medical Association (2018) Taking and using video and audio recordings of patients. https://www.bma.org.uk/advice/employment/ethics/confidentiality-and-health-records/visual-and-audio-recordings-of-patients. Accessed 17 June 2019
42. Guidance for best practice for the management of intimate images that may become evidence in court. 2014, Faculty of Forensic and Legal Medicine and Royal College of Paediatrics and Child Health, London. https://fflm.ac.uk/wp-content/uploads/documentstore/1400752731.pdf. Accessed 17 June 2019
43. https://www.natterbox.com/call-recording-legislation-uk-us-australia/
44. Extract from the Hippocratic Oath. 5th century BC
45. The Lord Laming (2009) The Protection of Children in England: A Progress Report London: The Stationery Office. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/328117/The_Protection_of_Children_in_England.pdf. Accessed 19 June 2019

46. GMC 2018 Good practice in handling patient information. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/confidentiality. Accessed 18 June 2019
47. https://www.nmc.org.uk/
48. BMA 2018 Access to health records, Updated to reflect the General Data Protection Regulation and Data Protection Act 2018 Guidance for health professionals in the United Kingdom. https://www.bma.org.uk/advice/employment/ethics/confidentiality-and-health-records/access-to-health-records. Accessed 22 June 2019
49. GMC (2013) Intimate examinations and chaperone. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/intimate-examinations-and-chaperones. Accessed 19 June 2019
50. Tarasoff v Regents of the University of California (1976) P 551 2d 334 (Cal. Sup. Ct. 1976)
51. W v Egdell (1990) Ch. 359; [1990] 1 All ER 835
52. GMC Confidentiality: key legislation. https://www.gmc-uk.org/-/media/ethical-guidance/related-pdf-items/confidentiality/key-legislation-factsheet.pdf
53. GMC 2018 Confidentiality: reporting gunshot and knife wounds. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/confidentiality%2D%2D-reporting-gunshot-and-knife-wounds. Accessed 17 June 2019
54. Protecting children and young people: The responsibilities of all doctors. https://www.gmc-uk.org/-/media/documents/Protecting_children_and_young_people___English_1015.pdf_48978248.pdf
55. https://www.gov.uk/government/publications/mandatory-reporting-of-female-genital-mutilation-procedural-information. Accessed 27 June 2019
56. Department of Health NHS Information Governance Toolkit. https://www.igt.hscic.gov.uk/Caldicott2Principles.aspx. Accessed 16 June 2019
57. BMA. 2018 GPs as data controllers under the GDPR https://www.bma.org.uk/advice/employment/ethics/confidentiality-and-health-records/gps-as-data-controllers. Accessed 18 June 2019
58. FFLM (2017) Forensic Records Frequently Asked Questions for all healthcare professionals. https://fflm.ac.uk/wp-content/uploads/2017/10/Forensic-Records-FAQs-Oct-2017.pdf. Accessed 19 June 2019
59. FFLM (2018) Forensic clinicians (physicians, nurses and paramedics) as witnesses in criminal proceedings. https://fflm.ac.uk/publications/recommendations-forensic-physicians-as-witnesses-in-criminal-proceedings/. Accessed 18 June 2019
60. Hodgkinson T, James M (2015) Expert evidence: law & practice, 4th edn. Sweet & Maxwell, London, p 10
61. Criminal Procedures Rules and the Criminal Practice Directions (2019) http://www.justice.gov.uk/courts/procedure-rules/criminal/docs/2015/criminal-procedure-rules-practice-directions-april-2019.pdf. Accessed 18 June 2019
62. FFLM. The Code of Practice on Expert Evidence. 2018 https://fflm.ac.uk/wp-content/uploads/2018/06/The-Code-of-Practice-on-Expert-Evidence-Prof-K-Rix-May-2018.pdf. Accessed 18 June 2019
63. GMC (2013) Acting as a witness in Legal Proceedings. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/acting-as-a-witness. Accessed 18 June 2019
64. Academy of Medical Royal College (2019) Acting as an expert or professional witness Guidance for healthcare professionals. https://www.aomrc.org.uk/reports-guidance/acting-as-an-expert-or-professional-witness-guidance-for-healthcare-professionals/. Accessed 27 June 2019
65. Criminal Procedure Rules 2015 (Senior Courts of England and Wales, Magistrates' Courts of England and Wales) Part 1, 1.1 and 1.2 http://www.legislation.gov.uk/uksi/2015/1490/pdfs/uksi_20151490_en.pdf. Accessed 18 June 2019
66. Frye v. United States 54 App. D.C. 46, 293 F. 1013 (1923)
67. National Academy of Sciences. Strengthening Forensic Science in the United States - A Path Forward Washington 2009. Available from: http://nap.edu/12589. Accessed 27 June 2019
68. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U. S. 579 (1993)

69. Federal Rules of Evidence. Rule 702 Testimony by Expert Witnesses. https://www.rulesofevidence.org/article-vii/rule-702/. Accessed 18 June 2019
70. FSR 2019 Expert Report Guidance FSR-G-200 Issue 3. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/796387/Statement_and_Report_Guidance_Appendix_Issue_3.pdf. Accessed 22 June 2019
71. Edmond G, Found B, Martire K, Ballantyne K, Hamer D, Searston R et al (2016) Model forensic science. Aust J Forensic Sci 48(5):496–537
72. Jager C. 24 Cognitive Biases You Need to Stop Making 2018. Available from: https://www.lifehacker.com.au/2018/03/find-out-which-cognitive-biases-alter-your-perspective/
73. FFLM & RCPCH (2019) Peer review in sexual offences including child sexual abuse cases and the implications for the disclosure of unused material in criminal investigations and prosecutions. https://fflm.ac.uk/wp-content/uploads/2019/06/PeerReview_SexualOffences_Jun19.pdf. Accessed 18 June 2019
74. Re N (1999) Lloyds Law Reports (Medical) 257; [1999] EWCA Civ 1452

WIT.0043.0086.0067

Sexual Assault Examination

3

Maria Nittis

Learning Objectives

Knowledge of the types of injuries that may occur following sexual assault.

Management of the forensic assessment, including the taking of a forensic history and obtaining consent.

Demonstrate the importance of contamination reduction.

Ability to select the appropriate evidence-based samples based on the information provided by the complainant, witnesses, and police.

Knowledge of the evidence that underpins forensic collections and the timing of those collections.

Ability to provide appropriate aftercare including emergency contraception, post exposure prophylaxis.

Definitions

Sexual Assault has a legal definition which can vary across different jurisdictions. It is important that an examiner is very familiar with the legal definition in their area.

In the U.K., for example, "Sexual Assault" occurs if a person (A) intentionally touches another person (B), the touching is sexual and (B) does not consent. "Rape" occurs if person (A) penetrates the vagina, anus or mouth of another person (B) with his penis and (B) does not consent. There is another category called "Assault by penetration" which occurs if person (A) intentionally penetrates the vagina or anus of another person (B) with a part of his body or anything else, the penetration is sexual and "B" does not consent [1].

M. Nittis (✉)
Forensic Medical Unit, Western Sydney Local Health District, Sydney, NSW, Australia
e-mail: Maria.Nittis@health.nsw.gov.au

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_3

WIT.0043.0086.0068

In the Republic of Ireland, "Rape" is defined as having occurred if a man has unlawful sexual intercourse with a woman who does not consent [2]. "Rape" is defined as the penetration (however slight) of the anus or mouth by the penis or penetration (however slight) of the vagina by any object held or manipulated by another person [3]. "Sexual Assault" is reserved for non-penetrative events (as above) and is defined as any indecent assault perpetrated on a man or a woman.

In Scotland a "Sexual Assault" occurs if a person (A), without consent of person (B), does any of the following [4]:

- Penetrates sexually by any means and to any extent the vagina, anus or mouth of (B)
- Intentionally or recklessly touches (B) sexually
- Engages in any other form of sexual activity in which (A) has physical contact with (B) (whether bodily contact or contact by means of an implement and whether or not through clothing)
- Intentionally or recklessly ejaculates semen onto (B)
- Intentionally or recklessly emits urine or saliva onto (B) sexually

The definition of "Rape" is when a person (A) penetrates to any extent, with their penis and without the consent of (B), the vagina, mouth or anus of (B) [5].

In NSW, Australia, the term "Sexual Assault" is equivalent to "Rape" in the above legislations (even if penetration is by an object) while all other assaults of a sexual nature, without penetration, are termed "Sexual Touching." Sexual touching replaced the term "Indecent Assault" in December 2018 [6].

Introduction

Sexual Assault Services may be independent, stand-alone services that provide dedicated assessment, care and forensic sampling for complainants of sexual assault. The services may cater for males and females; pediatric and adult cases. They may have dedicated space in which to conduct these examinations. They may see all complainants, even those who do not wish to disclose the assault to police. They may supply additional services such as counselling, psychology, advocacy and / or support people to assist the complainant. The unit may provide ongoing sexual health screening as required. Or they may not. If you are an examiner, or just wishing to know how sexual assault services might work, this chapter aims to provide an overview of such facilities and aims to assist the examiner, working in the field of sexual assault, in providing an evidence-based forensic medical assessment.

Sexual assaults create significant health and legislative problems for every society. All health professionals who have the potential to encounter victims of sexual assault should have some understanding of the acute and chronic health problems that may ensue from an assault. An examiner must have knowledge of the relevant sexual assault legislation in the jurisdiction within which they work, understand the admission and exclusion criteria which operates and be familiar with any cut off time periods for forensic sampling.

WIT.0043.0086.0069

This chapter will not cover the epidemiology of sexual assault, as this has been covered extensively elsewhere, other than to state that it is a prevalent crime affecting more people than reports made to police. It affects men and women, girls and boys as well as those who identify as trans and intersex. It affects homosexuals, heterosexuals and bisexuals. It is seen in every culture, every community and across all religious denominations. "Despite its destructiveness, violence is ubiquitous in society" [7]. It has the ability to impact a person's life for the rest of his/her life. The aim of most sexual assault services is to reduce the psychological impact, restore a sense of power, control and choice, ensure all medical needs are met, provide forensic assessment and collection of evidence to the best standard possible and to assist the complainant to navigate their way through the process.

The following sections will include an overview of the relevant anatomy, development, and physiology. Injury and injury documentation will be covered. The practical aspects—which samples to obtain, when and how to obtain them, will also be addressed.

Throughout all the stages of the clinical forensic assessment, the forensic practitioner must avoid partisanship while remaining sensitive to the immense psychological and physical trauma that a complainant may have incurred. The continuing care of the complainant is essentially an ongoing process throughout and beyond the primary clinical forensic assessment.

While reference is made to the sexual assault "complainant" other terms that might equally apply include victim, patient, client or complainer.

While this chapter hopes to support an examiner tasked with performing sexual assault assessments it does not replace the specialist knowledge, skills, and attitudes that can only be acquired through more formalized theoretical and practical training and ongoing peer review and mentorship.

Neuroscience

The neuroscience of fear and fear reactions is still not completely understood. The brain is a complex and inter-related system which is affected by individual past experience as well as primary genetics. The following information is a very general outline of some of the current neuroscientific principles associated with fear and the fear response. It is hoped that a sexual assault examiner, by understanding these basic principles, might better understand the variability of presentations by complainants at time of examination (e.g. traumatized, distressed, absent, unperturbed etc.) and why there may be difficulties in trying to gain a cogent version of events.

It is thought that sensory information (sight, touch, smell, sound, taste) is transmitted to the thalamus. This information is then transmitted to other relevant areas of the brain for processing. When the thalamus does not function as it should (as may occur as a result of a flooding of the thalamus with stress hormones e.g. as a result of trauma), there can be interference with the way a person remembers the trauma i.e. they may not recall an event in an integrated or chronological way but,

WIT.0043.0086.0070

rather, remember it as a series of images, sounds and sensations associated with intense emotions [8].

The thalamus is thought to be responsible for sending information to the amygdala (which lies in the limbic, unconscious brain) and to the frontal lobes (conscious brain). The road to the amygdala is extremely fast. If the amygdala interprets this information as a threat, this information is sent to the hypothalamus and brain stem resulting in the release of stress hormones such as cortisol and adrenaline. There is engagement of the autonomic nervous system (sympathetic pathway) which can result in an increase in blood pressure, heart rate, respiratory rate, body temperature, and slow down of both urination and defecation. There can be dilation of airways, increase in heart contraction, increased muscular action, sweating of palms, dilation of pupils and piloerection.

This reaction, however, can be modulated by the frontal lobe (particularly the medial prefrontal cortex) which allows for assessment of the situation [8]. In low to moderate stress levels, the prefrontal cortex can act to "calm down" the amygdala. In an "amygdala hijack", where there is an extreme stimulus, the amygdala shuts off the prefrontal cortex function (where conscious control and decisions are made). It is an evolutionary response to a risk environment where there is no time for thought.

The hippocampus attempts to regulate the fear response, lessening it when the danger has passed. Like the thalamus, it has a key role in the development of and in the processing of memory. If overwhelmed by stress hormones, it too can result in disorganized or fragmented memories.

Neuropsychology of Trauma

The phrase "fight or flight" was coined in 1929. For many who do not work with sexual assault complainants, it can be easy to assume that most victims of assault would seek to escape or offer some form of resistance. Much work has been done in the years since 1929 and it has been postulated that there are essentially four distinct fear responses. There is an initial freeze response (this has been referred to as the stop, look, listen response). It is a state of hyper vigilance. The next response is to flee or leave the situation. If this is deemed impossible the next response is to provide some form of resistance (or fight). Hence it might better be referred to as the flight or fight response (order reversed). The last response is tonic immobilization [9] (freeze, flight, fight, frozen?).

Möller et al. [10] reviewed 298 women who had presented to a sexual assault clinic. 70% of those women reported significant tonic immobility (using the tonic immobility scale-adult form–TIS-A) and 48% reported extreme tonic immobility during the assault. This has been described as an involuntary, temporary state of motor inhibition in response to extremely fearful situations that can, not only, prevent someone from being able to move but may cause them to shake, prevent them from screaming out, and lead to feelings of detachment from the ongoing event. Interestingly, alcohol intake within the previous 12 h before the assault reduced the risk of tonic immobility by half!

Tonic immobility was associated with the development of post-traumatic stress disorder and severe depression. Not surprisingly, previous trauma history and psychiatric treatment history were both associated with the tonic immobility response [10].

Whether a person has experienced freezing, chosen to attempt an escape or provide resistance, or whether they have found themselves traumatically immobile as a result, an examiner should be aware that these responses are quite individual, may not be the same if they were to be sexually assaulted on another occasion, and the complainant may have very little conscious control over any of these reactions. That is, what we think we might do, if we found ourselves in such a situation, may not bear any resemblance to what we actually do.

Complainants of sexual assault should be offered counselling to help them cope with the recognized immediate and long-term psychological sequelae of a sexual assault [11]. Some examination facilities have 24-h access to trained counsellors [12].

Illustrative Case *During a Sydney trial in October 2016, a jury heard details of how a NSW girl had suffered torture and sexual assaults, as she was growing up, by her father and assisted by her mother. Richard Guilliatt, journalist at The Australian, spoke to a woman who had known the family for 15 years. She is reported to have said, "I don't believe any of it…Honestly, I can't see it." Another mother told Richard, "I don't know anyone who knew them and trained with them who thinks this happened." The parents' middle daughter and son also deny the accusations. The middle daughter said that her youngest sister had been diagnosed with Dissociative Identity Disorder and "began to recollect memories that no one else in the family had…my sister is as much a victim as anyone. All I know is that she was admitted into the mental health system and we lost her." Her father was found guilty and sentenced to 48 years in prison. Her mother was sentenced to 16 years* [13].

Medical Examination

Basic Principles

A clear referral pathway should be identified for complainants of sexual assault. All complainants should have immediate triage assessment which includes recording of blood pressure, temperature, pulse rate and a Glasgow Coma scale ranking. Injuries should be identified and triaged. Issues with consent (decreased/altering consciousness, mental health, intellectual and developmental delay, age, intoxication etc.) should be ascertained and substitute consent obtained if required. The health of a patient takes priority. Working closely with treating staff can ensure that medical care is provided in a timely manner and evidence can be preserved where possible.

Examiners should aim to look at all body areas, when conducting a sexual assault assessment, in order to record injury or sites of pain and tenderness. Dependent upon the history given they should be able to competently use an auroscope, ophthalmoscope, speculum, proctoscope (anoscope), colposcope and camera or there should be a clinician available who can assist with these examinations if required.

Prior to any body part examination, the examiner should ensure they have the complainant's ongoing consent to proceed. An examiner should, at all times, be mindful to protect and preserve the dignity and privacy of the patient, exposing only those parts of the anatomy being examined at any one time.

Assessment for intoxication should be done when there is a history of recent drug or alcohol use.

Timing of the Examination

Although in general terms the clinical forensic assessment should occur as soon as possible, reference to the persistence data given under the relevant sections and the acute medical needs of the patient will help the forensic examiner determine whether the examination of a complainant should be conducted as soon as possible, may be deferred or should not be undertaken at all. Even when the nature of the assault suggests there is unlikely to be any forensic evidence, the timing of the examination should be influenced by the speed with which any clinical signs if present, such as superficial/minor injuries, might disappear.

Detaining police personnel should be consulted prior to making the decision regarding the timing of a suspect examination.

Place of the Examination

Specially designed facilities used exclusively for the examination of complainants / suspects of sexual offences are available in many countries. Furnishings in these units should be durable and suitable for cleaning between examinations [14]. The complainant may wish to have a support person present for all or part of the examination, and this wish should be accommodated if practical. The presence of this additional individual should be recorded in the event that a DNA elimination sample is needed from them at a later date. Suspects are usually examined in the clinical room of the police station and a same-sex chaperone should be present.

During the examinations of both complainants and suspects, the local ethical guidance regarding the conduct of intimate examinations should be followed [15].

Contamination Reduction

Advances in DNA analysis and trace evidence bring with them increased responsibility for examiners. Of course it is virtually impossible to eliminate all extraneous DNA but effort should be made, and these efforts should be documented where appropriate, to reduce the potential for contamination of evidence.

"In the examination process the principle is to minimize the inadvertent transfer of DNA material that could lead to the miscarriage of justice" [16].

Contamination has been an issue in many high-profile cases including Farah Jama (Australia) [17], the Avenger of Zuuk (Netherlands) [18] and Adam Scott

(Manchester) [19]. This has resulted, over the last several years, in an increasing number of cases where the question is not just "whose DNA is it" but "how or when did it get there" [20].

All Sexual Assault units should have protocols/guidelines which address the issues surrounding contamination reduction.

Sources of contamination may include:

- DNA from the examiner. This can occur by breathing over specimens, touching swab tips etc.
- DNA from previous complainant/s. This can occur if examination surfaces are not adequately cleaned and prepared.
- DNA from other people who have entered the room e.g. cleaners, complainant's support people, counsellors, police etc.
- DNA from previous samples
- DNA from other people the complainant has been in contact with or from contact with surfaces that have been touched by other people e.g. in ED waiting rooms, ambulances, police cars etc.
- In the laboratory

Washing provides a first and preliminary level of cleaning. The act of washing hands or equipment will remove some DNA simply by the mechanical process involved. The act of washing itself, however, will not provide a sterile environment and it does not provide a DNA free space.

Using "single use" equipment is preferential to multiuse equipment. Single use items may be both clean and, in some cases, sterile but they may not necessarily be DNA free. Equipment that must be re-used, for example a camera or computer, should be decontaminated between each examination [16].

Bleach (0.5% sodium hypochlorite) is one of the most effective agents for denaturing DNA. Many units are hesitant to use this contamination reduction agent because of the attendant occupational health and safety issues associated with it. It can potentially damage sensitive equipment (such as colposcopes or cameras). There are some alternate detergent/decontaminants available e.g. Virkon™ [21], Virachlor™, Actichlor™, that offer combined sterilization along with some DNA decontamination.

Ethylene oxide (a gas) is commonly used for the sterilization of medical equipment. It is a bactericidal, fungicidal and sporicidal disinfectant that is damaging to DNA. It is also used, therefore, to sterilize swabs and forensic evidence kits to reduce the incidence of background DNA contamination.

In the UK, the Forensic Science Regulator [22] provides guidance as to DNA free consumables, guidance for Sexual Assault referral centers as well as to cleaning and environmental monitoring (pending at time of writing).

Some forensic laboratories may request the voluntary submission of examiner DNA to help eliminate accidental upload to offender databases if contamination does occur.

Securing a dedicated area for seeing complainants of sexual assault will further reduce chances of cross contamination. Thought should be given to maintaining a

WIT.0043.0086.0074

register to record anyone who accesses the area and those present during forensic examinations. Evidence kits should be sealed to prevent interference or reuse. Any unused items should be discarded, if open. Areas used for the storage and handling of consumables, samples and exhibits should be secure and access restricted to authorized personnel [16].

Powder free non-latex gloves should be easily accessible, worn by the examiner and replaced frequently during an examination. The powder in many types of gloves has been found to inhibit subsequent DNA analysis and therefore should be avoided [16]. Double gloving is recommended with regular changes of the top gloves when collecting different samples or examining different body areas. Some jurisdictions require that all used gloves should be retained and exhibited. Disposable plastic aprons and disposable sleeves are worn in some jurisdictions. In addition, the forensic practitioner should avoid talking, coughing, or sneezing over unsealed samples and should handle all samples as little as possible. Face masks further reduce the potential for this occurring. Choices for personal protection equipment (PPE) should be made keeping in mind patient acceptability versus potential risk.

It is suggested that any professional statements/expert statements/certificates prepared by forensic examiners should have a section that relates to the methods used to reduce potential contamination. Should these processes have been compromised in any way, for example a swab head was accidentally touched by the examiner or dropped on the floor, full disclosure should be made to the laboratory and to the court.

Any furniture, for example examination beds, chairs and lounges, in the sexual assault unit should be cleaned with bleach or a recommended cleaning agent that denatures DNA, before the examination. A disposable examination bed cover should be used and fresh paper roll may be used as a "sheet" if a DNA free examination bed cover is not available.

Decontamination (deep) cleaning of the whole forensic area should be carried out at least monthly to remove build-up of DNA contamination [16].

Consent

A person is assumed to have the capacity to provide consent unless there is reasonable evidence to support that it is lacking or may be impacted in a significant way.

It is a fundamental legal principle that:

> *Every human being of adult years and sound mind has a right to determine what will be done with his own body; and a surgeon who performs the operation without his patient's consent commits an assault, for which he is liable in damages* [23].

In someone who has capacity, consent must be freely given (not coerced) and it must be informed. They must have an understanding of the procedure proposed, consequences of providing and withholding consent (i.e. undergoing or not undergoing the procedure) and this must be presented to the complainant in a way they

WIT.0043.0086.0075

can understand. Consent may be implied, verbal or written. Many sexual assault services, however, require consent for a forensic examination, releasing the information/forensic samples to third parties (e.g. police or forensic laboratories) and consent for imaging to be in writing. Despite having signed a consent form, the complainant can withdraw their consent for any part of the procedure at any time. Any withdrawal of consent should be documented.

Taking samples from suspects may require specific legislative authority [24]; the inspector's authority as well as the consent of the individual [25].

Consent should be reassessed and sought as the examination progresses and for each stage of the clinical forensic assessment, including the use of equipment (e.g. colposcope, camera, speculum, anoscope etc.).

Medical patients can rightfully expect that their personal health information will only be given to another person if this is important for their health care or can otherwise be justified legally and ethically. Health service providers owe patients a common law duty of confidentiality in relation to information obtained as part of the treating relationship. The duty, however, is not absolute. Confidentiality can be overridden when:

- The patient waives their right of confidentiality (or consents to its release)
- There is a valid court order or subpoena
- There are statutory provisions for mandated reporting e.g. in cases of child abuse and certain notifiable diseases
- There is an overriding "public interest" to do so (e.g. you have been informed that your patient intends to leave your office and murder someone)
- In some other emergency situations

Information obtained during a forensic assessment may not remain confidential if the complainant has waived this right of confidentiality by consenting for release of information/samples to a third party. The patient should be made aware that both the history and any other physical evidence collected, such as photographs, may eventually be made available to the court under these circumstances.

There may be examples of privileged information which are exempt, in legislation, from being disclosed in court. The examiner should be aware of these.

Obligations regarding confidentiality of information extend to the transfer of information. Steps must be taken to safeguard it and prevent inappropriate access. This includes transfer via mail, email, or fax. This is particularly relevant when you need to send statements or images to another person/agency. Do not discuss patient information in public areas where it is likely to be overheard.

Forensic photography is another aspect of forensic assessments that should not be done unless the proper consents have been obtained. Information that should be provided includes why the images are being taken, how they will be used (for what purposes), where they will be stored and for how long, who will have access (including the judicial system), and whether they will form part of a medical record [26].

Special consideration should be given to intimate images. These may include images (still or video) of the genitalia, breast, buttocks or anus. Some jurisdictions

WIT.0043.0086.0076

have legislation which controls how these images are viewed within a judicial setting. In all cases, every endeavor should be made to ensure they are viewed only by those who have a legitimate reason for doing so.

If a person is unable to consent, a substitute consenter or person with lasting power of attorney is often necessary. Legislation and policy in the different jurisdictions should outline who can provide consent in place of the patient and under what circumstances this can apply. Each examiner should be aware of the local guidelines relating to consent especially as it relates to the following category of complainants/suspects:

- Aged under 18 years
- Intoxicated
- Unconscious/impaired-consciousness
- Acute and significant mental health illness
- An involuntary mental health patient
- Significant intellectual or cognitive delay

If a person lacks capacity, consent from another person or organization may be required. Lack of capacity may be temporary (e.g. unconscious, intoxicated) or longer term (e.g. mental illness, significant intellectual impairment, dementia, brain damage, or underage). Where the impairment of capacity is likely to be short term, consideration should be given to delaying an examination until the person regains full capacity [27]. In such cases, the collection of early evidence (if possible) might be considered.

Even if a substitute consenter is required, available and provides their consent for examination or a procedure, it should not be undertaken if the complainant/suspect refuses the examination.

Chaperones

"A chaperone is an independent and impartial third person who is present during a physical examination in order to witness the conduct of the examination." A chaperone is not the same as a support person. As family and friends are often not independent they should not be used as chaperones [28].

A chaperone can serve several purposes. These include reducing the vulnerability (or feeling thereof) of a complainant and offering a measure of protection for the complainant and the examiner. When an intimate examination is conducted in the absence of a chaperone this should be documented in the medical records, inclusive of the reasons for the absence of a chaperone. Consideration should be given to postponing intimate examinations, if there will be no impact on the complainant's health, when the offer of a chaperone is declined [28].

An auditory chaperone, where the chaperone is not in the same room but in an adjacent space where they can hear, may be a viable alternative to having someone in the room itself. When examining a person of a different sex, it is recommended that the chaperone actually be present in the room.

Medical and Sexual History

A past medical history, current medications and any known allergies should be documented, as would be the normal practice for any medical examination. This information should not be included within a medical statement unless there is an obvious reason to do so. For example, some medical conditions can increase bruising e.g. liver failure. Some medications can do the same e.g. aspirin, anticoagulants, antidepressants as well as certain herbal medications. This information could be relevant when attempting to interpret mechanisms of causation for injuries seen.

Likewise, obtaining a complainant's recent sexual history may be relevant. This information may be used to exclude the DNA of anyone with whom the complainant had recent consensual intercourse. It may be relevant to interpretation of ano-genital injury. Once disclosed, the privacy of this information cannot be guaranteed and so caution should be used when seeking to obtain sensitive information.

Forensic History

The following aspects of an allegation should be ascertained:

- Time and date of assault,
- Time and date of forensic examination,
- Number of suspects,
- A list of all assaults (i.e. the assaults that are sexual, indecent or physical),
- Whether a condom was worn and whether ejaculation occurred (and where),
- Alcohol/drugs used (or suspected of having been used) that might affect consent for intercourse,
- Injuries or symptoms thought to have been sustained/occurred as a result of the assault/s,
- Any suspected memory loss,
- Whether any physical resistance was provided and
- Any other actions that might result in deposition of DNA from the offender onto the complainant's body (e.g. licking, biting, kissing, sucking, spitting, bleeding).

The relationship between the complainant and suspect might have significance for the forensic laboratory, for example if they lived together or are in a current relationship.

In some cases, when it is not immediately obvious to the examiner that a sexual assault (intercourse without consent) has occurred from the history given, an examiner might respectfully ask the complainant how the offender might have known that there was no consent. This can give a complainant the chance to explain what might have been said, what non-verbal clues might have been given or to describe why they did not feel able to verbalize the lack of consent if, in fact, that was the case.

There are arguments for taking short histories that simply direct the examiner to the sites that need forensic sampling and enable the provision of proper medical care and prophylactic medications. These types of histories will rarely provide fodder for Defense counsel who wish to highlight inconsistencies in a complainant's history. They also fit nicely within those judicial systems that do not seek to elicit the best history, but simply one version of events. There are converse arguments for taking more in-depth histories. These can be richer in detail, might provide information that suggest further forensic evidence collection possibilities and are often more useful for those who are seeking to defend themselves against false allegations. Whichever style you use, there will be strengths and weaknesses associated with the approach. It is useful for examiners to be aware of these.

Some examiners choose to use disclaimers, in statements to police, elucidating the purpose of the sexual assault history collected by the forensic examiner. The history might have been taken to direct the examination. It might not be a full or detailed record of events. The history given by the complainant to the examiner will probably not appear in its entirety in any subsequent statement. Most examiners will remove extraneous information not thought relevant for the case at hand. Of course, without all the facts pertaining to the case, it can sometimes be difficult to assume what may or may not be relevant. For this reason it is important to keep all contemporaneous notes.

Clarify all colloquial statements. Do not assume that you understand what the complainant means. Use quotation marks when directly quoting the patient.

Most sexual assault units will record relevant post assault activity conducted by the complainant, after the assault and prior to examination. Activities such as changing clothes, bathing, swimming, douching, urinating, defaecating, vomiting, drinking, eating, cleaning teeth can all impact, to varying degrees, the retention of offender DNA on the body of the complainant.

All complainants should be asked about alcohol consumption in the preceding 24 h, drug consumption (illicit, over the counter and prescribed) in the preceding 3–5 days, and if there is any suspicion that a drug was given to them without their consent or knowledge. Complainants who have urine collected for toxicological assessment should understand that drugs taken weeks previously (especially if a heavy or regular user) may also show up in analysis. In many jurisdictions, police are not interested and will not prosecute complainants who have illicit drugs in their system found in this way. An examiner should be aware of local police practices and advise complainants accordingly, prior to offering the collection of either blood or urine samples.

Forensic examiners should not ask suspects about the alleged incident.

Substance Use

Drugs and alcohol are covered in Chap. 12.

A forensic examiner should make every effort to have the results of toxicology analysis returned to them. These results can then be reviewed in conjunction with

the clinical presentation of the complainant/suspect at time of forensic examination. This is one of the few methods for an examiner to improve future assessments and increase their clinical experience with drugs and alcohol.

Injury Documentation

Part of any forensic assessment, for sexual assault, is the documentation of injury. As complainants may not be aware of all injuries that have been sustained as part of an assault, it is important to include a full body review to ensure no injury is overlooked.

Injuries can be documented in three ways: in writing (verbally), by drawing them on a diagram and by imaging them (photograph or video). High quality documentation requires all three.

When measuring an injury the examiner should always keep in mind any risk of contamination. Give consideration to the type of scale used e.g. DNA free, sterile, single use or reusable and take steps to reduce any risk of DNA contamination, as required. A good rule of thumb is to collect any forensic biological evidence from the body of the complainant prior to documenting the injury or imaging it.

It is good practice to ask the patient, for every injury observed, whether they know how the injury occurred. If they are unaware how the injury occurred, you might ask whether they had noted the injury prior to the assault. It is not a good idea to record, for example, a linear scar at the bottom of the abdomen as a "Caesarean scar" unless you have actually seen the medical notes confirming this. When recording a patient's response you might record that the injury was "stated to have occurred as a result of having been punched to the eye" or "stated to have occurred as the result of a fall in childhood" etc. Alternatively, you might directly quote the patient, "That happened when I fell onto the coffee table when I was six." This enables you to confirm in Court, if asked, that it was the patient who told you that the injury occurred in this manner.

Occasionally, there may be factors that impinge on the quality of your examination. These should be noted. They may include:

- Seeing a patient in an unusual site e.g. in a bed in a ward rather than in a dedicated forensic examination suite
- Poor lighting
- Multiple interruptions
- The complainant's emotional status
- The actions of relatives/friends
- Use of a translator

Whether a forensic examiner documents non-medical findings, such a tattoos or piercings, is a matter of personal preference. Sometimes a simple disclaimer acknowledging that tattoos or piercings were seen but not itemized, might be sufficient.

WIT.0043.0086.0080

Whenever there is a clear account of the alleged incident, the anogenital examination can be tailored to the individual case (e.g. if an adult complainant only describes being made to perform fellatio, there is usually no indication to examine the external genitalia).

Be aware that a complainant may not always give an accurate account of the offence, for a variety of reasons. A New Zealand study in 1992 described 16 cases where penile vaginal penetration took place and the complainants denied ejaculation having occurred. Of the 16, seminal fluid was detected in 7, including 3 people who reported that a condom had been used [29].

Furthermore, children and some adults may not have the language skills or may feel unable to provide a detailed account of the sexual acts at the initial interview. In such cases, a comprehensive anogenital examination should be undertaken if the patient, or the person with legal authority to consent on behalf of the patient, gives his or her consent.

Physiology

Female Physiology

The female hypothalamic–pituitary–gonadal axis is developed at the time of birth. During the first 5 days of life, the level of gonadotrophin-releasing hormone (GnRH) rises, with a consequent transient rise in gonadal estrogen, attributable to the withdrawal of placental estrogen [30]. The estrogen causes prominence of the labia and clitoris and thickening and redundancy of the hymen. The neonatal vagina is purported to measure 4 cm in length [31]. Although after 3 months the GnRH levels gradually fall, the estrogenized appearance of the genitalia may persist for the first 2–4 years of life [32, 33]. During this period, the external genitalia gradually becomes less prominent; eventually, the hymen becomes thin and translucent and the tissues appear atrophic; occasionally, the hymen remains thick and fimbriated throughout childhood. The non-estrogenized vagina has relatively few rugae and lengthens by only 0.5–1.0 cm in early childhood [30, 31].

The hypothalamic–pituitary–gonadal axis is reactivated in late childhood, and the breasts and external genitalia alter accordingly. These changes are classically described in terms of their Tanner stage [34]. Under the influence of estrogens, the vagina lengthens to 7.0–8.5 cm in late childhood, eventually reaching its adult length of 10–12 cm [30, 31].

The estrogenized vagina is moist because of physiological secretions. This endogenous lubrication is enhanced with ovulation and with sexual stimulation [35]. The endogenous estrogen levels fall at the time of the menopause and as a consequence of this the vulva and vagina atrophy.

In times past, the physiology of the human sexual response was not particularly well understood. It had been assumed that injury during non-consensual intercourse was likely to occur more frequently than during consensual intercourse because of several factors, one of which was the lack of vaginal lubrication of the complainant (who was not wanting intercourse).

Mr. Scott Volkers was the head coach of the Australian women's swimming team when 3 swimmers, aged between 12 and 14 years, disclosed sexual abuse during their time under his care. It went to a committal hearing in 2002 and advice had been sought by the then-deputy director of the NSW Department of Public Prosecutions. The Deputy-Director gave advice that girls this age were unlikely to have fully developed breasts and hence allegations of groping (of the breasts) would be difficult to prove. One girl gave evidence of Mr. Volkers having rubbed her vagina through a pair of shorts and a swimming costume, resulting in an orgasm. The deputy director found this difficult to believe stating that it would be hard to accept that the girl could have been sufficiently relaxed for orgasm to occur. These were amongst the reasons for charges being dropped against him. Mr. Volkers was eventually re-arrested and charged with multiple child sex offences in 2017 [36].

Levin and van Berlo (2004) examined whether non-consensual sexual stimulation could lead to unwanted sexual arousal [37]. They opined that arousal was both a mental state and a physical state. They could occur independent and without the other, they could occur either before or after the other.

Physical changes that might occur in a woman who is aroused sexually include:

- Increased heart rate, blood pressure and respiration
- Increased blood flow to the breasts, nipple erection
- Clitoral engorgement of blood
- Increased vaginal lubrication
- Irregular contractions of pelvic muscles around the vagina
- Orgasm

In other words, arousal can occur even in the absence of consent.

Male Physiology

Semen is not produced until the male reaches puberty, which usually begins between 9 and 14 years of age [38]. Semen consists of seminal fluid (produced by the prostate) and spermatozoa. The normal volume of a single ejaculate is between 2 and 7 mL, and it will contain approximately 50–120 million spermatozoa per milliliter. There are numerous congenital and acquired causes for impaired spermatogenesis [39], resulting in either decreased numbers (oligospermia) or absence of (azoospermia) spermatozoa. Both conditions may be permanent or transitory depending on the underlying cause.

Forensic practitioners may be asked to comment on a person's ability to achieve a penile erection, particularly if the male is young or elderly. Masters and Johnson [40] note that during their research, "penile erection has been observed in males of all ages ranging from baby boys immediately after delivery to men in their late eighties"; they report that one 89-year-old study subject was able to achieve a full penile erection and ejaculate. Therefore, it is not possible to reach a conclusion regarding erectile efficiency based on age alone. When a defendant reports erectile dysfunction, the expert opinion of a urologist should be sought.

WIT.0043.0086.0082

Penile erection may result from visual stimulation (including fantasy) or tactile stimulation. The penis, scrotum, and rectum are all sensitive to tactile stimulation [40], which may explain why involuntary penile erections can be experienced by males subjected to nonconsensual anal intercourse.

Physical changes that might occur in a man include:

- Increased heart rate, blood pressure and respiration
- Nipple erection
- Penis engorgement of blood
- Elevation of testicles
- Rhythmic contractions of pelvic muscles
- Orgasm
- Ejection of seminal fluid [37]

Levin and Berlo's conclusion was that, despite a limited amount of published literature, case and anecdotal reports suggest that the induction of arousal and even orgasm does not permit the conclusion that the subjects consented to the stimulation. "A perpetrator's defense against the alleged assault built solely on the evidence that genital arousal or orgasm in the victim proves consent has no intrinsic validity and should be disregarded" [37].

Anatomy

Female Genital Anatomy

The external female genitalia (vulva) includes the mons pubis, the labia majora, the labia minora, the clitoris, and the vestibule (which incorporates the openings of the urethra and the vagina).

The labia majora are the outer vaginal lips with skin on the external surface and mucosa internally. The labia minora are the inner vaginal lips and these are covered with mucosa. The posterior fourchette is the junction of both lower aspects of the labia minora. The fossa navicularis is the mucosal depression between the posterior fourchette and the vaginal wall/hymen/hymenal remnants. The anatomical vagina is a muscular canal that begins at the hymen and extends to the cervix. The hymen is the tissue that partially or completely surrounds the opening of the vagina.

All sexual assault examiners should confidently be able to identify these landmarks as they are often the site of injury in both consensual and non-consensual intercourse.

The skin of the labia majora and the outer aspects of the labia minora is keratinized squamous epithelium, but only the outer aspects of the labia majora are hair bearing. The inner aspects of the labia minora and the vestibule (including the hymen) is nonkeratinized. This area is usually pink but, in the non-estrogenized child, it may appear red because the skin is thinner and consequently the blood vessels beneath its surface are more apparent [31].

WIT.0043.0086.0083

The vagina and cervix are covered by nonkeratinized squamous epithelium that normally appears pink in the estrogenized female. Occasionally, the columnar endocervical epithelium, which appears red, may be visible around the cervical os because of physiological or iatrogenic (e.g., exogenous estrogens) eversion of the endocervical canal; these are sometimes erroneously referred to as cervical erosions. The perineum is the area between the posterior fourchette and the perianal area (in a female). The perineal body is the central tendon located between the vestibule and the anus. It can occasionally be pigmented or white and is known as the median raphe [41].

Peri-urethral and peri-hymenal bands are small bands of tissue connecting two opposing surfaces, with the same colour and texture as the surrounding tissue [42].

Ano-rectal Anatomy

Most forensic examiners experience some difficulty with interpretation of anal and perianal injury. An understanding of the anatomy is a useful basis for considering issues that might be raised in relation to forensic injuries.

The rectum extends from the anal transitionary zone to the sigmoid colon and is 8–15 cm long. It is lined by typical intestinal mucosa and is red in the living. The rectum has only poorly defined dull sensation [43].

The anus is essentially divided into three sections. The uppermost section is called the proximal anus. This is a transition zone where the cells change from rectal cells to anal cells. It is usually located in the region of the anal columns and is purple [44].

The proximal anus is separated from the middle (or intermediate) zone by the pectinate (dentate) line. The middle zone is lined by cells called anoderm. The anal canal is lined by nonkeratinized squamous epithelium and is salmon pink in the living [45]. It is sensitive to touch, pain, heat, and cold to just above the dentate line [43].

The distal zone (closest to the exterior of the body) is lined by the same cells but has hair and sebaceous glands within it. The division between the middle and distal zone is called the anal verge and marks the point where anoderm becomes true skin. This is a histological demarcation, although occasionally it can be determined macroscopically.

The anal canal is narrow (in its non-distended state) measuring, on average, in adults (age range 18–90 years) 2.1 cm, with a range of 1.4–3.8 cm in males and 1.0–3.2 cm in females [46]. It is normally closed at one end by the internal and external anal sphincters.

The internal anal sphincter, smooth muscle under autonomic control, maintains approximately 80% of resting anal tone whereas the external sphincter, skeletal muscle, is responsible for the remainder. It has some voluntary control. This internal sphincter is a continuation of the circular muscle coat of the rectum and extends 8–12 mm below the dentate line.

This external sphincter encircles the internal sphincter but extends below it, ending subcutaneously. The lower edges of the external and internal sphincters can be distinguished on digital palpation. Although this sphincter is tonically contracted in

WIT.0043.0086.0084

the resting state, this contraction can be overcome with firm pressure [44]. If the patient is asked to contract the anus during a digital assessment, the external sphincter can be felt to ensure contraction and closing of the anus tightly. However, because the muscle fibers are predominantly the slow-twitch type, a maximum contraction of the external sphincter can only be maintained for approximately 1 min [47].

Because the anal canal can evert and invert as the anal sphincters and pelvic floor muscles relax and contract, the anal verge/margin is not a fixed, identifiable landmark.

The anus and lumen of the anal canal usually appear as an asymmetric Y-shaped slit when viewed via a proctoscope (anoscope). The folds of mucosa and subcutaneous tissue (containing small convoluted blood vessels surrounded by connective tissue) between the indentations of the Y are referred to as the anal cushions. Although this appearance is usually obscured externally by the folds of skin on the perianal area, it may become apparent if the patient is anesthetized or as the anus dilates.

Distension of the rectum is the stimulus for the involuntary relaxation of the internal sphincter, inducing the desire to defaecate. This allows some stool or flatus into the upper anal canal for sampling and identification [48]. If appropriate, volitional Valsalva straining begins, leading to an increased intra-abdominal pressure, pelvic descent and the overcoming of the recto-anal inhibition reflex.

Manometry testing shows that the anal resting pressure is never zero in healthy individuals. It can decrease with age, some diseases and as a result of certain trauma [48]. It is unlikely then that semen deposited in the vagina or near the anus makes its way passively into the anal canal unless there was either some damage to the anal canal (as evidenced by incontinence) or had been moved there via secondary transfer. Secondary transfer can occur in many ways including wiping the area after toileting or iatrogenic contamination i.e. an examiner has contacted the swab with the outer perianal area in the process of inserting the swab.

The diastasis ani should not be confused with scarring or injury. It is a congenital midline depression which may appear in some people, either anterior or posterior to the anus. It marks a congenital absence of the superficial division of the corrugator ani muscle. It may be V-shaped or wedge shaped.

Adolescent Anatomy

Curtis and San Lazaro (1999)[49] stated that it had been their experience, in examining more than 1000 sexually active adolescents, the most common appearance of the hymen was of indeterminate disruption to the free edge. Complete clefting or significant gaps in hymeneal rim was thought to be unusual [50]. Very little is really known, however, about normal female adolescent genitalia and much is anecdotal, or studied without the use of magnification or photographically documented [51].

In Emans et al. study of 100 sexually active adolescent girls 21% were found to have myrtiform caruncles, defined as rounded bumps of hymen separated on both sides by a complete cleft. Interestingly, there is very little literature about myrtiform caruncles. Emans et al. failed to find myrtiform caruncles in 200 sexually inactive post menarchal girls [52].

WIT.0043.0086.0085

Reliable information about the appearance of the adolescent/adult hymen remains scarce. This is not surprising, given the infrequency with which it is reviewed. A survey of 126 consultants (predominantly pediatricians and gynecologists) in 1997 found that 91 examined the genitalia of adolescents less than 5 times a year. Only 28 out of 75 assessed the hymen when doing a genital examination [50].

Pre-pubertal Anatomy

Hymen

Kinsey wrote: "I think any creator who claims that he had a purpose in creating the hymen certainly shows himself incapable of having done a good job" [53].

Interest in the human hymen has been predominantly cultural and spiritual. Medical interest, especially forensic, is relatively new. As late as 1987, a survey of 129 physicians, primarily pediatricians and family practitioners, asked to label anatomic parts on a picture of the genitalia of a young girl, showed that only 59% correctly identified the hymen [54].

Perhaps the simplest explanation for this anatomical chasm is that the genital examination is not a routine part of medical assessments in pre-pubertal girls. To date there is a dearth of longitudinal studies detailing normal hymeneal anatomy in any age group and none have been performed that follow girls aged over 9 years.

The hymen is a membrane which partially, or rarely completely, covers the external vaginal orifice. It is located at the junction of the vestibular floor and the vaginal canal.

The hymeneal membrane is of endodermal origin and consists of fibrous connective tissue attached to the vaginal wall (partly elastic and partly collagenous). It is comprised of squamous, stratified epithelium. The hymen is not richly supplied with nerve fibers. The vascular supply is rich in the lower border but scarce close to the edges. The amount of elastic fibers (and the ability of the hymen to stretch) is highly variable [55], dependent upon both age and hormonal status. Nowhere is this demonstrated more eloquently than in the case report of a 21 year old woman who was found to possess a micro-perforate hymen (an opening in the hymen, 2 mm in diameter) in the 27th gestational week of pregnancy. Her hymen was relatively elastic, and penile penetration was possible without damage or causing the patient discomfort. It was also easily stretched by the examiner's fingers, reverting back to its original shape afterwards [56]. How the histology alters with advancing years has yet to be documented.

Perhaps the greatest mystery of the hymen relates to its function. According to many sources, human females are the only species to possess a hymen but hymens have, in fact, been reported in African elephants [57], dogs and horses. The anatomy of these animals differs significantly from that of their human counterpart by way of retention of an uro-genital canal, where both the urethra and uterine body terminate. In domestic animals the hymen disappears during the fetal period or after birth, except in the rare case of persistence of an imperforate hymen [58].

In human fetuses, the lumen of the vagina also remains separated from the cavity of the uro-genital sinus by the hymen but, unlike the animal model, it ruptures during the perinatal period and remains as a membrane around the entrance to the vagina, and is penetrated by the act of intercourse [59].

WIT.0043.0086.0086

Hypotheses for the persistence of the hymeneal membrane have included:

1. Evolutionary predominance in societies where virginity of wives was demanded
2. A protection mechanism dating back to an aquatic past with the hymen evolving to protect the vagina from marine "pollution"
3. A structure designed to increase the retention of sperm and hence raise fertilization success and
4. An embryological remnant designed to keep the surrounding area protected from fecal and other material

The hymen has proved a fascinating piece of human anatomy if only by virtue of the fact that:

"This delicate membrane has no known physiological function, but its psychological and cultural significance as a sign of virginity has been enormous" [59].

Tanner Staging of the Hymen

In 1992 Tanner staging of the hymen was attempted for the first time. Patients in this study ranged from Tanner Stage 1 to 5 based on hymen development [60].

Tanner staging of the hymen seems to be rarely attempted in current practice, however.

Tanner Stage One	Hymen has very thin rim. Fossa navicularis characterized by a network of fine blood vessels extending to the edge of the hymeneal rim.
Tanner Stage Two	Thin hymeneal rims with less dramatic vascular patterns. Reduction in superficial vascular prominence noted at the hymeneal rim, fossa navicularis, and vestibule.
Tanner Stage Three	Hymen thicker with beginnings of redundant folds; although slight vascularity seen in some patients, previous widespread superficial vascular network generally absent; close inspection revealed first evidence of clear vaginal secretions. This stage thought to reflect beginnings of true estrogen effect.
Tanner Stage Four	Hymens dominated by thick projections and redundant folds. Neither hymen nor vestibule had visible blood vessels.
Tanner Stage Five	Morphologic qualities of Tanner stage 4 patients' hymens expressed to a greater degree by Tanner stage five patients.

Pediatric Hymeneal Morphology

There have been 3 longitudinal studies of the developing hymen, ranging from birth to 9 years of age. A summary of the morphology at each age group is summarized below. In the final study the author has added 2 new categories (folded, micro perforate) and removed 2 (fimbriated, sleeve like/ventral). It is not known whether the new terminology was chosen to replace the old or whether these were, in fact, new categories of their own [61–63]. Annular is the predominant morphology at birth being steadily replaced, with age, by crescentic.

WIT.0043.0086.0087

Age	Annular	Crescentic	Fimbriated	Sleeve like/Ventral	Septated	Folded	Micro-perforate/Small orifice	Reference
Birth	70%	0%	21%	7%	2%			[62]
1 year	54%	28%	7%	11%	0%			[62]
1 year	52%	29%	10%	10%	0%			[61]
3 years	41%	50%	2%	7%	0%			[61]
3 years	39%	61%			1%	1%	2%	[63]
5 years	23%	77%			1%	0%	2%	[63]
7 years	18%	82%			1%	0%	3%	[63]
9 years	10%	90%			0%	0%	3%	[63]

Importantly, no study has ever documented a newborn without a hymen [61, 62, 64] and hymeneal tissue appears redundant in all neonates.

Clearly, morphology of the hymen is not constant. Berenson, for the first time, demonstrated changes seen over time [62]. In this study, 4 different hymenal types were observed in newborns: Annular (n = 40/57; 70.2%); Fimbriated (n = 12/57; 21.1%); Ventral (n = 4/57; 7%) and Septate (n = 1/57; 1.8%). None of the children in this study were noted to have had a crescentic hymen at birth.

At age 1 year it was noted that of those who had been observed to have an annular hymen at birth, only 62.5% had the same morphology 12 months later. 32.5% had changed to a crescentic hymen and 5% had a ventral hymen.

Of those who had been born with a fimbriated hymen, only 33% remain fimbriated at 1 year, 41.7% became annular and 25% became crescentic. All ventral hymens noted at birth remained ventral hymens at 1 year. The single septate hymen had converted to an annular hymen (i.e. lost the septum).

External Ridge

Definition: A midline, longitudinal ridge of tissue on the external surface of the hymen usually anterior or posterior, extending to the edge of the hymen.

The frequency of external ridges decreases with age. They become infrequent after 4 years of age and are unlikely to form de novo [65]. Berenson's results with regard to the presence and location of external ridges, from 2 studies, are summarized below:

	0 years	1 year	3 years
[62]			
6 o'clock position	45	5	
12 o'clock position	7	2	
[61]			
6 o'clock position	106		8
12 o'clock position	12		1

Intravaginal Longitudinal Ridges (ILR)

Definition: Narrow, mucosa-covered ridges of tissue on the vaginal wall that may be attached to the inner surface of the hymen.

ILRs that extended to the hymeneal rim have been observed with almost the same frequency at birth and at 1 year of age [62].

In a review of the genital anatomy of preschool children (1 month – 6 years of age) ILRs appeared in 25%, one child having up to five appearing evenly around the rim [65].

Tags

Definition: An elongated projection of tissue arising from any location on the hymeneal rim.

Tags can appear or disappear. They are not an uncommon finding at birth, the majority of which will disappear by 3 years of age. New tags, in this time period, appear to result from the extension of an intravaginal or external ridge beyond the

WIT.0043.0086.0089

rim or from fimbriated hymens that were noted to have had similar protrusions at birth. They can also form as the result of the disruption of a hymeneal septum [61].

Bumps

Definition: A solid, localized, rounded and thickened area of tissue on the edge of the hymen [66]. They are generally thought to be a normal variant.

Bumps were noted to originate from longitudinal intravaginal ridges, from external ridges and can occur independently of ridges [65].

Notches

Definition: A cleft or notch is an indentation in the rim of the hymen.

A deep notch (cleft) is defined as a V shaped defect extending through more than 50% of the width of the hymen [51] and a superficial notch (cleft) is one that extends through less than 50%.

A study of the hymens of 468 newborn girls [67] found that notches were a frequent anatomical variation and were found in 35% of the neonates with annular hymens [65].

Notches were observed significantly less often at 3 years than near birth. One reason for this is the evolution of most annular hymens with superior notches at birth into crescentic hymens. It has been noted that the majority of lateral notches at birth resolved by 3 years of age [61].

Superficial notches have been noted in the anterior and posterior rim of the hymen in the non-abused pre-pubertal population. Deep notches in the posterior half of a non-fimbriated hymen have only been reported in pre-pubertal girls with a history of vaginal penetration [68]. Joyce Adams et al., however, have relegated the deep notch to the category of findings where there is no expert consensus regarding degree of significance stating that a notch or cleft, at or below the 3 or 9 o'clock location, which extends nearly to the base is a "very rare finding" that should be interpreted "with caution" unless an acute injury was documented at the same location [69].

Further confounding this problem is the fact that notches may be dependent upon examination position. A study of 93 pre-pubertal girls (ages 10 months to 10 years) found more clefts when a traction method was used (6.6%) than when the separation (4.1%) or knee chest methods (2.2%) were used [42].

The interest in the posterior edge of the hymen is heightened by the finding that injury from sexual trauma predominantly occurs in this region, between five and seven o'clock [51, 64]. The mechanism for rupture is thought to occur as a result of the symphysis pubis preventing any anterior movement, forcing the penis posteriorly, causing trauma at the midline position to the posterior fourchette. Conversely, it has been suggested that in digital penetration, in children, the force is more likely to be directed to the sides rather than the midline [64].

In summary, notches may be congenital, arise de novo or disappear. They are seen at all ages. Partial tears of the hymeneal rim may resolve with the formation of a notch but not all notches are the result of injury, superficial notches having been documented in normal studies around the entire rim, although less common in the lower half.

Transections

Definition: An acute tear or laceration through the entire width of the hymeneal membrane extending from its edge to the vaginal wall attachment. Transections to the hymen suggest a prior penetrative event. Straddle accidents (without penetration) have not been known to cause acute hymenal injury.

Findings Caused by Trauma

Any examiner who will be conducting pediatric sexual assault examinations should be familiar with all the normal variants of anatomy in both sexes. Despite the number of variations possible there are only a few hard and fast signs of trauma. These include:

- Acute lacerations to any part of the genital anatomy
- Bruising, petechiae or abrasions to the hymen
- Perianal, Posterior Fourchette, Fossa Navicularis scars ("A very rare finding that is difficult to diagnose unless an acute injury was previously documented at the same location")
- Complete cleft below the 3 to 9 o'clock location that extends to the base with no discernible hymenal tissue at the location
- Signs of Female Genital Mutilation (FGM) cutting e.g. loss of part or all of the clitoris, clitoral hood, labia minora or majora [69]

Findings Diagnostic of Sexual Contact

- Pregnancy
- Semen identified from forensic swabs (taken directly from the child's body) [69]

Male Genital Anatomy

The male penis can be subdivided into the glans (head of the penis), coronal sulcus (neck) and shaft. There may or may not be a foreskin (prepuce). On the under surface of the penis there is a frenulum. There is generally two testicles contained within a scrotal sac.

During examination of the male genitalia, the forensic practitioner is expected to document any features that could assist with subsequent identification of the suspect, to note any acquired or congenital conditions that could make an alleged sexual act impossible, to describe in detail any injuries that could relate to a sexual act, and to retrieve any forensic evidence. Although the specifics of the medicolegal assessment of the male genitalia are case dependent, the principles of the examination, whether of the complainant or of the defendant, are the same.

Forensic practitioners may be asked to provide evidence on the size of a defendant's penis in the flaccid state to support a hypothesis that a certain sexual act could not have occurred because of inter-genital disproportion between the complainant and the defendant. However, such measurements are unhelpful because it is not possible to predict the maximum erectile size from the flaccid length, and

WIT.0043.0086.0091

there is "no statistical support for the 'phallic fallacy' that the larger penis increases in size with full erection to a significantly greater degree than does the smaller penis" [40]. Furthermore, even when the erect penis is measured during auto-manipulation or active coitus, the measurements are recognized to be unreliable [40].

Forensic Examination

Examination of Adolescents

The Foley catheter technique, referenced by Carol Jenny MD in 1992, is used primarily to view post-menarchal hymens and requires the insertion of an indwelling catheter midway into the vaginal vault with inflation of the balloon with 40–50 mL of air (this can be modified dependent upon patient comfort and examiner requirement). The balloon is guided outwards to the hymen edge, allowing the hymen to drape over the balloon so that the hymenal edges can be readily visualized [70].

Jones et al. used the Foley catheter technique to examine the hymen of 20 adolescents aged 13–16 years. Use of the Foley catheter balloon technique was virtually painless and allowed identification of more hymenal abnormalities than labial traction alone. The results are summarized in the table below [71].

	Labial Traction Only	Foley Catheter Method
Laceration	2	7
Abrasion	0	3
Ecchymosis	1	4

Alternate methods for examination of the hymenal edge include the use of a swab. The swab is run around the internal edge of the hymen so that all edges can be adequately visualized. Occasionally, normal saline can be used in an attempt to "float" the hymen, separating the edges to better view the hymeneal rim.

Examination of Pre-pubertal Girls

Currently there are two positions that are used for the examination of pre-pubertal girls.

The supine separation technique conducted in the frog leg position (patient on their back, knees bent and flopped outwards) and the knee-chest approach (patient on knees, facing away from examiner, with chest to table and bottom in the air). The latter moves the perineal body and posterior fourchette dorsally, exposing the introitus, and the anterior two thirds of the vaginal canal can often be visualized. It can aid in opening the hymeneal orifice [72]. This latter method is primarily used to support or counter abnormal findings found in the supine frog leg position.

WIT.0043.0086.0092

Hymeneal Measurements

Until as late as 1995 it was suggested that a hymeneal opening diameter could be used to determine (or support) a history of sexual abuse. It had been suggested that hymenal openings more than 4mm, in the pre-pubertal child, were associated with sexual abuse [73, 74].

Both specificity and sensitivity of this finding has since been questioned.

Berenson found that approximately one third of abused pre-pubertal children had a horizontal measurement of greater than 6.5 mm in the knee-chest position, whereas two thirds of abused children did not (a specificity of 86% but a sensitivity of only 29%). When the child was examined in the supine position, horizontal hymeneal diameters of greater than 6.5 mm were noted to have a specificity of 73% but a sensitivity of only 32%. They opined that the specificity and sensitivity were not sufficient to warrant its use in either confirming abuse in those who provided a history of such or detecting undisclosed abuse [75].

Berenson also demonstrated that less than 1.0 mm of hymeneal tissue at 6 o'clock had a specificity and a positive predictive value of sexual abuse of 100%. However, the sensitivity of this test was extremely low (1–2%) as almost all of the abused children had greater than or equal to 1 mm of tissue visualized at six o'clock in both the supine and knee-chest positions [75]. It has now been widely accepted that posterior hymenal width cannot be measured accurately and that there is insufficient evidence to determine the significance of a "narrow" posterior hymeneal width in pre-pubertal girls [76].

Lateral measurements of less than 1 mm were observed in the supine position at both 3 o'clock and 9 o'clock and at three o'clock in the knee chest position among abused and non-abused children [75].

It has been suggested that instead of worrying about measurements, more attention should be paid to finding a clear rim of posterior hymeneal tissue (supine position), and a free hymeneal edge from the nine o'clock to three o'clock positions, as this is likely to represent a normal finding [77].

Injury

Female Genitalia Injury

Whether there is injury after vaginal penetration can depend on the presence or absence of a number of variables including, but not limited to, the amount of force used, level of "enthusiasm" of the participants, period over which the penetration continues, the size of the penis (or object), use of or presence of lubrication, associated drug or alcohol use, angle of penetration, experience of the participants, use of objects/toys, extremes of age (e.g. the very young and the old) etc.

Lacerations and ruptures (full-thickness lacerations) of the vagina have also been described in the medical literature after consensual sexual acts [78–80]. They are most commonly located in the right fornix or extending across the posterior fornix; this configuration is attributed to the normal vaginal asymmetry whereby the cervix

WIT.0043.0086.0093

lies toward the left fornix, causing the penis to enter the right fornix during vaginal penetration [80]. Factors that predispose to such injuries include previous vaginal surgery, pregnancy, and the puerperium, post-menopause, intoxication of the female, first act of sexual intercourse, and congenital genital abnormalities (e.g. septate vagina) [78]. Although most vaginal lacerations are associated with penile penetration, they have also been documented after brachiovaginal intercourse (fisting) [80], vaginal instrumentation during the process of a medical assessment [81], and the use of plastic tampon inserters [82]. Vaginal lacerations have been documented without any direct intravaginal trauma after a fall or a sudden increase of intra-abdominal pressure (e.g., lifting a heavy object) [80].

Healing of lacerations of the external genitalia is predominantly by first intention, with no residual scarring being detected at follow-up assessments [83, 84]. Nonetheless, scarring may occur occasionally in these areas, but it is important not to mistake a linear vestibularis, a congenital white line identified in the fossa navicularis (present in 25% of neonates), for a scar [85].

When a vaginal laceration may have been caused by an object that has the potential to fragment or splinter, a careful search should be made for foreign bodies in the wound [78] (this may necessitate a general anesthetic), and X-rays should be taken of the pelvis (anteroposterior and lateral), including the vagina, to help localize foreign particles [86]. Any retrieved foreign bodies should be appropriately packaged and submitted for forensic analysis.

Consensual V Non-consensual Injuries

The issue of determining the likelihood, or otherwise, of consent having been given based on the injury found has been studied extensively.

In 2003 Jones et al. concluded, after reviewing ano-genital injuries in adolescents after consensual intercourse, “clearly, the presence of ano-genital trauma suggests that penetration has occurred and implies nothing about consent” [87].

In 2006 Anderson et al. opined that “Currently many experts and laypersons alike believe that if women do not consent to intercourse, they are more likely to have injuries to their genital area. Based on the findings of this study and several other studies, there is evidence to suggest that injuries can be identified on examination after both non-consensual and consensual intercourse” [88].

Lincoln et al., in a 2013 journal paper, compared two groups of women. One group had sexual intercourse with consent and one group were complainants of sexual assault. It was noted that, of the 8 women in the study who had vaginal penetration with fingers only (and all were sexual assault complainants), 6 had observable injuries. Their opinion was that “Penetration exclusively with finger/s was more likely than any other scenario to result in an injury [Odds Ratio 11.25, $p<0.005$]” [89].

Dr. M. O’Keefe in 2008 perhaps best summarizes the current thought on the matter:

“On the basis of current research, it has not been found possible to identify clinical signs which might reliably distinguish non-consensual from consensual sexual intercourse” [90].

WIT.0043.0086.0094

It should also be recognized that not only can consensual intercourse result in injury but it can also result in significant injury.

Ahmed et al. reviewed patients admitted to a surgical and gynecological unit over a 7-year period. There was 1 labial, 9 posterior fourchette and 16 vaginal wall lacerations following consensual intercourse that required suturing [91].

Frioux et al. presented a case series of four female adolescent patients over a period of 6 months, each of which had developed significant vaginal bleeding after intercourse, 3 of which presented to the Emergency Department with vital signs consistent with compensated shock. Three of them described consensual intercourse prior to the injury (presenting with lacerations in the fornix, at the top of the vaginal vault) and one described the injury occurring during a sexual assault (presenting with vaginal wall laceration) [92].

Jones and O'Connor reviewed presentations to the Royal Brisbane (Australia) between 2007 and 2011. Vulval non-obstetric trauma was found in 19 of 519 cases. Injuries were due to, amongst other things, consensual (n = 7) and non-consensual (n = 3) intercourse. The seven post-consensual injuries comprised of a 7 cm labia minora tear, a 4 cm labia minora tear (requiring six sutures), a 2 cm labial minora tear, a 1.5 cm posterior fourchette tear, a 4 cm labia minora tear (requiring seven sutures), an unspecified size labia minora tear (requiring four sutures) and a 4 cm mid-labial sulcus tear and bruise [93].

Fisting

Cappelletti et al. [94] did a systematic review of fisting (brachiovaginal or brachioproctic insertion) in the forensic literature in 2016. They identified it as a "potentially dangerous sexual practice". When it involves insertion into the anus the fist may continue past the upper rectum, reaching the sigmoid colon or, less commonly, the descending colon.

The fourteen studies they selected had case numbers ranging from 1 to 11 people. They were able to determine consent status in 27 cases (consensual in 18/non-consensual in 9). Vaginal fisting is represented far less commonly than anal fisting. There was only 1 vaginal fisting case out of the 18 consensual and 3 of the 9 non-consensual cases studied. Two of the non-consensual cases involved fisting of both the vagina and the anus. Of the 18 consensual cases, 2 ended in death.

Of all the cases studied, eight were fatal.

Internal injuries of the rectum generally originated above the dentate line and extended to between 6 and 18 cm beyond the anal verge. When vaginal injuries occurred they were generally lacerations of the posterior part of both the cervix and vagina [94].

WIT.0043.0086.0095

First Sexual Intercourse

Nearly 30 years ago, 100 women were interviewed at random and asked about their first coital experience. Results are summarized in the table below [95]:

Incidence of Bleeding		Incidence of Pain	
No Bleeding	44	No Pain	32
Slight Bleeding	35	Slight Pain	22
Moderate Bleeding	9	Moderate Pain	15
Heavy Bleeding	12	Severe Pain	31

While this study has apparent limitations such as requiring memory of events in the past; inability to exclude other reasons for bleeding other than coitus; and the inclusion of seventeen women who reported some other kind of vaginal penetration prior to first coitus (e.g. examination by physician, tampons, douching, diaphragm, masturbation, foreplay with digital penetration) it eloquently debunks the myth that bleeding on the "wedding night" is confirmation of virginity [95].

Adolescent Injury

While no child has ever had a documented congenital transection [61], Emans et al. documented complete transections in 3% of 200 non sexually active post-menarchal girls, between the four and eight o'clock positions. This was attributed to undisclosed sexual abuse or prior sexual experience [96]. Adams et al. have since reproduced these findings, noting the same frequency of girls in the "no previous sexual intercourse" group with either a deep notch or transection. These girls had described painful insertion of a tampon [51].

Goodyear-Smith et al., after re-analysis of Emans' data on tampon users versus pad users and the subsequent development of complete clefts, came to the conclusion, contrary to Emans, that there is a "definite possibility" that tampon use can be associated with an increased percentage of complete hymenal clefts [97].

Equally as interesting was the fact that 26% of the girls in the Emans study, who admitted past sexual intercourse, had no evidence of a complete cleft between the 3 and 9 o'clock position [96]. Likewise, another study of pregnant teenagers (definitive evidence of sexual contact) revealed genital changes in only 2 of 36 that were diagnostic of penetrating trauma [98]. In this study (at that time), findings that were interpreted as clear evidence of penetrating trauma included hymeneal transections / lacerations, laceration of the posterior fourchette, scar of the posterior fourchette associated with loss of hymeneal tissue between 5 and 7 o'clock as well as an absent hymen in the posterior half of the ring.

WIT.0043.0086.0096

Pre-pubertal Injury

Heger et al. evaluated 2384 children for possible sexual abuse. A total of 96.3% of all children referred for evaluation had a normal medical examination. Only 4% of all children presented with medical findings diagnostic of abuse. These findings were primarily acute injuries, sexually transmitted diseases, positive forensics, or genital scarring (such as complete hymeneal transections) and included one child with an anal scar [99].

"Both the nature of the abuse and the process of disclosure impacts on the medical examination. Most children are not abused in a way to leave permanent physical findings. Children are usually abused by an individual known to them who wants continued access to them" [99].

The only conclusions that can be reached is that penetrative intercourse (through the hymen) is a rare occurrence in the pre-pubertal age group or that penetrative intercourse can occur, in some cases, without enduring symptoms or signs. It is possible that penetration more commonly occurs superficial to the hymen e.g. simulated intercourse. As yet unanswered is the role of grooming in preparing the pediatric vagina for penetration/sexual intercourse.

Sequelae of Transections

There are few papers that document the healing of ano-genital trauma in children. Heppenstall-Heger demonstrated that, of the 17 transections of the hymen that her team followed, 15 persisted (2 being repaired successfully at surgery), including the 6 followed to puberty [100].

Although there is anecdotal evidence to the contrary, there is no published study that disproves the notion that transections do not heal spontaneously, without residua, unless they are surgically repaired [100].

Male Genital Injury

After consensual sexual intercourse, lacerations of the foreskin and frenulum, meatitis, traumatic urethritis, penile edema, traumatic lymphangitis, paraphimosis, and penile "fractures" have all been described [101–104]. Accidental trauma is more common when there is a pre-existing abnormality, such as phimosis [101], or when the penis is erect. "Fracture" of the penis occurs when the erect penis is forcefully bent (or struck) rupturing the tunica albuginea of one or both corpora cavernosa. Patients sometimes hearing a cracking noise, loss of erection and pain [105].

Skin injury may be incurred if the genitals are deliberately bitten during fellatio [101]. Although the precise incidence of male genital trauma after sexual activity is unknown, anecdotal accounts suggest that it is rare to find any genital injuries when examining suspects of serious sexual assaults [106].

WIT.0043.0086.0097

In children the genitalia may be accidentally or deliberately injured, and the latter may be associated with sexual abuse [107]. Bruises, abrasions, lacerations, swelling, and burns of the genitalia of prepubescent males have all been described [107, 108].

When obtaining the relevant forensic samples, the forensic practitioner should inspect the male genitalia with particular reference to the following points:

1. Congenital abnormalities, such as micro phallus and cryptorchidism. Penile length in the flaccid state is said to vary from 8.5 to 10.5 cm (measured from the anterior border of the symphysis along the dorsal surface to the distal tip of the penis), with a documented range of 6–14 cm [40].
2. Acquired abnormalities, such as circumcision, Peyronie's disease, balanitis xerotica obliterans, vasectomy scars, phimosis, tattoos, and piercing.
3. Signs of infection such as warts, discharge, erythema, and vesicles.

Foreign bodies may be worn around the base of the penis, sometimes also encircling the scrotum, in an attempt to increase and sustain penile tumescence. Such devices may result in local and distal genital trauma (penile tourniquet syndrome) [109]. In several case reports, children have had human hairs wrapped around the penis; these hairs may be virtually invisible because of edema or epithelialization [110]. Kerry and Chapman [111] have described the deliberate application of such a ligature by parents who were attempting to prevent enuresis.

Ano-rectal Injury

A lack of perianal or rectal injury does not mean that penetration did not take place or that the complainant consented to the sexual acts as it is generally accepted that with gradual dilatation and lubrication, consensual penile anal intercourse can be performed without any resultant injury [112, 113].

Tears (anal fissures and lacerations), abrasions, redness, and swelling of the "anus" have been described following consensual and nonconsensual acts [113–115]. However, the lack of detail regarding the nature of the consensual sexual acts makes it difficult to determine whether the findings were coincidental, i.e., due to nonsexual causes or directly related to a sexual act. For example, anal fissures may result from numerous other means that are unrelated to penetrative trauma, including passage of hard stools, diarrhea, inflammatory bowel disease, sexually transmitted diseases, and skin diseases [116, 117]. Bruises appear to be infrequent findings following consensual sexual acts. However, the lack of data on perianal injuries make it impossible to determine whether this is a significant observation.

Injury to the Mouth

If injury follows fellatio it is most commonly erythema of the palate, petechiae or purpura. Areas of petechial hemorrhage and confluent bruising have been described

WIT.0043.0086.0098

on the soft palate and at the junction between the hard and soft palates after consensual fellatio [118–120]. These areas of bruising vary from discrete single or bilateral lesions of 1.0–1.5 cm in diameter, located on or either side of the midline [119], to larger bands of bruising that cross the midline [118, 120]. The bruises are painless and resolve in 7–10 days [118, 119], although they may reappear with repeated fellatio [119]. The uvula is usually spared and the hard palate is infrequently involved [121].

A forensic practitioner may be asked to explain to the court why these bruises occur. Although the precise mechanism is unknown, the following hypotheses have been proffered:

- *Repeated contraction of the palatal muscles*: As the penis touches the palatal mucosa, the gag reflex is activated, with resultant contraction of the soft palate and other constrictor muscles of the pharynx. It is suggested that the combination of retching and repeated palatal movements causes rupture of the blood vessels in the highly vascular palatal mucosa [118].
- *Sucking*: Sucking on the penis produces a negative intraoral pressure, which is postulated to cause rupture of the blood vessels in the palatal mucosa. This theory is supported by the anecdotal accounts of oral surgeons who found petechial hemorrhages on the palates of children who "made a habit of forceful sucking into a drinking glass" [119].
- *Blunt trauma*: Case reports describe palatal bruises subsequent to sexual assaults wherein a digit or digits have been forced into the mouth [122]. There is no specific evidence to support the hypothesis that direct blunt trauma from a penis can cause palatal bruising, however.

Differential diagnosis of palatal petechiae and purpura include:

- Blood dyscrasias e.g. disseminated intravascular coagulation, hemophilia, idiopathic thrombocytopenic purpura, leukemia
- Paroxysm of violent coughing, sneezing or vomiting
- Suction (negative intra-oral pressure)
- Infections e.g. infectious mononucleosis, measles, streptococcal infections
- Medications e.g. anticoagulants
- Systemic illnesses e.g. Hereditary hemorrhagic telangiectasias, scurvy
- Trauma e.g. fellatio, intubation, nasogastric tube, chemical and thermal injury
- Tumors e.g. nasopharyngeal carcinoma [121]

Whenever a complaint of nonconsensual fellatio is made, the head and face must be carefully examined because there may be other injuries around the oral cavity that support the allegation, such as bruises on the face and neck or lacerations of the frenula [123].

Basic Principles of the Forensic Analysis

Purpose and Value of Forensic Collections

The purpose of forensic sample collections, in cases of alleged or suspected sexual assault, is two-fold. The first is to collect sufficient evidence that can provide the identity of the alleged suspect; the second is to support a claim that sexual penetration occurred. Penetrative events can include the penetration of the anus or vagina by a penis, finger/s, tongue or other object or the penetration of the mouth by a penis. The forensic laboratory can also identify potential links with other offences.

Neither of these provide any evidence as to the fundamental issue of whether or not valid consent was present.

The value of forensic sampling is difficult to measure. If DNA is not recovered from the body samples it does not necessarily preclude an assault from having occurred. As time progresses, the likelihood of positive profiling from these samples is reduced. If the identity of the suspect is known and a claim is made by the accused that intercourse was consensual, it is likely that other evidence might be required to support a prosecution. It is therefore important for complainants to understand that body sampling for evidence collection is only one piece in the evidence puzzle. Other evidence that might be collected, dependent upon the individual circumstances of a case, include CCTV (close circuit television), discarded tissues/condoms/sanitary items, clothing worn immediately after the event by both the complainant and suspect, witness statements, complainant statements, forensic evidence from the body of the suspect, text messages, social media postings, mobile phone records, computer records etc. This evidence collection requires police involvement. The earlier a police investigation begins, the less chance important evidence will be lost, degraded or otherwise compromised.

In a review of data [124] collected from 257 cases of alleged sexual assault between 2005 and 2011, with victims aged 12 years or older, only 16.3% of cases had the biological samples needed and had DNA from a potential suspect sufficient to enable checking for a match. 31.6% of the samples without a "DNA match to suspect" did not have evidence kits taken, 29.9% had kits taken but no biological evidence was derived from them, 8% had biological evidence but no DNA analysis (possibly because the quality of the evidence was not adequate for DNA testing), 3.4% had DNA analysis that did not yield a DNA profile, and 10.3% had a DNA profile with no suspect for comparison. A suspect sample was not obtained in 30.3% of cases with a DNA profile [124].

Prosecutors opined that the value of biological evidence was for the establishment that a sexual act occurred, identifying suspects in stranger cases or when the complainant's ability to identify the suspect was compromised, and for confirming the correct person was being prosecuted even if there was additional evidence linking the defendant to the complainant [124].

WIT.0043.0086.0100

The primary defense was usually that intercourse was consensual, especially when the defendant and the complainant knew each other. Less commonly used was a challenge of the integrity of the process [124].

In 2017 the Federal Bureau of Investigation (FBI) expanded the number of unique DNA markers searched in CODIS (The Combined DNA Index System—US national database) from 13 to 20, dramatically increasing the power of forensic DNA testing [125]. It also increased the chance of contamination via secondary and tertiary transfer evidence. This has presumably led to another common defense i.e. providing alternate explanations for how the DNA of the defendant was found on the complainant or crime scene.

Cale et al. [126] suggested that individuals can have their DNA deposited on an item, in sufficient quantities, to be the only contributor or the major contributor without ever coming into contact with that object i.e. through secondary transfer. They defined secondary transfer as the transfer of DNA from one object (or person) to another via an intermediate object (or person). Tertiary transfer has been defined as the transfer of DNA from skin to object to vector to object. For example, person A touched object 1 and person B (the vector) touched object 1 and then touched object 2. It is tertiary transfer if DNA from person A is then found on object 2 [127]. In most cases, the number of indirect steps is unknown and so some prefer the term "indirect transfer" in preference to "secondary", "tertiary" etc. [20].

Indirect transfer should be a concern because it could falsely link someone to a crime, it could link extraneous DNA onto a forensic sample and it could lead to the false conclusion that DNA recovered from an object was a result of direct contact [126].

Preliminary work carried out by the Body Fluid Forum of the UK and Ireland [128] indicates that female DNA may sometimes transfer to the man's underpants following non-intimate social contact. In one experiment, vigorous contact took place between both parties' hands and between the male's hands and the female's face; the male went to the toilet and simulated urination. Subsequent analysis showed that in a small number of cases female DNA was transferred to the male's underpants [129].

Lowe et al. [130] conducted experiments which showed that caution should be exercised in interpretation of results where trace DNA is involved. The experiment involved two people, one a good DNA shedder and another a poor shedder holding hands for 1 min after which the poor shedder immediately held a plastic tube. In one case, only the good shedder on the tube was detected even though it was the poor shedder who touched the tube. No evidence of a mixed profile was observed. Therefore, the vector was not always the one with the most dominant profile on an object.

Kanokwongnuwat et al. [131] observed that males shed more DNA than females. They explained that the larger area of fingerprint left by a male might explain some of the difference. It was also observed that a thumb print, on average, generated more alleles than a print from the little finger. It now seems likely that people are rarely either a consistently good or consistently bad shedder. DNA shedding, on any particular day is likely to be due to a complexity of factors [132].

Illustrative Case *The murderer, dubbed the Phantom of Heilbronn, had baffled German investigators for 2 years. Police had DNA which linked a female assailant to 40 crimes including 6 homicides stretching into Germany, Austria and France. She was linked to the murder of a policewoman in Heilbronn, Germany. After police had accumulated over 16,000 h of overtime investigating the cases they discovered that the cotton swabs they had been using for evidence collection had been contaminated by the same worker at a factory in Austria and that the "Phantom of Heilbronn never existed". The swabs being used had been sterilised and double packaged. This highlights the point that sterilisation alone does not necessarily denature DNA and that caution should be taken when basing an investigation solely on DNA evidence* [133].

Guidelines for Evidence Collection from Complainants and Suspects

Body evidence collection guidelines should be, wherever possible, evidence based. This evidence can come from published research. As DNA analysis methods have changed considerably over the last 4 decades this should be kept in mind when analyzing any recommendations made in older research publications. DNA extraction methods and the equipment used for this can differ between laboratories and so the best evidence would originate from a collation of results from the local forensic laboratory. Unfortunately, most examiners are not given access to this information. The reasons for this are often multifactorial.

In a recent commentary by Tully [134], Forensic Science Regulator for England and Wales, it was observed that the provision of forensic science was currently a "complex landscape", fragmented across public and private sectors. Some police forces exercised considerable control over the number of samples that could be analyzed in sexual assault cases, making the interpretation of results potentially more difficult. The cuts to forensic science services that have occurred presented an "almost existential threat to the profession".

Siloing of responsibilities i.e. police are responsible for the history of the assault, forensic examiners are responsible for body evidence collection and forensic scientists are responsible for analyzing only a predetermined number of selected specimens is an approach that may result in a court presentation less likely to be challenged. It is likely, however, that it will also not represent the full facts in the case.

Persistence Versus Success

When looking at different evidence collection methods it is worth considering two factors. Persistence relates to the longest time period recorded in which a substance lasted or could be identified. This may relate to complete spermatozoa, enzymes such as amylase, alkaline phosphatase or prostate specific antigen, autosomal profiles from DNA,

WIT.0043.0086.0102

mitochondrial profiles from DNA (inherited through the maternal line), Y-STR profiles from DNA (inherited through the paternal line) etc. Success relates to the number of positive results from a given number of collection attempts. Both can be impacted by various things e.g. age of the complainant, time since intercourse and various post coital activities such as washing, eating and drinking. Up to 70% of swabs can be negative for semen. Results may be negative when evidence is collected from complainants who did not engage in a penetrative sexual assault (as may occur if there was no memory of an actual assault), where ejaculation did not occur (which would decrease the likelihood of DNA collection) or where there had been a significant lapse of time between assault and assessment. A negative swab therefore may not be a reflection of inefficient sampling.

Forensic examiners should be aware of any local guidelines for forensic sample collections. For example, in the U.K., the Faculty of Forensic and Legal Medicine [135] publishes and regularly updates Recommendations for the Collection of Forensic Specimens from Complainants and Suspects. The method chosen to collect various samples is likely to differ between sites and will often depend upon local laboratory capabilities to analyze those samples. The evidence underpinning current time periods for collection have been included in the section below. Cut off time periods in practice, however, should be determined regionally and an examiner should have a basic understanding of how those time limits were derived and the research data that underpins them. Guidelines should be reviewed regularly and should rely upon the experience of local forensic laboratories (statistically and not anecdotally) as well as published research.

If you are a new forensic examiner or an examiner with only an intermittent or small caseload there is value in taking a "cookie cutter" approach to forensic collections e.g. if there is an allegation of penile vaginal penetration, guidelines might suggest that you collect vulval, low vaginal and high vaginal samples. If you are an examiner who works at an established unit with a generous caseload experience, you might consider a more "bespoke" approach to forensic collections e.g. you may choose to add additional swab sites or exclude swab sites dependent upon the particular circumstances of the case. Always be guided by local recommendations and if deviating from suggested practice, record the reasons for doing so.

Slides

The majority of samples collected for sexual assault cases will be in the form of swabs. In some jurisdictions, examiners are required to make a slide from those swabs in cases where the sample has been taken for the purpose of finding DNA from semen. In other jurisdictions, the forensic laboratory will make their own slides from the submitted swabs. A slide is used as a screening test. Generally, if spermatozoa are seen on the slide, the corresponding swab will be sent for DNA analysis as sperm are recognized as a good potential source of DNA. Slides are not required if a swab has been taken with the view of detecting DNA from other sources such as epithelial cells, blood or saliva.

Some laboratories will assess slides and record estimates of intact spermatozoa. This and sperm density are sometimes used to provide a time since intercourse (TSI) determination. Advice as to the value of this should be sought from the local forensic laboratory.

Some laboratories will test all swabs submitted, some will screen slides first and choose the best swabs to test, and some laboratories will only be financed to test one swab. An understanding of how your local laboratory works and makes these decisions can be useful.

The swabs and containers used to collect forensic evidence differ from those used in clinical tests. They should be DNA free. Most swabs used for this purpose are sterilized with Ethylene Oxide.

Forensic swabs should be placed in plastic sheaths that do not contain transport media or in specially designed boxes that allow the swabs to air-dry. Given the risk of contamination, swabs should not be allowed to air dry prior to packaging.

Blood and Urine samples

Blood samples for drug and alcohol analysis should be placed in containers with a preservative that prevents decomposition and fermentation (e.g. sodium fluoride), and an anticoagulant (e.g. potassium oxalate). All the containers should be shatter-proof. Consideration should be given to placing the urine container in a plastic bag in case of leakage.

Lubricants

Water-based lubricants from a single-use sachet (Pedicat® or KY® Lubricating Jelly) may be used to moisten the proctoscope/speculum to facilitate its insertion into a body orifice. The empty sachet should be retained and packaged in a "tamper-evident bag". Sterile water may be used as a substitute to lubricants.

Packaging and Continuity

Any retrieved items must be packaged quickly and efficiently to prevent accidental loss of material and minimize decomposition of the sample. The use of bags with integral tamper-evident seals is recommended to prove that the sample has not been contaminated with exogenous substances since it was sealed.

It is the responsibility of the person who obtains the sample to ensure it is appropriately labelled and sealed. A crisis worker, police officer, or scene of crime officer may assist with the labelling process, but the forensic practitioner must check the labels before signing.

The information on each exhibit and tamper-evident bag should comply with local recommendations. It would generally include:

- Name of person (or reference number) from whom the sample was taken (examinee)
- The healthcare professional's name
- Description of exhibit or site sampled e.g. high vaginal swab
- Date on which the sample was taken
- Blood and urine only – time at which the sample was taken (24 h clock)

Where two swabs have been taken from the same site, it is *imperative* that there is a clear indication on the label regarding the order in which the swabs were obtained. This is most easily done by describing the first of the two samples as sample A and the second as sample B.

Tamper-Evident Exhibit Bags

The use of bags with integral labels will prevent accidental detachment of this vital information.

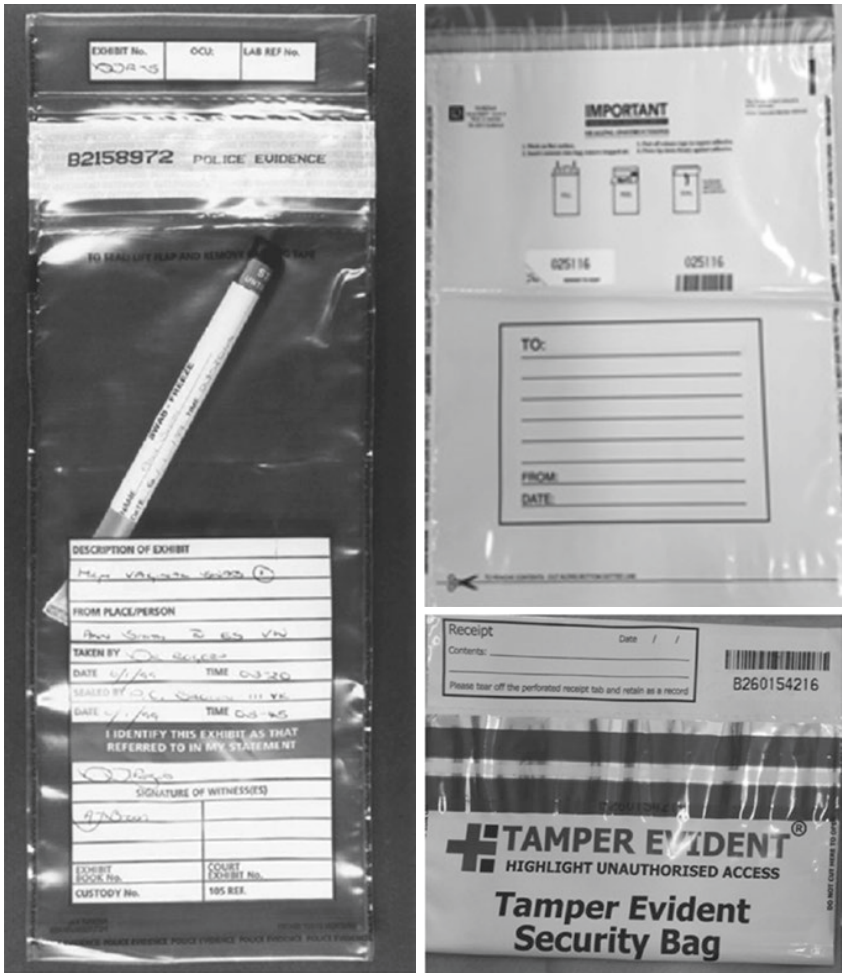


Figure above: Examples of tamper-evident bags.

WIT.0043.0086.0105

Clothing

The clothing worn by the complainant during or after the incident may be an invaluable source of information in terms of the nature of the assault (e.g. damage to clothing and body fluid stains) and the identification of the suspect. Even stains on clothing that has been washed have been found to contain sufficient spermatozoa to produce a DNA profile [136, 137]. Ruan et al. showed that 74% of UV treated cotton swatch samples produced DNA profiles after laundry with household garments. Of the mixed profile samples, the majority were from two to three persons with one being a four person mix. They observed that whilst we assume that DNA transfer occurs within the washing machine, there are in fact other opportunities for transfer such as the mixing of clothing in the laundry basket and the varied method of drying clothes [138].

Kulstein et al. observed that a prolonged storage period between semen deposition and laundering resulted in increased DNA quantities and full profiles [139].

Clothing should be placed in paper bags, or into breathable plastic bags, that prevent the accumulation of condensation which could accelerate decomposition of body fluids. Submitted clothing should be sealed and labelled as described previously. When the clothing is overtly wet or possibly contaminated with accelerants, the forensic science laboratory should be asked for advice on packaging and storage.

The forensic scientist must be provided with salient information regarding the incident and subsequent actions of the complainant to determine the type of forensic analysis required. A useful means of transmitting this information is via a pro forma. One example is the Forensic Medical Examination proforma as produced by Faculty of Forensic and Legal Medicine [140].

Analysis

Identification microscopy (e.g. spermatozoa) and immunodiagnostic techniques are used in the identification of body fluids. Microscopy is also used for hairs and fibers, although less commonly since the advent of DNA analysis.

Discovery of the specificity of an individual's DNA profile has considerably enhanced the information that can be provided by a forensic science service (FSS) for connecting a person to an offence and linking offences to each other. Although a detailed consideration of current DNA techniques is beyond the scope of this chapter, a general understanding of the terms and techniques will benefit the forensic practitioner. A useful information source has been provided by the Royal Society of Edinburgh: Forensic DNA Analysis – A Primer for Courts [141].

Except for identical twins, each person's nuclear DNA is unique. An individual's gender and DNA profile may be obtained from any of his or her body fluids or tissues (e.g. blood, semen, and bones). The current technical process used for DNA profiling is termed short tandem repeat (STR) analysis. STR loci are a class of polymorphic markers consisting of simple repeated sequences of 1–6 base pairs in length. STRs are present throughout the human genome (DNA), occurring on

WIT.0043.0086.0106

average every 6–10 kb along the DNA and may exhibit a high degree of length variation resulting from differences in the number of repeat units displayed by individuals. Their abundance and hypervariability make them ideal markers for the identification of an individual. When a DNA STR analysis is performed, the specific areas of interest on the molecule are initially targeted. Multiple copies of these areas are then produced using polymerase chain reaction (PCR) techniques, which amplify minute amounts of DNA. The DNA pieces are then sorted according to their size, producing the individual's DNA STR profile [142].

DNA STR analysis, including a DNA sex test [143], is part of the routine forensic assessment of biological samples in Europe. The formation of the European DNA Profiling Group has led to the standardization of DNA analysis procedures used in the European community and associated western European countries.

Standard DNA profiling systems used to be focused on the analysis of ten STR loci known as AMPlfSTR® SGMPlus™. This system has been superseded by multiplexes that utilize an increased number of STRs, containing the original 10 SGMPlus STRS plus six more and a gender marker in the case of DNA 17 multiplexes or an extra eleven STRs, two Y chromosome markers, and a gender marker in the case of AmpFISTRGlobalfiler. Increasing the number of loci provides a greater discriminating power but more importantly increases the sensitivity of DNA analysis. These systems contain all of the Interpol and European Networks Forensic Science International (ENFSI) recommended European loci, which provides points of comparison for DNA intelligence purposes outside of the UK [144–151].

When DNA profiling was first applied to forensic science, large amounts of nucleated material were required. However, the use of PCR technology has enabled much smaller amounts of material to be analyzed. Due to the increased sensitivity of the newer multiplexes, DNA profiles can be obtained from ever decreasing amounts of DNA or from poor quality DNA samples e.g. samples of DNA that have become degraded or are mixed with chemical inhibitors.

Y-Short tandem repeats (YSTRs) analysis is a well-established technique routinely used in casework that targets the STR regions located on the Y-chromosome, therefore male DNA only. Over 200 STR markers have been identified on the Y chromosome. Commercial kits are currently available for at least 23 of these [152]. Y-STR analysis has proven successful in detecting male DNA where there has been digital or penile penetration with no ejaculation and in cases of sexual assault where the male has been vasectomized [153]. In these cases, the absence of sperm mean only a small amount of male DNA may be present on intimate swabs and the female's DNA would swamp this. By specifically targeting the Y chromosome STR markers, it is possible to locate and amplify a small amount of male DNA present.

Y-STRs are inherited down the paternal line. As with routine STR testing, Y-STRs vary considerably between unrelated individuals however close paternal line male relatives are likely to share the same Y-STR profile.

Y-STR profiles cannot be loaded to the UK National DNA Database and Y-STR profiling has a lower discriminating power than autosomal STR profiling. Y-STR profiling can, however, provide results in sexual assault cases where autosomal STR profiling has been unsuccessful.

WIT.0043.0086.0107

Fluorescence in situ hybridization (FISH) is a technology that uses a fluorescein-tagged Y-specific DNA probe to label male epithelial cells. Once identified, the cells may be separated from the rest of the sample and submitted for DNA profiling. Without separation, the profile may be dominated by female DNA from the examinee, making it difficult to interpret.

Mitochondrial DNA analysis has been used in forensic casework. This technique examines the DNA contained within mitochondria in the cell body and obviates the need for nuclear material [154]. As there are numerous mitochondria in a single cell and each contains multiple copies of the mitochondrial genome, it is possible to extract far more mitochondrial DNA than nuclear DNA. This is useful when cells have become degraded through decomposition or burning. The technique is also suited to discrete samples, such as hairs without roots and for fecal material. Mitochondrial DNA is only passed from mother to child (unlike nuclear DNA, there is no contribution from the father); therefore, all the descendants along the maternal line will have the same mitochondrial DNA. It also has a much lower discrimination power than nuclear DNA profiling. In sexual offences, therefore, the selection of material to be analyzed by this technique is limited and its use needs careful consideration.

The forensic science laboratory must be notified when it is alleged that people who are closely related have been involved in a sexual offence, because their profiles will have greater similarity than profiles from individuals picked at random, and further differentiating tests may need to be performed.

Increasingly in the past few years, messenger RNA (mRNA) profiling has been proposed as a new method of body fluid identification and a lot of research is being carried out in this area. Techniques to use mRNA profiling to distinguish between menstrual blood and traumatic bleeding and buccal epithelial cells from other epithelial cells are being investigated [155, 156].

In addition to the autosomal systems, some laboratories are using DNA quantifiers, e.g. Quantifiler ™ Trio DNA Quantification Kit. This enables detection of amounts of autosomal versus male DNA as well as the quality of the DNA (i.e. presence and extent of degradation). Knowing the quantity and quality of the DNA assists the laboratory in determining the most suitable way of progressing testing.

Skin

The comments in this section refer to non-genital skin.

Areas of skin that have been licked, kissed, sucked, bitten, ejaculated, bled or spat on by either the suspect or the complainant can be sampled. DNA from saliva may also be found with self-lubrication of the penis or fingers. Cellular material, amenable to DNA profiling techniques, has also been identified where there has been skin-to-skin contact (e.g. manual strangulation or gripping the arm) [157, 158]. In a simulated strangulation it was possible to detect victim only DNA in 12 of 29 samples but full DNA profiles of both victim and offender in 7, up to 6 h after touching occurred [158].

WIT.0043.0086.0108

Trace DNA

Trace DNA can mean a variety of things:

- It is sometimes referred to as any substance collected for testing to aid an investigation [20]
- It can sometimes be used to refer to samples where the quantity of DNA available for testing is below a certain threshold. This has variously been described as "low template" and "low copy number DNA" [20]
- It can refer to any sample where there is uncertainty that it may be associated with the crime itself [159]
- It can refer, on occasion, to DNA that cannot be attributed to an identifiable body fluid [132]

The small number and nature of these transferred DNA-bearing cells, from skin, often make identification of the cellular source of origin (buccal, epithelial, etc.) either impractical or impossible [160].

Method of Sampling

The double-swab technique, first described by Sweet et al., is the recommended method to recover dried stains or possible cellular material from skin in many jurisdictions [161]. When using this technique, sterile water is used to moisten the cotton tip of the first swab. The tip of the swab is then rolled over the area of skin using circular motions while rotating the swab on its long axis to ensure maximum contact between the skin and the swab. Then, a second dry swab is rolled over the same area to absorb the water left on the skin by the initial swab and collect any remaining cells. Minimal pressure should be applied to prevent exfoliation of the patient's own epithelial cells. It may be important to understand that in the Sweet et al. experiment, only 5 subjects were used. A known quantity of saliva was placed on the skin and testing performed 10 minutes later. The difference between the single swab results vs the double swab results was determined by the percentage of DNA collected in relation to the theoretical amount of DNA deposited on the skin. The single swabs netted 35.3 ± 4.8% vs the double swabs which collected an estimated 44.6 ± 6.4% of the available DNA. This would indicate that, in some cases, the single swab may have had a better result!

Graham and Rutty tested two lines of varying amounts of DNA on a non-absorbent surface, swabbing 15 h later. One line was swabbed with a wet swab and the second was swabbed using both moist and dry swabs. They generated 16 samples and concluded that there was no additional benefit for adding a dry swab [158].

Pang and Cheung collected 20 wet and dry swabs from touched surfaces. Sixteen out of 20 wet swabs were positive for DNA as opposed to 12 out of 20 for the dry swabs. Of the 12 dry swabs, the corresponding wet swab was negative in 2 cases. 5 of the dry swabs returned greater quantities of DNA than the wet swab. Pang and Cheung opined that the second dry swab might collect more DNA if the first wet swab rehydrated the epithelial cells, making them easier to dislodge and collect with the second swab [162].

WIT.0043.0086.0109

Hanson and Ballantyne, while comparing DNA profiles from cervico-vaginal swabs, reviewed results from 2 couples where 2 swabs were taken from the same area, expecting that the first swab was more likely to have greater amounts of DNA. Couple 1 demonstrated that more alleles were indeed found on the first swab but the second swab had one allele identified, which had not been present on the first. In couple 4, it was unclear which swab had been done first but alleles were found on each swab not present in the other [163]. It is possible, therefore, that any success noted with the double swab method might be related more to the fact that 2 swabs were collected, rather than the fact that a moist/dry formula is used.

The performance of various types of swabs was tested by NSW Police Forensic Services Branch scientists. They demonstrated that single cotton swabs were equivalent or better than double swabbing in gaining a reportable DNA profile from material on all relevant surface types [164]. It has also been postulated that one possible reason for this is that if the first swab is saturated with water, it might inhibit the amount of material it can subsequently pick up when swabbing the skin. It is therefore recommended that, if using a swab moistened with water, that only one drop of water (or as little as is practical) be used.

Alternative Light Source

Some authors comment that ultraviolet (UV) light causes fluorescence of semen and saliva and advocate its use in determining the areas of skin to be swabbed [165, 166]. This advice must be interpreted cautiously, because a study by Santucci and colleagues found that although many creams and ointments fluoresced when exposed to a Wood's lamp (wavelength 360 nm), none of the 28 semen samples examined did [167].

In addition, other authors have commented that detergents, lubricants (particularly those that contain petroleum jelly), and milk fluoresce [168].

When semen stains are exposed to a high-intensity light source of variable wavelengths (e.g. the Polilight®) and viewed using goggles to block the strong excitation light, semen may be detectable even when the background surface is fluorescent [169]. Furthermore, the location of the stain may be recorded using photography.

Nelson and Santucci have described training forensic physicians to use an alternative light source (the Bluemaxx BM500) to identify semen (100% sensitivity) and to differentiate it from other products [170].

Nolan et al. used an alternative light source (Polilight-Flare®II Plus) to detect seminal fluid on a range of fabrics which were laundered up to 6 times. All unwashed sample materials fluoresced strongly. Fabrics with less absorbency (such as satin, nylon and lace) did not fluoresce following one wash. Following the second wash cycle no fluorescence was visible in any of the fabrics. Conversely, microscopy was positive for cotton and terry toweling after the sixth wash [171].

A survey of several forensic science laboratories in the UK and Ireland [128] found that most felt that using alternative light sources to detect stains on clothing and inanimate materials was of limited value because of the number of false positives and false negatives.

WIT.0043.0086.0110

Detection of Saliva

Saliva technically refers to the fluid that originates directly from the salivary glands. Oral fluid, however, relates to secretions from salivary glands, nasal secretions, bacteria and bacterial products, desquamated epithelial cells and food debris amongst other things [172]. DNA that is present in oral fluid is largely derived from the cellular material that is discarded from the mouth.

The only means of identifying the presence of saliva on the skin is by detecting the enzyme amylase. The traditional presumptive test is the Phadebas® amylase test. The Rapid Stain Identification of Human Saliva (RSID™—saliva) can detect human salivary α amylase at lower concentrations [173]. However, amylase can be present in body fluids other than saliva, so in some instances this test is not suitable.

In humans, amylase is expressed on two genetic loci:

- AMY1—salivary amylase—which is abundantly present in saliva with lower quantities found in perspiration and breast milk.
- AMY2—pancreatic amylase—which is found in urine, semen, feces and vaginal fluids [174].

Care needs to be taken with interpretation. The presence of amylase may be a result of secondary, rather than primary transfer.

Cunnilingus and Anolingus

Cunnilingus is the sexual activity in which the female genitalia is licked, sucked, or rubbed by the lips and/or tongue. Anolingus ("rimming") is the sexual activity in which the anus is licked, sucked, or rubbed by the lips and/or tongue.

In some jurisdictions, penetration of the vagina or anus with the tongue, during nonconsensual cunnilingus or anolingus, is considered to be legally analogous to nonconsensual penile penetration of the vagina and anus. For example, in England the offence of "assault by penetration" is defined as nonconsensual penetration of the anus or genitalia by an object or a body part (See definitions at start of Chapter) [175].

Repeated thrusting of the tongue over the edges of the mandibular incisors during cunnilingus or anilingus may cause ulceration of the lingual frenulum, which completely heals within 7 days [176]. Such lesions should be specifically sought during the examination of the suspect's oral cavity when such an act has been described by the complainant or when the precise details of the assault are unknown.

Persistence and Success

In 1992, a study conducted at the Metropolitan Police Laboratory, London, using vaginal swabs from volunteer female donors who had not participated in cunnilingus, revealed high levels of endogenous amylase [177]. Furthermore, amylase has been

WIT.0043.0086.0111

specifically isolated from cervical mucus [178]. DNA analysis is undertaken on the vulval and/or vaginal swabs. If the suspect's DNA profile is obtained, it can be used to support an allegation of cunnilingus although, obviously, the precise interpretation will depend on whether the complainant was subjected to other sexual acts that could account for the presence of the DNA (e.g. ejaculation, digital penetration etc.).

There is no published persistence data regarding the maximum time it is possible to obtain the assailant's DNA pattern from the female genitalia after cunnilingus/anolingus. It is worth noting that areas of clothing which were in contact with the genitals after such acts can be worth testing as saliva / DNA may have transferred to them.

Several studies have looked at persistence of DNA on skin, thought to have originated from oral fluids.

Graham and Rutty took five volunteers and had their partners deposit saliva on their neck. The following day, DNA profiles from the partners were obtained from the neck swabs of three of the five volunteers [158].

Sweet and colleagues have shown that it is possible to obtain a DNA profile from saliva stains (corresponding to a bite mark) on cadaver skin when the saliva was deposited up to 48 h earlier [179]. In a separate paper they showed the resilience of DNA which had been recovered from the right breast (bite mark) of the deceased body of a female who had been found 5.5 h after being in a river with a slow- moving current [180].

Kenna et al. in 2011 took samples of saliva from three male donors and plated it onto the legs of their three female volunteers. The women were instructed not to wash the affected area. Full male DNA profiles were obtained in all but one combination (n = 8 out of 9) at 96 h [181].

Hair

Hair is most commonly sampled to detect body fluids or retrieve foreign hairs or particles. It has been known for many decades that numerous ingested prescribed and illicit drugs (e.g. barbiturates, amphetamines, opiates, cocaine, benzodiazepines, γ-hydroxy butyrate, and cannabis) are deposited in the hair [182]. Although toxicology of hair was originally used to detect drugs that had been repeatedly ingested, recent advances in analytical techniques have meant that toxicology may be useful after single-dose ingestion as would occur in a substance-facilitated (sexual) assault [183, 184]. This is particularly pertinent because complainants of possible drug-facilitated (sexual) assaults frequently do not report the incident expeditiously because of amnesia and/or doubt about what might have happened, and drugs may be accessible to analysis for longer periods in hair compared to blood or urine [185].

Method of Hair Sampling

Cutting

Hairs should be sampled by cutting if they appear to be contaminated by material that has the potential to have forensic significance (e.g. semen). If the patient does not consent to having the contaminated hairs cut or if it is not practical to cut them

WIT.0043.0086.0112

because of the extent of foreign material contamination, then the relevant areas can be swabbed.

For drug analysis, hair can be collected up to 6 months (and sometimes longer) following a relevant incident. Sampling should not occur less than 4 weeks after the incident, as it takes at least this long for hair to grow sufficiently from the scalp to enable collection. Examinees should be advised not to cut, dye, bleach or perm their hair in the intervening time. Hair toxicology testing is only done by certain laboratories. Prior to collection it is recommended that the appropriate laboratory is contacted. Who (or what organization) will be paying for the process should be determined (as it is often not cheap). Discussion about available kits and appropriate method for collection and delivery also need to be determined prior to sampling. Hair samples should not be refrigerated or frozen but stored dry at normal room temperature [135].

Foreign Hair

Shed hairs, if in the catagen or anagen growth phase are suitable for routine nuclear DNA testing. Provided a root is present, close to a 100% success rate should be achieved. Most shed hairs (95%) are, however, usually in the telogen phase and contain little nuclear DNA. Mitochondrial DNA can be examined instead. It is a more time consuming and expensive process than nuclear DNA analysis, requires specialist interpretation and has lower random match probabilities [186]. While there may still be a place for macroscopic/microscopic examination of hair, most forensic laboratories have abandoned the practice and available expertise is often limited.

Any foreign particles or foreign hairs identified on the head or pubic hair should be collected with forceps (preferably DNA free) and submitted for analysis [187, 188].

Pubic hairs may be transferred between individuals during sexual intercourse. Exline et al. [189] studied volunteer heterosexual couples who combed their pubic hairs immediately after sexual intercourse in the “missionary” position. Even under such optimal collection conditions, pubic hair transfers were only observed 17.3% of the time using macroscopic and microscopic comparisons. Pubic hair transfer to males (23.6%) was more common than transfer to females (10.9%).

Some studies on sexual offence case material have shown lower rates of pubic hair transfer between complainant and suspect. Mann [190] reported that only 4% of female complainants and no male complainants were identified as having pubic hairs consistent with the assailant hairs isolated from combings of the pubic hair, and Stone [191] identified foreign pubic hairs among the pubic hair combings of 2% of the complainants studied. A survey of sexual offence case material submitted to laboratories throughout the USA, however, found pubic hairs that associated the complainant and the suspect in 15% of cases [192].

Nails

Fingernails should be examined as part of the examination of the hands of a complainant/suspect and any staining/breaks should be noted and possibly photographed.

WIT.0043.0086.0113

Sampling

Sampling of nails often occurs if there is a history of a complainant having scratched their offender or if there is an allegation of digital vaginal penetration. In the latter case it will be the suspect's nails that are sampled. Generally, there are two accepted methods used for the collection of fingernail/subungual evidence and these are swabbing and/or cutting of the nail. Most examiners who have attempted cutting someone else's fingernails can probably attest to the difficulty of the process. The current FFLM guidelines for the collection of evidence advise clipping only if visible material can be seen or if a broken nail needs to be matched with a recovered nail fragment [135]. Conversely, the Australian guidelines advocate either process or both if considered appropriate. They recommend a single swab to be used for each nail (ten in total).

When the nail is being swabbed as a result of a history of digital penetration, or if blood can be seen, additional swabs of the nail bed and nail surface are recommended. Nail clippings from each hand can be combined into two separate collection jars i.e. right hand and left hand [193].

Another consideration, when collecting nail evidence, is the type of nail of the complainant/suspect. The nails might be short or acrylic (fake) nails and cutting them might prove impossible. In these cases, the nails should be swabbed. When cutting longer nails it is important to ensure the implement (scissors or clippers) being used has been adequately prepared to reduce the risk of DNA contamination.

Available research looking at preferential sampling methods is limited.

What has been demonstrated:

- Sticks or scissors (sharp objects) should not be used to collect subungual evidence as they have the potential to remove too much of the donor DNA [194].
- The harder a complainant scratches the suspect, the more DNA that can be found on subsequent testing [194].
- The more nails that are clipped and sent for analysis, the better the success rate for finding offender DNA [195].
- Subungual evidence can be collected even if the examinee has washed their hands several times. It may persist up to 2 days following an allegation of digital vaginal penetration [196].
- Fingernail evidence can give rise to the question of background foreign DNA i.e. DNA that might be present and might not bare any relevance to the crime being investigated. In the Cook study the fingernails were swabbed from 100 volunteers and foreign DNA was detected in 13% with only 6% giving reportable mixed DNA profiles [197]. The presence of a mixed DNA profile in a fingernail sample may lead to reasonable doubt in court as to whether the DNA transfer occurred prior to, or during, an assault. Males, in this study, were more likely to provide a mixed profile from fingernail sampling, than women.
- Malsom et al. took 12 couples that co-habitated and swabbed all their fingernails on both hands on three separate occasions. The results demonstrated that as the couples spent increasing amounts of time together, the incidence of mixed DNA profiles increased. 61% of samples gave full or partial donor profiles. 37% exhibited DNA profiles additional to that of the donor [198].

WIT.0043.0086.0114

- People who bite their nails were significantly less likely to give a mixed DNA profile, even when the fingernails were swabbed [198].
- A 2015 study suggested that only 4 mm^2 of fingernail sample is required for testing [199].

It is important to remember that foreign DNA found under the fingernails can have an innocent explanation, and care must be exercised when considering this type of testing if the victim and suspect have legitimate access to each other.

Oral Cavity

Buccal Swabs

In sexual assault cases an examiner is often required to collect a baseline sample of the complainant's DNA. This is done with a buccal swab (patient reference swab). Instructions are included in most buccal swab kits. A properly collected buccal swab will provide adequate material for DNA profiling. It is best to do this after any other oral collections have been done. Police will usually collect buccal swabs from suspects.

Oral (Mouth) Swabs

The oral cavity may be sampled when fellatio was performed during the sexual assault or in circumstances in which the details of the incident are unknown. Fellatio (also referred to as irrumation) is a sexual activity in which the penis is placed in the mouth; sexual stimulation is achieved by sucking on the penis while it moves in and out of the oral cavity. Ejaculation may or may not occur. It is common for the semen to be spat or vomited onto clothing where it will remain until washed. Any potentially contaminated clothing or scene samples, therefore, should be submitted for forensic examination.

There is no current worldwide consensus as to what is the best oral sampling method. The following is one suggested method:

Swab the gingival recesses (between lip and teeth), over teeth, back of throat, under the tongue including dentures, dental fixtures and any oral piercings [135].

Success and Persistence

Given the lack of research as to the best site or method of collection it is not surprising that the success rates for sperm detection are appallingly low. 554 analyzed oral swabs, collected in NSW from 2010 to 2015, showed sperm detection in 4.2% (n = 21). All sperm positive samples were collected within 18 h except for one case in which the complainant admitted to post assault consensual oral intercourse with a partner. Of those collected 24 h or more after the assault, all were negative for spermatozoa with the only positive result coming from a deceased person [200].

Lack of success is due to a number of factors which include the hostile environment of the mouth with oral bacteria, enzymes, salivation, eating and

WIT.0043.0086.0115

drinking all potentially washing away evidence quickly. Although rinsing of the mouth, drinking, and brushing of teeth do not necessarily remove all traces of spermatozoa [201], such activities should be discouraged until the samples have been obtained.

Willott and Crosse [202] reported that spermatozoa are found more often in the saliva sample compared with mouth swabs, but also highlight several cases in which spermatozoa were recovered from swabs taken from specific areas of the oral cavity (e.g. under the tongue, the roof of the mouth, and the lips).

Willott and Allard found spermatozoa on only 9 oral swabs out of 74 tested (12%) [203].

Tucker et al. reviewed 369 cases of sexual assault where there was reported to have been oral involvement. Only 4 cases (1%) resulted in a sample positive for sperm and all of these were examined within 4 h of the assault [204].

A Norwegian study reviewed 22 oral samples and found that none were positive for sperm. All studies were done within 72 h; the majority having been conducted within 24 [205].

Perioral (Lip) Swabs

A moistened swab can be used to collect evidence from around the lips of a complainant or suspect. This might be considered if a history of kissing or licking has been given (DNA from saliva); if there is a history of oral sex (DNA from semen) or if a suspect has placed his hands over the complainant's mouth for a period of time (DNA from epithelial cells).

Analysis of 71 peri oral swabs was performed over a 5-year period in NSW. Sperm was detected on 13 of the samples (18.3%). None were positive after 24 h with the majority positive less than 18 h post assault [200].

Oral Rinses

One suggested method for the collection of oral rinses advises that the complainant places a small amount of sterile water into his/her mouth (up to 5 ml), swishes the fluid around the mouth and through the teeth, then "spits" the contents into a DNA free collection jar. This is then spun down using a centrifuge, usually by the forensic laboratory. The residual cells are examined for spermatozoa and analyzed for DNA.

In the Nittis et al. study, 60 cases were analyzed by the laboratory where there was a direct comparison between oral swabs (taken first) and oral rinses (taken as the second sample). The oral rinse was shown to be a more successful method to recover sperm (17 of 104 submitted samples – 16.3%) and has led to a decision in NSW to abandon oral swab collections in preference for oral rinses. Sperm, in all cases, was only detected when there was less than 18 h between assault and testing [200].

Chewing Gum

Interestingly, sufficient spermatozoa for a DNA profile have also been recovered using standard extraction techniques from chewing gum that was retained in the mouth during non-consensual fellatio [206].

WIT.0043.0086.0116

Female Genitalia

In many jurisdictions, the legal interpretation of "vaginal penetration" refers to penetration of the labia and does not require that the penis actually enter the anatomical vagina (See definitions at start of Chapter).

The age at which a female can legally give consent for penile–vaginal intercourse varies from country to country e.g. in England and Australia the age of consent is 16 years.

Forensic science laboratories are frequently requested to determine whether semen is present on the swabs taken from the female genitalia because semen evidence can play a central role in the identification of the suspect. The presence of semen usually confirms that sexual activity has taken place, but the absence of semen on the swabs does not mean that penetration did not occur. The female genitalia should also be sampled if a condom was used during the sexual act and if cunnilingus is alleged to have occurred.

Method of Sampling

Macroscopic examination of the external genitalia should occur before the insertion of a speculum, because even gentle traction on the posterior fourchette or fossa navicularis during a medical examination can cause a superficial laceration at these sites. Whenever possible, the vagina and cervix should be inspected via an illuminated and transparent speculum after the high vaginal samples have been obtained. Colposcopy and the application of toluidine blue dye are two specialist techniques used by some forensic practitioners during female genitalia examinations.

When nonconsensual penile–vaginal penetration is alleged, the swab samples are plated onto a slide and examined microscopically by the forensic scientist to identify spermatozoa and DNA analysis is performed on any spermatozoa found if deemed necessary.

The scientist is able to provide objective evidence in terms of the quantity (determined crudely) and quality of the spermatozoa present and may be asked to interpret the results in the context of the case. When providing expert evidence regarding whether vaginal penetration has occurred, the scientist must be able to rely on the forensic practitioner to obtain the samples in a manner that will refute any later suggestions by the defense that significant quantities of spermatozoa, which were only deposited on the outside of the vulva, could have been accidentally transferred to the high vaginal area during the medical examination [207]. It is worth noting that there has been no research to support or refute this hypothesis.

Areas of the female genitalia that are sampled have been determined historically. Earlier reports document collections at the vulva, low and high vaginal areas. Later, an endocervical swab was seen as being useful if there was a delay in presentation. The original research that underpins this was based on 36 patients [208]. The value of sampling three internal genital areas (vulva, low and high vagina) is uncertain, other than to increase the chance of collecting DNA by collecting three samples. What can be inferred about depth or likelihood of penetration from DNA/sperm

only found at one of these sites, or assessments made based on the amount of semen seen at these sites, is uncertain and any opinions on such should be approached with caution until further research is available.

Other potential genital or nearby areas for swabbing include the external labial area, the mons or perineum. It should be clear in the examiner's mind what anatomical areas are being sampled when submitting a "vulval" swab or "external labial" swab as these may differ from examiner to examiner or from unit to unit.

External Labial

In cases where cunnilingus is alleged (licking of the female genital area), swabs of the external aspect of both labia majora can be collected using a moistened swab. The external area is considered to be the skin side (or potential hair bearing aspect) of the outer vaginal lips (labia majora).

Vulval

The vulval swab, in NSW for example, is sampled from the lower half of the vaginal entrance, between the inner aspects of the lower ends of both labia minora, including the fossa navicularis. UK FFLM recommendations suggest that the vulval swab will include both the vulva and perineum and that all genital swabs include both a moist and dry sample [135].

Low Vaginal

The vagina anatomically originates at the hymen. A low vaginal sample is taken by introducing the swab into the lower part of the vagina, past the hymen (or hymeneal remnant).

High Vaginal

This should be collected using a speculum. If lubricant is used, specify the type of lubricant for the forensic laboratory. In most cases the speculum can be inserted with no lubrication but insertion should be done slowly and carefully. The swab is inserted through the speculum into the vagina and a sample is taken from the top of the vaginal vault. There will be some circumstances when a speculum cannot be used and then the high vaginal sample is called a blind high vaginal swab. The swab is introduced into the vaginal vault and progressed carefully as far as it will go. It is, in fact, a trans-vaginal swab, sampling all areas of the vaginal vault. Whether or not a speculum has been used should be identified in the case notes.

Endocervical

The endocervical sample should be taken from the cervical os. It is not necessary to introduce the swab through the os, as done with Pap smears, but merely sample the cells at the os opening. There has been some suggestion in the literature that if the os cannot be visualized, the cervix might be sampled anywhere along its length. Joki-Erkkila et al. [209]. demonstrated that the combination of an endocervical swab and a cervical canal brush could extend the time period for Y-DNA positive samples (up to 144 h – 6 days). It should be noted that cervical brushing can result

WIT.0043.0086.0118

in bleeding. The possibility of introducing a bleeding site (and thus a portal of entry for sexually transmitted diseases) should be weighed against the benefit likely to be obtained from a positive DNA sample.

Urine

Spermatozoa have been found in post assault urine samples. In some cases, where spermatozoa were not found via microscopy, Y-STR quantification (and, in theory, profiling) was still possible. Joki-Erkkila et al. [210] found the quantity of measurable male DNA was higher (median 0.68 ng/μl) in the post coital urine sample when compared to vaginal swabs (median 0.06 ng/μL), cervical swabs (median 0.02 ng/μl) and cervical brushings (median 0.02 ng/μL).

Speculum

In the process of sampling the vagina, the speculum may accumulate body fluids and trace evidence. Therefore, the used speculum can be retained, packaged separately, and stored in accordance with local policy. If the speculum is visibly wet on removal, swabbing may be undertaken to retrieve visible material. If storage space is restricted, swab the instrument and retain the swabs instead.

Seminal Fluid

Normal semen has an odor similar to bleach (sodium hypochlorite). 60% of the semen volume originates from the seminal vesicles, 20% from the prostate, 5% from spermatozoa and the remaining 15% is comprised of various gland secretions e.g. Cowper's and Littre's glands.

Sperm are created in the testes and stored in the epididymis, travelling to the urethra via the vas deferens during ejaculation. Semen has a volume in the range of 1.5–5 ml [211].

Acid phosphatase is found abundantly in the prostate gland and, therefore, in seminal fluid. In most laboratories, the Brentamine test [212] is used to detect acid phosphatase. However, acid phosphatase is also found to a lesser extent in vaginal secretions, so further confirmatory testing is necessary to determine whether the fluid is semen. Usually this is microscopy to visualize spermatozoa but under some circumstances (e.g. vasectomy) spermatozoa may be absent from semen.

If no spermatozoa are detected, an attempt is made to confirm the presence of semen by other means. Some laboratories use immunological tests such as Seratec prostate-specific antigen (PSA) [213–215] or The Rapid Stain Identification (RSID™) test for semen [216]. The latter is an immunochromatographic strip test, which uses two monoclonal antibodies specific for human semenogelin.

Because the PCR DNA techniques are now so sensitive, it is often possible to obtain a DNA profile from cellular material present in the seminal fluid even when no spermatozoa are present.

Blood

Whenever bleeding is noted during the medical examination, the forensic practitioner should communicate to the scientist any possible source for the bleeding

WIT.0043.0086.0119

(menstrual, trauma or unknown). When no explanation for the bleeding was given the presence of blood must be interpreted with caution, particularly if in small quantity, because traces of uterine blood may be present at any time of the cycle.

Even though work is still being undertaken to determine the source of DNA, Tozzo et al. (2018) [217] ascertain that tissue specific mRNA detection not only can provide these answers but provides additional benefits:

- It has high sensitivity due to the possibility of PCR amplification
- High specificity due to the pattern of gene expression
- Unique for the functional status of cells and organs
- Can obtain simultaneous DNA isolation without material loss
- mRNA is quite stable in forensic stains.

Success and Persistence: Adult Female

In a 3 year review of results obtained from sexual assault patients in NSW the following was observed:

- 368 high vaginal swabs were tested. 280 were positive and had been tested within 48 h of assault; 12 of the positive samples had been tested between 48 and 96 h with only 1 positive result being found between 4 and 7 days after the assault.
- 77 cases, where both a low vaginal and high vaginal swab was tested, the results matched in 64 cases but differed in 13.
- 84 cases, where both a low vaginal and vulval sample was collected, the results matched in 71 cases but differed in 13 [218].

Janisch revealed that 46.5% (53 out of 114) who had vaginal samples collected within 12 h of their alleged assault had samples that were positive for sperm. 43.1% (22 out of 51) were positive when examined between 12 and 24 h post assault. No sperm was detected in their study (213 people) 3 days post assault [205].

Owers [219] presented results from a large scale study of 2269 cases of penile–vaginal penetration sexual assault allegations. In this study spermatozoa were detected in 32% of the cases analyzed where the alleged offence had occurred 3–4 days previously, 16% where the alleged offence had occurred 4–5 days previously, 20% where the alleged offence had occurred 5–6 days previously, and 7% where the alleged offence had occurred 6–7 days previously, significantly above the level detected in other publications. This study highlights that TSI data is significantly affected by the sperm recovery method used during the initial examination of vaginal swabs for the identification of the presence of semen and that much of the published data in relation to time since intercourse (TSI) intervals and the expected persistence of semen in post-coital samples relates to extraction methods which are no longer routinely used in casework by many forensic laboratories. Although it is widely recognized that the expectation for obtaining a DNA profile increases as the level of recovered spermatozoa increases, this study also demonstrated that with enhanced sperm recovery techniques there is an increase in the number of single

WIT.0043.0086.0120

source male DNA profiles and 'usable' mixed DNA profiles (i.e. mixed DNA profiles for which a clear major or more prominent male contributor could be determined) from seminal pellets with low/trace levels of spermatozoa and that with the increase in sensitivity of current DNA techniques that nearly all (95%) of the seminal pellet samples submitted for DNA analysis in this study provided usable DNA profiles.

While longer times for persistence are the exception rather than the rule, caution should be taken when these time periods are obtained from older research. Note that semen will persist in dead bodies for much longer time intervals.

The quantity of semen in the vagina will diminish progressively with time, usually as a result of drainage. The posture and activity of the complainant subsequent to the act are likely to affect this. Similarly, washing, douching, or bathing may accelerate the loss of semen. Drainage of semen from the vagina may also result in soiling of intimate clothing items worn at the time, and these can prove valuable sources of body fluids.

It has been observed that spermatozoa can be isolated for longer periods in the endocervix. Studies that compared paired swabs from the vagina and cervix have found that 2 days or more after vaginal ejaculation there is a larger quantity of spermatozoa on endocervical swabs compared with the vaginal swabs [220]. It is recommended that where possible, therefore, an endocervical swab be taken in addition to the swabs from the vagina. It has been shown, in some jurisdictions where endocervical swabs are only taken after 24 or 48 h post assault, that these samples can be accidentally forgotten if they do not form part of the routine female genital collections [221].

Time Since Intercourse

There is interest in the possibility of determining the timing of intercourse. Opinions have been formulated in the past by looking at a combination of the detection of prostatic acid phosphatase (AP), detection of prostate specific antigen (PSA/p30), the identification of spermatozoa using microscopy and the density of sperm and/or presence of intact sperm (spermatozoa with tails).

Dziak et al. have proposed that rough time estimates might be established by looking at vaginal smears. Many sperm, including intact sperm, has been estimated to indicate time since intercourse may be up to 72 h, but likely to be within 24 h. Few sperm (including intact sperm) or many sperm (with no intact sperm) are likely to be seen within 72 h of intercourse. Few sperm (none intact) is likely to represent intercourse that has occurred within the last 7 days [222]. These determinations are relatively subjective as they require forensic scientists to estimate whether few or many sperm are seen and whether few or many are intact. This method of scoring has been used for about 40 years. In 2015, Tobe et al. tried to assess the reliability of the scoring system by developing slides with random dilutions of seminal fluid and asking 37 examiners to assess the slides. Each slide was assessed by a minimum of 25 investigators. On no slide was there a consensus between all scores. Sperm were not seen 56 times (9.6%) and 27 investigators (73%) did not see sperm on at least one slide. Their opinion was that sperm scoring was highly subjective and there was room to improve the objectivity of the ratings [223].

WIT.0043.0086.0121

Success and Persistence- Pediatric female

Given the anatomical development of the female genitalia with age, it is possible that different sampling approaches (with regards to time for cut off periods) should be considered especially for pre-pubertal girls. Persistence of spermatozoa in the vagina of young children is thought to be markedly reduced because they have decreased cervical mucus [224] and shorter (and hence smaller) vaginal cavities. Christian et al. reviewed the medical records of 273 children aged under 10 years. All children had been examined within 44 h of the alleged/suspected sexual assault. No swabs taken from the child's body were positive for sperm/semen after 9 h. The majority of forensic evidence was gathered from linen or clothing and it was recommended that these forms of evidence should be collected in every case where possible to do so [225].

Nittis and Stark (2014) reviewed NSW sample results. The pubertal status of the complainant was not known and an assumption was made that if the child was aged 11 years or younger and no attempt had been made to obtain a high vaginal sample that they were likely to have been pre-pubertal. 105 samples, fitting this criteria, had been tested. 15 of the positive samples for obtaining a DNA profile had come from skin (n = 5), underpants (n = 7), vulva (n = 1), the penis (n = 1) and the anus (n = 1). The positive vulval sample had been collected within 6–12 h following the alleged assault and the positive skin / penile samples were all collected within 12 h [221].

For the above reasons, female genital sampling of pre-pubertal children is undertaken, in NSW Australia, in cases where 24 h or less has passed since an alleged/suspected assault.

Colposcopy

A colposcopy has historically been performed using a binocular microscope. Many centers, particularly those in the USA, advocate the use of the colposcope for external and, where relevant, internal genital and / or anal assessments of complainants of sexual assault.

The colposcope can provide considerable advantages over gross visualization. First, it provides magnification (5–30 times) and greater illumination, enabling detection of more abnormalities. The abnormalities that are detected by magnification but missed by macroscopic examination are likely to be small injuries only, the significance of which might be controversial.

Second, with the attachment of a still or DVD video camera, the colposcope allows for a truly contemporaneous, permanent video/photographic record of the genital/anal findings. If a DVD video is used, it will document the entire genital examination and will show any dynamic changes, such as reflex anal dilatation and movement of the hymen. If appropriate, the medical findings can be demonstrated to the complainant and carer.

Finally, if a remote monitor is used, the whole examination can be viewed by another doctor for corroboration or teaching purposes without additional parties having to be present during the intimate examination. Ensure consent is obtained if this method is being used.

The use of colposcopes is not without issue. Some examiners have difficulty with binocular vision and find the equipment difficult to use. Colposcopes have,

WIT.0043.0086.0122

historically, been expensive pieces of equipment that occupy large amounts of space and were often not portable. There are now many options available on the market, including cameras that project only onto a monitor (no binocular vision required) and can be packed into a bag and transported where needed. Prices have reduced substantially.

Obviously, it is important that in all cases the colposcopic evidence be interpreted in the context of the information that is currently available regarding colposcopic assessments after consensual sexual acts [88, 114, 115, 226–228].

Toluidine Blue and Fluorescein

Toluidine blue stains breaches of the keratinized squamous epithelium, binding to nuclear material of tissues, and can highlight lacerations of the posterior fourchette that are not apparent on gross visualization [229, 230]. Use of toluidine blue increased the detection rate of posterior fourchette lacerations from 4% to 58% in adult (older than 19 years) complainants of nonconsensual vaginal intercourse, from 4% to 28% in sexually abused adolescents (11–18 years old), and from 16.5% to 33% in pediatric sexually abused patients (0–10 years old) [230, 231].

In contrast, adult complainants of nonconsensual vaginal intercourse and sexually abused children had significantly more lacerations demonstrable by toluidine blue staining than control groups [230].

Vulval swabs for forensic analysis must be taken before the stain is applied. Toluidine blue (1%) is then painted on the posterior fourchette, using a swab, before any instrumentation. After a few seconds, the residual stain is removed with lubricating jelly and gauze [229]. This is potentially messy and can result in residual staining of underpants, if care is not taken. The patient may experience some stinging at the application site. The time parameters within which the use of toluidine blue is beneficial in highlighting injuries have not been identified.

In March 2017, Kathryn Laughon [232] postulated use of another dye to highlight injury. Toluidine blue was thought to be less efficient when used on darker skin individuals because of the lack of contrast between the dark blue stain and the dark skin. She has proposed the use of Fluorescein which has been widely used in ophthalmology. The dye enters the space between cells, becoming more concentrated in areas where cell membranes have been disrupted or cell death has occurred. In her research Fluorescein improved detection of injury from about 37% (when not used) to 99% (when used), which was similar to her findings for toluidine blue. She also found that it did not appear to interfere with DNA typing. As Fluorescein does not depend upon contrast to be seen, it should work effectively across all skin types.

Male Genitalia

Method of Sampling

After an allegation of fellatio, swabs from the complainant's penis can be examined for saliva, and an amylase test may be carried out. It is worth remembering that

WIT.0043.0086.0123

amylase may also be present and detectable on underwear that was in contact with the penis after the deposition of the saliva [233]. DNA profiling can be carried out on the swabs or clothing. When an allegation of vaginal or anal intercourse is made, penile swabs from the suspect can be examined for cells, feces, hairs, fibers, blood and lubricants.

It should be noted that there is the potential for vaginal fluid from recent previous intercourse, unrelated to the allegation, to be detected by DNA analysis of swabs taken from the unwashed penis. In one reported case DNA, from the complainant's boyfriend, was found on the suspect's penis [234].

Data collected by the MPFSL between 1987 and 1995 [235] have shown that after vaginal intercourse, cellular material from the complainant can be recovered from the coronal sulcus (groove around the penis just below the glans) even if the suspect has washed or bathed since the offence. Swabs taken from the meatus and urethra are not suitable for microscopic assessment because some male urethral cells can be similar to vaginal cells [236].

Current Faculty of Forensic and Legal Medicine guidelines for the collection of penile samples suggest 2 sampling areas. The first area is the penile shaft (including the external foreskin covering the glans, if present) and the second area is the coronal sulcus (and internal foreskin, if present) [135]. Some jurisdictions advocate a further third sample area, the glans. The swabs must be labelled accordingly, and the order in which the samples were obtained must be relayed to the scientist. The same samples are also taken if it is believed that a lubricant or condom has been used during a sexual act or if the assault involved fellatio or anal intercourse.

DNA STR profiling of body fluids on the penis is the method of choice used to provide evidence of penile–vaginal/oral/anal contact. It has proved particularly useful when multiple suspects have had intercourse with a single complainant [234], because DNA STR profiles matching the other suspects may also be found on the penile swabs taken from one suspect.

Success and Persistence Male

Female DNA profiles have been obtained on penile swabs up to 24 h post-coitus [237].

Karrstadt et al. [238] reviewed results from 227 cases, over a 3-year period, and found that in 57% of cases, no suitable material was found from the penile swabs. 26 of the remaining 97 provided a DNA profile of the female. They found that success was more likely in those cases where the male had penetrated three body orifices i.e. mouth, anus and vagina. The finding of Lugol positive cells also resulted in a better rate of success for DNA profiling. No success was found after 15 h.

The above study may have had relatively poor success rates as, with all sexual assault cases, it is uncertain whether penetration, as described, has occurred. Farmen et al. (2012) used 11 volunteer couples who provided 14 post-coital penile swab samples between 5 and 24 h post intercourse. All males were asked not to wash prior to sampling. Samples were collected from the coronal sulcus. Between 5 and 12 h, 90% of samples recovered full female DNA profiles. Female DNA was recovered from all samples and a full female profile was discovered from one couple at 24 h [239].

WIT.0043.0086.0124

Cina et al. looked at the potential for isolating male and female DNA from post-coital condoms. Swabs were taken from both the internal and external condom surfaces during one penile vaginal encounter where a condom had been used, 8 h previously. As expected, female DNA could be found on the external surface and male DNA from the internal surface [240].

Perianal Area and Anal Canal

Buggery is a lay term used to refer to penile penetration of the anus (anal intercourse) of a man, a woman, or an animal (also known as bestiality). Sodomy relates to anal intercourse between humans only.

Sampling

The presence of semen in the anus or rectum can be corroborative evidence of alleged anal intercourse in conjunction with the presented history and possible physical findings.

Be aware that sperm sampled from the anal canal in women may not necessarily be the result of penile anal penetration. It has been postulated that the presence of spermatozoa within the anal canal/rectum may be a result of drainage from sperm deposition into the vagina or surrounding area. The evidence base for this is limited and largely relies upon research from Davies [212], Enos and Beyer [241] and Willott [203], published between 1974 and 1982.

It might be more accurate to assert that a positive finding from the anal swab, especially when sperm numbers are low, may be a result of secondary transfer. It seems no more likely that semen leaks past the anal sphincters into the anal canal than water does, when swimming or having a bath. Contamination may be iatrogenic i.e. occurred during the forensic procedure or it may be a result of everyday activities e.g. toileting.

Swabs should also be taken if a condom or lubricant was used during the sexual assault and if anolingus is alleged.

Sampling should start from the most external point and subsequent samples should be taken in an internal direction. The first site sampled is usually, therefore, the perianal area using a moistened swab (or double swabbing method if recommended in your jurisdiction). This is followed by sampling of the anal canal, just distal to the external anal sphincter. As it is possible to introduce DNA from the perianal area into the anus when collecting forensic evidence it is suggested that an examiner use a method of sampling that reduces, as much as possible, the chance of this occurring. One option is to wash the perianal area, after sampling, with sterile water and gauze, and prior to anal sampling. In all cases, separation of the buttocks for several seconds will result in the relaxation of the external sphincter. A swab can be introduced about 1.5 cm into the anus (just past the sphincter) and removed using the same caution, decreasing the potential for the swab to touch the perianal skin.

Sampling from the lower rectal area, if required, should only be done using an anoscope/rectoscope/proctoscope. Measures should be taken to reduce the potential

WIT.0043.0086.0125

for contaminating the swab during collection and during removal of the swab from the body. This should be the last sample collected and the swab should be taken just distal to the proctoscope, being careful not to touch the instrument when withdrawing the swab.

Water-based lubricant from a single-use sachet (Pedicat® or KY® Lubricating Jelly) may be used to moisten the proctoscope to facilitate its insertion into the anus. If lubricant is used, it should be noted on the form returned to the forensic scientist.

In the process of sampling the rectum/anal canal, the proctoscope may accumulate body fluids and trace evidence. The used proctoscope can be retained, packaged separately, and stored in accordance with local policy. Alternatively, if the proctoscope is visibly wet on removal, swabbing may be conducted to retrieve visible material.

Stool samples and toilet paper need not be collected routinely because the other samples described should be adequate for laboratory requirements.

Condoms and Lubricants

Traces of lubricant found on vaginal or internal anal swabs may provide confirmatory evidence of recent penetration of a body orifice. This has particular relevance if a condom is worn during a penetrative act.

While the wearing of a condom might reduce/eliminate DNA found from biological evidence, trace lubricant might be detected, the presence of which might help support whether a crime has occurred, corroborate the version of events provided as well as assist with determining whether penetration has occurred [242].

Consequently, if the forensic practitioner has used lubricant (other than sterile water) on specula, proctoscopes, it must be communicated to the forensic scientist. The most commonly encountered lubricants applied directly to the penis to aid penetration are Vaseline® (petroleum-based product) and KY® Jelly (water-based product) [243]. Various other substances have been used to facilitate penetration during a sexual assault including hand cream, cooking oil and margarine, the diversity of the products apparently reflecting what is immediately at hand. Saliva is also used as a lubricant.

The constituents of condom lubricant (e.g. polydimethylsiloxane (PDMS) and polyethylene glycol (PEG)) [244] are also found in numerous other skin care products and suppositories. Therefore, when relevant, the forensic practitioner should ask whether the complainant has applied anything to the genital/anal area in the preceding 2 days [245]. This information should be noted on the paperwork that is made available to the forensic scientist so that the scientist can source the relevant product to check what it contains. The same dusting agents are used on some clinical gloves. Therefore, the forensic practitioner should wear nonpowdered gloves when sampling the genital and anal area [246].

To maximize the possibility of lubricant detection, the necessary swabs should be obtained as soon as possible after the incident. If the practitioner is aware that condom lubricants may be an issue, lubricant should not be used on the speculum or proctoscope during the examination. The forensic science laboratory must then be told that lubricant analysis may be relevant, because this potentially requires scientists from more than one discipline to examine the same sample, e.g. when both

WIT.0043.0086.0126

body fluids and lubricant analysis are requested. If the forensic science laboratory is not made aware of this requirement, potential evidence could be inadvertently destroyed during laboratory processes.

Many factors may affect the length of time that a lubricant will persist on skin or in a body orifice. Condom lubricant has been detected on a swab taken from an unwashed penis 50 h after intercourse and, in a different case, on a vaginal swab (also when the complainant had not washed or douched) taken 24 h after intercourse, but detection after such prolonged periods would appear to be exceptional. Water-based lubricants (e.g., those containing polyethylene glycol) have only been detected within 8 h of the sexual act [243, 247].

Success and Persistence Ano-rectal Samples

Under normal circumstances, semen is unlikely to persist in the anus for more than 24 h. The maximum recorded interval between the act of anal intercourse and the identification of spermatozoa on a rectal swab is 96 h [203]. In one exceptional case, however, where a female lay prone in the hospital for several days because of injuries sustained during a sexual assault, semen was detected on anal swabs taken 113 h after the act of anal intercourse [203]. These results were published in 1982. More recent research has not replicated these time periods.

Janisch found that only 7 anal swabs out of 37 (18.9%) were positive for sperm, when taken within 24 h of assault [205].

More recently, a review of NSW forensic results demonstrated that of the 105 anal/rectal samples collected and tested for DNA only 36 resulted in a usable profile. All were collected within 48 h of the alleged assault. Of the 63 perianal samples tested, 19 were positive for DNA and had all been collected within 24 h [221].

Swabs should be taken even if the complainant has defecated since the assault. An unpublished review of 36 MPFSL cases of alleged anal intercourse in which the complainant had defecated before the examination found that in six cases (four female and two male) the internal/external anal swabs were still positive for spermatozoa, although only a few were present; one of these subjects, a male, had a positive external anal swab 52 h after the anal intercourse (Allard J, personal communication, 1998). Anal swabs have produced a positive DNA STR analysis up to 48 h after the incident (Elliott K, personal communication, 2003). Obviously, it would be preferable to avoid defecation and urination before sampling but it is acknowledged this is not always practical.

Blood and Urine Analysis

When drugs or alcohol have been consumed or possibly administered before or during a sexual assault, consideration should be given to the need to obtain samples of blood and urine for toxicological analysis. The length of time that a drug or its metabolites remain detectable in blood or urine depends on several factors,

including the quantity taken, the individual's metabolism, and the sensitivity and specificity of the analytical methods used by the laboratory [248]. Although the metabolites of some substances may be excreted for up to 168 h in the urine [248], many are detectable for only few hours. In general, drugs and their metabolites will be identifiable for longer in urine than in blood.

The limit of detection is the lowest concentration of analyte that the analytical process can reliably differentiate from the background.

The limit of quantitation is the lowest concentration of analyte that can be reliably identified and quantitated with a certain degree of reliability.

Method of Sampling

Cut off periods for the collection of blood and urine may differ between jurisdictions and from case to case. Current FFLM recommendations suggest blood should be collected if the incident occurred within the last 3 days and suggest urine sampling up to 5 days [135]. Samples from complainants do not need to be witnessed.

Ideally, a forensic toxicology kit should be used. Wipes that contain alcohol should not be used to clean the skin before the blood sample is taken. If volatiles (e.g. amyl nitrate) are suspected, a portion of blood must be collected into a separate container.

Analysis

Forensic science laboratories have the capability of detecting a range of prescribed and illicit substances, but the persistence of different substances or their metabolites in the blood and urine of an individual depends on numerous factors.

Certain information may be required to assist the forensic scientist with interpretation of the toxicological results:

- Sex and body weight
- The time that any drugs/alcohol were consumed (start of consumption and when consumption ceased)
- Did the complainant have an alcoholic drink after the incident and prior to the medical examination?
- The exact time/date that the blood and urine samples were taken
- Details of any prescribed medication or other substances normally consumed by the individual, including quantity and the date and time of most recent use

Persistence Data

The detection windows depend on a few different factors, including the amount of substance used / administered and the frequency of use. Specialist advice is often available from the toxicology section of the local forensic laboratory.

WIT.0043.0086.0128

Note that long acting drugs that may persist up to 5 days in urine include Methadone, long acting benzodiazepines e.g. clonazepam and nitrazepam (as well as diazepam), and possibly ketamine. The z-drugs (Zolpidem and Zopiclone) may be seen in urine up to 3 days (See Chap. 12).

Early Evidence

Some Sexual Assault units facilitate the collection of early evidence samples. The UK Forensic Science Service with Metropolitan Police developed one of the very first early evidence kits in 2001 [249]. Other services have developed their own variations in the two decades since. They are most useful for the collection of evidence that might otherwise disappear quickly, e.g. oral samples. Other samples that lend themselves to early collection include blood for toxicology (although this needs to be initiated by a health care practitioner), urine samples for biological evidence or toxicology, oral rinses, and "wipes"/swabs/equivalent for the early collection of vaginal and anal samples. All examiners that work for units that have access to these kits should be very familiar with their components and be able to provide necessary advice on techniques for their utilization. If considering early collections, and no current guidelines exist in your jurisdiction, please consult your local forensic laboratory for advice about the best sampling methods.

Early evidence collection, if available, may be the responsibility of police, hospital emergency department staff or forensic examiners. In all cases, chain of custody should be maintained and recorded.

At time of writing there was limited literature concerning the efficacy of early collection samples. Smith et al. 2014 [250] reviewed 88 alleged sexual assault cases that presented to their unit. Both early evidence and full forensic specimen collections were obtained for each. Early evidence samples included oral swabs, oral rinses, first void urine, vulval and peri-anal wipes and "other" (including sanitary items). Spermatozoa was detected in 35% (22/63) of early evidence kit first void urine specimens and 32% (18/57) of early evidence vulval wipes when penile vaginal penetration had been alleged. Spermatozoa was detected in 40% of cases where vaginal swabs were then taken by a forensic examiner as part of a full forensic assessment. These results appear to indicate that a urine sample more successfully results in offender DNA evidence than a wipe (although the difference may not be statistically valid). Gaining a urine specimen from a patient is relatively easy to do, most patients have experience with the process and this type of sample could be facilitated by non-medical personnel such as police. For these reasons, it may be a preferable choice over a "wipe" or self-collected swab.

When the allegation was penile anal penetration, spermatozoa were found in 33% (2/6) of early evidence anal wipes and in 67% (2/3) cases of early evidence urine samples (when there had been no allegation of successful penile vaginal penetration). Spermatozoa were found in 36% (4/11) of cases where a full forensic was conducted. Although case numbers are small, the suggestion is that

WIT.0043.0086.0129

sperm recovered from a urine sample can't be assumed to have been deposited in the vagina.

When the allegation was penile oral penetration spermatozoa was only detected in one early evidence oral rinse (1/18) but in none of the full forensic oral samples [250]. The numbers were, however, quite low.

Joki-Erkkila et al. [210] opined that during voiding, vaginal secretion flow was increased secondary to the relaxation of the pelvic floor and the increased intra-abdominal pressure. This would be one reason for the apparent success in voided urine being analyzed not only for toxicology but for sperm/DNA. In their research 88 volunteers collected various post coital urine samples following consensual intercourse. There were 205 urine specimens in total. The samples were centrifuged and the resultant cell pellet was sent for Y STR testing. Y DNA was measurable in 84.4% of samples. This increased to 96.5% of samples when the urine was the first post coital collection. Most specimens were collected within 24 h of coitus. After 24 h Y DNA was measurable in 40.9% of samples (9/22). The researchers considered the cut-off limit for identification of the male at ≥0.01 ng/μL Y-DNA. 74.6% of all samples returned this amount of Y-DNA. Not surprisingly, the percentage of positive samples decreased in proportion to the void number i.e. less Y-DNA was found in the sixth to tenth voids when compared to the first post coital void. It should be noted these results were based on Y-STR quantification PCR as opposed to Y-STR profiling [210].

Early Evidence kits are self-collected in many cases. This self-collection may be facilitated by non-forensic medical and nursing staff or by other emergency workers such as police or ambulance officers. As potential forensic evidence it needs to survive challenges in court with regards to chain of evidence, collection technique and potential cross contamination. Despite this, there seems little doubt that this type of evidence has a valuable place in sexual assault assessments.

Products of Conception

Occasionally forensic examiners may be asked for advice, or to participate in, the collection of products of conception for the purpose of identifying an alleged sexual assault offender. It is recommended that guidelines around this type of sampling should be available if required. They should be designed in consultation with police and forensic laboratories and updated regularly. Some general principles have been outlined below:

Informed consent should be obtained, as per any forensic collection procedure. In some jurisdictions, the procedure will not be carried out unless a report has been made to police. The type of fetal sample will depend upon the type of termination procedure. Medical terminations can be done up to 9 weeks, suction curettes up to 12–14 weeks and dilatation and evacuations generally from about 14 weeks onwards.

Most laboratories will require an estimated date of conception and will accept a tissue sample, rather than the entire fetus. All equipment used should be sterile and

WIT.0043.0086.0130

preferably disposable. Formalin should not be used and a chain of custody should occur, with documentation of every step in the process, including who handled the specimen. A medico-legal report documenting the receipt, sealing, storage and handover of the specimen may be required.

Prophylaxis

The risk of contracting a sexually transmitted infection following a sexual assault may differ vastly from city to city, state to state and country to country. Every attempt should be made to locate local guidelines that base their recommendations on local prevalence and incidence rates. Included below is some general information but forensic examiners should consult local pharmaceutical texts.

Ideally, guidelines should exist to assist a complainant's access to STI prophylaxis medication regardless of whether or not they consent to a full forensic examination. Complainants should be advised to practice "safe sex" until all results have been returned and they have been successfully treated for any infections.

Pregnancy

Female complainants at risk of pregnancy must understand that the efficacy of all emergency contraception decreases as the time since assault increases.

There are three options that might be considered for a complainant who, as a result of an assault, may be at risk of pregnancy. These include:

Copper IUD (Intrauterine Device)

Although not always considered first line, because training and experience are required to have them inserted and removed, they do offer some benefits over other choices. Once inserted they will work for up to 10 years. As Marie Stopes Australia has observed, it is the cheapest option around for contraception costing less than "a Netflix and Abstinence" approach [251]. It is the only long term, hormone free, reversible contraceptive on the market. It has a failure rate of less than 1 in 100 and doesn't require a woman to remember to take anything. The copper IUD can make tails separate from the body of sperm. As Marie Stopes has observed, "Makes it kind of hard to get to the egg when you can't swim." Lastly, it is the most effective form of contraception available, working for up to 120 h after unprotected sex. It should be considered as a first line option in those women who have a body mass index >25 kg/m^2 as there is a decline in efficacy of Ulipristal Acetate and Levonorgestrel as BMI increases [252].

Ulipristal Acetate 30 mg

This is a single dose treatment.

WIT.0043.0086.0131

There is a demonstrated improved efficacy of Ulipristal, when compared to Levonorgestrel, for the prevention of unwanted pregnancies when taken within the 0–120 h post intercourse period. A reduction in pregnancies of about 2.15–1.36% (if taken within 72 h of intercourse) has been demonstrated [253].

If the woman also has been taking a medication (or herb) that induces cytochrome P450 CYP3A4, or had treatment with these medications in the previous 4 weeks, there may be a decrease in the efficacy of Ulipristal as Ulipristal is metabolised by CYP3A4. Patients should be offered an alternate form of contraception such as a non-hormonal emergency contraceptive e.g. copper intrauterine device or 3mg (double dose) Levonorgestrel [254, 255].

If vomiting occurs within 3 h after ingestion of the medication the dose will need to be repeated.

Ulipristal is thought to prevent ovulation by suppression of the LH (luteinising hormone) surge for at least 5 days, which is beyond the lifespan of sperm. The effects post-fertilisation are currently unknown. The timing of ovulation cannot be predicted and if ovulation has already occurred Ulipristal may not be effective.

If a woman wishes to initiate or resume regular hormonal contraception after using Ulipristal, they should be advised not to commence hormonal contraception sooner than 5 days after the intake of Ulipristal AND to use a reliable barrier method until the next menstrual bleed. Breast feeding should be avoided for 1 week after ingestion of Ulipristal.

Levonorgestrel 150 mg

This is a single dose treatment. It has limited evidence of efficacy after 3 days (72 h) [255, 256].

Women requiring post exposure pregnancy prophylaxis must be asked specifically about whether or not they may be taking any cytochrome P450 3A4 inducers as the dose may need to be doubled i.e. 3 mg stat, however bear in mind evidence for efficacy is lacking [254].

The forensic examiner must advise that, if vomiting occurs within 2 h after ingestion of the medication, the dose will need to be repeated. Vomiting is, however, uncommon.

The possible mechanisms of action of Levonorgestrel include:

- Prevention of ovulation
- Altering the transport of sperm and egg through the tube
- Changing the lining of the uterus in a way that may discourage implantation.

Because Levonorgestrel does not interrupt an established pregnancy, defined as beginning with implantation, it is not considered an abortifacient [256].

Hepatitis B Prophylaxis

Hepatitis B is covered in detail in Chap. 10.

WIT.0043.0086.0132

The forensic examiner may assume a potential risk of Hepatitis B, following sexual assault/rape, if there has been a penetrative sexual event (excluding digital penetration) AND the assault was thought to have occurred within the previous 7 days AND there is no history of a complete Hepatitis B vaccination.

Booster doses may not be recommended for immune-competent persons who have completed a primary course of Hepatitis B immunisation. There is good evidence that a completed primary course provides long lasting protection even when antibody levels decline with time and become undetectable [257, 258].

Human Immunodeficiency Virus (HIV)

Generally there must be an occasion of receptive intercourse (i.e. penile anal or penile vaginal), there must be an offender who is either HIV +ve or from a group that is considered high risk e.g. men who have sex with men, from a high HIV prevalence country etc. and the penetrative event must have occurred within the last 72 h in order to be offered HIV prophylaxis.

In order to quantify the potential risk to a complainant an examiner needs to know the risk associated with the type of exposure that has occurred (e.g. for cases of receptive vaginal or anal intercourse, insertive vaginal or anal intercourse etc.). This is multiplied by the risk of the source being HIV +ve. These are very location specific statistics. Whether or not HIV post exposure prophylaxis should be offered is generally determined by the potential risk i.e. exposure risk x source risk.

Unaids website [259] provides up to date sero-prevalence of individual countries for HIV (use the key population atlas). A high prevalence country (HPC) is any country with sero-prevalence of the general population >1%. As an example, at time of writing, sub-Saharan African countries and sex worker contacts from South and South East Asian countries were considered to be high prevalence populations.

Note also that the sexual exposure risk in children is higher than in adults due to the increased risk of mucosal trauma, vaginal wall thinness and cervical ectopy [260].

Animal studies suggest that the sooner HIV Post Exposure Prophylaxis (PEP) is given, the greater the chance of preventing seroconversion. Therefore, it is currently recommended that HIV PEP is commenced no more than 72 h after the assault [261] and, like most prophylactic medication, the sooner it is commenced the more effective it is likely to be. Many sexual assault referral centers provide starter packs to ensure rapid access to the appropriate medicines. Patients considering HIV PEP should be advised of the unproven efficacy, potential side effects, and the fact that the long-term consequences are not fully understood [262]. If HIV PEP is given, baseline serological tests should be obtained. The recommended course of treatment is generally for 4 weeks, and patients should be monitored by a genitourinary physician during this period.

Chlamydia

There are two schools of thought with regards to Chlamydia prophylaxis. Those that recommend post exposure prophylaxis are likely to do so because sexual health follow up rates of sexual assault complainants is often poor, Chlamydia Trachomatis infection may be asymptomatic and can lead to serious morbidity if untreated

(infertility, ectopic pregnancy, chronic pelvic pain, arthritis, peri-hepatitis, proctitis, epididymo-orchitis), prophylactic treatment is easy to administer in a stat dose, is well tolerated and has few drug interactions, sexual assault victims are often young and therefore in the highest risk group for Chlamydia.

Some of the reasons to not recommend prophylaxis include the fact that the presence of any pre-existing Chlamydia infection is unknown, there may be inadequate contact tracing, Chlamydia is easily treated at follow up if STI check is positive and prophylactic treatment may discourage patients from seeking STI follow up if they believe they have already been treated.

Other Prophylactic Treatments

Gonorrhoea is not a particularly common infection seen in sexual assault victims in Australia and so routine prophylaxis is generally not prescribed, although this may depend upon the location of the sexual assault unit. There is an increased prevalence rate in some indigenous communities.

Prophylactic Treatment and Testing for Suspects

In cases of alleged sexual assault, all suspects should be advised to attend a Sexual Health / Genito Urinary Medicine (GUM) clinic for STI screening. A suspect has the same right to access post-exposure prophylaxis in a timely fashion [263].

Baseline STI Testing

Recommendations regarding this are likely to differ. It does offer an opportunity to target an at-risk population who may be unlikely to follow through with a sexual health appointment. Urine and swab sampling, if positive, may not however necessarily represent the infection status of the complainant but, rather, the infection status of the offender resulting in unnecessary anxiety or treatment i.e. if swabbing the vulva after non-consensual ejaculation, the sample might be a mix from both the complainant and the offender.

Expertise and Peer Review

> *The overriding objective of this procedural code is that criminal cases be dealt with justly. Dealing with a criminal case justly includes acquitting the innocent and convicting the guilty, dealing with the prosecution and the defense fairly, recognizing the rights of the defendant…* [264].

Forensic examiners, dealing with sexual assault complainants and suspects, should be aware of any potential conflicts of interest and instructing parties must be informed of this as soon as practicable [265].

Every examiner who works at the medicolegal interface should be aware of bias (over 20 different types have been identified) as they can influence decision making and opinions.

Examiners should be engaged in a process of continuing professional development in order to demonstrate continued competency in their area of expertise [265].

The expectation that there should be peer review of a statement, prior to its submission to court, is likely to increase. Peer review may occur in different ways. A reviewer may read a statement and offer comments about grammar, spelling and the opinion reached based on the evidence cited in the certificate/statement. A reviewer may, however, additionally review contemporaneous material collected at time of examination, for example original injury diagrams, patient histories and photographs. It is the latter, arguably, which should allow the reviewer to reach an independent assessment of the information that was available to the primary examiner. If a statement has been peer reviewed, should this be identified within the statement? Should a list of the materials reviewed be specified? Should difference of opinions be recorded for the court and when should this be done? Should reviewed drafts of statements be kept and presented to court upon demand? It is likely that examiners who work within sexual assault units will need to consider the pros and cons of each course of action and develop guidelines for staff to ensure a consistent and transparent approach.

Conclusion

Aiming for perfection is only likely to lead to disappointment. Aiming for improvement is much more achievable. It is important, therefore, to review each case after it has been performed in an attempt to identify what was done well and what might have been done better, where there were shortcomings in knowledge and how that information might be more readily accessed on the next occasion, where the system failed and where we failed. Replicating the things that worked well and improving upon the things that might have been done better will ensure competency in this area of clinical forensic medicine.

The UK Forensic Science Regulator provides updated advice on pertinent issues, including the Forensic Medical Examination Standard—Adult and Child Sexual Assault Complainants. This latter document contains a self-assessment table and is one way to ensure your service and practice meets acceptable standards [389].

Key Points

- It is essential that injuries are documented in detail in the clinical notes, describing the injury in writing, drawing on a diagram, and by imaging (photograph or video). High quality documentation requires all three.
- Examiners should be aware of the principles behind forensic sampling and local guidance should be regularly reviewed to ensure that the samples taken are appropriate and evidence based that is, based on the experience of local forensic laboratories (statistically and not anecdotally), as well as published research.

Self-Assessment Exercises

1. Which forensic samples would be required following an allegation of penile penetration of the vagina within the previous 48 h?

2. Outline the psychological response to rape and what support you could offer to a victim of sexual assault?
3. How would you manage the risk of pregnancy and sexually transmitted diseases in a complainant of sexual assault?

Acknowledgement Thanks to Karen Alexander & Carol Rogers - Forensic Scientists, the UK and Ireland Association of Forensic Science Providers' (AFSP) Body Fluid Forum (BFF)

With acknowledgement to the previous authors – Dr. Debbi Rogers & B. Martina Mc Bride.

References

1. Sexual Offences Act 2003. Part 1, Assault, Sections 1, 2 and 3. Accessed at http://www.legislation.gov.uk/ukpga/2003/42/contents. 23 Apr 2019
2. Criminal Law (Rape) Act, 1981. Section 2 Meaning of Rape. Accessed at http://www.bailii.org/ie/legis/num_act/1981/0010.html#zza10y1981s2 on 23 Apr 2019
3. Criminal Law (Rape) (Amendment) Act 1990 Section 4. Accessed at http://www.bailii.org/ie/legis/num_act/1990/0032.html#zza32y1990s2 on 23 Apr 2019
4. Sexual Offences (Scotland) Act 2009 Part 3. Accessed at http://www.legislation.gov.uk/asp/2009/9/pdfs/asp_20090009_en.pdf on 23 Apr 2019
5. Sexual Offences (Scotland) Act 2009 Part 1. Accessed at http://www.legislation.gov.uk/asp/2009/9/pdfs/asp_20090009_en.pdf on 23 Apr 2019
6. Crimes Act 1900 Section 61I Sexual Assault and 61KC Sexual Touching. Accessed at http://www.austlii.edu.au/cgi-bin/viewdb/au/legis/nsw/consol_act/ca190082/# on 23 Apr 2019
7. Filley CM, Price BH, Nell V, Antoinette T, Morgan AS, Bresnahan JF et al (2001) Toward an understanding of violence: neurobehavioral aspects of unwarranted physical aggression: Aspen Neurobehavioral Conference Consensus Statement. Neuropsychiatry Neuropsychol Behav Neurol 14(1):1–14
8. Van Der Kolk B (2015) The body keeps score - brain, mind and body in the healing of trauma. Penguin Books, New York
9. Bracha HS, Ralston TC, Matsukawa JM, Williams AE, Bracha AS (2004) Does "Fight of Flight" Need Updating? - Letter to the editor. Psychosomatics. 45(5):448
10. Moller A, Sondergaard HP, Helstrom L (2017) Tonic immobility during sexual assault - a common reaction predicting post-traumatic stress disorder and severe depression. Acta Obstet Gynecol Scand. 96(8):932–938
11. Burgess AW, Holmstrom LL (1974) Rape trauma syndrome. Am J Psychiatry 131:981–986
12. Duddle M (1991) Emotional sequelae of sexual assault. J R Soc Med 84:26–28
13. Guillliatt R. The Unbelievers. The Australian. July 08, 2017. pp. 114–120
14. Department of Health, Home Office, Association of Chief Police Officers (2009) Revised National Service Guide – a resource for developing sexual assault referral centers. DH, London. Available at Website: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107570. Accessed 14 Feb 2010
15. General Medical Council. Intimate examinations and chaperones April 2013 https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/intimate-examinations-and-chaperones. Accessed 21/03/2019
16. Forensic Science Regulator Overseeing Quality: Guidance – DNA Anti-Contamination – Forensic Medical Examination in Sexual Assault Referral Centres and Custodial Facilities. FSR-G-207. Issue 1. 2016.
17. Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010. Available from: https://assets.justice.vic.gov.au/…/vincentreportfinal16may2010.pdf
18. Kloosterman A, Sjerps M, Quak A (2014) Error rates in forensic DNA analysis: definition, numbers, impact and communication. Forensic Sci Int Genet. 12:77–85

19. Rennison A. report into the circumstances of a complaint received from the Greater Manchester Police on 7 March 2012 regarding DNA evidence provided by LGC forensics. Forensic Science Regulator; 2012 p.15. report No: FSR-R-618. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/118941/dna-contamination-report.pdf
20. Van Oorschot Roland AH; Szkuta Bianca; Meakin Georgina E; Kokshoorn Bas; Goray Mariya. DNA transfer in forensic science: a review. Forensic Sci Int Genet 38 (2019) 140-166
21. Ballantyne KN, Salemi R, Guarino F, Pearson JR, Garlepp D, Fowler S, Oorschot V, Roland AH (2015) DNA contamination minimisation – finding an effective cleaning method. Aust J Forensic Sci. https://doi.org/10.1080/00450618.2015.1004195
22. Forensic Science Regulator. https://www.gov.uk/government/organisation/forensic-science-regulator
23. Justice Cardozo in Schloendorff v Society of New York Hospitals (1914) 105 NE 92 AT 93
24. See for example: https://www.legislation.nsw.gov.au/#/view/act/2000/59/part2/sec5. Accessed 22 Mar 2019; and http://classic.austlii.edu.au/au/legis/vic/consol_act/ca195882/s464r.html. Accessed 22 Mar 2019
25. Section 62 of the Police and Criminal Evidence Act 1984 https://www.legislation.gov.uk/ukpga/1984/60/section/62. Accessed 22 Mar 2019
26. Faculty of Forensic and Legal Medicine. PICS Working Group Guidelines on Photography. United Kingdom, 2018
27. Faculty of Forensic and Legal Medicine. Recommendations—Consent from patients who may have been seriously assaulted. United Kingdom, Dec 2018
28. Royal College of Pathologists Australasia. The Presence of Chaperones During Intimate Forensic Medical Examinations. Australia, 2017
29. Hook SM, Elliot DA, Harbison S-A (1992) Penetration and ejaculation; forensic aspects of rape. N Z Med J 105:87–89
30. Emans SJH, Goldstein DP (1990) The physiology of puberty. In: Pediatric and adolescent gynecology, 3rd edn. Little Brown, Boston, pp 95–97
31. Muram D (2000) Anatomic and physiological changes. In: Heger A, Emans SJ, Muram D (eds) Evaluation of the sexually abused child. Oxford University Press, New York, pp 105–107
32. Porkorny SF (1987) Configuration of the prepubertal hymen. Am J Obstet Gynecol 157:950–956
33. McCann J, Wells R, Simon M, Voris J (1990) Genital findings in prepubertal girls selected for nonabuse: a descriptive study. Pediatrics 86:428–439
34. Girardin BW, Faugno DK, Seneski PC, Slaughter L, Whelan M (1997) Care of the sexually assaulted patient. In: Color atlas of sexual assault. Mosby, St. Louis, pp 111–118
35. Masters WH, Johnson VE (1966) The vagina. In: The human sexual response. Little Brown, Boston, pp 69–70
36. MamaMia. Unbelievable. The reason sexual assault charges against Scott Volkers were allegedly dropped. 2014. Available from: https://www.mamamia.com.au/scott-volkers-assault-charges/.
37. Levin RJ, van Berlo W (2004) Sexual arousal and orgasm in subjects who experience forced or non-consensual sexual stimulation—a review. J Clin Forensic Med 11(2):82–88
38. Muram D (1992) Anatomy. In: Hegar A, Emans SJ (eds) Evaluation of the sexually abused child. Oxford University Press, New York, p 73
39. Girardin BW, Faugno DK, Seneski PC, Slaughter L, Whelan M (1997) Anatomy and the human sexual response. In: Color atlas of sexual assault. Mosby, St. Louis, p 11
40. Masters WH, Johnson VE (1966) The penis. In: The human sexual response. Little Brown, Boston, pp 171–203
41. Health RCoPaC (ed) (2015) The Physical Signs of Child Sexual Abuse—An evidence based review and guidance for best practice. The Lavenham Press Ltd., London
42. McCann J, Wells R, Simon M, Voris J (1990) Genital findings in prepubertal girls selected for non abuse: a descriptive study. Paediatrics. 86(3):428–439
43. Fenger C (1997) Anal canal. In: Sternberg SS (ed) Histology for pathologists, 2nd edn. Lippincott-Raven, Philadelphia, pp 551–571

WIT.0043.0086.0137

44. Goligher J, Duthie HL, Nixon HH (1984) Surgical anatomy and physiology of the anus, rectum and colon. In: Surgery of the anus, rectum and colon, 5th edn. BaillièreTindall, London, p 15
45. Girardin BW, Faugno DK, Seneski PC, Slaughter L, Whelan M (1997) Anatomy and the human sexual response. In: Color atlas of sexual assault. Mosby, St. Louis, pp 14–16
46. Nivatovongs S, Stern HS, Fryd DS (1981) The length of the anal canal. Dis Colon Rectum 24:600–611
47. Parks AG, Porter NH, Melzak J (1962) Experimental study of the reflex mechanism controlling the muscles of the pelvic floor. Dis Colon Rectum 5:401–414
48. Bharucha AE (2006) Update of tests of colon and rectal structure and function. J Clin Gastroenterol. 40(2):96–103
49. Curtis E, San Lazaro C (1999) Appearance of the hymen in adolescents is not well documented. BMJ. 318(7183):605–606
50. Curtis E, San Lazaro C (1999) Appearance of the hymen in adolescence is not well documented- Letters. Br Med J 318(7183):605–606
51. Adams J, Botash A, Kellogg N (2004) Differences in hymeneal morphology between adolescent girls with and without a history of sexual intercourse. Arch Paediatr Adolesc Med 158:280–285
52. Emans J, Woods E, Allred E, Grace E (1994) Hymeneal findings in adolescent women: impact of tampon use and consensual sexual acitivity. J Paediatr 125(1):153–160
53. Pomeroy WB (1972) Dr. Kinsey and the Institute for Sex Research. Harper and Row, New York, p 164
54. Bays J, Chadwick D (1993) Medical diagnosis of the sexually abused child. Child Abuse Negl 17:91–110
55. Edgardh K, Ormstad K (2002) The adolescent hymen. J Reprod Med 47(9):710–714
56. Rabinerson D, Kaplan B, Dekel A (2002) Pregnancy with a microperforated hymen. Int J Gynaecol Obstet 80(2):171–172
57. Balke J, Boever W, Ellersieck M, Seal U, Smith D (1988) Anatomy of the reproductive tract of the female African elephant with reference to the development of techniques for artificial breeding. J Reprod Fertil 84:485–492
58. Tsumagari S, Takagi K, Takeishi M, Memon M (2001) A case of a bitch with imperforate hymen and hydrocolpos. J Vet Med Sci 63(4):475–477
59. Hobday A, Haury L, Dayton P (1997) Function of the human hymen. Med Hypotheses. 49:171–173
60. Yordan E, Yordan R (1992) The hymen and Tanner staging of the breast. Adolesc Paediatr Gynaecol 5:76–79
61. Berenson A (1995) A longitudinal study of hymeneal morphology in the first three years of life. Paediatrics. 95(4):490–496
62. Berenson A (1993) Appearance of the hymen at birth and one year of age: a longitudinal study. Paediatrics. 91(4):820–825
63. Berenson A, Grady J (2002) A longitudinal study of hymeneal development from 3-9 years of age. J Paediatr 140(5):600–607
64. Goodyear-Smith FA, Laidlaw TM (1998) What is an intact hymen? A critique of the literature. Med Sci Law. 38(4):289–300
65. Berenson A, Heger A, Hayes J, Bailey R (1992) Appearance of the hymen in prepubertal girls. Paediatrics. 89:387–394
66. APSAC APSotAoC (1998) Glossary of terms and the interpretations of findings of child sexual abuse evidentiary examinations
67. Berenson A, Heger A, Andrews S (1991) Appearance of the hymen in newborns. Pediatrics 87(4)
68. American Academy of Pediatrics, Faculty of Forensic and Legal Medicine, Royal College of Physicians, Royal College of Paediatrics and Child Health: The Physical Signs of Child Sexual Abuse. An evidence-based review and guidance for best practice. May 2015, p. 48

WIT.0043.0086.0138

69. Adams JA, Farst KJ, Kellogg ND (2018) Interpretation of medical findings in suspected child sexual abuse: an update for 2018. J Pediatr Adolesc Gynecol. 31(3):225–231
70. Ferrell J (1995) Foley catheter balloon technique for visualising the hymen in female adolescent sexual abuse victims. J Emerg Nurs 21(6):585–586
71. Jones J, Dunnuck C, Rossman L, Wynn B, Genco M (2003) Adolescent Foley catheter technique for visualising hymeneal injuries in adolescent sexual assault. Acad Emerg Med 10(9):1001–1004
72. McCann J, Voris J, Simon M, Wells R (1990) Comparison of genital examination techniques in prepubertal girls. Paediatrics. 85(2):182–187
73. Heger A, Emans J (1990) Introital diameter as the criterion for sexual abuse. Paediatrics. 85(2):222–223
74. Hobbs C, Wynn JM, Thomas AJ (1995) Colposcopic genital findings in prepubertal girls assessed for sexual abuse. Arch Dis Childhood. 73:465–471
75. Berenson A, Chacko M, Wiemann C, Mishaw C, Friedrich W, Grady J (2002) Use of hymeneal measurements in the diagnosis of previous penetration. Paediatrics. 109(2):228–235
76. American Academy of Pediatrics, Faculty of Forensic and Legal Medicine, Royal College of Physicians, Royal College of Paediatrics and Child Health: The Physical Signs of Child Sexual Abuse. An evidence-based review and guidance for best practice. May 2015.p57
77. Adams J (2003) Normal studies are essential for objective medical evaluations of children who may have been sexually abused. Acta Pediatrics. 92:1379–1380
78. Wilson F, Swartz DP (1972) Coital injuries of the vagina. Obstet Gynecol 39:182–184
79. Fish SA (1956) Vaginal injury due to coitus. Am J Obstet Gynecol 72:544–548
80. Metsala P, Nieminen U (1968) Traumatic lesions of the vagina. Acta Obstet Gynecol Scand 47:483–488
81. Underhill R, Dewhurst J (1978) The doctor cannot always tell: medical examination of the 'intact' hymen. Lancet 1:375–376
82. Gray MJ, Norton P, Treadwell K (1981) Tampon-induced injuries. Obstet Gynecol 58:667–668
83. Slaughter L, Brown CRV, Crowley S, Peck R (1997) Patterns of genital injury in female sexual assault victims. Am J Obstet Gynecol 176:609–616
84. McCann J, Miyamoto S, Boyle C, Rogers K (2007) Healing of non-hymenal genital injuries in pre-pubertal and adolescent girls: a descriptive study. J Pediatr 120:1000–1011
85. Kellogg ND, Parra JM (1991) Linea vestibularis: a previously undescribed normal genital structure in female neonates. Pediatrics 87:926–929
86. Hakanson EY (1966) Trauma to the female genitalia. Lancet 86:286–291
87. Jones JS, Rossman L, Hartman M, Alexander CC (2003) Anogenital injuries in adolescents after consensual intercourse. Acad Emerg Med 10:1378–1383
88. Anderson S, McClain N, Riviello RJ (2006) Genital findings of women after consensual and non-consensual intercourse. J Forensic Nurs 2:59–65
89. Lincoln C, Perera R, Jacobs I, Ward A (2013) Macroscopically detected female genital injury after consensual and non-consensual vaginal penetration: a prospective comparison study. J Forensic Leg Med 20:884–901
90. O'Keefe M (2008) Alleged rape—a case study illustrating potential difficulties in interpretation of ano-genital findings—a personal view. J Forensic Leg Med 15:42–47
91. Ahmed E, Syed SA, Parveen N (2006) Female consensual coital injuries. JCPSP. 16(5):333–335
92. Frioux SM, Blinman T, Christian CW (2011) Vaginal lacerations from consensual intercourse in adolsescents. Child Abuse Negl 35:69–73
93. Jones ISC, O'Connor A (2013) Non-obstetric vulval trauma. Emerg Med Aust 25:36–39
94. Cappelletti S, Aromatario M, Bottoni E, Fiore PA, Fineschi V, di Luca Natale M, Ciallella C (2016) Variability in findings of anogenital injury in consensual and non-consensual fisting intercourse: a systematic review. J Forensic Leg Med 44:58–62
95. Whitley N (1978) The first coital experience of one hundred women. JOGN Nurs 7:41–45
96. Emans J, Woods E, Allred E, Grace E (1994) Hymeneal findings in adolescent women: impact of tampon use and consensual sexual activity. J Paediatr 125(1):153–160

WIT.0043.0086.0139

97. Goodyear-Smith FA, Laidlaw TM (1998) Can tampon use cause hymen changes in girls who have not had intercourse? A review of the literature. Forensic Sci Int 94:147–153
98. Kellogg N, Menard S, Santos A (2004) Genital anatomy in pregnant adolescents: normal does not mean nothing happened. Paediatrics. 113(1):67–69
99. Heger A, Ticson L, Velasquez O, Bernier R (2002) Children referred for possible sexual abuse: medical findings in 2384 children. Child Abuse Negl 26:645–659
100. Heppenstall-Heger A, McConnell G, Ticson L, Guerra L, Lister J, Zaragoza T (2003) Healing patterns in ano-genital injuries: a longitudinal study of injuries associated with sexual abuse, accidental injuries or genital surgery in the pre-adolescent child. Paediatrics. 112(4):829–837
101. Wheatley JK (1983) Genital injury during intercourse. Med Aspects Hum Sex 17:24A–24J
102. Ball TP, Pickett JD (1975) Traumatic lymphangitis of penis. Urology IV 594–597
103. Davies DM, Mitchell I (1978) Fracture of the penis. Br J Urol 50:426
104. Pryor JP, Hill JT, Packham DA, Yates-Bell AJ (1981) Penile injuries with particular reference to injury to the erectile tissue. Br J Urol 53:42–46
105. Geist RF (1988) Sexually related trauma. Emerg Med Clin North Am 6(3):439–466
106. Paul DM (1977) The medical examination of the live rape victim and the accused. Leg Med Annu:139–153
107. Wells DL (1996) Genital trauma amongst young boys. J Clin Forensic Med 3:129–132
108. Hobbs CJ, Wynne JM (1996) Physical signs of child abuse. WB Saunders, Philadelphia
109. Farah R, Cerny JC (1973) Penis tourniquet syndrome and penile amputation. Urology 11:310–311
110. Garty BZ, Mimouni M, Varsano I (1983) Penile tourniquet sydrome. Cutis 31:431–432
111. Kerry RL, Chapman DD (1973) Strangulation of appendages by hair and thread. Pediatr Surg 8:23–27
112. Bolling DR (1977) Prevalence, goals and complications of heterosexual anal intercourse in a gynecologic population. J Reprod Med 19:121–124
113. Maguire W, Goodall E, Moore T (2009) Injury in adult female sexual assault complainants and related factors. Eur J Obstet Gynaecol Reprod Biol 142:149–153
114. Sommers MS, Zink TM, Fargo JD et al (2008) Forensic sexual assault examination and genital injury: is skin color a source of health disparity? Am J Emerg Med 26:857–866
115. Jones JS, Rossman L, Hartman M, Alexander CC (2003) Anogenital injuries in adolescents after consensual sexual intercourse. Acad Emerg Med 10:1378–1383
116. Keighley MRB, Williams NS (1993) Fissure in ano. In: Surgery of the anus, rectum and colon. Saunders, Philadelphia, pp 364–386
117. Goligher J, Duthie HL, Nixon HH (1984) Anal fissure. In: Surgery of the anus, rectum and colon, 5th edn. Baillière Tindall, London, p 150
118. Schlesinger SL, Borbotsina J, O'Neill L (1975) Petechial hemorrhages of the soft palate secondary to fellatio. Oral Surg 40:376–378
119. Giansanti JS, Cramer JR, Weathers DR (1975) Palatal erythema, another etiologic factor. Oral Surg 40:379–381
120. Damm DD, White DK, Brinker CM (1981) Variations of palatal erythema secondary to fellatio. Oral Surg 52:417–421
121. Cohen PR, Miller VM (2013) Fellatio-associated petechiae of the palate: report of purpuric palatal lesions developing after oral sex. Dermatol Online J. 19(7). Can be accessed via https://escholarship.org/uc/item/5w0346ch
122. Girardin BW, Faugno DK, Seneski PC, Slaughter L, Whelan M (1997) Findings in sexual assault and consensual intercourse. In: Color atlas of sexual assault. Mosby, St. Louis, p 41
123. Girardin BW, Faugno DK, Seneski PC, Slaughter L, Whelan M (1997) Findings in sexual assault and consensual intercourse. In: Color atlas of sexual assault. Mosby, St. Louis, p 38
124. Cross TP, Siller L, Vlajnic M, Alderden M, Wagner A (2017) Injury Evidence, Biological Evidence and Prosecution of Sexual Assault. Office of Justice Programs National Criminal Justice Reference Service
125. Innocence Project. DNA's revolutionary role in freeing the innocent 2018 Available from: https://www.innocenceproject.org/dna-revolutionary-role-freedom/
126. Cale CM, Earll ME, Latham KE, Bush GL (2015) Could Secondary DNA Transfer Falsely Place Someone at the Scene of a Crime. J Forensis Sci. Available at onlinelibrary.wiley.com

WIT.0043.0086.0140

127. Tamariz J, Wong A, Perez J, Prinz M, Caragine TA. Investigation of the Detection of DNA through Secondary and Tertiary Transfer. Accessed 26th February 2019 at https://www.promega.com/-/media/files/resources/conference-proceedings/ishi-20/poster-abstracts/poster68.pdf?la=en
128. Association of Forensic Providers body fluid forum (BFF). A U.K. and Irish Forensic Biology working group. The objectives of the forum are to identify best practice in the recovery, identification and interpretation of body fluid evidence and to raise the profile of such evidence within forensic science, policing and legal arenas. The BFF is a subgroup of the Association for Forensic Science Providers and provides this Board with regular progress reports.
129. Jones S, Scott K, Lewis J, Davidson G, Allard JE, Lowrie C, McBride BM, McKenna L, Teppett G, Rogers C, Clayson N, Baird A (2016) DNA transfer through nonintimate social contact. Sci Justice 56:90–95
130. Lowe A, Murray C, Whitaker J, Tully G, Gill P (2002) The propensity of individuals to deposit DNA and secondary transfer of low level DNA from individuals to inert surfaces. Forensic Sci Int 129:25–34
131. Kanokwongnuwut P, Martin B, Kirkbride KP, Linacre A (2018) Shedding light on shedders. Forensic Sci Int Genet 36:20–25
132. Meakin G, Jamieson A (2013) DNA transfer: review and implications for casework. Forensic Sci Int Genet 7:434–443
133. Claudia Himmelreich. Germany's phantom serial killer: a DNA blunder. Time Magazine. Mar 27, 2009. Accessed on 03 May 2019 at http://content.time.com/time/world/article/0,8599,1888126,00.html
134. Tully G (2018) Forensic science in England & Wales, a commentary. Forensic Sci Int
135. Faculty of Forensic and Legal Medicine: Recommendations for the Collection of Forensic Specimens from Complainants and Suspects. 17 Jan 2019. Accessed at https://fflm.ac.uk/
136. Kafarowski E, Lyon AM, Sloan MM (1996) The retention and transfer of spermatozoa in clothing by machine washing. Can Soc Forensic Sci J 29:7–11
137. Jobin RM, DeGouffe M (2003) The persistence of seminal constituents on panties after laundering. Significance to investigations of sexual assault. Can Soc Forensic Sci J 36(1):1–10
138. Ruan T, Barash M, Gunn P, Bruce D (2018) Investigation of DNA transfer onto clothing during regular daily activities. Int J Leg Med. 132(4):1035–1042
139. Kulstein G, Schaker U, Wiegand P (2018) Old meets new: comparative examination of conventional and innovative RNA-based methods for body fluid identification of laundered seminal fluid stains after modular extraction of DNA and RNA. Forensic Sci Int Genet 36:130–140
140. Faculty of Forensic and Legal medicine. Forensic Medical Examination form. January 2019. Accessible at www.fflm.ac.uk
141. Royal Society of Edinburgh. Forensic DNA Analysis—A Primer for Courts. November 2018. Accessed: https://royalsociety.org/-/media/about-us/programmes/science-and-law/royal-society-forensic-dna-analysis-primer-for-courts.pdf
142. Benecke M (1997) DNA typing in forensic medicine and in criminal investigations: a current survey. Naturwissenschaften 84:181–188
143. Mannucci A, Sullivan KM, Ivanov PL, Gill P (1994) Forensic application of a rapid and quantitative DNA sex test by amplification of the X–Y homologous gene amelogenin. Int J Leg Med 106:190–193
144. Foreman LA, Evett IW (2001) Statistical analyses to support forensic interpretation for a new ten-locus STR profiling system. Int J Leg Med 114:147–155
145. Gill P (2002) Role of short tandem repeat DNA in forensic casework in the UK—past, present and future perspectives. Biotechniques 32:366–372
146. Werrett DJ (1997) The national database. Forensic Sci Int 88:33–42
147. Hoyle R (1998) The FBI's national database. Biotechnology 16:987
148. Gill P, Sparkes B, Fereday L, Werrett DJ (2000) Report of the European Network of Forensic Science Institutes (ENFSI): formulation and testing of principles to evaluate STR multiplexes. Forensic Sci Int 108:1–29

WIT.0043.0086.0141

149. Bar W, Brinkman B, Budowle B et al (1997) DNA recommendations. Further report of the DNA commission of the ISFH regarding the use of short tandem repeat systems. International Society for Forensic Haemogenetics. Int J Leg Med 110:175–176
150. Olaisen B, Bar W, Brinkmann B et al (1998) DNA recommendations of the international society for forensic genetics. Vox Sang 74:61–63
151. Leriche A et al (1998) Final report of the Interpol Working Party on DNA profiling. Proceedings from the 2nd Eurpoean Symposium on Human Idenitification. Promege Corporation, Innsbruck 1991; pp. 48–54
152. Sinha SK, Budowle B, Arcot SS, Richley SL, Chakraborty R, Jones MD, Wojtkiewicz PW (2003) Development and validation of a multiplexed Y chromosome STR genotyping system Y-PLEX6, for forensic casework. J Forensic Sci 48:93–103
153. Owers R, McDonald A, Montgomerie H, Morse C (2018) A casework study comparing success rates and expectations of detecting male DNA using two different Y-STR multiplexes on vaginal swabs in sexual assault investigations where no semen has been detected. Forensic Sci Int Genet 37:1–5
154. Bender K, Schneider PM, Ritter C (2000) Application of mtDNA sequence analysis in forensic case work for the identification of human remains. Forensic Sci Int 113:103–107
155. Hass C, Klesser B, Maake C, Bar W, Kratzer A (2009) mRNA profiling for body fluid identification by reverse transcriptase endpoint PCR and real time PCR. Forensic Sci Int Genet 3(2):P80–P88
156. Bauer M, Kraus MD, Patzelt MD (1999) Detection of epithelial cells in dried bloodstains by reverse transcriptase- polymerase chain reaction. J Forensic Sci 44(6):1232–1236
157. Rutty G (2002) An investigation into the transference and survivability of human DNA following simulated manual strangulation with consideration of the problem of third party contamination. Int J Leg Med 116:170–173
158. Graham EAM, Rutty GN (2008) Investigation into "Normal" Background DNA on adult necks: implications for DNA profiling of manual strangulation victims. J Forensic Sci 53(5):1074–1082
159. Gill P, Misleading DNA evidence: Reasons for Miscarriages of Justice, Elsevier (2014) as quoted in: Van Oorschot RAH, Szkuta B, Meakin GE, Kokshoorn B, Goray M. DNA transfer in forensic science: a review. Forensic Sci Int Genet 38(2019):140–166
160. Wickenheiser RA (2002) Trace DNA: a review, discussion of theory and applications of transfer of trace quantities of DNA through skin contact. J Forensic Sci 47:442–450
161. Sweet D, Lorente M, Lorente JA, Valenzuela A, Villanueva E (1997) An improved method to recover saliva from human skin: the double swab technique. J Forensic Sci Soc 42:320–322
162. Pang BCM, Cheung BKK (2007) Double swab technique for collecting touched evidence. Leg Med 9:181–184
163. Hanson EK, Ballantyne J (2014) A Y-short tandem repeat specific DNA enhancement strategy to aid the analysis of late reported (≥6 days) sexual assault cases. Med Sci Law. 54(4):209–218
164. Deece K, Sears A, Gunn P, Raymond T. Comparison of swab types and collection methods used for the recovery of biological materials. Presented as a poster at the Australian New Zealand Forensic Science Society Conference 2010.
165. Girardin BW, Faugno DK, Seneski PC, Slaughter L, Whelan M (1997) Care of the sexually assaulted patient. In: Color atlas of sexual assault. Mosby, St. Louis, p 96
166. Lynnerup N, Hjalgrim H (1995) Routine use of ultraviolet light in medicolegal examinations to evaluate stains and skin trauma. Med Sci Law 35:165–168
167. Santucci K, Nelson D, McQuillen K, Duffy S, Linakis J (1999) Wood's lamp utility in the identification of semen. Pediatrics 104(6):1342–1344
168. Jones DN (1963) The task of the Forensic Science Laboratory in the investigation of sexual offences. J Forensic Sci Soc 3:88–93
169. Stoilovic M (1991) Detection of semen and blood stains using Polilight® as a light source. Forensic Sci Int 51:289–296

WIT.0043.0086.0142

170. Nelson DG, Santucci KA (2002) An alternative light source to detect semen. Acad Emerg Med 9:1045–1048
171. Nolan A, Speers Samuel J, Julie M, Brendan C (2018) A pilot study: the effects of repeat washing and fabric type on the detection of seminal fluid and spermatozoa. Forensic Sci Int 289:51–56
172. Pandeshwar P, Das R (2014) Role of oral fluids in DNA investigations. J Forensic Leg Med 22:45–50
173. Casey DG, Price J (2010) The sensitivity and specificity of the RSID saliva kit for the detection of human salivary amylase in the Forensic Science laboratory, Dublin, Ireland. Forensic Sci Int 194:67–71
174. Breathnach M, Moore E (2013) Oral intercourse or secondary transfer? A Bayesian approach of salivary amylase and foreign DNA findings. Forensic Sci Int 229:52–59
175. Sexual Offences Act (2003) http://www.legislation.gov.uk/ukpga/2003/42/contents. Accessed 22 Mar 2019
176. Mader CL (1981) Lingual frenulum ulcer resulting from orogenital sex. J Am Dent Assoc 103:888–890
177. Keating SM, Higgs DF (1994) The detection of amylase on swabs from sexual assault cases. J Forensic Sci Soc 34:89–93
178. Skerlavy M, Epstein JA, Sobrero AJ (1968) Cervical mucus amylase levels in normal menstrual cycles. Fertil Steril 19:726–730
179. Sweet D, Lorente JA, Valenzuela A, Lorente M, Villanueva E (1997) PCR-based DNA typing of saliva stains recovered from human skin. J Forensic Sci Soc 42:447–451
180. Sweet D, Shutler G (1999) Analysis of salivary DNA evidence from a bite mark on a body submerged in water. J Forensic Sci. 44(5):1069–1072
181. Kenna J, Smyth M, McKenna L, Dockery C, McDermott SD (2011) The recovery and persistence of salivary DNA on human skin. J Forensic Sci 56(1). Available online at: interscience.wiley.com
182. Muller C, Vogt S, Goerke R, Kordan A, Weinmann W (2000) Identification of selected psychopharmaceuticals and their metabolites in hair by LC/ESI-CID/MS and LC/MS/MS. Forensic Sci Int 113:415–421
183. Kintz P, Cirimele V, Jamey C, Ludes B (2003) Testing for GHB in hair by GC/MS/ MS after single exposure. Application to document sexual assault. J Forensic Sci 48:195–199
184. Negrusz A, Moore CM, Hinkel KB et al (2001) Deposition of 7-aminoflunitrazepam and flunitrazepam in hair after a single dose of Rohypnol®. J Forensic Sci 46:1–9
185. Guterman L (1998) Nailing the drug rapists. New Sci 160:4
186. Robertson J (2017) Managing the forensic examination of human hairs on contemporary practice. Aust J Forensic Sci 49(3):239–260
187. Ledray L (1993) Evidence collection: an update. J Sex Abuse 2:113–115
188. Young W, Bracken AC, Goddard MAA, Matheson S (1992) The New Hampshire sexual assault medical examination protocol project committee sexual assault: review of a national model protocol for forensic and medical evaluation. Obstet Gynecol 80:878–883
189. Exline DL, Smith FP, Drexler SG (1998) Frequency of pubic hair transfer during sexual intercourse. J Forensic Sci 43:505–508
190. Mann MJ (1990) Hair transfers in sexual assault: a six-year case study. J Forensic Sci Soc 35:951–955
191. Stone IC (1982) Hair and its probative value as evidence. Tex Bar J 45:275–279
192. Riis R (1990) Sexual assault combing evidence. Presented at the NWAFS Meeting. Jackson Hole
193. NSW Police Force; NSW Government Health. Guidelines for the collection of forensic specimens from complainants and suspects. Version 15.1. DOCCFMU01.2018.
194. Wiegand P, Bajanowski T, Brinkmann B (1993) DNA typing of debris from fingernails. Int J Leg Med 106:81–83
195. Gangitano DA et al (2002) Typing of the locus DYS19 from DNA derived from fingernail clippings using PCR concert rapid purification system. J Forensic Sci 47(1):175–177

WIT.0043.0086.0143

196. Lederer T, Betz P, Seidl S (2001) DNA analysis of fingernail debris using different multiplex systems: a case report. Int J Leg Med 114(4-5):263–266
197. Cook O, Dixon L (2007) The prevalence of mixed DNA profiles in fingernail samples taken from individuals in the general population. Forensic Sci Int Genet 1(1):62–68
198. Malsom S et al (2009) The prevalence of mixed DNA profiles in fingernail samples taken from couples who co-habit using autosomal and Y-STRs. Forensic Sci Int Genet 3(2):57–62
199. Ottens R, Taylor D, Linacre A (2015) DNA profiles from fingernails using direct PCR. Forensic Sci Med Pathol 11:99–103
200. Maria N, Michele F, Clint C (2016) New oral cut-off time limits in NSW. J Forensic Leg Med 44:92–97
201. Enos WF, Beyer JC (1978) Spermatozoa in the anal canal and rectum and in the oral cavity of female rape victims. J Forensic Sci Soc 23:231–233
202. Willott GM, Crosse MA (1986) The detection of spermatozoa in the mouth. J Forensic Sci Soc 26:125–128
203. Willott GM, Allard JE (1982) Spermatozoa—their persistence after sexual intercourse. Forensic Sci Int 19:135–154
204. Tucker S et al (1990) Sexual assault evidence collection. Wis Med J 89(7):407–411
205. Janisch S, Meyer H, Germerott T, Albrecht UV, Schulz Y, Debertin AS (2010) Analysis of clinical forensic examination reports on sexual assault. Int J Leg Med 124(3):227–235. PubMed PMID: 20182738. eng
206. Lind W, Carlson D (1995) Recovery of semen from chewing gum in an oral sexual assault. J Forensic Identif 45:280–282
207. Keating SM, Allard JE (1994) What's in a name? Medical samples and scientific evidence in sexual assaults. Med Sci Law 34:187
208. Morgan JA (2008) Comparison of cervical os versus vaginal evidentiary findings during sexual assault exam. J Emerg Nurs. 34(2):102–105
209. Joki-Erkkila M, Tuomisto S, Seppanen M, Huhtala H, Ahola A, Rainio J et al (2014) Clinical forensic sample collection techniques following consensual intercourse in volunteers—cervical canal brush compared to conventional swabs. J Forensic Leg Med 27:50–54
210. Joki-Erkkila M, Tuomisto S, Seppanen M, Huhtala H, Ahola A, Karhunen PJ (2016) Urine specimen collection following consensual intercourse—A forensic evidence collection method for Y-DNA and spermatozoa. J Forensic Leg Med 37:50–54
211. Pollak OJ (1943) Semen and seminal stains. Arch pathol. 35:140–187
212. Davis A, Wilson E (1974) The persistence of seminal constituents in the human vagina. Forensic Sci 3:45–55
213. Graves HCB, Sensabaugh GF, Blake ET (1985) Post-coital detection of a male-specific semen protein: application to the investigation of rape. N Engl J Med 312:338–340
214. Desroches A, Buckle B, Fourney R (2009) Forensic biology evidence screening past and present. Can Soc Forensic Sci 42(2):101–120
215. Allard JE, Baird A, Davidson G, Jones S, Lewis J, McKenna L, Weston C, Scrimger D, Teppett G (2007) A comparison of methods used in the U.K. and Ireland for the extraction and detection of semen on swabs and cloth samples. Sci Justice 47:160–167
216. Pang BCM, Cheung BKK (2007) Identification of human semenogelin in the membrane strip test as an alternative method for the detection of semen. Forensic Sci Int 169(1):27–31
217. Tozzo P, Nespeca P, Spigarolo G, Caenazzo L (2018) The importance of distinguishing menstrual and peripheral blood in forensic casework. a case report. Am J Forensic Med Pathol 39:337–340
218. Nittis M, Stark MM (2014) Evidence based practice: laboratory feedback informs forensic specimen collection in NSW. J Forensic Leg Med 25:38–44
219. Owers R et al (2018) Time since intercourse (TSI) data from a large-scale casework study of penile–vaginal penetration allegations using Sperm Elution TM. Forensic Sci Int 288:10–13
220. Wilson EM (1982) A comparison of the persistence of seminal constituents in the human vagina and cervix. Police Surg 22:44–45

WIT.0043.0086.0144

221. Maria N, Margaret S (2014) Evidence based practice: laboratory feedback informs forensic specimen collection in NSW. J Forensic Leg Med 25:38–44
222. Dziak R, Collins PL, Sarah VJ (2013) Providing evidence-based opinion son time since intercourse (TSI) based on body fluid testing results of internal samples. Can Soc Forensic Sci J. Can be accessed via http://www.tandfonline.com/loi/tcsf20.
223. Tobe Shanan S, Lynn D, Marielle V (2015) An assessment of the subjectivity of sperm scoring. Forensic Sci Int 251:83–86
224. Rogers DJ (2002) Assisting and advising complainants of sexual assault in the family planning setting. J Fam Plann Reprod Health Care 28(3):127–139
225. Christian Cindy W, Lavelle Jane M, De Jong AR, John L, Lewis B, Mark J (2000) Forensic evidence findings in prepubertal victims of sexual assault. Pediatrics. 106(1):100–104
226. Anderson SL, Parker BJ, Bourguignon CM (2008) Changes in genital injury patterns over time in women after consensual intercourse. J Clin Forensic Med 15:306–311
227. Fraser IS, Lahteenmaki P, Elomaa K et al (1999) Variations in vaginal epithelial surface appearance determined by colposcopic inspection in healthy sexually active women. Hum Reprod 14:1974–1978
228. Norvell MK, Benrubi GI, Thompson RJ (1984) Investigations of microtrauma after sexual intercourse. J Reprod Med 29:269–271
229. Lauber AA, Souma ML (1982) Use of toluidine blue for documentation of traumatic intercourse. Obstet Gynecol 60:644–648
230. McCauley J, Gorman RL, Guzinski G (1986) Toluidine blue in the detection of perineal lacerations in pediatric and adolescent sexual abuse victims. Pediatrics 78:1039–1043
231. McCauley J, Guzinski G, Welch R, Gorman R, Osmers F (1987) Toluidine blue in the corroboration of rape in adult victim. Am J Emerg Med 5:105–108
232. Laughon K. Evaluation of a novel fluorescent dye to detect ano-genital injury in women of color. March 2017. Published by US Department of Justice and available through the Office of Justice Programs' National Criminal Justice Reference Centre—Document Number 250666. https://www.ncjrs.gov/App/Search/SearchResults.aspx?txtKeywordSearch=250666&fromSearch=1
233. Kenna J, Smyth M, McKenna L, Dockery C, McDermott S (2011) The recovery and persistence of salivary DNA on human skin. J Forensic Sci 56(1):170–175
234. Ansell R (2002) Secondary transfer of seminal constituents. Can Soc Forensic Sci J 35(1):23–27
235. Allard JE (1997) The collection of data from findings in cases of sexual assault and the significance of spermatozoa on vaginal, anal and oral swabs. Sci Justice 37:99–108
236. Faculty of Forensic and Legal Medicine and Royal College of Paediatrics and Child Health (2010) Guidance for best practice for the management of intimate images that may become evidence in court 2010. Available at Website: http://www.fflm.ac.uk. Accessed 18 Feb 2010
237. Cina SJ, Collins KA, Pettenati MJ, Fitts M (2000) Isolation and identification of female DNA on post-coital penile swabs. Am J Forensic Med Pathol 21:97–100
238. Kaarstadt K, Rohde M, Larsen J, Eriksen B, Thomsen JL (2007) The detection of female DNA from the penis in sexual assault cases. J Forensic Leg Med 14:159–160
239. Farmen Ragne Kristin B, Ingeborg H, Peter R, Froyland Elin S (2012) Assessing the Presence of female DNA on post-coital penile swabs: relevance to the investigation of sexual assault. J Forensic Leg Med 19:386–389
240. Cina Maj Stephen J, Collins Kim A, Matthew F, Pettenati Mark J (2000) Isolation and identification of male and female DNA on a postcoital condom. Arch Pathol Lab Med 124(7):1083
241. Enos W, Conrath T, Byer J (1986) Forensic evaluation of the sexually abused child. Pediatrics 78(3):385–397
242. Tonkin M, Yeap L, Bartle E, Reeder A (2013) The effect of environmental conditions on the persistence of common lubricants on skin for cases of sexual assault. J Forensic Sci 58(S1)
243. Greaves C (1998) Safe sex? Is it so safe? Contact FSS Intern Publication 25:20–21

244. Spencer SE, Kim SY, Kim SB, Schug KA (2011) Matrix-assisted laser desorption/ionization-time of flight-mass spectrometry profiling of trace constituents of condom lubricants in the presence of biological fluids. Forensic Sci Int 207(1-3):19–26
245. Coyle T, Anwar N (2009) A novel approach to condom lubricant analysis: in-situ analysis of swabs by FT-Raman Spectroscopy and its effects on DNA analysis. Sci Justice. 49:32–40
246. McCrone WC, Delly JG (1973) The particles atlas 3:600; 702
247. Blackledge RD, Vincenti M (1994) Identification of polydimethylsiloxane lubricant traces from latex condoms in cases of sexual assault. J Forensic Sci Soc 34:245–256
248. Jansen K (1998) Date rape drugs. Bull Int Assoc Forensic Toxicol 28:18–20
249. Newton M (2013) The forensic aspects of sexual violence. Best Pract Res Clin Obstet Gynaecol. 27(1):77–90
250. Smith DA, Webb LG, Fennell AI, Nathan EA, Bassindale CA, Phillips MA (2014) Early evidence kits in sexual assault: an observational study of spermatozoa detection in urine and other forensic specimens. Forensic Sci Med Pathol. 10(3):336–343
251. Marie Stopes Australia. Accessed via https://www.mariestopes.org.au/your-choices/copper-iud-facts/. on 5th March 2019
252. Mazza D (2017) Ulipristal acetate—an update for Australian GPs. Aust Fam Pract 46(5)
253. Bateson D, McNamee K (2016) Ulipristal acetate—A new oral emergency contraceptive option. Med Today 17(6):63–67
254. Medicine and Healthcare products Regulatory Agency—Levonorgestrel-containing emergency hormonal contraception: advice on interactions with hepatic enzyme inducers and contraceptive efficacy. https://www.gov.uk/...emergency-hormonal-contraceptin-advice-on-interactions–with-hepatic-enzyme-inducers-and-contraceptive-efficacy. Accessed 09 Nov 2017
255. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit (2006) FFPRHC Guidance (aproil 2006) Emergency contraception. J Fam Plann Reprod Health Care 32(2):121–128
256. Allen RH, Goldberg AB (2007) Emergency contraception: a clinical review. Clin Obstet Gynecol 50(4):927–36. PubMed PMID: 17982335. eng.
257. The Australian Immunisation Handbook. 10th edn (updated June 2015); p. 226
258. Leuridan E, Van Damme P (2011) Hepatitis B and the need for a booster dose. Clin Infect Dis 53:68–75
259. Unaids. http://aidsinfo.unaids.org/
260. ANZPID guidelines for Post-Exposure Prophylaxis (PEP) for blood borne viruses in children. Accessed at https://www.asid.net.au/documents/item/1290. Accessed on 24 Apr 2019
261. British Association for Sexual Health and HIV (2015) United Kingdom guideline for the use of post-exposure prophylaxis for HIV following sexual exposure. Available at https://www.bashhguidelines.org/current-guidelines/hiv/post-exposure-prophylaxis-following-sexual-exposure/. Accessed on 24 Apr 2019
262. Home Office (2010) Medical care following sexual assault—guidelines for sexual assault referral centres. Available at Website: http://www.police.homeoffice.gov.uk.org. Accessed 14 Feb 2010
263. Faculty of Forensic & Legal Medicine: Care of Suspects of Sexual Assault in Police Custody. Aug 2018. Accessed at https://fflm.ac.uk/wp-content/uploads/2018/09/Care-of-Suspects-of-Sexual-Assault-in-Police-Custody-FFLM-Aug-2018.pdf
264. Criminal Procedure Rules 2015 (Senior Courts of England and Wales, Magistrates' Courts of England and Wales) Part 1, 1.1 and 1.2
265. Faculty of Forensic and Legal Medicine. The Code of Practice on Expert Evidence; 2018

WIT.0043.0086.0146

Injury Assessment, Documentation, and Interpretation

4

J. Jason Payne-James, Margaret M. Stark, Maria Nittis, and Douglas R. Sheasby

Learning Objectives

Ability to demonstrate accurate documentation of injuries in various forms.

Describe the classification of injuries.

Introduction

One of the most important functions of any healthcare professional (HCP) (doctor, nurse or paramedic) is the ability to assess, document and interpret visible injuries, wounds, cutaneous marks, or scars, which may have been sustained as a result of trauma or violence. Crimes of violence occur worldwide and are manifest in many ways, whether inter-personal, part of armed conflict, civil war, military intervention, accidental, from torture, or terrorism. The incidence of crimes of violence varies from country to country and may be dependent on many different factors, including political upheaval and mass forced migration. For the purpose of this chapter the definition of injury used is [1]:

J. J. Payne-James (✉)
Forensic Healthcare Services Ltd, Southminster, UK

M. M. Stark
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK

M. Nittis
Forensic Medical Unit, Western Sydney Local Health District, Sydney, NSW, Australia

D. R. Sheasby
University of Glasgow, Glasgow, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_4

WIT.0043.0086.0147

damage to any part of the body due to the deliberate or accidental application of mechanical or other traumatic agent.

The latter term would include heat, cold or chemical agents.

In the UK recently there are changes in the lower-volume but higher-harm types of violence, with increases in homicide and offences involving knives and sharp instruments, but decreases in offences involving firearms [2]. Worldwide there is much greater awareness of the issues of cruel, inhuman and degrading treatment and torture(CIDT) in those who are detained in a wide variety of detention settings [3, 4]. HCPs, particularly forensic physicians and forensic pathologists, are often involved in assessments of individuals who have made complaints. This chapter addresses the issues of physical assault and the assessment and documentation of wounds, injuries, cutaneous marks, and scars.

The aim of assessment and documentation is to assist in establishing how the recorded mark, injury, abnormality, or scar has been caused—and this is often the essence of medical evidence in courts and tribunals. The HCP's role may also be to explain the clinical relevance of the absence of visible injury or marks following allegations of assault and trauma. The skills of assessment and documentation are ones that should be within the remit of any doctor (and within the remit of appropriately trained HCPs), but sadly this is now rarely taught in medical schools. Additionally, immediate medical care and treatment may supervene in more serious or life-threatening injury meaning that useful forensic documentation near the time of injury may be lost. The interpretation of the causes of wounds, scars, and injuries should be undertaken by those with specific forensic expertise, as there may be many factors involved in such interpretation [5].

Interpretation requires the best quality evidence, which may include ambulance records, hospital records, operative notes, and photographic images. Increasingly high quality images from a variety of sources including smartphones, body worn video cameras (BWC) and CCTV may be available. As interpretation of wounds, cutaneous marks, scars, and injuries is frequently undertaken by review of documents without physical examination of the patient—for example, using written descriptions, body diagrams, or photographs—it is imperative that the descriptions of what is seen are clear and unambiguous. For example, the word "wound" has specific meaning in certain jurisdictions. In England and Wales it refers to the skin or mucosa being completely breached and there is specific case law for guidance:

- Both the dermis and the epidermis must be broken (*Moriarty v Brooks* (1834) 6 C & P 684).
- A scratch or break to the outer skin is not sufficient if the inner skin remains intact (*McLoughlin* (1838) 8 C & P 635).
- An internal rupture of blood vessels in the victim's eyes will not amount to wounding within s20 (*JCC (A Minor) v Eisenhower* (1984) 78 Cr App R 48).

This definition may affect both the nature of any criminal charge brought and the subsequent sentence if convicted. In many cases the initial examination and

assessment may have been undertaken for purely therapeutic purposes, and the forensic significance of the injuries may not become apparent until many weeks or months later. Scrutiny of the contemporaneous records at a later stage, may reveal serious deficiencies in documentation, which not only undermine the credibility of the individual practitioner, but can also seriously prejudice the legal proceedings. Pediatricians, primary care physicians, gynecologists and emergency medicine specialists are examples of those "non-forensic" practitioners who may treat patients with injuries that may become the subject of argument within court proceedings.

Assessment and Documentation

The key to appropriate assessment and documentation of injury is to apply routine medical processes, which are the taking of an appropriate history from the patient (or complainant/complainer or suspect) and the undertaking of an appropriate physical examination. The findings of the history and examination must be recorded contemporaneously, clearly, and unambiguously. If a case goes to court, all such documentation (e.g. contemporaneous medical notes—handwritten or electronic—including body diagrams) may be reviewed critically by others including doctors, lawyers, judges and juries. Consent for the examination and for subsequent production of a medical report should routinely be sought from the individual being examined. It should also be remembered that false, vexatious, or frivolous accusations of assault are made, and the professional undertaking the assessment should be aware that false allegations and counter allegations do occur which may only become obvious much later. Therefore the 'Gold Standard' for the documentation of injuries includes the following:

- The documentation of injuries clinically by a suitably qualified practitioner in the field of clinical forensic medicine
- Within an agreed timeframe
- There must be clear contemporaneous notes that can be interpreted by other HCPs—the defense expert if necessary
- Supported by body diagrams and photographs
- Expert interpretation as to causation

Limitations

Occasionally, there may be factors that impinge on the quality of the examination. These should be noted and may include:

- Seeing a patient in an unusual site e.g. in a bed in a ward rather than in a dedicated forensic examination suite
- Poor lighting
- Multiple interruptions

- The complainant's emotional status
- The actions of relatives/friends

Key Factors to Consider when Taking a History

Table 4.1 identifies the most important factors which may have relevance in the examination of anyone with injuries and which should be considered when the history is taken from the injured person.

It is important to document the time at which the injury was said to have occurred as the appearance of injury following assault is time-dependent. Assaults may not be reported for days or weeks afterwards. In the case of CIDT or torture, or non-recent child abuse, many years may have passed. In some cases, the only evidence may be fully healed and mature scars. In some cases there may be no evidence. There may be a number of injuries from different incidents at different times. Each injury, cutaneous mark or scar should be considered separately. Specific time frames should be sought for each injury. If more than one type of assault has occurred, clear records must be made of which injury was accounted for by which implement. Document the handedness (left or right or ambidextrous) of both complainant and suspect if known, as this may affect the interpretation of injury causation. Even if it doesn't, recording it shows that it has been considered. Contradictory accounts may be given by different witnesses—it is not the HCP's role to determine which account is necessarily the correct one, but to use medical knowledge applied to the evidence presented to assist the court in determining the true account. In many cases, the medical interpretation is neutral.

Whether an injury is intentional or accidental is difficult to say as there are often no unique features and hence why a global assessment of the patient is required with detailed history and comprehensive examination [6]. Such accounts may also be influenced by the effect of drugs and/or alcohol and it is appropriate to assess the influence that these may have in each case (see Chap. 12). Knowledge of the type of weapon used can be very important when assessing injury as particular implements

Table 4.1 Example of Factors & Questions to Consider When Assessing Injuries

How did you sustain the injury? Use open-ended questions
Weapon or weapons used (is it still available?)
What time was the injury sustained?
Has injury been treated (e.g. glued or sutured)
Are there pre-existing illnesses (e.g. skin disease)
Is regular physical activity a factor (e.g. contact sports)
Are you on regular medication (e.g. anticoagulants, steroids)
Handedness of complainant and suspect
Use of drugs and alcohol (complainant and suspect)
What clothing was worn?

WIT.0043.0086.0150

may cause recognizable, identifiable injuries (e.g. police batons, knuckledusters, footwear). The type of clothing worn (e.g. long sleeved shirts, leather jackets, armless vests) should be noted as these may modify the expected nature of the injury. It should be noted if there was damage to clothing at the time of the assault. When examining any individual for injury, all these features should at least be considered to see whether they may have relevance to the case. Additional features may assume significance as the examination progresses, or as other accounts of any assault are given, or additional forensic evidence becomes available at a later date. Ensure that a full body examination is performed or at least offered as there may be injuries underneath clothing that the patient is unaware of.

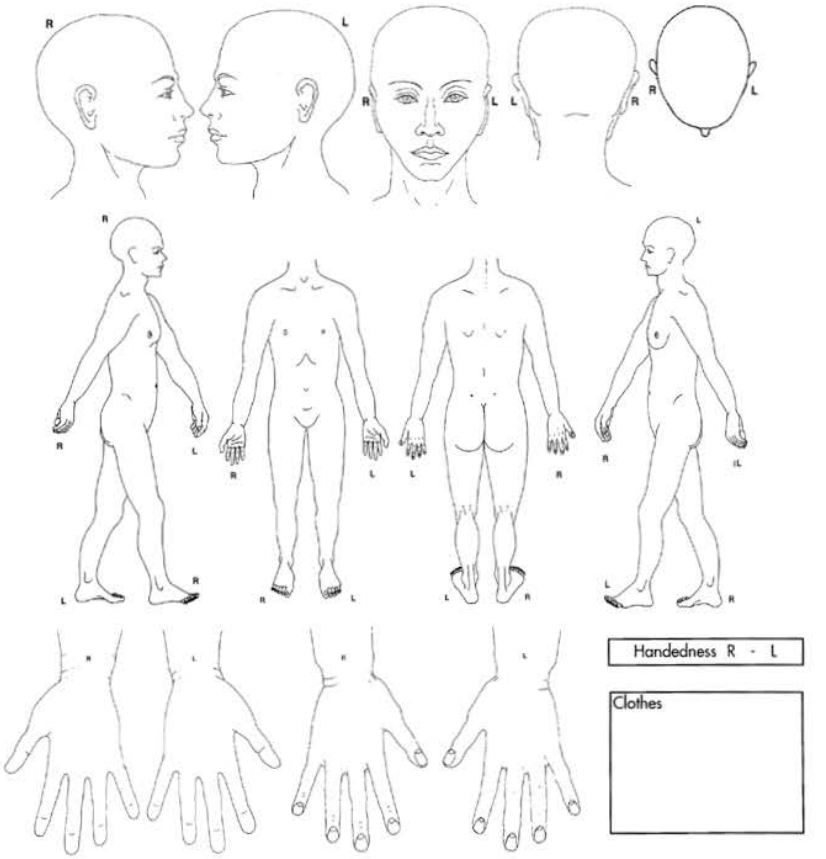
Actual documentation of injuries can be in a variety of formats, including written descriptions, hand-drawn notes, annotated proforma body diagrams, photographic or moving images. Figure 4.1 illustrates examples of a body diagram and note proforma. Table 4.2 lists the characteristics of each injury that may be needed for appropriate documentation.

Forensic Imaging

> *The notion that a line drawing of injury by one examiner compares equally to a photograph that can be peer reviewed by others, is highly irrational, given the standards of evidence based medicine…It is potentially an injustice to a victim not to offer the option of photo-documentation, just as it is equally a potential injustice to the defendant, who has the same right to expect the capture of all possible evidence that may influence the outcome of the case against them* [7].

Forensic photography has one primary purpose and that is documentation of clinical findings. Digital photographic images have now become a common way of documenting injury, but the digital image evidence should only support the evidence from properly documented contemporaneous written descriptions and hand-drawn notes [8, 9]. Photographic images should rarely be used as a sole source of medical evidence. The Faculty of Forensic & Legal Medicine of the Royal College of Physicians (FFLM) has produced guidelines on such photography [10]. Apps are now available on smartphones and tablets that can allow documentation of injury, body diagram production, and photographic documentation, which accurately geolocates and times the examination and outputs an editable document (e.g. ForensiDoc®). Ensure that, at the time of examination, the patient is given an opportunity to explain how the injury occurred. Consider whether the injury seems consistent with this explanation. If an injury does not seem consistent with the account given, question it at the time, without leading the patient. In many cases individuals who have been involved in fights or violent incidents are simply unaware of the causation of many sites of injury. Re-examination of injuries or sites of injury 24–48 h after initial assessment is of use to see how injuries evolve and whether bruises have appeared, or other sites of injury noted. Pre- and post-treatment examination and photography is often very useful. Photographs should be taken with a scale/rule and consideration should be given to using a color scale

WIT.0043.0086.0151



Handedness R - L

Clothes

No other injuries observed or complained of ☐ Time of injury ☐ Time of photographs ☐

Samples taken:

.../1-	at	h	.../4-	at	h	.../7-	at	h
.../2-	at	h	.../5-	at	h	.../8-	at	h
.../3-	at	h	.../6-	at	h	.../9-	at	h

Additional samples:.....

Given to.....**at**.....**h**

I consent* to a full examination and/or taking of samples and/or taking of photographs for educational purposes including publication in scientific & medical journals, books and all other media including electronic and am aware that formal reports/statements may be prepared from these notes for police, court and other purposes, and I consent to such reports/statements being made:

*** delete as appropriate**

Name ..... Witness *(name and signature)*

Signed ....

©2001 – JJ Payne-James & IJ Wall

Fig. 4.1 Examples of a body diagram and note proforma

WIT.0043.0086.0152

Subject Name .....
Examiner Name .....
Date of Examination .....
Time of Examination .....
Reference Number .....

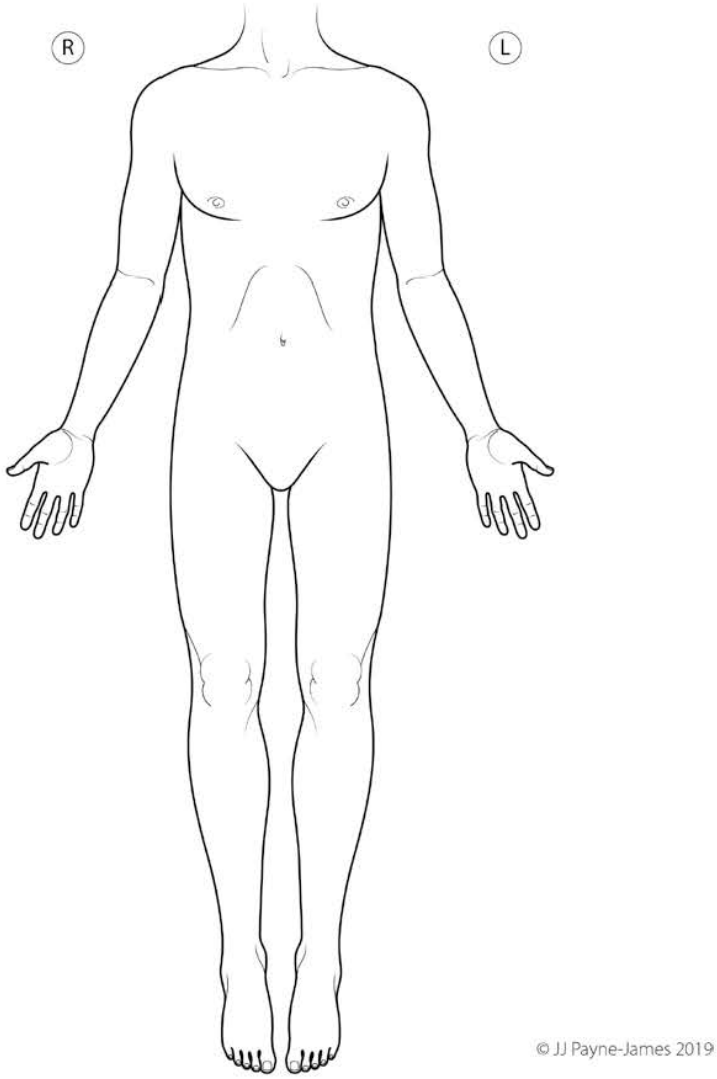
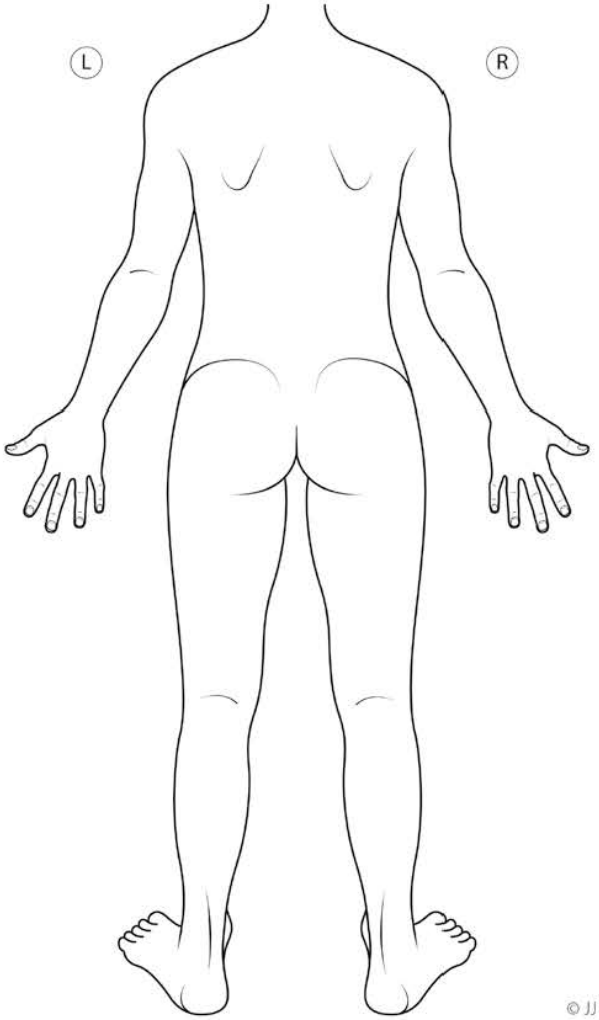


Fig. 4.1 (continued)

WIT.0043.0086.0153

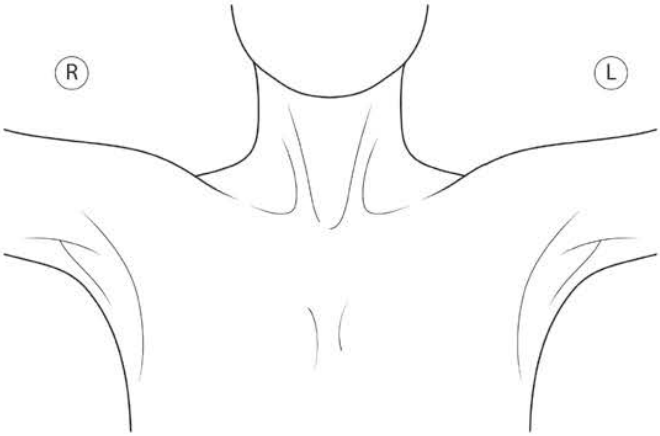
Subject Name .....
Examiner Name .....
Date of Examination .....
Time of Examination .....
Reference Number .....



© JJ Payne-James 2019

Fig. 4.1 (continued)

Subject Name .....
Examiner Name .....
Date of Examination .....
Time of Examination .....
Reference Number .....



© JJ Payne-James 2019

Fig. 4.1 (continued)

Forensic Medical Assessment (this is not a statement/report for court) Reference #

Forename Family Name Consent XM St

Reason for XM: Detain Interview Charge Other Mental Health Sexual

Location Date Arrival Start XM Finish XM Chaperone

Date of Birth Employment Marital Status Ethnicity

Address Alleged Offence

History	Risk Assessment	Education/Family/Social/Development
R /Allergies /Sickle cell	Cell/Examination Room	First language/country of origin/interpreter
PMH/PSH/Assault		Drugs/alcohol/cigarettes
PPH/Self Harm		Drugs (within 24h)
PGH		Alcohol (within 24h)
Injuries - restraint – assault – police		

Demeanour	Appearance	Gait	Speech	Orientation:	Time Location Reason
CVS BP S/D	Temperature	Mental state Behaviour			
		Mood		Previously Assessed (Y/N)	
RS	Glucose	Speech (form)		Previous Arrest Information (Y/N)	
		Thought Content		Summary Care Record (or equivalent (Y/N)	
AS	O_2	Auditory/Visual Hallucinations			
NS		Abnormal Beliefs/Experiences			
		Delusions			
Scars/DF	GCS KO	MMSE Score			
Skin		Substances			
		Nystagmus		Gooseflesh	
		FN		Needletracks	
		FF		Rhinorrhea	
Vision		Rombergism (30 sec)		Lacrimation	
		OL		Yawning	
		HT		Pupils	
		RD		Other	
		Sweating		Nausea/vomiting	
		Tremor		Alcohol	

Summary/ Management

Risk: Raised Standard

CCTV (Y/N) L 1 2 3 4

(Boxes and headings are for guidance only and need not be filled in or completed) © JJPayne-James 2019

Fig. 4.1 (continued)

WIT.0043.0086.0156

Table 4.2 Potential relevant information required when assessing injury

Location
Pain
Tenderness
Limitation of movement
Type of injury (e.g. bruise, incised wound, abrasion)
Size (use metric values and rules or scales with color chart e.g. Forensigraph®)
Shape
Color
Orientation
Age
Causation
Handedness
Time of injury causation

(e.g. ForensiGraph®). The color of an injury rarely provides much useful forensic information.

Secondary purposes for photo-documentation may include, amongst others:

- An aide-memoire for the examiner
- Review by peer, mentor or colleague
- Evidence for court
- Evidence to assist in the investigation of a crime
- Teaching and education
- Research
- Assessment of injury healing/change over time

Photo-documentation is an important tool in the production of factually based clinical conclusions (see below). When an HCP is required to document an injury, it should be completed in the most comprehensive manner possible, within limits imposed by patient consent and legislation. A digital SLR (DSLR) camera is the best device for taking high quality images. Consideration should be given to purchasing a camera that can be readily serviced and has compatibility with available equipment (lenses, electronic flash etc.).

A dedicated camera for the purpose of photo-documentation of injuries is suggested. Capture of images using a phone or tablet is not recommended. Although the images from these devices may 'look good', there can be issues that make reliable interpretation of the image technically difficult particularly due to image distortion in the absence of rules and scales. Furthermore, images captured on mobile devices have significant security consequences that could damage patient confidentiality and may breach organization policy.

It is vital that training on how to use the camera has been undertaken. All cameras will have their own specific characteristics and features and examiners need to be familiar with how to turn it on, where batteries are stored/charged and how they are inserted, how to go back to original settings or default (in case someone has

WIT.0043.0086.0157

inadvertently made changes), how to operate the flash, how to review the images, how to interpret exposure histograms, how to delete photos and how to download them etc. It is also critical that the settings in the menu are appropriate for the shooting conditions, including the color temperature of the light source (white balance setting).

Photo-documentation should not be attempted until guidelines, procedures and/or policies are in place. These should address the following issues:

- The type of camera and lens that is being used and appropriate settings
- Storage of the camera, battery, flash and lenses
- The correct date and time is set on the camera (for obvious reasons relating to court evidence)
- Digital storage of resultant images
- Review of images by examiners and how this is going to occur
- Transmission of images e.g. to the Court, Police, Prosecution, Defense, Examiner, Reviewer
- Guidelines re: retention of or destruction of images
- Consent of the patient
- The need to record, within a person's medical record (if appropriate) or within an Expert Certificate or Statement, that photographs have been taken.
- Ownership of images (do they belong to a Health, Justice, Police organization, the patient or to the examiner)
- Handling of sensitive images (e.g. ano-genital or breast) [11]

An examiner should also give some thought as to how these images will be presented in court. Ideally, if used they should be presented to the trier of fact in their original digital format as this will provide an image with the most information and detail. Most commonly, photographs are printed out on non-photographic paper and scanned. This will reduce detail to such an extent, in some cases, that the injury may not be recognizable.

Occasionally an examiner might be asked to provide an opinion on an injury from photographs alone, not having the opportunity to examine the patient personally. In these cases, it might be wise to consider the following:

- Providing a disclaimer as to the limitation of injury interpretation from photographs alone.
- Refraining from any comment about color, especially if there is no inclusion of a color reference card.
- Refraining from any comment with regards to specific size unless a scale with cross hairs has been included, the cross hairs are equal in size and the scale is adjacent to and on the same plane as the injury. Comment about approximate sizes might still be reasonable.
- Be extremely careful when commenting on photographs that have been provided in any format other than their original digital format. This includes photographs that have been converted to a PDF, scanned, printed, photographed from a computer screen or sent in a reduced size format. Comment might still be possible

WIT.0043.0086.0158

but it is often worthwhile noting the less than ideal image format that has been provided.

It is recommended that an examiner consults an expert in forensic photography before submitting or providing any written or oral opinions when made directly from photographic sources.

Types of Injury

Any practitioner who is involved in assessment of injury for court purposes must understand the range of terms that can be applied to different injuries. It is essential to have a consistent system of description that ensures that the nature of each injury is understood clearly, reproducibly, and unambiguously in note form—utilizing accepted terms of classification. The confusing assortment of terms used by doctors and other healthcare professionals often results in problems in court. The classic example (for good reasons) is the inappropriate or inaccurate use of the term "laceration" to describe a cut which can, if applied incorrectly, potentially alter the causation of a wound from one caused by a sharp instrument such as a knife, to a blunt impact such as a punch. This may have substantial impact on the charge applied and the sentence if convicted [12]. For medicolegal purposes, a standard nomenclature must be adopted when describing injuries. Although there are a number of classifications of injuries in papers and other textbooks, the classification shown in Table 4.3, is simple and clear and most injuries can be classified in this way. These injury types are expanded on below.

Inflicted injury (whether deliberate/intentional or accidental) may be divided into two main types—blunt impact (or blunt force or blunt contact injury) and sharp implement injury. Blunt injury simply describes injury not caused by instruments or objects with cutting edges. Blunt force injury can be caused in many ways, both direct (e.g. punch or kick) and indirect (e.g. by traction, torsion, and shear stresses) [13]. Injury is caused by impact with the object, either while moving towards or away from it. It is very important to understand the nature of the blunt force and there are many studies that illustrate the varied nature of blunt forces and physical settings in which blunt force can be sustained [14–18]. Examples of objects that can cause blunt impact injuries include fists, feet, baseball bats, impact rounds and police batons. Blunt force injuries are dependent on a number of factors including force, location (underlying organs or structures), and impacting surface. They can cause a range of symptoms and signs which range from no visible evidence of injury, to tenderness (pain on pressure at the site of contact), or pain at the site of contacts, reddening, swelling, bruising, abrasions, lacerations, and broken bones. There may be internal hollow and solid organ damage. Each type of injury may be present alone or in combination (a mixed type injury). Such injuries are generally seen at the point of contact of impacting object on the body, but if there are shearing forces injury may be sustained also away from the site of apparent contact. Forces applied to one point of the body may cause

WIT.0043.0086.0159

Table 4.3 Classification of injuries

Wheals and erythema (reddening)
Bruises (sometimes referred to as contusion, ecchymosis)
Hematoma (a fluctuant collection of liquid blood)
Petechiae (small hemorrhages)
Abrasions
Grazes scuff/brush abrasions
Linear abrasions, point abrasion
Lacerations
Incisions
Slash
Chop
Stab
Firearms
Burns
Thermal (heat and cold)
Chemical, radiation, electrical

injury to another site e.g. as might occur when the brain moves within the skull cavity resulting in a contra-coup brain injury. Bruises may migrate away from the point of contact by gravity after a period of time or track down ligamentous sheaths and through tissue planes. Abrasions give a clear indication of the actual site of impact, whilst bruises may not necessarily indicate the site of the impacting object.

The appearance or pattern of an injury or mark may indicate whether a particular implement or type of implement was used (e.g. a police baton with a distinctive tip outline), or a cluster of injuries may suggest a mechanism (e.g. a hand grip). The amount of force used to create an injury is influenced by many variables (most of which are unknown) e.g. moving towards the offender, moving away from the offender, force applied to a limb that is fixed in position (e.g. head against a wall) so there is no dissipation of energy, force to skin where underlying bone is close to the surface, clothing worn, implement used. The estimate of force used is fraught with difficulty and liable to be interpreted by the trier of fact as an indication of the level of intent to do harm.

A blow to the side of the head from, e.g. an open-handed slap across the ear, may result in rupture of the tympanic membrane and so examination of the ear and external auditory canal should be performed. Symptoms may include pain, bleeding, hearing loss, tinnitus, and vertigo. Many blunt contact injuries may cause initial pain and discomfort—which resolve within a few minutes, and tenderness—which may still be elicited hours or days later—with no visible sign of injury. Absence of visible injury does not imply that no assault or injury has taken place.

Sharp injuries are those caused by any implement with cutting edges (e.g. knives, scissors, glass, razor blades). The incised wounds that result may be variable with the cutting edge running tangentially to the skin surface, cutting through skin and deeper anatomical structures; or where the sharp edge penetrates the skin into deeper structures.

WIT.0043.0086.0160

The forces required to cause sharp injuries and the effect of such injuries are variable as a very sharp pointed object may penetrate vital structures with less force than a non-sharp object. In general, even with sharp implements, at least moderate force is required to penetrate skin, which is very robust. The force may occasionally occur from the victim who runs towards or falls into a sharp object held stationary by an offender. Generally, the skin offers most resistance to penetration (with the exception of bone and cartilage). The less sharp the object, the higher the likelihood of a mixed type injury (has both blunt and sharp force features), see Table 4.4 e.g. chop type injuries from weapons such as machetes or Samurai swords or axes [19–23] (Table 4.5).

Force of Injury

In considering the force required to cause an injury - force must have been applied but as to how much force it is not possible to determine accurately [24]. The amount of force varies directly with the mass of the weapon and directly with the square of the velocity of impact. This is again dependent on a number of factors including the area over which the force is applied, the duration and direction of application, mobility of the body part, biomechanical properties of the tissue hit, and the anticipation and co-ordination of the person hit [25].

Table 4.4 Features of certain incised wound/penetrating injuries

• Scissors will produce a variety of wounds depending on design and whether open or closed at the time of injury.
• Glassing (or bottling)—numerous incised wounds of varying shapes, sizes and depths. It may also cause a mixed type injury with features of both sharp force injury (from broken glass) and blunt force injury (from contact with the bottle before it breaks)
• Meat forks—abraded if the shaft is blunt, the distance between the two puncture sites may not correlate with measurements of the fork due to skin movement and the curvature of many skin surfaces.
• Screw driver—abraded edges due to skin being pulled down into the wound (the screw driver being relatively blunt)

Table 4.5 Comparative typical features of lacerations and incisions

Laceration	Incision
Wound margins may be: Ragged Crushed Abraded Inverted Bruised Foreign material may be found Bridging strands may be seen (undivided tissue that stretches across the wound)	Wound margins may be: Clean Regular Not crushed Usually not abraded Everted Usually not bruised

WIT.0043.0086.0161

Transient Lesions

Redness and wheals are non-permanent, transient signs that might follow trauma.

Wheals, are caused by initial vasodilatation and local release of vasoactive peptides following an injury such as a slap, scratch, or punch, which will leave no mark after a few hours. The classic features of the triple reaction are present (redness, pain and swelling), but no specific damage is done to any tissues. Thus, reddening associated with pain with possible subsequent development of local swelling may be present initially—but after a few hours may have resolved, unlike bruising which will still be present 24 or more hours after it first appears. Reddening caused by vasodilation can be distinguished from bruising by applying finger pressure—bruises do not blanch on finger pressure. Such injuries are non-specific. Although it is important to record whether these features are present, it must be borne in mind that there may also be non-traumatic causes for these lesions (e.g. eczema/dermatitis, psoriasis, impetigo). Red marks outlining an apparent injury, for example, the imprint of a hand on the slapped face or buttock of a child, should be photographed immediately as such images may fade within an hour or so and leave no residual marks.

Size and Shape of the Injury

The size of an injury should always be recorded in centimetres (and if photographed a rule & color chart (ForensiGraph® - www.forensigraph.com) should be used). There are still three countries in the world, however, that continue to use the Imperial system (inches not centimeters): Liberia, Myanmar and the United States of America).The general shape of the wound should also be described; simple terms such as circular, triangular, V-shaped, or crescentic are useful, but if the wound shape is irregular or complex then it is possibly easier to record this feature on a body chart and a photo. Wounds also may have depth, but it is not always possible to determine wound depth accurately (or often, at all) in the living unless some other form of imaging (e.g. ultrasound, CT or MRI) modality was used. If the person who has sustained the injury is being operated on it should be possible for the operating surgeons to record direction and depth of penetration, if asked specifically, and if possible to take pre-operative images of the surface wounds. Alternatively, an HCP might ask permission of the surgeon (with patient consent) to be present in the operating theatre to assist with the taking of images.

Position of the Injury

Location of an injury is best done by relating it to fixed anatomic landmarks. On the head, one can use the eyes, ears, nose, and mouth, on the neck the prominence of the thyroid cartilage and the sternocleidomastoid muscles, and on the trunk the nipples, umbilicus, and bony prominences can be used as points of reference. The advantages of using simple anatomic diagrams and body charts for locating the injury are

WIT.0043.0086.0162

self-evident. It is a simple process to record the position of an injury accurately, yet when medical records are reviewed it is common to find little or no indication of precise site of injury.

Ageing Injuries

Identifying a specific time, or time frame, for the infliction of an injury is one of the most frequently asked and possibly least frequently satisfactorily answered questions in forensic practice. It is very important to manage the expectations of those asking the questions. For most unwitnessed injuries, it is not possible to precisely time or date when injuries were caused. Injuries inflicted shortly before examination (in both living and deceased) will show no clinical or pathological evidence of healing. The physiological healing process (whether of blunt or sharp force injury) depends on a number of variables including the site of injury, the force applied, the severity of tissue damage, infection, and previous treatment. These can all make assessment of the age of a wound difficult. Bruises often become more prominent some hours or even days after infliction because of diffusion of blood closer to the skin surface; on occasion, a recent deep bruise may be mistaken for an older, more superficial lesion.

Bruises resolve over a variable period ranging from days to weeks; the larger the bruise the longer it will take to disappear. The colors of a bruise can include (dependent on the examiner) blue, mauve, purple, brown, green, and yellow—and all tints and hues associated with these. Many bruises exhibit multiple colors. The key study [26] which looked prospectively at bruise evolution by color showed that a bruise with a bright yellow color was likely to be more than 18 h old (although the study relied on assessment from photographs and limited patient numbers). The ability of a person to accurately perceive the color yellow diminishes with age [27]. The colors red, blue, and purple/black can occur anytime within 1 h of bruising to resolution (up to 21 days in the study) [26].

Early appearance of a bruise depends on the escape of hemoglobin containing erythrocytes from blood vessels into the tissue and depth within the skin at which this occurs.

The presence of hemoglobin near the surface of the skin may appear red while it may appear blue deeper in the tissue. This is thought to be the result of "*Rayleigh scattering, absorption coefficients of the skin and interpretation by the visual system*" [28]. Once blood is released, neutrophils and then macrophages breakdown red blood cells, splitting hemoglobin into biliverdin (green pigment). Biliverdin is rapidly converted to bilirubin (yellow pigment). Release of carbon monoxide during this process may make bruises brighter red. This would indicate that coloration of bruises and the progress and change of color patterns cannot be used to time the injury.

Studies show that estimation of bruise age from color photographs is also imprecise and should not be relied upon—as the color values are not accurate [29]. This is supported by another study [30] which identified great inter-observer variability in color matching both in vivo and in photographic reproductions. Other

WIT.0043.0086.0163

Table 4.6 Key points regarding ageing of injuries

Ageing is not precise and may be influenced by:
• Extent and nature of the injury
• Health of the individual
• Post-injury wound care and treatment
• Early changes may include bleeding, swelling
• Reddened margin, scab formation 12–24 h
• Granulation tissue 24–72 h
• 3 weeks onwards healing with scar formation

information (e.g. a witnessed blow) is the only way of reliably timing a bruise. Studies show that in children, no evidential value for aging of bruises should be put on color [31] and this principle realistically is also applicable to adults. Animal studies have shown that histological evaluation of two bruises from a pig with multiple lesions was found insufficient to assess the overall age of the lesions as substantial variation in the inflammatory response between bruises was present [32].

Abrasions sustained during life are usually red–brown in color and exude serum and blood, which harden to form a scab. This scab organizes over a few days, before detaching to leave a pink, often intact surface. This process may be modified by accidental knocking of scabs, picking, scratching at the scab site. In the absence of medical intervention, lacerations tend to heal with scarring, usually over a period of days or weeks, whereas incisions, the edges of which are often apposed, heal within a few days although some may scar badly (Table 4.6).

In providing a conclusion/opinion regarding injuries the Istanbul protocol hierarchy of consistency can be very useful in court [33]:

- **Not consistent**: could not have been caused by the trauma described;
- **Consistent with**: the lesion could have been caused by the trauma described but it is non-specific and there are many other possible causes;
- **Highly consistent**: the lesion could have been caused by the trauma described and there are few other possible causes;
- **Typical of**: this is an appearance that is usually found with this type of trauma; and.
- **Diagnostic of**: this appearance could not have been caused in any way other than that described.

Types of Injury

Bruises

Definition

Bruising is the visible evidence of leakage of blood into soft tissues as a result of injury to blood vessels. Ecchymosis and contusion are terms that have been used variously to describe different sizes of injury, but do not enhance understanding of either causation or mechanism of injury and should no longer be used—although contusion is still used frequently by clinicians to simply describe blood leakage from damaged blood vessels in internal organs such as the brain. Hematoma should be used to refer

WIT.0043.0086.0164

to a collection of liquid blood forming a fluctuant mass under the skin. The difference between that and a standard "bruise" is that a hematoma may be capable of being aspirated by needle—in the same way as a collection of pus from an abscess.

Bruising is caused when an impact damages blood vessels such that blood leaks into the perivascular tissues and is evident on the skin surface (or organ) as discoloration. In some cases, although blood vessels may be damaged, there may be no visible evidence on the skin. In certain cases, it may take hours or days for any bruise to become apparent (as the blood diffuses through damaged tissue, or along tissue planes). The blunt force ruptures small blood vessels beneath the intact skin, and blood then escapes to infiltrate the surrounding subcutaneous tissues under the pumping action of the heart (Fig. 4.2). Thus, theoretically at least, bruising is not produced after death. In fact, severe blows inflicted after death may cause some degree of bruising, although this is usually only slight. Bruises may be associated with other visible evidence of injury such as abrasions, lacerations and fractures, and these lesions may obscure the underlying bruise.

Bruises vary in severity according to the site and nature of the tissue struck, even when the force of the impact is the same. For example, a moderate blow may produce bruising associated with soft tissue swelling—for example a black eye. There are, however, other causes for black eyes, including a direct blow to the forehead or nose (even with no direct impact to the eye region itself) with blood from damaged scalp tracking down over the supraorbital ridge or a fracture of the base of the skull allowing blood to traverse the orbital roof manifesting itself as a black eye (see Fig. 4.3).

Bruises can enlarge and evolve (in terms of shape and position) over a variable period of time, affected by both movement and gravity, which can be misleading as to the actual site of original injury. Further difficulties arise if a bruise, as it extends, tracks along tissue planes from an invisible to a visible location. There are a number of other factors to consider in the forensic interpretation of bruises (see Table 4.7). Bruising of this kind may not become apparent externally for some time and then at a point some distance from the site of the original impact. This delay in the appearance of bruising is of considerable significance since absence of apparent injury at an initial examination is not necessarily inconsistent with bruising becoming apparent 24–48 h later. It is often advisable to conduct a further examination a day or so later and to get sequential photographs. A variety of photographic techniques have been used to try and enhance the visualization of bruises, or identify previous blunt force not visible to the naked eye, but none have a strong or compelling evidence base [34], with conventional and cross-polarized being superior to ultraviolet or infrared.

Also consider:

- Site of trauma (tissue vascularity, near to bone, type & texture of tissues)
- Condition of tissues (elderly, infants)
- Treatment post injury (reduce swelling with elevation)
- Time since alleged injury
- Skin pigmentation—darker skin may be difficult to see the entire bruise/pale skin more likely to see entire bruise

Many bruises (unless patterned or in groups) are nonspecific injuries, and it is usually not possible to offer any detailed opinions on the agent responsible. Some

WIT.0043.0086.0165

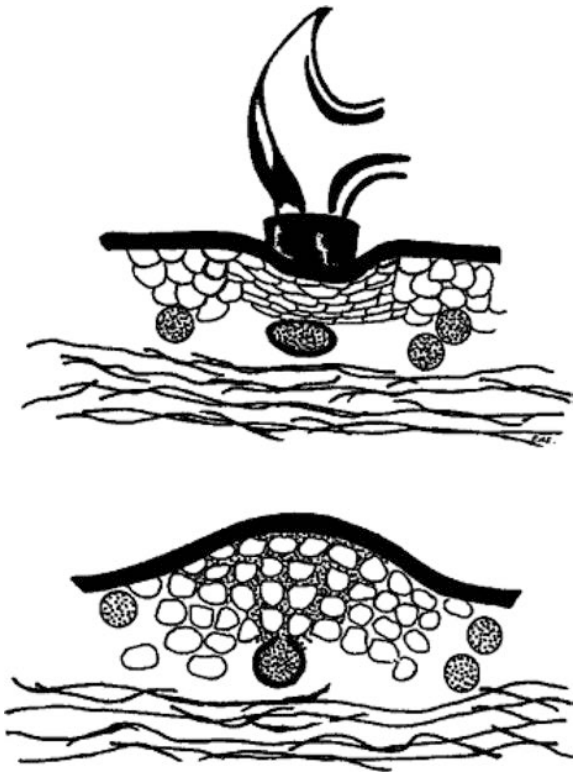


Fig. 4.2 Diagrammatic representation of how bruises are caused

bruises, however, may have a pattern (a patterned bruise), or because of their shape, size or location may have particular significance.

Types of patterned bruising:

Petechiae:	Small intradermal hemorrhages<3 mm diameter, that do not blanch with pressure. Often seen as part of a suction injury or strangulation but have been identified in over 70 reported medical conditions
Tramline:	Patterned bruising that occurs when an object impacts skin with sufficient intensity as to force blood out from the underlying blood vessels (at the site of impact) forming a bruise in the rough outline of the impacting object and either an area of sparing (non-bruising) on the skin centrally or bruising of a different color
Fingertip' bruises:	A collection of round/oval bruises, often 1—2 cm in size e.g. over the inner upper aspect of the arms and inner upper aspect of thighs. These may be suspicious of fingertip bruising which is generally caused by the pressure exerted from the fingers or thumb when grasping someone, prodding or poking with the fingers, or the firm impact of a knuckle. They may be seen on the limbs or on the abdomen when the victim is poked, prodded, or punched. Such injuries may also be seen after restraint, when an elderly person has been helped up by gripping the upper arms after a fall, or as a result of transporting a patient into an ambulance, for example. Questions often asked in courts include 'are these adult hands or fingers', and 'was the person left or right handed'. In general there is no possibility of being sure.

WIT.0043.0086.0166

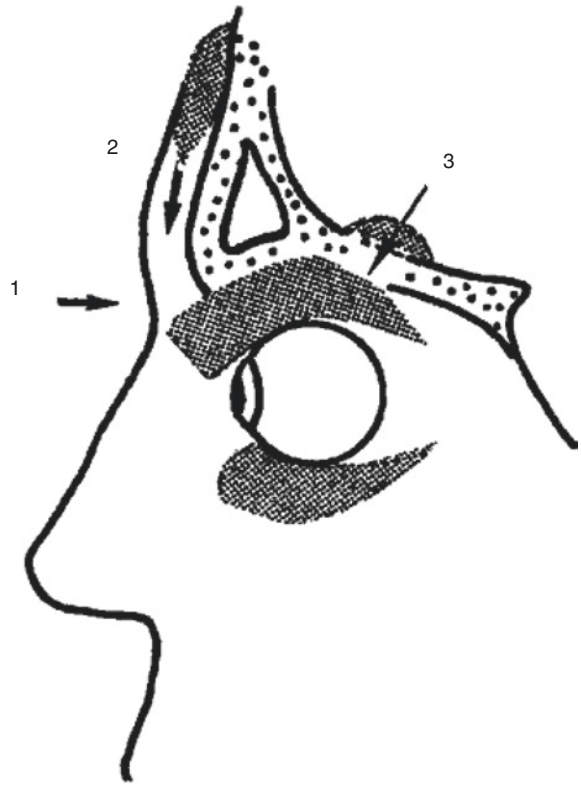


Fig. 4.3 Production of a black eye. (1) Direct blow to the orbit. (2) Injury to the front of the scalp. (3) Fracture of base of skull

Bite marks:	Typically present as a semi-circular injury which comprises two separate arcs (from upper and lower teeth) with a central area absent of injury or with a diffuse bruise present. It is not unusual to see only one arch and, if this is the case, it is usually the lower teeth. This is due to the mechanics of biting where the maxilla generally remains fixed while the mandible moves until the teeth meet. It should be noted that the "classic" bite mark is rare as the victim tends to try and pull away when it occurs.

Anatomical Location

Some bruises may have more significance by virtue of their anatomical location e.g. the neck, abdomen and buttock. Bruising at these sites is less common because the underlying bony structures are not in close proximity to the overlying skin. It would suggest, therefore, that a reasonable amount of force might have been needed to damage any blood vessels between the site of impact and the underlying bone. Accidental bruising that occurs over the inner upper thigh or inner upper arm

WIT.0043.0086.0167

Table 4.7 Some factors to consider in the forensic interpretation of bruising

Cultural practices:	e.g. suction cups and from coining
Issues with clotting (hereditary):	e.g. Haemophilia, Von Willebrand's
Issues with clotting (acquired):	e.g. Idiopathic Thrombocytopenia, Malignancy, Vitamin K deficiency, alcohol (dependency)
Medications	e.g. Salicylate (Aspirin), Warfarin (anticoagulants), NSAIDs, steroids
Herbs	e.g. Gingko biloba, ginseng, glycosamine, turmeric, angelica, clove, large quantities of garlic, saw palmetto, willow bark which can thin the blood slightly
Diseases:	e.g. Liver disease, high blood pressure)
Connective Tissue Disorders:	e.g. Ehlers Danlos syndromes, Epidermolysis Bullosa
Hypersensitivity:	e.g. Phytophotodermatitis, Stevens Johnson syndrome
Increased valsalva or intra-abdominal pressure	e.g. coughing, vomiting
Dermatitis	e.g. Lichen sclerosis
Infection	e.g. DIC, Meningococcaemia
Others	e.g. Henoch Schönlein Purpura
Excessive exercise:	e.g. in athletes and weight lifters (due to microscopic tears in blood vessels)

is less common because of the relatively protected nature of these sites. For example, the inner upper arm is normally a relatively protected area making accidental injury less likely compared with the front, back and outer aspects of the upper arm which are more exposed. In children, non-accidental injuries (see Chap. 5) must be differentiated from bruises seen on toddlers and children associated with "normal" activities, play, or sports [31].

Abrasions

Definition

An abrasion is usually a superficial injury that occurs as the result of pressure and movement (see Fig. 4.4). If deep enough to exude serum, the injury is progressively covered by a scab. Abrasions may also bleed as occasionally they are deep enough to breach the vascular papillae that corrugate the undersurface of the epidermis in which case frank bleeding may be present at an early stage.

Brush/Scuff abrasion: Very superficial abrasion with barely any damage to the skin and little or no exudation of serum (and thus no or little scab formation).

Abrasions can be further sub-categorized in the following ways:

Linear abrasions: scratches, can be caused by fingernails across the surface of the skin or pointed non-cutting objects The finer the object (edge of paper as in a paper cut) or the sharper the point (e.g. a broken nail, knife tip, broken glass) the narrower the linear abrasion is likely to be. The latter can also be referred to as "point abrasions".

WIT.0043.0086.0168

Graze/tangential abrasions: These are non-linear abrasions (where broader areas of skin have been involved). There may be some suggestion of direction of the object used to cause the abrasion (directional graze abrasion) or there may be no obvious direction (non-directional graze abrasion). Elevation of parts of the superficial epidermis to one end, may help differentiate the direction of travel of the opposing surface i.e. horizontal or verticalor it may be possible to infer that the victim had been dragged over a rough surface.

Crush abrasion: where the impact has been applied vertical to the skin, may see imprint of impacting object on surface of the skin. It may be patterned.

Consider the causation for each sub-category and the presence of possible evidence or soiling within the abrasion. Some abrasions may be contaminated with foreign material such as dirt or glass, which may have important medicolegal significance. Such material should be carefully preserved for subsequent forensic analysis. In such cases, consultation with a forensic scientist can ensure the best means of evidence collection and preservation (Fig. 4.4).

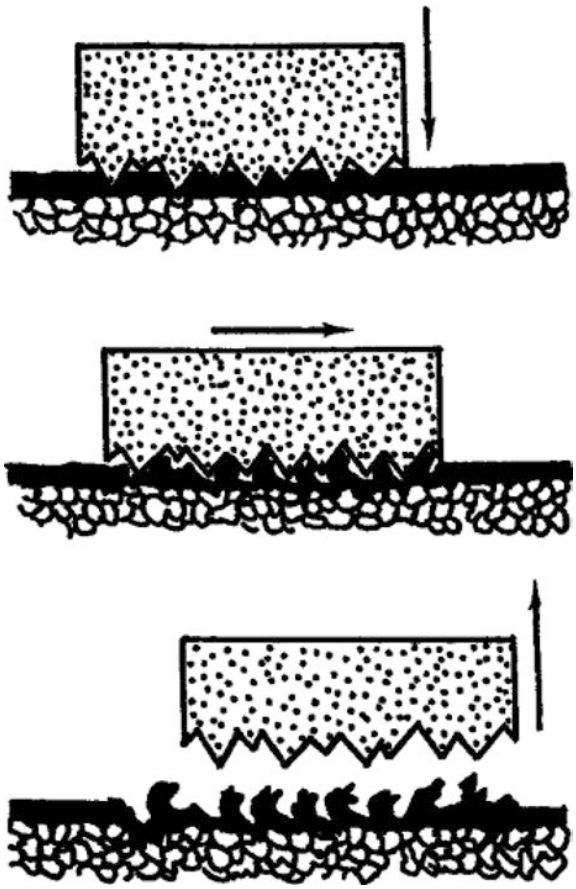


Fig. 4.4 Diagrammatic representation of the production of an abrasion

WIT.0043.0086.0169

The patterning of abrasions is clearer than that of bruises because abrasions may record a clear impression of the shape of the object causing them and, once inflicted, do not extend or gravitate—therefore they indicate precisely the area of application of force.

Fingernail Scratches

A scratch from a nail will, if done with sufficient force, result in a linear abrasion. Linear regular scratches of similar depth in a converging pattern are typical of such injuries. They may be linear if the nail is dragged down the skin or short, straight or curved when the skin is gripped in a static fashion [35]. They may be the width of a nail across [36].

Some scratch marks cause wheals (redness and minor swelling that disappear within a few hours) while others can draw blood [36].

Lacerations

Definition

Lacerations can be caused in two ways:

Crush lacerations: these occur when the tissue (skin or organ) is compressed between two objects with sufficient force to cause the tissue to break. The site of injury is at the site where pressure was exerted. It is caused by blunt force which results in tearing to the full thickness of the skin (Fig. 4.5)—most frequently when the skin and soft tissues are crushed between an impacting object and underlying bone. A classic example is where a laceration occurs when a punch is thrown to the eye of a victim, where the bony orbit lies immediately beneath the skin. These lacerations can often mimic incised wounds (or vice-versa) particularly where the skin is closely applied to underlying bone, for example, the scalp. Close examination of the injury can normally resolve the issue. These injuries may have margins that are bruised or macerated. Blood vessels, nerves, and delicate tissue bridges may be exposed in the depth of the wound, which might be soiled by grit, paint fragments, or glass.

The shape of the laceration may give some indication as to the agent responsible.

Split lacerations: These occur where tissue is stretched at two points resulting in a “split” or “tear” at the weakest point in between. A classic example is the split laceration that might be seen at either the posterior fourchette or fossa navicularis following penetration by a blunt object e.g. penis, digit etc. These may not exhibit the classical characteristics seen with the crush lacerations (e.g. tissue bridging, contaminated wound or damaged wound edges).

WIT.0043.0086.0170

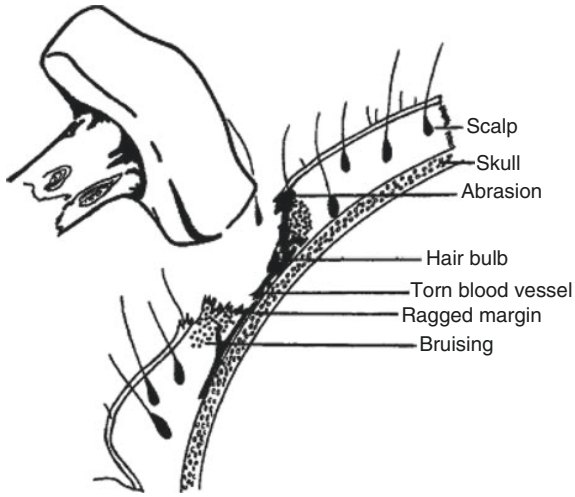


Fig. 4.5 Diagrammatic representation of the production of a laceration of the scalp

Incisions

Definition

Incised wounds are caused by sharp cutting implements, often bladed weapons such as knives and razors, but anything with a cutting edge such as shards of glass, edges of tin cans, and sharp tools such as chisels may also cause clean-cut incised injuries [37]. Injuries extend through the full thickness of the skin. Axes, machetes, Samurai swords, and other similar instruments, although capable of cutting, may causemixed type injuries(with characteristics of both sharp and blunt force injury)—as the injury caused by the weight of the instrument (e.g. axe head) may also cause blunt injury. Each element of the injury must be documented. Classical features of an incision (Fig. 4.6) include margins that tend to be clean, straight, unbruised, unabraded, and not inverted. The deeper tissues are all cut cleanly in the same plane. If the blade of the weapon is drawn across the skin while it is lax, it may cause a notched wound if the skin creases. Similar notching may occur if the sweep or direction of travel of the blade changes.

The head and neck are common targets when incised wounds are inflicted by an assailant. In an attempt to ward off the assailant, the arms are often raised in a protective gesture, and incisions are then often seen on the outer borders of the upper arms, forearms, and hand. If the blade of the attacking weapon is grasped, then incised wounds are apparent on the palmar surfaces of the fingers and can result in underlying damage to tendons, blood vessels and nerves. Such injuries are known as defense wounds. The palmar injuries often cannot be distinguished from wounds

WIT.0043.0086.0171

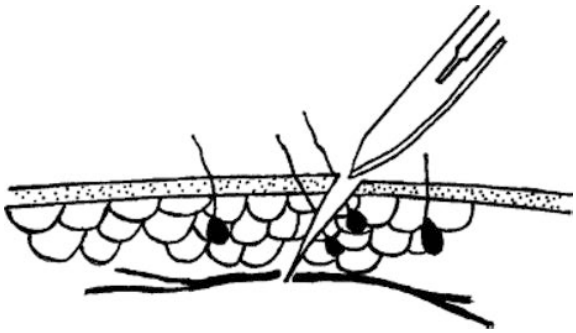


Fig. 4.6 Diagrammatic representation of a cross-section of an incision

caused when the hand of the assailant holding the blade slips down the blade from the handle, if the knife hits bone or cartilage.

Types of Incised Wounds

Stab wounds:

These are incisions where the depth is greater than their width or length.

Slash wounds:

These are incisions where the width/length is greater than the depth.

Puncture wounds:

These are penetrating injuries caused by sharp objects forced through the skin. Examples include needle stick injuries/injections/venipuncture.

Stab and slash incisions are often caused by knives, but can also be inflicted with glass shards, etc. If a penetrating wound occurs as a result of assault with a non-sharp item e.g. screwdrivers, pokers, scissors, the term "blunt force penetrating wound" is better applied. Perforation of the skin, in these cases, is less related to the sharpness of the implement than to the force that was used.

Although the external injury may not appear to be particularly serious, damage to internal organs such as the heart, liver, or major blood vessels can lead to considerable morbidity and death, usually from hemorrhage. In those cases that survive, it is common for little information to be present about the forensic description of the wound as the priority of resuscitation may mean that no record is made. If operative intervention is undertaken, the forensic significance of a wound may be obliterated:

(a) by suturing or
(b) using the wound as the entry for an exploratory operation or insertion of a drain (e.g. chest drain).

In such cases, it is appropriate to attempt to get a forensic physician to assess the wound in theater prior to treatment. Stab wounds are rarely accidental and occasionally suicidal, but usually their infliction is as a result of criminal intent. In the case of suicide, the wounds are usually located on the front of the chest or upper abdomen and, as with self-inflicted incisions, may be associated with a number of

WIT.0043.0086.0172

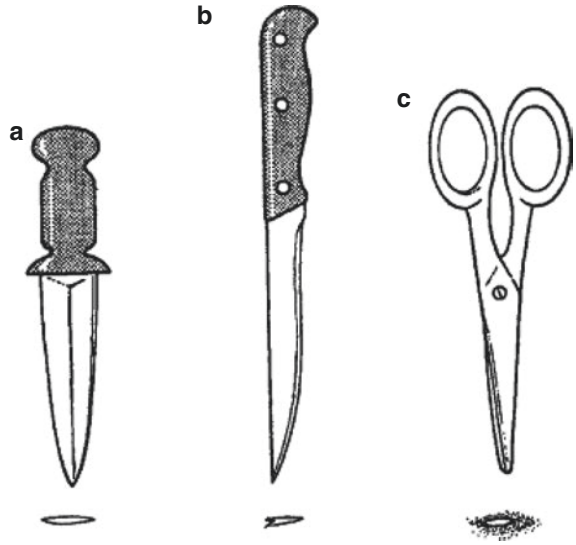


Fig. 4.7 Elliptical (**a**), fish-tailed (**b**), and bruised ovoid (**c**) stab wounds

superficial tentative puncture wounds. When deliberately inflicted by an assailant, they may be associated with defense injuries to the arms and hands.

The appearance of the skin wound will vary depending on the weapon used and can easily be distorted by movement of the surrounding skin. Typically, when inflicted with a knife, the wound is usually elliptical in shape as the natural elasticity of the skin causes its length to shrink. If the blade was double-edged, such as that of a dagger, the extremities of the wound tend to be equally pointed. A stab wound from a single-edged blade, such as a kitchen knife, will often have one extremity rounded, squared-off, or fish-tailed (caused by the noncutting back of the blade). Notched wounds may be caused by the blade of the weapon being partially withdrawn and then reintroduced into the wound or rotated during penetration.

When blunt weapons are used, for example, a pair of scissors, the wound tends to be more likely to be of mixed type, rounded or oval, with bruising and maceration of its margins (Fig. 4.7). Scissor wounds can sometimes have a pattern such as a cross-shape caused by the blade screws or rivets.

It is rarely possible from an inspection of the skin wound alone to comment usefully on the width of the blade since the skin retracts and the knife is unlikely to have been introduced and removed perfectly perpendicularly. The same applies when trying to assess healed stab wounds. Long skin wounds may be caused with quite narrow-width blades.

Self-Harm

Self-harm (or self-injurious behavior) refers to any attempt by an individual to harm themselves and can include self-injury, overdose, or self-hanging. When assessing injuries, it is important to understand which factors may indicate the possibility that

WIT.0043.0086.0173

an injury was caused by self-harm. Individuals injure themselves for a number of reasons which may include: mental health issues, secondary gain, attention seeking, to support an allegation of an offence having taken place, seeking retribution against an individual, the presence of significant intellectual delay or as a result of significant previous trauma [38].

Self-inflicted injuries have a number of characteristics, which are not diagnostic, but which together may give an indication of self-infliction. Table 4.8 lists characteristics of injury that may suggest self-infliction. Some or all of these characteristics may be present but it is important to reinforce that only some and rarely all will be present. The absence of a particular feature does not preclude self-infliction nor does the presence necessarily imply self-infliction.

Table 4.8 Some Characteristics of Injury Which May Suggest Self-infliction

Characteristic	Additional Comments
1. On an area of the body that the individual can access themselves	Sites less accessible e.g. the middle of the back are less likely
2. Superficial or minor injury	Although more severe injury may be caused—particularly in those with psychiatric disorder
3. If there is more than one cut they are of similar appearance, style, and orientation	Typically self-inflicted cutting injuries are more superficial, numerous and similar than those sustained in an assault from another—where the natural reaction of the injured person is to avoid repeated injury and to move away, if possible
4. If other types of injury (e.g. scratches, cigarette burns) are of similar appearance, style and orientation	As above—more than one similar injury should raise an index of suspicion as to the possibility of self-infliction
5. Multiple similar injuries	Raises a high index of suspicion as to the possibility of self-infliction
6. Parallel injuries	As above
7. Injuries grouped in a single anatomical region	As above
8. Injuries are grouped on the contralateral side to the patient's handedness	A right handed person will tend to harm themselves on the left hand side of the body
9. Tentative injuries	Smaller or lesser injuries grouped with the main injuries suggest the initial 'tentative' attempts at self-harm
10. Old healed scars in similar sites	May indicate previous attempts at self-harm
11. Scars of different ages in similar sites	May indicate repeated previous attempts at self-harm
12. Slow-healing injuries	Persistence of wounds that would otherwise have been expected to heal—in the absence of any other factors.
13. Psychiatric and related issues—such as eating disorders, drug and alcohol misuse	

WIT.0043.0086.0174

Firearm Injuries

The examination of fatal firearm injuries should be left to an experienced forensic pathologist; however, it is not unusual in cases of nonfatal injuries for a hospital clinician or forensic physician to be asked to comment on the nature of the wound or wounds. As with all injuries within the forensic setting, it is essential in these nonfatal cases that the initial appearances of the injuries be accurately described and the wounds photographed. This is particularly important since subsequent surgical treatment may distort or completely obliterate the wound characteristics. Furthermore, any fragments, bullets, or pellets found within the wounds must be carefully removed and handed over to the appropriate authorities. Patterns and nature of firearm injuries are very specialized areas, although broad principles apply [39–42]. There are two main types of firearm, smooth bore and rifled.

Smooth Bore Weapons

Shotguns, which fire a large number of small projectiles, such as lead shot, are the commonest type of smooth bore weapons. They are commonly used in sporting and agricultural activities and may be either single- or double-barrel. The ammunition for these weapons consists of a plastic or cardboard cartridge case with a brass base containing a percussion cap. Inside the main part of the cartridge is a layer of propellant, plastic, felt, or cardboard wads and a mass of pellets (lead shot of variable size) (Fig. 4.8a). In addition to the pellets, the wads and/or cards may contribute to the appearance of the wounds and may be important in estimating range and possible direction.

Rifled Weapons

These are characterized by having parallel spiral projecting ridges (or lands) extending down the interior of the barrel from the breach to the muzzle. This rifling causes the projectile, in this case a bullet (Fig. 4.8b), to spin as it is ejected from the weapon and thus imparts gyroscopic stability along its flight path. The rifling also leaves characteristic scratches, rifling marks, unique to the weapon on the projectile surface. The three main types of rifled weapon are revolver, the pistol, and the rifle. The revolver, which tends to have a low muzzle velocity of the order of 150 m/s, is a short-barrel weapon with ammunition retained in a rotating metal drum which rotates and loads each time the trigger is activated and a shot fired. The spent cartridge case is retained within the cylinder after firing. In the self-loading pistol, the ammunition is retained in a clip which, after firing, results in the cartridge case being ejected from the weapon with a spring mechanism elevating the next bullet into the breach. Muzzle velocities of pistols are between 300 and 360 m/s. Rifles are long-barrel shoulder weapons capable of firing bullets with velocities up to 1500 m/s. Most military rifles are "automatic," allowing the weapon to continue to fire while the trigger is depressed until the magazine is empty. They are thus capable of discharging multiple rounds within seconds.

WIT.0043.0086.0175

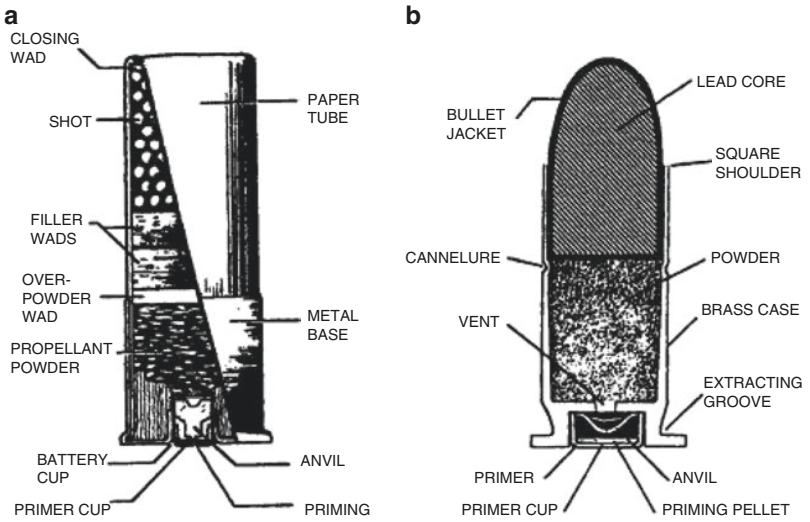


Fig. 4.8 Components of a shotgun cartridge (**a**) and a rifled bullet (**b**)

Shotgun Wounds

When a shotgun is discharged, the lead shot emerges from the muzzle as a solid mass and then progressively diverges into a cone shape, as the distance from the weapon increases. The pellets are often accompanied by particles of unburnt powder, flame, smoke, gases, wads, and cards, which may all affect the appearance of the entrance wound and are dependent on the range of fire. Both the estimated range and the site of the wound are crucial factors in determining whether the wound could have been self-inflicted.

If the wound has been sustained through clothing, then important residues may be found on this if it is submitted for forensic examination. It is absolutely essential that the advice of the forensic science team and crime scene investigator is sought when retrieving such evidence [43]. When clothing is being cut off in the hospital, staff should avoid cutting through any apparent holes.

Contact wounds are caused when the muzzle of the weapon is held against the skin. The entrance wound is usually a fairly neat circular hole, the margins of which may be bruised or abraded due to impact with the muzzle. In the case of a double-barrel weapons, the circular abraded imprint of the non-firing muzzle may be clearly seen adjacent to the contact wound. The wound margins and the tissues within the base of the wound are usually blackened by smoke and may show signs of burning due to the effect of flame. Because the gases from the discharge are forced into the wound, there may be subsidiary lacerations at the wound margin, giving it a stellate-like shape. This is seen particularly where the muzzle contact against the skin is tight and the skin is closely applied to underlying bone, such as in the scalp. Carbon monoxide contained within the gases may cause the surrounding skin and soft

WIT.0043.0086.0176

tissues to turn pink due to the formation of carboxyhemoglobin. Contact wounds to the head are particularly severe, usually with bursting ruptures of the scalp and face, multiple explosive fractures of the skull, and extrusion or partial extrusion of the underlying brain. Most contact wounds of the head are suicidal in nature (in the UK, Australia and New Zealand), with the temple, mouth, and under the chin being the sites of election. In these types of wounds, which are usually rapidly fatal, fragments of scalp, skull, and brain tissue may be dispersed over a wide area.

At close, noncontact range, with the muzzle up to about 15 cm (6 in.) from the skin, the entrance wound is still usually a single circular or oval hole with possible burning and blackening of its margins from flame, smoke, and unburned powder. Blackening due to smoke is rarely seen beyond about 20 cm; tattooing from powder usually only extends to about 1 m. The wads and cards rarely travel more than about 2 m.

As distance increases, the pellets begin to diverge. Up to about 1 m, they are still traveling as a compact mass, but between about 1–3 m the pellets start to scatter and cause variable numbers of individual satellite puncture wounds surrounding a larger central hole. At ranges greater than 8–10 m, there is no large central hole, only multiple small puncture wounds, giving the skin a peppered appearance.

Exit wounds are unusual with shotgun injuries as the shot is usually dispersed in the tissues. The pellets, however, may penetrate the neck or a limb, and in close-range wounds to the head, the whole cranium may be disrupted.

Rifled Weapon Wounds

Intact bullets penetrating the skin at 90° to the skin surface (orthogonal contact) usually cause neat round holes about 3–10 mm diameter. Close examination reveals that the wound margin is usually fairly smooth and regular and bordered by an even zone of creamy pink or pinkish red abrasion. A non-orthogonal nose-on strike is associated with an eccentric abrasion collar, widest at the side of the wound from which the bullet was directed (Fig. 4.9). Atypical entrance wounds are a feature of contact or near contact wounds to the head where the thick bone subjacent to the skin resists the entry of gases, which accumulate beneath the skin and cause

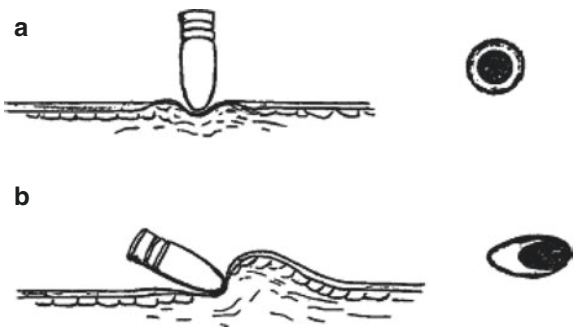


Fig. 4.9 Entrance wounds caused by perpendicular (**a**) and tangential (**b**) bullet strikes

WIT.0043.0086.0177

subsidiary lacerations to the wound margins, imparting a stellate lacerated appearance. Contact wounds elsewhere may be bordered by the imprint of the muzzle and the abraded margin possibly charred and parchmented by flame. Punctate discharge abrasion and sooty soiling are usually absent from the skin surface, but the subcutaneous tissues within the depth of the wound are usually soiled. The effects of flame are rarely seen beyond 10 cm with sooty soiling extending to ~20 cm. Punctate discharge abrasions, which may be particularly heavy with old revolver ammunition, are often present at ranges up to ~50 cm. Sooty soiling of the skin surrounding a wound is evidence that is easily removed by vigorous cleaning carried out by medical or nursing staff. Also, the soiling of contact close-range entrance wounds may be absent if clothing or other material is interposed between the skin surface and the muzzle of the weapon. Clothing should always beretained.

Exit bullet wounds tend to be larger than entrance wounds and usually consist of irregular lacerations or lacerated holes with everted, un-abraded, and unbruised margins. When the skin at the site of an entrance wound has been supported by tight clothing, for example, eversion of the margins of the wound may be absent and the margins may even be abraded although irregularly, making differentiation between these and entrance wounds sometimes difficult.

Entrance wounds caused by damaged or fragmented bullets may be so atypical that it may not be possible to offer a useful opinion as to their nature. Also, it is inappropriate to offer an opinion on the caliber of a bullet based on the size of an entrance wound nor is it possible to state from the appearance of the wound whether the bullet was fired from a revolver, pistol, or rifle.

Defense Injuries

Certain types of injuries may be described as “defense” injuries. These are injuries that are typically seen when an individual has tried to defend themselves against an attack. These occur in both blunt and sharp force injuries and are natural reactions to assault. Some individuals, for example the very young and the very old, or those who are intoxicated, or already impaired by an assault, may be less capable of offering much defense against the perpetrators of assault.

When attacked with blunt objects, most individuals will attempt to protect eyes, head and neck by raising arms, flexing elbows, and covering these areas. As a result, the exposed surfaces of the arms become the impact point for blows. Thus, the extensor surface of the forearms (the ulnar side) may receive blows, the lateral/posterior aspects of the upper arm, and the dorsum of the hands. Similarly, the outer and posterior aspects of lower limbs and back may be injured as an individual rolls into a ball, with flexion of spine, knees, and hips to protect the anterior part of thebody.

In sharp blade attacks, the natural reaction may be to try and disarm the attacker—often by grabbing the knife blade. This can result in cuts to the palm and ulnar aspect of the hand. On some occasions, the hands or arms may be raised to protect the body against the stabbing motion resulting in stab wounds to the defense areas.

WIT.0043.0086.0178

In blunt force attacks, the injuries sustained usually take the form of bruises if the victim is being punched or kicked, but there may also be abrasions and/or lacerations depending on the nature of any weapon used.

If the victim is lying on the ground while being assaulted, he or she will tend to curl up into a fetal position to protect the face and the front of the trunk, particularly from kicks. In these circumstances, defensive bruising is likely to be seen on other surfaces of the trunk and limbs.

The absence of defense injuries in persons otherwise apparently capable of defending themselves against an assault may be of particular significance if it is thought that other injuries found on the victim could have been self-inflicted or if it is believed that they were incapacitated through alcohol, drugs, or other injury.

Cruel Inhuman & Degrading Treatment and Torture

The World Medical Association's Declaration of Tokyo in 1975 defined torture as:

"The deliberate, systematic or wanton infliction of physical or mental suffering by one or more persons acting alone or on the orders of any authority, to force another person to yield information, to make a confession, or for any other reason."

The Declaration also laid down guidelines for doctors when faced with cases of suspected torture. The International Committee of the Red Cross definitions for torture and other forms of ill-treatment are [44]:

Torture consists of severe pain or suffering, whether physical or mental, inflicted for such purposes as obtaining information or a confession, exerting pressure, intimidation or humiliation; Cruel or inhuman (synonymous terms) treatment consists of acts which cause serious pain or suffering, whether physical or mental, or which constitute a serious outrage upon individual dignity. Unlike torture, these acts do not need to be committed for a specific purpose; Humiliating or degrading (synonymous terms) treatment consists of acts which cause real and serious humiliation or a serious outrage upon human dignity, and whose intensity is such that any reasonable person would feel outraged; Ill-treatment is not a legal term, but it covers all the above-mentioned acts.

The Manual on Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (known as the "Istanbul Protocol") was the first set of international guidelines for documentation of torture and its consequences and was published in 1999 [33]. It is likely to be revised by 2020. The Istanbul Protocol describes all the processes to be followed when assessing allegations of torture. For most clinicians, torture is seen in two main contexts: first, that perpetrated by criminals and terrorist organizations, and second, that carried out, or allegedly carried out, by the police or other security force personnel during the detention and interrogation of prisoners and suspects. Non-judicial "justice" is now meted out worldwide in a number ofways. Methods used are fairly crude and barbaric. Fresh injuries or scars of previous injury may indicate previous restraint at wrists and ankles. All types of injury may be seen. Cigarette burns, which may be seen as discrete circular areas of reddish yellow, parchmented skin, are also quite common. Patterned injuries due to being struck with the butt of a gun

WIT.0043.0086.0179

or tramline bruising due to blows with a truncheon or baseball bat may be seen. In Northern Ireland, shooting through the lower limbs ("knee-capping") was a favored method of punishment by paramilitary organizations.

Systematic torture by security personnel, usually during interrogation of suspects, ranges from the subtle use of threats and intimidation to actual physical violence. Hooding, prolonged standing, and the use of high-pitched sound have all been used, as have attempts to disorientate prisoners by offering food at erratic times, frequent waking up after short intervals of sleep, and burning a light in the cell 24 h a day. Physical abuse includes beating of the soles of the feet, "falanga or falaka" which, although extremely painful and debilitating, may not cause any significant bruising. Adaptations of the use of water causing near drowning (waterboarding or submarino) may prove fatal if prolonged, as can the induction of partial asphyxia by enveloping the head in a plastic bag (dry submarino).

Electrical torture is well documented and carries the risk of local electric shocks as well as fatal electrocution. Repeated simultaneous slapping of the sides of the head by the open palms (telefono) may result in tympanic membrane rupture.

In all cases of suspected or alleged ill-treatment of prisoners, it is essential that the doctor or other HCP carry out a methodical and detailed "head to toe" examination [3, 4]. All injuries and marks must be accurately recorded and photographed and the appropriate authorities informed immediately. Increasingly, forensic physicians are involved in assessments of refugees and asylum seekers to establish whether accounts of torture (both physical and psychological) are true. This role continues to expand and the principles of independent assessment, documentation, and interpretation are, as with other areas discussed, absolutely vital in ensuring that courts and tribunals have the appropriate information to allow fair judgments to be reached. The Faculty of Forensic & Legal Medicine of the Royal College of Physicians has defined Quality Standards for healthcare professionals working with victims of torture [45].

Forensic Asphyxia

Definitions [46]

Asphyxia: All conditions caused by the failure of cells to receive or utilize oxygen
Suffocation: A broad term encompassing different types of asphyxia such as vitiated atmosphere and smothering, associated with deprivation of oxygen
Smothering: Asphyxia by obstruction of air passages above the epiglottis, including the nose, mouth and pharynx
Choking: Asphyxia by obstruction of the air passages below the epiglottis
Mechanical asphyxia: Asphyxia by restriction of respiratory movements, either by the position of the body or by external chest compression (includes positional asphyxia and traumatic asphyxia)
Positional or postural asphyxia: A type of asphyxia where the position of an individual compromises the ability to breathe

WIT.0043.0086.0180

Traumatic asphyxia: A type of asphyxia caused by the external chest compression by a heavy object

Strangulation: Asphyxia by closure of blood vessels and / or air passages of the neck as a result of external pressure on the neck. Four main methods of strangulation:

1. Manual - the application of pressure to the neck using the hands - one or two hands may be held around the neck [47].
2. Chokehold or head lock—a restraining hold in which one person encircles the neck of another (usually within the crook of their arm) in a viselike grip, usually approaching them from behind. The amount of elbow flexion determines the amount of pressure applied to the neck. This is a known 'martial arts' grappling hold and is variably termed a sleeper hold or vascular/carotid restraint.
3. Ligature—A form of strangulation in which the pressure on the neck is applied by a constricting band tightened by force other than the body weight [45], e.g. a scarf or belt tightened around the neck.
4. Hanging - A form of strangulation in which the pressure on the neck is applied by a constricting band tightened by the gravitational weight of the body or part of the body. Examples include judicial hangings [48] (authority ordered hangings where a drop of 5–7 ft. or more is an integral part of the process) and non-judicial hangings.

There is increasing awareness of the dangers associated with strangulation. Its occurrence is common enough, especially amongst domestic partners or ex-partners, to possibly warrant asking all complainants whether or not they experienced strangulation (or had pressure placed to the neck area) as a part of the most recent assault. Injuries to the neck are not usually the result of accidental mechanisms and are more likely the result of infliction.

It takes greater pressure to occlude the windpipe (trachea) than it does the vessels of the neck (about 15kgs of pressure to occlude the trachea; 5kgs to occlude the carotid artery; and 1.8kgs to occlude the jugular vein) [49].

The jugular veins, on either side of the neck, are large vessels which return blood from the head to the heart. They have thinner walls than the carotid arteries, nearby, which send blood in the opposite direction, from the heart to the head. It is possible, therefore, for a given amount of applied neck compression that the veins may be occluded without totally occluding the arteries. In this case, blood continues to flow to the head and neck but is unable to leave, causing a build-up of pressure. It is not uncommon for victims of strangulation to observe this increase in pressure, telling examiners that they felt their head was about to explode or their eyes felt like they were going to pop out.

The build-up of pressure within the vasculature is the generally suggested cause of petechiae from strangulation. They may be seen over the face, eyes, soft palate and neck above the application of pressure. They may also be seen in the ear canal and be a reason for bleeding seen over the ear drum.

WIT.0043.0086.0181

A similar mechanism is proposed for the development of subconjunctival hemorrhages. Other causes for these injuries include sneezing, coughing, straining/vomiting, eye rubbing, trauma, high blood pressure or bleeding disorder.

When another method of asphyxia (e.g. smothering or mechanical asphyxia) occurs at the same time asstrangulation, less pressure and time is needed required for strangulation to result in significant morbidity and death than when strangulation occurs in isolation.

Strangulation is considered a "red flag" for serious interpersonal violence [50], and is a significant predictor for future lethal violence [51]. It is a potentially life threatening event, as it may take little sustained pressure over a very short period of time to cause unconsciousness and death. It is common for there to be few or no physical signs on examination after fatal and non-fatal strangulation [52].

HCPs should be familiar with signs of strangulation and those signs that should prompt further investigation or extended observation periods. The Training Institute on Strangulation Prevention (https://www.strangulationtraininginstitute.com) provides access to numerous resources on the subject as well as information on training and upcoming webinars. Strangulation victims may require specialized radiological screening to exclude underlying injury.

Clinical assessment may reveal pain on swallowing, hoarseness, noisy breathing (stridor), neck, head or back pain. Physical examination may reveal the following [53]:

- no injury. In a study of 300 cases 50% of survivors of strangulation had no visible markings to the neck and 25% only minor injuries [54].
- tenderness
- transient reddening to the skin of the neck
- bruising and/or abrasions at the point of compression
- petechiae (pinpoint bruises) above the site of the compression in skin, eyes and mucous membranes e.g. lining of the mouth
- damage to the larynx, or thyroid cartilage, and or hyoid bone including fracture (frequently under-diagnosed) [55]
- linear abrasions on the neck from the assailant and victim, as the victim tries to take the assailant's hand away
- damage to the mucosa of the mouth and tongue due to direct pressure on the teeth internally
- bleeding from mucosa where venous pressure is increased e.g. nose.
- subcutaneous emphysema (accumulation of air in skin tissue as a result of an increased intrathoracic pressure or rupture of the trachea)
- loss of laryngeal crepitus (the normal clicking sensation felt when the laryngeal cartilages are moved laterally. If there is no clicking it implies swelling between the laryngeal cartilage and vocal cords)
- restlessness or irritation
- carotid bruit
- limb weakness
- difficulty breathing

Bruises and abrasions may be seen on the front and sides of the neck, but the pattern of skin surface injuries may be difficult to interpret because of the dynamic nature of an assault and the possibility of the repeated re-application of pressure during strangulation.

In manual strangulation, small, crescentic abrasions, caused by the fingernails of the victim or assailant, may be the only signs visible on the neck. A victim resisting a sexual or other attack may claw at an assailant and leave linear parallel abrasions on the assailant's face [56].

Burns/Scalds [57]

A burn is an injury caused by exposure to thermal (heat/cold), chemical, electrical, or radiation energy. A scald is a burn caused by contact with a hot liquid or steam. Burn wounds are dynamic and need reassessment in the first 24–72 h because depth can increase as a result of inadequate treatment or superadded infection. Chemical burns are burns caused by acid, alkaline, or caustic chemicals and can be very damaging. Immediate first aid should be provided. If possible carefully remove the chemical and any contaminated clothing and rinse the affected area using as much clean water as possible.

Domestic Violence

Domestic Violence is clearly a global problem. Currently in the UK a statutory definition of domestic violence has been proposed in a draft Domestic Violence Bill [58]:

Behaviour by a person ("A") towards another person ("B") is "domestic abuse" if— (a) A and B are each aged 16 or over and are personally connected, and (b) the behavior is abusive.

Behaviour is "abusive" if it consists of any of the following— (a) physical or sexual abuse; (b) violent or threatening behavior; (c) controlling or coercive behavior; (d) economic abuse; (e) psychological, emotional or other abuse.

HCPs working in the environments of both general forensic and sexual offence medicine will see individuals, both male and female, who have been subjected to domestic violence. The general principles of history taking, examination, documentation and interpretation of injuries, treatment, and onward referral are all required. Safeguarding of adults, and of children, who may witness the violence is also essential. A proforma for the examination of adult complainants of domestic violence has been developed to assist HCPs in this role [59].

Currently the management of complainants/complainers of domestic violence is highly variable in different jurisdictions [60]. Complainants who have not been sexually assaulted may not be eligible to be examined at sexual assault centers. General practitioners (primary care physicians) and emergency department staff do not necessarily have the skills to document and interpret the injuries sustained and

WIT.0043.0086.0183

also have limited time to perform the assessments required. Historically in the UK forensic physicians performed this role but nowadays it would be rare for the police to ask the HCP to see a complainant of assault. There has been a promising initiative. The DV injury documentation project [61] in Western Sydney where complainants of domestic violence, aged 16 years or above, who had obvious injuries as a result of an assault by a partner or ex-partner, were eligible to visit the forensic medical unit and have their injuries documented. The results from this project showed that a forensic assessment increased the positive outcomes in court.

Bite Mark Injuries

Human bite marks occur in a minority of forensic medico-legal investigations, usually as a result of human beings biting one another. Occasionally, forensic bite marks have been reported in food and a miscellaneous group of inanimate materials. A bite mark has been defined as a mark caused by the teeth either alone or in combination with other mouth parts [62]. Human bite marks in skin are complex injuries and consequently the analysis is challenging. Bite mark analysis is the interpretation and comparison of two pieces of evidence, namely, the life-size, scaled photographs of the bite mark and the dental casts of the suspect biter.

Bite Mark Components

A human bite mark in skin is produced by three contributory components - dentition/mouth parts, skin and the episode of contact.

Dentition/Mouth Parts

A bite mark in skin is normally a representation of the maxillary and mandibular arches and the biting edges/cusps of teeth anterior to the second premolars. The dental arch features usually provide the information required to orientate the bite mark. The maxillary arch is normally larger and is composed of larger incisors and canines compared to the mandibular arch. There are many individual tooth features that are important in bite mark analysis; the presence or absence of a tooth, the location of the incisal angles of incisors and the cusps of canines. The character of the incisal edges and cusps may be affected by a variety of factors. The position or status of a tooth may be expressed as displacement and/or rotation. The interproximal embrasures are important distinguishing features between adjacent teeth.

The action of sucking produces a reduced intra-oral pressure that can traumatize the capillaries in the embouched tissue. The presence of a diffuse ovoid zone of bruising within the center of a bite mark is indicative of sucking activity [63]. Sucking may be accompanied by tongue thrusting, in which case, the appropriate

WIT.0043.0086.0184

descriptive term is suckling [64, 65].Tongue pressure marks are caused by a tongue thrusting action forcing the embouched tissue against the palatal and lingual surfaces of the anterior dentition and palate.

Skin

Skin is considered to be a poor impression medium because it is not dimensionally stable and is not capable of reproducing detail. There are a number of histological and physiological features that have a contributory influence; in particular, these relate to age and anatomical location.

Babies bruise easily; however, bruises in babies are sometimes difficult to see because of abundant subcutaneous fat. According to Gresham [66] bite marks in children are often faint and difficult to see. Important changes take place in the skin with ageing. The aged bruise easily due to poor collagen support of blood vessels and, consequently, slight pressure can produce an extensive bruise. It has been said that in contrast to infants and older people, teenagers and adults bruise less easily [64, 66], although there are no current data to support this (in the absence of medical reasons for such differences).

The contour or shape of the body varies depending on the anatomical location. In effect the quantity of tissue available for biting varies in different locations; the quantity of tissue is important because soft tissue absorbs and dissipates the kinetic energy of biting to a greater extent than hard tissue. Consequently, skin overlying soft tissue will be subjected to significantly lower levels of pressure than skin overlying hard tissue.

Bite marks usually occur in skin that is not covered by clothing. The presence of clothing at the time of biting reduces the degree of tooth pressure on the skin.

Episode of Contact

The dynamics of the action of human beings biting one another are complex. The degree of force and pressure exerted by the dentition on the skin can range from a minimal contact to a degree of holding of the tissue, to incision and avulsion of the tissue. The movement of the assailant and/or victim can range from static to extreme movement.

The nature of biting can range from amorous to aggressive with concomitant bite mark severity [62]. A “love bite” may occur during amorous contact; the mark is usually bruising caused by sucking and perhaps by gentle nibbling with the anterior teeth. The mark is characterized by diffuse bruising in the center; individual tooth marks are not a feature. By contrast, an aggressive bite mark is inflicted with the intention of causing pain. The marks relate mostly to teeth; the tooth marks usually form an ellipse leaving a central area relatively unmarked; alternatively, the tooth marks constitute scrape marks (abrasions) due to movement between the teeth and skin.

WIT.0043.0086.0185

Nature of Bite Marks

The shape of a single bite mark is usually oval or almost circular. Occasionally, multiple bite marks are superimposed on one another which results in variations in the shape of the overall mark.

The injuries in skin are caused by the surface anatomy of the teeth, the biting edge or cusp produces crush injuries. The angle between the biting surface and the long-axial surface causes damage due to marked flexion and extension of the skin as it is sharply deformed round the angle. The interproximal embrasure produces petechial hemorrhages due to skin stretching across the embrasure or skin being forced into the embrasure. Due to its elastic nature, skin is capable of absorbing considerable kinetic energy prior to the level of pressure required to produce visible injury [63]. At the time of injury, particular tooth mark indentations will be present; however, the passage of time results in a smoothing out of the tooth indentations due to the visco-elastic nature of skin and its ability to reconstitute to its original contour.

The degree and type of tissue injury is determined by the severity of the bite that can range from a minor contact to extreme clenching of the tissue; consequently, the bite mark can range from mild bruising to avulsion of the bitten tissue [62, 63, 67]. In addition, there are a number of systemic factors that influence the response of skin to injury.

Bite marks in skin are composed of one or more of the following injuries, bruise, abrasion and laceration [63, 66]. Gravity may cause a bruise to change position. When a sharp incisal edge or cusp scrapes across the surface of skin, the movement may produce heaping of the epidermis at the point in the abrasion where the tooth movement stops. Lacerations are often accompanied by bruising and abrasion of the wound edges. The appearance of bite marks in living and dead subjects alters with time. Consequently, photography should be repeated, which could be daily, until the mark fades.

Incidence of Bite Marks

Bite marks occur in a variety of violent crimes, assault, rape, murder and child abuse. Bite marks are found on all anatomical sites. Consequently, when one bite mark is discovered, a complete body examination of the victim should be conducted. The morbidity associated with significant bites is well recognized [68, 69]. The circumstances of biting are variable in adults. The usual occurrence is the assailant biting the victim; the victim biting the assailant occurs infrequently. Rarely the victim has a self-inflicted bite mark. The circumstances of biting are less variable in children. The abuser is usually the biter [70, 71]. The occurrence of children biting other children during play has to be recognized as an innocent bite mark.

Bite marks on the victim and/or the assailant have been caused by either the other party, self or a third party. Consequently, the practical application is to examine all suspect dentitions in the relevant time-line of a bite mark case. In the case of a

WIT.0043.0086.0186

suspected self-inflicted bite mark, the anatomical location is the significant consideration - is it physically possible for the bite mark to have been self-inflicted?

Distortion in Bite Marks

Distortion can occur at different stages in the causation and investigation of bite marks. Primary distortion occurs at the time of biting and secondary distortion may occur subsequent to a bite mark being made and/or be introduced at the stage when it is being examined or recorded [72]. A bite mark may demonstrate more than one type of distortion. Some degree of distortion is probably present in all bite marks and may be produced by a variety of factors [70, 73–75].

Primary Distortion

The two main components of primary distortion are dynamic distortion due to the dynamics of the biting process and tissue distortion due to the nature of skin [72]. Dynamic and tissue distortion are complex and unpredictable phenomena that are closely related because of their simultaneous occurrence during the episode of contact between the dentition and skin.

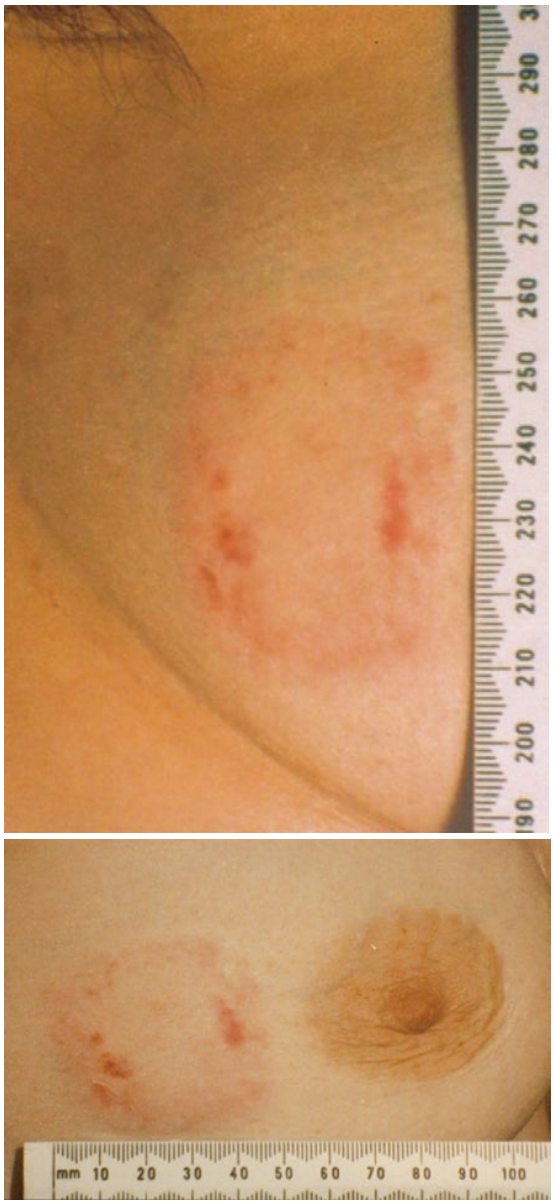
Secondary Distortion

There are three categories of secondary distortion [72]. Time-related distortion occurs when a bite mark changes in appearance with the time elapsed subsequent to the bite being made. The other two categories of secondary distortion, posture distortion and photographic distortion, occur during the examination and evidence recording of a bite mark.

Time-related distortion in living victims can take different forms. Where there is a laceration or where a segment of tissue has been bitten off, the subsequent healing can involve changes, particularly tissue contraction, that can modify the dimensions and detail of a bite mark. In a bruise, the changes with time can result in migration of part of the bruise to a slightly different anatomical location. The bruise may also diffuse variably giving an altered shape.

Posture distortion occurs when a bite mark is viewed or recorded in a position that is different from the position of the anatomical location at the time of biting. The degree of posture distortion depends on the variation in body position and the anatomical location, for example, posture distortion may be observed in the female breast depending on the body position and arm position as illustrated in Figs. 4.10 and 4.11. Posture distortion may be limited during photography by reconstructing a victim's body position at the time of biting; if this is not possible, it is suggested that bite marks are photographed in a range of positional possibilities [76].

WIT.0043.0086.0187



Figs. 4.10 and 4.11 Posture distortion in a bite mark on the right breast photographed on successive days with the right arm raised to an unknown position on day 1 (Fig. 4.10) and the arm down by the victim's right side on day 2 (Fig. 4.11). The Police photographer was not supervised by an odontologist. The photographs demonstrate posture distortion that produced a significant variation in the size and shape of the bite mark; the variation measures approximately 25% in the vertical axis and 12.5% in the horizontal axis

Photographic distortion may be produced by the photographic method of recording a bite mark [77]. Photographic distortion arises as a result of the influence of the angle of the film to the bite mark and body curvature. The ideal photographic angle is 90 degrees, the camera being perpendicular to the center of the bite mark [74].

WIT.0043.0086.0188

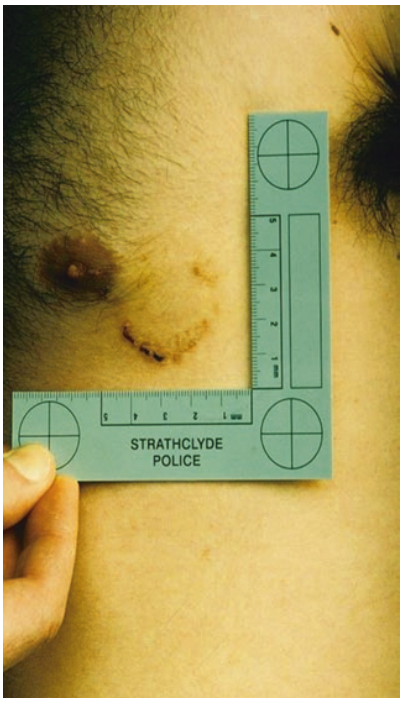


Fig. 4.12 The odontologist holds the ABFO No. 2 type scale adjacent to the bite mark; the planes of the scale and bite mark must be parallel and coincident.

This angle produces parallelism between the film/digital plane and the bite mark plane and consequently photographic distortion is minimized. The examining odontologist determines the position of the rigid, right-angled scale, similar to the ABFO No.2 scale [78] and holds the scale adjacent to the bite mark; the plane of the scale should be parallel to the bite mark plane and the two planes coincident as demonstrated in Fig. 4.12. If the curvature of the anatomical location prevents a single view of the entire bite mark, then the surface angle is large enough to cause significant photographic distortion and multiple scaled photographs, taken perpendicularly to the center of the various parts of the bite mark, are required. This technique limits photographic distortion as illustrated in Figs. 4.13, 4.14 and 4.15.

Bite Mark Analysis Techniques

Biological Comparison

Sweet et al. [79] pioneered the work on the recovery of salivary DNA from bite marks. The techniques are objective and offer a scientifically validated method of bite mark analysis. However, the techniques are expensive and require extensive

WIT.0043.0086.0189

Fig. 4.13 General photograph showing the location of a bite mark on the opposing surfaces of the child's left forearm. The entire bite mark cannot be viewed from a single direction; to avoid photographic distortion, the opposing surfaces of the forearm were photographed separately

Fig. 4.14 Scaled photograph of the arc of marks on the posterior surface of the left forearm taken under the supervision of an odontologist

laboratory equipment and expertise; it should also be noted that DNA can become degraded and is susceptible to environmental factors.

Physical Comparison

Bite mark analysis is the interpretation and comparison of the life-size photographs of a bite mark with the dental casts of a suspect biter. The comparison process

WIT.0043.0086.0190

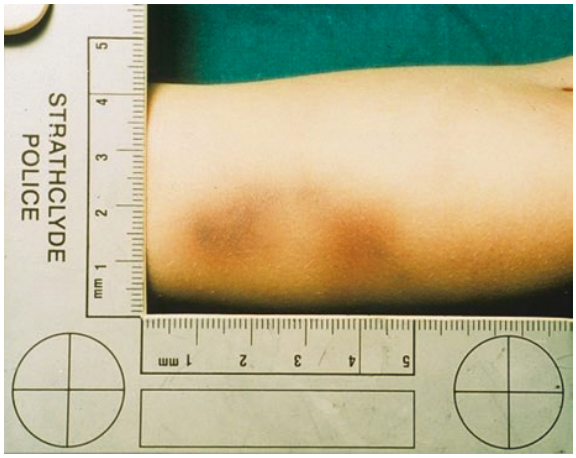


Fig. 4.15 Scaled photograph of the arc of marks on the anterior surface of the left forearm taken under the supervision of an odontologist

consists of two physical comparison techniques, feature based analysis and superimposition based analysis.

Context Effects and Observer Bias

According to Page et al. [80] context effects are psychological influences on decision making induced by knowledge of extraneous circumstantial information; cognitive bias refers to the psychological sway toward one opinion versus another due to having extraneous information. Context effects give rise to motivational bias and may also give rise to cognitive bias, particularly when there is ambiguity in the choice between two alternative hypotheses. Consequently, odontologists are susceptible to motivational and cognitive bias because of having circumstantial case information and the nature of bite mark evidence respectively. Clearly, context effects can be reduced by limiting the circumstantial case information available to the analyzing odontologist prior to bite mark analysis. Page suggested different odontologists collect and analyze the bite mark evidence to further reduce context effects and observer bias in the analyzing odontologist.

Feature Based Analysis

Feature based analysis demonstrates comparability/incomparability between the features observed in the photographs of the bite mark and the teeth of the suspect biter. Feature based analysis comprises a number of stages that are conducted in a prescribed sequence; examination of the bite mark photographs, preparation of a predictor of the causal dentition, examination of the dental casts of the suspect biter, comparative study and finally conclusions.

Superimposition Based Analysis

Superimposition based analysis demonstrates comparability/incomparability between the images of the bite mark and the teeth of the suspect biter. The role of superimposition based analysis is to provide visual comparability/incomparability between the life-size, scaled photographs of the bite mark and life-size, computer-generated scaled transparent overlays of the suspect biter's dental casts.

Limitations of Bite Mark Analysis

Aitken and MacDonald [81] noted that classified bite mark characteristics on large sections of the population were unavailable; this statement remains true today. At present, the scientific literature and published research evidence relating to bite mark analysis lacks peer-reviewed publications supporting its current use, including data on error rates and reliability. The current efficacy of bite mark analysis should rely on the available scientific evidence and limit expert opinions accordingly.

There have been many judicial concerns in the USA about the evidential weight and analysis of human bite marks following miscarriages of justice associated with flawed analysis. Consequently, the American Board of Forensic Odontology and other groups have raised the forensic threshold for stating that injuries are bite marks and for the levels of conclusion that can be reliably stated following the comparison of an alleged/suspected human bite mark with the dentition of a suspect biter. An extract of the revised (19-2-2018) ABFO Guidelines is under noted for reference.

American Board of Forensic Odontology Standards and Guidelines for Evaluating Bitemarks - Extract

Terms indicating a pattern or patterned injury is or is not a bitemark.

1. *Human Bitemark*—human teeth caused the pattern
   Criteria:
   (a) The pattern demonstrates class characteristics of human teeth, including prosthetic replacements when present.
   (b) The discernible features are sufficient such that other causes for the pattern were considered unlikely or excluded.
   (c) A curvilinear pattern or patterned injury generally circular or oval and often consisting of two opposing arches that may or may not be separated at their bases by unmarked space. Sometimes only one arch is clearly visible.
   (d) Individual marks, impressions, abrasions, contusions, striations, or lacerations from specific teeth may be found within the pattern.
   (e) A central area of contusion is sometimes present.

WIT.0043.0086.0192

(f) In severe human bitemarks, material may be forcefully removed from the medium bitten.
(g) The marks present reflect the size, shape, arrangement, and distribution of the contacting surfaces of teeth. (The contacting surfaces of human teeth include the incisal and occlusal surfaces of teeth and may also include the lingual surfaces of anterior teeth.)
(h) Some marks made by individual teeth can be recognized and identified based on the class characteristics and location relative to other features.
(i) The size and shape of each visible arch conforms to the varying ranges of size and shape of the human dentition.

2. *Not a Human Bitemark*—human teeth did not cause the pattern.
   Criteria: The pattern or patterned injury does not include features demonstrating the class characteristics of human teeth.
3. *Inconclusive*—there is insufficient information available to support a conclusion of whether or not a pattern or patterned injury is a human bitemark.
   Criteria: Features demonstrating the class characteristics of human teeth are incomplete, distorted, or otherwise insufficient.
   Terms relating or linking a dentition to a human bitemark

1. *Excluded as Having Made the Bitemark*
   Criteria: The bitemark demonstrates class characteristics or individual characteristics that could not have been caused by the dentition.
2. *Not Excluded as Having Made the Bitemark*
   Criteria: The bitemark demonstrates class characteristics or class and individual characteristics that could have been caused by the dentition. There are no unexplainable discrepancies between the features of the bitemark and the dentition. The dentition is not excluded from the population of dentitions that could have caused the bitemark.
3. *Inconclusive*
   Criteria: There is insufficient information to support a conclusion whether or not the bitemark could have been caused by the dentition.

Summary

The role of the HCP [82] in relation to the assessment of bite mark injuries is to remember that bites may result in bruising, abrasions, lacerations, punctures and even avulsions. The distinctive arc-shaped bruises with central sparing may not be seen because of distortion. The clinical management is important as referral to hospital may be required for treatment including tetanus, hepatitis B and HIV prophylaxis. The wound will need cleaning and antibiotics. Bite marks are of forensic importance as they may identify the suspect from certain dental features, as outlined above; a forensic odontologist, if available, should be contacted or careful documentation completed with measurements and scaled photographs. Furthermore, a skin swab utilizing the double-swabbing technique should be taken for DNA analysis.

Key Points

- Healthcare professionals working in the forensic environment must be able to describe injuries accurately, documenting what they see on examination in the clinical notes, and where appropriate, using body diagrams.
- Forensic imaging is a useful tool to document clinical findings, and in particular injuries, but there must be appropriate consent from the patient, with policies and protocols in place to cover the management of the images obtained.

Self-Assessment Exercises

1. You are in court to give evidence regarding an allegation of assault. The lawyers ask you to explain the injuries you found on examination to the jury:
   - What is a bruise?
   - What is an abrasion?
   - What is a laceration?
   - What is an incised wound?
2. A police officer has been bitten by a suspect. Outline your management.
3. A complainant of sexual assault advises you, the examining healthcare professional, that she was grabbed round the neck during the assault. What injuries may you find on clinical assessment?
4. What is the Istanbul protocol? How may it be used in providing an opinion with regard to the causation of trauma?

References

1. Payne-James JJ (2003) Assault and injury. In: Payne-James JJ, Busuttil A, Smock W (eds) Forensic Medicine: Clinical and Pathological Aspects. Greenwich Medical Media, London, pp 543–563
2. Office for National Statistics. Crime in England and Wales: year ending December 2018. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/yearendingdecember2018#main-points Accessed 21 June 2019
3. Payne-James JJ, Beynon J, Nuno Vieira D (2017) Monitoring Detention, Custody, Torture and Ill-Treatment. A Practical Approach to Prevention and Documentation. CRC Press, Boca Raton
4. Payne-James JJ, Beynon J, Nuno Vieira D (2017) Assessment of physical evidence of torture or cruel, inhuman and degrading treatment during visits to places of detention. In: Payne-James JJ, Beynon J, Nuno Vieira D (eds) Monitoring Detention, Custody, Torture and Ill-Treatment. A Practical Approach to Prevention and Documentation. CRC Press, Boca Raton
5. Gall J, Payne-James JJ (2011) Injury interpretation – possible errors and fallacies. In: Gall J, Payne- James JJ (eds) Current Practice in Forensic Medicine. Wiley, London
6. Reijnders UJL, Ceelen M (2014) 7208 victims of domestic and public violence; an exploratory study based on the reports of assaulted individuals reporting to the police. J Forensic Legal Med 24:18–23
7. Brennan PAW (2006) The medical and ethical aspects of photography in the sexual assault examination: whom does it offend? J Clin Forensic Med 13:194–202
8. Evans S, Baylis S, Carabott R, Jones M, Kelson Z, Marsh N, Payne-James J, Ramadani J, Vanezis P, Kemp A (2014 May) Guidelines for photography of cutaneous marks and injuries:

WIT.0043.0086.0194

a multi-professional perspective. J Vis Commun Med 37(1–2):3–12. https://doi.org/10.3109/17453054.2014.911152
9. Payne-James JJ, Hawkins C, Bayliss S, Marsh N (2012) Quality of photographic images for injury interpretation: room for improvement? Forensic Sci Med Pathol 8:447–450. https://doi.org/10.1007/s12024-012-9325-2
10. Faculty of Forensic & Legal Medicine. PICS Working Group Guidelines on Photography. London, 2017. https://fflm.ac.uk/wp-content/uploads/2018/01/PICS-Working-Group-Guidelines-on-Photography-Dr-Will-Anderson-May-2017.pdf. Accessed 21 June 2019
11. FFLM & RCPCH. 2014 Guidance for best practice for the management of intimate images that may become evidence in court. https://fflm.ac.uk/wp-content/uploads/document-store/1400752731.pdf. Accessed 21 June 2019
12. Irvine AJ (2002) Incisions, are not lacerations. Br Med J 325:1113–1114
13. Payne-James JJ (2015) Blunt injury. In: Payne-James JJ, Byard RW (eds) Encyclopedia of Forensic & Legal Medicine, 2nd edn. Amsterdam, Elsevier
14. Chrysou K, Halat G, Hoksch B, Schmid RA, Kocher GJ (2017) Lessons from a large trauma center: impact of blunt chest trauma in polytrauma patients-still a relevant problem? Scand J Trauma Resusc Emerg Med 25(1):42. https://doi.org/10.1186/s13049-017-0384-y.
15. Deacon C, Craxford S, Ollivere BJ (2019) Evaluating the cervical spine in confused or unconscious adults after blunt trauma. Br J Hosp Med (Lond) 80(6):317–319. https://doi.org/10.12968/hmed.2019.80.6.317
16. Hundersmarck D, Slooff WM, Homans JF, van der Vliet QMJ, Moayeri N, Hietbrink F, de Borst GJ, Öner FC, Muijs SPJ, Leenen LPH (2019) Blunt cerebrovascular injury: incidence and long-term follow-up. Eur J Trauma Emerg Surg. https://doi.org/10.1007/s00068-019-01171-9. [Epub ahead of print]
17. Naeem Z, McCormack JE, Huang EC, Vosswinkel JA, Shapiro MJ, Fnu Z, Jawa RS (2019) Impact of type and number of complications on mortality in admitted elderly blunt trauma patients. J Surg Res 241:78–86. https://doi.org/10.1016/j.jss.2019.03.031. [Epub ahead of print]
18. Siegenthaler L, Sprenger FD, Kneubuehl BP, Jackowski C (2018) Impact energy of everyday items used for assault. Int J Legal Med 132(1):211–217. https://doi.org/10.1007/s00414-017-1689-0. Epub 2017 Sep 29
19. Handlos P, Uvíra M, Dokoupil M, Marecová K (2019) Axe injury pattern in homicide. Forensic Sci Med Pathol. https://doi.org/10.1007/s12024-019-00112-7. [Epub ahead of print]
20. Johannesdottir U, Jonsdottir GM, Johannesdottir BK, Heimisdottir AA, Eythorsson E, Gudbjartsson T, Mogensen B (2019) Penetrating stab injuries in Iceland: a whole-nation study on incidence and outcome in patients hospitalized for penetrating stab injuries. Scand J Trauma Resusc Emerg Med 27(1):7. https://doi.org/10.1186/s13049-018-0582-2
21. Kristoffersen S, Normann SA, Morild I, Lilleng PK, Heltne JK (2016) The hazard of sharp force injuries: factors influencing outcome. J Forensic Legal Med 37:71–77. https://doi.org/10.1016/j.jflm.2015.10.005. Epub 2015 Nov 5
22. Wittschieber D, Beck L, Vieth V, Hahnemann ML (2016) The role of 3DCT for the evaluation of chop injuries in clinical forensic medicine. Forensic Sci Int 266:e59–e63. https://doi.org/10.1016/j.forsciint.2016.05.025. Epub 2016 Jun 1
23. Bleetman A, Watson CH, Horsfall I, Champion SM (2003) Wounding patterns and human performance in knife attacks: optimising the protection provided by knife resistant body Armour. J Clin Forensic Med 10:243–248
24. Gall J, Payne-James JJ (2011) Injury interpretation: possible errors and fallacies. Chapter 9. In: Current Practice in Forensic Medicine. Wiley-Blackwell, Chichester, West Sussex, pp 253–255
25. Saukko P, Knight B (2016) The pathology of wounds. Chapter 4. In: Knight's Forensic Pathology, 4th edn. CRC Press, Boca Raton, p 155
26. Langlois NEI, Gresham GA (1991) The ageing of bruises: a review and study of the colour changes with time. Forensic Sci Int 50:227–238
27. Hughes VK, Ellis PS, Langlois NEI (2004) The perception of yellow in bruises. J Clin Forensic Med 11:257–259

WIT.0043.0086.0195

28. Langlois NEI (2007 Dec) The science behind the quest to determine the age of bruises – a review of the English language literature. Forensic Sci Med Pathol 3(4):241–251. https://doi.org/10.1007/s12024-007-9019-3
29. Stephenson T, Bialas Y (1996) Estimation of the age of bruising. Arch Dis Child 74:53–55
30. Munang LA, Leonard PA, Mok JYQ (2002) Lack of agreement on color description between clinicians examining childhood bruising. J Clin Forensic Med 9(4):171–174
31. Maguire S, Mann MK, Sibert J, Kemp A (2005) Are there patterns of bruising in childhood which are diagnostic or suggestive of abuse? A systematic review. Arch Dis Child 90:182–186
32. Barington K, Agger JF, Nielsen SS, Dich-Jørgensen K, Jensen HE (2016) Gross and histopathological evaluation of human inflicted bruises in Danish slaughter pigs. BMC Vet Res 12(1):247
33. OHCHR (1999) Istanbul Protocol Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. https://www.ohchr.org/Documents/Publications/training8Rev1en.pdf. Accessed 27 June 2019
34. Trefan L, Harris C, Evans S, Nuttall D, Maguire S, Kemp AM (2018) A comparison of four different imaging modalities - conventional, cross polarized, infra-red and ultra-violet in the assessment of childhood bruising. J Forensic Legal Med 59:30–35. https://doi.org/10.1016/j.jflm.2018.07.015. Epub 2018 Aug 4
35. Saukko P, Knight B (2016) Chapter 4: The pathology of wound. In: Knight's Forensic Pathology, 4th edn. CRC Press, Boca Raton, p 137
36. Payne JJ, Busuttil SW (2003) Chapter 36: Assault and injury in the living. In: Forensic Medicine – Clinical and Pathological Aspects. Cambridge University Press, Cambridge, p 554
37. Payne-James JJ (2015) Sharp & Cutting-Edge Wounds. In: Payne-James JJ, Byard RW (eds) Encyclopedia of Forensic & Legal Medicine, 2nd edn. Elsevier, Amsterdam
38. Gall J, Payne-James JJ, Goldney RD (2011) Self-inflicted injuries and associated psychological profiles. In: Gall J, Payne-James JJ (eds) Current Practice in Forensic Medicine. Wiley, London
39. Fowler KA, Dahlberg LL, Haileyesus T, Gutierrez C, Bacon S (2017) Childhood firearm injuries in the United States. Pediatrics 140(1). https://doi.org/10.1542/peds.2016-3486. Epub 2017 Jun 19
40. Stefanopoulos PK, Mikros G, Pinialidis DE, Oikonomakis IN, Tsiatis NE, Janzon B (2019) Wound ballistics of military rifle bullets: an update on controversial issues and associated misconceptions. J Trauma Acute Care Surg. https://doi.org/10.1097/TA.0000000000002290. [Epub ahead of print]
41. Abramowicz S, Allareddy V, Rampa S, Lee MK, Nalliah RP, Allareddy V (2017) Facial fractures in patients with firearm injuries: profile and outcomes. J Oral Maxillofac Surg 75(10):2170–2176. https://doi.org/10.1016/j.joms.2017.05.035. Epub 2017 Jun 8
42. Hanna TN, Shuaib W, Han T, Mehta A, Khosa F (2015) Firearms, bullets, and wound ballistics: an imaging primer. Injury 46(7):1186–1196. https://doi.org/10.1016/j.injury.2015.01.034. Epub 2015 Jan 30
43. Blakey LS, Sharples GP, Chana K, Birkett JW (2018) Fate and behavior of gunshot residue-a review. J Forensic Sci 63(1):9–19. https://doi.org/10.1111/1556-4029.13555. Epub 2017 May 23
44. https://www.icrc.org/en/document/torture-and-other-forms-ill-treatment-definitions-used-icrc. Accessed 27 June 2019
45. Faculty of Forensic & Legal Medicine. Quality Standards for Healthcare Professionals Working with Victims of Torture. 2019 [link to follow]
46. Sauvageau A, Boghossian E (2010) Classification of asphyxia: the need for standardization. J Forensic Sci 55(5):1259–1267
47. Simpson's Forensic Medicine. (2019) Payne-James JJ, Jones RM (eds). 14th edn. Taylor and Francis, Oxford, UK
48. Jha MK, Majumder BC, Garg A, Agarwal KK, Oberoi SS (2012) Judicial hanging-cause of death. J Punjab Acad Forensic med Toxicol 12(2)
49. DiMaio VJ, DiMaio D (2001) Forensic Pathology, 2nd edn. CRC Press, Boca Raton, FL

50. Douglas H, Fitzgerald R (2014) Strangulation, domestic violence and the legal response. Sydney Law Rev 36(231):231–254
51. Glass N, Laughon K, Campbell J, Wolf AD, Block CR, Hanson G et al (2008) Non-fatal strangulation is an important risk factor for homicide of women. J Emerg Med 35(3): 329–335
52. Strack GB, McClane GE, Hawley D (2001) A review of 300 attempted strangulation cases. Part 1- criminal legal issues. J Emerg Med 21(3):303–309
53. Wyatt J, Squires T, Norfolk G, Payne-James J (2011) Chapter 4 Asphyxia. In: Oxford Handbook of Forensic Medicine. OUP, Oxford, pp 104–105
54. Strack GB, McClane GE, Hawley D (2001) Violence: recognition, management and prevention. A review of 300 attempted strangulation cases. Part 1: criminal legal issues. J Emerg Med 21(3):303–309
55. Fineron PW, Turnbull JA, Busuttil A (1995) Fracture of the hyoid bone in survivors of attempted manual strangulation. J Clin Forensic Med 2:195–197
56. Payne-James JJ (2015) Asphyxia – clinical findings. In: Payne-James JJ, Byard RW (eds) Encyclopedia of Forensic & Legal Medicine, 2nd edn. Elsevier, Amsterdam
57. https://cks.nice.org.uk/burns-and-scalds#!topicsummary. Accessed 21 June 2019
58. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/772202/CCS1218158068-Web_Accessible.pdf. Accessed 21 June 2019
59. FFLM (2018) Examination of adult complainant of domestic violence (as per current guidance, for individuals aged 16 years and over). https://fflm.ac.uk/wp-content/uploads/2018/10/Examination-adult-complainant-domestic-violence-pro-forma-FFLM-Sep-2018.pdf. Accessed 21 June 2019
60. Nittis M, Stark MM (2018) Interpersonal violence a NSW (Australia)/England and Wales perspective. J Med Legal 1(61):13–20
61. Nittis M, Hughes R, Gray C, Ashton M (2013) Domestic violence documentation project 2012. J Forensic Legal Med 20:683–689
62. MacDonald DG (1974) Bite mark recognition and interpretation. J Forensic Sci Soc 14:229–233
63. Sopher IM (1976) Chapter IX: Bite Mark Analysis. In: Forensic Dentistry. Charles C Thomas, Springfield, Illinois, pp 125–152
64. Harvey W (1976) Chapter 12: Bites and bite-marks. In: Dental Identification and Forensic Odontology. Henry Kimpton, London, pp 88–123
65. Harvey W, Millington P, Barbanel JC, Evans JH (1976) Chapter 13: Experimental human bite-marks. In: Dental Identification and Forensic Odontology. Henry Kimpton, London, pp 124–135
66. Gresham GA (1986) Chapter 1: Wounds. In: Colour Atlas of Wounds and Wounding. MTP Press Limited, Lancaster, pp 9–27
67. Whittaker DK, MacDonald DG (1989) Chapter 14: Bite marks in flesh. In: A Colour Atlas of Forensic Dentistry. Wolfe Medical Publications Limited, London, pp 108–119
68. Mann RJ (1977) Human bite marks of the hand: twenty years of experience. J Hand Surg 2:97–107
69. Burton DJ, Chiafail JG, Davis RG (1981) Human bites to the face: management, review of the literature, and report of a case. J Am Dent Assoc 102:192–194
70. Levine LJ (1977) Bite mark evidence. Dent Clin N Am 21:145–158
71. Sopher IM (1977) The dentist and the battered child syndrome. Dent Clin N Am 21:113–122
72. Sheasby DR, MacDonald DG (2001) A forensic classification of distortion in human bite marks. Forensic Sci Int 122:75–78
73. Barbanel JC, Evans JH (1974) Bite marks in skin - mechanical factors. J Forensic Sci Soc 14:235–8
74. Rawson RD, Vale GL, Herschaft EE, Sperber ND, Dowell S (1986) Analysis of photographic distortion in bite marks: a report of the bite mark guidelines committee. J Forensic Sci 31:1261–8
75. DeVore DT (1971) Bite marks for identification? - a preliminary report. Medicine, Science and the Law 11:144–5

WIT.0043.0086.0197

76. Bernstein ML (1985) Two bite mark cases with inadequate scale references. J Forensic Sci 30:958–64
77. Stimson P (1982) Photographic distortion in bite marks. In Abstracts: American Academy of Forensic Sciences, Colorado Springs, Colorado, p 64
78. Hyzer WG, Krauss TC (1988) The bite mark standard reference scale – ABFO No 2. J Forensic Sci 33:498–506
79. Sweet D, Lorente JA, Lorente M, Valenzuela A, Villanueva E (1997) An improved method to recover saliva from human skin: the double swab technique. J Forensic Sci 42:320–322
80. Page M, Taylor J, Blenkin M (2012) Context effects and observer bias – implications for forensic odontology. J Forensic Sci 57:108–112
81. Aitken C, MacDonald DG (1979) An application of discrete kernel methods to forensic odontology. Journal of the Royal Statistical Society 28:55–61
82. FFLM & BAFO. Management of Injuries Caused by Teeth 2018 https://fflm.ac.uk/wp-content/uploads/2018/04/Management-of-Injuries-caused-by-Teeth-April-2018.pdf. Accessed 21 June 2019

WIT.0043.0086.0198

Physical Child Abuse

5

John A. M. Gall

Learning Objectives

Understand the main presenting injuries of physical child abuse, their assessment and the conditions that mimic these injuries.

Understand the features and management of factitious illnesses related to physical child abuse.

Introduction

Physical abuse of children is common and carries a significant morbidity and mortality. Its consequences on the child are both short- and long-term and, for some, may be fatal. All professionals have an important role in recognizing suspected child physical abuse and making an appropriate referral but none moreso than child health practitioners, particularly general practitioners, paediatricians, and maternal and child health nurses. Unfortunately, the detection of this form of abuse remains challenging. As with any clinical presentation, a differential diagnosis is essential in formulating a final working diagnosis and, for children presenting with injuries, abuse must always be part of that differential. A failure to consider abuse as a

This is a revision of Chap. 5, Physical child abuse, written by Alison Kemp, Sabine Maguire and Paul Davis in the third edition of Clinical Forensic Medicine—A Physician's Guide. These authors were not involved in this revision.

J. A. M. Gall (✉)
Department of Paediatrics, The University of Melbourne, Melbourne, VIC, Australia

Victorian Forensic Paediatric Medical Service, Royal Children's Hospital and Monash Children's Hospital, Melbourne, VIC, Australia

Era Health, Melbourne, VIC, Australia
e-mail: johngall@erahealth.com.au

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_5

WIT.0043.0086.0199

potential cause of the injury or injuries will result in a potential missed diagnosis of abuse and a gross diservice to the patient. This chapter provides an overview of physical abuse in children as guidance to assist clinicians with their assessment of the potential cause of presenting injuries.

Definitions

For the purposes of this chapter, children are defined as a person below the age of 18 years [1]. This definition, however, varies between jurisdictions. In Western societies, physical abuse is recognized as one of four categories of child maltreatment with the other three being sexual abuse, emotional abuse, and neglect. It is well accepted that these categories may coexist in the same child or young person. Physical child abuse is an act of commission, both deliberate and intentional, although the intended consequence to the child may not be planned. For example, a carer may hit a child as a punishment but not intend to cause a serious injury [2]; nevertheless, such an act may cause significant physical and emotional harm and amounts to maltreatment. The UK Children Act 2004 [3] states that "physical abuse may involve hitting, shaking, throwing, poisoning, burning or scalding, drowning, suffocating or otherwise causing physical harm to a child. Physical harm may also be caused when a parent or carer fabricates the symptoms of or deliberately induces illness in a child." Although each state in the United States is responsible for providing its own definition of child abuse and neglect, this description broadly encapsulates an internationally agreed definition of physical abuse. Debate continues, however, in some circles, around the influence and attitudes of societies, cultural differences in child rearing, politics, and religious beliefs on what constitutes child abuse.

A unified definition is important to inform a general framework for child protection policy setting, multi-agency assessment, statutory and legal interventions, epidemiology, and an understanding of current and future research.

Epidemiology

The true prevalence of physical child abuse is difficult to determine. The number of cases that are recognized by statutory child protection agencies is the tip of a much bigger iceberg of victims who never come to their attention. Many cases go unreported or unrecognized. Information systems are incomplete or record a limited part of the picture. Alternatively, estimates are on the basis of self reporting from victims or surveys of adults about their childhood experiences. A recent review of all available data concludes that between 4% and 16% of children are physically abused every year in high-income countries [4, 5]. Many of these children are victims of repeated episodes of abuse which start in early childhood.

WIT.0043.0086.0200

Table 5.1 Risk factors for child abuse

Family factors	Parent/guardian factors	Child factors	Community and social factors
• Large families • Poor socio-economic status • Social isolation • Intimate partner violence/ domestic violence	• Young parents • The presence of a mental illness in one or both parents • Single parents • Unplanned pregnancy • Poor parenting skills • A history of maltreatment as a child • Substance abuse • Presence of a step-father • Known maltreatment of animals • Low educational achievement	• Being male • Emotional and behavioral problems • Being born premature • Born with a disability • Being an unwanted pregnancy being an adopted child	• No child protection/ safeguarding legislation • Unenforced child protection/ safeguarding legislation • Social inequality • Organised violence • Cultural norms

Risk Factors for Abuse

An important consideration in detecting child abuse is an understanding of the risk factors for abuse. These include family, parental (including non-parental guardian care giver), child, community and social factors [4, 6–9]. A list of these factors is provided in Table 5.1. The way that these factors interact to increase risk is complex and ill understood. It also needs to be kept in mind that the causal relationship between individual and associated factors is not inevitable as some households burdened with a number of risk factors develop resilience and are not abusive households.

Consequences of Physical Abuse

Physical abuse carries a significant mortality and morbidity. Child homicide figures reflect the most severe cases of physical child abuse. In the United Kingdom, between one and two children die from child abuse every week, while US child abuse mortality figures are as high as 2.35/100,000 annually [10]. The most serious abusive injuries include abusive head trauma (AHT) and visceral injuries. Both occur in the youngest children and have an estimated mortality rate of 12–30% [11, 12].

Significant neurological disability is seen in around half of the survivors of AHT [11] and many victims of abusive thermal injury sustain serious scarring and disfigurement. In terms of psychological outcome from physical abuse, it is difficult to

WIT.0043.0086.0201

disentangle the effects of associated types of abuse such as neglect and emotional abuse. However, studies confirm emotional and behavioral problems, post traumatic stress disorder, mental health problems, substance misuse, and criminality in survivors of abuse [4]. Early identification of physical abuse and early intervention are essential to prevent ongoing abuse and avoid its consequences.

Signs of Child Physical Abuse

The possible diagnosis of physical abuse should be at the forefront of any assessment of physical injury especially when the incident is either reportedly unwitnessed or where the injuries do not fit the history provided. Physical abuse may occur in combination with one or more of sexual abuse, emotional abuse and neglect. The nature of injuries sustained may include one or more of the following types:

- bruising
- abrasions
- lacerations
- bites
- burns and scalds
- skeletal injury
- abusive head trauma
- visceral injury

These injury types are discussed further below (and see Chap. 4).

Assessing a Child with Suspected Physical Abuse

Any clinician, indeed anyone who sees children on a regular basis, has a responsibility to recognize and report suspected physical abuse to statutory child protection (safeguarding) agencies, should these agencies exist. Who then should undertake the assessment of a child with suspected physical abuse? In most developed countries including the UK and USA, children with suspected physical abuse are referred to pediatricians to assess and investigate the child, to manage the injuries and determine the likelihood that the injuries are abusive or not. Experience shows that this is not necessarily ideal as many of these paediatricians do not have further training in forensic medicine and do not understand the many facets and intricacies of the discipline of clinical forensic medicine. The most appropriate practitioner, therefore, to undertake these assessments is either a paediatrician who has undertaken further formal training in clinical forensic medicine or a forensic physician who has extensive experience with children. Whichever of these two forensic practitioners is involved, and for the purposes of the remainder of this chapter they will be referred to as the 'physician', this physician should not be the practitioner providing care to the child but a completely separate and independent medical investigator. The reason for separating the treating physician from the investigating physician is that the

WIT.0043.0086.0202

treating physician needs to maintain good patient and parent interactions to ensure optimal health outcomes whereas the investigating physician may come to be viewed less than favourably by the parents/guardians. The investigating physician usually undertakes his/her assessment as part of a multidisciplinary team that may consist of other paediatricians, radiologists, haematologists, surgeons, nurses and social workers. This team may be involved in developing consensus decisions about the probability of abuse and the ongoing risk to the child. It is normally the practice that the investigating physician provides a medico-legal report and may then become involved in the legal child protection process and be expected to give an opinion in Court as a professional or expert medical witness.

When assessing an injury or injuries in a preadolescent child, there are two principal questions that the examining physician needs to consider and these are whether the injury is the result of accidental or nonaccidental causes. Consideration, therefore, needs to be given as to whether the explanation for the injury fits the account as provided by the parent or guardian and whether the injury is possible in the child based upon their age and developmental stage. If the injury is incompatible with either the account or the child's age and developmental stage then physical abuse becomes the working diagnosis until proven otherwise. In the absence of witnessed or admitted child abuse, a diagnosis of physical abuse can only be made on the balance of probability as there is no gold standard diagnostic test for the condition. The same considerations need to be made for the assessment of adolescents presenting with injuries. Generally unlike preadolescent presentations, a third consideration in the assessment that may arise is whether the injury sustained may be the result of self infliction.

As part of the assessment, a thorough history of the events and circumstances that led to the injuries that the child has sustained needs to be obtained. This information may be provided by third parties including preschool and school staff. Clear documentation of all relevant details is essential as these may have a bearing on the future protection of the child and decisions in any legal proceedings. It is widely accepted that certain features in a history raise concerns about physical abuse [13]. These include significant injuries where the cause is unexplained, or where the explanation is vague or detail is lacking or inconsistent; injuries that are inconsistent with the explanation given or where the explanation is inconsistent with a child's level of motor development. To make decisions regarding the plausibility of an explanation, it is important to know when or where the injury was sustained and details of the nature of the causative event; for example, if a fall is the proposed mechanism of injury it is essential to know the height of the fall, what the child was doing at the time, the nature of the surface of impact, and the anatomical site of impact. These details must be collected, in the context of the social, family, health, behavioral and developmental history of the child, to gain information regarding associated risk factors and to assess findings within a comprehensive family context.

The forensic assessment should include a full evaluation of the child's general physical, developmental, emotional, and behavioral welfare as well as a detailed assessment of the injuries that the child has sustained. This requires a clinical approach to determine the severity of injury and need for treatment, together with a forensic assessment of the pattern of injury in the context of the proposed explanation, to determine the likelihood of child abuse. A thorough evaluation of the child is required including investigations to identify the full profile of associated injuries and to exclude

WIT.0043.0086.0203

mimickers of abuse. The abuse may involve other siblings and family members who should be included in the assessment. Infants and young children are at the greatest risk of serious physical injury and are the most challenging to assess because of the sometimes occult nature of their injury and their inability to contribute to the history of the preceding events themselves. Although infants and very young children may not be able to provide details of abuse, studies have shown that additional useful information can be obtained from children including preschool children [14].

Cases of suspected physical abuse may be referred for assessment from a number of different sources including social services or child protection teams who have been alerted to the children following concerns expressed by members of the public, teachers, or health workers. Referrals may be received from general practitioners and from the emergency departments or inpatient units for a specialist opinion when clinicians raise concerns about unexplained or suspicious injuries.

Bruises

Bruising is an area of haemorrhage wihin the subcutaneaous tissue. It usually arises as a result of either blunt trauma or due to forceful pressure against a firm surface. It is the most common abusive injury that children sustain [15–17] and as such may be an important indicator that abuse has taken place, and that further enquiries/investigations are merited. Missing abusive bruising may be a lost opportunity to protect a child; it has been noted that 19% of children who were fatally abused had been seen by a doctor within the month prior to their death, and facial bruising was among the injuries seen [18]. As with all other injuries, it is important to differentiate between deliberate and accidental bruisies, and mimickers of bruising (Table 5.2).

Bruising is the most common finding in abused babies, and the face is a frequent site of abusive bruises [19, 20]. Bruises to a nonmobile child should

Table 5.2 Features of deliberate and accidental bruises and important mimickers of bruising

Bruises suggestive of physical abuse	Sites of common accidental bruising	Bruising mimics
• In children not independently mobile including babies • On the face (excluding the forehead), back, abdomen, buttocks, ears and hands • Not over bony prominences • Multiple and in clusters • Of uniform shape • With a clear pattern/imprint	• Knees • Shins • Forehead • Arms	• Disorders of coagulation – Haemophilias – Von Willebrand's – Idiopathic thrombocytopenic purpura – Henoch Schoenlein purpura • Dermatological conditions – Mongolian spots • Connective tissue disorders • Drugs (e.g. NSAIDS) • Cultural practices – Coining – Cupping

WIT.0043.0086.0204

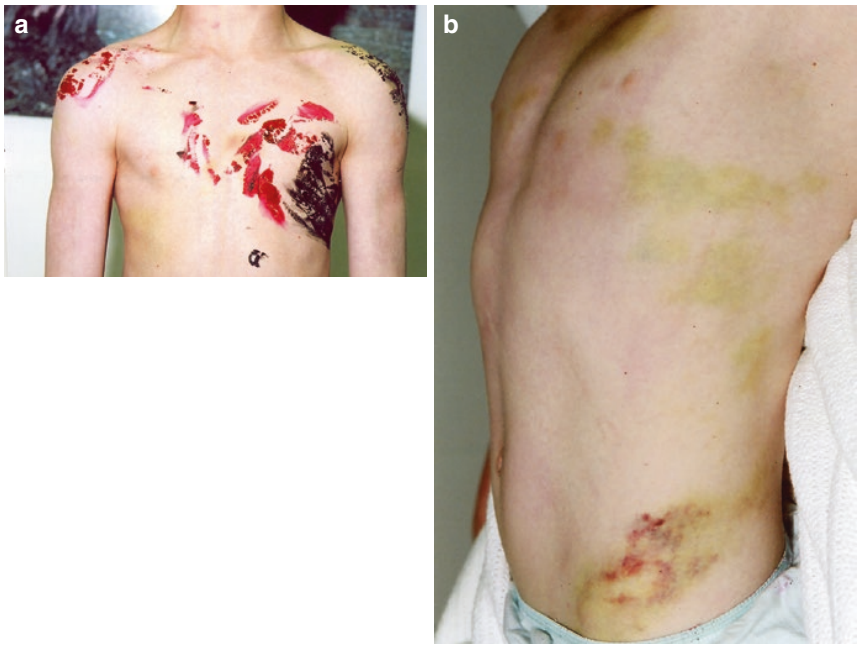


Fig. 5.1 Extensive bruising in a 7 yr old boy. (**a**) On presentation, all bruised were covered with paint with the parental explanation being that the children had been painting each other. Further investigation also revealed 7 fractures of differing ages. (**b**) The bruises show a yellow discolouration which is indicative of being 18–24 hours old or older

always alert a physician to the possibility of abuse. With the exception of birth related bruises, accidental bruising is extremely rare in pre-mobile infants (<1%), [21, 22].

Mobile children frequently sustain bruises during their normal day to day activities and the challenge is to accurately distinguish between these two (Table 5.2). It is estimated that 17% of children have bruises at any one time once they are crawling or cruising, increasing to 50% in those walking [21, 23]. When accidental bruises are present, they tend to occur over bony prominences [17, 21, 24]. Accidental facial bruises in toddlers are found in a "T" distribution over the forehead, nose, upper lip, and chin [25]. By contrast, abusive bruises to the face are predominantly over soft tissue such as the cheeks, mouth, and periorbital areas [26]. The neck and ears are very rarely bruised accidentally at any age [27]. Multiple bruises/extensive bruising in areas not usually prone to accidental bruising may also be an indicator of abuse (Fig. 5.1a).

Illustrative Case *This 7 year-old boy (Fig. 5.1a) was well known to child protection services in relation to parenting and care concerns. There had been reports of domestic violence, child sexual assault, failure to attend school, and the reported presence of repeated and multiple physical injuries. The injuries included, at different times, injuries to his mouth, the presence of bruises and a laceration at the base*

WIT.0043.0086.0205

of his penis. The injuries had on each occasion allegedly been the result of self-harm. He represented for a forensic examination following a further report to protective services and was accompanied by his mother and stepfather. During the interview, it was noted that his mother was holding his hand firmly throughout and that the boy would not remove his cap. When examined, he was noted to have multiple areas of his body painted. The explanation for this was that he had been painting with his sister and they had painted each other. The paint was washed from his body revealing the presence of multiple bruises. Despite his age, a limited skeletal survey (excluding skull) was undertaken and this showed five rib fractures at different stages of healing and a healing fractured left femur.

Once a child reaches school age, almost 80% will have some accidental bruising [22] with bruising to the shins, forehead and arms being the more common sites [21, 28]. Bruising to the hand is rare at all ages [19, 28] while bruising to the ears (Fig. 5.2), thighs, abdomen, and buttocks (Fig. 5.3) is significantly more common

Fig. 5.2 A case of physical abuse of a child showing bruising to and behind the ear a laceration in the groove between the ear and the scalp

WIT.0043.0086.0206

Fig. 5.3 Excessive buttock bruising in a young child indicative of abuse

among abused than non-abused children [19]. If petechiae are found with the bruising, in the absence of an underlying coagulopathy, the bruise is significantly more likely to be abusive in origin, with a positive predictive value of 80% (95% CI 64.1, 90.0); however, the absence of petechiae has no significance either way [29]. On some occasions, either the positive or negative imprint of the weapon causing the bruise may be visible, emphasizing the need for high quality imaging of the bruise, as this may enable matching of the outline to a proposed object used to assault the child (e.g. belt buckle, dog collar, etc.) [24, 30, 31]. Imprint bruising showing a hand print, ligature mark, 'tramline' bruising (use of a cane, stick, etc.), grip mark or implement imprint are indictors of abuse [6].

It is important to remember that bruising may be a consequence of bleeding disorders, and as such, any investigation of a child with bruises of possible significance should include an appropriate screening for coagulation disorders, including a full blood examination, clotting screen, Von Willebrand Factor, Factor VIII, IX, XI, XIII and platelet function (Table 5.3); if any history suggestive of a bleeding disorder (bleeding after dental extraction, prolonged bleeding from umbilical cord, etc.) is present, then the case should be discussed with a paediatric hematologist as to the need for an extended screen of clotting abnormalities. A skeletal survey should be considered in children aged less than 2–3 years and selective radiology in older children with severe soft tissue injuries. As with all children, a detailed past medical history (e.g., in the case of an infant, was Vitamin K administered following birth, etc.), previous episodes of prolonged bleeding or bruising, drug history (e.g., regular use of NSAID), and a family history of bleeding disorders should be sought. Idiopathic thrombocytopenic purpura is a relatively common temporary disorder of clotting that may resemble bruising. Similarly, although not a disorder of coagulation, Henoch Schoenlein purpura may present as a sudden onset of bruising affecting, usually, the lower limbs and buttocks. Connective tissue disorders are another consideration (e.g. Ehlers Danlos Syndrome) (Table 5.2).

Other potential mimickers of bruises include dermatological disorders and cultural practices. Mongolian spots and other variants of slate-grey naevi (Nevus of Ota and Naevus of Ito) are not infrequently misdiagnosed as bruises and are common on

WIT.0043.0086.0207

Table 5.3 Suggested baseline laboratory and radiological investigations for specific types of trauma

Bruises	Fractures	Burns	Abdominal trauma	Abusive head trauma
• Full blood examination • Clotting profile • Platelet function If required, a more extensive clotting factor profile: • Von Willebrand factor • Factor VIII, IX, XI, XIII In children aged <2 years of age: • Skeletal survey	• Alkaline phosphatase • Calcium • Phosphate • Parathyroid hormone • Vitamin D • Urea and creatinine In children aged < 2 years of age: • Radionuclide bone scan • Skeletal survey	In children aged <2 years of age: • Radionuclide bone scan • Skeletal survey	• Full blood examination • Liver function tests • Amylase and lipase • Urine ward test • Ultrasound and/or CT	• As for bruising if bruising and/or intracerebral haemorrhages present • Urine metabolic screen • MRI and/or CT brain • MRI neck • Radionuclide bone scan • Skeletal survey

The choice of investigations will, however, be dependent upon the circumstances of the presenting complaint and age of the child

the back and buttocks. Other congenital disorders including epidermal naevi, hyperpigmented macules and vascular cutaneous markings (e.g. haemangioma) need to be distinguished from bruises. Vascular lesions blanch and this may help distinguish them from bruises. Alternatively, a follow-up examination demonstrating a failure of the 'bruise' to resolve will provide the distinction.

There are some cultural practices that may result in bruising or bruise-like markings and these include coining and cupping. These practices are all health-related and believed to treat various illnesses. Coining involves taking a smooth-edged object like a coin and rubbing it along the skin in a linear fashion until a bruise is present. Cupping results in circular bruises due to suction from small cups or glasses placed on the skin.

Clinicians are often asked to date the bruises present, and it has long been the practice to do so on the basis of the color of the bruise [30]. There is no published scientific evidence to support such an estimation other than the presence of a yellow discolouration indicating a bruise 18–24 h old or older [31, 32] (Fig. 5.1b).

Oral Injury

As the head is one of the most common areas of the body to be injured in abuse, it is surprising that intraoral injuries are not recorded more frequently, being found in only 6–11% of abused children [33, 34]. All the studies to date have

WIT.0043.0086.0208

been retrospective, begging the question as to how often the mouth has actually been fully examined. It is a vital part of the assessment of suspected abuse, as almost all forms of intraoral injury have been described abusively—torn labial/lingual frenum, dental intrusions, extrusions, fractures, laceration, and even bites to the tongue [35]. A torn labial frenum has been deemed to be "pathognomonic" of child abuse in young children, as its earliest descriptions by Cameron and later Tate recorded this injury in severely abused children [36, 37]. It is recognized that this injury can occur in mobile toddlers and older children who accidentally sustain a direct blow to the upper lip [38]. It may also occur during resuscitation [39]. Unfortunately, there are no large scale comparative studies defining the pattern of such injuries found accidentally and abusively. What is clear, however, is that when a torn labial frenum occurs in child abuse, it is usually accompanied by severe, if not fatal, coexisting injuries [36, 38, 40]. As such, it is imperative that any infant or young child found to have a torn frenum should be fully investigated, as failure to do so may lead to the child being sent home, and subject to further abuse [41]. If a full physical assessment, including a skeletal survey in those <2 years of age, and a full social assessment, does not reveal any other abnormal findings or concerns, a torn frenum in isolation cannot be assumed to be abusive.

Other oral findings may be relatively subtle to physicians including microfractures which lead to gray discoloration of the teeth [42]. Likewise, the discoloration found in dentinogenesis imperfecta is an important finding as this may coexist with osteogenesis imperfecta, an important differential diagnosis of fractures in a young child [43]. It is important for examining physicians to know the expected primary/secondary dentition, as there have been reports of forced extraction of the teeth by parents as a form of "punishment" [44]. This highlights the need for physicians to work closely with their dental colleagues (and vice versa) in the event that any unexplained or unusual intraoral findings are identified.

Bites

Bites are a common injury in childhood [45], predominantly caused by other children or animals. They appear as bruises and lacerations to the skin. Often they present as an oval injury with opposing convex arcs and occasional central bruising (Fig. 5.4). Injury in the arcs is not usually continuous (unless the injury has aged and the bruising diffused) with foci of bruising or laceration as a mirror image of the perpetrator's teeth. Animal bites, such as dog bites, are easily distinguished from human bites in that they tend to be more 'V' shaped compared with the human 'U' shape. Animals have a longer narrow jaw, and tend to tear at flesh rather than crush it [46–48]. Children sustain abusive bites in any location, but the commonest appear to be arms, legs, back, shoulders, and buttocks [49]. A human bite is described as 2–5 cm oval or circular injury. Classically, measurement of the intercanine distance [50] is used to distinguish child and adult bites. Indicative intercanine distances are as follows:

WIT.0043.0086.0209

Fig. 5.4 Human bite mark on the arm

- 2.5–4.5 cm (>3.0 cm) - consistent with an adult human bite;
- <2.5 cm - a child (deciduous teeth); and
- 2.5–3.0 cm - a child or small adult.

It must be borne in mind that there may be racial and individual differences in intercanine distances, and that "adult" dentition is reached by 12 years of age. Nonetheless, it is vital to identify an adult bite on a child, as it is the only physical injury which may afford the opportunity to identify a specific perpetrator, either by retrieval of DNA from the bite itself, or by reconstruction of the dentition of the perpetrator by a forensic dentist [51]. This is just as important to rule in as to rule out a specific suspect.

Sometimes, bites can be confused with dermatological disorders, such as ring worm but a key difference is the presence of scaling in dermatological disorders.

Given the potential significance of an abusive bite, it is vital that appropriate photographs are taken at the time, using a right angled measuring device, and if the bite is on a curved surface (e.g., upper arm) to take photos in each plane. Ideally, photographs should be taken with the child in the position they were bitten [47]. A forensic dentist should be contacted as soon as possible. In the event that a child cannot be seen immediately by a forensic dentist, serial photographs on a daily basis

WIT.0043.0086.0210

may be helpful, as the precise dental imprints may become clearer over time as the surrounding induration reduces.

Abrasions and Lacerations

Both abrasions and lacerations are the result of blunt trauma [48]. Abrasions (a scratch or a graze) are an injury to the body causing disruption to the epidermis of the skin. The injury is caused by a combination of pressure and movement across the surface of the skin. It is an important injury in that it represents the site of contact with the implement or surface that may have caused the injury and may identify the direction of the force. Lacerations, as distinct from incisions, occur from blunt trauma. A laceration is a tearing/splitting of the skin producing an injury that extends beyond the epidermis and into the underlying tissue layers. The cause in children may be from accident (e.g. falls) or as a result of abuse. Accidental lacerations and abrasions tend to occur in a similar distribution to accidental bruises and may appear over bony prominences such as the knees shins and forehead. Suspicions of abuse arise in the following circumstances [24]:

- when the explanation for the injury is incompatible with the injury;
- on a child who is not mobile;
- where the injuries are multiple;
- where the injury is symmetrical in distribution;
- on areas usually protected by clothing;
- involving the eyes, ears and sides of the face; and
- on the neck, ankles and wrists where there may also be appearances of ligature marks.

Thermal Injury

There are many different types of burns (ie. thermal, chemical, electrical, radiation, and friction) but the most relevant to child abuse are thermal injuries. These injuries include both hot and cold burns and may result from immersion, splashes and direct contact.

It is estimated that up to 25% of children admitted to burns units, may be suffering from an abusive burn [52]. Abusive burns not only carry a higher mortality, but they lead to significant short and long term morbidity with the need for frequent dressing changes, surgery, and possible scarring and contractures in addition to the psychological consequences [53].

The most common intentional burns described in the literature are scalds, with hot water immersion burns being the more frequent pattern [54–56] (Fig. 5.5). While the typical pattern for abusive scalds involves the feet and legs, with or without buttocks/perineum, it may also involve both hands and feet, or one hand, or may involve only the face [54, 57]. Classically, these burns have a consistent burn depth,

WIT.0043.0086.0211

Fig. 5.5 Immersion burn that resulted in a fatality. A clear distinction is illustrated between burnt and spared skin

and have a clear upper margin [58], sometimes giving rise to the "glove and stocking" appearance [56, 59]. This pattern contrasts with the typical accidental scald, which occurs as a "spill over scald" where the child reaches up and pulls a hot drink over itself, scalding its face, upper limb, and upper trunk [60]. Here, the burn is deepest at the point of contact with the hot liquid and decreases in depth as the liquid reduces in heat and amount as it flows away from this point. With the increasing use of microwaves and "ready meals," there has been an increase in accidental spill burns due to hot food items in older children or to a small child who is in the care of a teenager. Burns are one injury where the injury found is directly related to the causative agent and duration of exposure. As it only takes 1 s for a child to sustain a full thickness burn from a liquid at 60 °C [61], if the history is that the child accidentally immersed itself in the bath water for only a matter of seconds, it is vitally important to find out what temperature the domestic water temperature in the house is set at, a fact which surprisingly few people know about their own home [62]. Likewise, if it is suggested that the child climbed into the basin and turned the tap on itself, causing a running water burn, a home visit is necessary combined with an appropriate developmental assessment [63]. Could this child have climbed into that basin? What way was he facing when the parent came into the bathroom? In other words, if the burn is on the left leg, would this have been the leg closer to the hot tap in that particular basin? When assessing a potentially abusive scald, it is important not only to assess the burn itself (agent, pattern, mechanism, distribution) but also to look for other risk factors, for example, are there other unrelated injuries at the time of the burn, was a sibling blamed, have there been previous burn injuries, is it developmentally appropriate, is there interpersonal violence in the home, have there been frequent emergency attendances, is the child behaving abnormally in light of such a painful and distressing injury [57, 63, 64]? Any child with a suspicious burn, aged less than 2 years, should undergo a skeletal survey, as it is recognized that up to 14% of children with abusive burns may have occult fractures [65].

Children may sustain other abusive or neglectful burns, such as radiation burns (sunburn) (Fig. 5.6), contact burns (e.g. from domestic irons) [66], caustic burns [67], and microwave burns [68]. While there are no uniform criteria for diagnosing abuse

WIT.0043.0086.0212

Fig. 5.6 Sunburn to the shoulder

in these situations, the key message is to be vigilant, and take a very careful history to ensure that the injury found is compatible with the child's development, the agent, and way it is supposed to have occurred (e.g. if a child has an iron burn, clearly demarcated, full thickness on the back, this is unlikely to be consistent with pulling an iron down on itself). It is also important to know what clothing the child may have been wearing at the time as this may provide protection and explain unusual injury presentations (e.g. point burns corresponding to metal fastners in a woollen jumpsuit). With the increasing use of hair curlers/straighteners among teenagers, there has been a rise in accidental burns among toddlers from such devices [69]. These may cause burns to both the dorsal and plantar aspects of the foot as the toddler stands on straighteners left on the floor and the straighteners flip over and makes contact with both aspects of the foot, or the toddler snaps it onto its foot. Parents often do not realize that these devices may reach temperatures of around 145° within 2 min, and stay hot enough to cause full thickness burns for up to 7 min after they are turned off.

There appears to be no study comparing the features of accidental vs. intentional cigarette burns. The few intentional ones recorded in the literature were circular / punched out lesions approximately 1 cm in diameter [70]. These injuries, however, are regular presentations in forensic assessments. Cold injuries (e.g., hypothermia; swollen red hands and feet) are not a common presentation in temperate climates. There is also no published literature identified that has documented associations between cold injury and child abuse. Presentation of such injuries, should they occur, without a suitable history may be a sign of child abuse [24].

First line forensic investigations for potential abusive burns assessments are limited and will depend upon the case presentation. For children, however, aged less than 2 years of age, with suspicions of abuse, then a skeletal survey and bone scan should be considered (Table 5.3).

One area of difficulty in assessing burns is the child who has been "treated" with moxibustion, a form of traditional remedy. This involves burning the Moxa herb directly over the site of the symptoms (e.g. around the umbilicus in abdominal

WIT.0043.0086.0213

pain), thus producing a series of circular well demarcated burns; likewise "cupping" (discussed above) can cause multiple circular superficial burns. Another therapeutic burn is Maquas which involves cauterization of the skin with a red-hot iron. While these may have been "inflicted" on the child, they are intended to be "therapeutic" for the underlying condition, and it is important that clinicians are aware of such practices, particularly among South Asian families. There are a number of medical conditions that may mimic burns. Included are bullous impetigo, ammoniacial rashes, eczema and staphylococcal skin infection (scalded skin syndrome). It also needs to be borne in mind that children with Attention Deficit and Hyperactivity Disorder (ADHD) do sustain more accidental burns than the rest of the childhood population [71], and this may not reflect neglect as such but highlight the challenge parents have in preventing such accidents in this group of children.

Self-Inflicted Injury

Self-inflicted or self-harm injuries occur within all age groups but are more likely seen in adolescents than younger children [48, 72]. The difficulty with these injuries is ascertaining whether they are the result of an accident, deliberate harm by another person or the result of self-infliction. The nature of self-harming injuries encountered are many and include bruises, abrasions, lacerations, incisions, stab wounds, bites and burns. Some of these injuries may result in death and some were intended to cause death but the attempt was unsuccessful. Others may be cries for help or an indicator of frustration. Some are used as a means of avoiding parental or school discipline (e.g. failure to complete homework; explanation for late return home). There are specific features regarding these injuries that assist in identifying their potential of having been self-inflicted [48, 72]. These include:

- all injuries tend to be of a similar injury type (e.g. all bruises or all abrasions) although they generally consist of abrasions or incisions rather than bruises or lacerations;
- all injuries tend to be of a similar severity (e.g. all abrasions are of a similar severity) and in most cases tend to be superficial (Fig. 5.7);
- the injuries are in accessible sites for the individual;
- the injuries tend to occur on the non-dominant side of the body (i.e. a right-handed individual will create injuries affecting the left-hand side of the body);
- the injuries are often multiple and parallel;
- the injuries generally do not involve vital structures such as the eyes but tend to involve non-vital structures such as the face, chest, abdomen, arms and legs;
- overlying clothing may be spared; and
- there is an absence of defensive injuries.

Illustrative Case *This 13 year old girl (Fig. 5.7) alleged that she had been assaulted by her father with a razor. There was a history of behavioral problems. The razor*

WIT.0043.0086.0214

Fig. 5.7 Self-inflicted abrasions in an adolescent alleging assault by her father with a razor

was stated to be a double-bladed disposable razor and the allegation was that the blade had caused the injuries to her back. The girl was right-handed. Examination showed the appearance of linear abrasions diagonally across the mid—lower back many of which were of similar severity. There were no lacerations. Based upon the allegation and the nature of injuries sustained, the appearances were suggestive of self-infliction. When confronted with this hypothesis during the consultation, the patient eventually confirmed that she had actually caused the injuries, the intention being to 'get back' at her father for his implementation of discipline within the home and limiting her visitation with friends.

Abdominal Injuries

Although abdominal injuries are rarely recorded in abused children, prevalence estimated at 1–8% of abuse cases, they are recorded as the second commonest cause of fatal abuse after head injuries [12]. Among abdominal injuries, liver and bowel

WIT.0043.0086.0215

injuries occur with almost equal frequency, although it is worth noting that accidental duodenal injury, which is the commonest abusive bowel injury recorded in the literature, is an extremely rare accidental injury in children less than 4 years of age, and no small bowel injuries have been recorded in children <5 years old as a consequence of a fall [12]. Almost every organ in the abdomen has been injured abusively, but the true prevalence of these injuries is difficult to determine because of the lack of high quality epidemiological data. It is estimated in the United Kingdom that 0.9 cases/million children/year (95% C.I; 0.58–1.39) present with an abusive abdominal injury [73].

The clinical presentation of those with abusive abdominal injury varies; bruising to the abdomen may be present in up to 60% of cases [73], but other studies note that up to 90% of children had no abdominal bruising [74]. Lindberg et al. [75] have attempted to assign a probability of abusive abdominal injury in the presence of abdominal bruising, where they estimated a positive likelihood ratio of 7.9, and a negative likelihood ratio of 0.7; thus, its presence is highly suspicious, but its absence does not mean serious injury is not present. Abdominal symptoms, for example, distension, vomiting, reduced bowel sounds, and tenderness were all positively associated with significant injury, although significant injury can be present in the absence of these signs [75]. Although abusive abdominal injuries tend to occur in younger children than accidental abdominal injuries (2.5–3.7 vs. 7.7–10.39 years), and hollow organ injuries are commoner among this group, alone or in combination with solid organ injuries, there are few other distinguishing features [76]. Delayed presentation was not a discriminator as children with low velocity accidental injuries also presented late. A high index of suspicion should be used if a child <4 years presents with abdominal symptoms suggestive of internal injury without an explicit history of blunt injury. Overall, the signs and symptoms of visceral injury vary from non-symptomatic to the lift-threatening. The investigative approach is as for blunt trauma from accidental injuries [77] and may include amylase, lipase, liver function, a full blood examination and either ultrasound and/or CT (Table 5.3).

Fractures

Fractures are the second most common injuries in abused children, second only to bruising [78]. They represent an application of physical force that is either directly or indirectly applied. Direct forces may result in a transverse or communited fracture at the point of impact whereas an indirect force may result in a fracture distant to the site of force application. Twisting results in spiral fractures and a combination of bending and compression may result in an oblique fracture. Associated with all fractures will be some degree of soft tissue injury and haemorrhage, and there may also be associated cutaneous bruising. Avulsion fractures may occur and joint injuries should not be overlooked [48].

Most skeletal injuries in children are accidental and are common about the wrist and forearm for those aged between 5 and 18 [79]. Fractures due to abuse are more common in children under the age of 2 years. In 1986, Worlock et al. [80] showed

WIT.0043.0086.0216

that 80% of abusive fractures occurred in children under 18 months while 85% of accidental fractures are seen in children aged 5 years and over. Abusive fractures are frequently clinically occult; they may be multiple and of different ages [80, 81]. Any fracture can occur as a result of physical abuse, but some have a higher specificity than others. Given the extent and variation of fractures with age the reader is referred to *Diagnostic Imaging of Child Abuse* by Kleinman [82] and the RCPCH Child Protection Evidence website [83].

Kleinman et al. [84] and Flaherty et al. [85] describe certain fractures that have specificity for child abuse. Those with a high specificity include the classic metaphyseal fractures of long bones, postero-medial rib fractures in infants, scapular fractures and spinous process and sternal fractures. Those with moderate specificity include multiple fractures in the same child, fractures of differing age, epiphyseal separations, vertebral body fractures and subluxations, digital fractures and complex skull fractures. Those of low specificity include subperosteal new bone formation, fractures of the clavicle and long-bone shafts, and linear skull fractures.

Rib fractures have the greatest specificity for physical abuse [86, 87]. The fractures are most likely to be multiple, affecting ribs on one or both sides of the thorax. They can be located at any point along the ribs; anterior rib fractures appear to be more common in abuse than nonabuse, and lateral fractures are more commonly seen in accidental injury, while posterior rib fractures are reported in both situations but are a predictor of high specificity for abuse in infants [84, 85].

Humeral and femoral fractures have a higher risk of being abusive than accidental in children under 18 months of age. Pandya et al. [87] showed that in children over 18 months of age both humeral and femoral fractures are more likely to be accidental. As far as fracture types are concerned, supracondylar humeral fractures are strongly indicative of an accidental injury [88]. There is no difference between the type of femoral fracture in abusive and nonabusive injuries which are most commonly mid shaft, with the exception of spiral fractures that were recorded as the most common abusive femoral fracture in children under 15 months of age [89].

No skull fracture pattern is disgnostic of abuse. Linear fractures (especially single, linear parietal skull fractures) are low-specificity fractures and falls from modest heights (up to about 1.5 m) explain most of this type of fracture in infants [90]. It is estimated, however, that as many as one in three skull fractures in preschool children are abusive [86, 87].

Metaphyseal fractures have been described as characteristic of physical abuse [80, 82, 85, 91, 92] and appear to occur more frequently in abuse than following accidental injury. They have also been described as birth related injuries [93] and following serial casting treatment of talipes deformity [94]. The presence of unexplained metaphyseal lesions in an infant always warrants further child protection investigations.

Skeletal spinal injuries are reported in physical abuse. Cervical injuries have been reported in association with abusive head trauma in babies and thoraco-lumbar fracture dislocations in toddlers [95]. These injuries may be associated with injury to the spinal cord. If spinal skeletal injuries are suspected, a spinal magnetic resonance imaging (MRI) scan should be conducted to exclude spinal cord involvement.

WIT.0043.0086.0217

Skeletal fractures have been described in up to one-third of children who have been physically abused [96]. In light of the fact that children under 2 years of age are at greatest risk and that fractures may be clinically occult, it is important that skeletal injuries are excluded in any child under 2 years of age when physical abuse is suspected. The American Association of Pediatrics, the Royal College of Radiology and the Royal College of Paediatrics and Child Health set out guidelines for the radiological investigation of children suspected of child abuse [97, 98]. They recommend an initial comprehensive skeletal survey that includes up to about 20 X-ray images to visualize the entire skeletal system adequately. Other countries have their own specific but similar regimes. Studies confirm that oblique views of the thorax increase the chances of identifying acute rib fractures [99] and that lateral views of the vertebrae are essential to exclude spinal skeletal injury [95]. Repeat skeletal surveys at 10–14 days have been shown to confirm the identity of ambiguous findings and to identify additional features not seen on the initial survey, particularly rib and metaphyseal fractures, and to support an opinion regarding the age of a fracture [100, 101]. In some regions, a radionuclide bone scan is conducted at the same time as a skeletal survey to improve identification of occult fractures in children under 2 years of age. In the absence of this facility, or should the parents of the child object, a repeat survey in 10–14 days is recommended. For children older than 2 years, radiology should be directed to the site of clinical suspicion.

Precise dating of fractures cannot be achieved [102]. Experienced pediatric radiologists are often prepared to offer an opinion on the age of fractures in broad terms according to the radiological appearance of the extent of fracture healing. Textbooks offer time intervals for the different stages of fracture healing based on the experience of radiologists [80].

Any comprehensive clinical and forensic assessment must exclude conditions such as accidental injury, birth trauma, infection, rickets, osteogenesis imperfecta, and metabolic bone disease of prematurity in their differential diagnosis. A comprehensive birth history, as well as family and nutritional history, is as important as detailed scrutiny of skeletal images for markers of these conditions [103]. Laboratory investigations may include serum alkaline phosphatase, calcium, phosphate, parathyroid hormone, vitamin D, and urea and creatinine (Table 5.3).

Other Physical Injuries

There are a number of other potential injuries that may be identified in child physical abuse that have not been addressed above. These include hair loss, eye trauma, ear trauma (ruptured tympanic membrane), trauma to the finger and toe nails, and spinal injuries. Injuries may also occur to the genitalia and anal region unrelated to a specific sexual assault. They are, however, considered under descriptions of injuries associated with sexual assault and will not be further discussed here (see Chap. 3).

Hair loss (principally head) may be the result of either trauma or it may fall out spontaneously because of an underlying medical condition (e.g. scalp infections) or as a result of chemotherapy. Published documentation regarding the association

WIT.0043.0086.0218

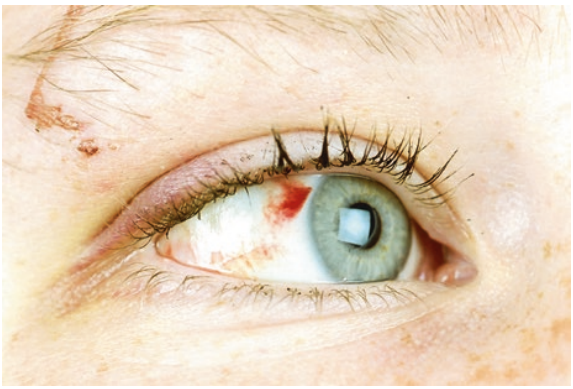


Fig. 5.8 Subconjunctival/scleral haemorrhage

between hair loss and child physical abuse has not been identified but should be considered in unexplained cases of hair loss.

Eye injury resulting from physical abuse is not uncommon. Subconjunctival haemorrhages are common and may result from direct trauma, attempted suffocation, neck compression (strangulation), and chest or abdominal compression (Fig. 5.8). They may also arise from birth trauma, forceful coughing and vomiting, and a too forceful Valsalva. Direct trauma may also result in corneal or scleral laceration, vitreous haemorrhage, acute hyphema and retinal detachment. Retinal haemorrhages have many causes but are an important consideration in abusive head trauma (see below). When assessing eye injuries, non-accidental causes should be considered when differentiating accidental and medical causes.

Spinal injuries are rare in childhood and potentially have significant morbidity and mortality [24]. They have a greater association with accidental trauma and are uncommonly reported in child abuse. They may, however, be associated with abusive head trauma which is described below.

Abusive Head Trauma

Abusive head trauma (AHT) is a difficult and challenging area of paediatric forensic medicine and is a condition that should be managed by experienced forensically trained physicians. AHT is a large topic but will only be briefly described here. It has been beset by theories and debate and its title, abusive head trauma, is a more recent term that replaced names such as 'shaken baby syndrome', 'inflicted traumatic brain injury' and 'non-accidental head injury'. The clinical outcome for children with AHT is poor and considerably worse than for those children with non-AHT [104–106]. It is the principal cause of fatal head injuries in children under 2 years of age [17, 107, 108]. Studies quote mortality rates of 8% [105] to 30% [11] in infants with AHT, and up to a half the victims of AHT sustain persistent neurological impairment. The estimated incidence of infants under the age of 1 year who are admitted to hospital is 20–24/100,000 year [11, 109]. This rises to 36/100,000 for infants under

WIT.0043.0086.0219

6 months old [11]. In practice, this means that physicians and pediatricians in non-specialized pediatric inpatient settings can expect to see a case infrequently, while pediatric intensive care and pediatric neurology units will do so on a regular basis.

It is widely accepted that AHT arises from shaking, impact injuries, or a combination of both. One study reports that 2.6% of American parents admit to disciplining their infant children by shaking them, figures from less-developed countries are considerably higher [110]. It is, therefore, likely that hospitalized cases are only a proportion of a much wider issue.

AHT consists of multiple components including one or a combination of skull fractures, subdural and other intracranial hematoma, intracranial and spinal changes including hypoxia and cerebral contusions, complex retinal hemorrhages, and rib and other fractures that are inconsistent with the provided mechanism of trauma. Clinically, presentation is varied and includes infants who present with unexplained traumatic brain injury or infants with other signs of physical abuse where intracranial injury is identified in the course of a full clinical investigation. Symptomatology can vary from a child who is dead at admission to children who present to hospital with a variety of neurological symptoms of varying degrees of impaired levels of consciousness, seizures, or apneic episodes, and some children presenting with minor degrees of irritability or impaired feeding without overt neurological symptoms [11, 105]. The findings may be incidental where the child presents for an unrelated condition.

One study [105] compared the presenting history of a group of children under the age of 3 with definite AHT with that of children with non-inflicted head trauma. They concluded that there is a high likelihood of abuse in children who have traumatic intracranial injury with no history of trauma or in children with persistent neurological impairment and a history of low impact fall (equivalent to falls of less than 1 m). They also showed that an explanation of out of hospital cardio-pulmonary resuscitation or a changing history or one where alternative traumatic explanations were offered was more common in cases of definite abuse. Low impact trauma was not specific for abuse in children without neurological impairment, consistent with the fact that low falls can cause skull fracture and rarely intracranial injury which is unlikely to be severe enough to cause neurological impairment. Late presentation to hospital and sibling involvement did not appear to be significant discriminatory features.

Ever since 1946 when Caffey [111] entitled his article "Multiple fractures of long bones of children suffering from subdural haematoma," it has been accepted that a number of features are often associated with AHT. Along with bruises and other cutaneous injuries these children may sustain different combinations of fractures, retinal hemorrhages, apnoeic episodes, and seizures more commonly than children with traumatic injury of a known accidental cause.

Retinal Haemorrhages

Retinal hemorrhages (RHs) are strongly associated with AHT. Studies have identified RHs in 70–80% of cases of confirmed AHT [112]. In contrast, they are seen in

WIT.0043.0086.0220

fewer than 10% of nonabusive head injuries. In the majority of cases of AHT, the hemorrhages are widespread throughout the retina, extending to the periphery [113]. They are more often bilateral than unilateral, and are commonly found throughout all layers of the retina. When they are present after accidental head injury, the hemorrhages are predominantly few in number and located primarily at the posterior pole or around the optic disc. They are often unilateral. More wide spread hemorrhages are seen after crush injuries to the head and high falls. Numerous additional retinal features have also been reported in either condition; retinal schisis and perimacular folds have been reported in AHT and nonAHT following significant crush injuries or high fall (>35 ft.). While there are features of RH that are undoubtedly strongly indicative of AHT, there is no pattern that is pathognomonic to either condition. It is important therefore that any child with suspected AHT has a retinal examination performed by an ophthalmologist using indirect ophthalmology. Findings should be accurately recorded including the number, distribution, laterality, and layers of retina involved together with documentation of any additional ophthalmological findings. A photographic image may provide a valuable record of the findings.

It should also be remembered that there are numerous other conditions associated with RHs in the age group at risk of AHT. These include some conditions that may have other features common to physical abuse such as coagulopathy disorders, birth-related retinal hemorrhages, metabolic disorders such as glutaric aciduria, homocystinuria, and osteogenesis imperfecta [114]. Other conditions such as cardio pulmonary resuscitation, apparent life threatening events (ALTE), epilepsy, and cough have been proposed to predispose to RH. However, there are very few published studies to help answer this question. RHs rarely occur after seizures and have not been reported in the literature in association with cardio pulmonary resuscitation, ALTE, or persistent coughing; however, published case series are small and inadequately powered to address the question with certainty.

Apnea and Seizures

Apnoeic episodes are increasingly recognized in association with AHT, which appears to coincide with the fact that hypoxic ischaemic injury is commonly seen on MRI images of these children [115] Multiple factors are proposed to account for the apnea, such as respiratory insufficiency in an infant who is subjected to repeated traumatic events or damage to the respiratory control centers in the brainstem. Seizures are more strongly associated with children with AHT; prolonged seizure activity may exacerbate further hypoxic ischaemic damage to the brain through excitotoxic mechanisms or by inducing further respiratory insufficiency [115].

Fractures

Rib fractures and long bone fractures have been found to be associated with AHT. By comparison, skull fractures are associated with both abusive and non-AHT.

WIT.0043.0086.0221

The explanation proposed is likely to be the fact that most cases of non-AHT arise from falls or impact injuries that predispose to skull fractures whereas AHT may include shaking injuries with or without impact.

Intracranial Haemorrhage and Brain Contusions

Subdural hemorrhage (SDH) is associated with AHT and must be considered as a possible diagnosis in any child with an unexplained SDH. Subarachnoid hemorrhages are recorded equally in both abusive and non-AHT while extradural hemorrhage is significantly associated with non-AHT [116–120]. In a comparison of non—accidental and accidental causes of SDH, there are certain features of SDH that are far more commonly associated with abuse and these include: –

- being bilateral;
- multiple bleeds;
- located in the inter-hemispheric fissure or falx;
- of differing densities;
- in the absence of skull fractures; and
- in the presence of a retinal haemorrhages.

Intracerebral changes of AHT include cerebral oedema [118] and hypoxic ischemic injury [115]. Subarachnoid haemorrhage is also relatively common in association with abusive brain injury and often occurs in association with subdural haemorrhage. Other changes that may be identified include brain contusions and diffuse axonal injury. Contusions may occur in young children due to acceleration-deceleration mechanisms and impact but they are less common than in older patients. They may occur adjacent to skull fractures. Contrecoup contusions may also be identified. Diffuse axonal injury due to rotational angular acceleration-deceleration forces may result from both shaking or blunt impact and may be identified on MRI.

Investigation of AHT

Radiology plays an important role in the investigation of AHT and current guidelines [97] suggest that CT is the first investigation of choice because of the widespread availability and technical ease of performing CT on a sick child on admission to hospital. MRI has added benefits and should be performed as soon as possible [121, 122]. In some centers with the appropriate expertise, MRI is increasingly accepted as the first line investigation. MRI is better at identifying small SDHs in areas obscure to CT imaging and is more sensitive to lesions within the brain parenchyma itself, which may provide prognostic information. MRI can help to differentiate subarachnoid hemorrhage or low attenuation subarachnoid fluid collections that may be consistent with a benign hygroma of infancy. Dating the intracranial

WIT.0043.0086.0222

trauma may be achieved utilizing signal analysis of resolving SDH on T1 and T2 weighted and FLAIR sequences [123]. It is important to consider extending the MRI to include the cranio cervical junction and spinal cord to exclude coexisting spinal injury which has been shown to be present in a number of cases. The reader is referred to a succinct overview of the appropriate radiological investigation of suspected AHT in children, interpretation of findings and the consideration of pitfalls in a recent review by Rao and Smith [124].

All cases of AHT should be assessed by an ophthalmologist at the earliest opportunity.

In all cases of AHT, a skeletal survey, nuclear bone scan and bone biochemistry should be arranged. In cases where haemorrhages are identified, the investigation should be as for bruising (Table 5.3). In some cases, a urine metabolic screen may be judicious in excluding potential mimics of AHT.

Mimickers of AHT

The differential diagnosis of AHT is extensive and has been detailed by Sirotnak [125]. The conditions may include accidental head injury, coagulopathy disorders, genetic conditions such as osteogenesis imperfecta, metabolic conditions such as glutaric aciduria and galactosaemia, birth related SDHs, cerebral infections, and benign extra axial fluid collections in infancy. These must all be considered within the diagnostic process.

Fabricated or Induced Illness

Fabricated or Induced Illness (FII) is a term used for child abuse where a child suffers harm (or is placed at risk of harm) as a result of fabrication (lying) or induction (causing) of illness by an adult carer. There is a spectrum of severity ranging from purely iatrogenic harm that arises when carers provide false information to doctors who then proceed to investigate or treat children unnecessarily, to severe physical abuse inflicted by carers who repeatedly present their children to medical services after smothering, poisoning, or other illness induction. These latter cases are often fatal whereas “fabrication only” cases are rarely fatal. All children exposed to this behavior are likely to suffer significant harm, both emotional harm arising from the unnecessary adoption of a “sick role” and physical harm which may be largely iatrogenic. Other forms of abuse may coexist and there are often very extensive difficulties with parent–child interaction that extend well beyond the medical interface.

FII replaced the previous term “Munchausen Syndrome by Proxy” (MSBP) in the United Kingdom in 2002 [126]. MSBP had widely been misinterpreted as a psychiatric condition in the carer “suffering from” MSBP. The term FII placed the focus back on to the child and the abuse it was suffering. Most observers suggest that there may be many pathways to fabrication that vary between perpetrators [127].

WIT.0043.0086.0223

The focus tends to remain on the child and any supplementary diagnosis of the parent would depend on their discrete clinical features [128].

The core concept of FII is that the child does not have a medical condition that explains the symptoms described by the carer. The history is incongruous with the child's clinical features and investigation results and the overall presentation is perplexing for the physician.

The Wider "Spectrum" of FII Concerns

There are other situations where a child may be presented for medical attention with symptoms that sound serious, yet the child does not have a medical condition that explains their presentation. Table 5.4 provides a useful basis for a differential diagnosis of FII. It should be recognized that some exaggeration by carers is common and simply reflects the carer's anxiety about the child's condition and his/her need to gain the attention of the treating physician. All physicians should possess the skills to deal with this without recourse to child protection procedures. Persistent exaggeration and fabrication that has the potential to lead to harm to the child is a more serious situation that must be addressed. Of these examples, only type 3 would generally be recognized as FII by pediatricians. This categorization is not exhaustive; for example, it does not deal with situations where carers are "malingering by proxy" [129] or attempting to defraud the state by lying about illness, nor does it encompass those situations where children actively fabricate their own illness.

While most FII cases are presented to pediatricians, some may be presented to child psychiatrists with unfounded complaints such as autism spectrum conditions, eating disorders, chronic fatigue, non-organic symptoms, or ADHD [130–134]. The carers involved may have complex reasons for presenting and may genuinely believe that their child has the condition, that is, different from the classical pediatric fabricating parent. They may have vested interests in obtaining a diagnosis; for example, they may need to feel that they are not responsible for their child's problems (or the problems of parent–child interaction), and they may want disability benefits for the child.

Some carers become convinced that their child has suffered abuse and may present repeatedly to child protection agencies requesting forensic assessment [135–138]. Some cases present in an education setting with carers who attempt to procure special educational support for a child who simply does not have the disability that is reported by the carers. In any of these situations, if there is concern that the child is at risk of harm and the situation cannot easily be resolved, then a child protection/safeguarding referral may be indicated. These situations may not fit comfortably under the label of FII as in many cases there is not good evidence that the carer is deliberately fabricating the child's illness.

Most perpetrators are mothers although a small number of cases involving fathers have been described [139–142]. No consistent psychopathology has been identified in FII perpetrators although some have personality disorder [143–145]. Certain characteristics have been observed in some cases, such as the following:

WIT.0043.0086.0224

Table 5.4 The range of situations where fabricated or induced illness (FII) concerns may arise [210]

Starting point: A child is presented for medical attention, possibly repeatedly, with symptoms or signs suggesting significant illness but an appropriate clinical assessment suggests that the child's "illness" is not adequately explained by any disease. The examples below illustrate the range of possible considerations				
Example 1	Example 2	Example 3	Example 4	Example 5
Type of presentation				
Simple anxiety, lack of knowledge about illness, over interpretation of normal or trivial features of childhood. May in some cases be associated with depressive illness in carer	Child's symptoms are being misperceived, perpetuated, or reinforced by the carer's behavior. The carer may genuinely believe that child is ill or have fixed beliefs about illness	Parent actively promoting sick role by exaggeration, non-treatment of real problems, fabrication (lying), falsification of signs, and/or induction of illness (i.e., "True" FII) [a]	Parents suffering psychiatric illness, e.g., delusional disorder	Unrecognized genuine medical problem becomes apparent after initial concern about FII [b]
Underlying factors				
Carer's need to consult a doctor may be affected by other social stresses, mental health issues, or coping abilities of carer	"Illness" may be serving a function for carer, and subsequently for an older child too (secondary gains)	There may be a background history of frequent use of health services or apparent dependency on health care. Carer may have personality disorder or the child's "illness" may be serving a purpose for the carer	Usually not difficult to recognize	Possibility of "false positive" child abuse diagnosis must always be considered. Child's clinical progress should always be monitored in case a genuine illness has been missed
Insight				
Carer usually reassurable although likely to present again in future	Difficult to reassure; carer and pro-fessionals may not agree on cause of symptoms and/or the need to consult or investigate further	Not reassurable; carer's objectives are diametrically opposed to those of professionals	Carer lacks insight	Carer's "illness behavior" will usually be appropriate for the signs displayed by child, but the child protection intervention may have affected the carer's behavior

(continued)

WIT.0043.0086.0225

Table 5.4 (continued)

Starting point: A child is presented for medical attention, possibly repeatedly, with symptoms or signs suggesting significant illness but an appropriate clinical assessment suggests that the child's "illness" is not adequately explained by any disease. The examples below illustrate the range of possible considerations				
Example 1	Example 2	Example 3	Example 4	Example 5
Level of risk				
Seldom reaches threshold of significant harm	May be disabling: often some risk of significant harm, may be emotional or educational harm, or social isolation	High risk cases. Always some harm, often severe	May Vbe risk of harm	Risk of harm due to inappropriate child protection process and delay in correct diagnosis
Iatrogenic harm				
Possible iatrogenic harm risk	Significant risk of iatrogenic harm	Very high risk of iatrogenic harm	Hopefully low risk of iatrogenic harm	See above
Management				
Discuss concerns openly with carer. Managed primarily by reassurance. Try to address carer's needs	Discussion with carers may need to be handled very sensitively. If in doubt, discuss with appropriate colleagues. Firm reassurance. Avoid iatrogenic harm. Multi-agency assessment may be needed to gain understanding of what underpins carer behavior (either "Child in Need" or "Child at risk" referrals may be indicated)	Local Safeguarding Children Procedures apply. Take immediate steps to reduce iatrogenic harm if possible. Do not disclose concerns to carers without first discussing the case within the Safeguarding procedures	Discuss with carers whether they feel that they have any mental health needs and how those might be addressed. Consider discussing with GP or other relevant professional (bearing in mind the constraints of patient confidentiality). Carer's mental health needs must be addressed. Child may be "Child in Need"	Consult widely with colleagues if a "false positive" child abuse diagnosis seems likely. If safeguarding procedures have already been activated, an immediate strategy meeting should be requested and the situation should be discussed with carers without delay

[a] Induced illness may include inflicted injuries intended to mimic a disease, but generally physical abuse where the perpetrator denies the cause of the injury would not be included

[b] Erroneous FII diagnosis has been described in the literature and this possibility must always be borne in mind. In one follow up study by the British Paediatric Surveillance Unit [148]. None of the 97 "MSBP" cases were subsequently found to have been due to misdiagnosed genuine disease (old terminology pertained at that time)

WIT.0043.0086.0226

- Unusual calmness or knowledge of illnesses
- Parents who fit in contentedly with ward life or, paradoxically, actively obstruct medical care
- Factitious or somatoform disorder in the perpetrator
- Extensive fabrication in other areas of their lives
- Fabrication of illness in spouses or pets [146]
- A history of self harm
- Complex obstetric histories that may be in part fabricated or self-induced problems [147]
- Alcohol or drug misuse
- Criminal activity
- Personality disorders including hysterical and borderline types [145]
- A personal history of being victims of child abuse or rape (which may not always be substantiated)
- A history of conduct disorder or eating disorder
- A very erratic employment record or interrupted training in a health related area
- Some engage in litigation, seek compensation, or allege harassment
- Some harass or complain about the doctor who made the diagnosis
- Financial mismanagement
- Marital and relationship difficulties, often well concealed

However, many of these features are present in carers who have not fabricated illness in their children and it would be wrong to use features such as these to support a diagnosis of FII. However, some of these are factors that must be considered in the wider assessment of risk to the child as part of the core social services assessment.

Epidemiology of FII

Studies give an estimated annual incidence of FII between 0.5 and 2/100,000 children under the age of 16 years. Figures vary according to study inclusion criteria [139, 148, 149]. The British Paediatric Surveillance Unit (BPSU) epidemiological study in United Kingdom in the early 1990s included new cases of FII, confirmed at Child Protection Case Conference or in Family Courts. There were 97 new cases identified over 2 years which suggests that a large teaching hospital will identify one or two new cases per year [139, 148]. There was no gender difference, the median age at onset was 20 months and 77% of the children were below 5 years of age. There were large unexplained variations in reported incidence between different regions in the United Kingdom.

In pediatric clinical practice, however, concerns about FII are frequently encountered because of the chronic nature of the presentations and the broad spectrum of the condition including "milder" cases that may not all require a formal child protection response. Large number of professionals may be involved in a single case.

WIT.0043.0086.0227

Watson et al. quoted in [150] surveyed Primary Care Teams and identified FII concerns in almost 1 in 1000 children, most of whom had not been identified as being "at risk."

There have been a few reports of FII involving traditional healers and faith healers in developing countries [151, 152]; however, FII tends to be reported mainly from countries with well developed health services from secondary and tertiary care facilities where the clinicians can effectively join a *folie-a-deux* with the fabricating carer. The availability of investigative and treatment facilities and a defensive medical culture with a fear of missing a rare diagnosis and attracting criticism are probably important factors in its evolution. Doctors unwittingly become duped into harming the child by their tests and treatments, although the primary responsibility for the abuse clearly rests with the carers if they are deliberately deceiving the doctors.

Presenting Features

Certain medical conditions where the diagnosis rests mainly on history and there are no reliable signs or test results which would refute the diagnosis are more vulnerable to fabrication or induction than others. In confirmed FII cases, it is often apparent that when the child was first presented to doctors, the symptoms reported were vague and nonspecific. After seeing several doctors, the carer becomes more aware of the important clinical signs for the suspected condition and the history given by the carer becomes more precise and convincing. This is just one way in which doctors contribute inadvertently to the problem. Examples include fabricated seizures, apnea, allergies [153], asthma [154], vomiting, or diarrhea.

Some parents may extend the fabrication by falsifying physical signs. The commonest example is simulating blood loss, where the blood may be found to come from the carers themselves [139, 155]. It is very important that opportunities to analyze blood in these situations are not missed [156, 157]. Other examples are carers who put glucose or albumin in urine samples, falsify blood glucose measurements or oxygen saturation readings, alter ward charts, tamper with laboratory specimens, obtain stomach or bowel contents from the child and substitute for other specimens, add water to the baby's nappy to falsify an excessive diuresis, spit in the child's ear, and so on [158–160]. Falsified fever has become rare since the use of ear probe thermometers has replaced the old mercury thermometers.

The most extreme presentations merge with severe physical abuse and involve repeated smothering [161, 162] or poisoning [139], physically injuring the child to produce rashes [163, 164], administering noxious or caustic substances to various parts of the body [165–169], burning the child to mimic skin conditions [170], inserting needles into the abdominal cavity, gouging the child's ears, ligating body extremities, depriving the child of food [164], injecting feces into soft tissues or central lines to cause polymicrobial sepsis, and so on [164, 171, 172]. These behaviors are far removed from the actions of any normal parent and are very ominous in terms of mortality and morbidity.

WIT.0043.0086.0228

Table 5.5 lists indicators that may help to give an overall picture and prompt more detailed investigation of the possibility of FII. The medical presentations are varied. Table 5.6 summarizes the mode of presentation documented in the BPSU study.

Smothering cases present with apnea and cyanosis, with or without associated convulsions. ALTE are relatively common clinical presentations in early childhood and only a small percentage are due to abuse [173–175]. Repeated apnea occurring only in the presence of one carer, where the infant recovers rapidly without active treatment and has no features of any underlying disease, should alert suspicions of FII [176]. Fresh blood appearing at the nose or mouth in an infant with recurrent apnea should be regarded as ominous [177–179]. Smothered infants may also have diffuse shadowing on chest X-ray and altered blood indices, particularly a lymphocytosis [162]. Where smothering is confirmed, there is often a past history of a sibling death in suspicious circumstances [161].

Fabricated seizures are particularly difficult to diagnose and commonly mismanaged. There are many reasons for this; many normal children have odd "episodes" that could justifiably raise concern about seizures. Anxious parents may to some extent "refine" the history they provide to encourage doctors to take them seriously. Carers who have a propensity to exaggerate or fabricate their child's medical history will rapidly learn that this is fertile ground to exploit this tendency. Epilepsy is a clinical diagnosis and there is no diagnostic test that confirms or refutes the diagnosis. Electroencephalography (EEG) may be normal in children with epilepsy or abnormal in children who do not have epileptic seizures. EEG therefore has its place

Table 5.5 Indicators which should alert doctors to the possibility of fabricated or induced illness (FII) may be included [210]

Reported symptoms and observed signs are not explained by any medical condition from which the child may be suffering
Physical examination and results of investigations do not explain the reported symptoms or signs
Inexplicably poor response to prescribed medication or other treatment, or intolerance of treatment
Acute symptoms are exclusively observed by/in the presence of one carer, are not seen in the absence of that carer, and subside when the carer is not present
Reporting of new symptoms on resolution of previous problems or reporting symptoms in different children in sequence
Limitation of child's daily life and activities, beyond what is expected due to any known disorder from which the child is known to suffer, e.g., partial or no school attendance; limitation of activity; special aids
Objective evidence of fabrication, e.g., conflicting history of events from different observers; history of events which are biologically implausible (e.g., small infants with a history of very large blood losses who do not become anemic, or infants with large negative fluid balance who do not lose weight); test results such as toxicology studies or blood typing; covert video surveillance
Carers may express concern that they are under suspicion of causing FII, or relatives may raise concern that the carer may be causing the child's illness
Carers who seek multiple opinions inappropriately

WIT.0043.0086.0229

Table 5.6 Presenting features in 97 "FII" cases from BPSU study [156]

Presenting feature	Fabrication cases	Fabrication with falsification cases	Illness induction cases	All cases
Fits	8	4	12	24
Apparent life threatening events (ALTE)	4	1	17	22
Drowsy, coma	0	1	12	13
Blood loss in vomit or rectally	2	8	3	13
Failure to thrive, feeding difficulty	1	1	9	11
Bowel disturbance	4	2	3	9
Asthma	6	0	3	9
Vomiting, gastro-esophageal reflux	0	2	6	8
Blood loss, haemoptysis	0	2	3	5
Skin lesions	0	0	4	4
Fabricated disability	3	0	0	3
False allegations of abuse	1	0	2	3
Blood in urine	0	2	1	3
False disclosure of accidental overdose	0	0	3	3

but should be interpreted with caution if the history provided by the carer cannot be relied upon. If in doubt, anti-epileptic medication should not be offered and further attempts should be made to secure reliable history and explore wider aspects of the family's presentation. Delay in starting treatment for genuine epilepsy in children is seldom prejudicial in any way [142, 164, 180–186].

Poisoning often presents with altered consciousness [187–191]. The commonest agents used to poison children in UK FII cases are anticonvulsants, maternal psychiatric drugs, drugs of abuse, paracetamol (acetaminophen), and household agents such as common salt or bleach [139]. Poisoning with insulin or hypoglycaemic drugs are also well recognized causes of hypoglycaemia. The latter will not show the characteristically high insulin:C-peptide ratio of exogenous insulin administration [192–194]. Toxicology studies should be requested if poisoning is suspected. Both blood and urine should be sent so that both qualitative and quantitative studies can be undertaken. Salt poisoning presents with hypernatraemia [195]. Where salt poisoning is suspected, urine sodium excretion should be carefully monitored as well as plasma sodium and osmolarity. Detailed guidelines have been produced by the Royal College of Paediatrics and Child Health in the United Kingdom [196]. Insulin poisoning is rare but serious and can be identified by the high blood insulin levels and lack of corresponding elevation of C-peptide [197–200].

Gastro-oesophageal reflux (GOR) also deserves particular mention. GOR in varying degrees is universal in infancy and there is considerable debate about the association with other problems such as apnea and whether in fact GOR is causal

WIT.0043.0086.0230

[174, 201]. The identification of GOR in the course of investigating recurrent apnea, persistent vomiting, or failure to thrive therefore should not prevent consideration of other possible diagnoses including FII, although FII probably accounts for only a very small proportion of persistent apnea or vomiting cases. The key, as usual, is careful history taking and clinical observation. Unfortunately, there have been many examples of cases where clinicians embarked on invasive interventions before the "penny dropped" and a diagnosis of FII was confirmed [139, 171, 200, 202–209].

Management of Suspected FII Cases

Detailed description of the clinical management of such cases and the ensuing child protection processes is contained in various other publications and is beyond the scope of this text. However, certain basic principles are worthy of emphasis (Table 5.7).

Covert Video Surveillance

This is a controversial area and is seldom needed if a comprehensive Health Chronology has been compiled and the possibility of FII considered in a multi-agency context. Covert video surveillance (CVS) would be indicated if there was no other viable way of safeguarding the welfare of the child. It is conducted by the police acting under the relevant legislation governing their investigatory powers (in the United Kingdom this is the Regulation of Investigatory Powers Act 2000) and should not be undertaken by health staff acting alone. Where it is felt that CVS may assist, it should be discussed in a strategy meeting attended by legal advisors and a senior police officer. The following circumstances might indicate that CVS would be helpful [162, 210].

- The cause of the child's illness is unexplained but FII abuse is suspected
- The prevailing evidence for child abuse is not considered strong enough to allow effective protection of the child or other children
- Other appropriate investigations have been undertaken and there is no realistic alternative investigation which may explain the child's illness
- Overt surveillance has been considered and not felt to be appropriate
- The child is having some type of "episode" of illness with a reasonable frequency (i.e., frequent enough that CVS is likely to capture an episode in a realistic timeframe)
- The "episodes" occur in hospital if the child is not closely supervised
- The location of the "event" is predictable, that is, the suspected abusive event is likely to be within the field of vision of CVS if it occurred
- The suspected act of abuse is something which is likely to be recognizable on CVS

WIT.0043.0086.0231

Table 5.7 Basic principles of management of FII

Where early concerns about FII arise, it is essential that iatrogenic harm is kept to a minimum
There are several available checklists of "warning signs" for FII that may be referred to at this stage and may be helpful
Taking a very detailed history of the child's condition from all adult carers is very important as important incongruities may arise. Some family members may already suspect FII and may volunteer this information
Any further tests or opinions should be directed at attempting to confirm or exclude the possibility of FII
All clinicians involved with the child should be made aware of the concerns
It is important that all clinicians keep an open mind and avoid dividing into discrete "camps" or assuming the role of advocate for the carer. The focus must be on the welfare of the child
Inflicting harmful investigations or treatments on a child in an attempt to exclude the presence of a rare disorder is inappropriate until concerns about FII have been resolved
The carer(s) should not be alerted to the concerns in the early stages as important opportunities to confirm a diagnosis may be lost, e.g., by forensic tests or covert video surveillance (CVS). The disclosure needs to be carefully planned to minimize the risks to the child and enable important evidence to be secured
The physician needs to keep an open mind and equal effort needs to be put into confirming genuine physical disease and FII
Information should be sought from other treating centers, bearing in mind the probability that the carers may have "shopped around" for various opinions (or to evade detection) and that perplexing problems are often referred to tertiary centers that may not be well placed to address a complex child protection concern
Sometimes, the most important "test" is to see if the child's symptoms resolve when the carer is absent. This may be difficult to arrange as an abusive carer will realize that his/her deception may be uncovered and will resist this plan, so statutory agencies may have to be involved
The threshold for making a child protection referral/report is a concern that the child may be at risk of significant harm. If that concern cannot be resolved rapidly without placing the child at further risk then a referral should be made
The initial strategy meeting, held without the carer's knowledge, is crucially important in defining a way forward and all relevant agencies need to be properly represented
The focus throughout has to be on the avoidance of harm to the child
The mental health needs of the carer should also be considered and appropriate supportive services offered after disclosure of the concerns
The absence of an identified mental health condition in the carer does not undermine the diagnosis of FII in any way and it is important that an adult psychiatrist does not assume the role of advocate for the carer within the child protection process
It is helpful if one physician (usually a pediatrician) assumes the role of responsible consultant and becomes the conduit for all medical information
A detailed medical chronology should be prepared and is likely to be invaluable in clarifying what, if any, medical conditions the child suffers from

- Appropriate resources and training can be made available in order to ensure that CVS can be undertaken efficiently and safely

If there is an agreement to proceed with CVS it would be sensible to involve a clinician with appropriate experience to oversee the medical contribution to the process.

WIT.0043.0086.0232

Illustrative Case *A child protection agency requested a forensic assessment of a family based upon ongoing concerns regarding the children's poor school attendance that was impacting upon their academic and social development, their failure to connect with their family and father, the children's social isolation, the number of different doctors the children had attended, the use of prescription medications for both children, and their mother's mental health. The parents were separated. The children lived with their mother but visited their father at increasingly infrequent times. The case was particularly complex requiring an assessment of each of the parents and children with specific attention to their mental health and included a developmental assessment of the children. Data for review by the assessing forensic physician and forensic pediatrician included the outcome of interviews and assessments of the parents and children, together with school reports, the results of interviews with teaching staff, and the medical records from the various treating general practitioners.*

A recommendation was made that the mother undergo a psychiatric assessment and pending this assessment that the children be removed from her care and placed into the care of their father with supervised access to their mother. Following the mother's psychiatric assessment, the children were placed into the permanent care of their father. This decision was challenged in court by the mother who presented a second psychiatric assessment indicating that she did not suffer from any mental health problem. Initially the mother was represented in court by legal counsel but she dismissed these practitioners and decided to represent herself. As the case progressed, the mother failed repeatedly to attend court and also failed to provide the court with any reasoning for her absence. A court decision was subsequently made placing the children into the permanent care of their father.

Key Points

- Physical child abuse should be undertaken by paediatricians with formal training in forensic medicine or by forensic physicians with extensive experience in paediatrics
- Physical child abuse is not uncommon and it is important to consider this diagnosis in the list of differential diagnoses for any child presenting with injuries
- The main injuries that may present in a case of physical child abuse and how this case should be assessed
- All healthcare professionals have an important role in recognizing suspected child physical abuse and need to be aware of how to make a referral to the appropriate agencies in their jurisdiction.

Self-Assessment Exercises

1. Outline the main features of the assessment of a child with suspected physical abuse.
2. List the main anatomical sites for abusive and nonabusive bruising.

WIT.0043.0086.0233

3. What does a yellow discolouration about a bruise mean?
4. Is a torn labial fraenulum pathognomonic of child abuse in a young child?
5. What is the most common intentional burn?
6. What is the appropriate first-line radiological and pathological investigation of fractures?
7. What are the clinical features of abusive head trauma?
8. What are the presenting features of fabricated or induced illness?

References

1. Unicef The convention on the rights of the child. https://www.unicef.org/crc/files/Guiding_Principles.pdf. Accessed 10 Apr 2019
2. Child Maltreatment Surveillance. https://www.cdc.gov/violenceprevention/pdf/cm_surveillance-a.pdf. Accessed 30 Apr 2019
3. Children Act 2004. http://www.opsi.gov.uk/acts/acts2004/ukpga_20040031_en_1. Accessed 1 Dec 2018
4. Gilbert R, Widom CS, Browne K et al (2009) Burden and consequences of child maltreatment in high-income countries. Lancet 373:68–81
5. Marchand J, Deneyer M, Vandenplas Y (2012) Educational paper: detection, diagnosis, and prevention of child abuse: the role of the pediatrician. Eur J Pediatr 171:17–23
6. Marchand J (2016) Child maltreatment: detection and diagnosis. In: Gall JAM, Payne-James JJ (eds) Current practice in forensic medicine, vol 2. Wiley, Chichester, pp 243–267
7. Govindshenoy M, Spencer N (2007) Abuse of the disabled child: a systematic review of population-based studies. Child Care Health Dev 33:552–558
8. Sidebotham P, Heron J, Golding J, The ALSPAC Study Team (2002) Child maltreatment in the "children of the nineties:" deprivation, class, and social networks in a UK sample. Child Abuse Negl 26:1243–1259
9. Berger LM (2005) Income, family characteristics, and physical violence toward children. Child Abuse Negl 29:107–133
10. Child Maltreatment 2007. http://www.acf.hhs.gov/programs/cb/pubs/cm07/. Accessed 10 Apr 2019
11. Jayawant S, Rawlinson A, Gibbon F et al (1998) Subdural haemorrhages in infants: population based study. BMJ 317:1558–1561
12. Collins KA, Nichols CA (1999) A decade of pediatric homicide: a retrospective study at the Medical University of South Carolina. Am J Forensic Med Pathol 20:169–172
13. Kliegman RM, Stanton BF, St Geme JW et al (2011) Nelson textbook of pediatrics, 19th edn. WB Saunders, Philadelphia
14. Drummond R, Gall JA (2017) Evaluation of forensic medical history taking from the child in cases of child physical and sexual abuse and neglect. J Forensic Legal Med 46:37–45
15. Murty OP, Ming CJ, Ezani MA et al (2006) Physical injuries in fatal and non-fatal child abuse cases: a review of 16 years with hands on experience of 2 years in Malaysia. Int J Med Toxicol Legal Med 9:33–43
16. Trocme N, MacMillan H, Fallon B, De Marco R (2003) Nature and severity of physical harm caused by child abuse and neglect: results from the Canadian incidence study. CMAJ 169:911–915
17. Escobar MA, Flynn-O'Brien KT, Auerbach M et al (2017) The association of nonaccidental trauma with historical factors, examination findings, and diagnostic testing during the initial trauma evaluation. Trauma Acute Care Surg 82:1147–1157
18. King WK, Kiesel EL, Simon HK (2006) Child abuse fatalities: are we missing opportunities for intervention? Pediatr Emerg Care 22:211–214

WIT.0043.0086.0234

19. Dunstan FD, Guildea ZE, Kontos K et al (2002) A scoring system for bruise patterns: a tool for identifying abuse. Arch Dis Child 86:330–333
20. Atwal GS, Rutty GN, Carter N, Green MA (1998) Bruising in non-accidental head injured children; a retrospective study of the prevalence, distribution and pathological associations in 24 cases. Forensic Sci Int 96:215–230
21. Sugar NF, Taylor JA, Feldman KW (1999) Bruises in infants and toddlers: those who don't cruise rarely bruise. Puget Sound Pediatric Research Network. Arch Pediatr Adolesc Med 153:399–403
22. Labbé J, Caouette G (2001) Recent skin injuries in normal children. Pediatrics 108:271–276
23. Carpenter RF (1999) The prevalence and distribution of bruising in babies. Arch Dis Child 80:363–366
24. NICE Clinical Guidelines (2009, modified 2013) When to suspect child maltreatment. https://www.nice.org.uk/guidance/cg89/evidence/full-guideline-pdf-243694625. Accessed 10 Apr 2019
25. Chang L-T, Tsai M-C (2007) Craniofacial injuries from slip, trip, and fall accidents of children. J Trauma 63:70–74
26. Jessee SA (1995) Physical manifestations of child abuse to the head, face and mouth: a hospital survey. ASDC J Dent Child 62:245–249
27. Feldman KW (1992) Patterned abusive bruises of the buttocks and the pinnae. Pediatrics 90:633–636
28. Wedgwood J (1990) Childhood bruising. Practitioner 234:598–601
29. Nayak K, Spencer N, Shenoy M et al (2006) How useful is the presence of petechiae in distinguishing non-accidental from accidental injury? Child Abuse Negl 30:549–555
30. Polson CJ, Gee DJ et al (1985) Injuries: general features. In: Polson CJ, Gee DJ, Knight B (eds) The essentials of forensic medicine. Pergamon, Oxford, pp 91–147
31. Maguire S, Mann MK, Sibert J, Kemp A (2005) Can you age bruises accurately in children? Arch Dis Child 90:187–189
32. Langlois NE, Gresham GA (1991) The ageing of bruises: a review and study of the colour changes with time. Forensic Sci Int 50:227–238c, 238
33. Becker DB, Needleman HL, Kotelchuck M (1978) Child abuse and dentistry: orofacial trauma and its recognition by dentists. J Am Dent Assoc 97:24–28
34. Naidoo S (2000) A profile of the oro-facial injuries in child physical abuse at a children's hospital. Child Abuse Negl 24:521–534
35. Maguire SA, Hunter B, Hunter LM et al (2007) Diagnosing abuse: a systematic review of torn frenum and intra-oral injuries. Arch Dis Child 92:1113–1117
36. Cameron JM, Johnson HRM, Camps FE (1966) The battered child syndrome. Med Sci Law 6:2–21
37. Tate RJ (1971) Facial injuries associated with the battered child syndrome. Br J Oral Surg 9:41–45
38. Price EA, Rush LR, Perper JA, Bell MD (2000) Cardiopulmonary resuscitation-related injuries and homicidal blunt abdominal trauma in children. Am J Forensic Med Pathol 21:307–310
39. Torriani DD, Bonow ML, Fleischmann MD, Muller LT (2008) Traumatic intrusion of primary tooth: follow up until eruption of permanent successor tooth. Dent Traumatol 24:235–238
40. Cordner SM, Burke MP, Dodd MJ et al (2001) Issues in child homicides: 11 cases. Legal Med 3:95–103
41. Thackeray JD (2007) Frena tears and abusive head injury: a cautionary tale. Pediatr Emerg Care 23:735–737
42. AAPD; American Academy of Pediatrics Committee on Child Abuse and Neglect & American Academy of Pediatric Dentistry Ad Hoc Work Group on Child Abuse and Neglect (1999) Oral and dental aspects of child abuse and neglect. Pediatrics 104:348–350
43. Wright J, Thornton J (1983) Osteogenesis imperfecta with dentinogenesis imperfecta. A mistaken case of child abuse. Pediatr Dent 5:207–209

WIT.0043.0086.0235

44. Carrotte PV (1990) An unusual case of child abuse. Br Dent J 168:444–445
45. Baker MD, Moore SE (1987) Human bites in children. A six-year experience. Am J Dis Child 141:1285–1290
46. Whittaker DK, MacDonald DG (1989) Bitemarks in flesh. In: Anonymous (ed) A colour atlas of forensic dentistry. Wolfe Medical Publications, London, p 108
47. Clement JG (2011) Bite marks. In: Gall J, Payne-James J (eds) Current practicee in forensic medicine. Wiley-Blackwell, Chichester, pp 291–308
48. Gall JAM, Boos SC, Payne-James JJ, Culliford EJ (2003) Forensic medicine. Colour Guide, Churchill Livingstone, Edinburgh
49. Freeman AJ, Senn DR, Arendt DM (2005) Seven hundred seventy eight bite marks: analysis by anatomic location, victim and biter demographics, type of crime, and legal disposition. J Forensic Sci 50:1436–1443
50. Levine LJ (1984) Bite marks in child abuse. In: Sanger RG, Bross DC (eds) Clinical management of child abuse and neglect. Quintessence, Chicago, pp 53–59
51. Bernitz H, Owen JH, van Heerden WF, Solheim T (2008) An integrated technique for the analysis of skin bite marks. J Forensic Sci 53:194–198
52. Centers for Disease Control and Prevention (2016) Injury Prevention and Control Data & Statistics (WISQARSTM). Centers for Disease Control and Prevention, Atlanta. https://www.cdc.gov/injury/wisqars/nonfatal.html. Accessed 8 Dec 2018
53. Montrey JS, Barcia PJ (1985) Nonaccidental burns in child abuse. South Med J 78:1324–1326
54. Daria S, Sugar NF, Feldman KW et al (2004) Into hot water head first: distribution of intentional and unintentional immersion burns. Pediatr Emerg Care 20:302–310
55. Ojo P, Palmer J, Garvey R et al (2007) Pattern of burns in child abuse. Am Surg 73:253–255
56. Zaloga WF, Collins KA (2006) Pediatric homicides related to burn injury: a retrospective review at the Medical University of South Carolina. J Forensic Sci 51:396–399
57. Maguire S, Moynihan S, Mann M et al (2008) A systematic review of the features that indicate intentional scalds in children. Burns 34:1072–1081
58. Yeoh C, Nixon JW, Dickson W et al (1994) Patterns of scald injuries. Arch Dis Child 71:156–158
59. Caniano DA, Beaver BL, Boles ET (1986) Child abuse: an update on surgical management in 256 cases. Ann Surg 203:219–224
60. Lowell G, Quinlan K, Gottlieb LJ (2008) Preventing unintentional scald burns: moving beyond tap water. Pediatrics 122:799–804
61. Dressler DP, Hozid JL (2001) Thermal injury and child abuse: the medical evidence dilemma. J Burn Care Rehabil 22:180–185
62. Feldman KW, Schaller RT, Feldman JA, McMillon M (1998) Tap water scald burns in children. Inj Prev 4:238–242
63. Allasio D, Fischer H (2005) Immersion scald burns and the ability of young children to climb into a bathtub. Pediatrics 115:1419–1421
64. Titus MO, Baxter AL, Starling SP (2003) Accidental scald burns in sinks. Pediatrics 111:e191–e194
65. Hicks RA, Stolfi A (2007) Skeletal surveys in children with burns caused by child abuse. Pediatr Emerg Care 23:308–313
66. Grellner W, Metzner G (1995) Kindesmißhandlung durch thermische Gewalt: Abgrenzung und Rekonstruktion [Child abuse caused by thermal violence—determination and reconstruction]. Arch Kriminol 195:38–46
67. Baron S, Moss C (2003) Images in paediatrics: caustic burn caused by potassium permanganate. Arch Dis Child 88:96
68. Alexander RC, Surrell JA, Cohle SD (1987) Microwave oven burns to children: an unusual manifestation of child abuse. Pediatrics 79:255–260
69. Wilson Jones N, Wong P, Potokar T (2008) Electric hair straightener burns an epidemiological and thermodynamic study. Burns 34:521–524

WIT.0043.0086.0236

70. Hobbs CJ, Wynne JM (1990) The sexually abused battered child. Arch Dis Child 65:423–427
71. Badger K, Anderson L, Kagan RJ (2008) Attention deficit-hyperactivity disorder in children with burn injuries. J Burn Care Res 29:724–729
72. Gall J, Goldney R, Payne-James JJ (2011) Self-inflicted injuries and associated psychological profiles. In: Gall J, Payne-James J (eds) Current practice in forensic medicine. Wiley Blackwell, Chichester, pp 273–290
73. Barnes PM, Norton CM, Dunstan FD et al (2005) Abdominal injury due to child abuse. Lancet 366:234–235
74. Gaines BA, Shultz BS, Morrison K, Ford HR (2004) Duodenal injuries in children: beware of child abuse. J Pediatr Surg 39:600–602
75. Lindberg D, Makoroff K, Harper N et al (2009) Utility of hepatic transaminases to recognize abuse in children. Pediatrics 124:509–516
76. Wood J, Rubin DM, Nance ML, Christian CW (2005) Distinguishing inflicted versus accidental abdominal injuries in young children. J Trauma 59:1203–1208
77. Maguire SA, Upadhyaya M, Evans A et al (2013) A systematic review of abusive visceral injuries in childhood – their range and recognition. Child Abuse Negl 37:430–445
78. Loder RT, Feinberg JR (2007) Orthopaedic injuries in children with nonaccidental trauma: demographics and incidence for the 2000 Kid's inpatient database. J Pediatr Orthop 27:421–426
79. Jones IE, Williams SM, Dow N, Goulding A (2002) How many children remain fracture-free during growth? A longtitudinal study of children and adolescents participating in the Dunedin multidisciplinary health and development study. Osteoporosos Int 13:990–995
80. Worlock P, Stower M, Barbor P (1986) Patterns of fractures in accidental and non-accidental injury in children: a comparative study. BMJ 293:100–102
81. Leventhal JM, Thomas SA, Rosenfield NS, Markowitz RI (1993) Fractures in young children. Distinguishing child abuse from unintentional injuries. Am J Dis Child 147: 87–92
82. Kleinman PK (ed) (2015) Diagnostic imaging of child abuse, 3rd edn. Cambridge, Cambridge University Press
83. RCPCH. (2018) Child protection evidence. https://www.rcpch.ac.uk/key-topics/child-protection/evidence-reviews. Accessed 10 Apr 2019
84. Kleinman PK, Rosenberg AE, Tsai A (2015) Skeletal trauma: general considerations. In: Kleinman PK (ed) Diagnostic imaging of child abuse, 3rd edn. Cambridge University Press, Cambridge, pp 23–52
85. Flaherty EG, Perez-Rossello JM, Levine MA et al (2014) Evaluating children with fractures for child physical abuse. Pediatrics 133:e477–e489
86. Kemp AM, Dunstan F, Harrison S et al (2008) Patterns of skeletal fractures in child abuse: a systematic review. BMJ 337:a1518
87. Pandya NK, Baldwin K, Wolfgruber H et al (2009) Child abuse and orthopaedic injury patterns: analysis at a level I pediatric trauma center. J Pediatr Orthop 29:618–625
88. Farnsworth CL, Silva PD, Mubarak SJ (1998) Etiology of supracondylar humerus fractures. J Pediatr Orthop 18:38–42
89. Dalton HJ, Slovis T, Helfer RE et al (1990) Undiagnosed abuse in children younger than 3 years with femoral fracture. Am J Dis Child 144:875–878
90. Wood JN, Christian CW, Adams CM, Rubin D (2009) Skeletal surveys in infants with isolated skull fractures. Pediatrics 123:e247–e252
91. Anderson WA (1982) The significance of femoral fractures in children. Ann Emerg Med 11:174–177
92. Beals RK, Tufts E (1983) Fractured femur in infancy: the role of child abuse. J Pediatr Orthop 3:583–586
93. Altman DH, Smith RL (1960) Unrecognised trauma in infants and children. J Bone Joint Surg 42:407–413
94. Grayev AM, Boal DKB, Wallach DM, Segal LS (2001) Metaphyseal fractures mimicking abuse during treatment for clubfoot. Pediatr Radiol 31:559–563

WIT.0043.0086.0237

95. Kemp A, Joshi A, Mann M et al (2010) What are the clinical and radiological characteristics of spinal injuries from physical abuse: a systematic review. Arch Dis Child 95(5):355–360
96. Merten DF, Radlowski MA, Leonidas JC (1983) The abused child: a radiological reappraisal. Radiology 146:377–381
97. Royal College of Radiologists. (2018) The radiological investigation of suspected physical abuse in children. https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr174_suspected_physical_abuse.pdf. Accessed 10 Apr 2019
98. American College of Radiology (2016) ACR–SPR practice parameter for the performance and interpretation of skeletal surveys in children. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/Skeletal-Survey.pdf Accessed 10 Apr 019
99. Hansen KK, Prince JS, Nixon GW (2008) Oblique chest views as a routine part of skeletal surveys performed for possible physical abuse-is this practice worthwhile? Child Abuse Negl 32:155–159
100. Kleinman PK, Nimkin K, Spevak MR et al (1996) Follow-up skeletal surveys in suspected child abuse. Am J Roentgenol 167:893–896
101. Zimmerman S, Makoroff K, Care M et al (2005) Utility of follow-up skeletal surveys in suspected child physical abuse evaluations. Child Abuse Negl 29:1075–1083
102. Prosser I, Maguire S, Harrison SK et al (2005) How old is this fracture? Radiologic dating of fractures in children: a systematic review. Am J Roentgenol 184:1282–1286
103. Bishop N, Sprigg A, Dalton A (2007) Unexplained fractures in infancy: looking for fragile bones. Arch Dis Child 92:251–256
104. Ettaro L, Berger RP, Songer T (2004) Abusive head trauma in young children: characteristics and medical charges in a hospitalized population. Child Abuse Negl 28:1099–1111
105. Hettler J, Greenes DS (2003) Can the initial history predict whether a child with a head injury has been abused? Pediatrics 111:602–607
106. Vinchon M, Defoort-Dhellemmes S, Desurmont M, Dhellemmes P (2005) Accidental and nonaccidental head injuries in infants: a prospective study. J Neurosurg 102:380–384
107. Shaahinfar A, Whitelaw KD, Mansour KM (2015) Update on abusive head trauma. Curr Opin Pediatr 27:308–314
108. Choudhary AK, Servaes S, Slovis TL et al (2018) Consensus statement on abusive head trauma in infants and young children. Pediatr Radiol 48:1048–1065
109. Hobbs C, Childs AM, Wynne J et al (2005) Subdural haematoma and effusion in infancy: an epidemiological study. Arch Dis Child 90:952–955
110. Runyan DK (2008) The challenges of assessing the incidence of inflicted traumatic brain injury: a world perspective. Am J Prev Med 34:112–115
111. Caffey J (1946) Multiple fractures in the long bones of infants suffering from chronic subdural haematoma. Am J Roentgenol 56:163–173
112. Maguire SA, Watts PO, Taylor RH et al (2013) Retinal hemorrhages and related findings in abusive and non-abusive head trauma: a systematic review. Eye 27:28–36
113. Hansen JB, Kilklough EF, Moffatt ME, Knapp JF (2018) Retinal hemorrhages. Abusive head trauma or not? Pediatr Emerg Care 34:665–670
114. Maguire SA, Lumb RC, Kemp AM, Moynihan S, Bunting HJ, Watts PO, Adams GG. A systematic review of the differential diagnosis of retinal haemorrhages in children with clinical features associated with child abuse. Child Abuse Review 22:29–43
115. Ichord RN, Naim M, Pollock AN et al (2007) Hypoxic-ischemic injury complicates inflicted and accidental traumatic brain injury in young children: the role of diffusion-weighted imaging. J Neurotrauma 24:106–118
116. Bechtel K, Stoessel K, Leventhal JM et al (2004) Characteristics that distinguish accidental from abusive injury in hospitalized young children with head trauma. Pediatrics 114:165–168
117. Ewing-Cobbs L, Prasad M, Kramer L et al (2000) Acute neuroradiologic findings in young children with inflicted or noninflicted traumatic brain injury. Childs Nerv Syst 16:25–34
118. Wells RG, Vetter C, Laud P (2002) Intracranial hemorrhage in children younger than 3 years: prediction of intent. Arch Pediatr Adolesc Med 156:252–257

WIT.0043.0086.0238

119. Hedlund GL (2012) Subdural haemorrhage in abusive head trauma: imaging challenges and controversies. J Am Osteopath Coll Radiol 1:23–30
120. Piteau SP, Ward MGK, Barrowman NJ, Plint AC (2012) Clinical and radiographic characteristics associated with abusive and nonabusive head trauma: a systematic review. Pediatrics 130:315–323
121. Kemp AM, Rajaram S, Mann M et al (2009) What neuroimaging should be performed in children in whom inflicted brain injury (iBI) is suspected? A systematic review. Clin Radiol 64:473–483
122. Vezina G (2009) Assessment of the nature and age of subdural collections in nonaccidental head injury with CT and MRI. Pediatr Radiol 39:586–590
123. Vinchon M, Noulé N, Tchofo PJ et al (2004) Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse. J Neurosurg 101:44–52
124. Rao P, Smith AS (2016) The utility of radiological investigation of suspected abusive head trauma in children. In: Gall JAM, Payne-James JJ (eds) Current practice in forensic medicine, vol 2. Wiley, Chichester, pp 207–241
125. Sirotnak AP (2006) Medical disorders that mimic abusive head trauma. In: Frazier L, Rauth-Farley K, Alexander R, Parrish R (eds) Abusive head trauma in infants and children. A medical, legal, and forensic reference. GW Medical Publishing, St. Louis, pp 191–226
126. Royal College of Paediatrics and Child Health (2002) Fabricated or induced illness by carers. Royal College of Paediatrics and Child Health, London
127. Adshead G, Bluglass K (2005) Attachment representations in mothers with abnormal illness behaviour by proxy. Br J Psychiatry 187:328–333
128. Galvin HK, Newton AW, Vandeven AM (2005) Update on Munchausen syndrome by proxy. Curr Opin Pediatr 17:252–257
129. Feldman MD (2004) Munchausen by proxy and malingering by proxy. Psychosomatics 45:365–366
130. Fisher GC, Mitchell I, Murdoch D (1993) Munchausen's syndrome by proxy. The question of psychiatric illness in a child. Br J Psychiatry 162:701–703
131. Katz RL, Mazer C, Litt IF (1985) Anorexia nervosa by proxy. J Pediatr 107:247–248
132. MacDonald TM (1989) Myalgic encephalomyelitis by proxy. Br Med J 299:1030–1031
133. Schreier HA (1997) Factitious presentation of psychiatric disorder: when is it Munchausen by proxy? Child Adolesc Ment Health 2:108–115
134. Scourfield J (1995) Anorexia by proxy: are the children of anorexic mothers an at-risk group? Int J Eat Disord 18:371–374
135. Barker LH, Howell RJ (1994) Munchausen syndrome by proxy in false allegations of child sexual abuse: legal implications. Bull Am Acad Psychiatry Law 22:499–510
136. Marcus A, Ammermann C, Klein M, Schmidt MH (1995) Munchausen syndrome by proxy and factitious illness: symptomatology, parent-child interaction, and psychopathology of the parents. Eur Child Adolesc Psychiatry 4:229–236
137. Meadow R (1993) False allegations of abuse and Munchausen syndrome by proxy. Arch Dis Child 68:444–447
138. Schreier HA (1996) Repeated false allegations of sexual abuse presenting to sheriffs: when is it Munchausen by proxy? Child Abuse Negl 20:985–991
139. McClure RJ, Davis PM, Meadow SR, Sibert JR (1996) Epidemiology of Munchausen syndrome by proxy, non-accidental poisoning, and non-accidental suffocation. Arch Dis Child 75:57–61
140. Meadow R (1998) Munchausen syndrome by proxy abuse perpetrated by men. Arch Dis Child 78:210–216
141. Parnell TF, Day DO (1997) Munchausen by proxy syndrome: misunderstood child abuse. Sage, Thousand Oaks
142. Rosenberg DA (1987) Web of deceit: a literature review of Munchausen syndrome by proxy. Child Abuse Negl 11:547–563
143. Bluglass K (1993) 'Factitious' illness or 'Munchausen by proxy'. Curr Pediatr 3:81–85

WIT.0043.0086.0239

144. Bools C (1996) Factitious illness by proxy. Munchausen syndrome by proxy. Br J Psychiatry 169:268–275
145. Bools C, Neale B, Meadow R (1994) Munchausen syndrome by proxy: a study of psychopathology. Child Abuse Negl 18:773–788
146. Buchta R (1988) Deliberate intoxication of young children and pets with drugs: a survey of an adolescent population in a private practice. Am J Dis Child 142:701–702
147. Feldman MD, Hamilton JC (2006) Serial factitious disorder and Munchausen by proxy in pregnancy. Int J Clin Pract 60:1675–1678
148. Davis P, McClure RJ, Rolfe K et al (1998) Procedures, placement, and risks of further abuse after Munchausen syndrome by proxy, non-accidental poisoning, and non-accidental suffocation. Arch Dis Child 78:217–221
149. Denny SJ, Grant CC, Pinnock R (2001) Epidemiology of Munchausen syndrome by proxy in New Zealand. J Paediatr Child Health 37:240–243
150. Eminson DM, Postlethwaite RJ (2000) Munchausen syndrome by proxy abuse: a practical approach. Butterworth Heinemann, Oxford
151. Ifere OA, Yakubu AM, Aikhionbare HA et al (1993) Munchausen syndrome by proxy: an experience from Nigeria. Ann Trop Paediatr 13:281–284
152. Oyelami OA, Alhaj AM, Airede IK (1994) Münchausen syndrome by proxy – a case report and review of literature. Cent Afr J Med 40:222–226
153. Warner JO, Hathaway MJ (1984) Allergic form of Meadow's syndrome (Munchausen by proxy). Arch Dis Child 59:151–156
154. Godding V, Kruth M (1991) Compliance with treatment in asthma and Munchausen syndrome by proxy. Arch Dis Child 66:956–960
155. Meadow R (1982) Munchausen syndrome by proxy. Arch Dis Child 57:92–98
156. Davis P (2000) The Cardiff Leeds study of alleged Munchausen syndrome by proxy, non accidental poisoning and non-accidental suffocation. Welsh Pediatr J 13:32–41
157. Wenk RE (2003) Molecular evidence of Munchausen syndrome by proxy. Arch Pathol Lab Med 127:36–37
158. Bennett AM, Bennett SM, Prinsley PR, Wickstead M (2005) Spitting in the ear: a falsified disease using video evidence. J Laryngol Otol 119:926–927
159. McSweeney JJ, Hoffman RP (1991) Munchausen's syndrome by proxy mistaken for IDDM. Diabetes Care 14:928–929
160. Ulinski T, Lhopital C, Cloppet H et al (2004) Munchausen syndrome by proxy with massive proteinuria and gastrointestinal hemorrhage. Pediatr Nephrol 19:798–800
161. Meadow R (1990) Suffocation, recurrent apnea, and sudden infant death. J Pediatr 117:351–357
162. Southall DP, Plunkett MC, Banks MW et al (1997) Covert video recordings of life-threatening child abuse: lessons for child protection. Pediatrics 100:735–760
163. Clark GD, Key JD, Rutherford P, Bithoney WG (1984) Munchausen's syndrome by proxy (child abuse) presenting as apparent autoerythrocyte sensitization syndrome: an unusual presentation of Polle syndrome. Pediatrics 74:1100–1102
164. Gray J, Bentovim A (1996) Illness induction syndrome: paper 1 – a series of 41 children from 37 families identified at The Great Ormond Street Hospital for Children NHS Trust. Child Abuse Negl 20:655–673
165. Baskin DE, Stein F, Coats DK, Paysse EA (2003) Recurrent conjunctivitis as a presentation of Munchausen syndrome by proxy. Ophthalmology 110:1582–1584
166. Clin B, Ferrant O, Dupont C, Papin F (2009) Recurrent caustic esophagitis: a clinical form of Münchausen syndrome by proxy. Child Abuse Negl 33:293–295
167. Friedman EM (1987) Caustic ingestions and foreign body aspirations: an overlooked form of child abuse. Ann Otol Rhinol Laryngol 96:709–712
168. Postlethwaite RJ (2010) Caustic ingestion as a manifestation of fabricated and induced illness (Munchausen syndrome by proxy). Child Abuse Negl 34:471
169. Tamay Z, Akcay A, Kilic G et al (2007) Corrosive poisoning mimicking cicatricial pemphigoid: Munchausen by proxy. Child Care Health Dev 33:496–499

WIT.0043.0086.0240

170. Libow JA (1995) Munchausen by proxy victims in adulthood: a first look. Child Abuse Negl 19:1131–1142
171. Lacey SR, Cooper C, Runyan DK, Azizkhan RG (1993) Munchausen syndrome by proxy: patterns of presentation to pediatric surgeons. J Pediatr Surg 28:827–832
172. Vennemann B, Perdekamp MG, Weinmann W et al (2006) A case of Munchausen syndrome by proxy with subsequent suicide of the mother. Forensic Sci Int 158:195–199
173. Kiechl-Kohlendorfer U, Hof D, Peglow UP et al (2005) Epidemiology of apparent life threatening events. Arch Dis Child 90:297–300
174. McGovern MC, Smith MB (2004) Causes of apparent life threatening events in infants: a systematic review. Arch Dis Child 89:1043–1048
175. Rahilly PM (1991) The pneumographic and medical investigation of infants suffering apparent life threatening episodes. J Paediatr Child Health 27:349–353
176. British Paediatric Association (1994) Evaluation of suspected imposed upper airway obstruction: report of a working party. British Paediatric Association, London
177. Krous HF, Nadeau JM, Byard RW, Blackbourne BD (2001) Oronasal blood in sudden infant death. Am J Forensic Med Pathol 22:346–351
178. McIntosh N, Mok JY, Margerison A (2007) Epidemiology of oronasal hemorrhage in the first 2 years of life: implications for child protection. Pediatrics 120:1074–1078
179. Walton LJ, Davies FC (2010) Nasal bleeding and non-accidental injury in an infant. Arch Dis Child 95:53–54
180. Ackerman NB Jr, Strobel CT (1981) Polle syndrome: chronic diarrhea in Munchausen's child. Gastroenterology 81:1140–1142
181. Baldwin MA (1994) Munchausen syndrome by proxy: neurological manifestations. J Neurosci Nurs 26:18–23
182. Barber MA, Davis PM (2002) Fits, faints, or fatal fantasy? Fabricated seizures and child abuse. Arch Dis Child 86:230–233
183. Martinović Z (1995) Fictitious epilepsy in Munchausen syndrome by proxy: family psychodynamics. Seizure 4:129–134
184. Meadow R (1982) Munchausen syndrome by proxy and pseudo-epilepsy. Arch Dis Child 57:811–812
185. Meadow R (1984) Fictitious epilepsy. Lancet 2:25–28
186. Meadow R (1991) Neurological and developmental variants of Munchausen syndrome by proxy. Dev Med Child Neurol 33:270–272
187. Dine MS, McGovern ME (1982) Intentional poisoning of children – an overlooked category of child abuse: report of seven cases and review of the literature. Pediatrics 70:32–35
188. Fischler RS (1983) Poisoning: a syndrome of child abuse. Am Fam Physician 28:103–108
189. Meadow R (1989) ABC of child abuse. Poisoning. Br Med J 298:1445–1446
190. Rogers D, Tripp J, Bentovim A et al (1976) Non-accidental poisoning: an extended syndrome of child abuse. Br Med J 1:793–796
191. Shnaps Y, Frand M, Rotem Y, Tirosh M (1981) The chemically abused child. Pediatrics 68:119–121
192. Giurgea I, Ulinski T, Touati G et al (2005) Factitious hyperinsulinism leading to pancreatectomy: severe forms of Munchausen syndrome by proxy. Pediatrics 116:e145–e148
193. Green RP, Hollander AS, Thevis M et al (2010) Detection of surreptitious administration of analog insulin to an 8-week-old infant. Pediatrics 125:e1236–e1240
194. Marks V (2009) Murder by insulin: suspected, purported and proven-a review. Drug Test Anal 1:162–176
195. Meadow R (1993) Non-accidental salt poisoning. Arch Dis Child 68:448–452
196. Royal College of Paediatrics and Child Health (2009) The differential diagnosis of hypernatraemia in children, with particular reference to salt poisoning. An evidence-based guideline. Royal College of Paediatrics and Child Health, London. https://www.sbp.com.br/fileadmin/user_upload/pdfs/41-Hypernatraemia-Guidelines-Royal-Colleg-Paediatrics.pdf. Accessed 10 Apr 2019

WIT.0043.0086.0241

197. Bauman WA, Yalow RS (1981) Child abuse: parenteral insulin administration. J Pediatr 99:588–591
198. Dershewitz R, Vestal B, Maclaren NK, Cornblath M (1976) Transient hepatomegaly and hypoglycemia. A consequence of malicious insulin administration. Am J Dis Child 130:998–999
199. Mayefsky JH, Sarnaik AP, Postellon DC (1982) Factitious hypoglycemia. Pediatrics 69:804–805
200. Zitelli BJ, Seltman MF, Shannon RM (1987) Munchausen's syndrome by proxy and its professional participants. Am J Dis Child 141:1099–1102
201. Amin RS (2000) Gastroesophageal reflux and infant apnea. J Pediatr 137:298–300
202. Alexander R, Smith W, Stevenson R (1990) Serial Munchausen syndrome by proxy. Pediatrics 86:581–585
203. Baron HI, Beck DC, Vargas JH, Ament ME (1995) Overinterpretation of gastroduodenal motility studies: two cases involving Munchausen syndrome by proxy. J Pediatr 126:397–400
204. Colletti RB, Wasserman RC (1989) Recurrent infantile vomiting due to intentional ipecac poisoning. J Pediatr Gastroenterol Nutr 8:394–396
205. Goss PW, McDougall PN (1992) Munchausen syndrome by proxy – a cause of preterm delivery. Med J Aust 157:814–817
206. Klebes C, Fay S (1995) Munchausen syndrome by proxy: a review, case study, and nursing implications. J Pediatr Nurs 10:93–98
207. Kosmach B, Tarbell S, Reyes J, Todo S (1996) "Munchausen by proxy" syndrome in a small bowel transplant recipient. Transplant Proc 28:2790–2791
208. Schreier HA, Libow JA (1994) Munchausen by proxy syndrome: a modern pediatric challenge. J Pediatr 125:110–115
209. Turk LJ, Hanrahan KM, Weber ER (1990) Munchausen syndrome by proxy: a nursing overview. Issues Compr Pediatr Nurs 13:279–288
210. Royal College of Paediatrics and Child Health (2009) Fabricated or induced illness by carers (FII): a practical guide for paediatricians. Royal College of Paediatrics and Child Health, London

WIT.0043.0086.0242

Chemical Crowd Control Agents

6

Sarah L. Belsey and Steven B. Karch

Learning Objectives

Interpret the symptoms and signs of exposure to chemical crowd control agents, fentanyl (and derivatives), and nerve agents.

Be able to use this knowledge to devise an appropriate treatment plan.

To understand the risk of secondary exposure to these chemicals and know the appropriate measures to take to ensure the safety of healthcare professionals.

Introduction

Chemical crowd control agents (CCCAs, also referred to as riot control agents) are a form of chemical restraint typically used to disperse and temporarily incapacitate large crowds so that smaller, more controllable groups result. The use of CCCAs also aims to minimise the requirement for physical intervention and force altogether. As such, these agents may be termed "less-than-lethal" weapons [1]. Other less-than-lethal weapons may be employed for restraint purposes, for example conductive energy devices (CEDs) such as Tasers. As CEDs are based on delivery of electricity, as opposed to a chemical, they will not be discussed in this chapter (See Chap. 8). The use of CCCAs is not limited to law enforcement personnel. They may be used by the military as training agents, as well as by civilians for self-defence. CCCAs may also be used by terrorists to incite fear or panic in the public. Delivery

S. L. Belsey
Toxicology Unit, Department of Clinical Biochemistry, King's College Hospital NHS Foundation Trust, London, UK
e-mail: sarah.belsey@nhs.net

S. B. Karch (✉)
Berkeley, CA, USA
e-mail: skarch@fdaa.com

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_6

WIT.0043.0086.0243

of CCCAs can be targeted at specific individuals using spray or pellet formulations, or to target groups through use of canisters, grenades, or water cannons [2].

An effective CCCA should have rapid onset of effects (seconds to minutes), a relatively short duration of effects, and a high safety ratio (i.e. a high ratio of the estimated lethal dose to the effective dose) [3]. The effectiveness of any agent depends upon the correct delivery to an appropriate area of the body, for instance the application of capsicum to the back is not going to deter anyone. One of the greatest challenges in the safe use of CCCAs is deployment of these agents in confined spaces, where it is not uncommon for officers themselves to be exposed to the agent whilst trying to make an arrest.

Numerous chemicals are used for riot control and law enforcement purposes (Fig. 6.1). The most commonly available CCCA is chlorobenzylidene malononitrile (CS, 'tear gas'), which replaced chloroacetophenone (CN, 'mace') due to a better toxicity profile [4]. Dibenzoxazepine (CR) was synthesised later in 1962, and is more potent and less toxic than both CS and CN [5]. For large crowds, 'bombs' have been developed that can be dropped from aerial positions producing wide dispersal of these compounds. They are also formulated in grenades or canisters, which can be propelled by either throwing or with a projectile device. Oleum capsaicin (OC; 'pepper spray', PS) is the only naturally occurring CCCA and contains a mixture of chemicals derived from chilli peppers, with capsaicin the major component present. The exact composition of OC is determined by various factors such as ripeness of the chilli, the environment in which the plant is grown, and the method of extraction [6]. It should be noted that some pepper spray formulations contain a combination of CS and OC. A synthetic analogue of capsaicin, pelargonic acid vanillylamide (PAVA; nonivamide), may also be used as an incapacitant/irritant spray. The advantage of PAVA over OC is that it is a single compound which makes its toxicological profile easier to assess. Commercially available OC products lack standardisation for capsaicinoid content which leads to variation in potency between products and hence a difference in effectiveness. Incapacitant sprays are typically less potent that the gas itself, for instance CS spray typically contains 1–5% CS dissolved in methyl isobutyl ketone (MIBK) [7]. The UK spray contains 5% CS dissolved in MIBK,

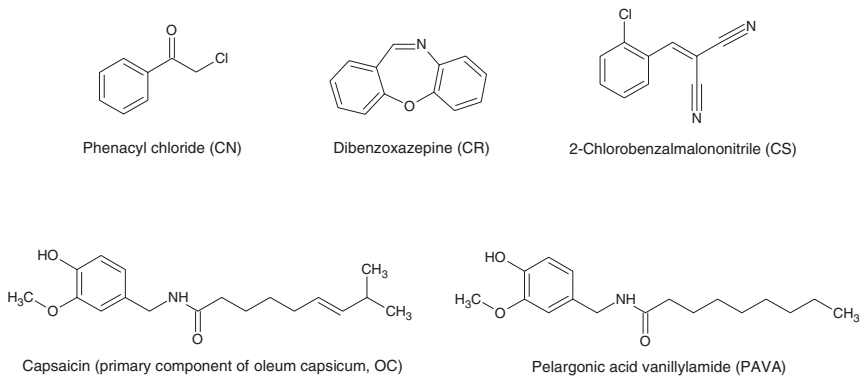


Fig. 6.1 Structures of some chemical crowd control agents

WIT.0043.0086.0244

released in a 50 mL burst whereas the US spray contains only 1% CS dissolved in MIBK, released in a 10 mL burst, a 25-fold smaller dose [8]. Examples of different spray formulations are given in Table 6.1.

When used appropriately, CCCAs have a demonstrated high safety margin and generally do no permanent harm. However, toxicity can still occur. Adverse side effects are usually seen if a person has been exposed to the chemical in a closed space, if they have had repeated exposure to the chemical, or if they have been exposed to greater concentrations than normal. CCCAs may also be misused, which may result in more pronounced toxicity. For example, a reported incident in the USA detailed how law enforcement officers directly applied OC liquid via a cotton-tipped applicator to the periorbital area of protesters who refused to disperse [12]. Litigation was the predictable result and so was the court verdict; a unanimous federal jury ruling that officers had used excessive force, a clear violation of the prisoner's Fourth Amendment rights.

The effectiveness of a CCCA is not only dependent on the correct application of the agent, but can also be influenced by uncontrollable factors such as the weather (particularly wind) and whether an individual is intoxicated (with alcohol or illicit drugs). For example, PAVA is deemed to be less effective against those under the influence of alcohol; however, no published data exist to support this theory.

No discussion of chemical crowd control agents would be complete without at least some acknowledgment of more lethal methods of chemical control. The use of fentanyl derivatives as chemical incapacitants was investigated, originally by the military during the Cold War. Research into many of these derivatives stopped due to the incapacitating dose not being sufficiently lower that the lethal dose. Structural modifications (e.g. lofentanyl was derived from alfentanyl) and combination with other drugs were researched to decrease the potency of the drug and improve the safety ratio. To complicate matters, many of the studies were conducted in rodents where some safety ratios were deemed acceptable, but later studies in primates showed much lower safety ratios [13]. The main mechanism of fatal opioid overdose is respiratory depression. Clinical features of opioid toxicity include respiratory depression, CNS depression, and miosis. Administration of naloxone ('Narcan')

Table 6.1 Examples of incapacitant sprays available

Name	Irritant	Solvent	Propellant	Reference
United Kingdom				
CS spray	5% CS	MIBK	Nitrogen	[9]
Captor I	0.3% PAVA	50% aqueous ethanol	Nitrogen	[9]
Captor II	0.3% PAVA	Monopropylene glycol, water & ethanol	Nitrogen	[9]
United States				
Punch II M-3	5% OC	Not stated	Hydrocarbon	[10]
911 Pepper Spray	10% OC	Not stated	Not stated	[10]
Total Control International Pepper Spray	5% OC	92% trichloroethylene	Nitrogen	[11]

WIT.0043.0086.0245

will reverse overdoses; however, higher dosing and prolonged infusion may be required due to the higher potency of fentanyl and its derivatives as compared to morphine [14].

On October 26, 2002, Russian Special Forces pumped an undisclosed incapacitating agent into the ventilation system of a Moscow theatre where Chechen terrorists had been holding over 800 people hostage for 3 days. The plan, as best as can be determined, was to disable the terrorists by exposure to a fentanyl derivative, while at the same time administering the antidote naloxone to the prisoners. Whilst supplies of naloxone had been increased, the medical services did not have the information of the chemical used which resulted in naloxone not being administered in a timely manner, and many of the captives died from opiate toxicity [15]. In part, this was due to the Russian government not immediately disclosing the use of a fentanyl derivative which led to medical personnel incorrectly treating patients as the use of a nerve agent was suspected [16]. The specific fentanyl derivative used has never been confirmed by the Russian government, but residue analysis from the hostages clothing suggests it was a combination of carfentanil and remifentanil [17].

Mechanism of Action

Capsaicin present in OC selectively stimulates nociceptors, notably TRPV1, in exposed mucous membranes [18, 19]. Exposure to OC leads to the release of substance P, bradykinin, histamine, and prostaglandins. The physiologic effects of these mediators result in vasodilation, increased vascular permeability, pain, and altered neurotrophic chemotaxis.

The mechanism of action of CN and CS is not fully understood. One proposed explanation is that hydrochloric acid is produced through reduction of chloride ions on mucosal membranes [20]. In addition, both CN and CS are SN_2-alkylating agents and readily react with nucleophilic sites such as thiol and sulfhydryl groups present in enzymes (e.g. lactic dehydrogenase, glutamic dehydrogenase, pyruvic decarboxylase). Inactivation of these metabolic enzyme systems may be related to the tissue injury that occurs following exposure [21]. CN and CS have also been found to interact with the TRPA1 receptor family. These receptors belong to the transient receptor potential (TRP) family of cation-selective channels that convert mechanical, thermal, and pain-related inflammatory signals, such as those that result from exposure to 'tear-gas' agents, into transmissible pain nerve signals [22].

Clinical Effects and Treatment

CCCAs produce a wide variety of physiological effects, with the most common clinical findings being pain, burning, and irritation of exposed mucous membranes and skin (Table 6.2). Individuals suffering from the acute effects of CCCAs should immediately be brought into fresh air. The initial treatment protocol should involve decontamination, including removal of contaminated clothing. Copious irrigation of

WIT.0043.0086.0246

Table 6.2 Common clinical findings with exposure to crowd control agents

Finding	CS	CN	OC
Ocular			
Lacrimation	✓	✓	✓
Blepharospasm	✓	✓	
Pain and/or burning	✓	✓	✓
Conjunctival injection	✓	✓	✓
Conjunctival oedema	✓	✓	
Photophobia	✓	✓	
Corneal abrasion	✓	✓	✓
Impaired vision	✓	✓	✓
Upper airway			
Pain and/or burning	✓	✓	
Shortness of breath	✓	✓	✓
Increased secretion	✓	✓	
Congestion	✓		
Coughing	✓	✓	✓
Throat irritation	✓	✓	✓
Wheezing	✓	✓	✓
Irregular respiration[a]	✓	✓	
Dermal			
Pain	✓	✓	✓
Contact dermatitis		✓	✓
Blistering	✓	✓	✓
Miscellaneous			
Nausea/vomiting	✓		
Bad taste	✓		
Headache	✓		
Increased blood pressure[a]	✓		

[a]Initial response thought to be associated with pain

the affected areas should attenuate the burning sensation [23]. However, care must be used to prevent contaminating other sites with the irritant (e.g. washing OC from the hair into the eyes or the oral pharyngeal mucosa). Serious systemic toxicity is rare and occurs most frequently with CN; particularly when used in very high concentration within a confined non-ventilated space.

Secondary exposure to CCCAs could be a notable occupational hazard for health care workers. It is therefore important that medical personnel should take precautionary measures such as wearing impermeable gloves and goggles while dealing with these patients. The patients should be asked to remove any clothing and to seal it in a plastic bag in order to prevent secondary contamination [23]. Effects may be minimised with common sense practicalities, such as decontamination prior to an individual being placed into a confined area such as a police car, ambulance, or treatment room in hospital. The Faculty of Forensic and Legal Medicine (FFLM) publish recommendations for forensic physicians, custody nurses, and paramedics on the clinical effects and management of incapacitant sprays [24].

WIT.0043.0086.0247

Treatment of exposure to CCCAs is summarised in Table 6.3. Whether the effect of CCCA exposure amongst those with underlying health conditions (e.g. asthma, chronic pulmonary obstructive disease) is more severe is an unknown. Current research on the topic remains equivocal, and is hindered by the fact that many studies have been conducted solely in animal models or small groups of healthy human volunteers. Reports of CS exposure in a nightclub [25] and in Londonderry [26] indicated patients with asthma experienced no greater sensitivity. However, a study in South Korea reported that patients with asthma and chronic obstructive pulmonary disease experienced deterioration of lung function following CS exposure [27]. Further research has been suggested by The UK Department of Health to investigate whether individuals with hypertension or cardiovascular disease, as well as those taking neuroleptic medication, may be more susceptible to the effects of CS [28].

Ocular Toxicity

The most sensitive target organ of CCCAs is the eye. Ocular toxicity resulting from exposure to CCCAs ranges in severity from conjunctival erythema/oedema to ocular necrosis. More severe toxicity is usually due to CN exposure. The most typical findings are lacrimation, conjunctival erythema/oedema, blepharitis, and erythema [29]. A retrospective study of 81 patients who presented to the emergency department as a result of OC exposure showed 56% developed opthalmodynia, 44% conjunctivitis, 40% conjunctival erythema, 13% lacrimation, and 9% corneal abrasion [30]. More severe findings are often found in exposure victims who wear contact lenses [31]. Soft contact lenses should be disposed of as OC residue has been shown to remain even after cleaning of the lenses [32].

There are conflicting views regarding irrigation of the eyes after CS exposure. Some suggest that the eyes should be thoroughly flushed with water or saline for 10–20 min [25, 33], while others advocate blowing dry air directly onto the eye to vaporise any dissolved gas [34–36]. Based on the limited evidence, irrigation with water or saline after exposure is recommended.

Table 6.3 Options for treatment for exposure to chemical crowd control agents

Treatment	CS	CN	OC
Removal of contaminated clothing	✓	✓	✓
Ocular irrigation		✓	✓
Dermal irrigation	✓	✓	✓
Alkaline solution irrigation of skin	✓	✓	
Soap and water decontamination	✓	✓	✓
Topical steroids for dermatitis	✓	✓	✓
Systemic antihistamines for dermatitis	✓	✓	✓
Systemic steroids for dermatitis	✓	✓	✓
Topical antibiotics for corneal abrasion	✓	✓	✓
Cycloplegics	✓	✓	✓
Analgesics for pain	✓	✓	✓

WIT.0043.0086.0248

A slit lamp examination of the anterior chamber, including evaluation under the lids, is warranted for those with persistent ocular complaints. If particles have become embedded in the cornea or under the lids, they should be removed. If corneal abrasions are present, a few days of topical broad-spectrum antibiotics, cycloplegics, and analgesics should be applied. An example of rather severe OC dermatitis and ocular swelling is shown in Fig. 6.2. This particular patient was sprayed during arrest by police officers and brought to the hospital for evaluation. He was treated with irrigation, systemic antihistamines, and steroids with resolution of his symptoms within 4 days.

Respiratory Toxicity

Inhalation of CCCAs may cause coughing, chest tightness, and shortness of breath due to burning and irritation of the airways [29]. Improvement will immediately be seen when an individual is removed from the contaminated environment. The majority of respiratory tract symptoms and signs should resolve within 15 min of the exposure. If symptoms persist, patients should be evaluated for hypoxia with pulse oximetry or, if severe, arterial blood gases. Bronchospasm may be treated with inhaled β_2-agonists, steroids, and aminophilline [29]. Pulmonary oedema may be delayed for 12–24 h after exposure, suggesting a need for follow-up radiographs

Fig. 6.2 Periocular swelling and facial contact dermatitis from OC exposure during an arrest by law enforcement

WIT.0043.0086.0249

[31]. Delayed onset bronchopneumonia may also occur from prolonged exposure to CCCAs in enclosed spaces [37].

A cluster of adverse respiratory effects associated with CS exposure during a US Marine training exercise has been reported [38]. Nine Marines were exposed to CS gas and participated in rigorous exercise within 3–4 days after the exposure. All were hospitalised with various pulmonary symptoms including cough, shortness of breath, hemoptysis (N = 5), and hypoxia (N = 4). All symptoms of respiratory distress abated within 72 h, and all had normal lung function 1 week after CS exposure.

Single case reports of severe reactions to pepper spray have been published. One detailed respiratory distress that necessitated extracorporeal membrane oxygenation in a 4 week old infant after a 5% spray was accidentally discharged in his face [39]. Another case detailed an 11 year old child who intentionally sprayed and inhaled PS from an individual canister and developed reversible wheezing [40]. These case reports are anecdotal in that they report symptoms temporally related to PS exposure and demonstrate that when used improperly these compounds can cause severe symptoms.

Dermal Toxicity

Burns occurring following exposure to CS gas are multifactorial in aetiology: (1) chemical burns caused by *o*-chlorobenzylidene malonitrile itself, (2) contact burns caused by direct contact with the hot canisters, or (3) flame burns caused by explosion of the tear gas grenades near victims. Dermal irritation in the form of burning and blistering can be treated with irrigation, preferably with an alkaline solution other than sodium hypochlorite (household bleach). The combination of bleach with CS has been noted to cause a much more severe reaction than that produced by CS alone [29].

Erythema can be common in skin that has been freshly abraded but resolves 45–60 min after exposure. Contact dermatitis can be effectively treated with topical corticosteroids and/or antihistamines such as diphenhydramine. Typical dermatitis associated with CS exposure resolves within a few days [41].

Safety

In some cases harmful effects are not due to the CCCA itself, but as a result of solvents and/or carriers, or through impact injuries caused by the delivery system (i.e. cartridges). Methyl-isobutyl ketone (MIBK) is a common solvent used in CS sprays, though there has been much debate over the safety of these formulations. MIBK is absorbed dermally and is of low oral toxicity. However, prolonged dermal contact may cause irritation, defatting of the skin, flaking and peeling. Dizziness, headache, drowsiness, ataxia, nausea, vomiting, weakness, and loss of appetite have also been reported after exposure. A study by Euripidou et al. [8] concluded that CS

WIT.0043.0086.0250

formulated with MIBK was more harmful than other CS formulations and exposure resulted in a higher incidence of dermatitis and blistering. Holopainen et al. [11] described 4 individuals who developed deep corneal and conjunctival lesions that took weeks to months to resolve after pepper spray exposure (formulated with 92% trichloroethylene as the carrier). In one of these cases the individual was only exposed to the solvent without the OC, suggesting that it may be the solvent responsible for the adverse effects.

A higher proportion of severe injuries have been observed when CS and OC are used in projectile munitions (27%) as opposed to in either a spray (7%) or aerosol (12%) formulation [2]. Incorrect delivery of an agent (e.g. being fired at very close distances or pointed directly at a person's face or head) may cause mechanical injury which, although rare, may lead to a fatal outcome [42]. Several factors may play a role in CCCA-related deaths including; drug use, especially that of stimulants such as cocaine and metamfetamine (methamphetamine), acute behavioural disturbance/excited delirium, and the prone maximal restraint position (PMRP) also known as the hog-tie or hobble restraint [3]. Strange as it seems, it is possible to force a body where asphyxia secondary to physical restraint occurs (such as officer placing too much weight on the back), but this does not occur in methamphetamine abusers with excited delirium who are sprayed with OC [43].

Of concern are reports describing violent prisoners, many of which were chronic stimulant users, who died after being sprayed with pepper spray [44]. In most cases where harm is alleged to have resulted from the application of chemical incapacitants, the decedents have other recognised risk factors for sudden cardiac death (e.g. ventricular remodelling, cardiomegaly) which may cause death in those not exposed to an incapacitant [45]. Many of these reports are anecdotal thus it is difficult to draw much evidence from them. Nonetheless it is important that prisoners are monitored and evaluated by healthcare professionals to minimise the risks whilst they are in custody. The absence of any association between restraint, asphyxia, and OC exposure has been demonstrated in a randomised, cross-over controlled trial where volunteers were sprayed with OC while restrained in a prone position [46]. Results from 35 individuals exposed to OC or placebo showed that inhalation of OC did not result in abnormal pulmonary function, hypoxemia, or hypoventilation when compared to those exposed to placebo, in either the sitting or maximal restraint positions. A problem with the use of CCCAs is that they are indiscriminate and affect not only the intended targets but also peaceful bystanders, nearby residents, and law enforcement officers themselves. Children and the elderly are particularly vulnerable to the toxicity of CCCAs and as a result may have worse clinical outcomes [2].

Legality

The Chemical Weapons Convention (CWC) came into effect on 29th April 1997. As of April 2016, 192 states, representing over 98% of the world's population, are party to the CWC. The CWC outlines three classes of controlled substances (Table 6.4). The CWC defines any CCCA as, "any chemical not listed in a Schedule, which can

WIT.0043.0086.0251

Table 6.4 Controlled substances according to the Chemical Weapons Convention

Schedule	Use	Example
1	Few or no uses outside chemical weapons	Nerve agents
2	Legitimate small-scale applications	Thiodiglycol (used in manufacture of mustard gas, but also as a solvent in inks)
3	Large-scale uses apart from chemical weapons	Phosgene

rapidly produce in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure" [47]. The convention prohibits military use of CCCAs, and states they may be used for "law enforcement including domestic riot control purposes".

Legal availability to law enforcement and the general public differs between countries; however, most can be easily obtained through international markets or ordered on the internet from a country where use is unregulated. Law enforcement agencies should also be briefed on responsible usage and the importance of not using highly concentrated solutions of these CCCAs. Use of CCCAs by the general public comes with no education, and as a result may lead to a greater risk of adverse effects due to inappropriate use of the agents.

Nerve Agents

Although not technically classed as CCCAs, nerve agents are the most toxic and fast-acting substances known in chemical warfare and may be used to target individuals or groups. Many of these agents were developed during the Cold War, including G-series agents (e.g. Tabun (GA), Sarin, Soman, GF), and the second generation more effective V-series agents (e.g. VX). A notable feature of the V-series agents is that they do not degrade easily and can remain active on surfaces for weeks to months [48]. As a result of their persistence and potency, people exposed to V-series agents are themselves a danger to first responders who may fall ill when they come into contact with minute traces of the agent. The victims must be decontaminated and affected areas cordoned off until they can be made safe. The so-called 'Novichok' agents were designed to be more lethal and more difficult to treat than the V-series agents, with Russian scientists claiming some variants were five to eight times more potent than VX [49]. Nerve agents have been implicated in assassinations and terror attacks, perhaps most notable was the Tokyo subway attack in 1995 where bags containing sarin were punctured and left on the train floor for the vapours to disperse. The attack resulted in 13 deaths, and thousands injured.

Exposure is generally via inhalation orabsorption via the skin, but in liquid form these agents can also be released into water supplies or added to food and drink, which delays the onset of their effects. The toxidrome depends on the route of absorption; after dermal absorption muscle twitching occurs first, whereas after

WIT.0043.0086.0252

inhalation breathing difficulties are first apparent. The onset of symptoms after inhalation is within 5 min, but with dermal exposure can be up to several hours after exposure [50].

The clinical effects of nerve agents are a result of the inhibition of acetylcholinesterase (AChE) which causes the neurotransmitter acetylcholine to accumulate in the body. Nerve agent toxicity affects all organ systems leading to a multitude of signs and symptoms which may cloud the clinical picture and patients often present in extremis quickly after exposure. Common clinical presentation may include defecation, urination, muscle weakness, miosis, bradycardia, emesis, lacrimation, and salivation. The binding of acetylcholine at nicotinic receptors results in muscle twitches, cramps, weakness, paralysis, and areflexia. Acetylcholine can also stimulate the brain where it can induce seizures and coma.

There are no readily available assays for the clinician to use to gauge exposure levels. Measurement of erythrocyte AChE levels best indicates the severity of an acute exposure; however, this test may not be available in all hospitals or laboratories. The effects of nerve agent toxicity may be reversed through timely administration of pralidoxime (2-PAM) or obidoxime, which enable regeneration of active acetylcholinesterase. Oximes are typically administered in conjunction with atropine which blocks muscarinic acetylcholine receptors slowing down the effects of the poison. Seizures are generally best treated with benzodiazepines.

Key Points

- The aim of chemical crowd control agents is to produce temporary incapacitation of an individual or a group without the need for physical force.
- Education of law enforcement officers is important to ensure these agents are used judiciously and in the correct manner to minimise adverse effects.
- Medical care should never be withheld from those who request it, or detainees/prisoners, complaining of lingering effects.
- Whilst use of these agents is relatively benign, there are reports of serious toxicity typically when these agents have been used at high concentration, in confined spaces, or through prolonged exposure.
- It must be recognised that their use is not always appropriate and may not be effective for all individuals, e.g. the acutely psychotic.
- Fentanyl (and its derivatives) and nerve agents are more lethal chemicals which may be used to target a crowd. Timely treatment of individuals exposed to these agents is paramount to a successful clinical outcome.

Illustrative Cases

A 21-year-old military police officer candidate reported left eye pain and redness after being exposed to pepper spray to the face during a drill. Immediately after the exposure, he experienced blurry vision and mild photophobia in both eyes. His eyes

WIT.0043.0086.0253

were immediately irrigated with normal saline by medical technicians on site and the officer reported feeling much better, but later that evening he began to experience pain in his left eye. Two days after the exposure, he presented to the Emergency Department complaining of continued left eye pain, now with redness. Slit-lamp examination with fluorescein stain revealed a corneal ulcer that measured 1 mm × 4 mm in size. He was treated with topical erythromycin and made an uneventful recovery [51].

On October 26, 2002, more than 120 hostages held at the Moscow Dubrovka Theatre Center by Chechen rebels died during a rescue attempt by Russian military. Russian physicians were told that an anaesthetic gas had been pumped into the theatre, but the gas was not identified. Doctors presumed that a nerve agent had been used, but there were many signs of opiate poisoning. The first few hours were spent testing various antidotes before they found something that worked, Narcan. Four days later Russian government confirmed a fentanyl derivative was the drug used, the exact drug was not specified. The bioavailability of aerosolized fentanyl base is comparable to the bioavailability to intravenous administration at the same dosage. The actual drug used has never been disclosed; initially it was widely believed to be a mixture of carfentanyl and remfentanyl. Carfentanyl has 1000 times the potency of heroin. The strategy used by the Russians made sense theoretically as the therapeutic index of carfentanyl is 10 times greater than heroin, and the concentration of aerosolized carfentanyl should, in theory have been quite low. It appears that the intra individual variation between individuals rules out the use of CCCAs [15].

The Tokyo subway sarin attack was the first large-scale disaster caused by a nerve gas. A religious cult released sarin gas into subway commuter trains during morning rush hour. Thirteen passengers died and about 5500 people were harmed. Sarin is a highly toxic nerve agent chemically similar to organophosphate pesticides. It can be fatal within minutes to hours. It causes the clinical syndrome of cholinergic hyperstimulation by inhibition of the crucial enzyme acetylcholinesterase. It is the most volatile of all the nerve agents making it the most dangerous. Death can occur within minutes to hours. Therapy of nerve agent toxicity is divided into three categories, decontamination, respiratory support, and antidotes. All of these therapies may be given simultaneously. Because most of the hospital staffs had no training many (23%) suffered acute poisoning themselves due to secondary exposure. The episode illustrates the need for multi-level, coordinated, disaster drills and the need for mass casualty planning [52].

Self-Assessment Exercises

1. List the signs and symptoms of ocular toxicity following exposure to a chemical crowd control agent.
2. Outline the measures you should take to protect yourself from secondary exposure to chemical crowd control agents.
3. Outline the treatment plans for (a) an individual exposed to fentanyl (or a derivative), and (b) an individual exposed to a nerve agent.

WIT.0043.0086.0254

References

1. Pilant L (1993) Less-than-lethal weapons: new solutions for law enforcement. In: Science and technology. Washington, DC, International Association of Chiefs of Police
2. Haar RJ, Iacopino V, Ranadive N, Weiser SD, Dandu M (2017) Health impacts of chemical irritants used for crowd control: a systematic review of the injuries and deaths caused by tear gas and pepper spray. BMC Public Health 17:831
3. Toprak S, Ersoy G, Hart J, Clevestig P (2015) The pathology of lethal exposure to the riot control agents: towards a forensics-based methodology for determining misuse. J Forensic Legal Med 29:36–42
4. Kim YJ, Payal AR, Daly MK (2016) Effects of tear gases on the eye. Surv Ophthalmol 61:434–442
5. Satpute RM, Kushwaha PK, Nagar DP, Rao PVL (2018) Comparative safety evaluation of riot control agents of synthetic and natural origin. Inhal Toxicol 30:89–97
6. Olajos EJ, Salem H (2001) Riot control agents: pharmacology, toxicology, biochemistry and chemistry. J Appl Toxicol 21:355e91
7. Southward RD (2000) CS incapacitant spray. J Accid Emerg Med 17:76
8. Euripidou E, MacLehose R, Fletcher A (2004) An investigation into the short term and medium term health impacts of personal incapacitant sprays. A follow up of patients reported to the National Poisons Information Service (London). Emerg Med J 21:548–552
9. ACPO (Association of Chief Police Officers of England, Wales and Northern Ireland) (2009) Guidance on the use of incapacitant spray. London, England. http://www.npcc.police.uk/documents/FoI%20publication/Disclosure%20Logs/Uniformed%20Operations%20FOI/2013/003%2013%20Att%2014%20of%2015%20Guidance%20on%20the%20use%20of%20Incapacitant%20Spray.pdf. Accessed 06 Apr 2019
10. Reilly CA, Crouch DJ, Yost GS (2001) Quantitative analysis of capsaicinoids in fresh peppers, oleoresin capsicum and pepper spray products. J Forensic Sci 46:502–509
11. Holopainen JM, Moilanen JA, Hack T, Tervo TM (2003) Toxic carriers in pepper sprays may cause corneal erosion. Toxicol Appl Pharmacol 186:155–162
12. Derbeken V (1997) Pepper spray in the eyes – protestors file suit against police. In: San Francisco chronicle. Herst Publications, San Francisco, CA
13. Pearson A (2006) Incapacitating biochemical weapons. Nonproliferation Rev 13:151–188
14. Sutter ME, Gerona RR, Davis MT, Roche BM, Colby DK, Chenoweth JA, Adams AJ, Owen KP, Ford JB, Black HB, Albertson TE (2017) Fatal fentanyl: one pill can kill. Acad Emerg Med 24:106–113
15. Wax PM, Becker CE, Curry SC (2003) Unexpected "gas" casualties in Moscow: a medical toxicology perspective. Ann Emerg Med 41:700–705
16. Gross ML (2009) Non-lethal weapons and the civilian death toll in war time. Nature 461:340
17. Riches JR, Read RW, Black RM, Cooper NJ, Timperley CM (2012) Analysis of clothing and urine from Moscow theatre siege casualties reveals Carfentanil and remifentanil use. J Anal Toxicol 36:647–656
18. Caterina MJ, Schumacher MA, Tominaga M, Rosen TA, Julius D (1997) The capsaicin receptor: a heat-activated ion channel in the pain pathway. Nature 389:816–824
19. Reilly CA, Taylor JL, Lanza DL, Carr BA, Crouch DJ, Yost GS (2003) Capsaicinoids cause inflammation and epithelial cell damage through activation of vanilloid receptors. Toxicol Sci 73:170–181
20. Worthington E, Nee P (1999) CS exposure – clinical effects and management. J Accid Emerg Med 16:168–170
21. Schep LJ, Slaughter RJ, McBride DI (2015) Riot control agents: the tear gases CN, CS and OC - a medical review. J R Army Med Corps 161:94–99
22. Brône B, Peeters PJ, Marrannes R, Mercken M, Nuydens R, Meert T, Gijsen HJM (2008) Tear gasses CN, CR, and CS are potent activators of the human TRPA1 receptor. Toxicol Appl Pharmacol 231:150–156

WIT.0043.0086.0255

23. Menezes RG, Hussain SA, Rameez MA, Kharoshah MA, Madadin M, Anwar N, Senthilkumaran S (2016) Chemical crowd control agents. Med Leg J 84:22–25
24. FFLM; McGorrigan J, Payne-James JJ (2017) Recommendations: Irritant sprays : clinical effects and management. https://fflm.ac.uk/wp-content/uploads/2018/08/Irritant-sprays-Dr-J-McGorrigan-and-Dr-J-Payne-James-December-2017.pdf. Accessed 06 Apr 2019
25. Breakell A, Bodiwala GG (1998) CS gas exposure in a crowded night club: the consequences for an accident and emergency department. J Accid Emerg Med. 15:56e7
26. Himsworth H, Dornhorst HC, Thompson RHS (1969) Report of an enquiry into the medical and toxicological aspects of CS (orthochlorohenzylidene malononitrile). Part I. Enquiry into the medical situation following the use of CS in Londonderry on the 13 and 14 august 1969. HMSO, London
27. Hu H, Fine J, Epstein P, Kelsey K, Reynolds P, Walker B (1989) Tear gas - harassing agent or toxic chemical weapon? JAMA 262:660–663
28. Fraunfelder FT (2000) Is CS gas dangerous? Current evidence suggests not but unanswered questions remain. BMJ 320:458–459
29. Hilmas CJ, Poole MJ, Katos AM, Williams PT (2009) Chapter 12: Riot control agents. In: Gupta RC (ed) Handbook of toxicology of chemical warfare agents. Academic Press, Cambridge, MA
30. Watson WA, Stremel KR, Westdorp EJ (1996) Oleoresin capsicum (cap-stun) toxicity from aerosol exposure. Ann Pharmacother 30:733–735
31. Solomon I, Kochba I, Marharshak N (2003) Report of accidental ingestion among seven patients in Central Israel and review of the current literature. Arch Toxicol 77:601–604
32. Lee RJ, Yolton RL, Yolton DP, Schnider C, Janin ML (1996) Personal defense sprays: effects and management of exposure. J Am Optom Assoc 67:548–560
33. Blain PG (2003) Tear gases and irritant incapacitants. 1-chloroacetophenone, 2-chlorobenzylidene malononitrile and dibenz[b,f]-1,4-oxazepine. Toxicol Rev 22:103e10
34. Agrawal Y, Thornton D, Phipps A (2009) CS gas – completely safe? A burn case report and literature review. Burns 35:895–897
35. Kiel AW (1997) Ocular exposure to CS gas: the importance of correct early management. Eye 11:759e60
36. Yih JP (1995) CS gas injury to the eye. BMJ 311:276
37. Beswick FW (1983) Chemical agents used in riot control and warfare. Hum Toxicol 2:247–256
38. Thomas RJ, Smith PA, Rascona DA, Louthan JD, Gumpert B (2002) Acute pulmonary effects from *o*-chlorobenzylidenemalonitrile "tear gas": a unique exposure outcome unmasked by strenuous exercise after a military training event. Mil Med 167:136–139
39. Billmire DF, Vinocur C, Ginda M, Robinson NB, Panitch H, Friss H, Rubenstein D, Wiley JF (1996) Pepper-spray induced respiratory failure treated with extracorporeal membrane oxygenation. Pediatrics 98:961–963
40. Winograd HL (1977) Acute croup in an older child: an unusual toxin origin. Clin Pediatr 16:884–887
41. Holland P, White G (1972) The cutaneous reactions produced by o-chlorobenzylidenemalononitrile and –chloroacetophenone when applied directly to the skin of human subjects. Br J Dermatol 86:150–154
42. Çorbacıoğlu ŞK, Güler S, Er E, Seviner M, Aslan Ş, Aksel G (2016) Rare and severe maxillofacial injury due to tear gas capsules: report of three cases. J Forensic Sci 61:551–554
43. Chan TC, Vilke GM, Neuman T (2000) Restraint position and positional asphyxia. Am J Forensic Med Pathol 21:93
44. Karch SB, Stephens BG (1999) Drug abusers who die in custody. J R Soc Med 92:110–113
45. Maeda H, Michiue T, Zhu B-L, Ishikawa T, Quan L, Bessho Y, Okazaki S, Kamikodai Y, Tsuda K, Komatsu A, Azuma Y (2009) Potential risk factors for sudden cardiac death: an analysis of medicolegal autopsy cases. Legal Med 11:S263–S265
46. Chan TC, Vilke GM, Clausen J, Clark RF, Schmidt P, Snowden T, Neuman T (2002) The effect of oleoresin capsicum "pepper" spray inhalation on respiratory function. J Forensic Sci 47:299–304

WIT.0043.0086.0256

47. The Organisation for the Prohibition of Chemical Weapons (1994) Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction: Article II, section 7. https://www.opcw.org/sites/default/files/documents/CWC/CWC_en.pdf. Accessed 06 Apr 2019
48. Candiotti K (2017) A primer on nerve agents: what the emergency responder, anesthesiologist, and intensivist needs to know. Can J Anaesth 64:1059–1070
49. Ellison DH (2008) Handbook of chemical and biological warfare agents, 2nd edn. CRC Press, Boca Raton, FL
50. Anderson PD (2012) Emergency management of chemical weapons injuries. J Pharm Pract 25:61–68
51. Shimada M, Young C, Tanen DA (2012) Corneal ulcer associated with pepper spray exposure during military training. J Emerg Med 43:e149
52. TokudaY KM, Takahashi O, Stein GH (2006) Prehospital management of sarin nerve gas terrorism in urban settings: 10 years of progress after the Tokyo subway sarin attack. Resuscitation 68:193–202

WIT.0043.0086.0257

Medical Issues Relevant to Restraint

7

Philip S. L. Beh and Margaret M. Stark

Learning Objectives

Understanding of legislation and basic principles underpinning the use of force.

Discuss the use of Use of Force Continuum.

Describe and interpret the injuries that may result from the use of force.

Introduction

In this modern era and in places where there is a functioning government with a robust judicial institution, the clash between individual rights and demands and those of the state or institutions will occur and will be subject to often intense public scrutiny. Readers will have watched television news broadcasts of large-scale protests and demonstrations at meetings of World Trade Organizations, Climate Change Summits, etc.

This chapter makes no attempt at answering what the norms or limits should be in the interaction between police and such demonstrators but will look at the various medical issues that such interactions between the police and the public may give rise to, and in particular, what the healthcare professional (HCP) called in to examine and record evidence of such encounters should be aware of so as to enable them to perform a thorough and detailed examination and to draw conclusions that can be supported by medical evidence.

The HCP's involvement with these issues involves many of the core attributes needed in the practice of high-quality forensic medicine. These include the need for good history taking from as many involved parties as is practical to clearly establish

P. S. L. Beh (✉)
Department of Pathology, The University of Hong Kong, Hong Kong, China
e-mail: philipbeh@pathology.hku.hk

M. M. Stark
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_7

WIT.0043.0086.0258

events, and a precise examination recorded clearly and contemporaneously. Objectivity must be maintained in the light of differing histories, and there is a need to keep abreast of developing restraint techniques and use of force, e.g. the introduction of spit and bite guards (SBG) which may bring new clinical problems. However careful police officers may be, there is the potential for serious injury requiring further medical intervention, and the real possibility of being a witness in a legal process such as police disciplinary procedures.

Legislation & Statistics

The law on the use of force varies depending on the jurisdiction [1]. The use of force should be based on the principles of necessity and proportionality. As a general principle during restraint, any force used must be proportionate to the threat faced, be lawful, and necessary in the particular circumstances. The United Nations have produced guidance for Law Enforcement Officials. In 1979 the Code of Conduct for Law Enforcement Officials [2] and in 1990 Basic Principles on the Use of Force and Firearms by Law Enforcement Officials [3].

The Human Rights Act 1998 (HRA) in the United Kingdom requires all public authorities, including the police, to act in a way which is compatible with the European Convention on Human Rights (ECHR). Use of force may engage several of the ECHR Articles: 2 Right to Life; 3 Prohibition of Torture; 5 Right to liberty and security; and Article 8 Right to respect for private and family life. The use of force by police must also be balanced against Article 11 Freedom of assembly and association.

Illustrative Case *M and about 100 others were kettled at a protest. No one disputed the confinement as there had been serious damage and a breach of the peace of which the police believed the recurrence was likely. As the group was funnelled slowly out, the chief superintendent decided that each of them should be filmed giving their personal details on camera as this would help the police with any subsequent investigations. M was taken to a separate area surrounded by officers, filmed and asked to state her name, address and date of birth. She asked which police powers authorised this action. She was not answered until after the filming. The court found that there were no statutory powers that allow the police to take details and film before the persons were allowed to leave the confinement. As such the giving of information and consent to filming had to be voluntary, which was not the case here. Therefore there was a breach of Articles 5 and 8 and the film should therefore have been destroyed*. [Mengesha v Commissioner for the Metropolis 2013].

In the England and Wales the three main powers relating to the use of force are contained within:

- common law
- section 3 of the Criminal Law Act 1967
- section 117 of the Police and Criminal Evidence Act 1984 (PACE).

In Northern Ireland (NI) the equivalent legislation is section 3 of the Criminal Law Act (Northern Ireland) 1967 and Article 88 of the Police and Criminal Evidence (Northern Ireland) Order 1989. The question whether the degree of force used by an officer was reasonable in the circumstances is to be decided by reference to the circumstances as the officer believed them to be at the time of making the arrest under Section 76 of the Criminal Justice and Immigration Act 2008.

In the United States an important case is that of *Graham v Connor* [4]. The Supreme Court clarified the basic US legal standard for determining the legality of any use of force by a law enforcement official in 1989 as whether his or her actions were 'objectively reasonable'. This assessment must be made on the perspective of a reasonable officer on the scene including what the officer knew at the time.

Comparatively recently (April 2017) in the UK the National Police Chiefs' Council (NPCC) has introduced a requirement for all police forces in the UK to record data on 'police use of force'. The Home Office released a set of 'experimental statistics' in December 2018 on the police use of force in England and Wales [5]. The police use of force 'refers to an officer using a force tactic (from handcuffing to using a firearm) on an individual'. A 'use of force incident' refers to one officer's use of force on one person. This means that situations involving more than one officer will count as multiple incidents.

There are 43 police forces in England and Wales and over the period of 1 April 2017–31 March 2018 there were 313,000 recorded incidents with 469,000 force tactics used. These figures are not an accurate representation of the total number of incidents and not all forces provided full data. Handcuffing was the most common with unarmed skills next most frequent (Table 7.1) and other restraint tactics less common; examples of types of use of force are given in Table 7.2.

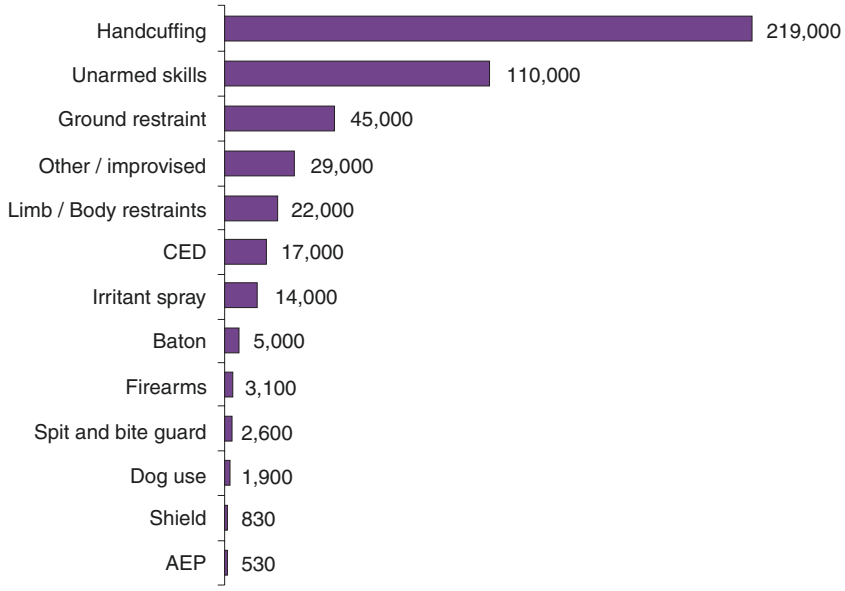
After arrest when the individual has been taken into police custody there is an expectation that 'any force used is strictly necessary, proportionate and lawful, used as a last resort and subject to robust accountability' [6]. If force is used in the custody setting it should be carried out by trained staff using approved techniques and for no longer that necessary. Staff should be trained in effective de-escalation techniques.

The restraint process maybe particularly challenging where the person has a mental health problem or is intoxicated with drugs and/or alcohol. In addition, the officer must be able, in retrospect and maybe under close scrutiny, to demonstrate that his/her actions were entirely appropriate. The National Decision Model [7] can assist police officers in making these complex decisions. The six key elements include a Code of Ethics covering the principles and standards of professional behavior; information and intelligence gathering; assessment of threat and risk and development of a working strategy; consideration of powers and policy; identify options and contingencies; and take action and review what happened. It must be recognized that at the time of restraint, officers may not have the luxury of time for a full analysis using prior information, or the knowledge that experience, combined with extensive training and re-training, brings.

In recent years police have started to use body worn cameras (BWC) that record the interactions with the public. Researchers have looked at whether BWC reduce the prevalence of the use-or-force and/or citizens' complaints against the police and

WIT.0043.0086.0260

Table 7.1 Number of times tactics were used in use of force incidents, England and Wales, year ending March 2018



Source: Home Office, Police use of force statistics, England and Wales, April 2017 to March 2018, Table 1.
The number of tactics does not sum to the total number of incidents as multiple tactics can be used in an incident.
The tactic 'CED' refers to a conducted energy device (i.e TASER®)

Table 7.2 Examples of use of force

• Rigid handcuffs
• Plastic wrist restraints/Body cuffs
• Spit hoods
• Irritant spray—CS & PAVA
• 'Empty hands'—unarmed combat
• Batons
• Personal Protective Equipment (PPE)/Shield
• Conducted Electrical Device (CEW)
• Prone restraint
• Water cannon
• Attenuating energy projectiles (AEP)
• Dogs
• Horses

initially found that the use of force was reduced as was the number of complaints filed against police officers [8]. However more recent research in a variety of jurisdictions have found that there was no overall discernible effect of using BWVs on police use of force and there was an increased likelihood of an officer being assaulted during a shift compared to not wearing the cameras [9]. Further research is needed to evaluate the use of BWC.

As an independent HCP, excellent clinical management throughout the case enables the HCP to act as a high-quality witness if needed. The HCP also has a duty to report any instance where excessive restraint appears to have been used and such concerns should be communicated to the senior police officer on duty immediately. The HCP needs to be aware that equipment may be misused so that a long barreled metal torch could be used as a striking weapon in some circumstances and indeed such lights were withdrawn in the United States to prevent this happening.

Illustrative Case *A 21 year-old male was under arrest regarding an allegation of possession of drugs. The HCP was called to document the detainee's injuries. The detainee complained of sore wrists. He advised that he had been handcuffed, resisted, and been put on the floor by police, the handcuffs had tightened. He described having a hand and arm across his neck; he said he was elbowed in the neck and had a knee put on his neck. He couldn't breathe or speak. There was no loss of consciousness and no urinary incontinence. He had no pain or difficulty in swallowing now.*

The HCP noted the following injuries:

1. *Inside the mouth there were injuries to both inner cheeks:*
   (a) *On the right side at the front of the inner right cheek at the level of the lower teeth a 2 cm linear abrasion*
   (b) *On the left side at the rear of the inner left check at the level of the lower teeth a 2 cm linear abrasion*
2. *An area of petechial haemorrhage or pinpoint bruising to between the eyebrows, round both eyes and below both eyes. The 'whites' of the eyes (sclerae) were reddened.*
3. *An abrasion of 1 cm by 0.5 cm to the left upper neck just below the angle of the jaw.*
4. *Three areas of patterned bruises to the right side of the neck one of 0.5 cm × 1 cm and two of 1 cm × 1 cm.*
5. *Extensive reddening round both wrists:*
   (a) *On the outer aspect of the right wrist over 5 cm in length with a 1.5 cm abrasion on the outer border and over 7 cm in length on the inner aspect of the wrist*
   (b) *On the outer aspect of the left wrist 6.5 cm in length with three linear abrasions - one of 1 cm and two of 0.5 cm; and on the inner aspect of the wrist over 5 cm in length with a 1 cm abrasion.*
   (c) *There was also a 2 cm incised wound on the back of the left wrist.*

The HCP concluded that the injuries to the wrists are typically seen with the application of rigid handcuffs. The petechiae seen to the face with the reddened 'whites' of the eyes are typical of compression to the neck. Bruises and abrasions may be seen on the front and sides of the neck as a result of the compression and the pattern of skin surface injuries may be difficult to interpret because the dynamic nature of such an assault and the possibility of the repeated re-application of pressure during strangulation. There may be damage to the mucosa of the mouth and tongue due to direct pressure on the teeth internally as seen in this case. The HCP spoke to the duty inspector about the findings of petechiae over the face.

WIT.0043.0086.0262

The Use-of-Force Continuum [10]

Police forces around the world will have policies and guidelines for their officers on when and how much force they can legitimately use in the line of duty. These will vary, but in the US research has shown that most use of force occurs in a linear fashion [11], where there is escalation from mere officer presence to more severe types of force. Individual police forces are likely to have their own guidelines but it is likely that they will include some or most of the following:

Officer presence—The simple presence of uniformed officers at an incident may be an effective means of establishing order. Such presence may vary from a single officer at petty disputes to large numbers of teams of police officers in riot gear, in armored vehicles, and in some jurisdictions even mounted police officers and officers with specially trained dogs; when such presence results in amicable outcomes, all involved are contented.

Verbalization—Here officers may need to shout or broadcast warnings to an individual or to crowds. Again, where consensus can be reached, it will gain a satisfactory outcome.

Empty hand control—From this point on there is physical contact between the officer and a member of the public. The outcome of such an encounter often depends on the degree of force used by the officer as well as on the degree of resistance put up by the person that the police officer has identified for "control". For example, in a situation where protesters lie on the street and allow the police to lift and remove them without any resistance, no or minimal injuries are expected. On the other hand, if an officer had chased and tackled a person running, one may expect to find injuries on both the officer and the subject. In some jurisdictions, officers are allowed to punch or kick to restrain an individual. In such instances the presence of injuries from such punches or kicks are of course to be expected.

Non-lethal force—Here officers will be using force in responding to an individual. Such non-lethal force will often involve the use of:

Batons—Batons come in different forms from the almost iconic wooden baton to longer extendable metallic tubes, etc. Essentially, police officers would have received training on the use of such "weapons" and in particular on where and how to strike individuals to disarm them and or to inflict sufficient pain to allow for the police officers to restrain such individuals.

Up to the early 1990s, UK police officers were equipped with a short wooden truncheon about 40 cm long and weighing just under 300 g. There was little formal training with these weapons but actual usage was not that common, either because they were not terribly effective or the situations faced at that time could be dealt with in different ways. In 1993, trials of both side-handled and a number of straight batons were introduced, as there was a rise in the number of officers injured on duty and the adequacy of their equipment was called into question.

There are currently three types of batons:

1. The Monadnock PR24 side handled baton can be either a rigid one piece baton or extendable from a shorter form for easier transport. Weighing around 600 g

with a shaft of polycarbonate plastic or aluminum, it has a fixed grip at right angles to the shaft towards one end. It is about 60 cm long. The addition of the handle to the shaft makes it very versatile with over 30 blocking and striking techniques available to the officer. Correct usage in stressful and challenging situations requires extensive and ongoing training. In some restraint situations, baton strike from the PR24 type is ineffective at producing the desired effect as not enough energy can be imparted from the strike.

2. The straight friction lock baton (e.g. the Asp) weighs less at 560 g and extends from 13 to 39 cm when racked (extended) with a flick of the wrist. It is carried unobtrusively on the belt and does not impede the general movement of the officer. It is made of hollow gun metal with a small metal knob at the far end. This gives more weight distally, but it is prone to becoming flattened and rough over time as the baton is closed by striking this end against the ground. This change in shape may increase the chance of injury in a forceful strike.
3. The acrylic patrol baton type has a solid or hollow nylon shaft with a ring of rubber separating the shaft and handle. It has fixed lengths of 56, 61 and 66 cm. It is broader than the friction lock type and therefore less likely to cause injury because the imparted energy is spread over a larger area. This is even though its weight is slightly less at 500–580 g. The heavier weights of these types of batons are used in public order disturbances.

In the United States, a 26 in. hickory (wooden) straight baton is used (similar to group 3 above). The situation across the Australian states is very variable with intra-state differences relating to specific police staff; for example, plain clothes staff may use an Asp type whereas uniformed officers are equipped with straight or side-handled batons.

Batons are used in offensive and defensive strikes, blocks or jabs. Strikes are made from an officer's strong (dominant) or weak (non-dominant) side, and clearly the potential for injury varies with the baton mass and velocity at impact, the target area and over how much surface area the force is applied to. Although no body area is absolutely forbidden to strike, an officer must use a proportionate response to the situation he faces knowing the potential to injure. Although target areas are divided into low-, medium- and high-risk areas as below, maintaining a distinction between them could be very difficult as strikes are made in dynamic situations where an initial target area may change as the potential detainee moves.

Target areas with a low injury potential are the areas of the common peroneal, femoral and tibial nerves on the legs and those of the radial and median nerves on the arms. There is a low probability of permanent injury with the main effects being seen as short-lived motor nerve dysfunction, as in a "dead leg", and bruising.

The areas of medium injury potential involve bones and joints including the knees and ankles, wrist, elbow, hands, upper arms and clavicle. In these cases fractures, dislocations and more extensive soft tissue injuries would be expected. Lastly, those areas with the highest risk of injury include the head, neck, throat, spine, kidneys and solar plexus.

The commonest injury to be seen will be bruising, and this is often in the pattern of so-called "tramline bruising" where two parallel lines of bruising are separated by a

WIT.0043.0086.0264

paler area. This is not unique to a baton injury but reflects an injury caused by any cylindrical hard object. The absence of bruising or other findings does not mean that a baton was not used as, for example, a degree of cushioning can occur from clothing. If the end of a baton is used to jab with, then circular bruises may be seen. It is possible for a detainee to have signs but with minimal symptoms or even be unaware of being struck. However, a move towards the friction lock batons makes this less likely.

An impact over a bony surface may produce a laceration. Abrasions are possible from the surface of a damaged baton. Fractures need to be considered where there are the traditional clinical signs of local pain, swelling and loss of function. X-ray confirmation is needed as soon as possible.

Considering the forces which can be applied when necessary, there is the potential for significant injury with bruising and rupture of internal organs including the heart, liver, spleen or kidneys or a head injury. The HCP should refer suspected cases for hospital review without delay especially if a confirmatory history for events is unavailable. Particular care is needed in those who are intoxicated as they are difficult to assess.

Individually held irritant sprays or gas canisters that are delivered from a hand-held device or from armored vehicles are increasingly popular and are intended to disorientate and to transiently incapacitate an individual. Details of the use and effects of these are covered in Chap. 6.

Conducted electrical weapons (CEW)/TASER® are used by a large number of police forces in North America, UK, Australia and in China. Details of the effects of these are covered in Chap. 8.

Water cannons are often mounted on armored vehicles and are capable of directing a powerful jet of water over long distances and with such force that grown adults are knocked off their feet.

Rubber bullets are hard solid chunks of rubber that are shot from a shot-gun like device. These bullets when used properly can cause painful soft-tissue injuries but have been known to cause fatal injuries when used improperly or when vulnerable parts of the body had been struck.

Lethal force—Here officers aim to prevent a lethal threat to another person or to avoid a lethal threat to himself.

HCPs involved in the examination and evaluation of individuals following an arrest must be aware of the above concept of the "use of force continuum" as such understanding will allow a much more informed ability to form opinions and comments on the sequalae of the use of such force. Ultimately though, it would be for the appropriate courts and tribunals to decide on the appropriateness of an officer's decision on how much force was used in response to a threat posed or perceived.

Methods of Physical Restraint

Physical restraint of an individual involves actual physical contact. The outcome of such contact is of course a function of the degree of force applied to restrain an individual and the degree of force used to resist such a restraint.

Upper Limb Restraints

A simple tight hand grip of a wrist, forearm or arm of an individual could easily result in bruises over the areas of the hand grip, such bruises may range from small oval bruises suggestive of fingertip bruises to larger patches of bruising. Forceful struggle against such a restraint will of course lead to bigger or more areas of bruising from repeated attempts to grip, etc. In situations where the individual's arm may be forced to the back of the body to facilitate the application of handcuffs, dislocation of the shoulders can occur.

Body Tackles

Body tackles will often result in falls of both the officer attempting to restrain the individual as well as the individual themselves. Injuries will typically include bruises and abrasions over hands, elbows, knees, etc. However, in situations where the fall was on a hard surface or was more complicated, more complex and severe injuries such as fractures may be seen. In many instances with such body tackles, the individual would end up lying on the ground and the arresting officer applying various degrees of force to keep the individual on the ground. Occasionally, deaths have occurred when it was suggested that several officers had jumped on an individual in such a position and such an individual was traumatically asphyxiated by the weight of all these officers acting on him.

Neck Holds

These are perhaps the most controversial form of physical restraint and the most problematic. Proponents of such holds claim that they are safe and effective and attribute their origin from judo, which has used these holds for centuries. Such holds are used in competition regularly with very rare if ever reports of serious injury or fatality. Others argue that such a means of restraint is inherently unsafe and has too narrow a margin for error to be used for restraint of an individual. The frequent use of the judo or mixed martial art (MMA) professional fights as examples of the safety of such holds is artificial since competitors in judo and MMA are highly skilled, trained and physically fit individuals. The fighters are all aware of the limits of the neck holds and are also watched closely by a professional referee. Individuals will frequently "signal defeat" to end the "hold". Such is never the case in a real-life crowd control situation.

Neck holds have been divided by many authors into:

1. Forearm holds—Such a hold involves the use of the forearm placed horizontally across the front of an individual's neck. The person applying the hold is positioned at the back and using the free hand, this forearm is pulled backwards forcing the individual's neck structures particularly the trachea against the

WIT.0043.0086.0266

cervical spine, hence constricting it and causing difficulty in breathing. Theoretically, the individual restrained ceases to struggle and resist restraint because of this difficulty in breathing.

2. Sleeper holds—This hold is even more ambitious as it purports to apply pressure on the carotid sinuses, and hence result in transient loss of consciousness. It is applied by placing the entire upper limb around an individual's neck so that the neck is caught or pinched between the arm and forearm. Flexion of the elbow joint applies pressure to both sides of the neck and the individual loses consciousness, and hence is restrained. Proponents of this hold talks about reducing cerebral cortex circulation via bilateral compression of the carotid arteries and jugular veins and that a painless unconscious state is achieved in 7–10 s [12].

Such a division is helpful in appreciating the supposed intended effects of these holds. In practical situations where an individual may be violently struggling, such a clinically accurate application of neck holds will be challenging to perhaps most, apart from the highly skilled and practiced judo exponents. No matter how well and how many individuals in a police force are trained on the use of these holds, it will be unusual that they will be able to maintain such expertise in the course of their career and also to have sufficient and regular opportunities to use such holds so as to be truly experts in their safe use.

The Pathophysiology of Neck Holds

Most forensic literature, even those published in the last decade attributes the effects of neck holds to one or more of the following:

1. The "forearm hold" applies pressure across the front of the neck and hence also on the thyroid cartilages. Indeed, where excessive force has been applied, fracture of the thyroid cartilages may be found.
2. The "forearm hold" will also result in the backward displacement of the tongue, hence occlusion of the hypopharynx.
3. The "sleeper" hold on the other end is believed to result in compression of both carotid arteries, hence decrease the carotid blood flow to the brain. Reay and Holloway [13] are often quoted as having demonstrated that the application of such a neck hold decreases blood flow to the head by 85%.
4. The "sleeper" hold may also be due to stimulation of the carotid sinus, which can produce bradycardia and a transient loss of consciousness. Carotid sinus stimulation is a common enough finding and hence conceptually this alleged mechanism commonly referred to as the "vasovagal effect" was often offered when no definitive findings were present to indicate another mechanism for the cause of death.

More recent reviews by Ross and Chan [14] as well as Di Maio and Di Maio [15] have collected experimental as well as focused serial collections whereby many of the above supposed or accepted mechanisms were challenged. Indeed, readers are

WIT.0043.0086.0267

encouraged to reflect on the rather provocatively titled article from Glatten and Karch [16]. Indeed, they call for a clearer focus on such cases and have supported the use of the collective term of Excited Delirium Syndrome to study such deaths.

There is no doubt that excessive force applied to the neck in any neck holds that results in injury to the laryngeal cartilages especially the thyroid cartilages can lead to serious neck injuries and possibly death. It is suggested that to kill, the hold would need to be applied for at least 2 or more minutes. In reality, this is quite a long time and seldom supported by independent witnesses to deaths in such incidents.

Vilke in reviewing the work of Reay and Holloway argues that the decreased blood flow was "capillary" in nature and may represent a decrease in blood inflow as well as blood outflow from the brain. The decreased blood outflow from the brain, effectively a result of the increased pressure from the neck hold, increases the venous pressure in the neck.

Raschka et al. [17] performed measurements on nine judokas and were able to demonstrate a reduction in the end-diastolic flow in the mid cerebral artery from a baseline peak flow of 85.3–4.2 cm/s. What was however more relevant was that none of the subjects lost consciousness and even more pertinent was that a pulse oximetry reading from a probe on the ear measured only a decrease from 97.9 to 93.2% only during the hold.

The carotid sinus syndrome can be diagnosed when carotid sinus stimulation produces a systole exceeding 3 s or a fall in systolic pressure exceeding 50 mmHg. However, this syndrome is found usually in older individuals. In two different studies, each involving 25 elderly subjects, Parry et al. [18] and McIntosh et al. [19] were unable to produce the above physiological changes in the majority of the subjects. Indeed McIntosh was able to produce a drop in blood pressure of more than 50 mmHg in only three individuals. Suffice to say that none of the subjects demonstrated any near-death changes.

It is now believed that sudden death in the course of an arrest where neck holds and or restraints are used particularly involving a violent struggling individual are multifactorial with inter-linked causations.

Physical Restraining Devices

Handcuffs

By and large the most commonly used restraining device is that of the metal handcuffs and to a lesser extent waist and ankle chains. Most handcuffs are fitted to both wrists of an individual with their hands behind their back. In some jurisdictions, individuals are handcuffed with their hands in front, which is a much less desirable position for restraint. Guidance on the use of handcuffs by The Association of Chief Police Officers of England, Wales and Northern Ireland [20] makes it clear that the use of handcuffs is an "intentional application of force to the person" and amounts to an assault unless it can be justified. Such justifications can be summarized simplistically as:

WIT.0043.0086.0268

1. A person may escape or attempt to escape.
2. A person is likely to use violence.
3. Assuming custody of prisoners from Her Majesty's Prisons.

Up to the early 1990s handcuffs linked both wrists by a short metal chain but apart from restricting arm movements they offered little else in terms of restraint and if only one wrist was attached to them the handcuffs could quickly become a flail like weapon. Rigid handcuffs, were first trialed in 1993 and have since become standard issue in the UK and the USA. Within Australia, there is a mixed usage of chain and fixed link handcuffs.

Although the ratchet mechanism is the same as with the older cuffs, the fixed joint between the cuffs gives several distinct advantages. Holding the fixed joint allows easy application as simple pressure against the wrist enables the single bar to release over the wrist and engage the ratchet. The ratchet can be locked to prevent further tightening but can also only be released with the key, which requires the detainee to cooperate by keeping still. If the cuffs are not locked then progressive tightening can occur. Correctly tightened cuffs should just have enough space for an additional finger between the applied cuff and wrist. The hands are usually cuffed behind the back one above the other, as handcuffing to the front may still give opportunities to resist detention.

Even with only one wrist within the cuffs, control by the officer can be gained by essentially using the free cuff and rigid link as a lever to apply local painful pressure to the restrained wrist. Techniques allow a detainee to be brought to the ground in a controlled manner or the other wrist to be put within the cuffs. A very gentle application, such as may be experienced by the forensic physician in a personal trial, will demonstrate that it is clearly an effective way of gaining control of most individuals. This may not be the case in those who are intoxicated, have mental health issues, or are violent. Cuffs should fit firmly but not tightly at the narrowest part of the wrist just distal to the radial and ulna styloid processes.

Injuries from Handcuffs

Injuries from handcuffs either reflect relative movement between the cuff and wrist or are the result of direct pressure from the cuff to the tissues of the wrist. It is important to remember that injuries may be unilateral especially where there has been resistance to their application.

The commonest injuries to be found are erythema, abrasions and bruising particularly to the radial and ulna borders of the wrist [21]. The erythema is often linear and orientated circumferentially around the wrist following the line of the handcuffs reflecting direct pressure from the edge of the cuffs. Bruising is commonly seen on the radial and ulna borders with tender swelling often associated with abrasions or superficial linear lacerations from the edge of the cuff. Abrasions reflect relative movement between the cuff and skin surface. However, it is not possible to determine whether this movement is from the cuff moving over the wrist or the wrist

WIT.0043.0086.0269

moving within the cuff, as the effect of either can produce the same skin abrasions. All of these soft tissue injuries will resolve uneventfully over the course of several days and only symptomatic treatment with simple analgesia and possibly a cold compress is required. Although rare, it is possible to have wrist fractures from restraint using hand cuffs. The styloid processes are the most vulnerable but scaphoid fractures have been reported [22]. Tenderness beyond that expected for minor injuries and especially tenderness in the anatomical snuff-box will need an X-ray assessment as soon as possible.

The earliest reports of sensory damage to the nerves of the wrist first appear in the 1920s with sensory disturbance often restricted to a small patch of hyperesthesia and hyperalgesia on the extensor aspect of the hand between the thumb and index finger metacarpals [23]. This area reflects damage to the superficial branch of the radial nerve and subsequent studies confirm that this nerve is most commonly affected by compression between handcuffs and the dorsal radius [24]. However, injuries to the median and ulna nerves can also occur and these may be in isolation or in any combination. The superficial branch of the radial nerve may be spared with others being damaged [25]. Resultant symptoms are reported as lasting up to 3 years in one case; pain may be severe and prolonged, although the most disturbing symptom to patients is paraesthesiae [21].

Nerve conduction studies may be used to distinguish between a compressive mononeuropathy and a radiculopathy. The majority of cases with significant nerve damage either involve detainees who are intoxicated or have a clear history of excessive pressure being applied by the officers [21]. Intoxication may cause problems through a decreased awareness of local pain, marked uncooperativeness or poor memory for the restraining episode when a significant struggle had occurred. It is possible to have nerve damage with no skin breakage reflecting undue pressure. Although some of the quoted studies predate the introduction of rigid handcuffs, because of the similar ratchet mechanism direct pressure problems are still possible.

Sensory nerve damage causes loss of pain, touch and temperature sensation over an area of skin which is smaller than the nerve's sensory supply because of the considerable overlap between the sensory territories of adjacent peripheral nerves. Lesser degrees of damage lead to tingling, pain and numbness in the appropriate sensory distribution. In acute compression of the nerve, symptoms appear more or less abruptly, and relief of this acute compression should lead to resolution in the course of some weeks. Associated motor weakness can be demonstrated by the correct clinical test within the hand. It should be noted that compression of the radial nerve at the wrist does not result in weakness.

Leg Irons and Chains

Leg iron cuffs and chains are not as frequently used as handcuffs but are seen in the transport of arrested persons particularly those felt to be at a high risk of attempted escape. In less developed jurisdictions, such devices are often routinely used even in the custodial cell.

WIT.0043.0086.0270

The proper use of cuffs even over a long period of time should not result in any serious injuries to a restrained individual. Still, prudence demands that any person so detained should be regularly monitored to ensure that there is no undue distress from the restraining devices.

Plastic Fasteners

These self-locking devices are made up of tough plastic and are frequently used in situations where it is anticipated that there will be many persons who will have to be restrained, such as during riots or even in combat situations. Again, when used appropriately and only for periods of time requiring them, such devices are generally safe. In situations where individuals may have also been subjected to chemical restraint compounds such as tear gases, pepper sprays, etc. custodial officers should exercise a higher degree of vigilance for individuals who may be in distress and arrange for transfer of such individuals to better physical locations where better restraint devices can be deployed if indeed.

Plastic fasteners are cheap to manufacture and are effective. In contrast to handcuffs however, they can be accidentally or deliberately over-tightened by the applicator and they will get tighter if individuals foolishly attempt to pull at the loose ends. Too tight an application may compromise blood supply or injure nerves caught against a bone. Hence, such restrainers should be used for as short a time as possible and with the awareness that it may cause serious injuries to the constricted limbs. In less civilized societies, these fasteners have been used to secure fingers or thumbs instead of wrists and can lead to serious injury and possible need for subsequent amputation of such thumbs and fingers.

Spit and Bite Guards

A Spit and Bite Guard (SBG) (also known as Spit Hood) is a transparent, breathable mesh hood that is placed over a detainee's head to restrict the transfer of body fluids from the mouth by means of spitting. These are available for police to use where a person detained is spitting at police officers/staff in custody or prior to arrival. SBG are used as a control measure and are a use of force and so their use needs to be proportionate to the circumstances. Officers should receive specific training prior to using a SBG and anyone place in a SBG should be kept under constant supervision [26].

The use of SBG appears to be increasing throughout the UK. A recent study [27] has shown that there is paucity of information available from police services in respect of quantifying the numbers of police officers who have contracted infectious disease as a result of spitting and/or bites, despite the fact that risk of infection and the need for subsequent prophylaxis is a driver of police services adopting the use of spit guard devices. The authors suggest that the use of SBG represents a form of mechanical restraint rather than a means to prevent transmission of infection. Spit-hoods were found to be used on children as young as 10, with at least 47 uses on children in 2017 and 114 incidents in the first 9 months of 2018 [28].

Restraint Positions

The use of restraint in clinical and policing environments is controversial [29–31]. There has been a lack of research evidence in the field due to a number of factors including the difficulties in collecting and comparing valid data in various situations, in different countries. There have been experimental studies in laboratory settings but these are not always transferable to the real physical restraint circumstances.

In July 2013 the Independent Advisory Panel on Deaths in Custody published 'Common principles for safer restraint' [32]. As a general principle the use of any form of restraint should be limited to situations where de-escalation and other non-physical diversion techniques have failed to resolve the situation.

De-escalation is the use of techniques (including verbal and non-verbal communication skills) aimed at defusing anger and averting aggression [33].

The College of Policing Authorised Professional Practice [34] provides advice for officers and staff on the principles of using force in custody and the prone position. This states that 'officers and staff should avoid using the prone restraint position unless it is proportionate to the threat and necessary in the circumstances. Officers should keep the period for which it is used to a minimum.'

Recent research has concluded that the use of the prone position with violent arrestees is a safe restraint method. Ross and Hazlett [35] conducted a prospective study over 12 months in multiple sites with 17 law enforcement agencies in six states of the United States. Arrestees were placed in the prone position for 1–5 min using a range of force, including handcuffs and hobble (hogtie or maximum restraint position) restraints. No deaths were recorded.

Furthermore Hall et al. [36, 37] reported data from 4828 consecutive use of force events over the period 2006–2013 in seven Canadian police agencies in Eastern and Western Canada. Officers prospectively documented the final resting position of the subject prone or non-prone. Over 2000 subjects remained prone with no subject dying in the prone position.

The effects of prone positioning on respiration have been studied. In a small study by Sloane et al. there were no clinically significant differences in the cardiovascular and respiratory measures comparing seated, prone, and prone maximum restraint position following exertion [38]. Particular care should be taken if an individual is physically unwell, injured, pregnant, disabled, or obese [33].

A recent Cochrane review [39] in clinical settings in adults with respiratory failure has found no effect whether an individual is placed in the prone position or supine. With regard to adverse effects on respiration significant reduction is only seen in restraint in obese individuals forced into a seated position leaning forward so their abdominal mass interferes with diaphragmatic breathing [40, 41]. However the time an individual is left in the prone position should be kept to a minimum to achieve control.

A risk assessment should be performed by the custody sergeant once the detainee is in custody. The assessment of risk is continuous. If a risk assessment is not possible on arrival into the custody suite then the custody sergeant should try to complete this assessment at the earliest opportunity and, if necessary ask for medical advice as highlighted in the report on Near Misses in Police Custody in 2008 [42].

WIT.0043.0086.0272

As described in earlier passages, it is common in the course of an action to physically restrain an individual, particularly those who struggle and resist arrests, to end up on the ground face down, either having been body tackled, or having a neck hold applied to subdue them so as to facilitate the application of handcuffs to the back of the body. In fact, it is common to see in the movies or on TV police dramas that an individual is ordered to surrender, place their hands over their head and lie flat face down on the ground. In the majority of arrests, this is safe for all concerned if the individual complies with police instructions.

Care should however be taken for individuals who may have a decreased level of consciousness either from the use of alcohol and/or drugs. Even more problematic are individuals who may be excitable because of acute behavioral disturbance (ABD). Cases of suspected acute behavioral disturbance (ABD) should be taken directly to the Emergency Department (ED) of the local hospital as ABD is a time critical emergency. However on the rare occasions that a detainee arrives in police custody guidance [43] has been developed to assist HCPs in the management of this condition. Although de-escalation and attempts to establish the cause of the ABD should be made immediate referral to the emergency department is essential [44] as pre-rapid tranquilization or rapid tranquilization maybe required.

Awareness should also be developed in officers who may be dealing with individuals from other cultures who may be bewildered because they do not understand the language or the procedures of the land. Cases of deaths occurring during arrest will result in intense media and public scrutiny in most civilized societies.

One particularly notorious restraint position is the so called "hog-tie" position. In this position, not only are the individual's hands tied behind the back, they are further tied to the ankles; such that the individual's knees are flexed and the torso may be hyper-extended.

Another form of restraint is the so called "hobble prone restraint position", now also referred to as total appendage restraint position (TARP). Here the ankles are restrained but may or may not be tied to the wrists. When they are tied to the wrists, much more slack is available such that there is less or little flexion of the knees required.

Deaths have been reported around the world involving persons arrested and placed in such positions, although the actual causes of deaths concluded are varied [11, 45]. Forensic pathologists traditionally agree and believe that the respiratory system is compromised as a result of the position of the body, the splinting of the arms restricting the efficiency of respiratory muscles, combined with elements of central nervous depression from alcohol, drugs or occasionally head injuries.

Review of the Patho-Physiological Effects of Restraint Positions

Critical review of the role of the body weight, body position, etc. associated with the hogtie and TARP positions by Neumann [46] challenges the simplistic argument accepted by many forensic pathologists. Neumann describes the results of several

WIT.0043.0086.0273

experimental studies by Chan et al. [47] Schmidt and Snowden [48] and Parkes [49], where a variety of physiological measurements such as FVC, FEV1, PaO_2, $PaCO_2$, etc. were taken and measured. No scientific basis was found to even support any significant deterioration in the respiratory abilities of the test subjects.

Chan et al. [50] further conducted a study whereby the "hobble" position and inhalation of pepper spray was combined with no significant respiratory deterioration observed. A third study was conducted by Chan et al. [51] whereby 25 and 50 pound weights were placed over the back in between the shoulder blades of individuals who were placed at the maximal prone restraint position. Readings were compared with when these same individuals were sitting. They recorded decreases in the FEV of 5% with the 25 pound weight and 9% with the 50 pound weight and concluded that such changes were clinically irrelevant.

A retrospective study by Stratton et al. [52] should be reflected upon. This study although retrospective gathered data on 216 cases of "excited delirium syndromes" witnessed by emergency medical services personnel. All these individuals had been "hog-tied" with their wrists and ankles bound together behind their back. There were 20 deaths. Two were excluded from the study as one had died from a pulmonary emboli and another had ligature marks and contusions of the neck. Eighteen deaths were attributed to be a result of "excited delirium syndrome". Despite the presence of emergency medical services personnel there were no successful resuscitation of the cardiac arrests that were observed. It was further observed that all cardiopulmonary arrests were preceded by a short period of about 5 min of labored or shallow breathing after the struggle had ceased. At autopsies, 9 of the 18 individuals had markedly enlarged hearts. Cocaine and/or methamphetamine were present in 78% of the cases. It was also observed that 50% of the individuals who died were obese; however, given the population norm of possibly 65% obesity, this finding could not be commented further.

Restraints in Medical Facilities

Restraint in the health setting has been defined as any restrictive intervention involving direct physical contact where the intervener's intention is to prevent, restrict, or subdue movement of the body or part of the body of another person. Prone restraint has been defined as the use of restraint face down or chest down position for any period of time.

Restraints used in medical facilities may be physical, chemical, or mechanical. Physical includes bodily force that controls a person's freedom of movement; chemical indicates that medication is given to restrict a person's movement (not to treat a mental illness or physical condition); and mechanical means a device, e, g, belt or cuff, that controls a person's freedom of movement [53].

The Department of Health published Positive and Proactive Care: reducing the need for restrictive interventions in 2014 [54]. Recommendations included that staff must not deliberately restrain people in a way that impacts on their airway breathing or circulation; restrictive interventions must not include the deliberate application of

WIT.0043.0086.0274

pain; the least restrictive option must be used to meet the immediate need; seclusion must not be used other than for people detained under the Mental Health Act 1983; people who use services families and carers must be involved in planning, reviewing, and evaluating all aspects of care and support; and individual support plans must be implemented for all people who use services known to be at risk of being exposed to restrictive interventions.

The Royal Australian and New Zealand College of Psychiatrists (RANZCP) has issued a Position Statement in February 2016 covering restraint with the aim of reducing, and where possible eliminating, the use of seclusion and restraint in a way that supports good clinical practice and provides safe and improved care for consumers [55].

Training in de-escalation is now an essential part of conflict resolution and physical intervention training programs (breakaway training). It is essential that in a clinical setting a multidisciplinary team approach is taken with those involved having the requisite expertise and skills in the use of rapid tranquillization and therapeutic restraint, if required [56].

In 2018 the British Association of Psychopharmacology and the National Association of Psychiatric Intensive Care and Low Secure Units developed a joint evidence-based consensus guideline for the clinical management of acute disturbance [56].

Healthcare professionals need to be aware of the key interventions that may be required: de-escalation, pharmacological interventions pre-rapid tranquillization, and rapid tranquillization (intramuscular and intravenous). In the environment of police custody treatment should be should be restricted to oral therapy (pre-tranquilization) [33]. Pre-rapid tranquillization (pre-RT) has the aim of offering oral medication to agitated patients pre-emptively to address acute disturbance and to avoid escalation and the need for parenteral medication and physical restraint.

Physical Examination

It goes without saying that once a person is restrained and the situation is brought under control, the continual use of the restraint must be evaluated regularly as to its appropriateness. It is not unexpected that individuals who have been restrained may lodge of a complaint or mount a legal challenge to their restraint and detention.

When a HCP is asked to examine such an individual, informed consent for the examination, photography, and release of the report should be obtained. Allegations of assaults should be recorded verbatim if possible and a full and thorough physical examination performed. All injuries should be properly described, located and measured. Color photography with scales and a color palette should be taken and kept with the records.

Bruises and abrasions will be commonly found. Abrasions over bony prominences may have resulted from falls and tumbles. Abrasions or bruised abrasions over the bony prominences of the wrists may be a result of handcuffs. Occasionally,

WIT.0043.0086.0275

tram line bruises are found and these may be due to blows from batons. Oval (fingertip) bruises may also be found over areas of the upper limbs where an individual may have been held.

Lacerations are unusual unless there had been blows by batons over underlying bones or impacts against hard objects in falls, etc. Incised wounds too will be unusual, unless sharp weapons have been used and there had been a tussle for control of such a weapon. Another not uncommon cause of incised wounds may be from broken glass at the place of incident or arrest. Fractures are rare but may occur from baton blows, falls and occasionally forceful twisting of an arm. Dislocation of shoulder joints too may occur.

It should be remembered that where chemical agents and/or other means of force have been used, specific injuries that may be associated with the use of these devices or agents should also be looked for, their presence or absence documented clearly. Ancillary investigations such as X-rays, CT scanning, toxicology, etc. should be done guided by the history of the incident available to the doctor.

Restraint at a Distance

One of the major problems facing police officers is how to restrain a violent or potentially violent individual, perhaps carrying an offensive weapon, using the minimum appropriate force. Clearly, the tactical firearms units are often required in these situations but there is an increasing trend to look for other "non-lethal" options, which will incapacitate with a lower risk of serious injury. Within the UK, the investigation of firearm incidents is undertaken by the Independent Office of Police Conduct who make recommendations as appropriate [57]. Different countries use different restraint equipment such as water cannon or the firing of different projectiles (e.g. bean bags) and these are subject to consideration for police use at certain times.

Attenuating Energy Projectiles (AEP)

Attenuating energy projectiles (AEP) are used in the UK by specially trained officers. Currently the device approved is the AEP L60A2 and this is fired from a 37 mm breech loaded weapon with the approved launcher the Heckler and Koch L104A2, equipped with an approved L18A2 optical sight [58]. There is a void in the nose of the projectile so reducing the energy. The collapse of the void extends the duration of the impact forces and so reduces the peak force on a surface, such as the skull [59].

The AEP thereby delivers a high amount of energy to maximise its effectiveness, while reducing the potential for life-threatening injury. Reducing the rate of onset of the impact force and reducing the magnitude of the peak force, have both been shown to reduce the severity of injuries in human impact.

WIT.0043.0086.0276

This AEP has replaced the L21A1 baton rounds previously used. Baton rounds, previously known as plastic bullets, were first introduced in Northern Ireland in 1970 where there were a number of fatalities. AEP is an alternative to using firearms against those who may use firearms or where there is a major risk to life.

The aim is to hit the individual directly. Injuries are mainly bruises and abrasions, with fewer lacerations, depending on how and where the body is hit. More serious injuries are possible with occasional fractures and bruising to internal organs. Although intra-abdominal injury is unusual, impacts to the chest can give rib fractures and pulmonary bruising.

A similar system is used in the United States based on the ARWEN (Anti-Riot Weapon Enfield) system, the Sage SL-6, and this is the preferred less lethal option of restraint. This has a projectile with a tail and is smaller and faster than the baton round. The pattern of injuries will be similar but if the projectile becomes unstable in flight so that the surface area striking the target is smaller (because of altered orientation), then the potential for injury is increased.

Anyone who has been struck by an AEP should have a medical assessment as soon as practicable (by an appropriately trained forensic physician).

Bean Bag Rounds

Available widely in the United States, some Australian states, but not the UK, these consist of rectangular, square or circular synthetic cloth bags filled with lead pellets and fired from a shotgun. As an example, the "Flexible Baton" fires a bag containing 40 g of number 9 lead shot with a projectile velocity of around 90 m/s. At impact, projectiles are designed to have separated from the shotgun shell and wadding, opened out to strike the target with its largest surface area before collapsing as they lose energy. The effect is to provide sufficient blunt force from an ideal range of 10–30 m to stop an adult's progress.

In one study, De Brito et al. [60] reported that the commonest injuries were bruising and abrasions followed by lacerations without having retention of the actual bean bag. However, there are significant other serious injuries documented including closed fractures, penetrating wounds with retention of the bean bag projectile (and at times parts of the shell and/or wadding) and internal organ damage. Serious penetrating injuries involved the thorax, eye, abdomen and limbs. Thoracic penetration resulted in one fatality from a massive hemothorax. Blunt injuries included splenic rupture, pneumothorax, compartment syndrome, testicular rupture, subcapsular liver hematoma and cardiac contusions. It was noted that retention of the bag was not always suspected from an initial clinical examination, being detected on subsequent scans. The distance between gun and target was not formally examined in this study.

Clearly, this device has potential for significant trauma to anywhere on the body. Just as with other non-lethal alternatives for restraint, the forensic physician should always consider why such techniques were needed to be deployed; use of drugs or alcohol and psychiatric illness are all common concurrent problems in these situations.

WIT.0043.0086.0277

Evaluations and Opinions

HCPs should wherever possible obtain as much information of an alleged incident as possible. If working as an expert, statements of the parties involved, and independent witnesses, photos and videos from surveillance cameras, may be available. It is of course important to establish the credibility of these materials first before considering them.

Findings should be based on what is known. The HCP must be impartial, it is not the clinical person's role to decide the appropriateness of a decision to use force or the degree of force, that is for the legal and public tribunal.

Summary

There exists an accepted but regulated need for law enforcement personnel to use force. Such use of force can and will cause injuries and sometimes death. Such incidents should of course be investigated in an open and transparent manner ensuring that all interested parties are properly represented. The impartiality of such investigative tribunals is the best safeguard to all members of society but must be built on trust [61].

Experts involved in such inquiries must be impartial and should keep up with the rapidly evolving literature. The exact or conclusive pathophysiology of such deaths have yet to be agreed and may never be agreed, for each case is likely to be the cumulative effects of many things, some known and some unknown. Full autopsies must always be performed and toxicological analysis and interpretation sought. Full histopathological studies should be performed and where available newer molecular biological screenings for genetic markers of the heart, brain, etc. New theories based on physiological responses to stress may 1 day help us understand more the triggers for such deaths.

Key Points

- As a general principle during restraint, any force used must be proportionate to the threat faced, be lawful, and necessary in the particular circumstances. Restraint may be physical, chemical, or mechanical.
- Police may use a variety of less-lethal weapon methods, most commonly handcuffs.
- Healthcare professionals working in the custody environment should record clearly complaints of assault made by detainees, with detailed documentation of any injuries found.

Self-Assessment Exercises

1. Describe the injuries that may result from the application of rigid handcuffs and a blow with a baton
2. Define restraint. What are the potential consequences of restraining a violent individual in the prone position? What advice could you give to police prior to an intervention?

WIT.0043.0086.0278

References

1. The Law on Police Use of Force Worldwide. https://www.policinglaw.info/. Accessed 29 Apr 2019
2. United Nations Human Rights Office of the High Commissioner. Code of Conduct for Law Enforcement Officials 1979. https://www.ohchr.org/en/professionalinterest/pages/lawenforcementofficials.aspx. Accessed 29 Apr 2019
3. United Nations Human Rights Office of the High Commissioner. Basic Principles on the Use of Force and Firearms by Law Enforcement Officials 1990. https://www.ohchr.org/EN/ProfessionalInterest/Pages/UseOfForceAndFirearms.aspx. Accessed 29 Apr 2019
4. Graham v. Connor, 490 U.S. 386 (1989) https://supreme.justia.com/cases/federal/us/490/386/. Accessed 29 Apr 2019
5. Home Office (2018) Police Use of Force Statistics. https://www.gov.uk/government/collections/police-use-of-force-statistics. Accessed 29 Apr 2019
6. HM Inspectorate of Prisons and HM Inspectorate of Constabulary and Fire and Rescue Services. Expectations for police custody. Criteria for assessing the treatment of and conditions for detainees in police custody May 2018 https://www.justiceinspectorates.gov.uk/hmiprisons/wp-content/uploads/sites/4/2018/05/Police-Expectations-2018.pdf. Accessed 29 Apr 2019
7. College of Policing. Authorised Professional Practice. National Decision Model. https://www.app.college.police.uk/app-content/national-decision-model/the-national-decision-model/#six-key-elements-ciapoar. Accessed 03 May 2019
8. Ariel B, Farrar T, Sutherland A (2015) The effect of police body-worn cameras on use of force and citizens' complaints against the police: A randomized controlled trial. J Quant Criminol, 31(3):1–27
9. Ariel B, Sutherland A, Henstock D et al (2016) Wearing body cameras increases assaults against officers and does not reduce police use of force: results from a global multi-site experiment. Eur J Criminol 13(6):744–755
10. National Institute of Justice (2009) The use-of force continuum. https://www.nij.gov/topics/law-enforcement/officer-safety/use-of-force/pages/continuum.aspx. Accessed 29 Apr 2019
11. Terrill W, Paoline EA (2013) Examining less lethal force policy and the force continuum: results from a National use-of-Force Study. Police Q 16(1):38–65
12. Ron Martelli Jan 30, 2014 Reconsidering Carotid Control, POLICE Magazine https://policemag.com/341089/reconsidering-carotid-control. Accessed 10 May 2019
13. Reay DT, Holloway GA Jr (1982) Changes in carotid blood flow produced by neck compression. Am J Forensic Med Pathol 3(3):199–202
14. Ross DL, Chan TC (2006) Sudden deaths in custody. Humana, Totowa
15. Di Maio TG, Di Maio VJM (2006) Excited delirium syndrome – cause of death and prevention. CRC Press Taylor & Francis Group, Boca Raton
16. Glatten K, Karch SB (2004) Positional asphyxia: inadequate oxygen or inadequate theory? Forensic Sci Int 141(2–3):201–202
17. Raschka C, Stock A, Brunner K et al (1996) Changes of intracerebral blood flow during choking (shime-waza) in judo by transcranial Dopplersonography. Dtsch Z Sportmed 47: 393–398
18. Parry SW, Richardson DA, O'Shea D et al (2000) Diagnosis of carotid sinus hypersensitivity in older adults: carotid sinus massage in the upright position is essential. Heart 83:22–23
19. McIntosh SJ, Lawson J, Kenny RA (1994) Heart rate and blood pressure responses to carotid sinus massage in healthy elderly subjects. Age Ageing 23(1):57–61
20. ACPO (2009) ACPO SDAR. Guidance on the use of handcuffs. Association of Chief Police Officers of England, Wales and Northern Ireland. https://www.npcc.police.uk/documents/FoI%20publication/Disclosure%20Logs/Uniformed%20Operations%20FOI/2013/003%2013%20Att%2015%20of%2015%20Guidance%20on%20the%20Use%20of%20Handcuffs.pdf. Accessed 29 Apr 2019

21. Rogers DJ, Stark MM, Davie M (1998) Medical complications associated with the use of rigid handcuffs: a pilot study. J Clin Forensic Med 5(1):34–37
22. Haddad FS, Goddard NJ, Kanvinde RN et al (1999) Complaints of pain after use of handcuffs should not be dismissed. Br Med J 318(7175):55
23. Stopford JSB (1922) Neuritis produced by a wristlet watch. Lancet 1:993–994
24. Stone DA, Laureno R (1991) Handcuff neuropathies. Neurology 41(1):145–147
25. Richmond PW, Fligelstone LJ, Lewis E (1988) Injuries caused by handcuffs. Br Med J 297(6641):111–112
26. National Police Chief's Council. Chief Constables' Council: NPCC Update on the use of Spit Guard. 16 March 2017 https://www.npcc.police.uk/2017%20FOI/CO/078%2017%20CCC%20April%202017%2006%202%20Spit%20Guards.pdf. Accessed 30 Apr 2019
27. Kennedy KM, Payne-James JJ, Payne-James GJ et al (2019) The use of spit guards (also known as spit hoods) by police services in England, Wales and Northern Ireland: to prevent transmission of infection or another form of restraint? J Forensic Leg Med. 2019;66:147–154. https://doi.org/10.1016/j.jflm.2019.07.003. Epub 2019 Jul 11
28. State of Children's Rights in England (2016) Briefing 8 Policing & Criminal Justice. http://www.crae.org.uk/media/118312/crae_scr2016_b8_cjs-web.pdf. Accessed 29 Apr 2019
29. Caring Solutions UK Ltd & University of Central Lancashire (2011) Review of the Medical Theories and Research Relating to Restraint Related Deaths. http://iapdeathsincustody.independent.gov.uk/wp-content/uploads/2011/11/Caring-Solutions-UK-Ltd-Review-of-Medical-Theories-of-Restraint-Deaths.pdf. Accessed 04 Apr 2019
30. Karch SB (2016) The problem of police-related cardiac arrest. J Forensic Legal Med 41:36–41
31. Kroll MW (2017) Positional asphyxia, and Restraint Asphyxia: A Brief Review https://www.researchgate.net/publication/313205063_Positional_Compression_and_Restraint_Asphyxia_A_Brief_Review. Accessed 04 Apr 2019
32. Independent Advisory Panel on Deaths in Custody. http://iapdeathsincustody.independent.gov.uk/work-of-the-iap/working-groups/use-of-restraint/. Accessed 04 Apr 2019
33. NICE. (2015) Violence and aggression: short-term management in mental health, health and community settings. https://www.nice.org.uk/guidance/ng10. Accessed 04 Apr 2019
34. College of Policing. Authorised Professional Practice. Detention and custody. Control, restraint and searches. https://www.app.college.police.uk/app-content/detention-and-custody-2/control-restraint-and-searches/. Accessed 04 Apr 2019
35. Ross DL, Hazlett MH (2016) A prospective analysis of the outcomes of violent prone restraint incidents in policing. Forensic Res Criminol Int J 2(1):0004
36. Hall CA, Votova K, Heyd C, Walker B, MacDonald S et al (2015) Restraint in police use of force events: examining sudden in custody death for prone and not-prone positions. J Forensic Legal Med 31:29–35
37. Hall CA, McHale AMD, Kader AS, Stewart LC, MacCarthy CS et al (2012) Incidence and outcome of prone positioning following police use of force in a prospective, consecutive cohort of subjects. J Forensic Legal Med 19(2):83–89
38. Sloane C, Chan TC, Kolkhorst F et al (2014) Evaluation of the ventilatory effects of the prone maximum restraint (PMR) position on obese human subjects. Forensic Sci Int 237:86–89
39. Bloomfield R, Noble DW, Sudlow A (2015) Prone position for acute respiratory failure in adults. Cochrane Database Syst Rev 11. https://doi.org/10.1002/14651858. Accessed 04/04/2019
40. Parkes J, Thake D, Price M (2011) Effect of seated restraint and body size on lung function. Med Sci Law 51(3):177–181
41. Barnett R, Stirling C, Pandyan AD (2012) A review of the scientific literature related to the adverse impact of physical restraint: gaining a clearer understanding of the physiological factors involved in cases of restraint-related death. Med Sci Law 52:137–142
42. Bucke T, Teers R, Menin S, Payne-Jame J, Stark M (2008) Near Misses in Police Custody: a collaborative study with Forensic Medical Examiners in London. IPCC Research and Statistics Series: paper 10. https://www.ipcc.gov.uk/page/near-misses-police-custody

43. FFLM. Acute behavioural disturbance: guidelines on management in police custody. April 2019 https://fflm.ac.uk/publications/guidelines-for-the-management-of-excited-deliriumacute-behavioural-disturbance/
44. The Royal College of Emergency Medicine Best Practice Guideline. Guidelines for the Management of Excited Delirium/Acute Behavioural Disturbance (ABD). May 2016 https://fflm.ac.uk/wp-content/uploads/2016/05/Guidelines-for-the-Management-of-Excited-Delirium-Acute-Behavioural-Disturbance-May-2016.pdf. Accessed 29 Apr 2019
45. Pollanen MS, Chiasson DA, Cairns JT et al (1998) Unexpected death related to restraint for excited delirium: a retrospective study of deaths in police custody and in the community. Can Med Assoc J 158(12):1603–1607
46. Neuman T (2006) Chapter 4. Positional and restraint asphyxia. In: Ross DL, Chan TC (eds) Sudden deaths in custody. Humana, Totowa
47. Chan TC, Vilke GM, Neuman T et al (1997) Restraint position and positional asphyxia. Ann Emerg Med 30(5):578–586
48. Schmidt P, Snowden T (1999) The effects of positional restraint on heart rate and oxygen saturation. J Emerg Med 17(5):777–782
49. Parkes J (2000) Sudden death during restraint: a study to measure the effect of restraint positions on the rate of recovery from exercise. Med Sci Law 40(1):39–44
50. Chan TC, Vilke GM, Clausen J et al (2002) The effect of oleoresin capsicum "pepper" spray inhalation on respiratory function. J Forensic Sci 47(2):299–304
51. Chan TC, Neuman T, Clausen J et al (2004) Weight force during prone restraint and respiratory function. Am J Forensic Med Pathol 25(3):185–189
52. Stratton SJ, Rogers C, Brickett K et al (2001) Factors associated with sudden death of individuals requiring restraint for excited delirium. Am J Emerg Med 19(3):187–191
53. Care Quality Commission. Brief Guide: Restraint (physical and mechanical) April 2016 https://www.cqc.org.uk/sites/default/files/20160422_briefguide-Restraint_physical_mechanical.pdf.pdf. Accessed 29 Apr 2019
54. Department of Health (2014) Positive and proactive care: reducing the need for restrictive interventions. Guidance for all those working in health and social care settings: commissioners of services, executive directors, Frontline staff and all those who care for and support people summary of key actions https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/300291/JRA_DoH_Guidance_on_RH_Summary_web_accessible.pdf. Accessed 29 Apr 2019
55. The Royal Australian and New Zealand College of Psychiatrists (RANZCP) (2016) Minimising the use of seclusion and restraint in people with mental illness. https://www.ranzcp.org/news-policy/policy-submissions-reports/document-library/minimising-the-use-of-seclusion-and-restraint-in-p. Accessed 29 Apr 2019
56. Sethi F, Parkes J, Baskind E, Paterson B, O'Brien A (2018) Restraint in mental health settings: is it time to declare a position. Br J Psychiatry 212:1–5. https://doi.org/10.1192/bjp.2017.31
57. IOPC. Deaths during or following police contact: Statistics for England and Wales 2017/18. https://policeconduct.gov.uk/sites/default/files/Documents/statistics/deaths_during_following_police_contact_201718.pdf. Accessed 29 Apr 2019
58. College of Policing. Authorised Professional Practice. Armed Policing: attenuating energy projectiles. https://www.app.college.police.uk/app-content/armed-policing/attenuating-energy-projectiles/. Accessed 04 Apr 2019
59. Defence Scientific Advisory Council (DSAC) subcommittee on the medical implications of less lethal weapons (DOMILL) 2005. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/445112/20150714-DOMIL06-AEP01-O.PDF). Accessed 29 Apr 2019
60. De Brito D, Challoner KR, Sehgal A et al (2001) The injury pattern of a new law enforcement weapon: the police bean bag. Ann Emerg Med 38(4):383–390
61. Coles D, Shaw H (2006) Comment: deaths in custody-truth, justice and accountability? Soc Justice 33:136–141

WIT.0043.0086.0281

TASER Conducted Electrical Weapons

8

Rich Childers, Ted Chan, and Gary Vilke

Introduction

John H. "Jack" Cover was the original inventor of TASER Conducted Energy Weapon (CEW) technology. Cover was the Chief Scientist at North American Aerospace when it was the prime contractor for the National Aeronautics and Space Administration's (NASA's) Apollo Moon Landing program. Cover was a dedicated physicist who in the 1960s read President Lyndon Johnson's Crime Commission report that urged the development of non-lethal weapons to combat airplane hijacking, riots, and civil unrest. Cover's quest to develop his first CEW began in 1966 when he developed working models and named them after his favorite childhood character: Tom A. Swift and his Electric Rifle (TASER). CEWs are now used by over 15,000 Law Enforcement agencies worldwide that possess over 500,000 units. As of January 19, 2019, the primary manufacturer of CEWs reports 3.9 million field uses, and 2.5 million training uses for a total of 6.5 million uses [1]. These numbers do not include the large numbers of times a CEW was used to resolve a violent encounter simply by its brandishing or by "painting" the suspect with the laser pointer sight.

Conducted electrical weapon, conducted energy device, electrical weapon, and stun-gun are some of the common terms for any device that delivers an electrical current to incapacitate a victim by disrupting voluntary control of muscles. TASER is a brand of electroshock weapon sold by the company Axon. Though there are other CEW companies, the term TASER is basically synonymous with electroshock weapons due to its widespread popularity.

R. Childers (✉) · T. Chan · G. Vilke
Emergency Department, University of California San Diego, San Diego, CA, USA
e-mail: rchilders@ucsd.edu; tcchan@ucsd.edu; gmvilke@ucsd.edu

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_8

WIT.0043.0086.0282

Background

Operational Principles

The CEW delivers its electrical energy to the subject either in the probe mode or drive-stun mode. In probe deployment mode, CEWs use compressed nitrogen to fire probes at distances up to 7.7 m (25 ft) (see Fig. 8.1). TASER cartridge models are available to reach out to 11 m (35 ft) as well. These probes, which are designed to pierce or become lodged in most light clothing, are discharged from the cartridge at a velocity of approximately 60 mps (meters per second) (200 ft per second) and can penetrate the body to a depth of no more than 13 mm. Figure 8.2 demonstrates that the TASER X26 deploys the probes at an 8 degree angle, thus the further from the target, the wider the probe spread and the increased likelihood of neuromuscular incapacitation (NMI), while the X2 deploys at a 7 degree angle.

In TASER CEW devices, the live probe cartridge can be removed, or with a discharged cartridge in place, and the CEW used in a "drive-stun" mode by pushing the

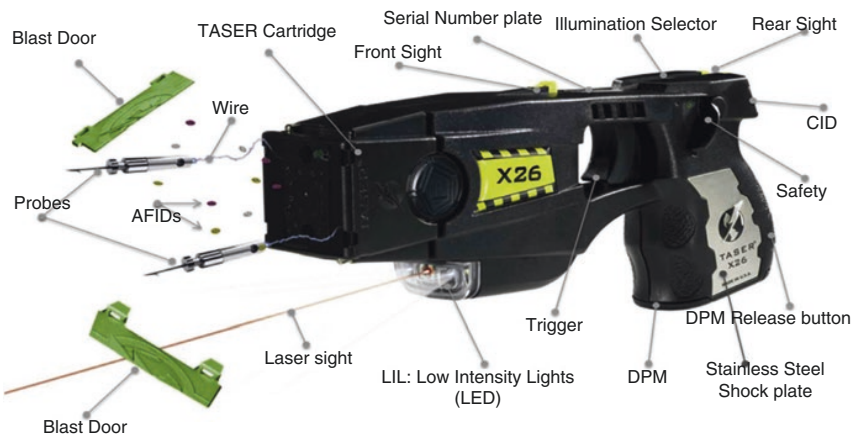


Fig. 8.1 The parts of the TASER X26 during probe deployment

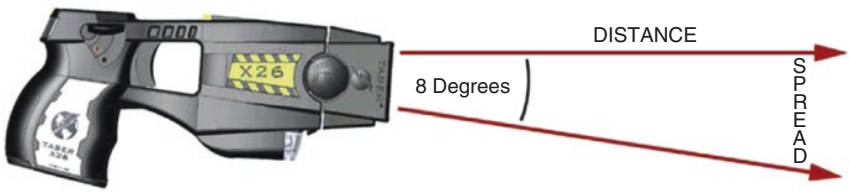


Fig. 8.2 The lower probe of the TASER is launched at an angle of 8° below the laser line

WIT.0043.0086.0283

front of the CEW into the skin to function as a higher charge stun gun. Since there is insufficient electrode spread (4 cm) to capture muscles, the drive-stun mode primarily serves only as a pain compliance technique. The X2 CEW can deliver a drive stun without live cartridge removal. Figure 8.3 demonstrates the electrodes of an X26 CEW.

Electrical Energy

There is a great deal of unwarranted concern of electrocution based on lay misunderstanding of the reported 50,000 volts (V) peak open arcing voltage used by TASER handheld CEWs. TASER handheld CEWs deliver only a fraction of the 50,000 V when deployed and activated. In the case of the TASER X26™ CEW, the mean delivered pulse voltage is 580 V with a typical peak voltage of 1900 V (volts) being delivered to the body [2]. Voltage is the difference in electric potential between two points. The average pulse voltage—which is what leads to stimulation—is actually about 600 V. The CEW also generates an open-circuit (arcing) voltage of up to 50,000 V to arc through air or across thick clothing but that voltage is never seen in, or "delivered" to the body. However, it is not the voltage, but the delivered electrical charge, that actually creates a risk for cardiac effects. For example, the static electricity from walking across a carpet

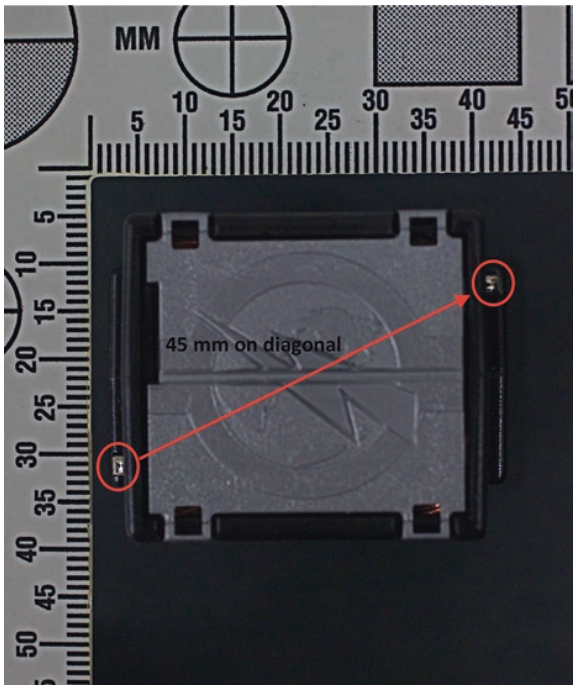


Fig. 8.3 The fixed electrodes of the X26 CEW with a distance of 45 mm when used in drive stun

can generate 30,000–100,000 V. Van De Graaff generators can have over a million volts that can be safely touched by humans.

The popular TASER X26E was released in 2003 and delivers a charge of 110 microcoulombs. Two newer releases, the X2 (2011) and X26P (2013), both deliver a charge of 63 ± 9 microcoulombs. All have a pulse rate of 19 pulses per second [3]. The X26 CEW main phase charge, which determines capture, ranges from 50–100 μC depending on the connection quality. The X26 CEW average net current is approximately 1.9 mA (milliamperes) (=19 pulses per second • 100 μC) and the peak current is only about 3 A. By way of comparison, a TASER M26™ CEW has a peak current of about 17 A; an International Electrotechnical Commission (IEC) Level IV static electricity shock has a peak current of 30 A; traditional non-LED Christmas tree light strings have on average current of 0.4 A or 400 mA, which is about 200 times the average (or actual or aggregate) delivered current of the TASER X26 CEW. Figure 8.4 is a recording of an X26 CEW probe deployment in a human volunteer [4]. What determines the capture is the electrical charge which is the area under the curve [5–7].

CEWs deliver a rapid series of very short duration (10–100 μs) electrical pulses to efficiently capture alpha-motor neurons while having minimal cardiac effects. Each pulse has less peak current than a strong static electricity shock that

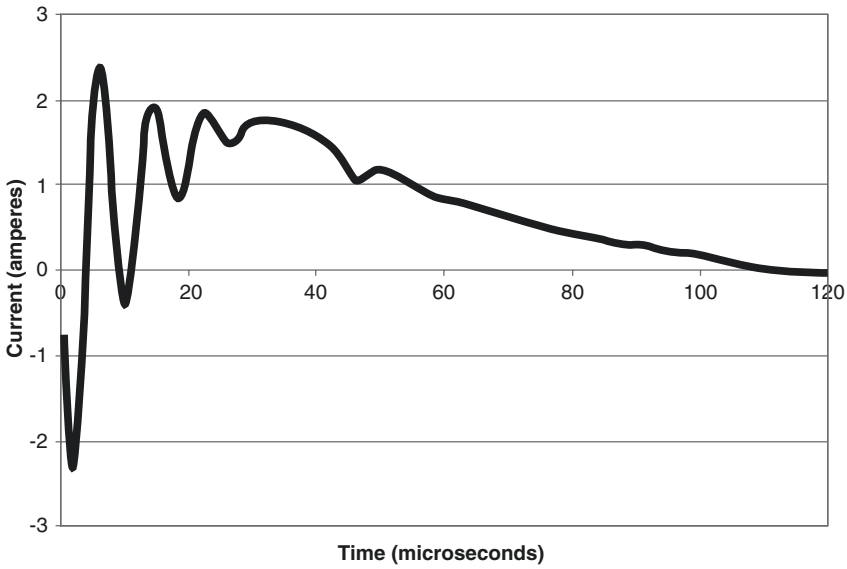


Fig. 8.4 Output waveform of X26 CEW pulse. Taken from a human probe application [64]. The initial short negative and positive peaks are the "arc" phase. They do not contribute to stimulation due to their mutual charge cancellation. The current delivered between 10 and 110 μs contributes to motor-neuron stimulation

WIT.0043.0086.0285

one could get from a doorknob on a winter day. Just as a strong static shock temporarily incapacitates someone, this series of 19 very short duration shocks per second delivered in probe-mode from the X26 CEW will likely temporarily incapacitate a person.

The stored energy in the TASER X26 CEW is about 0.36 joules (J) per pulse (J/pulse), and the delivered energy is about 0.1 J/pulse. By comparison, an automatic external cardiac defibrillator (AED) delivers up to 360 J, over 3000 times greater than the X26 ECD. Or, if one thinks about it, this limited amount of delivered electrical energy able to be transferred to a person makes sense as the TASER X26 CEW is only powered by a battery of two 3 V cells (Duracell® CR123s), commonly used in some small digital cameras.

Selective Stimulation

In probe mode, the stimulus train of narrow pulses is intended primarily to capture the motor neurons and cause the nerve-mediated activation of skeletal muscle contraction. This serves to disable the individual through NMI and their ability to voluntarily move. In addition, it also elicits strong sensory overload and discomfort. An important safety concern of the electrical weapon technology is to significantly minimize or eliminate stimulation of the heart, which could cause life-threatening dysrhythmias or cardiac arrest.

The minimum level of charge needed for stimulation is much higher for cardiac cells then myelinated motor nerves [8]. In addition, the heart is also located deeper within the torso. With probe barbs embedded just at or below the skin, much more energy is delivered to the skeletal muscle than cardiac tissue. Thus, relatively little, if any, current will pass through the heart. This effect of relatively low penetration of the electrical charge into the heart given surface or near-surface stimulation of tissues is well known and well-studied both in the electrical safety literature as well as the medical literature of transthoracic pacing and defibrillation.

From an efficacy perspective in terms of efficiently activating skeletal muscle between and near the probes, the CEW stimulus pulses appear to selectively stimulate muscle controlling motor neurons more than the heart. Similar selectivity is seen from a safety perspective in terms of nerve-mediated activation of skeletal muscle with a wide safety margin in comparison to corresponding current levels that would be needed to excite or fibrillate the heart.

Drive-Stun

In the drive-stun mode, the electrical energy is delivered over a very short pathway between the electrodes of the CEW. The result is isolated pain, but not enough electrical charge or electrode spread to cause motor neuron activation and skeletal muscle capture. While similar, the TASER CEW should not be confused with generic

WIT.0043.0086.0286

"stun guns." Generic stun guns deliver less average current (typical values of 0.3–0.5 mA) and deliver it over a short pathway between two fixed electrodes. With stun gun electrodes only 2–5 cm apart—and the lack of skin penetration—the current flow is primarily across the epidermis and then along the dermis between the electrodes and there is no significant penetration beyond the fat layer. Thus, there is insufficient current in the skeletal muscle layer to capture motor neurons and achieve muscle control.

Epidemiology

CEWs have now been applied to over five million human beings with over three million field uses and over two million uses in training. The existing literature shows that the introduction of CEWs decrease serious adverse outcomes compared to other lethal force methods, and that death or serious injuries are extremely rare. There have been no deaths following CEWs use in training scenarios. There are several papers describing the epidemiology of suspect injuries and a few comparing the suspect and officer injury rates with alternative control modalities. Eastman et al. did a prospective study of 426 CEW uses in Dallas Texas [9]. He reported no subject injuries beyond scrapes and cuts requiring only first aid. Notably he found that in 5.4% of the CEW uses, lethal force was replaced by CEW use. Bozeman et al. prospectively studied 1201 uses in five law enforcement agencies in the USA [10]. There were two serious injuries from falls at a rate of 0.17%. One was a 6.5-mm temporoparietal intraparenchymal contusion and the other an 8-mm cerebellar epidural hematoma. Both subjects were admitted to the hospital for observation and discharged after 2 and 3 days, respectively, without neurosurgical intervention or long-term sequelae. There was a case of rhabdomyolysis which was discussed in detail in the paper and was clearly unrelated directly to the CEW usage.

In the Bozeman study, there were two deaths: Both cases were men in their 30s who struggled violently with police both before and after CEW use and on whom other physical force was used to take them into custody. One subject had a high body mass index and was involved in a foot pursuit and prolonged physical struggle with police, during which two conducted electrical weapon discharges were used. He collapsed approximately 20 min later. At autopsy, he was found to have a dilated cardiomyopathy and cocaine was present in his blood. The second subject was agitated and violent, with a history of mental illness. After an extensive struggle, during which pepper spray and two CEW discharges were used, he was restrained in a prone position. He collapsed an estimated 5 min after CEW use. An autopsy revealed no anatomic cause of death, but olanzapine at 170 ng/mL was present in his blood. CEW use was not determined to be causal or contributory to death by the medical examiner in either case.

Strote et al. studied 1101 consecutive uses by the Seattle Police Department, Washington, USA [11]. He found eight "restraint related" trauma injuries. However, he did not distinguish the injuries typical of CEW usage (e.g. head injury from fall) from those typical of other control techniques (broken limbs, dislocations, etc.).

WIT.0043.0086.0287

Thus, the Strote study is less helpful for estimating CEW rates except to place an extreme upper bound at 0.73% which is far higher than the combined rate of 0.12% from the Eastman and Bozeman studies. The UK Home Office publishes statistics on CEW usage quarterly [12]. As of December, 2016 they had 14,126 actual field CEW applications of current to suspects, not including displays and arcing. Unfortunately, the injury rate has not been publicly reported.

Smith et al. did a cross-over analysis of CEW usage in Richland County (South Carolina, USA) and the Miami Dade (Florida, USA) police department. They found that the Miami data showed an 87% reduction in suspect injuries and a 68% reduction in officer injuries. Results for smaller Richland County did not reach statistical significance [13]. Brewer et al. performed a weighted meta-analysis of reductions in suspect and officer injuries in the first full year of a law enforcement agency adopting the CEW. They found that the suspect injury rate was reduced by 64 ± 12% while the officer injury rate was reduced by 63 ± 8% [14]. The U.S. DOJ (Department of Justice) research arm NIJ (National Institute of Justice) sponsored a combination cross-over and a case-control study of the impact of CEW adoption by MacDonald et al. [15]. They studied twelve agencies and found subject injury reduction of 65% but no officer injury reduction. Their data suggested a 56% reduction in the ARD (arrest-related death) rate but this did not achieve statistical significance due to the small number of deaths.

O'Brien described the prevalence of mental illness in 141 TASER exposures during a 2006–2007 trial of CEW use in New Zealand. They found 21% of the subjects were having a mental health emergency. Compared to a criminal arrest, TASERS were twice as likely to be discharged as in mental health emergencies. No deaths were reported [16].

Bailey also examined the prevalence of substance abuse and mental illness in 233 cases of TASER exposure that occurred between 2008–2009 in Louisville, KY and recorded by LEOs. Of the 233 total cases, drug use was confirmed in 35%. Twenty-six percent were using alcohol, 4.6% stimulants, 4% multiple substances, and 4% other substances. Sixteen percent had mental illness. One death, not described in detail, occurred in a patient taking stimulants who subsequently died en route to the hospital after two TASER shocks [17].

Gardner reviewed a law-enforcement database of TASER use to determine the prevalence of pediatric subjects in 2026 consecutive TASER uses. Five percent of these TASER uses involved pediatric patients. Ages ranged from 13 to 17 years with a mean age of 16.1 years. There were no significant injuries reported. Twenty subjects were noted to sustain 34 mild injuries; these included the expected superficial punctures from the CEW probes as well as superficial abrasions and contusions. No deaths were reported [18].

Finally, Lee et al. asserted that the ARD rate actually went *up* in the first year after CEW deployment and then returned to normal [19]. This paper failed to give actual numerators and denominators, disclosing only percentages, and the authors have reportedly declined to share any of their data with other researchers. The speculated mechanism for this curious finding was that overly aggressive use of the CEWs in the first year escalated the violence in arrest situations and led to more

WIT.0043.0086.0288

officer-involved fatal firearms shootings. That speculated mechanism is inconsistent with all other research in this area.

Morbidity and Mortality

Probe Marks

The probe impact leaves a very distinctive disc-shaped mark of ~3 mm diameter. Figure 8.5 depicts this post-mortem. Obviously in a living person, wound evolution with inflammation and healing processes would occur. Figure 8.6 demonstrates wound healing at 24, 48, and 96 h post exposure in a living subject. Complete healing and recovery of normal skin appearance may take up to a month. In addition to the initial wound is a small puncture wound from the shaft of the probe itself may be visible as shown in Fig. 8.7. The above will be seen where the probe actually penetrated the skin and the thicker collar impacts the skin. In about 20% of cases, one of the probe connections is made by arcing through thick or baggy clothing. In that case there will be no characteristic disc mark but rather a slight burn from the arcing current. This response may be more obvious in darker skinned individuals.

Ocular Injury

The head, face, and neck receive 1.4% of probe deployments [10]. The sharp probe clearly carries a risk of injury to the eye should direct contact occur. In a systematic

Fig. 8.5 Post-mortem CEW probe wound. Other wounds were from violent prolonged struggle

WIT.0043.0086.0289

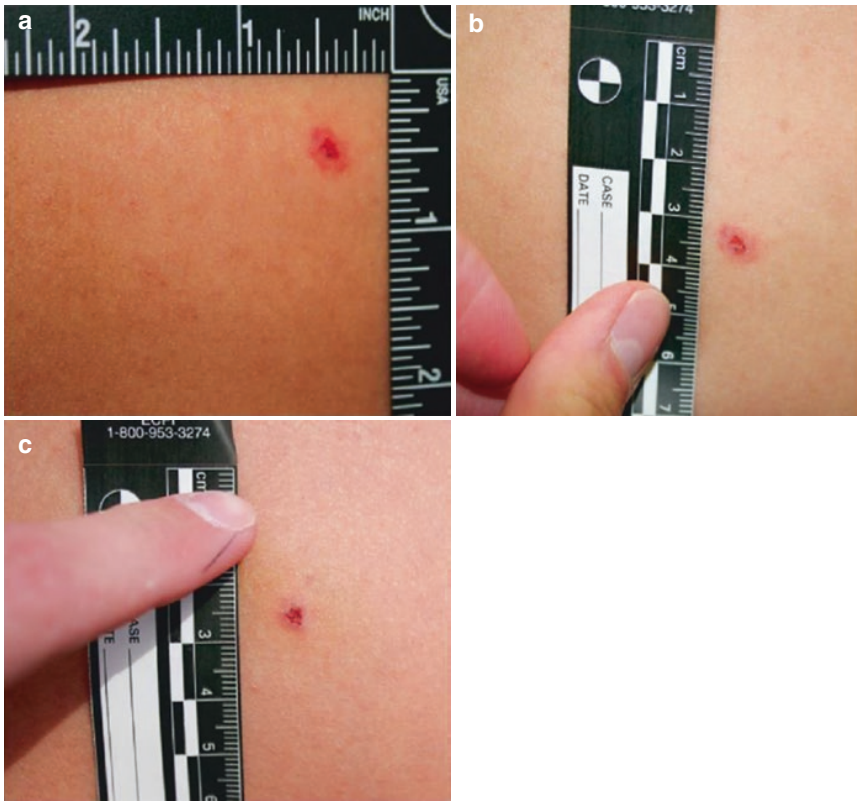


Fig. 8.6 CEW Probe wounds. Parts (**a**), (**b**), and (**c**) are respectively 24, 48, and 96 h post exposure

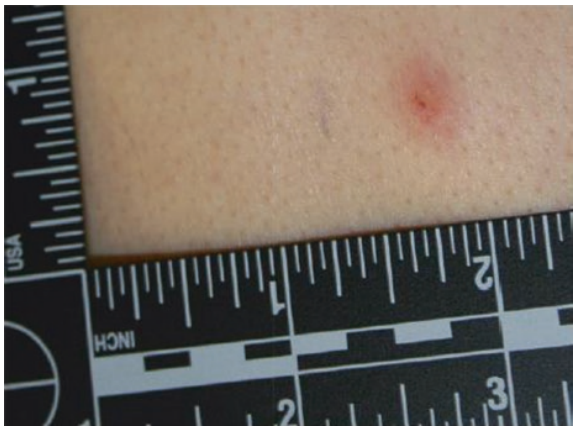


Fig. 8.7 CEW Probe wound 24 h post exposure in which the small dart puncture wound is noticeable

WIT.0043.0086.0290

review of literature and open source media, Kroll found a total of 28 ocular injuries from a TASER probe. Using the total number of TASER field uses has a denominator, a risk of 1:123,000 was calculated. Eighteen of these injuries led to a complete loss of vision. There were seven cases of partial blindness, and two cases of normal vision after surgical repair. One case was lost to follow-up after attempted surgical repair [20].

There has been a case report of a TASER exposure causing a cataract [21]. High energy powerline injuries can cause remote electrical damage to the eye [22]. However, it is unlikely for TASERs to cause remote injury to eye tissue as the electrical output appears too low to cause such damage. Supporting this are a number of case reports with peri-ocular probe penetration without any reduction in vision or reported development of cataracts [23].

Skull Penetration

The penetrating part of the probe is either 9 or 13 mm long, which is sufficient to penetrate the skull if it strikes at a perpendicular angle. See Fig. 8.8 for an image of a TASER probe. There have been four published case reports involving skull penetration [24–27]. There were no infectious or neurological sequelae. In one case the broken-off probe tip was left in the outer cortex [24]. In the other three cases, the probe penetrated the skull and a neurosurgical procedure was required to remove the probe [25–27]. None of the patients had neurologic complications observed prior to discharge.

In another case an officer chasing a suspect was accidentally shot in the back of the head by his partner [28]. He quickly fell to the ground and had a loss of consciousness, clonic-tonic seizure activity, and post-ictal confusion. It is difficult to determine whether the seizure activity was caused by the possible electrical stimulation or from brain trauma that occurred as a result of the fall. This is the only case-report published that associates CEW use with seizures.

Fig. 8.8 CEW probe, the active portion of the dart comes in a 9 mm and 13 mm length

WIT.0043.0086.0291

Pneumothorax

A pneumothorax was reported in a case involving a 16 year old suspect who received a probe into his left chest while attacking an officer [29]. He was 180 cm tall, weighed 66 kg giving him a BMI (body mass index) of 20.4 kg/m [2]. The probe was removed in the hospital; he was treated for the pneumothorax, and was discharged in 2 days. However, it was not clear to the authors that there was a direct barb penetration into the thoracic cavity to explain the pneumothorax. It's possible that the finding was a secondary pneumothorax caused by a strong valsalva leading to high intrathoracic pressures.

Vertebral Fracture

Cases of vertebral compression fracture have not been reported in field use on suspects. However there have been published case reports of compression fractures in LEOs in training exposures across the back [30, 31]. In one case the officer had pre-existing osteoporosis and the other case a LEO had pre-existing osteopenia. These case reports, out of over two million training exposures, suggest an injury rate that compares favorably to jumping sports such as basketball. Additionally, it is believed that the compression fractures are caused by the person coming violently forward after the completion of the CEW exposure. This is suspected because the compression fractures were anterior, not posterior fractures. When a subject receives a back exposure to the CEW he arches backward, not forward. Thus, if the CEW discharge was the direct cause of the fracture, the fracture should be posterior and not anterior. No posterior fractures have been reported.

Fall Injuries

The design objective of the CEW is to cause a violent person to lose control of major muscles from NMI in order to stop the resistance or dangerous behavior. A standing suspect can suffer a sudden and uncontrolled fall with all of its obvious risks. The typical fall-related injuries, varying with ground surfaces, are to be expected. These include lacerations, bruising, hematomas, dental damage and limb and skull fractures. Bozeman et al. reported two significant head traumas from CEW-induced falls; Mangus et al. reported on three such injuries [10, 24].

It can be difficult to separate the cause of a fall between the CEW, intoxication induced imbalance, physical resistance, and other LEO interactions. There have been approximately twelve cases of fatal falls where the CEW probably played a role. With sufficient probe spread, NMI can be significant and an uncontrolled fall is possible [32]. Thus, traumatic injuries, including fatal traumatic brain injuries, are possible. Investigators have previously completed a database review of arrest related deaths in individuals who suffered TBI after CEW induced fall. Out of three million field uses, they found 16 probable cases of fatal brain injuries [33].

WIT.0043.0086.0292

Illustrative Case The mother of an emotionally disturbed individual asked someone to call 911 after her son did not answer the door of his New York City apartment. When police arrived, the son ran onto the fire escape outside his third-floor apartment.

Fleeing the officers up the fire escape, he tried to enter another apartment on the fourth floor by pushing in an air-conditioner. When unsuccessful, he then descended to the second-floor fire escape and from there jumped down to the security-gate housing for a ground-floor storefront, which was about 10 ft from the sidewalk.

As an officer was securing himself on the second-floor fire escape, the subject jabbed at the officer with an 8-foot-long fluorescent light tube.

Under orders from a lieutenant, the officer on the sidewalk, used the CEW on the subject, who had NMI and subsequently fell to the sidewalk, striking his head. The police said an officer at the scene had radioed for an inflatable bag, and it was not clear why the bag had not arrived when the subject fell, or why the officers had not waited for it before using the TASER on him.

The subject was taken to a hospital with serious head trauma and was later pronounced dead [34].

Drive-Stun Burn Marks

As mentioned earlier, the CEW may also be used in the "drive-stun" mode without the deployment of probes. The effect of this mode is cause localized pain to encourage compliance. The characteristic sign is a pair of burn-marks about 4 cm apart corresponding to the 4 cm electrode spacing on the muzzle of the weapon, or the exposed electrodes on a previously discharged cartridge. An example of such a pair of marks is given in Fig. 8.9.

Drive-stun applications may cause more skin trauma than the probe-mode applications. The fully penetrated probe forms a low resistance path and hence there is minimal heating at the skin. The drive-stun application, on the other hand, forms a short, high electrical resistance on the epidermis, which can lead to some localized burns. An example is shown in Fig. 8.10. Additionally, the act of pressing the CEW into the subject with enough force to improve electrical contact along with the subject's movements increases the possibility of trauma to the skin. With such movement, a single 5-s CEW cycle can result in numerous skin contacts and resulting damage.

Burns from Ignition of Flammable Substances

Under certain circumstances with a volatile substance, as well as suboptimal application of the CEW in probe mode, can cause risk ignition and subsequent injuries. With good probe-to-body connections there is no significant arcing and hence no

WIT.0043.0086.0293

Fig. 8.9 Drive-stun marks. Parts (**a**), (**b**), and (**c**) are respectively 0, 24, and 72 h post exposure

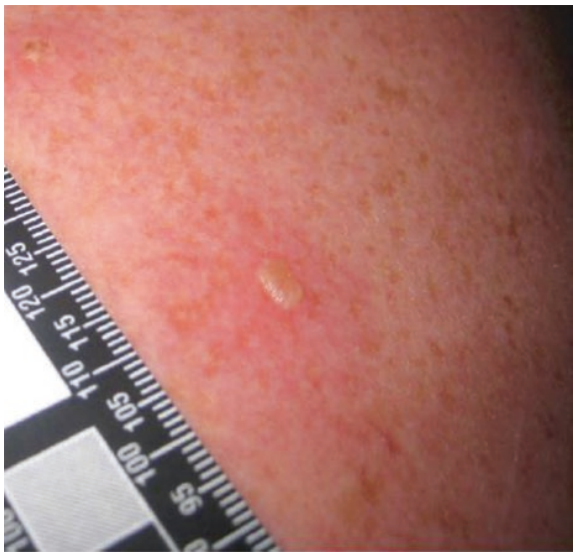


Fig. 8.10 Example of drive-stun blistering

WIT.0043.0086.0294

real opportunity for ignition of a volatile substance. (With older probes there was also some arcing within the "eye of the needle" where the wire connects to the probe which could theoretically ignite an ideal gas-air mixture.) However, if one probe fails to make a good connection then the 50,000 V open circuit "arcing" voltage will attempt to complete the connection. If the disconnected probe is more than 6 cm from the body, then an arc is unlikely to occur at the subject. In that situation, the arc will occur back at the muzzle of the officer's CEW. If this occurs, there is still little risk of ignition unless the volatile substance has sufficient concentration near the officer.

The volatile substances of most concern are: OC (oleoresin capsicum) spray, petrol, and cooking gas. The OC spray is only of concern if it is alcohol-based or contains other flammable substances or carriers. OC spray is available with non-flammable carriers and these are preferred within agencies that use electrical weapons. However, caution is necessary because some OC sprays clearly labeled nonflammable have been shown to be flammable during testing. Petrol itself is not ignitable with a spark. Evaporated petrol combined with air is highly ignitable and that is the key ingredient of the modern automobile engine.

In a database review of arrest related deaths designed to quantify the risk of burn injury from CEW use, six cases of fatal burn injury and four cases of major non-fatal burns were confirmed. At the time of the review, there had been an estimated 3.17 million field uses of the TASER. Like many of the risks of CEW use, the risk of burn is very small [35].

Illustrative Case A man who doused himself with petrol then caught on fire after police fired a TASER at him died from his injuries. The 47 year old was hospitalized and later died. Police said they used pepper spray while trying to take the subject into custody, but that he was never handcuffed. The subject had a can of petrol and a small lighter in his hand at one point. He tossed petrol at officers, but no one was injured. The Texas Rangers were investigating whether a lighter found at the scene could have contributed to the fire and whether the CEW played a role. Two of subject's sons who live nearby said their father had been threatening for months to burn himself and his house. His wife was seeking a divorce and he didn't want to have to leave the house, the sons said the subject also had a history of mental illness [36].

Probe Infection

A recent study examined the infection risk associated with CEW use [37]. The authors estimate that approximately 3.3 million darts have penetrated human skin, however there have been no reported infections. The authors confirmed this by completing a literature review and also surveying 208 trainees who had a CEW exposure. Data indicates that approximately 5% of probes had Staphylococcus aureus on them. The authors propose this low infection rate is secondary to a clean manufacturing process as well as the electrical pulses sterilizing the dart through a process

WIT.0043.0086.0295

called electroporation. Electroporation occurs when electrical pulses cause damage to ion channels or cell walls.

Metabolic Derangements

Animal and clinical studies have found only minor increases in myoglobin or in CK (creatine kinase) [38–40]. The CK level increases were consistent with moderate exercise. A meta-analysis of four human studies included CEW exposure times of 5, 10, and 30 s. The median pre-exposure level was 148 (Inter-quartile range 87–479). Median increases in CK (at 24 h post-exposure) were 12, 26, and 47 respectively [41]. A recent multi-center study also found no clinically significant increases in CK [42]. Thus it does not appear that CEW applications can cause clinically significant rhabdomyolysis.

Acidosis has been reported from CEW applications in swine studies; however, the positive studies were in artificially ventilated and anesthetized swine that had the ventilator turned off during the prolonged CEW applications [38, 43, 44]. Human beings continue to breath and ventilate well during CEW applications whether across the chest, diaphragm muscles, or phrenic nerves in the neck [45–49]. This suggests that the unventilated anesthetized swine model does not give meaningful predictions extrapolatable to humans for acidosis. In fact, human studies demonstrate a minor alkalotic pH shift with the CEW application similar to that seen with moderate exercise, not acidosis.

Randomized studies have shown that a 10-s CEW application reduced acidemia in the already exhausted volunteer compared to the alternative of continued exertion from physical control techniques [50, 51]. In one study of 37 volunteers, pH change after a CEW application was compared to various length sprints and found to change the pH about the same amount as a 20 yard sprint (thirty yards is the distance from home plate to first base in the game of baseball) [52]. By denying the agitated subject muscle control, the CEW application likely reduces metabolic demands compared to the intense exercise of a struggle.

To determine the physiologic effects of the newly released TASER X2 CEW, researchers measured pH, lactate, potassium, CK, and troponin before and after a 10 s CW exposure in ten volunteers. There were no clinically significant changes in any of these parameters [53].

Massive electrical shocks, such as those from lightning or power lines, can cause cardiac cellular damage as evidenced by increased troponin levels [54]. Troponin levels have been measured in subjects before and after CEW exposures in numerous studies [40, 42, 48, 51, 55]. No statistically or clinically significant increases were found. A recent "best-evidence" review concluded that no cardiac monitoring was required for subjects in sinus rhythm after a CEW exposure [56]. The American Academy of Emergency Medicine Clinical Practice Committee published similar recommendations from their structured literature review on TASER CEWs [57].

WIT.0043.0086.0296

Electrocution and Cardiac Issues

No topic regarding the use of CEW has generated more controversy than the possibility of CEW-induced cardiac issues. This seems natural considering the level of scrutiny associated with an arrest related death."Electrocution" is the term first coined in the late 1800s to describe the government's execution of a criminal by use of electricity. It was a contraction of "electrical execution." Today the term "electrocution" is more broadly used to describe the induction of a cardiac arrest by the application of, or exposure to, electrical shock. This has been the most theorized mechanism by which a CEW could allegedly cause death in a person.

Due to the frequent practice of ICD implantation, the electrical induction of VF is well studied. During the implantation process, the electrophysiologist will intentionally use electricity to induce a cardiac arrest [58, 59]. The ICD will then recognize the ensuing electrically induced VF and deliver a lifesaving electrical shock to verify the ICD's proper function. Table 8.1 lists the characteristics of electrically induced dysrhythmias that have been determined by cardiac electrophysiologists. Awareness of these characteristics informs efforts at determining the potential for CEWs to cause VF.

Computer Modeling

Numerous computer modeling studies have been done to evaluate the electrical current reaching the heart and the risk of the direct induction of VF by a CEW. The most exhaustive study was done by Holden et al. which suggested a very wide safety margin for the direct induction of VF [60]. When applied to the ventricles in trains designed to mimic the discharge patterns of CEW devices, neither the M26 or X26 TASER CEW model waveforms induced VF at peak currents >70-fold (for the M26 waveform) and >240-fold (for the X26) higher than the modelled current densities. The authors conclude that this provides evidence for a lack of arrhythmogenic action of the M26 and X26 CEW devices. Panescu et al. similarly found that electrical current density at the heart was significantly below that required to directly induce VF [61]. The Webster group reported that the risk of direct induction of VF from a CEW application, was 6 PPM (parts per million) [62]. However, that modeling data base was dominated by thin females and thus the 6 PPM stated risk

Table 8.1 Characteristics of electrically induced dysrhythmias established in the cardiac electrophysiology literature [95–99]

Ventricular fibrillation is either induced or not induced within 1–5 s
Cardiac rhythms of asystole and PEA (pulseless electrical activity) are not induced by the electrical pulses
The cardiac pulse disappears immediately
The patient loses consciousness within 5–15 s
A sufficiently strong defibrillation shock—either internal or external—restores a cardiac sinus rhythm 99.9% of the time
There is no increased risk of a delayed VF since electrical current does not linger, or build up, in the body as a poison or drug might

WIT.0043.0086.0297

significantly exaggerates the risk in males. Webster's data relied upon skin to heart echocardiograms of 150 subjects. Of those 150 subjects, Webster stated that 8 of the 150 had a sufficiently narrow skin to heart distance for the induction of VF. Webster's paper fails to mention that of the eight subjects, seven were females. Thus, the probability of CEW directly induced VF in males is far less than Webster's stated 6 PPM. Clearly the male risk is <1 PPM (1/8 • 6 PPM).

Ideker et al. used transthoracic pacing data to predict the VF safety margin and estimated that the safety margin was 28:1 [63]. Multiple human studies using anterior chest applications have uniformly reported zero incidents of VF [50, 51, 64–66]. These studies included contra-lateral electrode placements to test primarily for respiration impairment. In addition other studies have used continuous echocardiographic monitoring and have not found VF [67–70]. Bozeman et al. combined published US data with UK Home Office data covering 4058 consecutively monitored CEW field uses in which the electrical current was actually delivered [71]. There were no cases of cardiac death related to the CEW usage. Panescu utilized computer modeling to determine the theoretical probability of inducing VF and concluded that it is significantly lower than 0.0000008, or 1:1,270,000 [72].

Minimum requirements for assessing of CEW electrocution are given in Table 8.2.

Table 8.2 Electrocution checklist to help discern if CEW exposure could have caused ventricular fibrillation

Present?	Not present	Criterion	Rationale
From law enforcement reports			
		1. Probe mode deployment (instead of drive-stun)	Drive-stun mode is not able to directly induce VF even in small swine [132, 162]
		2. Use of X26E CEW (as opposed to the newer X2, and X26P)	The X26E delivers a higher electrical charge compared to the other models (axon company info)
		3. Subject has cardiovascular collapse within 15 seconds (s) of *initiation* of a probe-mode application	The direct electrical induction of VF requires 2–5 s [95–99, 110] Subject collapse in VF occurs within 10 s of the VF initiation [163]
From EMS report			
		4. A defibrillator shock applied to the person within 8–10 min of VF terminates the VF. Law enforcement defibrillator may have been used	Electrically induced VF is terminated by a defibrillation shock 99.9% of the time (if delivered promptly) [99, 164]. After 12 min (with CPR) this falls to 88% [164]
		5. Cardiac rhythm seen within 30 min of the collapse is VF. This is demonstrated either by an external defibrillator announcing "shock advised" or by a paramedic's EKG recording	Most cardiac rhythms seen with acute or chronic drug effects or excited delirium are not VF [92, 165–168] After 30 min of a possible VF the rhythm may deteriorate to another type of dysrhythmia [127, 129]

(continued)

WIT.0043.0086.0298

Table 8.2 (continued)

Present?	Not present	Criterion	Rationale
		6. Initial presenting rhythm is not asystole or PEA	Asystole and PEA cannot be induced with electrical stimulation. This criterion is not valid after 30 min from collapse as VF will eventually deteriorate into asystole or PEA [129]. Unsuccessful defibrillation shocks can convert VF into asystole or PEA but that is different
From autopsy			
		7. One probe was directly over a cardiac ventricle	When VF has been induced in the small swine, at least one of the probes was over a ventricle [132, 169]
		8. The probe directly over the cardiac ventricle penetrated the skin and did not simply penetrate or lodge in the person's clothing	VF has only been induced even in swine with a fully inserted probe [133, 169–171]
		9. Penetration of the probe through the intercostals in the left parasternal region	This would shorten the dart to heart distance
		10. The penetrating probe over the heart penetrated straight in and was not at an angle that would negatively affect the dart-to-heart distance	Webster group predicted, from porcine studies, that VF induction would require a very thin person with a full 9 mm barb penetration [169]
		11. The dart tip-to-heart distance is a maximum of 8 mm. For exposures of >90 s this critical distance is probably 15 mm [67] (15–20 mm in swine) [135, 136]	The most extreme distance found by the Webster group for VF induction—in swine—was 8 mm with an average of 6 mm, and a minimum of 2 mm [169]. Swine are easy to fibrillate and thus present a conservative model [172–174]

Items 3, 9 and 10 do not apply completely to situations of exposures >90 s

Safety Standards and Animal Studies

Two organizations, the Underwriters Laboratory (UL) and the International Electrotechnical Commission (IEC), specify safety standards for electrical fences. By their standards, the various models of TASERs, including the current X2 and X26P models, deliver a safe level of electrical power [73–76]. Modern CEWs deliver a current of approximately 1.8 mA pulsed DC and the limit is 2.2 mA. 1.8 mA is equivalent to 16 mA of AC which is lower than the IEC 40 mA safety limit.

However, the electrical fence safety standards assume external skin contact. The heart is closest to the skin at the fourth or fifth left parasternal intercostal

WIT.0043.0086.0299

space where the depth can be as small as 18 mm in a thin male or 12 mm in a female [77]. Therefore, it is implied that a 10 mm dart to heart (DTH) distance is generally considered an approximate minimum safe distance between the probe and the heart [78].

Swine studies have been used extensively to determine the risk of ECW induction of VF. However, they have limited generalizability. Swine have longer QT intervals and a short repolarization reserve compared to human [79, 80]. Additionally, swine have intramural Purkinje fibers which make them more sensitive to external electrical stimulation. Humans have Purkinje fibers that are located on the inner musculature of the heart, whereas swine have the electrically conducting Purkinje fibers throughout all layers of the heart making the conducting tissue closer to the surface of the heart, increasing the likelihood of conducting an exogenous source of electricity into the swine heart [81, 82]. Also, swine are, in general, smaller than humans, particularly the swine that were used for CEW research purposes. This is important because the current required to cause harm is weight related. The larger the subject, the higher the current required to induce VF [83].

Thus, swine are excellent models to study the electrical behavior of VF but are not great models to study VF thresholds in humans. Despite this, even in all of the swine studies involving CEWs, induction of VF was incredibly rare. In a review of all swine studies examining the risk of inducing VF with an CEW, there have been over 7500 standard CEW activations in swine, with 745 cases of cardiac capture reported. Recall that cardiac capture is depolarization of the cardiac electrical circuitry in response to an electrical stimulus. And out of all of these CEW activations and even fewer episodes of cardiac capture, there have only been six cases of VF induced in swine [83]. Of these six cases of VF, five started immediately after the CEW activation stopped. In one 29 kg pig, after 80 s of a CEW application (two 40-s activations) in which the ventilator was shut off, there was one episode of VT that started immediately after the CEW activation was stopped and then approximately 3 min later it degenerated into VF [84]. This is the only reported case of cardiac capture leading to VF that did not start immediately at the time of the CEW activation.

Additionally, these six cases all have confounders which limit their applicability to humans in general and ARDs specifically. VF was not induced in any swine weighing more than 36 kg using an isolated CEW discharge. A single case of VF occurred in a 50 kg swine who was simultaneously receiving an epinephrine infusion [83]. Recall that epinephrine lowers the VF threshold during and for several minutes following administration. There was one case in which the pig was subjected to a thoracotomy and the CEW activations had more direct access to the cardiac tissue.

Investigators have taken the swine data, and using correction factors, made VF induction risk estimates for humans. It is estimated that the VF risk is approximately one in three million probe uses. The critical DTH is estimated to be approximately 3 mm. Lastly, the lower limit of body mass for safety is approximately 21 kg in humans [78]. Put simply, these projections estimate that for an CEW to induce VF in a human, the probe has to hit the chest in the exact right place, the heart has to be

very near (~3 mm) the probe, and the patient has to be very small. These are all unlikely events.

Human Data

There have been a number of human studies and the human data are consistent with these estimates. In laboratory studies, 66 humans have been intentionally exposed to a CEW discharge with precordial probes. During continuous ECG or echocardiographic monitoring, there were no cases of VF and only one case of cardiac capture during the activation. This one case reverted to sinus rhythm with the cessation of the CEW activation [85–87]. Of note, in the one case where there was cardiac capture, a prototype ECW was used; this model was never manufactured and sold. Other studies have also used transcardiac placement of probes without any negative cardiac effects reported [65, 88, 89].

As of January 2019, the primary manufacturer of CEWs reported 3.9 million field uses. A probe lands in the anterior chest in 49% of field uses [10]. There have been twelve case reports that suggest a CEW induced electrocution. Thus, the incidence of CEW induced electrocution in the field is approximately 6.3×10^{-6}.

Kroll examined these twelve cases in more depth [90]. Seven criteria were used to assess a general probability that the CEW induced VF. These criteria are useful when trying to determine a causal relationship between a CEW discharge and the induction of VF. The first criterion was the presenting rhythm. A patient presenting with asystole or PEA is unlikely to have had VF induced by a CEW because these rhythms are not inducible with electrical stimulation [91]. These rhythms are more consistent with drug overdoses or excited delirium [92, 93]. Also, VF does not progress to asystole as rapidly as typically thought; in swine studies, the median time for deterioration is 34 min [94] (2012 Kroll the stability of electrically induced ventricular fibrillation).

The second criterion is the DTH distance. Recall that, based on models derived from swine studies, the critical DTH distance is approximately 3 mm in humans. That is, the probe tip of the CEW, needs to be approximately 3 mm or less away from the epicardium to induce VF [78]. 8 mm was used in Kroll's analysis as a more conservative estimate [90].

Third, a documented pulse after CEW discharge makes an electrically induced VF unlikely. Studies in patients in the electrophysiology lab show that VF is either induced or not induced within 5 s, and that the pulse is lost immediately [95–99].

Next, patients who have VF very quickly stop breathing. Normal breathing should cease soon after the induction of VF but can have agonal breathing for up to 6 min [100–102]. In some of the case reports, normal respirations were recorded several minutes after CEW discharge but prior to collapse, which is inconsistent with CEW induced VF.

Fifth, electrically induced VF should respond promptly to defibrillation attempts. With chest compressions, defibrillation has a 90% success rate after 10 min of electrically induced VF with <3 shocks [103]. VF resistant to defibrillation

WIT.0043.0086.0301

is more consistent with underlying cardiac or metabolic disease and not electricity induced VF.

The last two criteria to consider are cardiac pathology and the findings of the medical examiner. Cardiac pathology, such as a prolonged QT interval or coronary artery disease, complicate the case for causation. And while medical examiners/forensic pathologists may not be specialists in electrophysiology, they are central to death investigations and their impressions can be relevant.

In his review, Kroll found that the twelve cases all had characteristics that were inconsistent with electrically induced VF [90]. A case consistent with electrically induced VF would be a thin patient without underlying cardiac or metabolic disease who receives a probe in the left chest and immediately collapses. There should be no detectable pulse, breathing should cease within minutes, the presenting rhythm should be VF, and it should respond promptly to timely defibrillation.

Illustrative Case Chicago police officers and paramedics were called to a high-rise apartment building where the subject was naked and noted to be talking to aliens on his cellular telephone. Police officers used a TASER X26 CEW to attempt to get the subject under control. After application of the CEW, he was handcuffed and helped to climb into the paramedics stair-chair. Paramedics then verified the subject's pulse and respiration. Police and paramedics agree that he was alert and breathing—with eyes open—as he was wheeled into the elevator.

At the ground level of the high-rise—8 min after the CEW applications, the subject was unresponsive, found to be in VF and aggressive resuscitation therapy was given unsuccessfully. The subject was pronounced deceased in the hospital about 60 min later. Toxicology later showed a blood methamphetamine level of 0.55 μg/mL.

The local deputy medical examiner (DME) blamed the CEW as the primary cause of this individual's death in his autopsy report stating that the death was by "*electrocution*" from the CEW (with the contribution of methamphetamine) [104]. Material concerns regarding this autopsy conclusion include: (1) blaming the CEW when the subject had normal pulse and respiration after the application as the electrical induction of VF causes loss of both within seconds, (2) relying on an unsupported speculation of a dysynergy between electrical current and methamphetamine, (3) ignoring the 8-min gap between the CEW application and the collapse, (4) ignoring the subject's alertness minutes after the CEW application, and (5) ignoring the failure of defibrillation shocks.

An additional concern was raised years later when the DME, admitted under oath, that his supervisor had suggested the term "electrocution. There were speculations of conflict with the supervisor [105].

Ventricular Fibrillation, Commotio Cordis, and Cardiac Capture

VF can be induced by sufficiently strong electrical current flowing through the body. The current that is required to directly induce VF is dependent on the length of time, but only up to a few seconds. It is well established that the direct

WIT.0043.0086.0302

VF induction threshold decreases for the first few seconds and does not decrease further [95, 96, 106–109]. In other words, if a person is not put directly into VF by a certain level of electrical current after 5 s, the person will not be electrocuted by a 60+ s exposure either [110]. Both the International Electrotechnical Commission (IEC) and the Underwriters Laboratories (UL) regulation's recognize that electrocution either happens in the first few seconds or does not happen [111]. Electrical currents that will not directly induce VF in 5 s will not induce VF in 1 min [110].

Animal studies going back to the 1930s show that the risk of inducing VF does not build up (increase) after the first few seconds. The duration (critical time) is the time at which further applications of electrical current do not increase the risk of directly inducing VF. These studies have found that the critical time ranges from 0.8 to 5 s [95, 96, 106–109]. Based on the animal results above, Biegelmeier and Lee calculated that the critical time ranged from 2 to 5 s for humans due to the lower heartrate [95, 96]. More recently Swerdlow et al. demonstrated that the human VF threshold (VFT) dropped dramatically when going from 0.5 to 1.0-s long applications [112]. The VFT fell by another 54% going from 1 to 5-s applications consistent with the Biegelmeier predictions.

A sharp blow over the heart can induce VF via the mechanism of commotio cordis, in which blunt trauma mechanical shock occurring during the "vulnerable" period of the cardiac rhythm could cause VF [113]. This is associated with energy levels of 380 J (rubber bullet) or 540 J with a plastic bullet. Rarely, but tragically, it is reported in young people with a 13 J impact over the heart during the so-called vulnerable period T-wave. However, the CEW probe kinetic energy (1.5–2.2 J) is far too low to induce commotion cordis [114–116].

The suggestion that the CEW could induce VF by shocking in the vulnerable period of the heartbeat cycle has been referred to as "Russian Roulette," "Lightning Lottery," or the "Tailspin." [117–119] The most vulnerable section of the cardiac rhythm is the first half of the T-wave and this lasts about 54 ms on average in humans [120]. The X26 CEW puts out 19 pps. That means that the spacing between pulses is 1/19th of a second or 52.6 ms. In other words, for the average individual, no vulnerable period escapes the X26 CEW pulsing—the X26 CEW pulse hits every T-wave. If this was the mechanism for VF, basically every transcardiac probe deployment should be able to cause VF, which is obviously not the case based on the epidemiologic data.

The presenting cardiac rhythm with ARDs is most commonly either brady-asystole or PEA—rhythms that are typically associated with excited delirium or drug overdose deaths [121–125]. A natural concern is whether or not there may have been electrically induced cases of VF which deteriorated to asystole. This appears to be unlikely for several reasons. First, in the majority of the cases reported by Swerdlow et al. the cardiac rhythm was documented within 5 min. Secondly, in many of the other cases, the EMS was present about the time of the LEOs arrival and were staged waiting for the officers to gain control of the subject. In many of these cases, LEOs applied their own AED (automatic external defibrillator) which

WIT.0043.0086.0303

reported "No shock advised" thus eliminating VF as the presenting cardiac rhythm. Finally, the time course of VF deteriorating to asystole—from electrically induced VF—is far longer than generally appreciated. Studies of canines, swine and sheep have found no deterioration to asystole from electrically induced VF out to the limits of their monitoring time of 10 min [126–128]. In one study designed specifically to determine the stability of electrically induced VF, six swine were observed after VF was electrically induced. In all swine, VF lasted at least 24 min before deterioration to asystole and the median duration of VF was 34 min [94].

In the one clearly documented human case of the deterioration of electrically-induced VF into asystole the time required was 34 min [129]. Human beings have been kept in VF for over an hour with cardiac massage without deteriorating into asystole [130]. Most LEOs are trained to administer chest compressions in the event an individual goes into cardiac arrest. This would likely further extend the time for deterioration of VF into asystole.

Long-term high-rate cardiac capture has also been hypothesized as a possible mechanism for the induction of VF in a field situation. This is an issue worthy of examination as high-rate cardiac capture will occur at electrical current levels about 1/3 of those required to directly induce VF. High-rate cardiac capture is commonly seen in small swine when the CEW probes are placed deeply and close enough to the heart [131–133].

For background it should be noted that there is nothing intrinsically dangerous about long-term cardiac capture. Cardiac capture, after all, is how pacemakers keep pacemaker patients alive. However, if the electrical current delivered to the heart was strong enough to cause high-rate capture (220–280 BPM) there would be a significant loss of cardiac output. This could eventually lead to VF when the ischemic acidosis sufficiently lowered the VFT. The median time for this to occur has been variously reported as 1.5–4 min (90–240 s) [134–136]. A canine study found that it could not occur in 60 s but the study durations did not extend beyond 60 s [110]. As mentioned prior, out of 745 cases of capture in the swine literature, there have been only six cases that degenerated into VF. All of these cases occurred in severe conditions not present in human field use [83, 84, 135].

Long before the high-rate cardiac capture could induce VF, the subject would show evidence of a significant drop in cardiac output, such as syncope. This would cause the subject to stop fighting and resisting within 5–10 s of the CEW application. From a physiologic standpoint, such a scenario would play out as follows:

1. A violent subject receives a CEW probe discharge over the heart.
2. The subject is thin and a relatively precise probe placement and penetration depth obtains allowing high-rate cardiac capture.
3. The high-rate cardiac capture causes syncope within about 10 s.
4. The subject collapses to the ground and stops resisting.
5. The LEO unnecessarily holds the trigger back for approximately 2 min in spite of the fact that the subject stopped resisting at 5–10 s.
6. The subject experiences VF

WIT.0043.0086.0304

Published echocardiographic studies with chest application studies in humans (with either probes or EKG electrodes) have not reported cardiac capture [67, 69, 70]. And thus, there has never been a documented case of cardiac capture in a human leading to sustained VT or VF.

Other Considerations

Pacemaker and Implantable Cardioverter Defibrillator Patients

Pacemakers and Implantable Cardioverter Defibrillators (ICDs) are required by international standard to withstand the 360 J (joule) shock of an external defibrillator, lasting approximately 10 ms (milliseconds), and protection circuits have been incorporated to prevent damage to electronic components from transthoracic shocks [137]. The X26 CEW delivers about 0.1 J per pulse. Thus, pacemaker and ICD protection circuits have an ample safety margin (3600:1) to protect against X26 CEW discharges. New models including the X2 and X26P have similar energy pulses. Nevertheless, transthoracic defibrillation shocks can reprogram and occasionally damage pacemakers if a defibrillation electrode is placed directly over the pacemaker's pulse generator. However, no investigators have identified reprogramming of or damage to pulse generators as a result of CEW discharges [138–140].

Newer ICDs have sophisticated circuitry and should not pass voltage from a CEW down its lead into the heart. However, ICDs can potentially misinterpret the rapid pulses of a CEW as a cardiac dysrhythmia such as VF. Haegeli et al. reported such a case in a 51 year old female ICD patient with an "integrated bipolar" lead [139]. Such a lead is more sensitive to interference compared to the "true bipolar" lead [141]. Probes struck the woman in the sternum and the pulses were mistaken by the ICD as VF. The ICD began the 8–10 s charging process to deliver a shock; however, by the time the device was charged, the CEW application was over and the ICD went back to its normal monitoring operation without delivering a shock. While there is a risk of an ensuing shock delivery, this is unlikely because the typical CEW application is shorter than the typical ICD detection and capacitor charge times. A systematic review found two other instances where an ICD misinterpreted a CEW shock as VF, but no shocks were delivered [78].

Pacemaker circuitry is different than ICDs, and there is a theoretic risk that the pacemaker lead can act as an "antenna" to deliver CEW pulses into the heart. The CEW pulses could then act to pace the heart and theoretically induce cardiac arrest. This has not been reported.

Despite several million field uses, there are only several recorded CEW exposures in pacemaker patients. Cao reported a case of an X26 CEW cardiac capture in which the CEW discharge was delivered into the chest of a rioting prisoner with a pacemaker [138]. In another case series, two pacemaker patients were exposed to a TASER CEW application but experienced no symptoms of rapid pacing and pacemaker interrogation showed no untoward effects [142].

WIT.0043.0086.0305

Fortunately, while there is a small risk of an adverse event for pacemaker and ICD patients when exposed to a CEW, these interactions are infrequent due to the significant age difference between the typical resisting subject requiring CEW control methods (30 ± 10 years) [9] and pacemaker patients (first implant 75.3 ± 11.1 years) [143].

The most common ICD-CEW interaction is detection of the CEW pulses as rapid oversensing, which should put the pacemaker into noise reversion (fixed-rate) mode for the duration of the application. This has not been demonstrated in swine models looking at pacemakers nor reported to have occurred in a humans [144, 145]. Moreover, fixed-rate reversion would prevent a drop in cardiac output and any resulting clinical manifestations such as syncope.

Illegal Stimulants

There have been a number of speculated potential morbidities associated with the CEW. Suspects presenting with excited-delirium type behavior tend to have rhabdomyolysis and acidosis and many also have cardiomyopathies from their chronic abuse of cocaine, methamphetamine, or alcohol [146–148]. Hence there has been concern that CEW application could cause or exacerbate these conditions.

Given the inherent risk of illegal stimulants, some have assumed a potential synergistic interaction with CEWs placing humans at greater risk of cardiac injury or death. This contention does not appear supported by current research. It is well documented that cocaine has strong effects on the heart such as dramatically raising the heart rate and blood pressure [149]. Chronic cocaine usage also significantly increases the risk of a myocardial infarction [150] and cardiac arrest [151]. Thus, the natural "medically intuitive" assumption is that the presence of cocaine also makes it easier to electrocute someone and electrically induce VF.

However, most scientific studies have shown that cocaine makes electrocution more difficult, not easier [152–154]. This is due to the sodium channel blocking effects of cocaine which makes it much harder to stimulate a heart cell. This has been confirmed using actual X26 CEW waveforms [155]. The VF safety margin went up significantly with the presence of cocaine and was almost doubled for probe barbs near the heart.

Cardiac electrophysiologists routinely use intravenous stimulants (such as isoproterenol) to induce ventricular tachycardias in their electrophysiology labs. Hence, a typical first blush reaction is to assume that stimulants increase the risk from a CEW or external electrical shock in general. However, stimulants, including isoproterenol, tend to actually increase the amount of electrical current required to induce dysrhythmias [156]. The same is true with other stimulants such as phenylephrine [157].

Direct catecholamine exposure appears to only lower the VF threshold for the first 3–7 min, which in an ARD (arrest-related death) is usually *before* the arrival of

WIT.0043.0086.0306

law enforcement and EMS (emergency medical services) to a call for strange or bizarre behavior, after which time the VFT (VF threshold) actually goes up [158].

Note that this field CEW application situation is far different from someone quickly ingesting a large drug dosage in front of LEOs and then struggling against the officers' attempts at capture, control, and restraint. That could be dangerous with some stimulants for the first few minutes as was shown in an absolute worst case situation of low body weight, barb inserted under the skin, barb placed over the heart, barb penetrating the intercostal muscles, and a strong pure stimulant (epinephrine—with no protective effects such as those of cocaine) given intravenously [133].

There is concern that drug abusers using methamphetamine and other illegal stimulants could be at increased risk for electrocution from the CEWs. However, a small animal study found no CEW induced VF even in the presence of various similar stimulating agents [159]. Also, a large study from the UK (United Kingdom) Home Office found no increase in risk with common drugs [160]. In a study of 16 sheep, cohorts of sheep were exposed to escalating doses of methamphetamine, then exposed to a CEW discharge. After the CEW discharge, two sheep developed supraventricular tachycardia, one had a premature atrial contractions, and one had non-sustained ventricular tachycardia. None developed VF. These were all in smaller animals; CEW induced dysrhythmias were associated with weight, but not exposure to methamphetamine [161]. Overall, there does not appear to be an increased risk of cardiac dysrhythmia or sudden cardiac arrest when CEWs are used in subjects using illicit drugs.

Clinical Management

The clinical management of patients exposed to a CEW discharge is straightforward: patients should be assessed with a history and physical which will guide further therapy. A 2010 clinical practice guideline concluded that since CEW exposures do not lead to delayed cardiac ischemia or dysrhythmias, the literature does not support routine performance of electrocardiograms, prolonged ED observation, or hospitalization for ongoing cardiac monitoring after CEW exposure in an otherwise asymptomatic awake and alert patient. It also concluded that the literature does not support routine performance of laboratory studies to detect metabolic abnormalities [57]. Subsequent findings, as presented in this chapter, have reinforced this recommendation. Put simply, CEW exposures do not lead to occult or delayed findings.

Many of these patients will have underlying medical conditions such as intoxication, psychosis, excited delirium, or traumatic injuries that will require further care. A small portion will need further care to address CEW injuries in sensitive areas including the face, hand, or genitals. However, these conditions will be evident on exam and are no different from the many arrest-related conditions addressed by the law-enforcement system daily.

There is no global standard of care for these patients and protocols vary; however, some type of assessment is recommended. This can be accomplished in a

WIT.0043.0086.0307

variety of ways and is often completed by EMS personnel in the field, by a medical screening at a jail facility, or in the Emergency Department.

Conclusion

Conducted electrical weapons are an important tool for LEOs when confronting violent subjects. Serious injuries from their use are rare and are usually minor and straightforward for the examining clinician. Determining if a CEW exposure has caused a death by inducing a lethal dysrhythmia is less clear. While this event is theoretically possible, it is highly unlikely. We recommend a systematic, evidence-based approach to making this clinical determination. Table 8.2, designed to help pathologists address the specific question regarding the causation of VF, can help in this area.

Key Points

- Significant injuries from CEW exposure are uncommon but include wounds from the direct trauma of probe penetration, traumatic injuries from falls caused by muscle incapacitation, and very rarely burns from ignition of flammable substances.
- Ventricular fibrillation and sudden cardiac arrest are highly unlikely to be caused by a CEW exposure. Use the included checklist to assess for possible causation.

Self-Assessment Exercises

1. List the conditions consistent with CEW induced ventricular fibrillation.
2. List the potential traumatic injuries that can occur secondary to CEW exposure.

Acknowledgement Original author Mark W. Kroll not involved in this edition.

References

1. Axon. News & Views 2018
2. Roberts J (2008) Medical Effects of TASERs. Emerg Med News 30:12–15
3. Girion L (2017) Shock tactics. Reuters Investigates, Reuters
4. Dawes DM, Ho JD, Kroll MW, Miner JR (2010) Electrical characteristics of an electronic control device under a physiologic load: a brief report. Pacing Clin Electrophysiol 33:330–336
5. Reilly J, Diamant A, Comeaux J (2009) Dosimetry considerations for electrical stun devices. Phys Med Biol 54:1319–1335
6. Lapicque L (1909) Definition experimentale de l'excitabilite. C R Acad Sci 67:280–283
7. Weiss G (1901) Sur la possibilite' de rendre comparable entre eux les appareils survant a l'excitation electrique. Arch Ital Biol 35:413–446
8. Reilly JP (1998) Applied bioelectricity: from electrical stimulation to electrical pathology. Springer, New York

WIT.0043.0086.0308

9. Eastman AL, Metzger JC, Pepe PE et al (2008) Conductive electrical devices: a prospective, population-based study of the medical safety of law enforcement use. J Trauma 64:1567–1572
10. Bozeman WP, Hauda WE 2nd, Heck JJ, Graham DD Jr, Martin BP, Winslow JE (2009) Safety and injury profile of conducted electrical weapons used by law enforcement officers against criminal suspects. Ann Emerg Med 53(4):480–489
11. Strote J, Walsh M, Angelidis M, Basta A, Hutson HR (2010) Conducted electrical weapon use by law enforcement: an evaluation of safety and injury. J Trauma 68:1239–1246
12. Office UH (2016) Police use of TASER® X26 conducted energy devices statistics in England and Wales. Sandridge, St Albans, Hertfordshire
13. Smith M, Kaminski R, Rojek J, Alpert G, Mathis J (2007) The impact of conducted energy devices and other types of force and resistance on officer and suspect injuries. Policing 30:423–446
14. Brewer J, Kroll M (2009) Field statistics overview. In: Kroll M, Ho J (eds) Taser conducted electrical weapons: physiology, pathology, and law. Springer-Kluwer, New York
15. MacDonald JM, Kaminski RJ, Smith MR (2009) The effect of less-lethal weapons on injuries in police use-of-force events. Am J Public Health 99:2268–2274
16. O'Brien AJ, McKenna BG, Thom K, Diesfeld K, Simpson AI (2011) Use of Tasers on people with mental illness A New Zealand database study. Int J Law Psychiatry 34:39–43
17. Bailey CA, Smock WS, Melendez AM, El-Mallakh RS (2016) Conducted-energy device (Taser) usage in subjects with mental illness. J Am Acad Psychiatr Law 44:213–217
18. Gardner AR, Hauda WE 2nd, Bozeman WP (2012) Conducted electrical weapon (TASER) use against minors: a shocking analysis. Pediatr Emerg Care 28:873–877
19. Lee BK, Vittinghoff E, Whiteman D, Park M, Lau LL, Tseng ZH (2009) Relation of Taser (electrical stun gun) deployment to increase in in-custody sudden deaths. Am J Cardiol 103:877–880
20. Kroll MW, Ritter MB, Kennedy EA et al (2018) Eye injuries from electrical weapon probes: incidents, prevalence, and legal implications. J Forensic Legal Med 55:52–57
21. Seth RK, Abedi G, Daccache AJ, Tsai JC (2007) Cataract secondary to electrical shock from a Taser gun. J Cataract Refract Surg 33:1664–1665
22. Saffle JR, Crandall A, Warden GD (1985) Cataracts: a long-term complication of electrical injury. J Trauma 25:17–21
23. Jey A, Hull P, Kravchuk V, Carillo B, Martel JB (2016) Emergent diagnosis and management of TASER penetrating ocular injury. Am J Emerg Med 34:1740.e1743–1740.e1745
24. Mangus BE, Shen LY, Helmer SD, Maher J, Smith RS (2008) Taser and Taser associated injuries: a case series. Am Surg 74:862–865
25. Rehman TU, Yonas H, Marinaro J (2007) Intracranial penetration of a TASER dart. Am J Emerg Med 25:733.e733–733.e734
26. Le Blanc-Louvry I, Gricourt C, Toure E, Papin F, Proust B (2012) A brain penetration after Taser injury: controversies regarding Taser gun safety. Forensic Sci Int 221:e7–e11
27. Kaloostian P, Tran H (2012) Intracranial taser dart penetration: literature review and surgical management. J Surg Case Rep 2012:10
28. Bui ET, Sourkes M, Wennberg R (2009) Generalized tonic-clonic seizure after a Taser shot to the head. CMAJ 180:625–626
29. Hinchey PR, Subramaniam G (2009) Pneumothorax as a complication after TASER activation. Prehosp Emerg Care 13:532–535
30. Sloane CM, Chan TC, Vilke GM (2008) Thoracic spine compression fracture after TASER activation. J Emerg Med
31. Winslow JE, Bozeman WP, Fortner MC, Alson RL (2007) Thoracic compression fractures as a result of shock from a conducted energy weapon: a case report. Ann Emerg Med 50:584–586
32. Ho J, Dawes D, Miner J, Kunz S, Nelson R, Sweeney J (2012) Conducted electrical weapon incapacitation during a goal-directed task as a function of probe spread. Forensic Sci Med Pathol 8:358–366
33. Kroll MW, Adamec J, Wetli CV, Williams HE (2016) Fatal traumatic brain injury with electrical weapon falls. J Forensic Legal Med 43:12–19

WIT.0043.0086.0309

34. Fahim K, Hauser C (2008) Taser use in Man's death broke rules, police say. New York Times, New York
35. Kroll MW, Ritter MB, Williams HE (2017) Fatal and non-fatal burn injuries with electrical weapons and explosive fumes. J Forensic Legal Med 50:6–11
36. Boyle J (2007) Man ignites in dispute. San Angelo Standard-Times, San Angelo
37. Kroll MW, Ritter MB, Guilbault RA, Panescu D (2016) Infection risk from conducted electrical weapon probes: what do we know? J Forensic Sci 61:1556–1562
38. Jauchem JR, Cook MC, Beason CW (2008) Blood factors of Sus scrofa following a series of three TASER electronic control device exposures. Forensic Sci Int 175:166–170
39. Ho J, Dawes D (2009) TASER device induced rhabdomyolysis is unlikely. J Emerg Med
40. Ho JD, Miner JR, Lakireddy DR, Bultman LL, Heegaard WG (2006) Cardiovascular and physiologic effects of conducted electrical weapon discharge in resting adults. Acad Emerg Med 13:589–595
41. Dawes D, Ho J, Miner J (2009) "A meta-analysis of the effect of an electronic control device on muscle injury as determined by creatine kinase enzyme." Aust College Emerg Med Sci Assembl
42. Vanmeenen KM, Cherniack NS, Bergen MT, Gleason LA, Teichman R, Servatius RJ (2010) Cardiovascular evaluation of electronic control device exposure in law enforcement trainees: a multisite study. J Occup Environ Med 52(2):197–201
43. Jauchem JR (2010) Repeated or long-duration TASER((R)) electronic control device exposures: acidemia and lack of respiration. Forensic Sci Med Pathol 6(1):46–53
44. Jauchem JR, Sherry CJ, Fines DA, Cook MC (2006) Acidosis, lactate, electrolytes, muscle enzymes, and other factors in the blood of Sus scrofa following repeated TASER exposures. Forensic Sci Int 161:20–30
45. Ho J, Dawes D (2008) The effect of the eXtended range electronic projectile (XREP) on breathing. Australian College of Emergency Medicine Winter Symposium, Newcastle, NSW
46. Dawes D (2009) Effects of CEWs on respiration. In: Kroll M, Ho J (eds) TASER conducted electrical weapons: physiology, pathology, and law. Springer-Kluwer, New York
47. Ho J, Lapine A, Joing S, Reardon R, Dawes D (2008) Confirmation of respiration during trapezial conducted electrical weapon application. Acad Emerg Med 15:398
48. Vilke GM, Sloane CM, Bouton KD et al (2007) Physiological effects of a conducted electrical weapon on human subjects. Ann Emerg Med 50:569–575
49. Ho JD, Dawes DM, Bultman LL et al (2007) Respiratory effect of prolonged electrical weapon application on human volunteers. Acad Emerg Med 14:197–201
50. Ho JD, Dawes DM, Cole JB, Hottinger JC, Overton KG, Miner JR (2009) Lactate and pH evaluation in exhausted humans with prolonged TASER X26 exposure or continued exertion. Forensic Sci Int 190:80–86
51. Ho JD, Dawes DM, Bultman LL, Moscati RM, Janchar TA, Miner JR (2009) Prolonged TASER use on exhausted humans does not worsen markers of acidosis. Am J Emerg Med 27:413–418
52. Ho JD, Dawes DM, Nystrom PC et al (2013) Markers of acidosis and stress in a sprint versus a conducted electrical weapon. Forensic Sci Int 233:84–89
53. Ho JD, Dawes DM, Chang RJ, Nelson RS, Miner JR (2014) Physiologic effects of a new-generation conducted electrical weapon on human volunteers. J Emerg Med 46:428–435
54. Stutz N, Weiss D, Reichert B (2006) Lightning injuries: case report of a 17-year-old man and a brief review of the literature. Unfallchirurg 109:495–498
55. Sloane CM, Chan TC, Levine SD, Dunford JV, Neuman T, Vilke GM (2008) Serum troponin I measurement of subjects exposed to the Taser X-26. J Emerg Med 35:29–32
56. Rechtin C, Jones JS (2009) Best evidence topic reports. Bet 2: cardiac monitoring in adults after taser discharge. Emerg Med J 26:666–667
57. Vilke GM, Bozeman WP, Chan TC (2011) Emergency department evaluation after conducted energy weapon use: review of the literature for the clinician. J Emerg Med 40:598–604
58. Kroll M, Tchou P (2006) Testing of implantable defibrillator functions at implantation. In: Ellenbogen K, Kay G, Lau C, Wilkoff B (eds) Clinical cardiac pacing, defibrilla-

WIT.0043.0086.0310

tion and resynchronization therapy, 3rd edn. W.B. Saunders Company, Philadelphia, pp 531–557
59. Singer I, Lang D (1996) The defibrillation threshold. In: Kroll M, Lehmann M (eds) Implantable cardioverter-defibrillator therapy: the engineering-clinical interface. Kluwer, Boston
60. Holden SJ, Sheridan RD, Coffey TJ, Scaramuzza RA, Diamantopoulos P (2007) Electromagnetic modelling of current flow in the heart from TASER devices and the risk of cardiac dysrhythmias. Phys Med Biol 52:7193–7209
61. Panescu D, Kroll MW, Efimov IR, Sweeney JD (2006) Finite element modeling of electric field effects of TASER devices on nerve and muscle. Conf Proc IEEE Eng Med Biol Soc 1:1277–1279
62. Wu JY, Sun H, O'Rourke AP et al (2008) Taser blunt probe dart-to-heart distance causing ventricular fibrillation in pigs. IEEE Trans Biomed Eng 55:2768–2771
63. Ideker RE, Dosdall DJ (2007) Can the direct cardiac effects of the electric pulses generated by the TASER X26 cause immediate or delayed sudden cardiac arrest in normal adults? Am J Forensic Med Pathol 28:195–201
64. Dawes D, Ho J, Kroll M, Miner J (2010) Tissue resistance to an electronic control device in human subjects. Pacing Clin Electrophysiol; in press
65. Vilke GM, Sloane CM, Suffecool A et al (2009) Physiologic effects of the TASER after exercise. Acad Emerg Med 16:704–710
66. Dawes D, Ho J, Reardon R, Miner J (2009) Multiple simultaneous exposures of the TASER X26 in human volunteers. Europace 11:i49
67. Dawes DM, Ho JD, Reardon RF, Miner JR (2010) Echocardiographic evaluation of TASER X26 probe deployment into the chests of human volunteers. Am J Emerg Med 28:49–55
68. Reardon RF (2009) Echocardiographic effects of the CEW. In: Kroll M, Ho J (eds) TASER conducted electrical weapons: physiology, pathology, and law. Springer-Kluwer, New York, pp 153–162
69. Ho JD, Dawes DM, Reardon RF et al (2008) Echocardiographic evaluation of a TASER-X26 application in the ideal human cardiac axis. Acad Emerg Med 15:838–844
70. Ho J, Dawes D, Reardon R, Moscati R, Gardner R, Miner J (2008) Cardiac and diaphragm ECHO evaluation during TASER device drive stun. Australian Emergency Medicine Conference.
71. Bozeman WP (2009) Additional information on Taser safety. Ann Emerg Med 54:758–759
72. Panescu D, Kroll MW, Stratbucker RA (2008) Theoretical possibility of ventricular fibrillation during use of TASER neuromuscular incapacitation devices. Conf Proc IEEE Eng Med Biol Soc 2008:5671–5674
73. UL standard for electronic fence controllers (2009) In: Laboratories U (ed) Laboratories U, UL69. Vol UL69. 10th ed. Underwriters Laboratories, Northbrook
74. Nimunkar AJ, Webster JG (2009) Safety of pulsed electric devices. Physiol Meas 30:101–114
75. commission Ie (2006) Household and similar electrical appliances–safety–IEC 60335-2-76: particular requirements for an electric fence energizers. 2.1 ed. International Electrotechnical Commission, Geneva, Switzerland
76. Walcott GP, Kroll MW, Ideker RE (2011) Ventricular fibrillation threshold of rapid short pulses. Conf Proc IEEE Eng Med Biol Soc 2011:255–258
77. Rahko PS (2008) Evaluation of the skin-to-heart distance in the standing adult by two-dimensional echocardiography. J Am Soc Echocardiogr 21:761–764
78. Kunz SN, Calkins H, Adamec J, Kroll MW (2018) Cardiac and skeletal muscle effects of electrical weapons: a review of human and animal studies. Forensic Sci Med Pathol 14:358–366
79. Hamlin RL, Burton RR, Leverett SD, Burns JW (1975) Ventricular activation process in minipigs. J Electrocardiol 8:113–116
80. Kano M, Toyoshi T, Iwasaki S, Kato M, Shimizu M, Ota T (2005) QT PRODACT: usability of miniature pigs in safety pharmacology studies: assessment for drug-induced QT interval prolongation. J Pharmacol Sci 99:501–511

WIT.0043.0086.0311

81. Howe BB, Fehn PA, Pensinger RR (1968) Comparative anatomical studies of the coronary arteries of canine and porcine hearts. I. Free ventricular walls. Acta Anat (Basel) 71:13–21
82. Panescu D, Kroll M, Brave M (2014) Limitations of animal electrical cardiac safety models. Conf Proc IEEE Eng Med Biol Soc 2014:6483–6486
83. Brave MA, Lakkireddy DR, Kroll MW, Panescu D (2016) Validity of the small swine model for human electrical safety risks. Conf Proc IEEE Eng Med Biol Soc 2016:2343–2348
84. Dennis AJ, Valentino DJ, Walter RJ et al (2007) Acute effects of TASER X26 discharges in a swine model. J Trauma 63:581–590
85. Stopyra JP, Winslow JE, Fitzgerald DM, Bozeman WP (2017) Intracardiac electrocardiographic assessment of precordial TASER shocks in human subjects: a pilot study. J Forensic Legal Med 52:70–74
86. Dawes DM, Ho JD, Reardon RF, Miner JR (2010) The cardiovascular, respiratory, and metabolic effects of a long duration electronic control device exposure in human volunteers. Forensic Sci Med Pathol 6:268–274
87. Ho JD, Dawes DM, Reardon RF et al (2011) Human cardiovascular effects of a new generation conducted electrical weapon. Forensic Sci Int 204:50–57
88. Levine SD, Sloane CM, Chan TC, Dunford JV, Vilke GM (2007) Cardiac monitoring of human subjects exposed to the taser. J Emerg Med 33:113–117
89. Vilke GM, Sloane C, Levine S, Neuman T, Castillo E, Chan TC (2008) Twelve-lead electrocardiogram monitoring of subjects before and after voluntary exposure to the Taser X26. Am J Emerg Med 26:1–4
90. Kroll MW, Lakkireddy DR, Stone JR, Luceri RM (2014) TASER electronic control devices and cardiac arrests: coincidental or causal? Circulation 129:93–100
91. Zima E, Gergely M, Soos P et al (2006) The effect of induction method on defibrillation threshold and ventricular fibrillation cycle length. J Cardiovasc Electrophysiol 17:377–381
92. Raval M, Wetli C (1995) Sudden death from cocaine-induced excited delirium: an analysis of 45 cases. Am J Clin Pathol 104:329
93. Nanji AA, Filipenko JD (1984) Asystole and ventricular fibrillation associated with cocaine intoxication. Chest 85:132–133
94. Kroll MW, Walcott GP, Ideker RE et al (2012) The stability of electrically induced ventricular fibrillation. Conf Proc IEEE Eng Med Biol Soc 2012:6377–6381
95. Biegelmeier G, Lee WR (1980) New considerations on the threshold of ventricular fibrillation for a.c.shocks at 50~60 Hz. IEE Proc 127(Pt. A):103–110
96. Biegelmeier (1987) Effect of current passing through the human body and the electrical impedance of the human body: A guide to IEC-Report 469. ETZ, VDE,-Verlag, Berlin
97. Sharma AD, Fain E, O'Neill PG et al (2004) Shock on T versus direct current voltage for induction of ventricular fibrillation: a randomized prospective comparison. Pacing Clin Electrophysiol 27:89–94
98. Weismuller P, Richter P, Binner L et al (1992) Direct current application: easy induction of ventricular fibrillation for the determination of the defibrillation threshold in patients with implantable cardioverter defibrillators. Pacing Clin Electrophysiol 15:1137–1143
99. Frame R, Brodman R, Furman S et al (1992) Clinical evaluation of the safety of repetitive intraoperative defibrillation threshold testing. Pacing Clin Electrophysiol 15:870–877
100. Haouzi P, Ahmadpour N, Bell HJ et al (2010) Breathing patterns during cardiac arrest. J Appl Physiol (1985) 109:405–411
101. Zuercher M, Ewy GA, Hilwig RW et al (2010) Continued breathing followed by gasping or apnea in a swine model of ventricular fibrillation cardiac arrest. BMC Cardiovasc Disord 10:36
102. Clark JJ, Larsen MP, Culley LL, Graves JR, Eisenberg MS (1992) Incidence of agonal respirations in sudden cardiac arrest. Ann Emerg Med 21:1464–1467
103. Kroll MW, Fish RM, Calkins H, Halperin H, Lakkireddy D, Panescu D (2012) Defibrillation success rates for electrically-induced fibrillation: hair of the dog. Conf Proc IEEE Eng Med Biol Soc 2012:689–693

WIT.0043.0086.0312

104. Main F (2005) Taser killed man, pathologist finds medical examiner's ruling on drug suspect 1st to blame stun gun. Chicago Sun-Times, Chicago, IL
105. Jeffers G (2004) Medical examiner's sons charged; FBI agent beaten, city cop assaulted. Chicago Tribune, Chicago, IL
106. Ferris LP, King BG, Spence PW, Williams HB (1936) Effect of electric shock on the heart. Electr Eng 55:498–515
107. Roy OZ, Park GC, Scott JR (1977) Intracardiac catheter fibrillation thresholds as a function of the duration of 60 Hz current and electrode area. IEEE Trans Biomed Eng BME-24:430–435
108. Antoni H (1985) Pathophysiological basis of ventricular fibrillation. In: Bridges JF, Ford GL, Sherman IA, Vainberg M (eds) Electrical shock safety criteria. Pergammon Press, New York, pp 33–43
109. Jacobsen J, Buntenkotter S, Reinhard HJ (1975) Experimental studies in pigs on mortality due to sinusoidal and phase-controlled alternating and rectified currents (author's transl). Biomed Tech (Berl) 20:99–107
110. Scott JR, Lee WR, Zoledziowski S (1973) Ventricular fibrillation threshold for AC shocks of long duration, in dogs with normal acid-base state. Br J Ind Med 30:155–161
111. Chilbert M (1998) Standards and rationale. In: Reilly J (ed) Applied bioelectricity: from electrical stimulation to electrical pathology. Springer, New York, pp 454–501
112. Swerdlow CD, Olson WH, O'Connor ME, Gallik DM, Malkin RA, Laks M (1999) Cardiovascular collapse caused by electrocardiographically silent 60-Hz intracardiac leakage current. Implications for electrical safety. Circulation 99:2559–2564
113. Link MS, Wang PJ, Pandian NG et al (1998) An experimental model of sudden death due to low-energy chest-wall impact (commotio cordis). N Engl J Med 338:1805–1811
114. Link MS, Maron BJ, Wang PJ, Vander Brink BA, Zhu W, Estes NA 3rd (2003) Upper and lower limits of vulnerability to sudden arrhythmic death with chest-wall impact (commotio cordis). J Am Coll Cardiol 41:99–104
115. Link MS, Estes NA 3rd (2007) Mechanically induced ventricular fibrillation (commotio cordis). Heart Rhythm 4:529–532
116. Geddes LA, Roeder RA (2005) Evolution of our knowledge of sudden death due to commotio cordis. Am J Emerg Med 23:67–75
117. Russell S (2005) Heart expert warns about using Tasers. San Fransisco Chronicle, San Fransisco
118. Garay A (2004) As orders soar, concern over stun guns soar. Herald_Journal, Spartanburg, SC
119. Schlosberg M (2005) Stun gun fallacy: how the lack of Taser regulation endangers lives
120. Hou CJ, Chang-Sing P, Flynn E et al (1995) Determination of ventricular vulnerable period and ventricular fibrillation threshold by use of T-wave shocks in patients undergoing implantation of cardioverter/defibrillators. Circulation 92:2558–2564
121. DiMaio T, DiMaio VJM (2006) Excited delirium syndrome cause of death and prevention. Taylor & Francis, Boca Raton
122. Pollanen MS, Chiasson DA, Cairns JT, Young JG (1998) Unexpected death related to restraint for excited delirium: a retrospective study of deaths in police custody and in the community. CMAJ 158:1603–1607
123. Allam S, Noble JS (2001) Cocaine-excited delirium and severe acidosis. Anaesthesia 56:385–386
124. Brice JH, Pirrallo RG, Racht E, Zachariah BS, Krohmer J (2003) Management of the violent patient. Prehosp Emerg Care 7:48–55
125. Wetli C (2006) Excited delirium. In: Chan R (ed) Sudden deaths in custody. Humana Press, Totawa, pp 99–112
126. Tabereaux PB, Walcott GP, Rogers JM et al (2007) Activation patterns of Purkinje fibers during long-duration ventricular fibrillation in an isolated canine heart model. Circulation 116:1113–1119
127. Allison JS, Qin H, Dosdall DJ et al (2007) The transmural activation sequence in porcine and canine left ventricle is markedly different during long-duration ventricular fibrillation. J Cardiovasc Electrophysiol 18:1306–1312

WIT.0043.0086.0313

128. Mischke K, Schimpf T, Knackstedt C et al (2008) Efficacy of transesophageal defibrillation in ventricular fibrillation of long duration. Am J Emerg Med 26:287–290
129. Veltmann C, Borggrefe M, Schimpf R, Wolpert C (2007) Fatal inappropriate ICD shock. J Cardiovasc Electrophysiol 18:326–328
130. Adams R (1955) Case of ventricular fibrillation of long duration with recovery; lessons from six cases in prevention and treatment. J Am Med Assoc 158:1026–1030
131. Kroll MW, Panescu D, Carver M, Kroll RM, Hinz AF (2009) Cardiac effects of varying pulse charge and polarity of TASER(R) conducted electrical weapons. Conf Proc IEEE Eng Med Biol Soc 1:3195–3198
132. Lakkireddy D, Wallick D, Verma A et al (2008) Cardiac effects of electrical stun guns: does position of barbs contact make a difference? Pacing Clin Electrophysiol 31:398–408
133. Nanthakumar K, Billingsley IM, Masse S et al (2006) Cardiac electrophysiological consequences of neuromuscular incapacitating device discharges. J Am Coll Cardiol 48:798–804
134. Roy OZ, Scott JR, Park GC (1976) 60-Hz ventricular fibrillation and pump failure thresholds versus electrode area. IEEE Trans Biomed Eng 23:45–48
135. Hinz A. Ventricular fibrillation induction from long-term cardiac capture from a TASER electronic control device. In preparation
136. Nimunkar A, Wu J, O'Rourke A, Huebner S, Will J, Webster J (2010) Ventricular fibrillation and blood chemistry after multiple Tasering of Pigs. Physiol Meas
137. International Electrotechnical Commission (1988) Medical electrical equipment, part 1: general requirement for safety. International Electrotechnical Commission, Geneva, Switzerland
138. Cao M, Shinbane JS, Gillberg JM, Saxon LA, Swerdlow CD (2007) Taser-induced rapid ventricular myocardial capture demonstrated by pacemaker intracardiac electrograms. J Cardiovasc Electrophysiol 18:876–879
139. Haegeli LM, Sterns LD, Adam DC, Leather RA (2006) Effect of a Taser shot to the chest of a patient with an implantable defibrillator. Heart Rhythm 3:339–341
140. Vanga SR, Bommana S, Kroll MW, Swerdlow C, Lakkireddy D (2009) TASER conducted electrical weapons and implanted pacemakers and defibrillators. Conf Proc IEEE Eng Med Biol Soc 1:3199–3204
141. Nelson R, Gilman B, Shapland J, Lehmann M (1996) Leads for the ICD. In: Kroll M, Lehmann M (eds) Implantable cardioverter-defibrillator therapy: the engineering-clinical interface. Kluwer Academic Publishers, Norwell, MA, pp 173–204
142. Vanga SR, Bommana S, Kroll MW, Swerdlow C, Lakkireddy D (2009) TASER conducted electrical weapons and implanted pacemakers and defibrillators. Conf Proc IEEE Eng Med Biol Soc 2009:3199–3204
143. Koplan BA, Gilligan DM, Nguyen LS, Lau TK, Thackeray LM, Berg KC (2008) A randomized trial of the effect of automated ventricular capture on device longevity and threshold measurement in pacemaker patients. Pacing Clin Electrophysiol 31:1467–1474
144. Lakkireddy D, Khasnis A, Antenacci J et al (2007) Do electrical stun guns (TASER-X26) affect the functional integrity of implantable pacemakers and defibrillators? Europace 9:551–556
145. Khaja A, Govindarajan G, McDaniel W, Flaker G (2011) Cardiac safety of conducted electrical devices in pigs and their effect on pacemaker function. Am J Emerg Med 29:1089–1096
146. Karch S (2009) Stimulant abuse and sudden cardiac death. In: Kroll M, Ho J (eds) TASER® electronic control devices: physiology, pathology, and law. Springer, New York, pp 315–325
147. Karch SB, Green GS, Young S (1995) Myocardial hypertrophy and coronary artery disease in male cocaine users. J Forensic Sci 40:591–595
148. Awtry EH, Philippides GJ (2010) Alcoholic and cocaine-associated cardiomyopathies. Prog Cardiovasc Dis 52:289–299
149. Pozner CN, Levine M, Zane R (2005) The cardiovascular effects of cocaine. J Emerg Med 29:173–178
150. Qureshi AI, Suri MF, Guterman LR, Hopkins LN (2001) Cocaine use and the likelihood of nonfatal myocardial infarction and stroke: data from the third National Health and nutrition examination survey. Circulation 103:502–506

WIT.0043.0086.0314

151. Karch SB (1996) Cardiac arrest in cocaine users. Am J Emerg Med 14:79–81
152. Schwartz AB, Boyle W, Janzen D, Jones RT (1988) Acute effects of cocaine on catecholamines and cardiac electrophysiology in the conscious dog. Can J Cardiol 4:188–192
153. Schwartz AB, Janzen D, Jones RT (1989) Electrophysiologic effects of cocaine on the canine ventricle. J Cardiovasc Pharmacol 13:253–257
154. Tisdale JE, Shimoyama H, Sabbah HN, Webb CR (1996) The effect of cocaine on ventricular fibrillation threshold in the normal canine heart. Pharmacotherapy 16:429–437
155. Lakkireddy D, Wallick D, Ryschon K et al (2006) Effects of cocaine intoxication on the threshold for stun gun induction of ventricular fibrillation. J Am Coll Cardiol 48:805–811
156. Inoue H, Saihara S, Toda I, Sugimoto T (1989) Summation and inhibition by ultrarapid train pulses in dogs: effects of frequency and duration of trains, lidocaine, and beta blockade. Pacing Clin Electrophysiol 12:1777–1786
157. Mitrani RD, Miles WM, Klein LS, Zipes DP (1998) Phenylephrine increases T wave shock energy required to induce ventricular fibrillation. J Cardiovasc Electrophysiol 9:34–40
158. Han J, Garciadejalon P, Moe GK (1964) Adrenergic effects on ventricular vulnerability. Circ Res 14:516–524
159. McDaniel W, Stratbucker R, Smith R (2000) Surface application of TASER stun guns does not cause ventricular fibrillation in canines. Proc Annu Int Conf IEEE Eng Med Biol Soc
160. Wilkinson D (2005) PDSB further evaluation of TASER devices. Publication No. 19/2005. http://www.homeoffice.gov.uk/docs3/psdb09-02.pdf
161. Dawes DM, Ho JD, Cole JB et al (2010) Effect of an electronic control device exposure on a methamphetamine-intoxicated animal model. Acad Emerg Med 17:436–443
162. Valentino DJ, Walter RJ, Dennis AJ et al (2008) Acute effects of MK63 stun device discharges in miniature swine. Mil Med 173:167–173
163. Schipke JD, Heusch G, Sanii AP, Gams E, Winter J (2003) Static filling pressure in patients during induced ventricular fibrillation. Am J Physiol Heart Circ Physiol 285:H2510–H2515
164. Ewy GA, Zuercher M, Hilwig RW et al (2007) Improved neurological outcome with continuous chest compressions compared with 30:2 compressions-to-ventilations cardiopulmonary resuscitation in a realistic swine model of out-of-hospital cardiac arrest. Circulation 116:2525–2530
165. DiMaio V, DiMaio T (2009) Excited delirium syndrome. In: Kroll M, Ho J (eds) TASER conducted electrical weapons: physiology, pathology, and law. New York, Springer-Kluwer, pp 347–363
166. Park KS, Korn CS, Henderson SO (2001) Agitated delirium and sudden death: two case reports. Prehosp Emerg Care 5:214–216
167. Stratton SJ, Rogers C, Brickett K, Gruzinski G (2001) Factors associated with sudden death of individuals requiring restraint for excited delirium. Am J Emerg Med 19:187–191
168. Swerdlow CD, Fishbein MC, Chaman L, Lakkireddy DR, Tchou P (2009) Presenting rhythm in sudden deaths temporally proximate to discharge of TASER conducted electrical weapons. Acad Emerg Med 16:726–739
169. Wu J, Sun H, O'Rourke A et al (2007) Taser dart-to-heart distance that causes ventricular fibrillation in pigs. IEEE Trans Biomed Eng 54:503–508
170. Walter RJ, Dennis AJ, Valentino DJ et al (2008) TASER X26 discharges in swine produce potentially fatal ventricular arrhythmias. Acad Emerg Med 15:66–73
171. Wu J, Sun H, O'Rourke A et al (2008) Taser blunt dart-to-heart distance causing ventricular fbrillation in pigs. IEEE Trans Biomed Eng 55(12):2768–2771
172. Dalziel CF, Lee WR (1968) Reevaluation of lethal electric currents. IEEE Trans Indust General Appl IGA-4:467–476
173. Kroll MW, Calkins H, Luceri RM, Graham M, Heegaard W (2008) Sensitive swine and TASER electronic control devices. Acad Emerg Med 15:695–696
174. Pak HN, Kim YH, Lim HE et al (2006) Role of the posterior papillary muscle and purkinje potentials in the mechanism of ventricular fibrillation in open chest dogs and Swine: effects of catheter ablation. J Cardiovasc Electrophysiol 17:777–783

WIT.0043.0086.0315

Care of Detainees

9

Margaret M. Stark, Alex J. Gorton, and Patrick Chariot

Learning Objectives

Demonstrate the ability to manage the common presentations of physical illness (asthma, epilepsy, diabetes) in custody.

Describe the safe administration of medication in custody settings.

Explain the management of specific individuals in custody: children, those suspected of terrorist offences, suspected internal drug traffickers.

Assess detainees with mental illness at risk of self-harm.

Introduction

Healthcare professionals (HCPs) may be requested by the police to assess the fitness for detention in police custody of adults and juveniles arrested in connection with an offense; those detained by immigration; individuals requiring a place of safety (children, vulnerable adults, and the mentally ill); remanded or sentenced (convicted) prisoners; or those detained under terrorism legislation. In some areas they may also be asked to assess complainants/complainers of crime.

Detainees in police custody may have to be interviewed regarding their involvement in an offense and possibly further detained overnight for court; guidance may therefore have to be given to custody staff regarding their care.

M. M. Stark · A. J. Gorton (✉)
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK
e-mail: assistreg@fflm.ac.uk

P. Chariot
Department of Forensic and Social Medicine, Hôpital Jean-Verdier (AP-HP), Bondy, France

France Institut de Recherche Interdisciplinaire Sur Les Enjeux Sociaux (IRIS), UMR 8156-997, UFR SMBH, Sorbonne Paris Cité, Université Paris 13, Villetaneuse, France

© Springer Nature Switzerland AG 2020

M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_9

WIT.0043.0086.0316

There are a variety of terms used to describe the individuals that HCPs may care for in the custody setting. These terms include patients, detainees, detained person (DP), suspects, arrestees, clients, or even customers. It is helpful to think carefully about the language used as this may impact on the direction an assessment takes. The authors tend to prefer to utilise the terms patient or detainee. The first term emphasises a clinical relationship, whilst the second reminds HCPs that the individuals in front of them are in an unusual situation for most patients. They have lost a degree of autonomy by being brought into custody, are often under increased stress, and may be suspicious of authority figures. Bearing these factors in mind can only enhance the quality of the clinical assessment being undertaken. Throughout the rest of this chapter, individuals in police custody will be referred to as a detainee.

Although various laws govern the powers of the police in different jurisdictions [1], the basic principles remain the same [2–4]. It is essential that custody staff perform a risk assessment when an individual is detained in police custody [5].

Significant health concerns among police detainees have now been recognised [6–8]. In recent years the assessment of the health needs of detainees in police custody in England and Wales has indicated that mental health problems including substance misuse and physical conditions are highly prevalent among the custody population requiring both emergency and routine care [9]. Mental health concerns and depression account for up to 20% of patients assessed in London [6, 10]. The importance of recognising dual diagnosis (comorbidity) has also been highlighted in this population [11]. In a study in The Netherlands of detainees obtaining medical attention in police custody almost 50% were diagnosed with mental health problems with substance abuse as the leading reason for the consultation. The authors concluded that the magnitude of mental health problems among police detainees has significant implications for the qualifications of police health staff and those provide healthcare in the police setting especially concerning substance abuse [12]. In Germany a study of medical examinations to determine whether a person is fit to be detained in custody indicated in the majority of cases problems with acute alcohol intoxication or drug withdrawal, trauma, and internal or mental diseases. In 40% of cases were detainees found to be unconditionally fit for detention and just under 10% the person was found unfit to be detained in custody [13].

An evaluation of the efficacy of the current risk assessment screening in London, UK, found that a high prevalence of a range of health disorders were not identified [14]. A modified screening process was developed and demonstrated improvements in the rate of detection of significant health morbidity by custody officers while also reducing the number of detainees needlessly referred for the attention of HCP [15].

Detainees who are identified as:

- Suffering from a mental illness
- Suffering from a physical illness
- Needing medical attention
- Having sustained any injuries (either at or prior to arrest)

WIT.0043.0086.0317

should be referred for clinical attention as soon as possible, whether or not the detainee requests an assessment [16]. Furthermore if the detainee's behaviour gives rise to concern, medical advice should be sought [17].

Custody staff should also seek medical advice where [16]:

- a detainee requests a medical assessment
- requires medication
- if they suspect the detainee is suffering from an infectious disease and they need advice
- a detainee has in their possession or claims to need, medication for a heart condition, diabetes, epilepsy or a comparable condition.

In some areas, when a person under arrest is discharged from the hospital and taken to a police station, a HCP will be called for advice as to whether the detainee is fit to be detained and fit to be interviewed.

In 2003, the term healthcare professional was introduced in the UK. It refers to a: Clinically qualified person, who is working within the scope of practice as determined by their relevant professional body and who is registered with that body as competent to practice [18]. This term has been used in the Codes of Practice of the Police and Criminal Evidence Act 1984 (PACE) since 2003. Since its introduction the majority of teams working within police custody in the UK are multidisciplinary, comprising of nurses, paramedics and doctors. It is essential that any initial training is to the required standard and continuing professional development is maintained [19, 20]. National Occupational Standards have been defined for the healthcare service provision in police custody in the UK [21] and there are also French national standards available [22].

Clinicians working in police custody, a lone and autonomous role professionally, should be supported by robust clinical governance procedures to ensure competence in this high-risk environment [23, 24]. Nurses and paramedics working in this setting are expected to make clinical decisions and risk assess at a level broadly equivalent to advanced nurse practitioners in Emergency Departments and therefore should receive similar training and qualifications to practice independently. The quality of current healthcare provision in the police custodial environment in the UK is extremely variable and there is a need for improvements to ensure that the HCPs working in this area are competent to provide a quality of care that is of equivalence to that of the wider community.

The health and welfare of detainees should be paramount, with any forensic considerations of secondary importance [25]. The role of any healthcare professional in this field, as in any other healthcare situation, should be independent, professional, courteous, and non-judgmental [26].

If the police bring a detainee to the emergency department or if the HCP is contacted by custody officers to attend the police station, it is important to find out the reason why a clinical assessment is required. It is essential that the HCP is properly briefed by the custody staff or investigating officer (Table 9.1).

WIT.0043.0086.0318

Informed consent from the detainee should be obtained after explaining the reason for the examination. The Faculty of Forensic and Legal Medicine of the Royal College of Physicians of London have several proform as for forensic examinations and for obtaining consent that are readily available to all HCPs (www.fflm.ac.uk).

It should be stressed that the detainee is not obliged to consent to an assessment. It should also be stressed that there is no right to absolute confidentiality and it should be explained that this is no different to any other healthcare setting where disclosures may be required. Notwithstanding the latter, custody staff should only be given the information necessary for them to care for detainees while they are in police detention. Such information would usually include details of any medical concerns, required observations, medication, and dietary requirements. It may be useful to explain that although generally medical information will remain confidential (with the caveats above) information may be shared to keep the detainee safe whilst in custody (see Chap. 2).

It is essential that a full clinical assessment is performed and detailed contemporaneous notes made. Obtaining an accurate account of a detainee's drug history, including prescribed and illicit drugs, can be difficult. A useful aid to obtaining a better drug history has been described (Table 9.2) [27].

Table 9.1 Briefing on arrival

Discuss reason for being called (physical or mental illness/medication/injuries)
Obtain details from the custody record and any risk assessment performed by police personnel or other healthcare professional, including the reason for arrest (may be related to drugs/mental illness)
Ask the arresting officer for information regarding the circumstances of arrest (concerns regarding behaviour/use of force)
Other information may be obtained from relatives/friends/family doctor/hospital/police national computer/database
Whether any force was used: handcuffs, incapacitant spray, batons, conducted electrical weapon, etc.
Whether anything found in the detainee's property or when searched (medication, illicit drugs)
Any concerns about detainee's behaviour or personal safety
Is the request to assess fitness for detention only?
The anticipated length of detention, if known, is the detainee likely to be in custody overnight
Is the detainee to be interviewed?
Are any forensic samples required?

Table 9.2 The drugs mnemonic from Hocking et al.

Doctor	Any medication prescribed by a registered medical or dental practitioner
Recreational	Tobacco, alcohol, illicit drugs, anabolic steroids, etc.
User	Over the counter purchases/alternative medicine/homeopathy
Gynaecological	Contraceptive or hormone replacement treatment
Sensitivities	Including the exact nature of the response

The length of time a detainee spends in custody is important in determining a management plan. Many conditions that would not cause an issue during a short stay may require more complex interventions if detainees spend longer in custody. In the last few years the average duration of a detainee's custody stay has gradually increased in the UK from 6 h in the 1990s [28] to 11 h in 2015 [29], posing increasing challenges to the HCPs working in the setting. There is no evidence of an increased duration of detention in other countries, including France. There is also a general shift towards police forces in the UK preferring to have a HCP on site in custody.

The above two factors have contributed to a shift in focus from simply keeping someone alive during their stay in custody to ensuring that a more holistic approach is taken [30]. Increasingly there is an emphasis on liaison with appropriate services (including substance misuse teams, housing, women's pathfinder schemes, and criminal justice mental health liaison teams). By encouraging engagement with these services the aim is to reduce reoffending and divert appropriate individuals away from the criminal justice pathway.

Administration of Medication

As previously described the standard of clinical treatment in custody should be equivalent to that provided in non-custodial settings. Thus, wherever safe and practical a detainee's medication should be continued whilst in custody to ensure their safety and wellbeing. In some cases, however, it may be appropriate to adjust doses of existing regimes or even withhold them following a clinical assessment. Wherever possible this should be done in consultation with the detainee.

Historically some HCPs and organisations have imposed a '6-hour rule' barring administration of medication to detainees for the initial period after arriving in custody. This is clearly inappropriate and decisions to administer or withhold medication based on perceived risks of pre-arrest ingestions should be made on a case by case basis following a clinical assessment of the detainee. The same applies to considering risks and benefits of administering medication to detainees under the influence of drugs or alcohol.

In addition to previously prescribed medication, detainees may require additional treatment whilst in custody such as analgesia for headaches or minor injuries, or medication for symptoms of withdrawal from alcohol or drugs.

HCPs should ensure that clear, detailed information regarding any medication administered whilst the detainee is in police custody (including the dose, times of administration, and special instructions) are given to custody staff [31] and entered on the custody record.

Nurses and paramedics may use Patient Group Directions which are defined as:

> a written instruction for the supply and/or administration of a licensed medicine (s) in an identified clinical situation signed by a doctor or dentist and a pharmacist. It applies to groups of patients who may not be individually identified before presenting for treatment [32].

Prescribers (usually forensic physicians, occasionally nurse prescribers) may prescribe medication for detainees, either via private prescriptions, or from stock held by the police or outsourced provider. Where medication is prescribed a sufficient quantity of medication should be prescribed to cover the anticipated time in detention. With embedded models of healthcare this is likely to be administered by the resident HCP.

Medications may be left by prescribers in appropriately labelled individual containers or sachets. Officers can, with appropriate safeguards, then supervise the detainee's self-administration of prescribed medication.

It is vital that there is a safe regime for the administration of medication to detainees. Records should be kept showing that the prescribed medication is given at the correct time and that any unused medicines are accounted for. Medication should be stored in a locked cupboard. Ideally, police personnel should ensure that when administering medication, they are accompanied by another person as a witness and the detainee should be observed taking the medication to prevent hoarding.

If detainees are arrested with medications on their persons, medical advice should be sought as to whether they should be allowed to self-administer this medication. It may be prudent for an assessment by a clinician to be performed either in the custody suite or in the local hospital prior to self-administration.

Medication brought with the detainee or collected from the home address should be checked to ensure that it has the correct name and dosage and that the quantity left is consistent with the date of issue. If there is doubt, checks should be made with the pharmacist, family doctor, or hospital, previous custody notes/computer log entries. If the medicine is unlabelled, it is preferable to issue a new prescription, especially with liquid preparations such as methadone. Consideration should be given to supervising injections such as insulin.

Illustrative Case *The HCP was asked to review a detainee who had been in custody for about 6 hours. She had been interviewed, charged, and was due in court the next day. She was known to be a heroin and crack/cocaine user with mental illness, on medication. The custody staff requested an assessment with regard to whether she required any medication. During the consultation with the HCP the detainee became increasingly drowsy. On direct (persistent) questioning the detainee said she had taken:*

- *Temazepam 10 mg x8 (prescribed 10 mg at night)*
- *Quetiapine 200 mg x6–7 (prescribed 200 mg each day)*
- *Tramadol 50 mg x10 (not normally prescribed)?Slow Release*

Examination revealed she was not fully alert but drowsy/rousable to voice, respiratory rate was 10 per minute, oxygen saturation 98% which fell to 94% on air, P87 decreased to 74 and BP 113/76 (possibly low). An emergency ambulance was called and she was transported to hospital for further assessment, observation and treatment for a suspected overdose.

Table 9.3 Additional Juvenile Risk Assessment (Gorton AJ)

Custody issues	Have you ever been in custody before? Do you understand why you're in custody? Does your parent/guardian know you're in custody? Do you feel safe whilst in custody?
Schooling	Are you in full time education? If no, how old were you when you left school, and why? What type of school do/did you attend? (Explore if they had any additional support, what type of class were they in? Where they bullied at school?
Relationships	What is your relationship like with your parents? (Are they able to talk to their parents if they are in difficulty? Is there any violence in the house? Are there issues with parental substance misuse?) Who lives with you at home/where are you living? (If in care, what type of housing? Who else is there? Are you coping in that environment?) Do you have friends who you can talk to if you are struggling? (If the HCP has any concerns regarding child sexual exploitation this may be an appropriate point to explore if these relationships are age appropriate.) Have you ever been at risk of, or suffered physical or sexual abuse? (Has anyone tried to touch you in a way that you weren't comfortable with? Would you know what to do/who to tell if someone did?)

Children in Custody

Increasingly, forces in the UK are requesting additional assessments for children (those under 18 years of age) in custody. This aims to identify any safeguarding issues at an early stage. In some countries, a medical examination is systematic for teenagers under 16 years [33, 34]. Although there are currently no formal recommendations as to what these assessments should contain, a suggested scheme is given in Table 9.3.

Conditions of Detention

The HCP should ensure that the conditions of detention are satisfactory with regard to the temperature, ventilation, and cleanliness of the detention cells, bedding, as well as the detainees personal hygiene, dietary needs, and fluids [4, 35]. The detainee should have access to food and fluids as appropriate and should also have a period of rest of 8 h during each 24 h [16].

Medical Problems

A number of common medical problems are encountered when the HCP is assessing fitness to be detained in police custody. These are now considered in more detail (Table 9.4). Substance misuse including alcohol, is fully discussed in Chap. 12.

WIT.0043.0086.0322

Table 9.4 Common medical problems

Epilepsy
Asthma
Diabetes
Heart disease
Hypertension
Sickle cell disease
Injuries
Infectious diseases
Mental health
Self-harm
Claustrophobia
Pregnancy
Detainees who refuse nourishment
Substance misuse including alcohol

Epilepsy

Many detainees state that they have "fits" and there is a need to differentiate, if possible, between epilepsy and seizures related to withdrawal from alcohol or benzodiazepines; it is also important to consider hypoglycemia.

The type of seizure should be ascertained together with the frequency and date of the most recent one [36]. Details of medication should be obtained including time of the last dose. Treatment may be given if the detainee is in possession of legitimate medication; however, if he or she is intoxicated with alcohol or other central nervous system depressant drugs, treatment should generally be deferred until the detainee is no longer intoxicated.

The custody staff should have basic first aid skills to enable them to deal with medical emergencies such as what to do when someone has a fit. If a known epileptic has a seizure while in custody, a medical assessment is advisable, although there is probably no need for the detainee to be transferred to hospital. However, if a known epileptic has more than one fit or a detainee has a "first-ever" fit while in custody, then transfer to a hospital is recommended.

Convulsive Status Epilepticus (CSE) is a medical emergency, defined by tonic clonic seizures persisting (or recurring without recovery) beyond 5 min, with an increasing risk of morbidity and mortality if not controlled by 30 min. Treatment should be initiated at 5 min [37].

In custody, HCPs should have access to rectal diazepam or buccal midazolam for prolonged or repeated seizures [38]. Any detainee requiring parenteral medication to control fits should be observed for a period in the hospital.

Asthma

Asthma is a common condition. A careful history, including asking about recent exacerbations and hospital admissions, and objective recording of simple severity

WIT.0043.0086.0323

markers such as pulse and respiratory rate, blood pressure, speech, chest auscultation, mental state, and peak expiratory flow rate should identify those patients who require hospitalization or urgent treatment [39, 40]. Asthmatics should be allowed to retain bronchodilators, after a risk assessment, for the acute relief of bronchospasm, e.g. salbutamol or the equivalent, with instructions left with the custody sergeant on other treatment if required. Any inhaler should be checked before being left with the detainee.

Custody staff may confuse hyperventilation for asthma in the custodial setting which may be feigned to attempt diversion. The HCP should perform a detailed assessment regarding management to exclude other causes such as infection, head injury, diabetic ketoacidosis, and other lung diseases. If the detainee is very anxious and has a panic attack, this would suggest the need for a further mental state assessment to exclude a psychiatric condition. Often reassurance is all that is required to calm the detained person and efforts should be made to slow the breathing.

Illustrative Case *A 35 year old female was arrested for theft from a shop. The police risk assessment stated that she had a 'blood clot—lung and right leg' and was on regular meds. The patient told the HCP that she had been diagnosed with a pulmonary embolus (PE) in the local hospital three weeks ago. She was supposed to be taking warfarin but was unaware of the dose and last took it 5 days prior to this assessment. Her last blood check for warfarin was 2 weeks ago. She had been asthmatic since childhood and used both salbutamol and steroid inhalers. Over the past year she had been admitted to hospital for pneumonia and severe asthma.*

Physical examination revealed that she was alert and cooperative. Her respiratory rate was 20 per minute and there was an audible wheeze. Her pulse rate was 103 beats per minute, BP 117/78, temperature 37.8, O2 91% on air. There was a pleural rub to the back of the right side of the chest and wheezes throughout the chest. The right calf was swollen and tender.

The HCP concluded that the female was not fit to be detained and referred her to hospital for treatment for suspected deep vein thrombosis, PE and an acute exacerbation of her asthma.

Diabetes

It is desirable to obtain a baseline blood glucose measurement (using a blood glucose meter) when diabetic detainees are initially assessed and for this to be repeated, if necessary, throughout the period of detention, especially for insulin dependent diabetics. There should also be access to either urine strips or specific meters to determine ketones in the event of detainees having an elevated blood glucose.

Consideration should be given to reducing the normal insulin dose as the carbohydrate load of many custody meals is relatively poor and it may be more appropriate to dose insulin post-food rather than pre-food in the custody setting due to risk of food refusal and subsequent hypoglycaemia. It may also be safer to allow the

WIT.0043.0086.0324

blood glucose to run a little higher than usual in this setting as risks associated with hyperglycaemia are long term rather than short term.

Insulin pump therapy also known as Continuous Subcutaneous Insulin Infusion is used in the treatment of insulin dependent diabetes. These infusion pumps can pose a particular difficulty in custody. The HCP should always assess the detainee and consideration given to appropriate levels of supervision, based on the overall risk assessment (likely to be constant supervision) [41].

Oral hypoglycemics and insulin should be continued and consideration given to supervision of insulin injections. Regular meals and snacks should be provided, and all diabetic patients should have access to rapidly absorbed carbohydrate-rich food. HCPs should also be alert to the potential for illicit substances to have been substituted for insulin in devices.

Hypoglycemia is easily treated [42]. If the blood glucose is less than 4 mmol/L in a conscious person, oral carbohydrate should be given, this may include usage of glucose gels or tablets. In an unconscious or restless detainee, an intravenous bolus of 20% dextrose solution may be given, however this is often not practical in the custody setting; therefore, glucagon can be given intramuscularly followed by 40% glucose gel orally or applied to the inside of the mouth. Glucagon can give an initial glycemic response even in a patient with alcoholic liver disease [43]; however, it should be remembered that in severe alcoholics with depleted glycogen stores, the response to glucagon may be reduced or ineffective.

Heart Disease

The main problems encountered include a history of hypertension, angina, cardiac failure, and stable dysrhythmias. Basic cardiovascular assessment may be required including examination of the pulse and blood pressure together with auscultation of the heart and lungs for evidence of murmurs or cardiac failure. Prescribed medication should be continued, and detainees should be allowed access to glyceryl trinitrate (GTN) spray. Chest pain that does not settle with GTN will require further assessment in the hospital [44].

Where patients are suspected of having an Acute Coronary Syndrome (ACS) HCPs should manage appropriately with aspirin 300 mg crushed or chewed as soon as possible, sublingual GTN spray, and oxygen, if saturations are less than 94% on air. It should be possible to provide these interventions in most custody settings whilst awaiting transfer to hospital [45].

Hypertension

This is often a concern, however HCPs should recognise that in the majority of cases the absolute value of blood pressure is not a primary concern, rather, it is the trend in values that matters.

Many detainees will have elevated blood pressure secondary to either exertion or anxieties relating to their situation. In the first instance, in an asymptomatic patient, the clinician should consider repeating the blood pressure manually.

HCPs should, however be alert to more concerning signs and symptoms which may indicate a need for further assessment. These include [46]:

- Accelerated hypertension (BP higher than 180/110 mmHg) with:
  - Papilledema
  - And/or retinal haemorrhage
- Suspected pheochromocytoma (labile or postural hypotension, headache, palpitations, pallor and diaphoresis)
- Rapidly increasing blood pressure

In the majority of cases, however, for detainees who are noted to have elevated blood pressure with no concerning sequelae they can simply be advised to arrange follow up with their own GP.

Sickle Cell Disease

Most detainees with sickle cell disease are aware of their illness and the symptoms to expect during an acute sickle cell crisis. Medical management in custody should not pose a problem unless there is an acute crisis, when hospital transfer may be required. Factors which may precipitate a crisis include:

- cold and rapid cooling after exercise e.g. following pursuit at arrest
- stress
- infection
- lack of analgesia
- dehydration

Conditions of detention should be suitable, with adequate heating and access to fluids and analgesics as appropriate.

General Injuries

Detailed documentation of injuries is an important and common request. The injuries may have occurred prior to or during the arrest, and documentation of such injuries may form part of the investigation to refute counter allegations of assault.

A record of each injury as outlined in Chap. 4 should be made and basic first aid provided. Certain wounds may be treated with Steristrips or glue/skin adhesive in the police station, [47] although transfer to a hospital may be required for further assessment, e.g. wound toilet, suturing, X-rays.

WIT.0043.0086.0326

Head Injuries

Any suspected head injury should receive a detailed assessment [48]. The time, location, and nature of the injury should be ascertained from the detainee or from any witnesses who were present. The duration of any loss of consciousness and the behaviour since the injury should be noted.

Examination should include measurement of pulse and blood pressure, Glasgow Coma Scale [49] (Appendix 1), and neurologic assessment. The indications for hospital assessment include situations in which there are problems with the assessment of the patient or an increased risk of skull fracture or an intracranial bleed [50] and are illustrated in Fig. 9.1.

Ingestion of alcohol or drugs and relevant medical history should be ascertained. Although deaths in police custody are rare, head injuries accounted for 10% and substance abuse, including alcohol and drugs, accounted for 25% in a survey of such deaths between 1990 and 1997 in England and Wales [51]. These figures appear to be rising with 49% of deaths being in police custody in England and Wales related to substance misuse between 2004 and 2014 [52].

There should be a low threshold for referral to hospital, especially if a detainee with a head injury is also under the influence of alcohol and/or drugs.

If the detainee is to remain in custody, then instructions regarding the management of head-injured detainees should be provided both verbally and in writing to

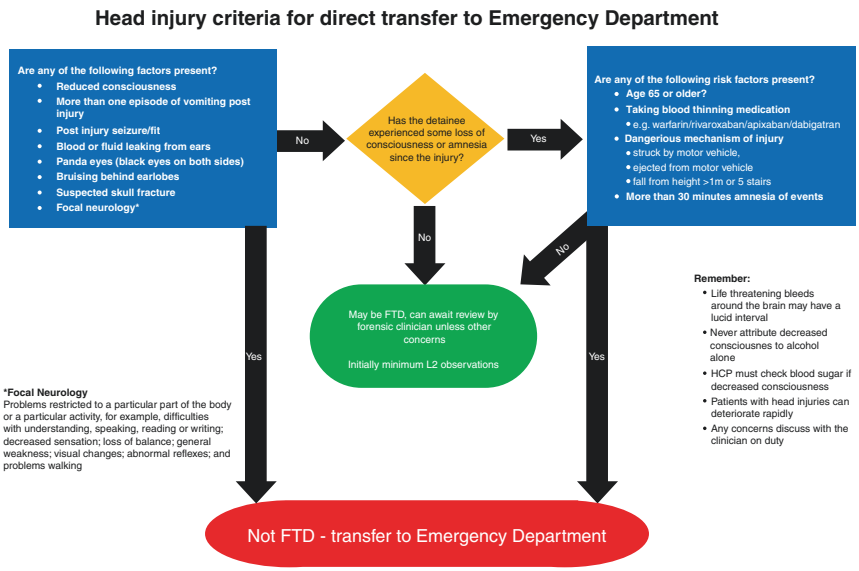


Fig. 9.1 Head injuries—Indications for hospital assessment

the custody staff and given to the detainee on release [53]. Police should be advised particularly that when checking a detainee's conscious level they are required to rouse and speak with the detainee, obtaining a sensible response (see Appendix 2).

Infectious Diseases

HCPs may be called to advise the police regarding infectious diseases. This subject is covered in Chap. 10. As the population in police custody could be seen as high risk for blood-borne viruses such as hepatitis and the human immunodeficiency virus [54] all detainees should be considered a potential risk, and observation of good clinical practice relating to body fluids, standard precautions, to avoid contamination is required.

Mental Health

General Psychiatric Problems

A significant proportion, around a third [8, 55] of detainees screened at custody will have some form of mental health condition. The police should be trained to recognize those detainees with mental health problems or intellectual disabilities (see Section "Intellectual Disabilities") at point of contact [5], but also on detention when carrying out a risk assessment [6]. When a psychiatric disorder is suspected, the custody staff should consider whether a HCP should be called to perform a full assessment, including mental state examination (Table 9.5) and mini-mental state examination (MMSE see Appendix 3) where appropriate to assess whether there is in fact any evidence of mental health problems.

Where a nurse or paramedic have concerns regarding the mental state of a detainee they should refer to the forensic physician for advice, or the criminal justice liaison& diversion service (CJLDS) who will then consider whether diversion from the criminal justice system is appropriate. If the detainee has committed a minor offense and there is only evidence of minor-to-moderate mental illness, treatment may be arranged in the community, in outpatients, or in the day hospital. If, however, the detainee is found to have an acute and severe mental illness, but has only committed a minor or moderate offense, then admission to the hospital for further assessment and treatment will be required either informally, or if necessary, formally. When the offense is more serious and there is evidence of probable mental illness needing further assessment, then the detainee may need to go before the court for such an assessment to be ordered.

Chronic stable mental health problems usually pose no specific problems for police detention, but may require specific safeguards when the detainee is to be interviewed by the police (see Chap. 11). Long-term medication should be continued.

WIT.0043.0086.0328

Table 9.5 Mental State Examination [56]

Appearance	Self-care, clothing Motor e.g. restlessness, over activity, or retardation Level of consciousness
Behaviour	Disinhibition, withdrawn, aggressive, Attitude to examiner—hostile, cooperative friendly
Speech	Form and content of speech—talkative, pressure of speech, retardation, mute Presence of thought disorder, flight of ideas
Mood/affect	Objective and subjective Depression, anxiety, elation, hopelessness
Thoughts/perceptions	Hallucinations Delusions
Cognition	Orientation Concentration attention Memory—short and long term
Insight	Understanding and acceptance of situation
Other considerations: Biological symptoms	Sleep, appetite, energy levels
Self-harm and suicidal ideation	History of self-harm, type of self-harm, current thoughts, intention, protective factors, plans
Harm to others	Thoughts, intent, previous harm to others

Detainees with attention deficit hyperactivity disorder (ADHD) and attention deficit disorder (ADD) may not be easily recognized by custody staff and yet because of confrontational behaviour may come to the attention of the police. ADHD is associated with early offending and repeat offending into adult life [57]. Detainees with autism and Asperger's syndrome, part of the autistic spectrum disorders (ASD), and other developmental conditions, may have difficulties in social situations and with communication in custody environment.

Substance Misuse and Mental Illness

Concurrent substance misuse and mental illness—"dual diagnosis" or "co-morbidity"—is an important consideration. Dual diagnosis refers to people with a severe mental illness (including schizophrenia, schizotypal and delusional disorders, bipolar affective disorder and severe depressive episodes with or without psychotic episodes) combined with misuse of substances (the use of legal or illicit drugs, including alcohol and medicine, in a way that causes mental or physical damage).

In the Epidemiologic Catchment Area (ECA) study, 29% of individuals with a lifetime history of any mental disorder (other than substance use) had a history of substance use (22% alcohol disorder and 15% a drug disorder) [58]. In a study [59] of patients accessing community mental health teams and substance misuse services in urban UK centres, 44% reported past-year problem drug use and/or harmful

alcohol use; 75% of drug service and 85% of alcohol service patients had a past-year psychiatric disorder. More recent studies have estimated prevalence rates of 20–37% in secondary mental health services and 6–15% in substance misuse settings in the UK [60]. Lifetime comorbidity in 1208 psychiatric patients diagnosed with schizophrenia in three European countries have also revealed prevalence rates of 19% in France, 21% in Germany, 35% in the United Kingdom [61].

There are a numbers of pathways to comorbidity [62]. There are those with a primary diagnosis of a major mental illness who have a secondary diagnosis of substance misuse that further affects their mental health. Such individuals may use drugs to relieve the adverse symptoms of their mental illness. Conversely, substance misuse may be the primary diagnosis leading to psychiatric complications and mental illness—for example, depression with suicidal ideation may occur amongst substance misusers. On occasions, mental illness and substance misuse may coexist together, such as when an underlying traumatic experience results in both substance misuse and posttraumatic stress disorder.

Self-Harm

Research has shown that episodes of self-harm typically occur soon after arrest. Particular risk factors include a previous history of self-harming and a past psychiatric history [63, 64]. Medical assessments should be requested for those detainees who give a clear intention of self-harming with attention given to any visible evidence of previous acts of self-harm.

If a detainee does self-harm, an assessment by a HCP should be carried out irrespective of whether there has been any physical injury, and an attempt should be made to assess the risk of suicide [65]. When the risk is thought to be high, then referral to a hospital will be required and the detainee should be kept under constant supervision until such transfer is arranged. When the risk is deemed to be low, clear instructions will need to be given to the custody officers regarding care and supervision. The custody officers may consider removal of the detainee's clothing and personal effects to prevent self-harm. Cells should be checked with respect to their structural integrity to prevent any defects being used to self-harm, and bedding should be of an appropriate standard.

It is important to explore the intent behind the episode of self-harm and ascertain if it is as punishment, release, or simply to feel something. It should not be assumed that an episode of self-harm in the custody setting is simply manipulative behaviour or 'acting out'. Liaison between agencies is essential, and when the detainee is transferred to prison, another police station, or hospital, details regarding the self-harming incident should be passed to the custody or hospital staff concerned so they can take appropriate precautions.

Detainees may arrive in custody having had suicidal ideation or attempts at self-harm and there should be a low threshold for a HCP assessment to asses the risk of further self-harm. Factors associated with an act of self-harm that indicate a high risk for suicide include:

WIT.0043.0086.0330

- a medically serious act of SH; the writing of a suicide note;
- precautions having been taken against being found;
- stated wish to die;
- belief that the act would have proved fatal;
- expressed regret that the act failed;
- previous episode of DSH;
- depression and psychoses;
- substance misuse;
- co-morbidity;
- impulsive and aggressive personality traits;
- loneliness and lack of a social network

Pre-release Risk Assessment

In recent years in the UK HCPs are increasingly asked to conduct a pre-release risk assessment on a detainee where the police have concerns about the mental state of the detainee. This has resulted from an apparent rise in the number of suicides following police conduct [66].

In performing a pre-release risk assessment it is essential that the HCP understands that risk can be assessed and managed but varies over time and with the individual's particular circumstances. The most recent figures of deaths following police contact in England and Wales show that the commonest cause for arrest was for sexual offences [66]. Interventions can decrease or increase risk and assessment requires information from many sources, involving colleagues whenever possible. A clear management plan should aim to reduce risk and reduce the personal distress of the individual. As with all assessments in clinical forensic medicine the plan should be recorded in detail and should be shared with colleagues. The presence in custody of criminal justice liaison and diversion staff can assist with information regarding an individual patient and help with the organisation of appropriate services, treatment, and follow-up.

Intellectual and Developmental Disabilities (IDDs)

Intellectual disability (ID) is a term used when there are limits to a person's ability to learn at an expected level and function in daily life. ID starts any time before a child turns 18 and is characterized by problems with both intellectual functioning or intelligence, which include the ability to learn, reason, problem solve, and other skills; and adaptive behaviour, which includes everyday social and life skills [67]. ID maybe mild, moderate, severe, or profound, although the focus is more on daily skills rather than a measure of IQ.

Developmental disabilities are a broader category of often lifelong disabilities that can be intellectual, physical, or both. Differing parts of the body may be affected, e.g. the nervous system (cerebral palsy, Down's syndrome, autism

WIT.0043.0086.0331

spectrum disorders); sensory system ((affecting sight, hearing, touch, taste, and smell) preterm infants, ASD); metabolism (phenylketonuria, congenital hypothyroidism); and degenerative [68].

Intellectual and Developmental Disabilities (IDDs) is used to describe situations in which intellectual disability and other disabilities are present.

Tourette's Syndrome (TS) is a condition of nervous system that causes people to have tics, sudden twitches, movements, or sounds that people do repeatedly. There are two types: motor with movements of the body; or vocal resulting in sounds that a person makes with his or her voice. Furthermore the tics can be simple or complex [69].

It is important to identify detainees with IDDs, so precautions can be put in place to protect them while detained in police custody (see also Chap. 11). Although there is no easy way to recognize individuals with such disabilities, questions [70] regarding employment, schooling, reading, writing and telling the time, contact with relevant services/agencies, as well as enquiries as to whether they live independently may assist in identifying this vulnerable group. Intellectual disabilities should not be confused with learning disorders including dyslexia, dyscalculia and dysgraphia.

Illustrative Case *A male detainee, aged 18 years, had been arrested on suspicion of common assault. The police had performed a risk assessment and established that there was a history of Tourette's, ADHD, OCD, and anxiety. The HCP was called to assess fitness to be detained and interviewed. The detainee confirmed the mental health conditions as given in the risk assessment. He said he was under the care of the local community mental health team and had been admitted to psychiatric hospitals on a number of previous occasions, including an involuntary admission. He was not taking any medication. He described a number of different placements with regard to education including being home schooled and was currently unemployed. Examination revealed the he was restless, anxious and at times aggressive. His mood was volatile and unpredictable. There was evidence of involuntary sounds and tics during the consultation. He was alert and orientated in time, place and person with normal speech content and there was no other abnormality on the mental state examination. He was aware of the reason for his arrest and he had previously been detained in a police station. The HCP concluded that the detainee was fit to be detained and interviewed but in view of the history of mental health conditions and IDD he would require the presence of an AA.*

Claustrophobia

Claustrophobia is a common complaint, and a detailed history and examination with an emphasis on the presence or absence of anxiety when faced with the problem in everyday life should be sought. An enquiry regarding behaviour at home, such as leaving doors and windows open, avoidance of elevators and underground trains, and a history of the original precipitant for such behaviour should be noted.

WIT.0043.0086.0332

Where there is significant anxiety it may be appropriate to allow the detainee to use an open space if available within the custody complex, or, there may be the option for an observation cell which has a clear perspex door.

Often reassurance is enough, and it is rarely necessary to give any medication. The custody staff should be advised if genuine claustrophobia is suspected as this may affect the detainee's fitness to be interviewed.

Pregnancy

It is not uncommon to have pregnant detainees in police custody or detainees who state that they are pregnant. Access to on-site pregnancy testing kits is an advantage. Irregular menses are common in substance misusers, especially those dependent on opiates [71]. HCPs will need to assess each case and decide whether to recommend detention or transfer for obstetric assessment. Extreme caution is required in prescribing medication, especially opioid substitute prescribing [56].

It is useful to take a detailed history of the pregnancy, the last menstrual period, estimated date of delivery, previous pregnancies, and outcomes. Specific enquiry should be made about the presence of fetal movements, abdominal pain, or bleeding per vagina. Occasionally, pregnant detainees may not have had any contact with local services such as antenatal, and drug services if required, and this consultation is an opportunity for intervention. There should be a low threshold for referral to hospital. Before the 8th month of pregnancy, asymptomatic detainees can usually be considered fit for detention during the daytime, depending on material conditions in police cells [72].

Detainees Who Refuse Nourishment

The HCP may have to advise custody staff regarding a detainee's diet. If a detainee refuses food for 24 h, the HCP should be called to assess the detainee as to the capacity to make such a decision and should explain to the detainee the consequences of food refusal. If the detainee has refused fluids, then they should be seen more regularly as the physical and mental state of the detainee may deteriorate quickly. A general physical examination should be performed including body weight, body mass index, blood pressure, and pulse.

It is important to differentiate between food refusal and a hunger strike; the latter refers to a means of protesting by fasting, generally associated with a demand of some kind [73]. Food refusers do not wish to cause themselves harm whereas the hunger striker has a specific motivation. The initial mental state examination, and assessment of capacity, is therefore crucially important. If there is a history of mental illness, or evidence of undiagnosed conditions, then a referral for an expert psychiatric opinion should be made. A fast of 72 h is considered the beginning of a hunger strike.

Table 9.6 ABCDE assessment based on ABCDE approach guidelines by Resuscitation Council UK [45]

Airway	Patency, ability to maintain
Breathing	Efficacy & effort of breathing
Circulation	Peripheral and central perfusion, pulse rate, skin colour and temperature, capillary refill, blood pressure etc.
Disability	Neurological function, moving all four limbs, pupils & blood glucose
Exposure	Rashes, temperature, injuries

Detainees Who Refuse Assessment

When a detainee declines or refuses assessment the HCPs have a responsibility to ensure that they have made some form of assessment/observation of the detainee. It is essential that the HCP visits the detainee and offers an assessment making an attempt to engage with the detainee. If the detainee refuses to be seen this should be noted along with a record of observations made.

A detainee who shouts at the HCP has demonstrated that they have a patent airway, is breathing sufficiently to vocalise and shout, and is perfusing the brain sufficiently to ascertain that they are arguing with a HCP not a police officer. This allows the HCP to complete at least four stages of an ABCDE [45] assessment (see Table 9.6). If the detainee is walking around in the cell naked or partially clothed the HCP may be able to complete the majority their E assessment too.

HCPs should be alert to the possibility that erratic or aggressive behaviour may be due to an undiagnosed head injury/low blood glucose/alcohol or drug (particularly stimulant) intoxication rather than simply ascribing it to the detainee's attitude.

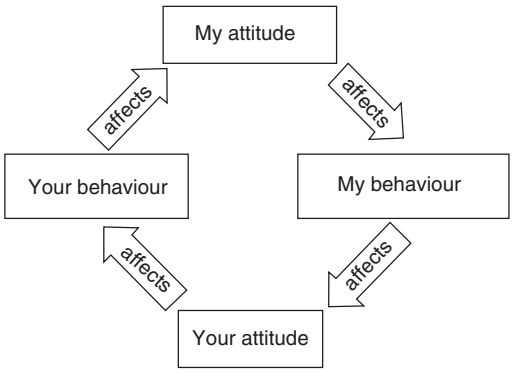
An entry should be made on the custody record that the detainee refused assessment but was observed in the cell with a summary of the findings and a note completed in the clinical record.

Personal Safety Issues

Certain healthcare groups are at increased risk of violence in the workplace, for example, those working in the custodial environment [74] or accident and emergency services [75]. Accurate assessment regarding the possibility of violence will reduce the danger, but it should never be assumed that there is no risk, and every clinical situation should be categorized as high risk due to an obvious risk or unknown/standard risk due to undiscovered factors [76]. There are a number of strategies for interviewing a difficult detainee [77], which include being fully aware of previous history and warning markers (be prepared!), and considering how they see you (as uninterested or hostile?), being polite and respectful, avoiding confrontation, using appropriate eye contact, keeping calm, and showing interest. Look for signs of tension and find out why tension may be increasing. Finally, be ready to

WIT.0043.0086.0334

Fig. 9.2 Betari Box



leave if necessary and consider the need to have a chaperone (appropriately trained in restraint techniques) of the same sex as the patient to be examined.

Clinicians should also be alert to the way that their actions may impact on interactions and consider the Betari Box model in Fig. 9.2.

This highlights the importance of planning workloads/rotas appropriately and ensuring healthcare professionals are appropriately rested prior to a shift.

Drug Searches

Persons unlawfully in possession of illicit drugs for personal use or involved in drug supply or trafficking may ingest drugs or pack them into certain body cavities. Terminology is important [56, 78].

Body stuffers (also known as swallowers/contact precipitated concealers) is a term commonly used to describe people who swallow illicit drugs to avoid being found with the drugs in their possession by (police) authorities. Body pushers are those who insert drugs into either their vagina or rectum, to avoid being found in possession of drugs.

Body packers ('drug couriers' or 'surgical mules') is the term commonly used to describe people who swallow packets of illicit drugs or put them into body orifices (using condoms or other containers, often purposely designed to escape detection) as they pass through customs checks. Third parties may be employed to act as mules and a case of body packing using children, two boys aged 6 and 12, who had concealed heroin has been reported [79].

Detainees who have recently swallowed drugs should be taken immediately to an emergency department for full assessment [5] and treated as any other overdose of these substances [80].

Doctors and nurses may be called by the police to carry out intimate searches of those arrested (see Chap. 2) [81]. Any healthcare professional who agrees to perform an intimate search should have the required skills and a comprehensive understanding of the risks involved and their management. This includes understanding

WIT.0043.0086.0335

the limitations of such intimate searches such as recognition that proctoscopy cannot exclude rectally inserted packages due to potential retrograde peristalsis and the length of a proctoscope. The limitations of such intimate searches would usually suggest that even a negative examination would mandate a period of observation for several hours. There is no evidence that the passage of a number of normal stools confirms that there are no other drug packages within the individual's body [66]. Low dose CT scanning may be a safer alternative to search for packages.

The HCP should discuss the possible implications of the ingestion of certain drugs and obtain fully informed consent from the detainee before carrying out any search that may involve examination of the mouth, nostrils, ears, umbilicus, foreskin, rectum, or vagina [82] or request radiological examination.

Variable quantities of drugs such as heroin, cocaine, cannabis, and amphetamine may be packaged in layers of cellophane or in condoms. All searches for such drugs should be carried out in premises where there are full facilities for resuscitation [83] in case significant quantities of the drugs leak into the bloodstream, resulting in acute intoxication and death from overdose [84, 85]. Other medical problems such as bowel obstruction may also occur.

The aim of medical management is to prevent these complications, but for ethical reasons the retrieval of packages for legal purposes alone is no indication for intervention without the detainee's permission. Therefore, without such permission, the HCP can do nothing except advise the police authorities that the detainee should be observed. In most asymptomatic patients, a trial of conservative treatment, provided bowel obstruction or package perforation is not suspected, will result in the uncomplicated elimination of all ingested packages [86, 87].

In a genuine emergency, when there is no possibility of obtaining consent, the clinician has a duty to carry out treatment to safeguard the life and health of a patient in accordance with what would be accepted as appropriate treatment in the detainee's best interests [88]. In these cases it may be appropriate to remove the packages in order to reduce future absorption. However, body stuffers can develop symptoms hours after ingestion with delayed toxicity leading to death. A fatal case report of a cocaine body stuffer concluded that the integrity of the packaging has an important predictive value in determining the time and likelihood of toxicity [89]. A nonfatal case of significantly delayed toxicity has also been reported [90].

Forensic Samples

Samples from a detainee such as dental impressions, blood, urine, hair, fingernail swabbing and cuttings, and swabs (e.g. mouth, penile, vaginal) may be requested by police authorities in connection with the investigation of an offense. These samples should only be taken by an appropriately trained HCP for evidential purposes with the detainee's fully informed consent and should be packaged in accordance with local procedures to ensure the chain of evidence. For further details regarding samples see Chap. 3.

WIT.0043.0086.0336

Restraint (See Chap. 7)

Within the custody suite it is not uncommon for detainees to require some degree of restraint. Whilst in the majority of cases this is relatively minimal, in some cases it may be a much more significant intervention.

Role of the HCP in a Significant Restraint Episode

Although the custody sergeant is ultimately responsible for the welfare of the detainee the HCP has an important role to play. This can be divided into three parts:

Prior to Intervention

If there is a planned intervention (e.g. cell removal/transfer) rather than an acute reactive intervention the HCP should take time to review the risk assessment as well as any previous medical assessments to advise the officers of any specific risks due to the detainee from a known medical condition. It may be relevant for the HCP to be involved in initial de-escalation with the detainee as the response may be better to the HCP's input rather than to police intervention.

During the Restraint

When the HCP becomes aware of a restraint episode they should attend immediately if possible to observe the restraint. Guidance from the Independent Advisory Panel on Deaths in Custody requires there to be a member of staff (controller) in charge of restraint whenever three or more officers are involved in a restraint episode [91]. Usually this will be the police officer responsible for protecting the detainees head, neck and airway.

The HCP should not take part in restraining the detainee, rather they should observe the restraint throughout and monitor the detainee's condition. During the restraint particular attention should be paid to any potential compromise of the airway, breathing or circulation and the HCP should be alert to any deterioration in the detainee's clinical condition. The risk of acute behavioural disturbance/excited delirium should be considered. If the HCP observes restraint techniques that have the possibility to impair the detainee's airway, or ability to breath, they must alert the restraint team.

Post Restraint

The clinician should document on the custody record that they were present throughout the restraint and (provided it is the case) that they observed the detainee throughout and at no time was their airway or breathing compromised. They should complete a full clinical assessment of the detainee (which may include documentation of any injuries sustained) as soon as practicable after the restraint episode. If irritant spray has been used the HCP may wish to refer to FFLM guidance [92] on irritant sprays (also see Chap. 6).

WIT.0043.0086.0337

Terrorist Detainees

HCPs may be asked to assess those detained under terrorism legislation. Such an assessment should be carried out by an experienced forensic physician who will outline a management plan for the multidisciplinary team [93]. The same general principles apply as for any other detainee but in England and Wales there are separates Codes Of Practice under PACE Code H [94]. It should be remembered that terrorist detainees may be held for longer periods of time and in solitary confinement. Solitary confinement is defined by the Istanbul statement as the physical isolation of individuals who are confined to their cells for 22–24 h a day [95]. It is essential that a high standard of care and ethical behaviour is maintained by clinicians, including providing advice on the physical conditions and overall regime [96].

Key Points

- Although the custody environment can be challenging, care provided should be equivalent to that provided in non-custodial settings.
- The population managed in custody may have the same range of illnesses or injuries seen in other settings, however there is an increased incidence of mental health and substance misuse issues which can complicate care.

Self-Assessment Exercises

1. How might the medication regime of an insulin dependent diabetic need to be amended in the custody setting?
2. List the factors associated with an act of self-harm that may indicate a high risk for suicide.
3. Thinking about where you currently practice, what methods might be available for you to confirm a detainee's prescribed medication?
4. In what circumstances might a detainee be unfit to be detained but not need transfer to hospital or an alternative healthcare setting?

Acknowledgment Original co-author Dr. Guy Norfolk not involved in this edition.

Appendix 1: Glasgow Coma Scale

Behaviour	Response	Score
Eye opening response	Spontaneous	4
	To speech	3
	To painful stimulus	2
	None	1

WIT.0043.0086.0338

Behaviour	Response	Score
Best verbal response	Orientated	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	None	1
Best motor response	Obeys commands	6
	Localises to painful stimulus	5
	Withdraws from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	None	1

From Jennett and Teasdale [49]

Appendix 2: Detained Person: Observation List

1. If any detainee fails to meet any of the following criteria, an appropriate healthcare professional or ambulance must be called
2. When assessing the level of rousability consider:
Rousability—can they be woken?
• Go into the cell
• Call their name
• Shake gently
Response to questions—can they give appropriate answers to questions such as:
• What's your name?
• Where do you live?
• Where do you think you are?
Response to commands—can they respond appropriately to commands such as:
• Open your eyes!
• Lift one arm, now the other arm!
Remember—take into account the possibility or presence of other illnesses, injury, or mental condition, a person who is drowsy and smells of alcohol may also have the following:
• Diabetes
• Epilepsy
• Head injury
• Drug intoxication or overdose
• Stroke

From: Home Office. Code C. Annex H [16]

Appendix 3: The Mini-Mental State Examination

Task	Score
Orientation	
What is the (year) (season) (date) (day) (month)	__/5
Where are we: (country) (state) (county) (town) (police station)	__/5

Registration	
Examiner names three objects (e.g., orange, key, ball)	
Patient asked to repeat the three names	
Score one for each correct answer	__/3
Then ask the patient to repeat all three names three times	
Attention	
Serial 7's. Stop after 5 correct answers	
Alternatively, if patient makes errors on serial subtraction: Spell	
"World" backwards: D L R O W	
Score best performance on either task	__/5
Recall	
Ask for the names of the objects learnt earlier	__/3
Language	
Show and ask the patient to name a pencil and a watch	__/2
Repeat the phrase "No ifs, and, or buts"	__/1
Give a three-stage command. Score one for each stage (e.g., "Take this piece of paper in your right hand, fold it in half, and place it on the chair next to you")	__/3
Ask patient to read and obey a written command on a piece of paper stating: "Close your eyes"	__/1
Ask the patient to write a sentence. Score correct if it has a subject and a verb	__/1
Copying	
Ask patient to copy intersecting pentagons. Score as correct if they overlap and if each has five sides	__/1
Total score	**__/30**

From Folstein et al. [97]

References

1. Police and Criminal Evidence Act 1984 Codes of Practice A-H 2018 for England and Wales. TSO, London. https://www.gov.uk/guidance/police-and-criminal-evidence-act-1984-pace-codes-of-practice. Accessed 29 May 2019. Accessed 10 Apr 2019
2. British Medical Association Medical Ethics Department and Faculty of Forensic and Legal Medicine (2009) Health care of detainees in police stations. British Medical Association, London
3. Stark MM, Rogers DJ, Norfolk GA (2009) Good practice guidelines for forensic medical examiners. Royal Military Police, GPG Editors, Oxford
4. Council of Europe (2006) European Committee for the prevention of torture and inhuman or degrading treatment or punishment (CPT). The CPT standards. https://rm.coe.int/16806dbaa3. Accessed 10 Apr 2019
5. College of Policing. Authorised professional practice. Detention in custody. Risk assessment. https://www.app.college.police.uk/app-content/detention-and-custody-2/risk-assessment/. Accessed 10 Apr 2019
6. McKinnon I, Grubin D (2010) Health screening in police custody. J Forensic Legal Med 17:209–212
7. Sturgiss EA, Parekh V (2011) The work of forensic physicians with police detainees in the Canberra city watch house. J Forensic Legal Med 18:57–61
8. Ceelen M, Dorn T, Buster M et al (2012) Healthcare issues and healthcare among detainees in police custody. J Forensic Legal Med 19:324–331
9. Rekrut-Lapa T, Lapa A (2014) Health needs of detainees in police custody in England and Wales. Literature review. J Forensic Legal Med 27:69–75

WIT.0043.0086.0340

10. Payne-James JJ, Green PG, McLachlan GMC, Moore TCB (2010) Health issues of detainees in police custody in London, UK. J Forensic Legal Med 17:11–17
11. Sondhi A, Williams E (2018) Health needs and co-morbidity among detainees in contact with healthcare professionals within police custody across the London metropolitan police service area. J Forensic Legal Med 57:96–100
12. Dorn T, Ceelen M, Buster M, Stirbu I, Donker G, Das K (2014) Mental health and healthcare use of detainees in police custody. J Forensic Legal Med 26:24–28
13. Heide D, Stiller D, Lessig R et al (2012) Medical examination of fitness for police custody in two large German towns. Int J Legal Med 126:27–35
14. McKinnon I, Grubin D (2014) Evidence-based risk assessment screening in police custody: the HELP-PC study in London UK. Policing 8:172–182
15. McKinnon I, Thomas SDM, Noga HL, Senior J (2016) Police custody healthcare: a review of health morbidity, models of care and innovations within police custody in the UK, with international comparisons. Risk Manag Healthcare Policy 9:213–226
16. Police and Criminal Evidence Act 1984 Code C Revised July 2018. TSO, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729842/pace-code-c-2018.pdf. Accessed 27 Apr 2019
17. McMillan R, Stark MM (2010) HCP examination of detainees in custody. Guidance for custody staff. Metropolitan Police Service, London
18. Home Office Circular (02/2003) Healthcare professionals in custody suites—guidance to supplement revisions to the codes of practice under the Police and Criminal Evidence Act 1984. http://library.college.police.uk/docs/hocirc/ho-circ-2003-020.htm. Accessed 27 Apr 2019
19. Wall I, Stark MM (2019) Quality standards in forensic medicine: GFM & SOM FFLM. www.fflm.ac.uk
20. Cladingboel J, Smith J, Stark MM, Wall I (2019) Quality standards for nurses & paramedics: GFM. FFLM. www.fflm.ac.uk
21. Functional Map for HCP Working in Police Custody Settings. Skills for Health, 2007. www.skillsforhealth.org.uk
22. Chariot P, Martel P, Penneau M, Debout M (2008) Guidelines for doctors attending detainees in police custody. Int J Legal Med 122:73–76
23. Stark MM (2000) The medical care of detainees and the prevention of tragedy—the role of the forensic medical examiner. Clin Risk 7:15–19
24. Payne-James JJ (2010) Clinical risk and detainees in police custody. Clin Risk 16:56–60
25. Payne-James J (2018) Confidentiality & consent in police custody: general principles. J Forens Legal Med 57:66–72
26. Fewkes S, Smith J, Stark M (2019) The role of the health care professional. FFLM. https://fflm.ac.uk/wp-content/uploads/2019/02/RoleoftheHCP-Jan-2019.pdf. Accessed 27 Apr 2019
27. Hocking G, Kalyanaraman R, deMello WF (1998) Better drug history taking: an assessment of the DRUGS mnemonic. J R Soc Med 91:305–306
28. Phillips C, Brown D (1998) Entry into the criminal justice system: a survey of police arrests and their outcomes. Home Off Res Study 185:109. https://webarchive.nationalarchives.gov.uk/20110221083401/http://rds.homeoffice.gov.uk/rds/pdfs/hors185.pdf. Accessed 24 June 2019
29. HMIC (2015) The welfare of vulnerable people in police custody. p 83. https://www.justiceinspectorates.gov.uk/hmicfrs/publications/the-welfare-of-vulnerable-people-in-police-custody/. Accessed 27 Apr 2019
30. Chariot P, Heide S (2018) Custody medicine. J Forensic Legal Med 57:55–57
31. Cooke C, Payne-James JJ (2016) Safe and secure administration of medication in police custody. Recommendations. FFLM. https://www.fflm.ac.uk/wp-content/uploads/2016/08/Safe-and-Secure-Administration-of-Medication-in-Police-Custody-July-2016.pdf. Accessed 27 Apr 2019
32. National Prescribing Centre (2009) Patient Group Directions. A practical guide and framework of competencies for all professionals using patient group directions. www.npc.co.uk

33. Fablet D, Chariot P (2018) Children detained in French police cells. J Pediatr Child Health 54:788–792
34. Coudert C, Vidal C, Lefèvre T, Chariot P (2019) Adolescent arrestees detained in police cells: an observational study in the Paris, France area. Int J Legal Med 133(4):1251–1258. https://doi.org/10.1007/s00414-018-1942-1
35. Howitt J (1995) Poor conditions of detention compromise ethical standards. J R Soc Med 88:40P–41P
36. Epilepsy Foundation 2017 Revised Classification or seizures. https://www.epilepsy.com/article/2016/12/2017-revised-classification-seizures. Accessed 11 Apr 2019
37. Galizia E, Faulkner HJ (2018) Seizures and Epilepsy in the acute medical setting: presentation and management. Clin Med 18(5):409–413. Accessed 11 Apr 2019
38. NICE 2018. Epilepsies: diagnosis and management, CG 137. https://www.nice.org.uk/guidance/cg137. Accessed 11 Apr 2019
39. Mathur R, Bell D (1996) Asthma management in police study. J Clin Forensic Med 3: 133–140
40. British Thoracic Society/Scottish Intercollegiate Guidelines Network (BTS/SIGN) (2016) British guideline on the management of asthma, quick reference guide. https://www.sign.ac.uk/assets/qrg153.pdf. Accessed 27 Apr 2019
41. FFLM (2017) Management of diabetes mellitus in custody. https://fflm.ac.uk/wp-content/uploads/2017/05/Management-of-Diabetes-Mellitus-in-Custody-Academic-Committee-May-2017.pdf. Accessed 11 Apr 2019
42. Hypoglycaemia—treatment in diabetic patients. http://www.htmc.co.uk/resource/data/htmc1/docs/Diabetic%20with%20suspected%20hypoglycaemia.pdf. Accessed 11 Apr 2019
43. Heller MB, Vukmir RB (1992) Glucagon for metabolic/endocrinologic emergencies: hypoglycaemia. In: Picazo J (ed) Glucagon in acute medicine. Pharmacological, clinical and therapeutic implications. Kluwer Academic, London
44. The National Institute for Clinical Excellence (NICE) (2010 updated 2016) Chest pain of recent onset. CG 95 Quick reference guide. https://www.nice.org.uk/guidance/cg95. Accessed 27 Apr 2019
45. Nolan J, Soar J et al (2015) The ABCDE approach. https://www.resus.org.uk/resuscitation-guidelines/abcde-approach/. Accessed 28 Apr 2019
46. The National institute for Clinical Excellence (NICE) (2011) Hypertension in adults: diagnosis and management. CG 127. https://www.nice.org.uk/guidance/cg127/resources/hypertension-in-adults-diagnosis-and-management-pdf-35109454941637. Accessed 28 Apr 2019
47. Payne-James JJ (1993) The role of cyanoacrylate tissue adhesive (Histoacryl blue) in forensic medical practice. Police Surg 43:30–31
48. Marks PV (1994) Acute head injury: assessment and practical management. J Clin Forensic Med 1:43–46
49. Jennett B, Teasdale G (1977) Aspects of coma after severe head injury. Lancet:878–881
50. The National Institute for Clinical Excellence (NICE) (2014) Head injury: assessment and early management. CG 176 Quick reference guide. https://www.nice.org.uk/guidance/cg176/resources/head-injury-assessment-and-early-management-pdf-35109755595493. Accessed 28 Apr 2019
51. Leigh A, Johnson G, Ingram A (1998) Deaths in police custody: learning the lessons, police research series paper 26. Police Research Group Publications, Home Office, London
52. Lindon G, Roe S (2017) Deaths in police custody: a review of the international evidence. Home Office Research Report 95, Home Office, London
53. Payne-James JJ, Marks P (2016) FFLM Head injury warning. https://fflm.ac.uk/wp-content/uploads/2016/05/A5-HeadInjuryWarning_Apr16.pdf. Accessed 11 Apr 2019
54. Payne-James JJ, Keys DW, Wall I, Dean PJ (1994) Prevalence of HIV factors for individuals examined in clinical forensic medicine. J Clin Forensic Med 1:93–96
55. McKinnon IG, Grubin D (2012) Health screening of people in police custody—evaluation of current police screening procedures in London, UK. Eur J Pub Health 23:399–405

WIT.0043.0086.0342

56. Royal College of Psychiatrists and Faculty of Forensic & Legal Medicine (2019) Substance misuse in detainees in police custody—guidelines on clinical management. (Fifth edition) Report of a Medical Working Group. www.fflm.ac.uk
57. Young S (2007) Forensic aspects of ADHD. In: Fitzgerald M, Bellgrove M, Gill M (eds) Handbook of attention deficit hyperactivity disorder. Wiley, Hoboken
58. Regier DA, Farmer ME, Rae DS, Locke BZ, Keith SJ, Judd LL et al (1990) Comorbidity of mental disorders with alcohol and other drug abuse: results from the epidemiologic catchment area (ECA) study. JAMA 264:2511–2518
59. Weaver T, Madden P, Charles V, Stimson G, Renton A, Tyrer P, Barnes T, Bench C, Middleton H, Wright N, Paterson S, Shanahan W, Seivewright N, Ford C, on behalf of the Comorbidity of Substance Misuse and Mental Illness Collaborative (COSMIC) Study Team (2003) Comorbidity of substance misuse and mental illness in community mental health and substance misuse services. Br J Psychiatry 183:304–313
60. Carrà G, Johnson S (2009) Variations in rates of comorbid substance use in psychosis between mental health settings and geographical areas in the UK. A systematic review. Soc Psychiatry Psychiatr Epidemiol 44(6):429–447
61. Carrà G, Johnson S, Bebbington P et al (2012) The lifetime and past-year prevalence of dual diagnosis in people with schizophrenia across Europe: findings from the European schizophrenia cohort (EuroSC)'. Eur Arch Psychiatry Clin Neurosci 262(7):607–616
62. EMCCDA (2016) Perspectives on drugs. Comorbidity of substance used and mental health disorder in Europe. http://www.emcdda.europa.eu/topics/pods/comorbidity-substance-use-mental-disorders-europe. Accessed 27 Apr 2019
63. Ingram A, Johnson G, Heyes I (1997) Self harm and suicide by detained persons: a study. Police Research Group Publications, Home Office, London
64. Norfolk GA (1998) Deaths in police custody during 1994: a retrospective analysis. J Clin Forensic Med 5:49–54
65. The National Institute for Clinical Excellence (NICE) (2004) Self harm. The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. CG16 Quick reference guide. https://www.ascert.biz/uploads/files/NICE%20-%20self%20harm.pdf. Accessed 28 Apr 2019
66. IOPC. Deaths during or following police contact: Statistics for England and Wales. 2017/18. https://policeconduct.gov.uk/sites/default/files/Documents/statistics/deaths_during_following_police_contact_201718.pdf. Accessed 28 Apr 2019
67. Centers for Disease Control and Prevention (n.d.) Intellectual disability fact sheet. http://www.cdc.gov/ncbddd/actearly/pdf/parents_pdfs/IntellectualDisability.pdf. Accessed 27 Apr 2019
68. https://www.nichd.nih.gov/health/topics/idds/conditioninfo/default. Accessed 27 Apr 2019
69. Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/tourette/facts.html. Accessed 24 June 2019
70. Holmes J, McKinnon I (2017) Assessment of people with learning difficulties and disabilities in police custody. FFLM. https://fflm.ac.uk/wp-content/uploads/2018/01/Assessment-Learning-Difficulties-Disabilities-in-Custody-Dr-J-Holmes-Nov-2017.pdf. Accessed 27 Apr 2019
71. Reddy RG, Aung T, Karavitaki N, Wass JAH (2010) Opioid induced hypogonadism. BMJ 341:c4462
72. Gandon V, Outh-Gauer S, Chariot P (2018) The health of female arrestees in police cells, a descriptive study. J Forensic Legal Med 57:86–90
73. Reyes H (2018) Chapter 8: Management of hunger strikes in detention. In: Payne-James JJ, Beynon J, Nuno Vieira D (eds) Monitoring detention, custody, torture and ill-treatment. A practical approach to prevention and documentation. CRC Press, Boca Raton, FL
74. Schnieden V, Stark MM, Payne-James JJ (1995) Violence in clinical forensic medicine. Med Sci Law 35:333–335
75. Schnieden V, Maguire J (1993) A report on violence at work and its impact on the medical profession within hospitals and the community. British Medical Association, London
76. Johns A, Clarke S, Stark MM (1997) Management of potentially violent detainees. J Clin Forensic Med 1:139–144

77. Royal College of Psychiatrists (1997) Using the mental health act—a training resource for doctors. Gaskell, Royal College of Psychiatrists, London, p 72
78. Department of Health & Social Care. The Medical Care of Suspected Internal Drug Traffickers—Independent Report of the Chief Medical Officer's Expert Group. January 2013. https://www.gov.uk/government/publications/report-on-the-care-of-suspected-internal-drug-traffickers. Accessed 16 Mar 2019
79. Traub SJ, Kohn GL, Hoffman RS, Nelson LS (2003) Pediatric 'body packing'. Arch Pediatr Adolesc Med 157:174–177
80. Hayhurst C (2014) The College of Emergency Medicine Best Practice Guidelines: Caring for adult patients suspected of having concealed illicit drugs. https://www.rcem.ac.uk/docs/College%20Guidelines/5z1.%20Caring%20for%20adult%20patients%20suspected%20of%20having%20concealed%20illicit%20drugs%20(June%202014).pdf. Accessed 28 Apr 2019
81. Stark MM (2017) Recommendations for healthcare professionals asked to perform intimate body searches. Guidance for doctors from the British Medical Association and the Faculty of Forensic and Legal Medicine. https://fflm.ac.uk/wp-content/uploads/2017/10/Recommendations-HCPs-Intimate-Body-Searches-September-2017.pdf. Accessed 28 Apr 2019
82. Stark MM (2016) Body cavity searches: practical issues and consent. In: Payne-James J, Byard RW (eds) Encyclopedia of forensic and legal medicine, vol 1, 2nd edn. Elsevier, Oxford, pp 433–436
83. Faculty of Forensic and Legal Medicine (2017) Intimate searches in police custody flowchart. https://fflm.ac.uk/wp-content/uploads/2017/10/Intimate-Searches-in-Police-Custody-Flowchart-September-2017.pdf. Accessed 28 Apr 2019
84. Heinemann A, Miyaishi S, Iwersen S, Schmoldt A, Puschel K (1998) Body-packing as cause of unexpected sudden death. Forensic Sci Int 92:1–10
85. Koehler S, Ladham S, Rozin L, Shakir A, Omalu B, Dominick J, Wecht C (2005) The risk of body packing: as case of a fatal cocaine overdose. Forensic Sci Int 151:81–84
86. Glass JM, Scott HJ (1995) "Surgical mules": the smuggling of drugs in the gastrointestinal tract. J R Soc Med 88:450–453
87. Das D, Ali B (2003) Conservative management of asymptomatic cocaine body packers. Emerg Med J 20(2):172–174
88. F v West Berkshire Health Authority 2 All ER 545, 1989
89. Norfolk GA (2007) The fatal case of a cocaine body-stuffer and a literature review—towards evidence based management. J Forensic Legal Med 14:49–52
90. Bucke T, Teers R, Payne-James JJ, Stark MM (2008) Near misses in police custody: a collaborative study with forensic medical examiners in London. IPCC Research and Statistics Series: Paper 10. IPCC. www.ipcc.gov.uk
91. Independent Advisory Panel on Deaths in Custody. Common Principles for Safer Restraint 2013. http://iapdeathsincustody.independent.gov.uk/wp-content/uploads/2013/07/IAP-common-principles-for-safer-restraint.pdf. Accessed 28 Apr 2019
92. McGorrigan J, Payne-James J (2017) Irritant sprays: clinical effects and management. Faculty of Forensic and Legal Medicine. https://fflm.ac.uk/wp-content/uploads/2018/08/Irritant-sprays-Dr-J-McGorrigan-and-Dr-J-Payne-James-December-2017.pdf. Accessed 28 Apr 2019
93. Gorton AJ, Evans JV (2019) Recommendations: medical care of persons detained under the Terrorism Act 2000. www.fflm.ac.uk
94. Police and Criminal Evidence Act 1984 (2018) Code H revised 2018. Her Majesty's Stationery Office, Norwich
95. The Istanbul statement on the use and effects of solitary confinement. Adopted on 9 Dec 2007 at the International Psychological Trauma Symposium, Istanbul. http://www.solitaryconfinement.org/uploads/Istanbul_expert_statement_on_sc.pdf. Accessed 28 Apr 2019
96. Shalev S (2008) A sourcebook on solitary confinement. http://solitaryconfinement.org/Sourcebook. Accessed 28 Apr 2019
97. Folstein MF, Folstein SE, McHugh PR (1975) "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. J Psychiatr Res 12:189–198

WIT.0043.0086.0344

Infectious Diseases: The Role of the Healthcare Professional

10

Felicity Nicholson

Learning Objectives

Explanation of the importance of taking standard precautions with all patients.

Treatment of an 'at risk exposure' and organization of a management plan.

Demonstrate the ability to provide advice to the police with regard to the effective management of the common infectious diseases seen in custody.

Introduction

Infections have plagued healthcare professionals (HCPs) for centuries, both in the diagnosis of the specific diseases, and the identification and subsequent management of the causative agents. There is a constant need for information as new organisms emerge, existing ones develop resistance to current drugs or vaccines, and there are changes in epidemiology and prevalence. In the twenty-first century, obtaining this information has never been more important. Population migration, and the relatively low cost of flying, means that unfamiliar infectious diseases may be brought into industrialized countries. An example of this was an outbreak of severe acute respiratory syndrome (SARS), which was first recognized in 2003. Despite modern technology and a huge input of money, it took months for the agent to be identified, a diagnostic test to be produced, and a strategy for disease reporting and isolation to be established.

A further example of how population migration can result in the spreading of disease was with the appearance of swine influenza A (H1N1). In March 2009, the first case was reported in Mexico; by June 2009, over 22,000 cases had been reported in 70 countries, thus fulfilling the criteria for a pandemic. Challenges ensued with decisions about treatment and then the distribution and administration of specific vaccine. More recent examples include the discovery of Corona virus Mers CoV

F. Nicholson (✉)
Trailfinders Travel Clinic, London, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_10

which emerged predominantly from the Middle East in 2012 and spread to many countries. In 2014 there was an Ebola outbreak in West Africa which lead to cases being transferred to Europe and the USA.

There is no doubt that other new and fascinating diseases will continue to emerge. For the healthcare professional dealing with infections presents two main problems. First, managing detainees or police personnel who have contracted a disease and may be infectious or unwell, and second, handling complainants of assault, including police officers, who have potentially been exposed to an infectious disease. The latter can be distressing for those involved, compounded in part from an inconsistency of management guidelines, if indeed they exist.

With the advent of human rights legislation, increasing pressure is being placed on HCPs with regard to consent and confidentiality of the detainee. Therefore, it is prudent to pre-empt such situations before the consultation begins by obtaining either written or verbal consent from the detainee to allow certain pieces of information to be disclosed. If he/she does not agree, then the HCP must decide whether withholding relevant details will endanger the lives or health of those working within custody or others with whom they may have had close contact (whether or not deliberate). Issues of consent and confidentiality are discussed in detail in Chap. 2.

Adopting standard precautions with all detainees will decrease the risk to staff of acquiring such diseases and will help to stop unnecessary overreaction and unjustified disclosure of sensitive information. For victims of violent or sexual assault, a more open-minded approach is needed (see also Chap. 3). If the assailant/suspect is known, then it may be possible to make an informed assessment of the risk of certain diseases by ascertaining their lifestyle and where possible by asking permission to test for certain diseases. If, however, the assailant is unknown, then this is not possible and so it is best to assume they are infected. This chapter aims to highlight the most common infections encountered by the healthcare professional. It aims to dispel "urban myths" and provide a sensible approach for achieving effective management.

Standard Precautions

The risk of exposure to infections, in particular to blood-borne viruses (BBVs), can be minimized by adopting measures that are considered good practice in the UK, the USA and Australia [1–3]. The Guidance for Clinical Health Care Workers: Protection against infection with blood borne viruses, (DOH 1998) contains standard precautions. The aim of adopting standard precautions is to prevent transmission of BBVs by considering that blood and other body fluids are potentially infectious. It means never assuming that there is no risk. If every patient is assumed to be potentially infected with a blood borne infection the same precautions to prevent exposure should be used for every procedure.

Healthcare professionals should wash their hands before and after contact with each detainee or victim. A laminated copy of good hand washing techniques (e.g. from the National Patient Safety Agency) should be displayed by the sink in the

WIT.0043.0086.0346

medical room. Liquid soap from a wall mounted dispenser should be used routinely. Alcohol hand rub can be used as an alternative if hands are dry and physically clean. It should not be used if the patient has had diarrhea in the last 48 h as it is not effective against Norovirus or Clostridium difficile. Police officers should be encouraged to wash their hands after exposure to body fluids or excreta. All staff should wear gloves when exposure to body fluids, mucous membranes or non-intact skin is likely. Gloves should also be worn when cleaning up body fluids or handling clinical waste including contaminated laundry. Only single-use gloves which are powder free should be used and must conform to the requirements of British and EN standards and be CE marked or equivalent [1–3]. A synthetic alternative conforming to the same standards should also be available for those allergic to latex e.g. nitrile.

All staff should cover any fresh wounds (less than 24 h old), open skin lesions or breaks in exposed skin with a waterproof dressing. Single gloves have been shown to remove 86% of surface blood and therefore reduces the risk of acquiring a BBV infection. Doubling gloving removes even more. Gloves should be worn when taking blood, providing this does not reduce manual dexterity and therefore increase the risk of accidental percutaneous injury.

A designated person should be allocated to ensure the clinical room is kept clean and sharps containers and clinical waste bags should be removed on a regular basis. Clinical waste must be disposed of in "hazard bags" and should never be over-filled. After use they should be double-bagged and sealed with "hazard tape". The bags should be placed in a locked designated waste disposal store and removed by a professional company. When cells are contaminated with body fluids, a professional cleaning company should be called to attend as soon as possible. Until such time, the cell should be deemed "out of action".

Ideally there should be a designated infection control lead who has the overall responsibility of auditing the premises and ensuring that they meet infection control standards.

Sharps Awareness

The main risk of sharps injury is the potential acquisition of the major blood borne viruses (BBV) hepatitis B, hepatitis C, and HIV. Other infectious agents can also be transmitted through sharp injuries including but not limited to Human T Lymphotrophic retroviruses (HTLVI & II), Cytomegalovirus, and Epstein Barr virus.

Whether or not an infection is acquired depends on a number of factors including the person's immune system, the type of sharp involved, the depth and site of the sharp injury and how infectious the blood was at the time of the injury.

Whilst the number of sharp injuries leading to infection is small, there are the direct costs of the medication to consider alongside the psychological impact which is harder to quantify. There may also be side effects from the medication and time lost from work.

There is a legal requirement in the UK under the Environmental Protection Act (1990) and the Control of Substances Hazardous to Health Regulations 2002 (COSHH) to dispose of sharps in an approved container. In the USA, the Division of Healthcare Quality Promotion (DHQP) on the Centers for Disease Control and Prevention (CDC) website provides similar guidance. Further guidance can also be find in the 'Stop Sticks' campaign run by the National Institute for Occupational Safety and Health (NIOSH).

In custody where sharps containers are transported off site, they must be of an approved type and the correct UN approved color. In the UK, such a requirement is contained within the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 2009. These measures help to minimize the risk of accidental injury. Further precautions include wearing gloves when handling sharps and never bending, breaking or re-sheathing needles before disposal. Sharps bins should never be more than three quarters full, they should be secured to the wall when in use and should be placed at a safe height for those using it to minimize the risk of inoculation injuries when disposing of the sharps.

Contaminated Bedding

Any bedding that is visibly stained with body fluids should be handled with gloves. There are only three acceptable ways of dealing with contaminated bedding:

1. Laundering with a detergent at a minimum temperature of 71 °C (160 °F) or at a lower temperature (22–50 °C) with water containing detergent and 50–150 ppm of chlorine bleach.
2. Dry cleaning at elevated temperatures/dry cleaning cold followed by steam pressing.
3. Incineration.

It is not considered acceptable practice to share bedding between detainees.

Other Measures

It is not necessary for staff to wear masks or protective eyewear in the custodial setting as the risk of infection is low. However, single use eyewash should be available in the clinical room or contained in other first aid kits located within the police station in case of accidental exposure. Contact lenses should be removed prior to eye washing.

Formulation of Guidelines

An example of good practice is contained within the UK Health Department's 1998 document [1] which states "that it is the responsibility of Health Authorities, Health Boards and NHS Trusts to create their own local guidelines to prevent the spread of

WIT.0043.0086.0348

BBVs in the health care setting". The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance also sets out the standards for the NHS and other regulated health care providers. Such guidelines may not exist in other work places. If this is the case, then they should be formulated as soon as possible. It is also prudent to pre-arrange a system of referral with the nearest hospital that has an Emergency Department, a Genito-Urinary Department and access to a Specialist. The latter may be a consultant in Virology, Microbiology, Infectious Diseases or Genito-Urinary Medicine. Similar guidance in the USA can be found in "The Guideline for Infection Control in Health Care Personnel" [4].

Most exposures to staff usually result from a failure to follow accepted practice; however, accidents can happen no matter how much care is taken. All healthcare professionals working in custody should understand what constitutes a risk and should have had relevant infection control training. This involves taking a detailed history of the incident, including the type of exposure, the body fluids involved and when it occurred.

This information could help to allay unnecessary anxiety from the outset and will ensure that the recipient of the exposure is referred, if appropriate, to the designated hospital at the earliest opportunity. Knowledge of precise treatment protocols is not required, but it is helpful to be able to explain to the recipient what to expect. For example, he or she will be asked to provide a voluntary baseline blood sample for storage and a number of follow-up samples for testing depending on the nature of the exposure. This is especially relevant for hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Most usually, this will be complete by 12 weeks, but on occasion testing may be extended to 6 months after the incident.

Sexual assault complainants should ideally be referred to specialist centers, if available. A police station should only be used as a last resort because the environment is often hostile and there is no ready access to the necessary treatment and ongoing management (see Chap. 3).

Routes of Transmission

Organisms may utilize more than one route. For ease of understanding, the infections discussed in this chapter are classified according to their primary route, i.e. transmission through blood and body fluids; through contact with lesions or organisms; through the respiratory route; and through the fecal-oral route.

Transmission Through Blood and Body Fluids

The BBVs which present most cross-infection hazard to staff or victims are those associated with persistent viral replication and viremia. These include hepatitis B (HBV), hepatitis C (HCV), hepatitis D (HDV), and human immunodeficiency virus (HIV).

WIT.0043.0086.0349

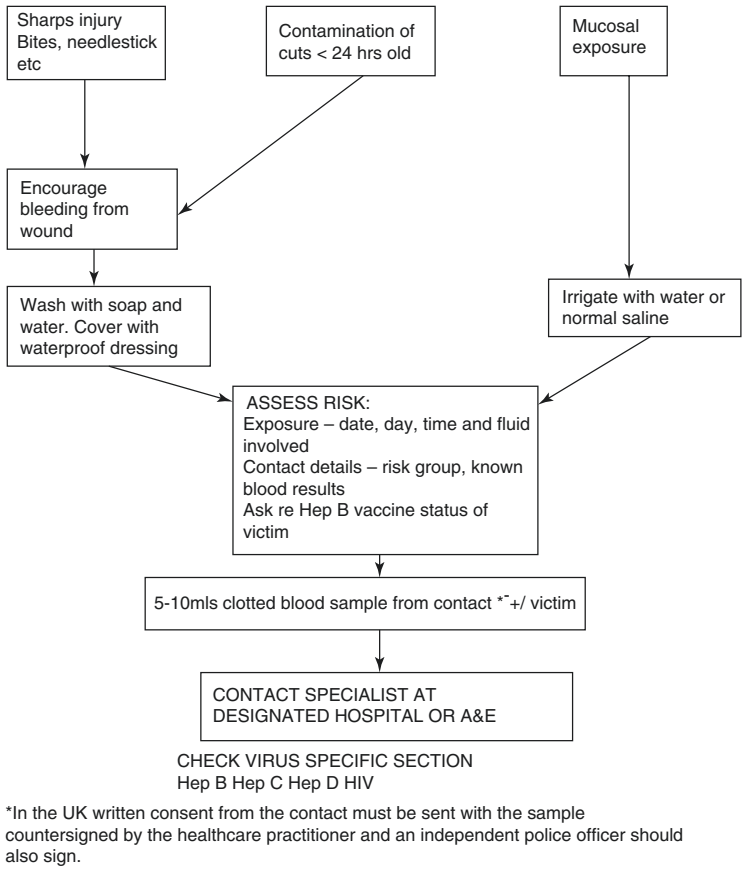


Fig. 10.1 Immediate management following occupational exposure to blood-borne viruses (BBVs)

In general, risks of transmission of BBVs arise from the possible exposure to blood or other body fluids. The degree of risk varies with the virus concerned and will be discussed under the relevant sections. Figure 10.1 illustrates the immediate management following a percutaneous injury, mucocutaneous exposure, or exposure through contamination of fresh cuts or breaks in the skin.

Hepatitis B

Epidemiology and Prevalence

HBV is endemic throughout the world with populations showing a varying degree of prevalence. Approximately 2000 million people have been infected with HBV. In

WIT.0043.0086.0350

Table 10.1 Prevalence of chronic hepatitis B by world areas

Prevalence	Areas
Low <2%	Most of western Europe including the UK, North America, Australia (excluding the Aborigines), New Zealand
Intermediate (2–8%)	Mediterranean, the Amazon Basin, most of the Middle East, japan, the Indian Sub Continent and southern parts of Eastern and Central Europe
High >8%	Sub Saharan Africa, most of Asia and the Pacific Islands

2015 there were 257 million people living with chronic infection world-wide [5]; and world-wide in that same year HBV killed 887,000 people.

With the development of a safe and effective vaccine in 1982, the World Health Organization (WHO) recommended that HBV vaccine should be incorporated into national immunization programmes by 1995 in those countries with a chronic infection rate of 8% or higher and into all countries by 1997. In 2015 global coverage with the three doses of hepatitis B vaccine in infancy reached 84%. However coverage with the first birth dose of vaccine remains low at 39%. Meaning that some of the poorer countries were not meeting their targets [5].

In the United Kingdom, the overall prevalence of chronic HBV is around 0.1–0.5% [6] which according to the WHO classification based on the prevalence of HBsAg is low (less than 2%). Other low prevalence areas include most of Western Europe and North America. High prevalence which is found in sub Saharan Africa, most of Asia and the Pacific Islands has a prevalence of more than 8% (see Table 10.1).

Symptoms and Complications

The incubation period is approximately 40–160 days. As the name suggests, the virus primarily affects the liver. Many people with acute infection have a sub clinical or flu-like illness. Typical symptoms include malaise, anorexia, nausea, mild fever, and abdominal discomfort and may last from 2 days to 3 weeks before the insidious onset of jaundice. Joint pain and skin rashes may also occur due to immune complex formation. Infections in the newborn are usually asymptomatic.

The majority of patients with acute HBV make a full recovery and develop immunity. Following acute infection, about 1 in 300 patients develop liver failure, which may result in death.

Chronic infection develops in around 90% of neonates, about 20–50% of children infected between the ages of 1–5 years old and around 5% of adults. Neonates and children are usually asymptomatic. Adults may have only mild symptoms or may also be asymptomatic. Approximately 20–25% of chronically infected individuals (depending on age of acquisition) will develop cirrhosis over a number of years. This may also result in liver failure or other serious complications including hepatocellular carcinoma, though the latter is rare. The overall mortality rate of HBV is estimated at less than 5%.

WIT.0043.0086.0351

Table 10.2 Significance of markers

Name	Infectivity	Immunity	Risk following needle stick (%)
HBsAg	Yes	No	Only marker = 10–20
HBeAg	Yes	No	With HBsAg = 30–40
HBeA	Yes	Yes	With HBsAg ≤ 10
HBCA	No	Yes	0
HBSA	No	Yes	0

HBsAg Hepatitis B surface antigen, *HbeAg* hepatitis B e antigen, *HBeA* hepatitis B e antibody, *HBCA* hepatitis B core antibody, *HBSA* hepatitis B surface antibody

Period of Infectivity

A person is deemed infectious if hepatitis B surface antigen (HBsAg) is detected in the blood. In the acute phase of the illness, this can be for as long as 6 months. By definition, if HBsAg persists for after this time then the person is deemed a carrier. Carriers are usually infectious for life. The degree of infectivity depends on the stage of disease and the markers present in Table 10.2.

Routes of Transmission

The major routes include: parenteral (e.g. needlestick injuries, bites (rare), blood transfusions (rare in the UK as blood donors and donations are screened), tattooing, acupuncture and dental procedures, where equipment is inadequately sterilised); mucous membrane exposure (including mouth, eyes and genital mucous membranes including vaginal and anal intercourse), through perinatal transmission from mother to child and contamination of broken skin (especially when <24 h old).

At-Risk Groups

HBV is an occupational hazard for anyone who may come into contact with blood or bloodstained body fluids through the routes described above. Saliva alone may transmit HBV. The saliva of some people infected with HBV has been shown to contain HBV-DNA concentrations 1/1000–1/10,000 of that found in their serum [7]. This is especially relevant for penetrating bite wounds. Infection following exposure to other body fluids, e.g. bile, urine, feces and CSF, has never been demonstrated unless the fluids are contaminated with blood.

In 2016 in England there were 453 reported cases of acute or probable acute cases of hepatitis B [8]. The prevalence of acute hepatitis B in London was 1.7/100,000 population compared with 0.82/100,000 nationally. Where a route of transmission was identified, in 64.6% cases the mode of transmission was through heterosexual exposure. Men who have sex with men accounted for 14% of the cases. However, only 36% had information about the associated exposure. None the less the data presented suggests that the number of cases of acute hepatitis B in PWID has remained low in 2016. Periodic surveys in PWID show that the hepatitis B

WIT.0043.0086.0352

prevalence is around 1 in 500 [9] This is thought to be in part due to increased awareness, and self-reported hepatitis B vaccine uptake. In 2016 about 75% of PWID reported having hepatitis B vaccine, but this level is no longer increasing. Uptake is especially low in younger age groups and amongst new injectors [8].

Evidence has shown that the virus may also be spread among members of a family through close household contact. This is thought to be through kissing, sharing toothbrushes, razors, bath towels, etc. [10–12]. This route of transmission probably applies to institutionalized patients.

In the Public Health England Health and Justice Annual Review 2017/2018 [13] the prevalence of blood-borne viruses was four times higher in the prison population than in the general population. Hepatitis B prevalence was reported as 0.6% in the prison population versus 0.16% in the general population.

HBV can be transmitted vertically from mother to baby during the perinatal period. Around 80% of babies born to mothers who have either acute or chronic HBV become infected and most will develop chronic HBV. This has been limited by the administration of HBV vaccine to the neonate. In industrialized countries all antenatal mothers are screened for HBV. Vaccine is given to the neonate ideally within the first 12 h of birth and at least two further doses are given at designated intervals. The WHO recommends this as a matter of course for all women in countries where prevalence is high. However, the practicalities of administering vaccine that has to be stored at the correct temperature and limited access to medical care mean that there is a significant failure of vaccine uptake and response.

Disease Prevention

In industrialized countries, HBV vaccination is recommended for those deemed at risk of acquiring the disease

1. Through occupational exposure
2. Homosexual/bisexual men
3. People who inject drugs
4. Female commercial sex workers
5. Patients with chronic renal or hepatitis disease
6. Sexual partners of people with acute or chronic HBV including victims of sexual assault
7. Family members of people with acute or chronic HBV
8. Newborn babies whose mothers are infected with HBV. If the mother is HBeAg positive, then HBV-specific immunoglobulin (HBSIG) should be given at the same time as the first dose of vaccine
9. If the baby is born to an HBV negative mother but is going home to another HBV positive household member they should receive one dose of Hepatitis B vaccine before leaving hospital and then continue on the routine schedule [10]
10. Institutionalized patients and inmates of custodial institutions.
11. As of October 2017, hepatitis B has been incorporated in a hexavalent vaccine which is given to all babies born in the UK with doses being at given at 2, 3 and 4 months

WIT.0043.0086.0353

Ideally, HBV vaccine should be administered prior to exposure. For most adult and child risk groups an accelerated schedule is used. Three doses of vaccine are given at 0, 1 and 2 months because it has been shown that there are higher completion rates particularly amongst those who are less compliant (e.g. PWID). The improved compliance will probably offset against the slightly reduced immunogenicity of this accelerated schedule compared with the 0, 1 and 6 month schedule. Giving a booster after a year where possible will provide a similar immune response.

If the individual is considered to be at more immediate risk then a super accelerated course can be used with three doses given on day 0, 7 and 21. A fourth dose would be given 12 months after the first dose to ensure long term protection. This schedule is licensed in adults over 18 and is particularly useful for people travelling to areas of high endemicity, prisoners and PWID. It can also be used off license for those aged 16–18 where it is important to provide rapid protection and achieve maximum compliance.

It is believed that in immunocompetent individuals following a successful vaccination course that immunity against hepatitis B lasts for around 30 years. The WHO in 2017 stated that there was no need for a booster dose of hepatitis B vaccine in routine immunization programmes.

For health care workers the 0, 1, 6 month schedule is preferred unless they are going to be engaging in exposure prone procedures in which case a more rapid schedule can be used. A blood test should be done 8–12 weeks after the third dose of vaccine. If the titre is >10 miU/mL then an adequate response has been achieved. In the UK a further dose of vaccine is given at 5 years. In the USA, if an initial adequate response has been achieved, then no further doses of vaccine are considered necessary for Health care workers.

Patients with chronic renal failure or who are on hemodialysis may have poor immunological memory and require further boosts if titres fall below 10 miU/mL.

Post Exposure Prophylaxis

Hepatitis B vaccine administration after exposure varies according to the timing of the incident, the degree of risk involved, and whether the individual has already been partly or fully vaccinated as can be seen in Table 10.3 below.

Hepatitis B specific Immunoglobulin (HSIG) may be used either alone or in conjunction with vaccine. The exact dose given is age-dependent, but must be administered by deep intra-muscular injection in a different site from the vaccine. In an adult, this is usually into the gluteus muscle. If HBIG is being given together with hepatitis B vaccine then it should be given at the same time, ideally within 24 h of an exposure, but can be considered up to 7 days after. It is also used for neonates born to mothers who are HBeAg-positive where the risk of vertical transmission is greatest.

Between 5% and 10% of adults fail to respond to the routine schedule of vaccine. A further full course of vaccine should be tried before deeming them “non-responders”. It is worth considering using Twinrix as there is evidence that the combination of

WIT.0043.0086.0354

Table 10.3 Hepatitis B prophylaxis following exposure—adapted from the Green book Chap. 18 [14]

	Significant exposure		
HBV status of person exposed	Source HBsAg positive	Unknown source	Source HBsAg – ve
Unvaccinated	Accelerated course of Hep B vaccine plus HBSIG with first dose	Accelerated course of Hep B vaccine	Consider course of hepatitis B vaccine especially if at continued risk
Partially vaccinated	One dose of vaccine sat and then finish the course	One dose of vaccine stat and then finish the course	Consider completing the course
Fully vaccinated with primary course	Booster dose of hep B vaccine if last dose ≥1 year ago	Consider booster dose of hep B vaccine if last dose ≥1 year ago	No HBV prophylaxis. Reassure
Known non responder Anti HBS <10 iu 1–2 months after vaccination	HBIG Booster dose of hepatitis B vaccine Repeat HBIG at 1 month	HBIG Consider booster dose of hepatitis B vaccine Repeat HBIG at 1 month	No HBIG Consider booster dose of hepatitis B vaccine

hepatitis A and B vaccines is more immunogenic. Using higher strength (40 μg) hepatitis B vaccine as used in renal patients may also be worth trying in non-responders working in high risk settings. Non responders involved in a high-risk exposure should be given two doses of HBIG administered a month apart and a booster dose of hepatitis B vaccine would also be given. Ideally, the first dose of HBIG should be given within 48 h after exposure and no longer than 2 weeks after exposure.

Management in Custody

For staff or victims in contact with disease, it is wise to have a protocol in place for immediate management and risk evaluation. An example is shown in Fig. 10.1. While healthcare professionals are not expected to administer treatment, it is often helpful to inform persons concerned what to expect (Table 10.2).

Other measures to avoid an exposure include minimizing the risk of exposure by adopting the safe working practices outlined in the "Standard Precautions" section. There should be a protocol in place which explains how the person exposed should be managed and where they need to go to be assessed and treated where necessary. Any potential exposures should be dealt with as soon as possible. Detainees with disease can usually be managed in custody. If the detainee is bleeding, then the cell should be deemed out of action after they have left until it can be professionally cleaned. Contaminated bedding should be dealt with as described previously. If the detainee has chronic HBV and is on an antiviral agent (e.g. tenofovir), then the treatment course should be continued, if possible.

People who inject drugs should be encouraged to be vaccinated and to avoid sharing needles or any other drug paraphernalia (see "Management in Custody" in section "Other Bacteria Associated with Abscess Formation in People who Inject Drugs").

WIT.0043.0086.0355

Hepatitis C

Epidemiology and Prevalence

Hepatitis C virus (HCV) is endemic in most parts of the world. In 2015 it was estimated that 71 million people are living with chronic hepatitis C infection. In that same year there were 1.75 million new infections world-wide [15]. As part of the WHO Global Health Sector Strategy the aim is to eliminate all viral hepatitis by 2030.

Seroprevalence studies carried out among blood donors have shown that the highest prevalence exists in Egypt—13% in 2016. This has been ascribed to contaminated needles used in the treatment of schistosomiasis carried out between the 1950s and the 1980s [16].

Intermediate prevalence (1–5%) exists in Eastern Europe, the Mediterranean, the Middle East, the Indian Sub-continent and parts of Africa and Asia. In Western Europe, most of Central America, Australia and limited regions in Africa including South Africa, the prevalence is low (0.2–0.5%). Previously, America was included in the low prevalence group, but a report published in 2015 [17] indicated that up to 5.2 million Americans, i.e. 1.6% of the population, have antibody to HCV, representing either ongoing or previous infection. It also states that HCV accounts for approximately 15% of acute viral hepatitis in America.

Between 0.5–1% of the UK population are chronically infected with hepatitis C meaning that in 2018 there are 160,000 people living with chronic infection. However, within any country, there are certain groups that have a higher chance of carrying HCV. In the UK the most important risk factor of hepatitis C is injecting drug use accounting for 90% of all lab reports where a risk factor was disclosed [18]. In 2016 54% of people who had injected psychoactive drugs and participated in the Unlinked Anonymous Monitoring Survey (UAMS) tested positive for antibodies to hepatitis C. However, only 52% of those surveyed were aware of their status impacting on the number of people who could seek treatment. The survey also revealed that 18% of participants still share needles but this is still a fall when compared with the 23% recorded in 2005.

There has been a 3% fall in the number of deaths from HCV end stage liver disease and hepatocellular carcinoma between 2014 and 2016. This has been attributed to more patients seeking treatment and an improvement in the treatment.

Symptoms and Complications

After an incubation period of 6–8 weeks, the acute phase of the disease lasts approximately 2–3 years. Unlike hepatitis A (HAV) or HBV, the patient is usually asymptomatic; therefore, the disease is often missed unless the individual has reported a specific exposure and is being monitored. Other cases are found by chance, when raised liver enzymes are found on a routine blood test.

A “silent phase” follows the acute phase when the virus lies dormant and the liver enzymes are usually normal. This period lasts approximately 10–15 years.

WIT.0043.0086.0356

Reactivation may then occur. Subsequent viral replication damages the hepatocytes, and liver enzymes rise to moderate or high levels.

Antibodies develop 4–6 weeks after the acquisition of the virus, with 97% having detectable antibodies by 6 months. RNA can be detected by PCR 2–3 weeks after acquisition of the virus.

Eighty percent of individuals who are HCV antibody-positive are infectious, regardless of the levels of their liver enzymes. Approximately 80% of people develop chronic infection, one fifth of whom progress to cirrhosis. There is a much stronger association with hepatocellular carcinoma than with HBV. An estimated 1.25–2.5% of patients with HCV-related cirrhosis develop liver cancer [19]. Less than 2% of chronic cases resolve spontaneously.

Routes of Transmission

The main route of acquisition for hepatitis C is through injecting drug use, unsafe injection practice, and unscreened blood transfusions. Transmission through the sexual route is not common and only appears to be significant if there is repeated exposure with one or more people infected with HCV [18]. Mother-to-baby transmission is not common, but has been reported [20]. Theoretically, household spread is also possible through sharing contaminated toothbrushes or razors.

Since the disease is often silent, there is a need to raise awareness among the general population on how to avoid infection and to encourage high-risk groups to be tested. Healthcare professionals should also be educated to avoid occupationally acquired infection. An example of good practice is contained within the document 'Hepatitis C strategy for England', issued by the Department of Health in 2002 [19].

Risks from Exposure from HCV RNA-Positive Person

Blood or bloodstained body fluids need to be involved for a risk to occur. Saliva alone is not deemed to be a risk. The risk from a single needlestick incident is 1.8% (range 0–7%). Contact through a contaminated cut is estimated at 1%. For penetrating bite injuries, it is only considered a risk if blood is involved. Blood or bloodstained body fluids have to be involved in transmission through mucous membrane exposure. This may account for the lower than expected prevalence among the gay population.

Management in Custody

Staff/Victims in Contact with Disease

Follow the immediate management flow chart, making sure all available information is obtained. Inform the designated hospital and/or specialist as soon as possible. If the contact is known and is thought to be immunocompromised, and he or she has

WIT.0043.0086.0357

consented to provide a blood sample, it is important to tell the specialist, as their antibody tests may be spuriously negative. In this instance, a different test should be used (polymerase chain reaction [PCR] which detects viral RNA).

The staff member/victim will be asked to provide a baseline sample of blood ideally within 48 h of the exposure. Further samples may be taken at 4–6 weeks and again at 12 weeks. If tests are negative at 12 weeks, but the risk was deemed high, then follow-up may continue for up to 24 weeks. If any of the follow-up samples are positive, then the original baseline sample will be tested to ascertain whether the infection was acquired through the particular exposure.

Treatment of hepatitis C infection has been improved more recently with the use of Direct Acting Antiviral agents e.g. sofosbuvir. These drugs act by targeting non-structural proteins of the virus which disrupts viral replication and infection. They can be given orally, for shorter durations and have an improved safety profile over the pegylated interferons used previously and can cure the infection within 2–3 months. Treatment is usually not started till after 6 months as between 15–45% of people can spontaneously clear the virus in the acute phase. Prior to these drugs being developed Genotype 1 was notoriously difficult to treat. Now with a combination of drugs there is a cure rate of over 90%. Recovery from hepatitis C does not confer immunity and it is possible to become infected again [21].

Co-infection with HIV also occurs and in 2015 worldwide there was around 2.3 million living with both HCV and HIV. In the UK data studied between 2008 and 2014 showed that around 4% of people with HCV were co infected with HIV. More than 84% of them were male, and 66% were of white ethnicity. Two thirds of those who were co-infected were diagnosed with HIV ≥6 months before HCV [22].

Detainees with disease: Unless they are severely ill, detainees can be managed in custody. Special precautions are only required if they are bleeding. Custody staff should wear gloves if contact with blood is likely. Contaminated bedding should be handled appropriately and the cell cleaned professionally after use. Medication should be continued wherever possible.

Hepatitis D (Delta Agent)

This defective transmissible virus discovered in 1977 requires HBV for its own replication. At least 5% of people with chronic hepatitis B are co-infected with HDV meaning that about 15–20 million people world-wide are infected. High prevalence areas include Central and West Africa, Central and Northern Asia, Vietnam, Mongolia, Pakistan, Japan and Chinese Taipei, the Pacific islands of Kiribati and Nauru, the Middle East, Eastern Europe, the Amazon Basin and Greenland. The number of cases has been falling since the 1980s with the introduction of a successful global hepatitis B immunization program [23].

HDV is associated with acute (co-infection) and chronic hepatitis (superinfection) and can exacerbate pre-existing liver damage caused by HBV in as little as 5 years. The routes of transmission and at-risk groups are the same as for HBV. Staff/victims in contact with a putative exposure and detainees with disease should be

WIT.0043.0086.0358

managed as for HBV. Current guidelines advise treatment with pegylated Interferon-alpha for 28 weeks, but this would not be practical to continue in the custodial setting [23, 24].

Human Immunodeficiency Virus

Epidemiology and Prevalence

HIV was first identified in 1983—2 years after the first reports were made to the CDC Atlanta, GA, of an increased incidence of two unusual diseases (Kaposi's sarcoma and *Pneumocystis carinii* pneumonia) occurring among the gay population in San Francisco. The scale of the virus gradually emerged over the years, and by the end of 2016, there was an estimated 36.7 million people throughout the world living with HIV or AIDS. Over 80% of the world total live in Africa and India [25].

By the end of 2015 the number of people living with HIV in the UK was estimated at 101,200 with around 13,500 (13%) unware of their infection. The overall HIV prevalence in the UK is about 0.16% [26].

The number of new diagnoses has continued to fall over the past 10 years with a marked decrease in 2016 and 2017. From 2017 data the total number of new HIV diagnoses was 4363 with most among men who have sex with men (2330). This still represents a 30% drop since 2015. Around 1400 new cases were diagnosed in heterosexual woman and around 1000 new cases in heterosexual men. PWIDs have remained consistently low with only 140 new diagnoses being made in 2017 [27]. This equates to about 1 in 100 PWID who are living with HIV. Most are accessing antiviral treatment but are more likely to be diagnosed late [8].

The proportion of people being diagnosed at a late stage of infection (CD4 count <350 cells/mm^3 at diagnosis) remains high at around 40%. This is significant as when a diagnosis is made late there is a tenfold increased risk of death within a year of diagnosis and an increased risk of onward transmission. The highest risk group for late diagnosis was black African heterosexual men (69%) and the lowest rates were among gay and bisexual men (33%) [27].

UK data collected in 2017 showed that 98% of persons seen for HIV care are receiving anti-retroviral therapy (ART) compared with 79% in 2008 (Table 10.4).

Table 10.4 Persons seen for HIV care in the UK by ethnicity and probable routes of exposure (2017)

	MSM (%)	Heterosexual (%)	IDU (%)	Mother to child (%)
White	84	25.6	87.5	9.3
Black African	1.7	56.9	2	70.9
Black Caribbean	1.99	4.06	3.3	1.6
Asian	3.6	3.8	1.8	4.3

Taken from National HIV surveillance data tables [28]

WIT.0043.0086.0359

Window Period for HIV

Following infection with HIV there is a period of time when the person is very infectious but an HIV antibody test could be negative. This is known as the window period, which for a fourth generation antigen/antibody test is about 4 weeks. At this time about 95% of patients will test positive. By 12 weeks the figure is 99.9%. The earliest point where antibodies could be detected is 2 weeks.

PCR can be used to measure the viral load and this can be detected as early as 7 days after infection. The higher the viral load the more likely the person will have seroconversion symptoms. At the same time as the viral load becomes detectable the p24 viral antigen is also present in the blood. A negative p24 and viral load early on in infection do not mean that the person has not got HIV. Usually an antibody test is conducted 4 weeks after exposure and if it is negative it is repeated at 12 weeks.

During the acute phase of the infection, between 50–80% of people experience a sero-conversion "flu-like" illness. In some people the symptoms are so mild that they may be missed and in 20% they get nothing at all. The individual is infectious at this time, as viral antigen (p24) and viral particles are present in the blood. As antibodies start to form, the virus disappears and the individual enters the latent phase. They are non-infectious and remain well for a variable period of time (7–15 years). Development of the AIDS marks the terminal phase of disease. Viral antigen re-emerges and the individual is once again infectious. With the development of effective ART patients who take a combination of drugs are very unlikely to develop AIDS. Treatment has changed HIV from being a fatal disease to being a chronic and very manageable condition.

Routes of Transmission

Parenteral transmission includes needle stick injuries, bites, unscreened blood transfusions, tattooing, acupuncture and dental procedures where equipment is inadequately sterilised. Risk of transmission is increased with deep penetrating injuries with hollow bore needles that are visibly bloodstained, especially when the device has previously been in the source patient's (contact) artery or vein. Other routes include mucous membrane exposure, (eyes, mouth and genital mucous membranes) and contamination of broken skin.

The higher the viral load in the contact, the greater the risk of transmission. This is more likely at the terminal stage of infection unless the patient is being treated. HIV is transmitted mainly through blood or other body fluids that are visibly bloodstained with the exception of semen, vaginal fluid and breast milk. Saliva alone is most unlikely to transmit infection. Therefore, people who have sustained penetrating bite injuries can be reassured that they are not at risk providing the contact was not bleeding from the mouth at the time.

WIT.0043.0086.0360

Risk of Seroconversion

The risk from a single percutaneous exposure from a hollow bore needle is low (<3 in 1000) and a single mucocutaneous exposure is even less likely to result in infection (<1 in 1000).

The risk from sexual exposure varies, though it appears that there is a greater risk with receptive anal intercourse compared with receptive vaginal intercourse [29, 30] (see Table 10.5).

Body Fluids Containing HIV

High-risk fluids include blood, semen, vaginal fluid and breast milk. There is little or no risk from saliva, urine, vomit or faeces unless they are visibly bloodstained. Other fluids that constitute a theoretical risk include CSF, peritoneal, pleural, synovial or pericardial fluid.

Management in Custody of Staff/Victims in Contact with Disease

Management in custody of staff/victims in contact with disease includes following the immediate management flow chart (Fig. 10.1) and contacting the designated hospital/specialist with details of the exposure. Where possible, obtain a blood sample from the contact. Like HBV and HCV, blood samples taken for HIV testing can only be taken with informed consent in the United Kingdom. There is no need to go into details about the meaning of the test, but the contact should be encouraged to attend the genito-urinary department (or similar) of the designated hospital to discuss the test results. Should the contact refuse to provide a blood sample, then any

Table 10.5 Risks of HIV transmission from a known HIV positive individual

Type of exposure	Estimated risk of HIV transmission[a]
	Per exposure (%)
Blood transfusion (one unit)	90–100
Sharing injection equipment	0.63
Needle stick injury	0.3
Human bite	<0.001
Receptive anal intercourse	0.138
Receptive vaginal intercourse	0.08%
Insertive anal intercourse	0.06–0.11
Insertive penile vaginal intercourse	0.03–0.09
Receptive oral sex (fellatio)	0–0.04

Adapted from the BASHH guidelines [30]

[a]This assumes that the HIV positive person has a detectable viral load and is not on ART

WIT.0043.0086.0361

Table 10.6 PEP management following a potential HIV exposure

		HIV status		
	HIV positive		Unknown HIV status	
	HIV VL unknown/	HIV VL undetectable	From high prevalence	From low prevalence
	>200 copies/mL	<200 copies/mL	Country or risk group	Country or risk group
	For >6 months			
Receptive anal sex	R	NR	R	NR
Insertive anal sex	R	NR	Consider	NR
Receptive vaginal sex	R	NR	Consider	NR
Insertive vaginal sex	Consider	NR	Consider	NR
Fellatio with or without ejacualtion	NR	NR	NR	NR
Splash of semen in eye	NR	NR	NR	NR
Sharing of injection equipment	R	NR	Consider	NR
Human bite	NR	NR	NR	NR
Needlestick from a discarded needle in the community			NR	NR
Occupational needlestick	R	NR	Consider	NR

R recommended, *NR* not recommended

information about their lifestyle, ethnic origin, state of health, etc. may be useful for the specialist to decide whether post-exposure prophylaxis (PEP) should be given to the recipient. Where saliva only is involved in a penetrating bite injury, there is every justification to reassure the recipient that there is little risk of acquiring HIV. However, it is still wise to take advice from a specialist. Table 10.6 shows the various exposures and whether post exposure prophylaxis (PEP) would be recommended.

In the UK, the current recommended regime for PEP is one Truvada tablet (254 mg tenofovir and 200 mg emtricitabine) once a day plus raltegravir twice a day for 28 days [30].

Treatment should be started as soon as possible after exposure and ideally within 24 h, but it can be considered for up to 72 h. It is usually given for 4 weeks unless the contact is subsequently identified as HIV negative or the recipient develops tolerance or toxicity occurs.

In the UK high risk countries or groups would include men who have sex with men (MSM) and PWID from high risk countries e.g. Eastern Europe, and Central Asia. It would also include individuals who have immigrated to the UK from high risk countries particularly sub Saharan Africa.

If the source states that they are HIV positive, and are being treated, then it is important to establish what the viral load, resistance profile and treatment history is. For the recipient not to need PEP, if the viral load of the source is reported as undetectable it has to have been less than 200 copies/mL for at least 6 months. Where

WIT.0043.0086.0362

there is any uncertainty about the results or doubt as to compliance with ART then PEP should be given after unprotected anal intercourse. Routine blood test monitoring is not recommended for raltegravir based PEP if baseline bloods are normal and there is no clinical indication.

Other useful information that may influence the decision whether to treat with the standard regime or use alternative drugs include interaction with other medications that the recipient may be taking or if the contact has been on anti-retroviral therapy which has not been sustained or drug resistance is suspected.

PEP is not considered for exposure to low or no risk fluids through any route, nor where the source is unknown, e.g. a discarded needle. Despite the appropriate use and timing of PEP, there have been reports of failure [31, 32].

Management in Custody of Detainees with HIV

Unless they are severely ill, they can be kept in custody. Every effort should be made to continue any treatment they may be receiving. Apply standard precautions when dealing with the detainee and ensure that contaminated cells and/or bedding are managed appropriately.

Transmission Through Contact with Lesions or Organisms

Varicella (Chicken Pox)

Epidemiology and Prevalence

Cases of this highly infectious disease occur throughout the year, but are more frequent in winter and early spring. This seasonal endemicity appears to be blurring with global warming but in the UK it reaches a peak between March and May. In the UK, the highest prevalence occurs in the 4–10 years age group. Ninety percent of the population over the age of 40 are immune [33]. A similar prevalence has been reported in other parts of Western Europe and the USA. In South East Asia, Varicella is mainly a disease of adulthood [34]. Therefore, people born in these countries who have moved to the UK are more likely to be susceptible to chicken pox.

There is a strong correlation between a history of chicken pox and serologic immunity (97–99%). Most adults born and living in industrialised countries with an uncertain or negative history of chicken pox are also seropositive (70–90%). In March 1995, a live-attenuated vaccine was licensed for use in the USA and a policy for vaccinating children and susceptible healthcare personnel was introduced. In the summer of 2002 in the UK, GlaxoSmithKline launched a live-attenuated vaccine called Varilrix. In December 2003, the Department of Health, following advice from the Joint Committee on Vaccination and Immunisation (JCVI), recommended that the vaccine be given for non-immune healthcare workers who are likely to have direct contact with individuals with chicken pox. Any healthcare worker with no previous history of chicken pox should be screened for immunity, and if no

WIT.0043.0086.0363

antibodies are found, they should receive two doses of vaccine 4–8 weeks apart. The other group of people who would be considered for vaccination are close contacts (e.g. family members) of patients with weakened immune systems who would be at high risk of developing complications.

The vaccine is still not currently recommended for children in the UK and should not be given during pregnancy. The rationale behind not vaccinating in the UK stems from the concern that if children are vaccinated then the virus is not circulating. This means that children who have not been vaccinated will be more susceptible as adults when the disease can be more serious or in pregnancy when the baby can be harmed. As adults, being exposed to natural disease from infected children boosts immunity and protects the adults from developing shingles. Therefore it is likely that the number of cases of shingles would rise if children were routinely vaccinated. Other countries, including the USA and Australia, disagree with this policy and vaccinate their children.

Incubation Period and Symptoms

Following an incubation period of 7–21 days (this may be shorter in the immunocompromised), there is usually a prodromal "flu-like" illness which lasts 1–2 days before the onset of the rash. This coryzal phase may be absent particularly in young children. The lesions typically appear in crops; rapidly progressing from red papules through vesicles to open sores that crust over and separate by 10 days. They appear on the face and scalp and spread on to the trunk and then the limbs. The distribution of the rash is centripetal, i.e. more over the trunk and face than on the limbs which is the converse of small pox. In adults, the disease is often more severe with lesions involving the scalp and mucous membranes of the oropharynx.

Complications

In children, the disease is often mild, unless they are immunocompromised, so are unlikely to experience complications. In adults (defined as 15 years or older), the picture is rather different [35]. Secondary bacterial infection is common, but rarely serious. There is an increased likelihood of permanent scarring. Hemorrhagic chickenpox typically occurs on the 2nd or 3rd day of the rash. Usually, this is limited to bleeding into the skin, but life-threatening melaena, epistaxis or hematuria can occur.

Varicella pneumonia ranges from patchy lung consolidation to overt pneumonitis and occurs in 1 in 400 cases [36]. It can occur in previously healthy individuals (particularly adults), but the risk is increased in those who smoke. Immunocompromised people are at the greatest risk of developing this complication. It runs a fulminating course and is the commonest cause of Varicella-associated death.

Fibrosis and permanent respiratory impairment may occur in those who survive. Any suspicion of lung involvement is an indication for immediate treatment and any detainee or staff member should be sent to hospital. Involvement of the CNS includes a variety of conditions including meningitis, Guillain–Barre and encephalitis. The latter is more common in the immunocompromised and can be fatal.

Complications can also occur in pregnancy—see At-risk groups.

WIT.0043.0086.0364

Period of Infectivity

This is taken as 1–3 days before the first lesions appear to the end of new vesicle formation and the last vesicle has crusted over. This typically is 5–7 days after onset, but may last up to 14 days. It is more likely to be prolonged in immunocompromised people.

Routes of Transmission

The primary route is through direct contact with open lesions of chicken pox. However, it is also spread through aerosol or droplets from the respiratory tract. Chicken pox may also be acquired through contact with open lesions of shingles (Varicella zoster), but this is less likely as shingles is less infectious than chicken pox. The secondary infection rate from a household contact with chicken pox can be as high as 90%.

At-Risk Groups

Non-immune individuals are at risk of acquiring disease. Approximately 10% of the adult population born in the UK and <5% of adults in the USA fall into this category. Therefore, it is more likely that if chicken pox is encountered in the custodial setting, it will involve people born outside the UK (in particular South East Asia) or individuals who are immunocompromised and have lost immunity. Non-immune pregnant women are at risk of developing complications.

Pneumonia can occur in up to 10% of pregnant women with chicken pox and the severity appears to be increased in later gestation [37]. They can also transmit infection to the unborn baby [38]. If infection is acquired in the first 20 weeks, there is <3% chance of it leading to congenital Varicella syndrome. This includes limb hypoplasia, microcephaly, cataracts and growth retardation. Mortality estimates are between 1–2%.

Infection in the last trimester can lead to neonatal Varicella unless more than 7 days elapse between onset of maternal rash and delivery when antibodies have time to cross the placenta leading to either mild or inapparent infection in the newborn. In this situation, Varicella immunoglobulin (VZIG) should be administered to the baby as soon as possible after birth [39].

Management in Custody

Staff with chicken pox should stay off work until the end of the infective period (approximately 7–14 days). Those in contact with disease who are known to be non-immune or who have no history of disease should contact the designated occupational health physician. A significant contact would be considered as being in the same room for at least 15 min.

Detainees with visible disease should not be kept in custody if at all possible (especially pregnant women). If this is unavoidable, then non-immune or immunocompromised staff should avoid entering the cell or having close contact with the detainee.

Non-immune immunocompromised or pregnant individuals exposed to chicken-pox should seek expert medical advice for the administration of VZIG. Aciclovir (or

WIT.0043.0086.0365

similar antiviral agent) should be given as soon as possible to immunocompromised people with chicken pox. It should also be considered for anyone over 15 years old who is non immune as they are more likely to develop complications. Immunosuppressed patients who have detectable varicella antibodies will not need VZIG. Second attacks of chicken pox can occur in such people but this is most likely to be due to a fault in cell-mediated immunity.

Do not give ibuprofen as this can cause serious skin infections. Do not give aspirin to under 16 year olds with chicken pox as this can lead to Reyes syndrome which is a serious condition that causes swelling to the liver and the brain. Anyone suspected of severe complications should be sent straight to hospital.

Herpes Zoster (Shingles)

Epidemiology

After chicken pox, the varicella zoster virus lies dormant in the dorsal root or cranial nerve ganglia, but may reactivate and re-emerge typically involving one dermatome [40]. The site of involvement depends on the sensory ganglion initially involved. Shingles is more common over the age of 50, but it can occur in children and is very common in the immunosuppressed at any age. The latter are also more susceptible to secondary attacks and involvement of more than one dermatome. Bilateral zoster is even rarer, but is not associated with a higher mortality.

In the UK, there is an estimated incidence of 1.2–3.4 per 1000-person years [41].

Symptoms

There may be a prodromal period of paresthesia and burning or shooting pains in the involved segment. This is usually followed by the appearance of a band of vesicles. Rarely, the vesicles fail to appear and only pain is experienced. This is known as *zoster sine herpete*. In individuals who are immunocompromised, disease may be prolonged and dissemination may occur but is rarely fatal. The overall fatality rate is estimated as 1/1000 persons over 70 years old.

Shingles in pregnancy is usually mild. The fetus is only affected if viremia occurs before maternal antibody has had time to cross the placenta.

Complications

The most common complication of shingles is post-herpetic neuralgia (PHN) occurring in about 10% of cases. It is defined as pain lasting more than 120 days from rash onset [42]. It is more frequent in people over 50 and can lead to depression as the pain can be very debilitating and is mostly unresponsive to standard pain killers. Other drugs such as pregabalin and amitryptiline may help to alleviate symptoms. Infection of the brain can lead to encephalitis, involvement of motor neurones leading to ptosis, paralysis of the hand, facial palsy or contralateral hemiparesis. Involvement of the oculomotor division of the trigeminal ganglion can cause serious eye problems including corneal scarring.

Period of Infectivity

Shingles is far less infectious than chicken pox and is only considered to be infectious up to 3 days after lesions appear.

Routes of Transmission

Shingles is only infectious following prolonged contact with lesions. Unlike chickenpox, airborne transmission is not a risk.

At-Risk Groups

Individuals who are immunocompromised may reactivate the dormant virus and develop shingles. People who have not had primary Varicella are at risk of developing chicken pox following prolonged direct contact with shingles.

Despite popular belief, it is untrue that immunocompetent people who have had chicken pox develop shingles when in contact with either chicken pox or shingles. Such occurrences are merely coincidental unless immunity is lowered.

Management in Custody

Staff with shingles should stay off work until the lesions are healed unless they can be covered. Staff who have had chicken pox are immune (including pregnant women) and are therefore not at risk. If they are non-immune (usually accepted as those without a history of chickenpox), they should avoid prolonged contact with detainees with shingles. Pregnant non-immune women should avoid contact altogether.

Detainees with disease may be kept in custody and any exposed lesions should be covered. It is well documented that prompt treatment attenuates the severity of the disease, reduces the duration of viral shedding, hastens lesion healing, and reduces the severity and duration of pain. It also reduces the likelihood of developing post-herpetic neuralgia [43]. Prompt treatment with Famciclovir (500 mg tds for 7 days, for example) or acyclovir (800 mg five times a day for 7 days) should be initiated if the onset is 3 days or less. It should also be considered after this time if the detainee is over 50. Pregnant detainees with shingles can be reassured that there is minimal risk for both the mother and the unborn child. Expert advice should be sort before initiating treatment for the mother.

In the UK Zostavax (a live vaccine for shingles) was introduced in September 2013 as a single dose of vaccine for adults aged 70 on 1st September 2013 and aged 79 in the first year as part of a phased catch up. Data from the first 3 years of the program show that there has been a significant reduction in the number of cases of shingles and PHN despite the fact that the vaccine is only about 50% effective [44].

Shingrix is an inactivated shingles vaccine that has been introduced in the USA. This vaccine is given as a two dose course and is reported as being over 90% effective. The uptake has been so great that there have been vaccine shortages while the manufacturers catch up with the unprecedented demand. It has yet to be introduced into the UK.

WIT.0043.0086.0367

Scabies

Epidemiology

This tiny parasitic mite (*Sarcoptes scabiei*) has infested humans for over 2500 years. Experts estimate that in excess of 300 million cases occur worldwide each year. The female mite burrows into the skin especially around the hands, feet and male genitalia, in about 2.5 min. Eggs are laid and hatch into larvae that travel to the skin surface as newly developed mites.

Symptoms

The mite causes intense itching which is often worse at night and is aggravated by heat and moisture. The irritation spreads outside the original point of infection due to an allergic reaction to mite feces. This irritation may persist for about 2 weeks after treatment, but can be alleviated by antihistamines.

Crusted scabies is a far more severe form of the disease. Large areas of the body may be involved. The crusts hide thousands of live mites and eggs making them difficult to treat. This so-called Norwegian scabies is more common in the elderly or the immunocompromised, especially those with untreated HIV.

Incubation Period

Following a primary exposure, it takes about 2–6 weeks before the onset of itching. However, further exposures reduce the incubation time to around 1–4 days.

Period of Infectivity

Without treatment, this is assumed to be indefinite. With treatment, the person should be considered infectious until the mites and eggs are destroyed—usually 7–10 days. Crusted scabies is highly infectious.

Management in Custody

Since transmission is through direct skin-to-skin contact with an infected case, gloves should be worn when dealing with individuals suspected of infestation. Usually prolonged contact is needed, unless the person has crusted Scabies where transmission occurs more easily. The risk of transmission is much greater in households where repeated or prolonged contact is likely.

Since mites can survive in bedding of clothing for up to 24 h, gloves should also be worn when handling these items. Bedding should be treated by washing at a temperature of at least 50 °C. Professional cleaning of the cell is only warranted in cases of crusted scabies.

Treatment

The preferred treatment for scabies is either Permethrin cream (5%) or aqueous Malathion (0.5%) [45]. Either treatment has to be applied to the whole body and should be left on for at least 8 h in the case of permethrin and 24 h for Malathion before washing off. Lindane is no longer considered the treatment of choice, as there may be complications in pregnancy [46].

Treatment in custody may not be practical, but should be considered when the detainee is thought to have Norwegian scabies.

Head Lice

General Information

Like scabies, head lice occur worldwide and are found in the hair close to the scalp. The eggs or nits cling to the hair and are difficult to remove, but are not harmful. If you see nits then you can be sure that lice are also present. The latter are best seen when the hair is wet. The lice bite the scalp and suck blood causing intense irritation and itching.

Route of Transmission

They can only be passed from direct hair to hair contact.

Management in Custody

It is only necessary to wear gloves when examining the head for whatever reason. The cell does not need to be cleaned after use, since the lice live on or near skin. Bedding may be contaminated with shed skin so should be handled with gloves and laundered or incinerated.

The presence of live lice is an indication for treatment either by physical removal with a comb or the application of an insecticide. The latter may be more practical in custody. 0.5% aqueous Malathion should be applied to dry hair and washed off after 12 h. The hair should then be shampooed as normal.

Crabs or Body Lice

General Information

They are more commonly found in the pubic, axillary, chest and leg hair. However, eyelashes and eyebrows may also be involved. They are associated with people who do not bath or change clothes regularly. The person usually complains of intense itching or irritation.

Routes of Transmission

The main route is from person to person by direct contact, but eggs can stick to fibers so clothing and bedding should be handled with care (see section below).

Management in Custody

Staff should always wear gloves if they are likely to come into contact with any hirsute body part. Clothing or bedding should be handled with gloves and either laundered or incinerated.

Treatment of a detainee in custody is good in theory but probably impractical as the whole body has to be treated.

Fleas

General Information

Fleas lay eggs on floors, carpets and bedding. In the UK, most fleabites come from cats or dogs. The eggs and larvae fleas can survive for months and are reactivated in

WIT.0043.0086.0369

response to animal or human activity. Since animal fleas jump off humans after biting, most detainees with fleabites will not have fleas, unless they are human fleas.

Management in Custody

Treatment is only necessary if fleas are seen. After use, the cell should be vacuumed and cleaned with a proprietary insecticide. Any bedding should be removed wearing gloves, bagged and either laundered or incinerated.

Bedbugs

General Information

Bedbugs live and lay eggs on walls, floors, furniture and bedding. If you look carefully, fecal tracks may be seen on hard surfaces. If they are present for long enough, then they emit a distinct odor. Bedbugs are rarely found on the person, but may be brought in on clothing or other personal effects.

Symptoms

Bedbugs bite at night and can cause sleep disturbance.

Management in Custody

The detainee does not need to be treated, but the cell should be deemed out of use until it can be vacuumed and professionally cleaned with an insecticide solution. Any bedding or clothing should be handled with gloves and disposed of as appropriate.

Methicillin-Resistant *Staphylococcus aureus*

Epidemiology

Staphylococcus aureus is commonly carried on the skin or in the nose of healthy people. Approximately 25–30% of the population is colonized with the bacteria, but remain well [47]. From time to time, the bacteria cause minor skin infections that usually do not require antibiotic treatment. However, more serious problems can occur, e.g. infection of surgical wounds, drug injection sites, osteomyelitis, pneumonia or bacteremia. Over the last 50 years, the bacteria have become increasingly resistant to penicillin-based antibiotics [48] and in the last 20 years to an increasing number of alternative antibiotics. These multi-resistant bacteria are known as methicillin-resistant *S. aureus* (MRSA).

MRSA is prevalent worldwide. Like non-resistant staphylococci, it may remain undetected as a reservoir in colonized individuals, but can also produce clinical disease. It is more common among the elderly, debilitated or immunocompromised people or those with open wounds. Clusters of skin infections with MRSA have been reported among injecting drug users since 1981 in America [49, 50] and more recently similar strains have been found in the UK in PWIDs in the community [51]. This may have particular relevance for the healthcare professional when dealing

WIT.0043.0086.0370

with injecting drug users' ulcers or abscesses. Immunocompetent people rarely get MRSA and should not be considered at risk. Between April 2003 and December 2008, there were 74 recorded cases of a community-acquired MRSA in injecting drug users in England and Wales [52]. A study conducted from the CDC in Atlanta looked at data from injecting drug users between 2005 and 2016. The data showed that PWID are 16.3 × more likely to develop invasive MRSA infections than others.

Data from 2016 in the UK from the mandatory enhanced surveillance showed that 13% of the Methiciliin Sensitive Staphylcoccus Aureus (MSSA) bacteremia and 8.1% of the MRSA bacteremias were associated with injecting drug use [53]. This has increased since 2011 from 6.9% for MSSA and 1.6% for MRSA.

In 2014 in Bristol there was an increase in the number of severe MRSA infections among PWID. A study showed that 8.7% of PWID in Bristol were carriers compared with 1–4% for the UK population in general. The rise in cases was thought to be due to a specific clone and to the increase in injecting outside and into the groin [53].

Route of Transmission

The bacteria are usually spread via the hands of staff after contact with colonized or infected detainees or devices, items (e.g. bedding, towels, soiled dressings) or environmental surfaces that have been contaminated with MRSA-containing body fluids.

Management in Custody

With either known or suspected cases (consider all abscesses/ulcers of injecting drug users as infectious), standard precautions should be applied. Staff should wear gloves when touching mucous membranes, non-intact skin, blood or other body fluids or any items that could be contaminated. They should also be encouraged to wash hands with an antimicrobial agent whether or not gloves have been worn. After use, gloves should be disposed of in a yellow "hazard" bag and not allowed to touch surfaces. Masks and gowns should only be worn when carrying out procedures that generate aerosols of blood or other body fluids. Since this is an unlikely scenario in the custodial setting, they should not be necessary. Gloves should be worn when handling bedding or clothing and all items should be disposed of in the appropriate manner. Any open wounds should be covered as soon as possible. The cell should be cleaned professionally after use if there is any risk that it has been contaminated.

Other Bacteria Associated with Abscess Formation in Injecting Drug Users

Epidemiology

Over the last decade, there has been an increasing awareness of the bacterial flora colonizing injection sites that may potentially lead to life-threatening infection [54].

WIT.0043.0086.0371

In 1997, a sudden increase in needle abscesses caused by a clonal strain of Group A *Streptococcus* (GAS) was reported among hospitalized intravenous drug users (IDUs) in Berne, Switzerland [55]. A recent study in the UK showed that the predominant isolate is *S. aureus*, with *Streptococcus* species forming just under one fifth (50% *beta-hemolytic* streptococci) [56].

There have also been reports of both non-sporing and sporing anaerobes (e.g. *Bacteroides* and *Clostridia* species including *Clostridium botulinum*) [57, 58]. In terms of numbers, in 2003–2004, injecting drug use was one of the most important risk factors for Group A streptococcal infection in the United Kingdom accounting for 20%. Over subsequent years the number of cases fell [52]. However, in 2016/17 there has been an increase in invasive Group A Streptococcal infections (iGAS) amongst homeless people and PWID in England and Wales. In Brighton, Gloucestershire, Bristol and London there was an emm66 cluster and more recently an emm99 cluster in Bournemouth which is spreading more widely [53].

In 2000, laboratories in Glasgow were reporting isolates of *C. novyi* among IDUs with "serious unexplained illness". By 12 June 2000, a total of 42 cases (18 definite and 24 probable) had been reported. A definite case was defined as an IDU with both severe local and systemic inflammatory reactions. A probable case was defined as an IDU who presented to hospital with an abscess or other significant inflammation at an injecting site and had either a severe inflammatory process at or around an injection site or a severe systemic reaction with multiorgan failure and a high white cell count [59].

In the UK, the presence of *C. botulinum* in infected injection sites is a relatively new phenomenon. Up to the end of 1999, there were no cases reported to the Public Health Laboratory Service (PHLS). Since then the number has increased with a total of 13 cases in the UK and Eire being reported since the beginning of 2002. It is thought that these cases are associated with contaminated batches of heroin. Simultaneous injection of cocaine increases the risk by encouraging anaerobic conditions. Anaerobic flora in wounds may have serious consequences for the detainee but the risk of transmission to staff is virtually non-existent. By the end of 2008, a cumulative total of 132 suspected cases had been reported from the United Kingdom, with 86% of cases occurring in England. Four cases were reported in 2008 alone [52]. In 2016 wound botulism still continues to be a problem albeit rare with seven cases being reported and one case of confirmed tetanus [8].

In December 2009, two injecting drug users in Scotland died from anthrax contaminated heroin. Following this, two further deaths occurred in England in February 2010. An alert was issued first by the Department of Health and then, by the National Treatment Agency warning any drug user of the possible risks. Spores from the bacillus anthracis can contaminate heroin without any obvious signs. Anthrax can be acquired by injecting, smoking or inhaling heroin. Obvious symptoms include excessive swelling and redness at injection sites, fever, headache or shortness of breath when the heroin is smoked. Users are advised to go straight to the Emergency Department if they are at all worried. Such infections with spore forming bacteria

WIT.0043.0086.0372

will always occur from time to time. Healthcare professionals should be mindful at all times. There were no reported cases of anthrax in 2016.

Management in Custody

Staff should be reminded to wear gloves when coming into contact with detainees with infected skin sites exuding pus or serum and that any old dressings found in the cell should be disposed of into the yellow bag marked "clinical waste" in the medical room. Likewise, any bedding should be bagged and laundered or incinerated after use. The cell should be deemed out of use and professionally cleaned after the detainee has gone.

The healthcare professional managing the detainee should clean and dress open wounds as soon as possible to prevent the spread of infection. It may also be appropriate to start a course of antibiotics if there is abscess formation, signs of cellulitis and/or the detainee is systemically unwell. However, infections can often be low-grade because the skin, venous and lymphatic systems have been damaged by repeated penetration of the skin. In these cases, signs include lymphoedema, swollen lymph glands and darkly pigmented skin over the area. Fever may or may not be present, but septicemia is uncommon unless the individual is immunocompromised (e.g. HIV positive). Co-Amoxiclav is the preferred treatment of choice as this covers majority of staphylococci, streptococci and anaerobes (the dose used is dependent on the degree of infection).

Necrotizing fasciitis and septic thrombophlebitis are rare but life-threatening complications of intravenous drug use. Any detainee suspected of either of these needs hospital treatment. Advice about harm reduction should also be given. This includes encouraging drug users to smoke rather than inject or at least to advise them to avoid injecting into muscle or skin. Although most injecting drug users are aware of the risk of sharing needles, they may not realize that sharing any drug paraphernalia could be hazardous. Advice should be given to use the minimum amount of citric acid to dissolve the heroin as the acid can damage the tissue under the skin allowing bacteria to flourish. Drugs should be injected at different sites using fresh works for each injection. This is particularly important when "snowballing" as crack cocaine creates an anaerobic environment. Medical help should be requested if any injection site become painful and swollen or shows signs of pus collecting under the skin. Much work has been done to vaccinate PWID against hepatitis B but there is always an opportunity to check their status and encourage them to get vaccinated if they have not had it. Hepatitis A vaccine should also be encouraged as cases of the disease do get reported in PWID.

Another serious but relatively rare problem is the risk from broken needles in veins. Embolization can take anything from hours to days or even longer if it is not removed. Complications may include endocarditis, pericarditis or pulmonary abscesses [60, 61]. PWID should be advised to seek medical help as soon as possible, and should such a case present in custody, then the detainee should be sent straight to hospital.

WIT.0043.0086.0373

Management of Human and Dog Bites

The HCP may encounter bites in four circumstances:

1. During the examination of victims of assault (both children and adults) where presentation is more likely to be late
2. Among police officers bitten during the arrest of a detainee
3. In detainees during the arrest if dogs have been used
4. Where detainees have been involved in a fight either around the time of arrest or earlier

A detailed forensic examination of bites is given in Chap. 4. With any bite that has penetrated the skin, the goals of therapy are to minimize soft tissue deformity and to prevent or treat infection.

Epidemiology

In the UK and USA, dog bites represent approximately three-quarters of all bites presenting to Emergency departments [62]. A single dog bite can produce up to 220 psi of crush force in addition to the torsional forces as the dog shakes its head. This can result in massive tissue damage. Human bites may cause classical bite marks or puncture wounds (e.g. impact of fists on teeth) resulting in crush injuries.

Rates and Risks of Infection

An estimated 10–30% of dog bites and 9–50% of human bites lead to infection. Compare this with an estimated 1–12% of non-bite wounds managed in Emergency Departments.

The risk of infection is increased with puncture wounds, hand injuries, full thickness wounds, wounds requiring debridement, and those involving joints, tendons, ligaments or fractures.

Co-morbid medical conditions such as diabetes, asplenia, chronic edema of the area, liver dysfunction, the presence of a prosthetic valve or joint, and an immunocompromised state may also increase the risk of infection.

Other Complications of Bites

Infection may spread beyond the initial site, leading to septic arthritis, osteomyelitis, endocarditis, peritonitis, septicemia and meningitis. Inflammation of the tendons or synovial lining of joints may also occur. If enough force is used, bones may be fractured or the wounds may be permanently disfiguring.

Initial Management

Encourage the wound to bleed unless it is already bleeding and irrigate with warm running water. Assessment as to whether hospital treatment is necessary should be made as soon as possible. Always refer if the wound is bleeding heavily or fails to stop when pressure is applied. Penetrating bites involving arteries, nerves, muscles, tendons, the hands or feet or resulting in a moderate-to-serious facial wound, or crush injuries also require immediate referral.

WIT.0043.0086.0374

If management within custody is appropriate, then ask about current tetanus vaccine status, HBV vaccination status and known allergies to antibiotics.

A full forensic documentation of the bite should be made as detailed in Chap. 4.

Note if there are clinical signs of infection such as erythema, edema, cellulitis, purulent discharge, or regional lymphadenopathy. Cover the wound with a sterile, non-adhesive dressing. Wound closure is rarely advised in primary care and is not generally recommended as data suggest that this may increase the risk of infection. This is particularly relevant for non-facial wounds, deep puncture wounds, bites to the hand, clinically infected wounds, and those occurring more than 6–12 h before presentation. Head and neck wounds in cosmetically important areas may be closed if less than 12 h old and not obviously infected. This should only be done in a tertiary setting by an appropriately trained health care professional.

Pathogens Involved

1. Bacteria
   - Dog bites—*Pasteurella canis, P. multocida, S. aureus*, other staphylococci, *Streptococcus* species, *Eikenella corrodens*, *Corynebacterium* species and anaerobes including *Bacteroides fragilis* and *C. tetani*.
   - Human bites—*Streptococcus* species, *S. aureus, E. corrodens*, and anaerobes including *Bacteroides* (often penicillin resistant), peptostreptococci species, and *C. tetani*. TB and syphilis may also be transmitted.
2. Viruses
   - Dog bites—Outside of the UK, Australia and New Zealand, rabies should be considered. In the USA, domestic dogs are mostly vaccinated against rabies [63], and police dogs have to be vaccinated, so the most common source is from racoons, skunks and bats.
   - Human bites—HBV, HCV, HIV, and herpes simplex.

Antibiotic Prophylaxis

Prophylactic antibiotics should be prescribed for all human and cat bites less than 72 h old even if there is no sign of infection. For other animal bites then antibiotics should be prescribed if the bite involves the hand, foot and face, joints, tendons or where there are suspected fractures. Antibiotics should also be prescribed for people who are at increased risk of infection e.g. diabetes, asplenia, cirrhosis, immunosuppressed, or who have a prosthetic joint or valve.

Co-amoxiclav (amoxycillin and clavulanic acid) is the first choice for both prophylaxis and treatment and should be given for 7 days. For adults, the recommended dose is 500/125 mg tds and for children 40 mg/kg tds (based on amoxycillin component). If the individual is known or suspected to be allergic to penicillin, then a tetracycline (e.g. doxycycline 100 mg bd) and metronidazole (500 mg tds) or erythromycin (or clarithromycin) and metronidazole can be used. Specialist advice should be sort for children who are penicillin allergic and for pregnant women.

Anyone with severe infection or who is clinically unwell should be referred to hospital. Tetanus vaccine should be given if the primary course or last booster was more than 10 years ago. Human tetanus immunoglobulin should be considered for tetanus-prone wounds (e.g. soil contamination, puncture wounds, signs of

devitalized tissue, or for wounds sustained more than 6 h old). If the person has never been immunized or is unsure of their tetanus status, then a full three-dose course, spaced at least a month apart, should be given.

Management of Suspected Viral Infections from Human Bites

Penetrating bite wounds that involve only saliva may present a risk of HBV if the perpetrator belongs to a high-risk group. For management see "Disease Prevention" and "Management in Custody" in section "Hepatitis B". HCV and HIV are only a risk if blood is involved. The relevant management is dealt with in "Management in Custody" in section "Hepatitis C" and "Management in Custody of Staff/Victims in Contact with Disease" in section "Human Immunodeficiency Virus". Consultation with a virologist or communicable diseases doctor should be sought at the earliest opportunity.

Infections Transmitted Through the Respiratory Route

General Information

Respiratory tract infections are common, are usually mild and self-limiting, although they may require symptomatic treatment with paracetamol or a non-steroidal anti-inflammatory. These include the common cold (80%—rhinoviruses and 20%—coronaviruses), adenoviruses, influenza and parainfluenza, and during the summer and early autumn—enteroviruses. Special attention should be given to asthmatics or the immunocompromised detainee, as infection in these people may be more serious particularly if the lower respiratory tract is involved.

The following section includes respiratory pathogens of special note as they may pose a risk to both the detainee and/or staff who come into close contact.

Meningococcal Meningitis (*Neisseria meningitidis*)

General Information and Epidemiology

There are six meningococcal capsular groups of *Neisseria meningitidis*: A, B, C, W135 X and Y that are responsible for nearly all invasive infections in humans. The prevalence of the different types varies from country to country. In the UK nasopharynx carriage prevalence is around 5% in infants and reaches a peak at around aged 19 of 24%. The rate declines to about 8% in adulthood. The risk of invasive disease following acquisition varies with environmental and host factors. Established carriers rarely get invasive disease.

In 1999 the MenC conjugate vaccine was introduced and vaccination programs over the years have substantially reduced the number of cases in the under 18 s. A secondary benefit of the reduced carriage rate in immunized adolescents was to reduce the number of cases in older age groups. MenC has remained well controlled with 20–30 cases occurring annually over the last 10 years. Of the current cases many occur in people who were born outside the UK and who may not have been vaccinated.

WIT.0043.0086.0376

Cases of MenW were associated with the Hajj pilgrimage in the early 2000 but this has been controlled by the mandatory introduction of MenACWY vaccination for all pilgrims going to Saudi Arabia. Since then MenW have accounted for about 5% of invasive disease until 2010 when cases increased with a peak in 2015/16 of more than 200 cases in that year. The cause was identified as a hypervirulent strain which was responsible for severe disease with high fatality rates in South America, From August 2015 the UK introduced an emergency MenACWY vaccination program for adolescents. The conjugate vaccine is now routinely given to 14 year olds with a catch up for 14–18 years and new university students up to their 25th birthday. This has been effective as by the end of August 2016 there was a 69% decrease of MenW disease in those who left school in the summer of 2015.

MenB disease has declined in the UK over the last 10 years. Around 26% of MenB cases occur in the first year of life with 60% occurring during the first 5 years. A second smaller peak occurs in 15–19 year olds. Since September 2015 MenB vaccine has been incorporated into the UK childhood program and there has already been a fall in the number of cases [64].

Symptoms

Following an incubation period of 3–5 days [65, 66], disease onset may either be insidious with mild prodromal symptoms or florid. Early symptoms and signs include malaise, fever and vomiting. Severe headache, neck stiffness, photophobia, drowsiness and a rash may develop. The rash may be petechial or purpuric and characteristically does not blanche under pressure. Meningitis in infants is more likely to be insidious in onset and lack the classical signs. In approximately 15–20% of cases, septicemia is the predominant feature. Even with prompt antibiotic treatment, the case fatality rate is 3–5% in meningitis and 15–20% in those with septicemia [33]. Meningococcal meningitis and septicemia are statutorily notifiable under health protection legislation in the UK. All cases where a diagnosis of meningococcal disease is suspected should be reported to the Health Protection Team without delay.

Period of Infectivity

A person should be considered infectious until the bacteria are no longer present in nasal discharge. With treatment, this is usually approximately 24 h.

Routes of Transmission

The disease is spread through infected droplets or direct contact from carriers or those who are clinically ill. It requires prolonged and close contact, so is a greater risk for people who share accommodation, utensils, and intimate kissing. It must also be remembered that unprotected mouth-to-mouth resuscitation can also transmit disease but this should never occur in the custody setting where pocket masks and bag valve masks are available.

The risk of illness in close contacts is highest in the first 48 h of disease onset in the index case. The absolute risk of developing a second case of invasive meningococcal disease (IMD) is 1/300 if no chemoprophylaxis is given. Antibiotics are

WIT.0043.0086.0377

given to close contacts of cases to eliminate established carriage and to eradicate carriage in those who have newly acquired the invasive strain.

Transient contact with an index case such as during travel in a plane, bus or car does not justify prophylaxis. European Centre for Disease Prevention and Control (ECDC) guidance indicates flight contact tracing only if there was intense exposure to nasopharyngeal sections. In the USA antibiotic prophylaxis would be recommended for passengers seated next to an index case for more than 8 h.

Management in Custody

Anyone suspected of having meningococcal disease should be sent straight to hospital. Antibiotic prophylaxis is only recommended for those who have had prolonged close contact with a case during the 7 days before the onset of illness, or for those who have had transient close contact but have been directly exposed to large droplets and respiratory excretions around the time of hospitalization. The latter situation may occur in custody with a detainee who is clinically unwell and who coughs into the staff member's face. Respiratory droplets in the eyes is not a case for antibiotics but there is a low risk of meningococcal conjunctivitis. Staff exposed in this way should be advised to seek medical treatment promptly if conjunctivitis develops within 10 days of exposure. Any staff member who thinks they have been exposed should seek advice from their Occupational Health Department or local Health Protection Team.

Ciprofloxacin is the prophylactic antibiotic of choice in the UK, for all age groups and in pregnancy. It is given as a single dose and does not interfere with oral contraceptives and is readily available in pharmacies. In cases of ciprofloxacin hypersensitivity rifampicin is a viable alternative but this requires multiple doses, can inhibit oral contraceptives and is only available through hospital pharmacies. Antibiotic prophylaxis should be given as soon as possible and ideally within 24 h after the diagnosis of the index case. However, antibiotics and vaccine may still be considered up to 28 days later.

Meningococcal vaccination is offered to those at prolonged contact with the index cases. This provides longer term protection and can reduce the chance of late cases. Health care workers or those working in custody suites do not need to be vaccinated routinely because of the low risk of exposure. The threshold for given chemoprophylaxis would however be lowered in those staff members who were immunocompromised [64].

Tuberculosis

Prevalence and Epidemiology

Human tuberculosis (TB) is caused by infection with *Mycobacterium tuberculosis, M. bovis* or *M. africanum*. It is a notifiable disease under legislation specific to individual countries, for example in the UK this comes under the Public Health (Control of Disease) Act 1984. In 1993, the WHO declared TB to be a global emergency with

WIT.0043.0086.0378

an estimated seven to eight million new cases and three million deaths occurring each year, the majority of which were in Asia and Africa.

In 2017 it was estimated that ten million new cases of TB occurred globally (5.8 million men, 3.2 million women and one million children). There were cases in all countries and all age groups but overall 90% were adults (>15) and 9% had concomitant HIV and of those 72% were living in Africa. Two thirds of the TB cases were from eight countries, India, China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh, and South Africa. Only 6% of global cases were in the WHO European region (3%) and WHO Region of the Americas (3%) [67].

World-wide in 2017 it is estimated that around 558,000 people developed TB that was resistant to Rifampicin (RR-TB) and of these 82% had multi-drug resistant TB (MDR-TB), India, China and the Russian Federation accounted for almost 50% of the cases with India accounting for 24%. Some 8.5% of the MDR-TB cases in 2017 were estimated to have extensively drug resistant TB (XDR-TB).

About 1.7 billion people in the world have latent TB that can be reactivated and are therefore at risk of active disease. This represents just under a quarter of the world population.

TB in England

In 1999 the Enhanced Surveillance system was introduced in England and Wales and in the following year in Northern Ireland. The number of cases of TB rose steadily from 6686 in 2000 to a peak of 8919 cases reported in 2011 after which the numbers started to decline. The overall UK rate in 2017 was reported as 8.4/100,000 down from 14.1/100,000 in 2011. England had the highest rate 9.2/100,000 and Wales the lowest 3.4/100,000. Despite the overall the drop since 2011 England continues to have one of the highest TB rates in Western Europe [68].

Data collected throughout England averaged over a 3 year period of 2015–2017 show that London, Manchester and Birmingham have the highest rates (24.3, 23.4 and 22.8 per 100,000 population respectively). This has been attributed to its highly mobile population, the variety of ethnic groups, a high prevalence of HIV, and the emergence of drug-resistant strains.

A similar picture was initially found in the USA, when there was a reversal of a long-standing downward trend in 1985. However, between 1986 and 1992, the number of cases increased from 22,201 to 26,673 [69]. There were also serious outbreaks of multi-drug-resistant TB (MDR-TB) in hospitals in New York City and Miami [70]. Factors pertinent to the overall upswing included the emergence of HIV, the increasing numbers of immigrants from countries with a high prevalence of tuberculosis, and perhaps more significantly, the stopping of categorical federal funding for control activities in 1972. The latter led to a failure of the public health infrastructure for TB control. Since 1992, the trend has reversed as the CDC transferred most of its funds to tuberculosis surveillance and treatment programs in states and large cities. In 2017 9093 cases were reported to the CDC giving an overall TB rate of 2.8 cases/100,000 persons. More than 50% of all TB was reported in four states (California, Florida, New York and Texas). The TB rate was 14.6 times higher

WIT.0043.0086.0379

in non US born persons than in US born persons and although this represented a decrease in previous years there was only a 0.9% decrease in the non US born persons compared with 7% in those born in the USA. The HIV status was known for 86% of all TB cases reported in 2107 and 5.6% were shown to be co infected with HIV [71].

The acquisition of tuberculosis infection is not necessarily followed by disease as the infection may heal spontaneously. It may take weeks or months before disease becomes apparent or infection may remain dormant for years before reactivation in later life especially if the person becomes debilitated or immunocompromised. Contrary to popular belief, the majority of cases of TB in immunocompetent people pass unnoticed. Of reported cases, 75% involve the lung, while non-respiratory (e.g. bone, heart, kidney, brain) or dissemination (miliary TB) are more common in immigrant ethnic groups and the immunocompromised [72]. They are also more likely to develop resistant strains. In the general population, there is an estimated 10% lifetime risk of tuberculosis infection progressing to disease [73].

In 2017 there were a total of 464,633 cases reported of TB in people living with HIV. This represents 51% of the estimated number of cases indicating the degree of under reporting. This is very significant as TB is more likely to progress to active TB in HIV positive individuals with a greater than 50% lifetime risk [74]. TB can also lead to a worsening of HIV with an increase in viral load [75]. Therefore, the need for early diagnosis is paramount but it can be more difficult as pulmonary TB may present with non-specific features, e.g. bilateral, unilateral or lower lobe shadowing [76].

Symptoms of Pulmonary TB

After an incubation of 4–12 weeks, symptoms may develop (see Table 10.7).

Routes of Transmission

The main route is airborne through infected droplets, but prolonged or close contact is needed. Non-respiratory disease is not considered a risk unless the *Mycobacterium* is aerosolized under exceptional circumstances (e.g. during surgery) or there are open abscesses.

Table 10.7 Symptoms of pulmonary TB

Cough lasting >3 weeks or >2 weeks in endemic countries
Fatigue
Anorexia and weight loss
Fever and night sweats
Mild haemoptysis (rusty colored)
Cough with phlegm
Swollen lymph glands

Period of Infectivity

A person is considered infectious as long as viable bacilli are found in induced sputum. Untreated or incompletely treated people may be intermittently sputum-positive for years.

Following 2 weeks of appropriate treatment, the individual is usually considered as non-infectious. This period may be extended for treatment of MDR-TB or XDR-TB or for those with concomitant HIV. Patient compliance also plays an important factor.

At-Risk Groups

The risk of infection is directly proportional to the degree of exposure. More severe disease occurs in the malnourished, or the immunocompromised (e.g. HIV etc.) and substance misusers.

Immunocompromised people are at special risk of MDR-TB, XDR-TB or *Mycobacterium avium-intracellulare* (MAI) although more recently cases resistant to treatment have been described in immunocompetent people.

Management in Custody

Staff with disease should stay off work for 2 weeks whilst treatment is taking effect. You no longer have to wait to be sputum negative as the bacilli can persist for months even though you are no longer infectious. Staff in contact with disease who have been vaccinated with BCG are at low risk of acquiring disease, but should minimize the time spent in the cell. Those who have not received BCG or who are immunocompromised should avoid contact with the detainee wherever possible. Any staff member who is pregnant, regardless of BCG status or type of TB, should avoid contact all together.

Anyone who has had a significant exposure should report to Occupational Health or their GP if no other route exists for testing and treatment if needed. They should also be educated as to the symptoms of TB. Anyone who is likely to come into repeated contact with individuals at risk of TB should receive BCG (if they have not already done so) regardless of age, even though there is evidence to suggest that BCG administered in adult life is less effective. This does not apply to immunocompromised individuals or pregnant women. In the latter case, vaccination should preferably be deferred until after delivery. HIV positive people should never be given BCG.

Detainees with disease (whether suspected or diagnosed) who have not been treated or treatment is incomplete (i.e. less than 2 weeks) should be kept in custody for the minimum time possible. Immunocompromised individuals with TB are usually too ill to be detained, but if they are, they should be considered at greater risk of transmitting disease to staff. Any detainee with disease should be encouraged to cover their mouth and nose when coughing and sneezing.

Staff should wear gloves when in contact with the detainee and when handling clothing and bedding. Any bedding should be bagged after use and laundered or

WIT.0043.0086.0381

incinerated. The cell should be deemed out of action until it has been ventilated and professionally decontaminated, although there is no hard evidence to support that there is a risk of transmission from this route.

Severe Acute Respiratory Syndrome SARS-CoV and Middle East Respiratory Syndrome MERS-CoV

On March 142,003, the WHO issued a global warning to health authorities about a new atypical pneumonia called SARS. The earliest case was believed to have originated in the Guandong province of China on 16 November 2002. The causative agent was identified as a new Corona virus—SARS-CoV [77, 78]. By the end of June 2003, 8422 cases had been reported from 31 different countries with a total of 916 deaths. Approximately 92% of cases occurred in China (including Hong Kong, Taiwan and Macao). The case fatality rate varied from <1% in people less than 24 years old, to over 50% in persons 65 or older. On 5 July 2003, the WHO reported that the last human chain of transmission of SARS had been broken and lifted the ban from all countries. However, they warned that everyone should remain vigilant, as resurgence of SARS was still a possibility and this indeed proved the case with reports ongoing until May 2004. Since then, there have been no further reported cases. Knowledge about the epidemiology and ecology of SARS-CoV and the disease remains limited; however, the experience gained from the previous outbreak enabled the disease to be contained rapidly—reflected in the few cases reported since December. There is still no specific treatment or preventative vaccine that has been developed to date.

Another coronavirus, MERS-CoV was identified in Saudi Arabia in 2012 which causes a similar clinical picture to SARS. This zoonotic disease is acquired by humans through direct or indirect contact with dromedary camels. Since 2012 27 countries have reported cases of MERS including Algeria, Austria, Bahrain, China, Egypt, France, Germany, Italy, Jordan, Malaysia, the Netherlands, Oman, Philippines, Qatar, Saudi Arabia, Thailand, Tunisia, Turkey the UK, the USA and Yemen. Over 90% of all reported cases have been from the Kingdom of Saudi Arabia. Cases outside the Middle East have originated in travellers to that area. There was one large outbreak in the Republic of Korea with 186 cases reported Approximately 35% of patients with MERS have died but this may be an overestimate as milder cases that are not being reported are not included. As of the 3rd September 2018 2241 cases of MERS-CoV have been reported to WHO with at least 795 deaths [79].

PHE reported a laboratory confirmed case in August 2018 from a resident of the Middle East who had travelled to the UK. The last case reported from the UK was in 2013. The risk of infection to UK residents remains very low but HCPs should remain vigilant. It is important that any suspected cases are identified early and reported to local health protection teams as soon as possible.

Incubation Period and Symptoms

The incubation period for SARS is around 3–6 days (maximum 10 days), and for MERS-CoV 2–14 days with a median of 5 days.

WIT.0043.0086.0382

The following clinical case definition of SARS has been developed for public health purposes [80].

A person with a history of:

- Fever (at least 38 °C)
- And, one or more symptoms of lower respiratory tract illness (cough, difficulty in breathing, dyspnea)
- And, radiographic evidence of lung infiltrates consistent with pneumonia or Respiratory Distress Syndrome, or post mortem findings of the above with no identifiable cause
- And, no alternative diagnosis can fully explain the illness.

The clinical symptoms of MERS-CoV ranges from asymptomatic or mild respiratory symptoms to severe acute respiratory disease and death. Pneumonia is common and gastrointestinal symptoms including diarrhea have also been reported. Severe cases require hospitalization and mechanical ventilation. More severe disease occurs in older people, those who are immunosuppressed or who have chronic diseases such as cancer, renal disease, diabetes and other chronic lung diseases. The algorithm for possible cases of MERS-CoV can be found at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732267/Algorithm_case_v31-Aug2018.pdf.

Route of Transmission

SARS is spread by close contact with an infected individual via aerosol or infected droplets. Most cases occurred in hospital workers caring for an index case or their close family members. The virus can also be spread by hands and other objects the droplets have touched. The virus has also been shown to survive in stool for up to 4 days.

For MERS-CoV the route is thought to be from dromedary camels to humans but is not fully understood. Human to human transmission does not occur easily but clusters of cases have occurred in healthcare facilities where infection control practices have been poor. No sustained human to human transmission of MERS-CoV has been documented anywhere in the world [81].

Management in Custody

There have been no cases of SARS since 2004, but cases of MERS-CoV do continue to occur so should be borne in mind for returning travelers who present with respiratory symptoms. There is no vaccine or medicine specific for MERS-CoV so treatment is just supportive and is based on the clinical condition of the patient.

Infections Transmitted Through the Faecal-Oral Route

General Considerations

The most consistent feature of diseases transmitted through the fecal-oral route is diarrhea (see Table 10.8). Infective agents include bacteria, viruses and protozoa.

Table 10.8 Common causes of infective diarrhea

Cause	Symptoms	Incubation	Infectivity	Notes
Campylobacter	C, F, N, V, BD	1–10 days	Untreated—7 weeks	Requires antibiotics. Seek advice. Exclude from custody in acute phase
E coli 0157:H7	BD rarely WD, F is rare	3–8 days	Up to 48 h after diarrhea and vomiting stops around 7 days	Person to person spread. Can be serious with TTP HUS, dehydration, seek advice. Antibiotics not usually used as can increase risk of HUS and increase toxin production
Norwalk Virus	N, V, D, AP, F	24–72 h	Up to 48 h after diarrhea stops	Mild to moderate self-limiting
Rotavirus	F, V, WD ± AP	24–72 h	Up to 8 days but up to 30 days in immunocompromised	Symptomatic treatment. Persists in environment
Salmonella	H, AP, D, N, F ± V	6–72 h	Days to weeks	Persistent carriage can occur. Requires antibiotics. Seek advice
Shigella	DY/WD, F, N, (C, V)	12–96 h	Up to 4 weeks	Usually mild but can be severe in IC. Needs antibiotics Seek advice

AP abdominal pain, *H* headache, *BD* bloody diarrhea, *HUS* hemolytic-uremic syndrome, *C* cramps, *IC* immunocompromised, *D* diarrhea, *N* nausea, *DY* dysentery (blood and mucus), *TTP* thrombotic thrombocytopenic purpura, *F* fever, *V* vomiting, *WD* watery diarrhea

WIT.0043.0086.0383

WIT.0043.0086.0384

Since the causes are numerous, it is beyond the remit of this chapter to cover them all. It is safest to treat all diarrhea as infectious unless the detainee has a proven non-infectious cause (e.g. Crohn's disease, ulcerative colitis).

All staff should wear gloves when in contact with the detainee or handling clothing, bedding etc. and contaminated articles should be laundered or incinerated. The cell should be professionally cleaned after use paying particular attention to the toilet area.

Hepatitis A

Epidemiology and Prevalence

This viral hepatitis occurs worldwide with variable prevalence. It is highest in countries where hygiene is poor and infection occurs all year round. In temperate climates, the peak incidence is in autumn and winter, but the trend is becoming less marked.

All age groups are susceptible if they are non-immune or have not been vaccinated. In developing countries, the disease occurs in early childhood, whereas the reverse is true in countries where the standard of living is higher.

In the UK, there has been a gradual decrease in the number of reported cases from 1990 to 2000 [82, 83]. This is due in part to improved standards of living and the introduction of an effective vaccine. In 2015 there were 330 confirmed cases of hepatitis A. The highest incidence occurred in the 15–34-year-old age group [84].

In the UK between July 2016 and January 2017, 37 confirmed cases of hepatitis A were reported from eight areas in England and Northern Ireland and of those 28 were identified among MSM [85]. Since 2016, 1173 confirmed cases of hepatitis A have been reported from 15 EU countries. Most cases were reported among MSM [86]. Cases in the UK and the EU have been with identical strains prompting the European Centre for Disease Prevention and Control (ECDC) to issue a rapid risk assessment in December 2016 [86]. The outbreak emphasized the need for awareness of hepatitis A among the MSM population.

Symptoms

The clinical picture ranges from asymptomatic infection through a spectrum to fulminant hepatitis. Unlike HBV and HCV, HAV does not persist or progress to chronic liver damage. Infection in childhood is often mild or asymptomatic, but in adults tends to be more severe.

Following an incubation period of 15–50 days (mean 28 days), symptomatic infection starts with the abrupt onset of jaundice anything from 2 days to 3 weeks after the anicteric phase. It lasts for approximately the same length of time and is often accompanied by a sudden onset of fever.

WIT.0043.0086.0385

HAV infection can lead to hospital admission in all age groups, but is more likely with increasing age.

The overall mortality is less than 1%, but 15% of people will have a prolonged or relapsing illness over 6–9 months. Fulminant hepatitis occurs in <1% of people, but is more likely over the age of 65 or in those with pre-existing liver disease. In hospitalized patients, case fatality ranges from 2% in 50–59 year olds to nearly 13% in those older than 70 years [83].

Period of Infectivity

The individual is most infectious in the 2 weeks before the onset of jaundice when they are asymptomatic. This can make control of infection difficult since the disease is not recognized.

Routes of Transmission

The main route is fecal-oral through the ingestion of contaminated water and food. It can also be transmitted by close personal contact including homosexuals practicing anal intercourse and fellatio. There is a very slight risk from blood transfusions if the donor is in the acute phase of infection. It should not be considered a risk from needlestick injuries unless clinical suspicion of HAV is high.

Risk Groups

Risk groups include the homeless, MSM, PWID, travellers abroad who have not been vaccinated, patients with chronic liver disease and chronic infection with HBV and HCV, employees and residents in day-care centers and hostels, sewage workers, laboratory technicians and those handling non-human primates.

Several large outbreaks have occurred among injecting drug users—some with an epidemiological link to prisons [87, 88]. Transmission occurs during the viremia phase of the illness through sharing injecting equipment and via fecal-oral routes because of poor living conditions [89]. There have also been reports of HAV being transmitted through drugs that have been carried in the rectum. A study in Vancouver showed that 40% of injecting drug users had past infection of HAV and they also showed an increased prevalence among men who have sex with men [90].

Management in Custody

Staff with disease should report to Occupational Health and stay off work until the end of the infective period. Those in contact with disease (either through exposure at home or from an infected detainee) should receive prophylactic treatment as soon as possible (see below).

WIT.0043.0086.0386

To minimize the risk of acquiring disease in custody, staff should wear gloves when dealing with the detainee then wash their hands thoroughly. Gloves should only be disposed of in the clinical waste bags.

Detainees with disease should be kept in custody for the minimum time possible. They should only be sent to hospital if fulminant hepatitis is suspected. The cell should be quarantined after use and professionally cleaned. Any bedding or clothing should be handled with gloves and laundered or incinerated according to local policy. Detainees reporting contact with disease should be given prophylactic treatment as soon as possible (see section "Post exposure prophylaxis").

Post exposure Prophylaxis

Contacts of HAV should receive HAV vaccine (e.g. Havrix Monodose or Avaxim) if they have not been previously immunized or had disease. Human normal immunoglobulin (HNIG) 500 mg deep im in gluteal muscle should be used in the following circumstances:

- The contact is aged 60 or over and it is within 14 days of exposure
- Also for close contacts within 14 days of exposure who are HIV positive and have a CD4 count <200 cells/mm^3
- For contacts who are immunosuppressed for other reasons within 14 days of exposure.

If time allows anyone needing HNIG should be tested for IgG antibodies to hepatitis A (anti-HAV IgG) [91].

Staff at higher risk of coming in contact with HAV should consider being vaccinated prior to exposure. Two doses of vaccine given 6–12 months apart provide around 25 years of protection. There is no specific treatment for HAV except supportive measures and symptomatic treatment.

Exotica

Although the chance of encountering a tropical disease in custody is small, it is worth bearing in mind. It is not necessary for a healthcare professional to be able to diagnose the specific disease, but simply to recognize that the detainee/staff member is ill and whether or not they need to be sent to hospital. This is best achieved by knowing the right questions to ask and carry out the appropriate examination. Tables 10.9, 10.10, and 10.11 should be used as an aide memoire in order not to miss some more unusual diseases.

Illustrative Cases 1. A police officer sustained a needle stick injury whilst searching a detainee's property. The needle penetrated his gloves and drew blood. The officer reported the injury immediately to the HCP who encouraged the puncture to bleed and washed the area well with soap and water and applied a plaster.

WIT.0043.0086.0387

Table 10.9 Suspicion of exotica? History and examination aide memoire

Has the detainee travelled to Africa, South East Asia, the Indian Sub-continent, Central/South America or the Far East in the last 6–12 months
Ascertain whether they received any vaccinations prior to travel and what
Ask if they took malaria prophylaxis, what type and whether they completed the course
Ask if they swam in any stagnant lakes during the trip
If yes to any of the above, ask if they have experienced any of the following symptoms:
A fever/hot or cold flushes/shivering
Diarrhea ± abdominal cramps ± blood or slime in the stool
A rash
Persistent headaches ± light sensitivity
Nausea or vomiting
Aching muscles/joints
A persistent cough (dry or productive) lasting at least 3 weeks

Table 10.10 Examples of tropical diseases that present with a fever

Disease	Countries	Incubation	How transmitted	Management
Dengue	Caribbean and S. America, Asia, Africa	3–14 days	Mosquito—no human to human in the UK	Usually symptomatic
Ebola	Sub Saharan Africa	2–21 days	Body fluids from infected people	Isolation and hospitalisation
HFRS[a]—Hanta virus	Europe, Asia, Africa	2 days to 8 weeks	Rat, mouse and vole excreta and body fluids	Hospital
HPS[b]—Hanta virus	North and South America	2 days to 8 weeks	Rat, mouse and vole excreta and body fluids	Hospital
Lassa fever	West Africa	6–21 days	Rat urine and excreta	Isolation and Hospitalisation
Malaria	Sub Saharan Africa, some parts of Asia and South America, Vanuatu	7 days to 1 year	Mosquito—no human to human transmission in the UK	May need urgent treatment
Yellow fever	Sub Saharan Africa and South America	3–6 days	Mosquito—no human to human transmission in the UK	Often needs hospital treatment

[a]*HFRS* haemorrhagic fever with renal syndrome
[b]*HPS* hantavirus pulmonary syndrome

Details of the incident were recorded along with a medical history of the police officer and details of vaccinations received. The police officer reported that he had not had any hepatitis B vaccine. He had no underlying health concerns.

The HCP spoke with the detainee who admitted injecting drugs and to sharing needles. He last shared a needle more than 3 months ago and had no other risk fac-

WIT.0043.0086.0388

Table 10.11 Examples of tropical diseases that can present with diarrhoea

Disease	Incubation	Infectivity	Transmission route	Management
Amoebic dysentery	Days to months	Years	Oral-fecal	Anti-parasitic treatment e.g. metronidazole
Cholera	Hours to 5 days	3–5 days after recovery	Oral-fecal Vomit	Requires antibiotics
Gardia	3–25 days	Months	Oral-fecal	Anti-parasitic treatment e.g. tinidazole
Malaria	7 days to 1 year	None	None	Urgent treatment—hospital
Typhoid[a]	Up to 3 days	Days to weeks	Oral-fecal	Requires antibiotics

[a]Typhoid can also present as a fever

tors. The HCP asked if the detainee was willing to provide a sample of blood which would be tested for hepatitis B, HIV and hepatitis C. The detainee agreed and signed a consent form which was countersigned by the HCP and an independent police officer. Ten mLs of clotted blood was taken from the detainee which was given to the police officer involved who took it to the designated hospital. A 10 mL clotted sample of blood was taken at the hospital from the police officer as a baseline blood to be stored.

Testing of the detainee's blood revealed the following:

HBs Ag positive
HCV antibody positive
HIV antibody/Ag negative

Based on these findings and the unvaccinated status of the police officer—HBIG was administered into the gluteal region along with the hepatitis B vaccination in to the deltoid region. Arrangements were made to follow up the police officer to receive two further doses of hepatitis B vaccine at 4 and 8 weeks. Further screening for hepatitis C RNA at 6 and 12 weeks and for HCV antibodies at 12 and 24 weeks. A test for HBsAg would also be conducted at 24 weeks.

2. A detainee was arrested and brought into custody. Whilst filling in the risk assessment form the Custody Sergeant became aware that the detainee was on medication for pulmonary TB.

   The HCP was asked to examine the detainee and established that the diagnosis of TB had been made 3 weeks ago.

   The detainee had been prescribed isoniazid and rifampicin for 6 months with ethambutol and pyrazinide for the first 2 months. She reported that she had taken her medication every day for the last 20 days. This was evidenced by the number of tablets that had gone from the supply given. She said that she was feeling less tired and was no longer getting night sweats.

The HCP concluded that with such good compliance the detainee was unlikely to be infectious now and was therefore safe to remain in custody.

WIT.0043.0086.0389

Key Points

- The aim of adopting standard precautions with all personnel is to prevent transmission of BBVs by considering that blood and other body fluids are potentially infectious.
- The vulnerable population of patients seen in police custody are at risk of a number of infections due to general poor health, intravenous drug use, and social circumstances. There needs to a high index of suspicion and careful consideration as to whether treatment is required, including referral to hospital.

Self-Assessment Exercises

1. Place these hepatitis B markers in order of infectivity starting with the least infectious and give the % chance of acquisition of hepatitis B following a needle stick injury for each:
   HBsAg, HBeA, HBeAg, HBSA
2. When is the earliest time for detecting (a) antibodies, (b) RNA following infection with hepatitis C virus?
3. (a) What is the current recommended regime for PEP in the UK?
   (b) How long after exposure can PEP be considered?
4. When would you send a detainee or staff member with chicken pox to hospital? Give at least two examples
5. What are the main criteria for giving prophylactic antibiotics following human and other animal bites? Name the first choice of antibiotic and an alternative for people with allergies to penicillin.

References

1. UK Health Guidelines (1998) Guidance for clinical health care workers: protection against infection with blood-borne viruses: recommendations of the Expert Advisory Group on AIDS and the Advisory Group on Hepatitis [HSC 1998/063]. NHS Executive, London, UK
2. Standard precautions in USA. https://www.cdc.gov/oralhealth/infectioncontrol/summary-infection-prevention-practices/standard-precautions.html. Accessed 5 Apr 2019
3. Prevention and Management of infections in Health Care settings South Australia. https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/healthcare+associated+infections/prevention+and+management+of+infections+in+healthcare+settings. Accessed 5 Apr 2019
4. Bolyard EA, Tablan OC, Williams WW, Pearson ML, Shapiro CN, Deitchman SD, and the Hospital Infection Control Practices Advisory Committee (1998) Guideline for infection control in health care personnel. Am J Infect Control 26:289–354
5. WHO Global Hepatitis Report 2017. http://www.who.int/hepatitis/publications/global-hepatitis-report2017/en/. Accessed 5 Apr 2019
6. Hepatitis B virus. http://www.hse.gov.uk/biosafety/blood-borne-viruses/hepatitis-b.htm. Accessed 5 Apr 2019
7. Centers for Disease Control (CDC) (1988) Perspectives in disease prevention and health promotion update. Universal precautions for prevention of transmission of human immuno-deficiency

WIT.0043.0086.0390

virus, hepatitis B virus and other bloodborne pathogens in health-care settings. MMWR Morb Mortal Wkly Rep 37:377–388
8. Acute Hepatitis B (England) Annual Report 2016. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/643558/hpr3117_hepB_ann.pdf. Accessed 5 Apr 2019
9. Shooting up: infections among people who inject drugs in the UK 2017, an update November 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/756502/Shooting_up_2018.pdf. Last accessed 8 Apr 2019
10. Martinson FE, Weigle KA, Royce RA, Weber DJ, Suchindran CM, Lemon SM (1998) Risk factors for horizontal transmission of hepatitis B in a rural district in Ghana. Am J Epidemiol 147:478–487
11. Verma G, Dalai P, Bapat M, Rathi P, Abraham P (2003) Familial clustering of hepatitis B infection: study of a family. Indian J Gastroenterol 22:22–23
12. Erol S, Ozkurt Z, Ertek M, Tasyaran MA (2003) Intrafamilial transmission of hepatitis B in the Eastern Anatolian region of Turkey. Eur J Gastroenterol Hepatol 15:345–349
13. Public Health England Health and Justice Review 2017/18. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725776/Health_and_Justice_Annual_Review_2017-2018.pdf. Accessed 5 Apr 2019
14. Immunisation Against Infectious disease. Chapter 18. Hepatitis B. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/628602/Greenbook_chapter__18.pdf. Accessed 5 Apr 2019
15. World Health Organisation Global Hepatitis Report 2017. http://www.who.int/hepatitis/publications/global-hepatitis-report2017/en/. Accessed 5 Apr 2019
16. Frank C, Mohamed MK, Strickland GT (2000) The role of the parenteral antischistosomal therapy in the spread of hepatitis C virus in Egypt. Lancet 355:887–891
17. Hepatitis C Epidemiology in the United States. https://www.hepatitisc.uw.edu/pdf/screening-diagnosis/epidemiology-us/core-concept/all. Accessed 5 Apr 2019
18. PHE Hepatitis C in England. 2018 report. http://www.hcvaction.org.uk/sites/default/files/resources/Hepatitis%20C%20in%20England%202018%20report.pdf. Last accessed 5 Apr 2019
19. Chief Medical Examiner, Sir Liam Donaldson (2002) Hepatitis C strategy for England. Department of Health, London, UK
20. Ramsay ME, Balogun MA, Collins M, Balraj V (1998) Laboratory surveillance of hepatitis C virus in England and Wales: 1992–1996. Commun Dis Public Health 1:89–89
21. Treatment for hepatitis C. https://www.nhs.uk/conditions/hepatitis-c/treatment/. Accessed 5 Apr 2019
22. HIV and Chronic HCV co-infection prevalence in England highest with MSM. http://www.aidsmap.com/HIV-and-chronic-HCV-co-infection-prevalence-in-England-highest-among-MSM/page/3319032/. Accessed 5 Apr 2019
23. WHO fact sheet hepatitis D. https://www.who.int/en/news-room/fact-sheets/detail/hepatitis-d. Accessed 5 Apr 2019
24. Hepatitis D, Sean R Lacey, Assistant Professor, Department of Medicine, Case Western Reserve University. http://emedicine.medscape.com/article/178038-overview. Accessed 5 Apr 2019
25. The Global HIV/AIDS Epidemic. https://hiv.gov/hiv-basics/overview/data-and-trends/global-statistics. Accessed 5 Apr 2019
26. HIV in the UK Report. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/602942/HIV_in_the_UK_report.pdf. Accessed 5 Apr 2019
27. Trends in new HIV diagnoses and people receiving HIV related care in the UK. Data to the end of December 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/738222/hpr3218_hiv17_v2.pdf. Accessed 5 Apr 2019
28. National HIV Surveillance Tables. www.gov.uk/government/statistics/hiv-annual-data-tables. Accessed 5 Apr 2019
29. Limb S, Kawar M, Forster GE (2002) HIV post-exposure prophylaxis after sexual assault: the experience of a sexual assault service in London. Int J STD AIDS 13:602–605

WIT.0043.0086.0391

30. UK Guidelines of the use of HIV post-exposure prophylaxis following sexual exposure (PEPSE) 2015. https://www.bashhguidelines.org/media/1027/pepse-2015.pdf. Accessed 5 Apr 2019
31. Jochimsen EM (1997) Failures of zidovudine post exposure prophylaxis. Am J Med 102:52–55
32. Hawkins DA, Asboe D, Barlow K, Evans B (2001) Seroconversion to HIV-1 following a needlestick injury despite combination post-exposure prophylaxis. J Inf Secur 43:12–15
33. Salisbury DM, Begg NT (1996) Immunisation against infectious disease. Her Majesty's Stationery Office, London, UK
34. Sinha DP (1996) Chickenpox—disease predominantly affecting adults in rural West Bengal. Int J Epidemiol 5:367–374
35. Centers for Disease Control and Prevention (1996) Prevention of *varicella*: recommendations of the Advisory Committee on Immunization Practices. MMWR Morb Mortal Wkly Rep 45:1–36
36. Fairley CK, Miller E (1996) *Varicella-zoster* virus epidemiology. A changing scene? J Infect Dis 174(suppl 3):314–319
37. Smego RA, Asperilla MO (1991) Use of Acyclovir for *varicella* pneumonia during pregnancy. Obstet Gynecol 78:1112–1116
38. Pastuszak AL, Levy M, Schick B et al (1994) Outcome after maternal varicella infection in the first 20 weeks of pregnancy. N Engl J Med 330:901–905
39. Miller E, Cradoc-Watson JE, Ridehalgh MK (1989) Outcome in newborn babies given anti-*varicella zoster* immunoglobulin after perinatal maternal infection with *varicella zoster* virus. Lancet 2:371–373
40. Gilden DH, Vafai A, Shtram Y et al (1983) *Varicella-zoster* virus DNA in human sensory ganglia. Nature 306:478–480
41. Dworkin RH, Schmader KE (2001) Epidemiology and natural history of herpes zoster and post herpetic neuralgia. In: Watson CPN, Gershon AA (eds) Herpes zoster and postherpetic neuralgia, 2nd edn. Elsevier, New York, NY, pp 39–64
42. Desmond RA, Weiss HL, Arani RB et al (2002) Clinical applications for change-point analysis of herpes zoster pain. J Pain Symptom Manag 23:510–516
43. Gnann JW Jr, Whitley RJ (2002) Herpes zoster. N Engl J Med 347:340–346
44. Vaccine update Issue 286 September 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/744508/VU_286_september_2018.pdf. Accessed 5 Apr 2019
45. Haustein UF, Hlawa B (1989) Treatment of scabies with permethrin versus lindane and benzoyl benzoate. Acta Derm Venereol 69:348–351
46. Brown S, Becher J, Brady W (1995) Treatment of ectoparasitic infections; review of the English-language literature 1982–1992. Clin Infect Dis 20(suppl 1):S104–S109
47. Klutymans J, Van Belkum A, Verbrugh H (1989) Nasal carriage of *Staphylococcus aureus*: epidemiology and control measures. Infect Dis Clin N Am 3:901–913
48. Lowry FD (1998) *Staphylococcus aureus* infections. N Engl J Med 339:520–532
49. Centers for Disease Control and Prevention (1981) Community-acquired methicillin-resistant *Staphylococcus aureus* infections—Michigan. MMWR Morb Mortal Wkly Rep 30:185–187
50. Saravolatz LD, Markowitz N, Arking L, Pohlod D, Fisher E (1982) Methicillin-resistant *Staphylococcus aureus*, epidemiologic observations during a community acquired outbreak. Ann Intern Med 96:11–16
51. M.J. Ellington et al. Panton-Valentine Leucocidin related disease in England and Wales. https://www.sciencedirect.com/science/article/pii/S1198743X14617900. Accessed 10/9/19
52. Shooting Up. Infections among injecting drug users in the United Kingdom 2008. An update (2009). https://webarchive.nationalarchives.gov.uk/20140629102649/http://www.hpa.org.uk/Publications/InfectiousDiseases/BloodBorneInfections/ShootingUp/. Accessed 6 Apr 2019
53. Shooting up: Infections among people who inject drugs in the UK, 2016. An update November 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/663003/Shooting_Up_2017_report.pdf. Accessed 5 Apr 2019

WIT.0043.0086.0392

54. Summanen PH, Talan DA, Strong C et al (1995) Bacteriology of skin and soft tissue infections: comparison of infections in intravenous drug users and individuals with no history of intravenous drug use. Clin Infect Dis 20(Suppl 2):S279–S282
55. Bohlen LM, Muhlemann K, Dubuis O, Aebi C, Tauber MG (2000) Outbreak among drug users caused by a clonal strain of group a *Streptococcus*. Emerg Infect Dis 6(2):175–179. Dispatches—emerging infectious diseases. http://www.cdc.gov. Accessed Mar 2003
56. Lettington W (2002) Bacteriological skin and subcutaneous infections space in injecting drug users—relevance for custody. J Clin Forensic Med 9:65–69
57. Passaro DJ, Werner SB, McGee J, MacKenzie WR, Vugia DJ (1998) Wound botulism associated with black tar heroin among injecting drug users. JAMA 279:859–863
58. Brazier JS, Duerden BI, Hall V et al (2002) Isolation and identification of *Clostridium*spp from infections associated with injection of drugs: experiences of a microbiological investigation team. J Med Microbiol 51:985–989
59. Greater Glasgow Health Board, SCIFH (2001) Unexplained illness among drug injectors in Glasgow. Eur Secur 4:500518
60. Kuylaylat MN, Barakat N, Stephan RN, Gutierrez I (1993) Embolization of illicit needle fragments. J Emerg Med 11:403–408
61. Ngaage DL, Cowen ME (2001) Right ventricular needle embolus in an injecting drug user: the need for early removal. Emerg Med J 18:500–501
62. Spanierman C (2004) Departments of Emergency Medicine and Pediatrics, Lutheran General Hospital of Oak Brook, Advocate Health System. eMedicine-Human Bites. http://www.emedicine.com/ped/topic246.htm. Accessed 10/9/19
63. Presutti JP (2001) Prevention and treatment of dog bites. Am Fam Physician 63:1567–1572
64. Guidance for the public health management of meningococcal disease in the UK. Update February 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/688835/Public_health_management_of_meningococcal_disease_guidelines.pdf. Accessed 5 Apr 2019
65. Boutet R, Stuart JM, Kaczmarski E, Gray SJ, Jones M, Andrews N (2001) Risk of laboratory-acquired meningococcal disease. J Hosp Infect 49:282–284
66. Orr H, Kaczmarski E, Sarangi J, Pankhania B, Stuart J (2001) Cluster of meningococcal disease in rugby match spectators. Commun Dis Public Health 4:316–317
67. The Global Tuberculosis Report 2018 Executive Summary. https://www.who.int/tb/publications/global_report/tb18_ExecSum_web_4Oct18.pdf?ua=1. Accessed 6 Apr 2019
68. Chapter 7 current and emerging health protection issues. https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-7-current-and-emerging-health-protection-issues. Accessed 5 Apr 2019
69. Cantwell MF, Snider DE, Cauthen GM, Onorato IM (1994) Epidemiology of tuberculosis in the United States, 1985 through 1992. JAMA 272:535–539
70. Centers for Disease Control (1991) Nosocomial transmission of multi-drug resistant tuberculosis among HIV-infected persons—Florida, New York, 1988–1991. MMWR Morb Mortal Wkly Rep 40:585–591
71. Stewart RJ et al (2017) Tuberculosis USA. MMWR 67(11):317–323. https://www.cdc.gov/mmwr/volumes/67/wr/mm6711a2.htm?s_cid=mm6711a2-e. Accessed 5 Apr 2019
72. Sepkowitz DV (1995) Tuberculosis in HIV-infected individuals (Chapter 5). In: Lutwick LI (ed) Tuberculosis—a clinical handbook. Chapman & Hall Medical, London, UK
73. Murray JF (1989) The white plague: down and out, or up and coming? Am Rev Respir Dis 140:1788–1795
74. Selwyn PA, Hartel D, Lewis VA et al (1989) A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. N Engl J Med 320:545–550
75. Wallis RS, Vjecha M, Amir-Tahmasseb M et al (1993) Influence of tuberculosis on human immunodeficiency virus (HIV-1): enhanced cytokine expression and elevated B_2-microglobulin in HIV-1 associated tuberculosis. J Infect Dis 167:43–48

WIT.0043.0086.0393

76. Long R, Maycher B, Scalcini M, Manfreda J (1991) The chest roenterogram in pulmonary tuberculosis patients seropositive for human immunodeficiency virus type 1. Chest 99:123–127
77. Peiris JSM, Lais T, Poon LLM et al (2003) Coronavirus as a possible cause of severe acute respiratory syndrome. Lancet 361:1319–1325
78. Donnelly CA, Ghani AC, Leung GM et al (2003) Epidemiological determinants of spread of causal agents of severe acute respiratory syndrome in Hong Kong. Lancet 361:761–766
79. PHE Risk Assessment of MERS-CoV. https://www.gov.uk/government/publications/mers-cov-risk-assessment/phe-risk-assessment-of-mers-cov. Accessed 5 Apr 2019
80. World Health Organization (2003) Alert, verification and public health management of SARS in post-outbreak period. http://www.who.int/csr/sars/postoutbreak/en/. Accessed 14 Dec 2003
81. Middle East Respiratory Syndrome Coronavirus (MERS-COV). http://www.who.int/news-room/fact-sheets/detail/middle-east-respiratory-syndrome-coronavirus-(mers-cov). Accessed 5 Apr 2019
82. Gay NJ, Morgan-Capner P, Wright J, Farrington CP, Miller E (1994) Age-specific antibody prevalence to hepatitis A in England: implications for disease control. Epidemiol Infect 113:113–120
83. Crowcroft NS, Walsh B, Davison KL, Gungabissoon U, PHLS Advisory Committee on Vaccination and Immunisation (2001) Guidelines for the control of hepatitis A infection. Commun Dis Public Health 4:213–227
84. Health Protection Report Volume 10 No 24. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/540334/hpr2416_hepAC.pdf. Accessed 5 Apr 2019
85. Outbreak of hepatitis A associated with men who have sex with men (MSM), England, July 2016 to January 2017. https://www.eurosurveillance.org/docserver/fulltext/eurosurveillance/22/5/eurosurv-22-5-2.pdf?expires=1539097725&id=id&accname=guest&checksum=7229AE7B3AE6F20963113FC7E402D883. Accessed 5 Apr 2019
86. Hepatitis A outbreaks in the EU/EEA mostly affecting men who have sex with men. Second update 19 May 2017. https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2017.22.5.30454. Accessed 5 Apr 2019
87. Harkess J, Gildon B, Istre GR (1989) Outbreaks of hepatitis A among illicit drug users, Oklahoma, 1984–1987. Am J Public Health 79:463–466
88. Hutin YJ, Bell BP, Marshall KL et al (1999) Identifying target groups for a potential vaccination program during a hepatitis A community outbreak. Am J Public Health 89:918–919
89. Hutin YJ, Sabin KM, Hutwagner LC et al (2000) Multiple modes of hepatitis A transmission among metamphetamine users. Am J Epidemiol 152:186–192
90. Ochnio JJ, Patrick D, Hom TG et al (2001) Past infection with hepatitis A among Vancouver Street youth, injection drug users and men who have sex with men; implications for vaccination programmes. CMAJ 165:293–297
91. Public Health control and management of hepatitis A. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727411/Public_health_control_and_management_of_hepatitis_A_2017.pdf. Accessed 5 Apr 2019

Fitness to Be Interviewed and Fitness to Be Charged

11

Margaret M. Stark and Keith J. B. Rix

Learning Objectives

Explain the different types of false confessions.

Be able to describe the various conditions, both physical and mental, that might result in vulnerability.

Explain how to evaluate whether a detainee might be at risk during a police interview.

Introduction

The interview of suspects or persons of interest is an essential component of all systems of criminal investigation. Codes C of the Codes of Practice of the Police and Criminal Evidence Act 1984 (PACE) [1] and the Police and Criminal Evidence (Northern Ireland) Order 1989 (PACE(NI)O) [2] define an interview as:

> *'the questioning of a person regarding their involvement or suspected involvement in a criminal offence or offences which […] must be carried out under caution'*. (Code C 11.1A)

Section 82 (1) PACE defines a confession as including any statement wholly or partly adverse to the person who made it.

M. M. Stark
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK
e-mail: president@fflm.ac.uk

K. J. B. Rix (✉)
Honorary Fellow and Mental Health and Intellectual Disability Lead,
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK
e-mail: keith@drkeithrix.co.uk

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_11

WIT.0043.0086.0395

The confessions and other incriminating statements that are obtained during interviews have always played an important role in prosecutions and continue to be relied on as evidence of guilt in a substantial number of trials. For example, in England and Wales, confessions have been found to provide the single, most important piece of evidence against defendants in the Crown Court, being crucial in about 30% of cases [3]. Similarly, an influential American observational study found that interview was necessary for solving the crime in about 17% of cases [4]. Whereas in Scotland corroboration of a suspect's confession has always been required; other than in exceptional cases there is a need for two separate sources of evidence before a case comes to trial. The quest to obtain confessions from the mouths of suspects has seen a slow and uneven move away from the inquisitions aided by torture and oppression of the Middle Ages toward the doctrine that:

> *A free and voluntary confession is deserving of the highest credit, because it is presumed to flow from the strongest sense of guilt and therefore it is admitted as proof of the crime to which it refers; but a confession forced from the mind by the flattery of hope or by the torture of fear comes in so questionable a shape when it is to be considered as the evidence of guilt, that no credit ought to be given to it; and therefore it is rejected* [5].

In the years since this judgment, considerable effort has been expended on attempting to regulate the custodial interview in order to minimize the risk of false confessions while preserving the value of interrogation as a means of solving crime. In this section, we will consider the important psychological aspects of interview and confession and then discuss the role the healthcare professional (HCP) can play in ensuring that suspects are fit to be interviewed.

Police Interview Techniques

A number of American manuals detail the way in which coercive and manipulative interrogation techniques can be employed by police officers to obtain a confession [6, 7], with similar techniques being advocated by Walkley [8] in the first such manual written for British officers. The authors of these manuals propound various highly effective methods for breaking down a suspect's resistance while justifying a certain amount of pressure, deception, persuasion, and manipulation as necessary in order for the "truth" to be revealed. Walkley acknowledges that "if an interviewer wrongly assesses the truth-teller as a lie-teller he may subject that suspect to questioning of a type which induces a false confession." Generally, however, the manuals pay scant attention to the fact that, in certain circumstances, the techniques they recommend may make a suspect confess to a crime he or she did not commit and there is now a considerable body of experimental evidence that raises serious concerns about the use of such techniques [9]. Manipulative and persuasive tactics continued to be used in England and Wales, particularly in relation to more serious crimes, at least until the late 1980s and early 1990s [10–12].

Interviewers are encouraged to look for verbal clues, nonverbal clues and behavioural attitudes which indicate deception. However, the innocent as well as the

guilty may exhibit signs of nervousness. Innocent suspects may be anxious because they are erroneously being accused of being guilty, because of worries about what is going to happen to them while in custody, and possibly because of concerns that the police may discover some previous transgression. Furthermore, there are three aspects of a police interview that are likely to be as stressful to the innocent as to the guilty: the stress caused by the physical environment in the police station, the stress of being isolated from family and friends, and the stress caused by the suspect's submission to authority. All these factors can markedly impair the performance of a suspect during interview. Indeed, American research has suggested that for most suspects interviews are likely to be so stressful as to impair their judgement on such crucial matters as the exercise of legal rights [13]. Furthermore in an experimental study comparing forensic investigators and students, although the investigators were better than students in distinguishing between true and false denials, they were significantly more likely to make false positive errors suggesting a bias towards perceiving deception where there is none [14]. As observed by Vrij [15] '*once innocent suspects are mistakenly identified as guilty, they run the risk of being submitted to an interview style that is even more grilling than the interview style that guilty suspects are subjected to*.' It is little wonder that false confessions are made to the police.

False Confessions

During the last two decades of the twentieth century, the United Kingdom (UK) witnessed a number of well-publicized miscarriages of justice in which the convictions depended heavily on admissions and confessions made to the police that were subsequently shown to be untrue [16–18]. In reviewing 70 earlier wrongful imprisonments that occurred between the years 1950 and 1970, Brandon and Davies [19] found that false confessions were second only to incorrect identification evidence as the most common cause of wrongful conviction. In 1994, Justice [20] identified 89 cases in which an alleged miscarriage of justice rested on a disputed confession. There has been no comparable research this century in the UK but the number of such cases considered by the Criminal Division of the Court of Appeal of England and Wales suggests that such miscarriages of justice are now less frequent. This is probably a result of the bedding down of PACE with its Code of Practice and the increasing use of the PEACE (Planning and Preparation; Engage and Explain; Account clarification and challenge; Closure; Evaluation) model of interviewing [21] which has formed part of a national training package for police officers since 1993 along with the influential of work of forensic psychologist and former Icelandic police officer Gisli Gudjonsson [9] which has led to what has been described as improved professionalism in investigative interviewing [22].

Gudjonnson [23] has reviewed 34 cases of miscarriages of justice between 1989 and 2009 and found that in 23 cases (68%) the conviction was overturned on the basis of a psychological vulnerability identified, including borderline IQ, personality disorder, clinical depression, pathological attention seeking, abnormal traits of

WIT.0043.0086.0397

suggestibility and or compliance. In only 10 cases (29%) were there police/procedural improprieties.

However, a review of key USA studies in [24] found that the percentage of false confessions in studies of wrongful convictions ranged from 14% to 25%. Since then there has been a singularly important study [25] of DNA exoneration cases which found that 16% of those exonerated had given detailed narratives of the crime, most of them richly contaminated accounts which were '*so persuasive, detailed, and believable that judges repeatedly upheld the convictions during appeals and habeas review*'.

Therefore vigilance must remain the watchword. People are at risk of making false and misleading admissions against their own interest. We need to turn to modern psychology to obtain insights into why this happens and to learn how it can be avoided.

Why Make a False Confession?

There is no single reason why people falsely confess to crimes they have not committed. Indeed, such confessions usually result from a combination of factors unique to the individual case. Nonetheless, Kassin and Wrightsman [26] have been able to identify three distinct types of false confession, which have been developed by Gudjonsson [27] and Shepherd [28]. These categories are voluntary, accommodating-compliant, coerced-compliant, coerced-reactive and coerced-internalized.

Voluntary False Confessions

Voluntary false confessions are offered by individuals without any external pressure from the police. Commonly the individuals go voluntarily to the police to confess to a crime they may have read about in the press or seen reported on television. Often they do so out of a morbid desire for notoriety, the individual seeming to have a pathologic desire to become infamous, even at the risk of facing possible imprisonment.

Alternatively, a voluntary false confession may result from the individual's unconscious need to expiate guilt feelings through receiving punishment. The guilt may result from real or imagined past transgressions or, occasionally, may be part of the constant feeling of guilt felt by some individuals with a poor self-image and high levels of trait anxiety.

By contrast, some people making this type of confession do so because they are unable to distinguish between fact and fantasy. Such individuals are unable to differentiate between real events and events that originate in their thinking, imagination, or planning. Such a breakdown in reality monitoring is normally associated with psychotic illness, such as schizophrenia.

On occasions, people may volunteer a false confession to assist or protect the real culprit. Gudjonsson [29] highlights some evidence that confessing to crimes to protect others might be particularly common in juvenile delinquents.

Finally, Shepherd [28] identifies a subset of individuals who falsely confess to crimes to preempt further investigation of a more serious crime.

Accommodating-Compliant False Confessions

Expanding on the original three distinct categories of false confession, Shepherd [28] recognizes a group of people for whom acquiescing with the police is more important than contradicting police assertions about what happened. In such circumstances a false confession arises from a strong need for approval and to be liked. Police conduct is noncoercive, although it does involve the use of leading questions sufficiently obvious to suggest to the suspect what answers the police want to hear. People at all intellectual levels are at risk of behaving in this manner, with those who are excessively compliant being at greatest risk.

Coerced-Compliant (or Pressured-Compliant) False Confessions

Coerced-compliant false confessions are typically elicited during persuasive interrogation: the person perceives that there is some immediate instrumental gain from confessing. The suspect does not confess voluntarily but comes to give in to the demands and pressures of the interrogators. He or she is fully aware of not having committed the crime of which he is accused, and the confession is usually retracted once the immediate threat is over. The key mechanism is dysfunctional/maladaptive coping [30].

Gudjonsson [31] suggests that the four main types of perceived immediate gain are being allowed home after confessing, bringing the interview to an end, a means of coping with the demand characteristics (including the perceived pressure) of the situation, and avoidance of being locked up in police custody. Recognizing that not all police-induced false confessions are coerced [32] and that coercion can occur from other sources than the police [33] (see below), Gudjonsson [34] now suggests that the word 'coerced', which is a legal concept, should be replaced by 'pressured'.

In these circumstances the suspect may be vaguely or fully aware of the consequences of making a false self-incriminating statement, but the perceived immediate gain outweighs, in their mind, the potential long-term consequences. They may think that their innocence will be self-evident and naively believe that the truth will come out later in court, perpetuating the belief shared by many police officers and legal advisers that what happens in the police station is not really that important.

Coerced-Reactive (or Pressured-Reactive) False Confessions

Gudjonsson [34] now recognizes a type of false confession that results from pressure by persons other than police officers such as family, friends and peers. This hitherto previously neglected group of false confessors has been identified by

WIT.0043.0086.0399

McCann [33] who suggests that as this type is likely to involve a close emotional relationship between the false confessor and the coercer it should be conceptualized separately from police coerced confession. The assumption that the relationship produces an additional pressure on the coerced person receives support from research [35] which suggested an overlap in vulnerability to compliance in personal and impersonal relationships. In such cases a refusal to comply with a request from a close friend or partner may result in a fear of emotional rejection or, if it is an abusive relationship, a fear of violence.

Coerced-Internalized (Pressured-Internalized) False Confessions

Coerced-internalized false confessions occur when suspects are gradually persuaded that they have committed a crime of which they have no recollection, or when they have become so confused that they begin to mistrust their own memory ('memory distrust') and accept a false scenario suggested by the police. In order to achieve this, the investigator has to convince the suspect that (a) there is incontrovertible evidence that they committed the crime of which they are accused, even though they have no recollection of it, and (b) there is a good and valid explanation for their having no recollection of it. This type of confession can happen under two distinct conditions:

1. The suspects have no memory of the alleged offense, even whether or not they committed it. This can be as a result of amnesia such as alcohol-amnesia. In essence, the suspects have no clear recollection of what they were doing at the time the offense was committed and come to believe they must have committed the crime.
2. At the outset of the interview, the suspects have a clear recollection that they were not involved in the alleged offense. However, as a result of subtle manipulative techniques employed by the interrogator, they begin to distrust their own memory and beliefs. Interrogators attempt to undermine the suspects' confidence in their own recollection of events, which then creates sufficient self-doubt and confusion to cause them to adjust their perceptions of reality and accept the allegations put by the police. To make matters worse, the original memory contents may then be inaccessible.

In contrast to the makers of coerced-compliant false confessions, those who make coerced-internalized false confessions only come to retract when they realize, or suspect, that they are in fact innocent. These retractions can take considerable time and, on occasion, may never occur if the original memory of events becomes permanently distorted.

A key component facilitating internalization is susceptibility [36]. This can be dispositional such as naivety, low IQ, or suggestibility, or transient factors associated with custody and interrogation such as social isolation, extreme stress or sleep deprivation. Gudjonsson [37] further identifies as pre-existing vulnerabilities for

WIT.0043.0086.0400

internalized false confessions: substance misuse, memory problems and lack of confidence in memory which cause suspects to doubt their existing memory of innocence. These same vulnerabilities, which along with poor self-image/low self-esteem, suggestibility, compliance and tendency towards confabulation, can create the false belief of guilt ('plausibility acceptance') and then assist the suspect with a reconstruction based on suggested material using crime-related knowledge and imagined material and using leading and hypothetical questions.

Suggestibility, Compliance and Acquiescence

Of vital importance to an understanding of why false confessions can often prove so incriminating is an awareness of the theory of interrogative suggestibility [38, 39]. At the heart of the theory is the way leading questions can produce distorted responses from suspects because they are phrased in such a way as to suggest the expected response. Through this process people can come to accept a piece of post-event information and incorporate it into their memory, thus appearing to have "special knowledge" about the alleged offense. This special knowledge may seriously mislead the police and the courts to assume the suspect's guilt erroneously. Suggestibility has been found to be moderated by factors such as anxiety, poor memory, history of life adversity, poor self-esteem, and low intelligence [40]. These factors impair the suspect's ability to cope with the uncertainty and expectations contained within questioning.

Compliance refers to the tendency of people to obey the instructions of others when they don't really want to, either because they are overeager to please or are simply unable to resist the pressure [41]. The traits of both suggestibility and compliance have been shown to be relevant to the issue of false confessions [42].

Acquiescence is the manner by which people answer questions in the affirmative irrespective of content. Acquiescence is more highly correlated with low intelligence than suggestibility or compliance [40].

Preventing False or Otherwise Unreliable Confessions

It is a fundamental tenet of both American and English law that reliance should only be placed on confession evidence that is given freely and voluntarily. In considering the voluntary nature of a confession, several factors will need to be considered. These include the vulnerability of the accused (as a result of factors such as age, mental illness, intellectual disability, physical illness or injury, intoxication with alcohol or other substances, memory problems, suggestibility, compliance), the conditions of detention (lack of access to legal advice, failure to be given legal rights, adequate rest periods during detention, solitary confinement, lack of social support, continued interrogation over a long period of time, physical violence by the police), and the characteristics of the interrogation (pressure, manipulation, threats, physical abuse, inducements etc.).

WIT.0043.0086.0401

In America the most important legal development designed to protect the rights of suspects and deter police misconduct relates to the case of Miranda v Arizona, which was decided in 1966 [43]. The effect of this judgment was to ensure that all criminal suspects in police custody must be warned against self-incrimination and made aware of their right to remain silent and to receive legal advice. These rights have to be actively waived by the accused before interrogation can commence, and any violations of the requirements render any subsequent confession inadmissible.

In England and Wales and in Northern Ireland, statutory safeguards are provided by PACE and the PACE(NI)O respectively and their Codes of Practice [1, 2], which regulate practice in respect to a number of matters including the detention, treatment, and questioning of persons by police officers.

Specifically s 76 of PACE deals with the challenges to the admissibility of confessions in criminal proceedings. Under s 76(2) the court shall not allow a confession to be admitted if it was or may have been obtained:

(a) by oppression

(b) in consequence of anything said or done which was likely … to render unreliable any confession which might be made by him in consequence thereof.

Section 78(1) of PACE states that the court may refuse to allow confession evidence if it appears that:

> *"having regard to all the circumstances, including the circumstances in which the evidence was obtained, the admission of the evidence would have such an adverse effect on the fairness of the proceedings that the court ought not to admit it."*

The fairness of the trial proceedings in criminal cases is guaranteed by Article 6 of the European Convention on Human Rights. Confessions will generally be inadmissible if the provisions of the Codes of Practice are breached by the police [44, 45].

The role of the HCP when assessing a suspect's fitness for interview is seen as fitting into this overall legal framework. The HCP's primary concern being to recognize any characteristics that might render the individual vulnerable to providing a false or otherwise unreliable confession so that adequate safeguards can be put in place.

A Definition of Fit for Interview

Previously there was no clear definition of what precisely is meant by the term "fit to be interviewed," which has led to confusion among those doctors called on to perform these assessments [46]. To address this deficiency Norfolk [47] proposed a definition that was used as the starting point for discussion by a subgroup set up by the Home Office Working Party on Police Surgeons in the UK. That working party made an interim recommendation [48], which has now been modified and included since 2003 in the PACE Codes of Practice [42], thus providing the first Parliamentary approved definition of the term fitness for interview. The Codes of Practice state that:

A detainee may be at risk in an interview if it is considered that:

(a) Conducting the interview could significantly harm the detainee's physical or mental state.
(b) Anything the detainees say in the interview about their involvement or suspected involvement in the offence about which they are being interviewed might be considered unreliable in subsequent court proceedings because of their physical or mental state.

Thus, a suspect with known ischemic heart disease who is experiencing chest pain satisfies the criteria of (a) above and clearly needs assessment and appropriate treatment before it is safe to conduct an interrogation.

In Scotland equivalent safeguards derive from Lord Hodge's ruling in *HM Advocate v Duncan and Stewart* [2006] HCJ 06:

> '*the test is one of fairness in all the circumstances, having regard not only to the means by which the interview was conducted but also other circumstances which might place the accused in a position of such disadvantage that he could understand neither the situation he was in nor his right not to answer the questions which were put to him*.'

The concept of unreliability may be harder to evaluate and will require consideration of the various vulnerability factors associated with false confessions. In making an assessment, the Codes of Practice [49] require the HCP to consider:

1. How the detainee's physical or mental state might affect their ability to understand the nature and purpose of the interview, to comprehend what is being asked, and to appreciate the significance of any answers given and make rational decisions about whether they want to say anything;
2. The extent to which the detainee's replies may be affected by their physical or mental condition rather than representing a rational and accurate explanation of their involvement in the offense;
3. How the nature of the interview, which could include particularly probing questions, might affect the detainee.

Recognizing that '*vulnerable persons are often capable of providing reliable evidence'* but *'may, without knowing or wanting to do so, be particularly prone in certain circumstances to provide information that may be unreliable, misleading or self-incriminating'* [50, 51], the England and Wales Code C includes particular provisions relating to persons who *'may be vulnerable as a result of having a mental health condition or mental disorder'* [52]. Vulnerable applies to any person who, because of a mental health condition or mental disorder [53]:

(i) May have difficulty understanding or communicating effectively about the full implications for them of any procedures and processes connected with:
   - Their arrest and detention; or (as the case may be)

WIT.0043.0086.0403

- Their voluntary attendance at a police station or their presence elsewhere, for the purpose of a voluntary interview; and
- The exercise of their rights and entitlements.

(ii) Does not appear to understand the significance of what they are told, of questions they are asked or of their replies;

(iii) Appears to be particularly prone to:
- Becoming confused and unclear about their position;
- Providing unreliable, misleading or incriminating information without knowing or wishing to do so;
- Accepting or acting on suggestions from others without consciously knowing or wishing to do so; or
- Readily agreeing to suggestions or proposals without any protest or question.

Code C of PACE(NI)O makes similar provisions for those with 'mental disorder', as defined in s 305 of the Mental Capacity Act (Northern Ireland) 2016 as 'any disorder or disability of the mind', mental vulnerability or communication difficulties.

Mental vulnerability probably includes states of extreme emotion and distress [54]. This is of particular relevance because Gudjonsson et al. [55], in a study for the Royal Commission on Criminal Justice, found that a third of suspects were not in a normal mental state while in police custody due to extreme distress or mental disorder. This could impair their capacity for rational decision-making or coping effectively with interview and they have suggested that even detainees whose mental health or psychological problems do not amount to actual mental illness or mental disorder are potentially vulnerable to giving misleading or unreliable statements.

The Codes of Practice of PACE Code C 11.15 state that a juvenile (child under 18 years of age) or vulnerable person must not be interviewed regarding their involvement or suspected involvement in a criminal offence or offences, or asked to provide or sign a written statement under caution or record of interview in the absence of the appropriate adult unless certain circumstances prevail. An officer of the rank of superintendent or above must authorize such an exceptional interview. Code C of PACE(NI)O Codes has a similar provision (11.15, 11.18).

An appropriate adult means (Code C Annex E):

(i) a relative, guardian, or other person responsible for their care or custody;

(ii) someone experienced in dealing with vulnerable persons, but who is not:
  (a) a police officer;
  (b) employed by the police;
  (c) under the direction or control of the chief officer of the police force;
  (d) a person who provide services under contractual arrangements (but without being employed by the chief officer of the police force) to assist that force in relation to the discharge of its chief officers functions:
  (e) whether or not they are on duty at the time.

(iii) failing these some other responsible adult aged 18 or over who is other than a person described above.

The role of the appropriate adult is to safeguard the rights, entitlements and welfare of the detainee. There may be a significant problem with interviewing the mentally vulnerable without support in that any evidence obtained maybe unreliable, misleading, self-incriminating, and the vulnerable person may not be sure what is in their best interests. In the case of *R v Aspinall* [56] the failure to follow the requirements to have an appropriate adult in the interview of a mentally disordered suspect meant that, despite his apparent lucidity in interview, it was unfair to admit it in evidence.

Similar legislation to PACE regarding vulnerability is found in New South Wales, Australia. The legislation in New South Wales is arguably the most extensive, compared to other States/Territories in Australia, making special provision for a range of vulnerable persons [57].

Vulnerable persons are defined in the Law Enforcement Powers and Responsibility Regulation 2016 [58] Clause 28 as:

(a) children,
(b) persons who have impaired intellectual functioning,
(c) persons who have impaired physical functioning,
(d) persons who are Aboriginal persons or Torres Strait Islanders,
(e) persons who are of non-English speaking background,

Impaired intellectual functioning is defined in the Code of Practice for CRIME (Custody, Rights, Investigations, Management and Evidence) 2012 [59] as:

- total or partial loss of a person's mental functions
- a disorder or malfunction that results in a person learning differently from a person without the disorder or malfunction
- a disorder illness or disease that affects a person's thought processes, perception of reality emotion or judgements, or that results in disturbed behaviour

Impaired physical functioning is also defined:

- total or partial loss of the person's bodily functions or part of a person's body
- the presence in the person's body of organisms causing or capable of causing disease or illness
- the malfunction, malformation or disfigurement of part of a person's body.

When a vulnerable person is identified a 'support person' and/or 'interview friend' should be contacted to provide support.

In Ireland there is a general provision under reg 3 of the Criminal Justice Act 1984 (Treatment of Persons in Garda Síochána Stations Regulations) 1987 that members of the Garda should have regard for the special needs of any detainees who

WIT.0043.0086.0405

may be under a 'physical or mental disability' and under reg 12 there is a requirement that the interview must be conducted in 'a fair and humane manner'.

Scheme of Examination

When assessing a detainee's fitness for interview, the traditional medical model of taking a history and then conducting an examination should be employed. As always, informed consent should be obtained and detailed and contemporaneous notes should be taken. The HCP should review the risk assessment performed by the custody staff during the booking in process, and speak to the custody sergeant, and other relevant police officers as appropriate, to obtain any relevant background information relating to the arrest and whether there are any specific concerns about the detainee. There may be relevant information from friends, family, witnesses, as well as hospital letters. Previous police and/or health computerized records may be a source of information (NSPIS/NICHE/SCR, etc.). If time and circumstances permit, it may also be helpful for the HCP to speak to such relatives, friends or professionals, e.g. the general practitioner, community mental health team, community drug team.

In recent years, following on from the Bradley report [60], Criminal Justice Liaison and Diversion (CJLD) teams are increasingly found in police custody centres and the courts [61]. These services identify people who have mental health, learning disability, substance misuse, or other vulnerabilities, when they first come into contact with the criminal justice system as suspects, defendants, or offenders. They screen, assess and refer onto other services. The CJLD practitioner may be able to provide the HCP tasked with the assessment of fitness to be interviewed information about the detainee's current health condition and, if required, liaise with the detainee's mental health team for further assessment and treatment, or, where required, a formal Mental Health Act assessment.

The History

As much background information as is practicable should be obtained (as outlined above) and, when possible, an indication of how long any interview is likely to take. The demand characteristics of a long interview about a suspected murder will be much greater than a short interview about a shoplifting offense.

A general medical history should be taken with enquiry made about significant illness and any prescribed and over the counter medication. The detainee should be asked whether he or she has suffered from psychiatric illness, past or present, and specific enquiry should be made about substance misuse, both alcohol and drugs. There should be questions to assess the person's educational background, as individuals with learning difficulties can be difficult to recognize and enquiring about schooling or being in receipt of a statement of special educational needs may aid identification.

WIT.0043.0086.0406

Table 11.1 Vulnerabilities to consider in the assessment of FTI

Physical vulnerability	Mental vulnerability
Medication, e.g. concern re access/pain relief	Schizophrenia
Epilepsy: post ictal state; pre-ictal aura	Bipolar disorder
Diabetes: hypoglycemia (ideally the blood glucose should be over 6 mmol/L) [63]	Psychotic episode, e.g. drug-related
Asthma	Depressive disorder (spectrum from severe to mild)
Cardiac disease	Attention deficit hyperactivity disorder (ADHD)/Attention deficit disorder (ADD)
Cerebrovascular disease	Acquired brain injury (ABI)/Dementias
Alcohol intoxication, withdrawal, delirium tremens	Alcohol dependence, Korsakoff's syndrome, Wernicke's encephalopathy
Substance misuse/dependence including intoxication or withdrawal	Substance misuse/dependence including intoxication or withdrawal
Sleep deprivation	Intellectual disability
Injuries, e.g. head injury, fractures	Post-traumatic stress disorder (PTSD)

Make sure the detainee has not been deprived of food or sleep and enquire about significant social distractions (e.g. a single parent may make a false confession in order to obtain early release from custody and a speedy reunion with his or her child). Detainees should be asked whether they have been detained before and, if so, whether they have had unpleasant experiences while in custody in the past.

The recognition of vulnerabilities (Table 11.1) is very important in the overall assessment of fitness to be interviewed. Norfolk [62] developed the acronym 'PHIT' which refers to:

- Personality factors - suggestibility, compliance, acquiescence
- Health—mental and physical (including substance misuse)
- Interview—demands and characteristics of the interview;
- Totality of the circumstances—all other relevant circumstances of the arrest and custody

The Examination

The examination should include observations on the general appearance, physical examination as appropriate, and mental state examination. A functional assessment should be performed as to whether the detainee:

(a) is aware of the reason for arrest
(b) understands the caution and can explain it
(c) understands their legal rights
  – their right to consult privately with a solicitor and that free, independent legal advice is available ('Do you need money in order to have a solicitor

WIT.0043.0086.0407

help you at the police station?' 'If you don't want a solicitor to help you now, can you change your mind later?')
  - their right to have someone informed of their arrest
  - their right to consult the Codes of Practice
  - if applicable, their right to interpretation and translation and their right to communicate with their High Commission, Embassy or Consulate

(d) is capable of making a rational decision (able to choose between relevant courses of action) and of carrying out the chosen course of action.

Each examination needs to be tailored to the individual, but HCPs should be able to assess the vulnerabilities of the detainees, both physical and mental, they have been asked to examine and thus ensure that any necessary safeguards are put in place before the interview begins.

Documenting Fitness to Be Interviewed

At the conclusion of the assessment the HCP needs to advise:

- on the need for an appropriate adult (concept of vulnerability)
- whether reassessment of the person's fitness for interview is required at a later date
- whether a (further) specialist opinion may be required
- the risks of unreliability and attempt to quantify those risks (see below).

The importance of detailed contemporaneous clinical notes of the assessment will assist the HCP if required to provide a witness statement at a much later date and give evidence in the court proceedings, including at a *voir dire* (an inquiry conducted by the judge in the absence of the jury into the admissibility of an item of evidence e.g. a confession).

The Home Office Working Group [64] identified four categories of risk:

- Definite—unlikely to be fit for interview at any stage e.g. severe dementia
- Major risk—unfit at present. Needs re-assessment or review at a later stage to establish FTI, e.g. intoxication with alcohol and/or drugs
- Some risk—precautions advised e.g. presence of AA or referral for other medical or psychiatric advice e.g. schizophrenia, depression, mild intellectual disability
- No discernible risk

If, for example, a detainee with intellectual disability is to be interviewed it will be appropriate to advise the police to keep language simple, or where an individual has a mental illness advise the appropriate adult, to be ready to intervene if particular symptoms and sings of mental illness occur such as delusional material begins to be introduced [65].

WIT.0043.0086.0408

Alcohol and Fitness for Interview

It is generally accepted that severe alcohol intoxication renders a suspect unfit to be interviewed. There is much less agreement, however, when it comes to deciding when somebody with mild or moderate intoxication should be considered fit to interview [46, 66]. The customary view that intellectual processes are impaired at lower blood alcohol levels than sensory or motor processes has been challenged. Indeed, the very opposite has been shown, with intellectual processes appearing to be more resistant to alcohol than sensory and motor skills [67]. Nonetheless, the effect alcohol can have on short-term memory should be borne in mind when advising the police on fitness. Research suggests that moderate quantities of alcohol impair the process of forming new memories [68]. Deterioration in performance of a task assessing short-term memory occurred at blood alcohol levels of 70 mg/100 mL in one study [69], and a significant impairment of eyewitness memory has been demonstrated at average blood alcohol levels of 100 mg/100 mL [70]. When suspects mistrust their own memory of events, they are at increased risk of providing coerced-internalized false confessions [71].

The ultimate decision regarding whether a suspect who has been drinking is fit for interview is best decided on the medical and functional assessment performed by the HCP rather than on arbitrarily defined "safe" blood alcohol levels [72].

Alcohol withdrawal states and the complications of alcohol withdrawal can impair cognitive functioning and affect both a suspect's ability to cope with interrogative pressure and the ability to provide reliable testimony. Even the after effects of alcohol, or "hangover," have been shown to impair critical task performance, such as aircraft operation, and can impair judgment [73]. Research evidence has also suggested that alcohol withdrawal can increase a suspect's suggestibility, although it is not totally clear whether this is a direct result of the alcohol withdrawal or a secondary effect of its treatment [74].

Illustrative Case *A 37 year old male had been arrested on suspicion of criminal damage of a motor vehicle. The police had performed a risk assessment and established that the detainee was under the influence of alcohol and there was a query that he had received brain damage a couple of months prior to this arrest. The detainee had been seen by a colleague after arrest who had concluded that the detainee was intoxicated with alcohol. The HCP was now asked to assess whether the detainee required an appropriate adult.*

The detainee gave a history of drinking alcohol daily (strong cider 8.4%). He drank alcohol on wakening otherwise he was tremulous and unable to get up. He had been drinking at this level for five years. He said he had been assaulted two months previously and this had resulted in a skull fracture requiring an operation at the local hospital. He confirmed that he had a problem with his memory since the assault.

The detainee was aware of the reason for his arrest but couldn't remember whether he had ever been arrested before. He was calm, cooperative, alert and orientated in time, place and person, and the mental state examination was entirely

WIT.0043.0086.0409

normal. He was tremulous, sweating with a blood pressure of 145/95 and pulse 98 beats per minute. The HCP concluded that there was evidence of alcohol withdrawal and provided treatment (a long acting benzodiazepine diazepam 10 mg). The HCP advised the police that in view of the history of an acquired brain injury and severe alcohol dependence the detainee would require the presence of an appropriate adult.

Substance Misuse and Fitness for Interview

A substance misuser may be rendered unfit for interview by virtue of either intoxication or withdrawal. Generally speaking, intoxication is easy to recognize, and the police will usually wait until the intoxication has cleared before starting their questioning. However, problems may be encountered with hallucinogenic substances. For example, the mental state may fluctuate in the recovery stages of an LSD experience and some of the novel psychoactive substances with hallucinogenic properties e.g. tryptamines and phenethylamines, which may not be immediately obvious to the interviewer [75].

Withdrawal states can pose a bigger problem for the doctor assessing fitness for interview. Although most confessions made in these circumstances are reliable [76], it should be recognized that the person suffering from drug withdrawal may be particularly vulnerable to providing a false confession. Such persons may believe that compliance will result in early release and that the risks entailed in providing a false confession may seem worthwhile in the presence of an overwhelming desire to reestablish access to their supply of drugs [32].

Although symptoms of mild withdrawal from opiates, for example, is considered unlikely to be a barrier to interview [46, 75], the physical and mental distress occasioned by established withdrawal may seriously impair a suspect's fitness to undergo the somewhat threatening and difficult experience of police interrogation.

When faced with a suspect suffering from severe withdrawal, the HCP should consider advising that the interview be deferred until such time as the withdrawal has subsided or been adequately treated. If the HCP decides to treat the withdrawal state, consideration should be given to the risk that the therapeutic intervention may in itself have a bearing on fitness to interview. Arranging for therapy that the suspect has been receiving in the community to be continued in police custody is unlikely to influence fitness for interview [75, 77, 78]. However, when substitution therapy is initiated in custody, or when symptomatic treatment alone is provided, the HCP may well need to assess the impact of the treatment before an interview takes place.

The Court of Appeal (Criminal Division) in *R v Crampton* (1991) 92 Cr App R 369 [79], has ruled that the mere fact that an addict is withdrawing and might have a motive for confession does not necessarily make the confession unreliable. Whether an addict is fit to be interviewed in the sense that his or her answers can be relied on as being true is a matter for those present at the time. It is therefore essential that the HCP performs a comprehensive assessment as the evidence he/she provides could be pivotal in the case.

The Impact of Psychiatric Illnesses and Personality Disorders

There has been a considerable amount of research into the manner in which certain functional psychiatric illnesses can affect the reliability of testimony [80, 81]. Thus anxiety has been shown to increase a suspect's suggestibility [82] and depression can lead to feelings of guilt and poor self-esteem that render a suspect vulnerable to providing a false confession [83]. It has been accepted that personality disorder might render a confession unreliable in *R v O'Brien* [84] and evidence of possible inaccurate elaboration on events without understanding the implications of doing so was the basis of a successful appeal against conviction for robbery in the case of a prostitute with a severe personality disorder *R v Walker* [85]. Psychiatric illness may also render a person unfit for interview by virtue of its effect on cognitive processes or because of associated thought disorder [66, 86]. However, careful questioning that avoids the use of leading questions and coercive pressures can often elicit reliable testimony. The fact that a suspect suffers from an illness such as schizophrenia does not necessarily mean that he or she is unfit for interview [87]; such an opinion would depend on the likely demand characteristics of the interview and the functional assessment by the doctor. This is reflected in Annex G of Code C of PACE and the PACE(NI)O:

> '*It is essential healthcare professionals who are consulted consider the functional ability of the detainee rather than simply relying on a medical diagnosis, e.g. it is possible for a person with severe mental illness to be fit for interview.*'

Intellectual Disabilities

Gudjonsson [88] has observed that a common theme across real-life studies is that many of the exonerated people who falsely confessed had intellectual disabilities. The police and HCPs rarely have difficulty recognizing moderate or severe learning difficulties, but borderline or low-normal intelligence may not be obvious even to trained observers [89–91]. The identification of those with ID on arrest is important to ensure that they receive the support they need and access to the appropriate services to help them understand what is happening as they go through the CJS [92]. The FFLM recommends use of a short questionnaire to ascertain the presence of an ID [93]. Detainees with ID will be particularly vulnerable and are likely to believe that they do not need legal advice, will be allowed home after confessing and will be believed if they retract a false confession [94]. Such individuals may have difficulties in understanding the caution, understanding and exercising their legal rights, making informed decisions and in communicating with police officers. They are also more likely to be suggestible and acquiescent [95].

A recent case of *Miller v DPP* [96] has confirmed how important the role of the AA is in supporting an individual throughout the custodial process. In this case the detainee had been arrested for failing to provide a specimen of blood in breach of s 7 of the Road Traffic Act 1988. The detainee was known to suffer from autism and intellectual disability and on appeal the court stated that there was a very real

WIT.0043.0086.0411

possibility that the presence of an appropriate adult would have calmed the detainee and led him to behave differently and make different choices from those he in fact made. An AA must be present so that the suspect can understand the gravity of his decision not to provide a specimen.

Neurodevelopmental Disorders

Gudjonsson [97], summarizing the results of four studies, has suggested that persons who are symptomatic for attention deficit hyperactivity disorder (ADHD) are two to three times more likely than their 'peers' to make false confessions during police questioning.

Detainees with autistic spectrum disorders (ASD) are also at risk. In *L & R v R* [2011] EWCA Crim 649 [98] the Court of Appeal ruled that an interview with L, conducted in the absence of an appropriate adult and a solicitor, should be excluded as there was evidence that L, who showed signs of ASD, was '*suggestible particularly when under pressure and when required to respond to complex statements or questions'* and was at risk of giving erroneous answers in response to a confrontational style of questioning.

The Effect of Physical Illnesses on Fitness for Interview

The presence of any physical illness renders an individual more vulnerable when faced with a stressful situation such as a custodial interrogation. Features such as anxiety or depression will affect a person's ability to function during the police interview, and physical illness, especially if severe, is as likely to cause anxiety and depression as any other form of stress [99]. The severity of the emotional response will depend on the nature of the illness itself, the personality of the individual and social circumstances. Suspects who are already coping with physical illness are more likely to focus on the short-term consequences of their behavior than the long-term ones, thus increasing the risk that they might provide a false confession.

As the impact of physical illness on a person's coping strategy is not disease specific, depending more on the actual or perceived severity of the illness rather than the nature of the illness itself, the actual diagnosis is unimportant. By contrast, there are many physical illnesses in which characteristic disturbances in cognitive functioning have been recognized [100]. With these illnesses, the nature and degree of the mental disturbance produced depends entirely on the diagnosis of the underlying condition. The more common of the conditions encountered in custody are discussed below.

Epilepsy

It is now clear, after long historical dispute, that a predisposition to epileptic fits does not mean per se that there will be associated intellectual impairment, personality disorder, or mental illness. Most epileptic patients remain mentally normal,

WIT.0043.0086.0412

although this does depend on the presence, site, and extent of any brain damage underlying the epilepsy [101].

However, people with epilepsy without significant brain damage do, nonetheless, remain prone to cognitive impairment, particularly memory impairment, as a result of their epilepsy and its treatment. The potential impact of this cognitive impairment has to be considered when assessing fitness for interview in a suspect with epilepsy.

For example, problems with concentration, memory, and intellectual functioning can be seen when anticonvulsant drugs are administered in toxic doses or unsuitable combinations [102]. Suspicion should be raised when a suspect complains of mental lethargy or appears to be performing below expected levels, symptoms particularly associated with toxicity.

Further problems with the reliability of testimony from suspects with epilepsy may be related to their personality. Patients with epilepsy are often overprotected in childhood by concerned parents and, later in life, can be exposed to profound social and occupational discrimination [103]. All these factors can lead to personality problems, which include feelings of insecurity, low self-esteem, and dependency. Individuals with these personality traits are likely to be highly suggestible and may strive to please interviewing officers by giving answers that seem plausible and consistent with the external cues provided, even though the responses are known to be untrue.

The neurophysiologic consequences of an epileptic fit can in themselves seriously distort an individual's perception of events occurring around the time of the fit, thus rendering any subsequent account of that event potentially unreliable. Complex disturbances of thinking, memory, or awareness may feature as part of an aura preceding the actual seizure. These may include distortion of time sense, mental confusion, or feelings of depersonalization or déjà vu. The fit may also be ushered in by distorted perceptions or actual hallucinations of sight, hearing, taste, or smell. When the ensuing fit is mild or abortive, the connection between these reported experiences and their epileptic causation may be missed [103].

In March 2017 the classification system for seizures was revised [104] with a new nomenclature based on where seizures begin in the brain; the level of awareness during the seizure; and other features of seizure.

Cognitive disturbances can follow in the wake of seizures, with clouding of consciousness and disorientation lasting for a few minutes or up to an hour or more, so that recollection for events occurring during the postictal period may also be unreliable [101].

Head Injury

Head injuries may occur in a number of circumstances involving possible criminal offenses such as road traffic collisions and assaults; therefore, it is not uncommon to encounter head-injured detainees in police custody. The potential for the head injury to affect the person's ability to recall the details of the accident or assault can assume considerable importance.

WIT.0043.0086.0413

Memory loss for events occurring around the time of the injury is likely to occur whenever there has been diffuse brain damage of a degree sufficient to cause concussion. In most cases loss of consciousness will accompany the head injury, but this is not invariable, and it is possible for patients to display both retrograde and post-traumatic amnesia without losing consciousness [100].

Retrograde amnesia refers to the loss of memory for events that immediately precede the head injury. Individuals can often indicate with fair precision the last event that they can clearly recollect. In road traffic collisions the journey may be recalled up to a specific point, which allows an estimate of the extent of the pre-traumatic gap to be made. Such amnesia is usually short in duration and can usually be counted in minutes or hours rather than days or weeks. Indeed, when the retrograde amnesia lasts for a long time the explanation is often due to hysteria.

Retrograde amnesia may render a suspect unfit for interview immediately after the head injury, but the HCP should be aware that the extent of the amnesia can change with time. At first it may be very long, but it can then shrink over the next days and weeks, eventually ending up as a matter of minutes only. Recovery from retrograde amnesia tends to occur in chronological order, with items in the distant past recovering first.

By contrast, post-traumatic amnesia refers to the period from the moment of the injury until normal continuous memory returns, the length of the amnesia providing a good index, albeit in retrospect, of the severity of the brain damage [105]. It should be emphasized that the amnesia only ends when the person becomes able to give a clear and consecutive account of what is happening around him or her. Sometimes "islands of memory" will be exhibited, but these should not be taken as indicating the end of the amnesia. There is a similar danger in underestimating the duration of post-traumatic amnesia in those suspects who, although aware of things going on around them, are unable to recall these events at a later date [100].

A variety of behaviors may be exhibited during the period of post-traumatic amnesia, ranging from apparent normality to obvious confusion. In general, however, behavior is unremarkable, and the HCP may be easily misled into believing that there is nothing amiss. The individuals themselves are usually unaware of the abnormal memory at the time and can give superficial or made-up explanations for any defects that are discovered. Occasionally these false memories can appear most convincing [106].

Migraine

Migraine is a common and sometimes incapacitating disorder, affecting approximately 20% of women and 15% of men at some time in their lives [107]. Some degree of mental change is almost universal during attacks. Anxiety and irritability are common early in the attack and are often followed by drowsiness and lethargy. Cognitive impairment may occur. Cerebration is often slowed with poor concentration, and there may be marked impairment of memory [100].

WIT.0043.0086.0414

Detainees who claim that they suffered an attack of migraine at or around the time of the alleged offense should be questioned closely about any cognitive impairment during previous attacks. However, it should be recognized that the pattern of any such impairment can change from attack to attack in the same person.

Hypothyroidism

A detainee who is being adequately treated for hypothyroidism poses no particular problem for the HCP assessing fitness for interview. However, an individual with undiagnosed or undertreated hypothyroidism may exhibit mental manifestations that are as important as the physical. The typical picture is of mental lethargy, general dulling of the personality, and slowing of all cognitive functions. In particular, the hypothyroid patient shows deficits in memory, abstraction, conceptual organization, and mathematical ability [108].

Diabetes Mellitus

Although confusion is a prominent feature in patients who are slipping into hyperglycemic coma, this condition is rarely seen in police custody. Questions relating to fitness for interview and the potential reliability of a detainee's confession are more likely to involve those with hypoglycemia.

Episodes of hypoglycemia are associated with irritability, anxiety, and panic in the early stages. As the episode develops, the individual becomes disinhibited and may exhibit childish or aggressive behavior that often mimics drunkenness. Disorientation and mental confusion are common and, in severe cases, the person may pass into a coma. Anybody suffering from hypoglycemia will prove to be a poor witness to events that occur during the episode. Most will have complete amnesia for the content of the attack and occasionally for an additional period before the attack occurred when their behavior will have appeared to be normal [109]. The HCP should take a clear history of any hypoglycemic episodes that may have occurred prior to arrest and should consider checking the blood glucose of any diabetic about to be interviewed by the police. The manifestations of hypoglycemia with subsequent impaired intellectual function are extremely variable, and it has been recommended that the blood sugar should be kept at 6 mmol/L or more if a diabetic person is to give a statement or be interviewed [63].

Dementia

It is estimated that there are 850,000 people in the UK with dementia with the main sub-types Alzheimer's disease, vascular dementia, mixtures of these two pathologies ('mixed dementia') and rarer types such as Lewy body dementia, dementia in Parkinson's disease and fronto-temporal dementia [110].

However, in many of these patients the dementia is not recognized until there is some form of crisis in their lives. Such a crisis may be precipitated by sudden illness, bereavement, or police arrest. Individuals seem able to develop strategies to cope with their daily tasks and thus appear to function normally until the crisis disrupts the status quo and exposes the degree of their dementia [111].

Although there are many different causes of dementia, the clinical picture remains broadly similar, with any variation depending mainly on the age of onset of the illness, premorbid personality, and intelligence. In the custodial situation the doctor is likely to encounter only those at an early stage of the disease. This is characterized by impaired memory, loss of the sense of time, and spatial disorientation, all of which can distort a suspect's recollection of events. This distortion may be compounded by the lack of judgment that is frequently displayed by those with dementia and that can cause the suspect to misjudge the importance of providing reliable testimony [100].

Therefore it is important that the HCP be aware of the possibility that an elderly suspect may be suffering from dementia, even when there are reports of apparently normal social functioning prior to arrest. In such circumstances recognition of the dementia can be facilitated by using a standard test of cognitive function, such as the Abbreviated Mental Test Score (AMTS) [112], the Six-Item Cognitive Impairment Test [113] (6CIT http://6cit.co.uk/test/) or the Mini-Mental State Examination Score [114].

Illustrative Case *An 80 year old man was arrested for shoplifting. The police performed a routine risk assessment on his arrival at the police station and found that he appeared to be 'confused'. The HCP was called to assess the detainee for fitness to be detained and fitness to be interviewed. The HCP concluded, after performing a comprehensive assessment, including a Mini-Mental State Examination, that the detainee had dementia. The HCP advised the police that the detainee was not fit to be interviewed, and was unlikely to be fit for interview at any stage due to the diagnosis of dementia. There was a definite risk that anything the detainee said in the interview might be considered unreliable in subsequent court proceedings. Furthermore the detainee's condition was unlikely to improve. Referral to the adult safeguarding team was recommended having regard to the detainee's vulnerability. The police were advised to inform the CPS that prosecution in this case would probably not be in the public interest.*

Fitness to Be Charged

A person will be fit to be charged if he/she is capable of:

- understanding the meaning of the written notice detailing the particulars of the offence (which should be stated in simple terms as well as following the precise wording of the offence in law); and
- understanding the meaning of the statutory warning that precedes the details of the charge.

WIT.0043.0086.0416

Fitness to be charged is not the same as fitness to be interviewed, as those vulnerabilities that render an individual more likely to give a false confession to the police are not relevant when considering fitness for charge. If a suspect is fit to be interviewed then he/she will also be fit to be charged unless there is any material change in their condition. Children and the mentally vulnerable should have the appropriate adult present when they are charged.

Conclusions

The Innocence Project [115] found that in about 25% of DNA exoneration cases innocent defendants made a false confession or incriminating statement. The importance of the electronic recording of all interviews has been highlighted. Currently in the US nearly half the states have a requirement for audio recording of all interviews. This occurs routinely in England and Wales. In New South Wales interviews are video and audio recorded. Whilst this makes it easier to assess the interview process, video and audio recording interviews does not necessarily ensure that false confessions do not occur.

It is essential that HCPs working in the field of general forensic medicine have the necessary competencies to be able to adequately assess a suspect with regard to fitness to be interviewed. Forensic physicians with sufficient experience of, and relevant qualifications in general forensic medicine, as well as forensic psychiatrists, may also assist in potential appeals where it is suspected that a conviction has resulted from a false or unreliable confession which should have been ruled inadmissible at trial [116].

Key Points

- A comprehensive assessment by the HCP who has the appropriate competencies (knowledge, skills, and experience) is required to assess a suspect with regard to fitness to be interviewed by the police.
- The HCP's primary concern is to recognize any characteristics that might render the individual vulnerable to providing a false or otherwise unreliable confession so that adequate safeguards can be put in place.

Self-Assessment Exercises

1. Describe the five types of false confessions.
2. What is the role of an appropriate adult?
3 Outline a scheme to recognize vulnerabilities in the assessment of fitness to be interviewed?

Acknowledgment With acknowledgement to the previous co-author Dr. Guy Norfolk who was not involved in this edition.

References

1. Police and Criminal Evidence Act 1984 (s.60 (1)(a), s.60A(1) and s.66 (1)) (2006) Codes of Practice A-G 2005 for England and Wales. Her Majesty's Stationery Office, Norwich
2. Police and Criminal Evidence (Northern Ireland) Order (1989) Code C Code of practice for the detention, Treatment and questioning of persons by police officers. Department of Justice, Northern Ireland
3. Baldwin J, McConville M (1980) Confessions in Crown Court Trials. Royal Commission on Criminal Procedure Research Study No. 5. Her Majesty's Stationery Office, London
4. Wald M, Ayres R, Hess DW, Schantz M, Whitebread CH (1967) Interrogations in New Haven: the impact of Miranda. Yale Law J 76:1519–1614
5. R v Warickshall (1783) 1 Leach 263
6. Inbau FE, Reid JE (1967) Criminal interrogations and confessions, 2nd edn. Williams & Wilkins, Baltimore
7. Royal RF, Schutt SR (1976) Gentle art of interviewing and interrogation: a professional manual and guide. Prentice Hall, Englewood, Cliffs
8. Walkley J (1987) Police interrogation. A handbook for investigators. Police Review Publication, London
9. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 90
10. Irving B (1980) Police interrogation. A case study of current practice. Royal commission on criminal procedure, research study no 2. Her Majesty's Stationery Office, London
11. Irving BL, McKenzie IK (1989) Police interrogation: the effects of the police and criminal evidence act. The Police Foundation, London
12. Pearse J, Gudjonsson GH (2003) The identification and measurement of 'oppressive' police interviewing tactics in Britain, Chapter 4. In: Gudjonsson GH (ed) The psychology of interrogations and confessions, a handbook. Wiley, Chichester
13. Leiken LS (1970) Police interrogation in Colorado: the implementation of Miranda. Denver Law J 47:1–53
14. Meissner CA, Kassin N (2002) "He's guilty!": Investigator bias in judgments of truth and deception. Law Hum Behav 26:469–480
15. Vrij A (2008) Detecting lies and deceit. Pitfalls and opportunities, 2nd edn. Wiley, Chichester
16. Kennedy L (1988) 10 Rillington place. Grafton, London
17. Thomas T (1987) The confait confessions. Policing 3:214–225
18. Kee R (1989) Trial and error. The true events surrounding the convictions and trials of the Guildford four and the Maguire seven. Penguin, London
19. Brandon R, Davies C (1973) Wrongful imprisonment. George Allen & Unwin, London
20. Justice (1994) Unreliable evidence? Confessions and the safety of convictions. Justice, London
21. Shepherd E, Griffiths A (2013) Investigative interviewing. The conversation management approach (2nd ed). Oxford University Press, Oxford
22. Oxburgh G, Myklebust T, Grant T, Milne R (2016) Communication in investigative and legal settings: introduction and contexts. In: Oxburgh G, Myklebust T, Grant T, Milne R (eds) Communication in investigative and legal contexts. Wiley, Chichester, pp 1–13
23. Gudjonsson GH (2010) Psychological vulnerabilities during police interviews. Why are they important? Leg Criminol Psychol 15:161–175
24. Drizin SA, Leo RA (2004) The problem of false confessions in the post-DNA world. North Carolina Law Rev 82:891–2007
25. Garrett BL (2011) Convicting the innocent. Where criminal convictions go wrong. Harvard University Press, London
26. Kassin SM, Wrightsman LS (1985) The psychology of evidence and trial procedure. Sage Publications, London

27. Gudjonsson G (1992) The psychology of interrogations. Confessions and testimony. Wiley, Chichester, pp 195–197
28. Shepherd E (2004) Police station skills for legal advisors: becoming skilled, 3rd edn. Law Society, London
29. Gudjonsson G (1992) The psychology of interrogations and confessions. A Handbook. Wiley, Chichester, pp 175–176
30. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 345
31. Gudjonsson G (1992) The psychology of interrogations and confessions. A Handbook. Wiley, Chichester, p 196
32. Davison SE, Forshaw DM (1993) Retracted confessions: through opiate withdrawal to a new conceptual framework. Med Sci Law 33:285–290
33. McCann JT (1998) A conceptual framework for identifying various types of confessions. Behav Sci Law 16:441–453
34. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 69
35. Gudjonsson GH, Sigurdsson JF, Einarsson E, Einarsson JH (2008) Personal versus impersonal relationship compliance and their relationship with personality. J Forensic Psychiatry Psychol 19:502–516
36. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 73
37. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 79
38. Gudjonsson GH, Clark NK (1986) Suggestibility in police interrogation: a social psychological model. Soc Behav 1:83–104
39. Schooler JW, Loftus EF (1986) Individual differences and experimentation: complementary approaches to interrogative suggestibility. Soc Behav 1:105–112
40. Gudjonnson GH Interrogative suggestibility—can it be recognsied in custody? In: Norfolk GA (ed) Fit to be Interviewed by the Police. Association of Police Surgeons, Harrogate
41. Gudjonsson GH (1989) Compliance in an interrogation situation: a new scale. Pers Individ Differ 10:535–540
42. Groves T (1991) Explaining false confessions. BMJ 303:1087–1088
43. Miranda v Arizona 384 US 436 (1966)
44. R v Kenny (1994) Crim L R:284
45. R v Cox (1991) Crim L R:687
46. Norfolk GA (1996) Fitness to be interviewed and the appropriate adult scheme: a survey of police surgeons' attitudes. J Clin Forensic Med 3:9–13
47. Norfolk GA (1997) 'Fitness to be interviewed'—a proposed definition and scheme of examination. Med Sci Law 37:228–234
48. Norfolk GA (1997) Fit to be interviewed—a police surgeon's perspective. In: Norfolk GA (ed) Fit to be interviewed by the police. Association of Police Surgeons, Harrogate
49. Police and Criminal Evidence Act 1984 (s.60 (1)(a), s.60A(1) and s.66 (1)) (2006) Codes of practice A-G 2005 for England and Wales. Her Majesty's Stationery Office, Norwich; Code C, Annex G
50. PACE Code C Annex E, Note for Guidance E2
51. PACE(NI)O Code C, Guidance Note 11C
52. Police and Criminal Evidence Act 1984 (s.60 (1)(a), s.60A(1) and s.66 (1)) (2006) Codes of Practice A-G (2005) For England and Wales. Her Majesty's Stationery Office, Norwich; Code C, Note for Guidance 1G
53. Police and Criminal Evidence Act 1984 (s.60 (1)(a), s.60A(1) and s.66 (1)) (2006) Codes of practice A-G 2005 for England and Wales. Her Majesty's Stationery Office, Norwich; Code C, Note for Guidance 1G, Paragraph 1.13(d)
54. *R v Souter* [1995] Crim LR 279

55. Gudjonsson GH, Clare ICH, Rutter S, Pearse J (1993) Persons at risk during interviews in police custody: the identification of vulnerabilities. Royal Commission on criminal justice. HMSO, London
56. *R v Aspinall* [1999] MHLR 12
57. Bartels L (2011) Police interviews with vulnerable adult suspects. Research in practice No. 21. Australian Institute of Criminology, Canberra
58. https://legislation.nsw.gov.au/#/view/regulation/2016/544/part3/div3/sec28. Accessed 25 May 2019
59. https://www.publicdefenders.nsw.gov.au/Documents/Code_CRIME_-_January_2012.pdf. Accessed 25 May 2019
60. The Bradley Report (2009) Lord Bradley's review of people with mental health problems or learning disabilities in the criminal justice system. https://lx.iriss.org.uk/sites/default/files/resources/The%20Bradley%20report.pdf
61. Durcan G, Saunders A, Gadsby B, Hazard A (2014) The Bradley report five years on. An independent review of progress to date and priorities for further development. Centre for mental health June 2014. https://www.centreformentalhealth.org.uk/sites/default/files/2018-09/bradley5years.pdf. Accessed 25 May 2019
62. Norfolk GA (2001) Fit to be interviewed by the police—an aid to assessment. Med Sci Law 41:1–12
63. Levy D (1996) Management of diabetes in clinical forensic practice. J Clin Forensic Med 3:31–36
64. Home Office. Police Leadership and Powers Unit (2001) Report of the Home Office Working Group on Police Surgeons
65. Rix KJB (1997) Fit to be interviewed by the police? Adv Psychiatr Treat 3:33–40
66. Clarke MDB (1991) Fit for interview? Police Surg 40:15–18
67. Carpenter JA (1980) Effects of alcohol on some psychological processes. A critical review with special reference to automobile driving skill. Q J Stud Alcohol 23:274–314
68. Loftus EF (1980) "Did I really say that last night?" Alcohol, marijuana and memory. Psychol Today 92:42–56
69. Carpenter JA, Ross BM (1965) Effect of alcohol on short-term memory. Q J Stud Alcohol 26:561–579
70. Yuille JC, Tollestrup PA (1990) Some effects of alcohol on eyewitness memory. J Appl Psychol 75:268–273
71. Gudjonsson G (1992) The psychology of interrogations and confessions. A Handbook. Wiley, Chichester, p 197
72. Rogers DJ, Stark MM, Howitt JB (1995) The use of an alcometer in clinical forensic practice. J Clin Forensic Med 2:177–183
73. Yesavage JA, Leirer VO (1986) Hangover effects on aircraft pilots 14 hours after alcohol ingestion: a preliminary report. Am J Psychiatry 143:1546–1550
74. Gudjonsson G, Hannesdottir K, Petursson H, Bjornsson G (2002) The effects of alcohol withdrawal on mental state, interrogative suggestibility and compliance: an experimental study. J Forensic Psychol 13:53–67
75. Faculty of Forensic and Legal Medicine and Royal College of Psychiatrists (2019) Substance misuse in detainees in police custody. In: Guidelines for clinical management (Fifth edition) Report of a medical working group. Royal College of Psychiatrists, London. http://www.fflm.ac.uk
76. Sigurdsson JF, Gudjonsson GH (1994) Alcohol and drug intoxication during police interrogation and the reasons why suspects confess to the police. Addiction 89:985–997
77. Stark MM (1994) Management of drug misusers in police custody. J R Soc Med 87:584–587
78. Zacny JP (1996) Should people taking opioids for medical reasons be allowed to work and drive? Addiction 91:1581–1584
79. R v Crampton (1991) 92 Cr App R 369
80. Ross DF, Read JD, Toglia MP (eds) (1994) Adult eyewitness testimony. Cambridge University Press, Cambridge

81. Gudjonsson GH (1995) The vulnerabilities of mentally disordered witnesses. Med Sci Law 35:101–106
82. Gudjonsson G (1992) The psychology of interrogations. Confessions and testimony. Wiley, Chichester, p 385
83. Gudjonsson G (1992) The psychology of interrogations. Confessions and testimony. Wiley, Chichester, p 317
84. R v O'Brien [2000] All ER (D) 62
85. R v Walker [1998] Crim LR 21
86. Bluglass R, Bowden P (1990) Principles and practice of forensic psychiatry. Churchill Livingstone, Edinburgh
87. Gudjonsson G (1995) "Fitness for interview" during police detention: a conceptual framework for forensic assessment. J Forensic Psychiatry 6:185–197
88. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 127
89. Halstead S (1996) Forensic psychiatry for people with learning disability. Adv Psychiatr Treat 2:76–85
90. Gudjonsson G, Clare I, Rutter S, Pearse J (1993) The Royal Commission on Criminal Justice. Persons at Risk During Interviews in Police Custody: The Identification of Vulnerabilities. Research Study No. 12. Her Majesty's Stationery Office, London
91. Lyall I, Holland AJ, Styles P (1995) Incidence of persons with a learning disability detained in police custody. A needs assessment for service development. Med Sci Law 35:61–71
92. Criminal Justice Joint Inspection. A joint inspection of the treatment of offenders with learning disabilities within the criminal justice system—phase 1 from arrest to sentence. A Joint Inspection by HMI Probation, HMI Constabulary, HM Crown Prosecution Inspectorate and the Care Quality Commission January 2014. https://webarchive.nationalarchives.gov.uk/20140204185858/http://www.justice.gov.uk/downloads/publications/inspectorate-reports/hmiprobation/learning-disabilities-thematic-report.pdf. Accessed 25 May 2019
93. FFLM (2017) Assessment of people with learning difficulties and disabilities in police custody. https://fflm.ac.uk/wp-content/uploads/2018/01/Assessment-Learning-Difficulties-Disabilities-in-Custody-Dr-J-Holmes-Nov-2017.pdf. Accessed 25 May 2019
94. Clare ICH, Gudjonsson G (1995) The vulnerability of suspects with intellectual disabilities during police interviews: a review and experimental study of decision-making. Mental Handicap Res 8:110–128
95. Murphy G, Clare ICH (1998) People with learning disabilities as offenders or alleged offenders in the UK criminal justice system. J R Soc Med 91:178–182
96. Miller v DPP [2018] EWHC 262 (Admin) [95]
97. Gudjonsson G (2018) The psychology of false confessions. Forty years of science and practice. Wiley, Chichester, p 131
98. L & R v R [2011] EWCA Crim 649
99. Mayou RA (1987) Emotional reactions to disorders. In: Weatherall DJ, Ledingham JGG, Warrell DA (eds) Oxford textbook of medicine, 2nd edn. Oxford University Press, Oxford
100. Lishman WA (1987) Organic psychiatry. The psychological consequences of cerebral disorder, 2nd edn. Blackwell Scientific Publications, Oxford
101. Lishman WA (1996) Specific conditions giving rise to mental disorder. In: Weatherall DJ, Ledingham JGG, Warrell DA (eds) Oxford textbook of medicine, 3rd edn. Oxford University Press, Oxford
102. Williams D (1963) The psychiatry of the epileptic. Proc R Soc Med 56:707–710
103. Laidlaw J, Richens A, Chadwick D (eds) (1993) A textbook of epilepsy, 4th edn. Churchill Livingstone, Edinburgh
104. Epilepsy Foundation (2017) Revised Classification of Seizures. https://www.epilepsy.com/article/2016/12/2017-revised-classification-seizures. Accessed 19 May 2019
105. Teasdale GM (1996) Head injuries. In: Weatherall DJ, Ledingham JGG, Warrell DA (eds) Oxford textbook of medicine, 3rd edn. Oxford University Press, Oxford
106. Whitty CWM, Zangwill OL (eds) (1977) Amnesia. Butterworths, London

WIT.0043.0086.0421

107. Pearce JMS (1996) Headache. In: Weatherall DJ, Ledingham JGG, Warrell DA (eds) Oxford textbook of medicine, 3rd edn. Oxford University Press, Oxford
108. Droba M, Whybrow PC (1989) Endocrine and metabolic disorders. In: Kaplan HI, Sadock BJ (eds) Comprehensive textbook of psychiatry, vol 2, 5th edn. Williams and Wilkins, Baltimore
109. Deary IJ (1993) Effects of hypoglycaemia on cognitive function. In: Frier BM, Fisher BM (eds) Hypoglycaemia and diabetes: clinical and physiological aspects. Edward Arnold, London
110. https://www.england.nhs.uk/mental-health/dementia/. Accessed 25 May 2019
111. Pearce J (1984) Dementia. A clinical approach. Blackwell Scientific Publications, Oxford
112. Hodkinson HM (1972) Evaluation of a mental test score for assessment of mental impairment in the elderly. Age Ageing 1(4):233–238
113. 6CIT. http://6cit.co.uk/test/. Accessed 25 May 2019
114. Folstein MF, Folstein SE, McHugh PR (1975) "Mini-mental state": a practical method for grading the cognitive state of patients for the clinician. J Psychiatr Res 12:189–198
115. Innocence Project (2003). https://www.innocenceproject.org. Accessed 25 May 2019
116. Rix KJB, Nathan R (in press) Reports for criminal proceedings, in KJB Rix, L Mynors-Wallis and C Craven (eds) Rix's expert psychiatric evidence (2nd ed). Cambridge University Press, Cambridge

WIT.0043.0086.0422

Substance Misuse

12

Margaret M. Stark

Learning Objectives

To demonstrate the ability to take a detailed substance use history.
To identify the symptoms and signs of alcohol withdrawal.
To describe the clinical effects of commonly used illicit drugs.
To manage the treatment of a detainee dependent on opiates.

Introduction

There are a significant number of individuals passing through the criminal justice system with substance misuse problems and it is essential that healthcare professionals (HCPs) working in the field of clinical forensic medicine are aware of the current drug trends in their area and have been trained to a standard to practice competently in this field [1]. In England for example, The National Drug Treatment Monitoring System (NDTMS) [2] consistently reports that approximately a quarter of all referrals into treatment are generated via criminal justice sources.

Statistics

Different jurisdictions collect information from different sources in an attempt to establish patterns of drug use, and the harm that results. The statistics quoted below are not directly comparable, but give an indication of drug use within a particular country.

M. M. Stark (✉)
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_12

WIT.0043.0086.0423

Statistics from the Crime Survey England and Wales 2017/2018 [3] reveal that around 1 in 11 (9.0%) adults, aged 16–59, had taken a drug in the last year; with 1 in 29 (3.5%) this was a Class A drug (in the last year). This has increased over the past decade. Furthermore class A drug use among 16–24 year olds has been increasing since 2011/2012 mainly driven by an increase in powder cocaine and ecstasy use. Figures from the National Survey on Drug Use and Health (NSDUH) in the US show that in 2016, 28.6 million people aged 12 or older used an illicit drug in the past 30 days, which corresponds to about 1 in 10 Americans overall (10.6%), but ranges as high as 1 in 4 for young adults aged 18–25 [4]. The commonest illicit drug used was cannabis, followed by prescription opioids. The NSDUH statistics also indicate that in 2016, over the past year new cocaine users rose 13.6%, from 968,000 in 2015 to 1.1 million in 2016; and in relation to heroin there was 14.5% increase in new users from 828,000 in 2015 to 948,000 in 2016.

The National Drug and Alcohol Research Centre based in Sydney, Australia, runs the Drug Trends Program which identifies emerging problems in substance use in Australia triangulating data from various sources (https://ndarc.med.unsw.edu.au/program/drug-trends). Reviewing the most recent figures (2018) from the Illicit Drug Reporting System (IDRS) [5] two in five participants (41%) reported that their drug of choice was heroin, although methamphetamine remained the drug injected most often in the past month (44%). Weekly or more frequent use of crystal methamphetamine increased in 2018 (47%), continuing an upward trend that has been observed from 2010 onwards. Cannabis use remains stable, with nearly half of consumers (45%) reported using cannabis daily, and recent use of cocaine, and frequency of use, generally decreasing amongst the national sample since the beginning of monitoring (14% in 2018).

Local knowledge is key. Tramadol is a widely prescribed analgesic of the 'synthetic opiate' class. It has become a highly abused drug, causing more deaths in Northern Ireland in 2015 than any other drug [6].

Purity of illicit substances will vary between countries and from year to year; this may be reflected in the drug history obtained, with increasing amounts ingested as drug purity diminishes, or potential complications from overdose as the purity has increased beyond an individual's tolerance level. For example a spate of deaths occurred in England in 2017 related to the presence of carfentanyl in heroin [7].

In England and Wales the average purity of powder cocaine at user-level has increased over the last 3 years, from 36% in 2014 to a record high of 54% in 2016; purity of crack cocaine has also risen from a record low of 26% in 2011 to a record high of 71% in 2016; and heroin purity reducing from 35% in 2010 to a low of 18% in 2011 (secondary to reduced supply following on the heroin drought) to 43% 2016 [7]. In the US the Drug Enforcement Administration (DEA) collates information from a variety of sources on drug purchases submitted as evidence to DEA laboratories for analysis [8]. During the period 2012–2016 cocaine purity increased from 49.1% to 62%; heroin from 29.8% to 32.3%; and methamphetamine purity from 87.9% to 94%.

Similar statistics regarding purity are collated in Australia with the annual median purity varying between states and territories:

WIT.0043.0086.0424

- amphetamine ranged from 1.5% in Queensland to 6.2% in New South Wales
- methylamphetamine ranged from 73.3% in Queensland to 82.0% in Victoria
- phenethylamines ranged from 1.8% in South Australia to 52.5% in New South Wales
- heroin ranged from 17.0% in Victoria to 71.0% in Western Australia
- cocaine ranged from 33.2% in Queensland to 60.5% in Western Australia [9].

There are now well established global surveys to determine trends in drug use. The World Drug Report [10] in 2019 reporting that the severity and complexity of drug use is increasing with 35 million people worldwide suffering from drug use disorders while only 1 in 7 people receive treatment. The Global Drug Survey (https://www.globaldrugsurvey.com/) is typically completed by young, mainly recreational drug users, revealing that the most popular drug used in this selected survey group is cannabis, followed by ecstasy. Data on the drug situation in Europe is collected annually from member States and includes the prevalence of drug use with information on seizures, price, potency and purity of individual drugs [11].

Wastewater analysis is a relatively new scientific method to estimate the quantity of drugs consumed by a community by measuring the level of illicit drugs and their metabolites excreted in urine [12]. There is a Europe-wide network (Sewage analysis CORe group (SCORE)) that coordinates research. A distinct geographical and temporal pattern of drug use across European cities has been found [13]. Benzoylecgonine (BE) has been found in wastewater at higher levels in western and southern European cities, especially Belgium, Netherlands, and UK compared to eastern European cities; amphetamine levels were at the highest in northern and east European cities. Interestingly and perhaps not surprisingly, high levels of amphetamine, BE and MDMA have been found in wastewater during the weekend than during weekdays. Drug testing at festivals has been carried out in an attempt to reduce drug-related harm [14].

Drug related deaths are increasing in the UK with the largest number of deaths associated with heroin, and the proportion of deaths involving cocaine also continuing to rise [7]. Deaths involving Novel Psychoactive Substances (NPS) have increased since 2010 in England, Wales and Scotland. The nature of the NPS involved in deaths differs between the two countries with cathinones (mainly mephedrone) responsible for the largest proportion of NPS deaths in England and Wales since they were first recorded in 2010, whereas benzodiazepine-type substances (in particular etizolam) were implicated in 98% of deaths involving NPS in Scotland in 2016 [7]. Hospital admissions related to drugs also provide evidence. Over the past 20 years, there was a fourfold increase in the rate of drug-related general acute hospital stays in Scotland (from 51 to 199 stays per 100,000 population), with a sharper increase observed in recent years [15]. There is significant global burden of disease from both alcohol and drug use [16]. In the forensic environment deaths in custody often involve drugs and alcohol (see Chap. 13).

WIT.0043.0086.0425

Drug Facilitated Crime (DFC) and Drug Facilitated Sexual Assault (DFSA)

The UK Government published a Serious Violence Strategy in 2018 stating that drugs have been an important driver of the increase in serious violence in England and Wales since 2014 [17]. The report linked drugs to violence directly via their psychoactive effects, and indirectly by fueling crime, such as robberies to service drug dependence, or through violent competition between drug dealers. It further concluded that crack cocaine markets are linked to serious violence and there has been a rise in use in England. The increase has been explained by a number of factors: aggressive marketing by the drug dealers, easy accessibility to the drug, affordability, an increase in county lines drug dealing activity, a reduction of police focus on drugs and less stigma with crack cocaine use [18]. There has also been a global increase in the production of cocaine [19].

For a HCP working in general forensic medicine or in sexual offence medicine consideration should always be given to whether drugs have been used, not only to assess the condition of the complainant or suspect at the time of the examination, but also whether there is any indication that drugs have been administered and effected the situation.

Drug facilitated crime (DFC) is any crime in the course of which the victim is administered a drug, or other incapacitating substance, in order to affect control over their actions, decision making, or mental or physical capabilities [20]. This may occur in a variety of circumstances, including cases of drug facilitated assault (DFSA).

Two forms of DFSA have been recognized [21]. Proactive DFSA involves the covert or forcible administration of an incapacitating or disinhibiting substance, by an assailant, for the purpose of sexual assault. Opportunistic DFSA involves sexual activity, by an assailant, with a victim who is profoundly intoxicated by his or her own actions to the point of near or actual unconsciousness, and thus lacks the capacity to consent.

Where DFC/DFSA is suspected samples of urine and blood need to be taken as soon as possible (see Chap. 3). Many jurisdictions use an Early Evidence Kit (EEK) that includes the taking of a urine sample. This can be facilitated by law enforcement/emergency department personnel/other first responders before the forensic HCP arrives to undertake a full forensic assessment. EEKs should be widely available as delay in obtaining samples will result in the metabolism of shorter acting drugs so that they are no longer reliably detected in blood and urine [22].

Timescales for the collection of forensic samples should be based on evidence including statistical feedback from the local laboratory. Currently blood samples are recommended within 24–72 h and urine up to 5 days [23–25]. In cases of DFC/DFSA there is often a delay so hair samples may provide evidence of drug use some time after an incident [23], including single dose exposure [26]. However it should be remembered that drugs and their metabolites found in hair may arise not only from deliberate drug administration and other factors may affect the interpretation of results [27].

WIT.0043.0086.0426

Alcohol is by far the commonest drug to be implicated in DFSA but polydrug use is common and this maybe because of voluntary ingestion or be covertly administered [28, 29]. Cannabinoids and ethanol, and benzodiazepine and alcohol, appear to be common combinations [20, 30]. Interpretation of drug and/or alcohol levels will be depend on may factors but the HCP should ensure that they take a detailed history of any substances misused, as outlined in this chapter below. Back calculations for alcohol from the complainant's blood alcohol concentration (BAC) from the time of sampling to the time of the alleged offence can be made. This is not recommended on urine [31]. The urine alcohol concentration (UAC)/BAC ratio is highly variable depending on many factors including time of the last bladder emptying before providing the urine sample for toxicological analysis [32].

General Principles [33]

History and Examination

A detailed history of recent drug use, including alcohol, needs to be obtained to establish whether the individual is a currently dependent or a recreational user (Table 12.1). Street names of substances will vary from country to country, within regions in the same country, with the cultural background of the user, and over time. The examination should look for signs of intoxication, withdrawal, or previous drug use (Table 12.2). Baseline parameters are useful for re-examination if the detainee is kept in custody. The method of administration of a drug may include enteral, parenteral, topical, and by inhalation and the speed at which the peak plasma levels of a drug are reached depends on the route of administration [34]. Those that are rapidly released have a greater abuse potential.

In recent years more research has been undertaken into the health needs of those detained by the police and this shows that in this population [35–37] mental health problems, including substance use disorders, and physical ailments, are highly prevalent, often requiring emergency referral (see Chap. 9). Many detainees are homeless and this is associated with multiple complex needs [38]. As well as taking a comprehensive substance use history it is essential that the HCP take a full medical history including [39]:

Table 12.1 Substance misuse history

Type of substance used
Period of substance use
Quantity taken per day, on an average/typical day
Amount spent on substances per day
Frequency of use
Routes of administration (noting any sites of injection)
Amount used in the past 24–48 h
The time of the last dose(s)
Currently prescribed drugs
Experience of withdrawal

WIT.0043.0086.0427

Table 12.2 Substance misuse examination

Level of consciousness—AVPU/GCS
Blood pressure
Pulse rate
Temperature
Pupil size
Orientation in time, place, person
Agitation, restlessness
Delirium/psychosis/disordered perceptions
Speech—content and articulation
Flushed
Pallor
Tremor
Yawning
Lachrymation
Rhinorrhoea
Gooseflesh
Sweating
Examination of the cardiovascular system—check heart sounds
Examination of the respiratory system—auscultation of chest
Bowel sounds
Presence of needle tracks
Coordination
Gait
Romberg's
Mental state examination (MSE)
Use of withdrawal sales CIWA-Ar & COWS

- presenting symptoms of a physical or mental health problem
- complaint of recent injuries, including use of force during arrest
- past medical history including operations, injuries, (especially significant head injuries) and periods in hospital
- past psychiatric history including periods in hospital, contact with mental health team
- for women, relevant contraception history, cervical screening, menstrual and pregnancy history
- consideration of sexual health and history of sexually transmitted infections (including any partners with HIV or hepatitis B, C)
- oral health problems
- current prescribed medication

The use of an onsite drug testing kit in police stations may be of assistance [33]; however, these tests are qualitative rather than quantitative indicating that a substance has been used rather than how much has been taken, or whether the detainee is dependent, so care is needed in the overall interpretation. Urine tests have been used as part of the clinical management in police custody settings [40] and the results of oral fluid sampling undertaken by police may be available.

WIT.0043.0086.0428

Pregnant detainees need very careful assessment and management as sudden cessation of opioid use in a pregnant woman with dependence may be life-threatening for the fetus. Special care should be taken to ensure that a pregnant, opiate-dependent woman's medication is continued while she is in custody. There should be a low threshold for referral for hospital assessment, especially in the third trimester. It is important to consider whether or not a female detainee is pregnant before initiating treatment. Detailed guidance has been issued for the management of pregnant detainees in police custody [33].

Medical Complications of Substance Misuse

Medical complications of substance misuse may give an indication of a problem in the absence of acute symptoms or signs of intoxication or withdrawal [41]. Intravenous injection may result in superficial thrombophlebitis, deep vein thrombosis and pulmonary embolus, and chronic complications of limb swelling and venous ulcers. If injection occurs accidentally into an artery vascular spasm may result in ischemia which, if prolonged, can lead to gangrene and amputation.

Cellulitis and abscesses may be seen around injection sites, and deep abscesses may extend into joints, producing septic arthritis. Self-neglect, malnutrition, and dental decay may occur, as may infectious diseases such as hepatitis B, C, HIV, and the acquired immunodeficiency syndrome (AIDS). An outbreak of anthrax among injecting heroin users in 2009–2010 from contaminated heroin, occurred due a single novel strain of anthrax not previously seen in the UK, but found to related to anthrax strains previously identified in goats in Turkey [42].

Skin manifestations of drug use [43] may be seen more commonly in opiate rather than stimulant users, even though stimulant users inject more frequently. This is partly because stimulants do not cause histamine release and are therefore seldom associated with pruritus and excoriations and also because cutaneous complications are frequently caused by the adulterants injected along with the opiates, rather than the drugs themselves. Fresh puncture sites, tattoos used to cover needle tracks, keloid formation, track marks from chronic inflammation, burns, ulcerated areas and skin popping resulting in atrophic scars, necrotizing fasciitis, acute generalized exanthematous pustulosis, fungal infections, hyperpigmentation at sites of healed abscess, puffy hands (lymphoedema with obliteration of anatomic landmarks and pitting edema absent), and histamine-related urticaria (opiates act on mast cells resulting in histamine release) may be seen.

Reducing Health Risks

Information and advice should be given to the detainee by the HCP on reducing the harm from continued drug misuse. Advice can be provided on a range of issues [33]:

- encouraging the detainee to see their general practitioner and/or attend hospital clinics to receive the appropriate care for long-term conditions.
- referral to an on-site arrest referral/drug worker (if available see below)
- information being provided about local agencies involved in counselling and treatment of substance-related problems, such as community drug and alcohol teams, treatment centres and needle exchange schemes
- advice regarding testing for blood-borne virus infections, hepatitis C and HIV, with referral for treatment if required
- information and advice about, and immunisation against, hepatitis B (and possibly hepatitis A) (see Chap. 10)
- tetanus immunisation status should be checked in people who inject drugs
- education on the hazards of injecting drugs, particularly with regard to shared injecting equipment
- education on the risks of overdose, of multiple use of substances, including alcohol, and of the variable purity of illicit drugs
- advice regarding the loss of tolerance and risk of fatality following reduction in regular use or a period of abstinence such as may occur following time in prison or residential rehabilitation
- contraception advice, reminders regarding cervical cancer screening, and safer sex advice and, where required, referral to sexual health service
- referral to dentists with oral health problems—dental caries, tooth erosion, periodontal disease.

Substance misusers who inject may have experienced a broken needle at some time in their injecting career [44]. Central embolization may occur within a few hours up to several days and this can lead to potentially fatal consequences including pericarditis, endocarditis, and pulmonary abscesses. Needle fragments need to be removed as soon as possible to avoid future complications. This may be done by the users themselves or necessitate attendance at the emergency department.

Brief interventions, whereby it is possible to provide advice about the risks inherent in a range of patterns of substance use and to advise reducing or stopping use as part of screening and assessment [45], should be used opportunistically in the criminal justice system. A person's motivation to change is important in determining the likelihood of success of any intervention [46], and such motivation may alter depending on a variety of factors. For example, negative life events such as being arrested for an acquisitive crime motivated by a need to finance a drug habit can introduce conflict in the detainee's mind about substance misuse and may increase the likelihood of successful intervention.

There is no longer a national Drug Intervention Programme (DIP) [47] in England and Wales which had the aim of identifying Class A drug (heroin and cocaine) users by testing them on charge, and directing them into drug treatment in an attempt to reduce offending behavior. Individual police forces have the discretion to opt in or out of legacy DIP powers including testing on arrest, required assessments, and restrictions on bail. Consequently, the implementation of these provisions varies from area to area. HCPs should be aware of whether there is access to

Criminal Justice Integrated Team (CJIT) workers (or equivalent) who are members of a multi-disciplinary team providing support, advice, brief and structured interventions to individuals, with substance use disorders within the criminal justice system.

Older People with Multiple Co-morbidity

There is an increasing older population with substance use disorders in the community [38, 48, 49]. HCPs may see older detainees on opiate substitution treatment (OST), as well as other medications, with complex and multiple health problems. There are a group of early onset substance users with a long history, usually of poly-substance use (heroin, crack/cocaine, tobacco and alcohol) persisting into later life. There are also late onset users of substances who may have begun using substances regularly later in life, often following stressful life events or lifestyle changes.

Prescribing

Although prompt treatment to limit or prevent the withdrawal syndrome is desirable, no central nervous system (CNS) depressant medication should be given if there is evidence of intoxication with other drugs, for example, alcohol, as many substances have an additive effect, or even, synergistic effect. Consideration of whether the detainee is fit for detention is the priority. Most individuals are not detained in police custody for very long, and therefore medical treatment may not be required. This is particularly so if there is any question that the detainee may have recently ingested substances the full effects of which may not as yet be obvious. Reassessment after a specific period should be recommended depending on the history given by the detainee and the objective examination findings.

Details of medication should be verified whenever possible. It is good practice for all new substitute opiate prescriptions to be taken initially under daily supervision [39]. In the custodial situation if the detainee is on a supervised program of therapy, one can be reasonably sure the detainee is dependent on that dose; the detainee may of course be using other illicit substances as well. Recent urine test results may be checked with the clinic to see whether methadone or other drugs are detected on screening.

With OST in particular, in the absence of withdrawal signs, confirmation of such treatment should be sought before authorizing continuation. The prescribed dose of OST may not necessarily indicate accurately the actual amount taken each day if not supervised, as part or all of the dose may be given to other individuals. If there is doubt about the daily dose, then the dose can be divided and given every 12 h. It should be remembered that giving even a small amount of opiates to a nondependent individual may be fatal. Cocaine abuse appears to accelerate the elimination of methadone; therefore, higher doses of methadone need to be prescribed to individuals on maintenance regimes who continue to abuse cocaine [50]. Any decision to

WIT.0043.0086.0431

prescribe should be made on the assessment of objective signs as opposed to subjective symptoms, and a detailed record of the history and examination should be made contemporaneously. If there is any doubt as to the interpretation of the given history, findings on physical examination, and need for prescribing then it is essential to seek advice from a senior colleague.

Good practice dictates that where treatment can be verified it should be continued as long as it is clinically safe to do so. Evidence from the National Treatment Outcome Research Study (NTORS), a prospective study of treatment outcome among substance misusers in the UK, has shown substantial reduction across a range of problem behaviors 4–5 years after patients were admitted to national treatment programs and it is important not to disrupt such programs [51]. Individuals referred from the criminal justice system have been found to have more complex offending patterns and chaotic problems, although a significant majority 73% have been in treatment before [52]. So it is important to facilitate reinitiating treatment for this "difficult group."

Specific Drugs

Pharmacodynamics refers to the effect of substances on the body, and the acute and chronic effects of substances take place at receptors (see Table 12.3). There are now seven main criteria for substance dependence (see Table 12.4). The detailed guidance on the clinical management of acute and chronic harms of the specific drugs outlined below, including the novel psychoactive substances (NPS), can be found in a variety of texts [33, 39, 53, 54]. A brief summary will be given in relation to management in police custody.

Opiate Intoxication and Withdrawal

The characteristics of the medical syndromes in opiate intoxication, overdose, and withdrawal are given in Table 12.5. Opiates such as heroin may be taken orally, more usually injected, or smoked. The start of withdrawal will vary in time with the different opioid drugs, and it should be remembered that the severity of withdrawal symptoms is influenced greatly by psychological factors [55]; the environment of a police cell is likely to exacerbate these symptoms.

Chronic administration of opiate drugs results in tolerance (Table 12.4) to effects such as euphoria mediated by the opiate receptors and to the effects on the autonomic nervous system mediated by the noradrenergic pathways. Tolerance to heroin can develop within 2 weeks of commencing daily heroin use, occurs more slowly with methadone, and may go as quickly as it develops. With abrupt withdrawal of opiates, there is a "noradrenergic storm," which is responsible for many of the opiate withdrawal symptoms (Table 12.5). Many opiate users are also dependent on benzodiazepines and concurrent benzodiazepine withdrawal may increase the severity of opiate withdrawal [57].

WIT.0043.0086.0432

Table 12.3 Primary target and main effects of addictive substances in the brain

Drug	Primary target	Main effects	Other actions
Opiates	Stimulate mOR receptor	?	Stimulate delta and kappa opioid receptors
Heroin			
Morphine/ methadone			
Buprenorphine	Less stimulation of mOR		
Stimulants			
Amphetamines	Promote dopamine release	Increase dopamine	Increase norepinephrine, serotonin, and endorphins
Cocaine	Blocks DAT	Increases dopamine	Inhibits norepinephrine reuptake
Nicotine	Stimulates nicotinic receptor	Increase dopamine	
Sedatives			
Alcohol	Simulate $GABA_A$ receptor	Increases GABA	Increases dopamine
		Reduces glutamate	
Benzodiazepines	Stimulate $GABA_A$ receptor	Increases GABA	?
Gamma Hydroxybutyrate	Stimulate GAB_A and GHB receptors	Increases GABA	Increase dopamine
Cannabinoids	Stimulate CB1 receptor	Increases dopamine	Reduces GABA and norepinephrine release
Hallucinogens			
LSD	Stimulate serotonin $5\text{-}HT_2$ receptor	Mimics serotonin	Increases dopamine
MDMA	Promotes serotonin release	Increases serotonin	Increase dopamine
		Increases norepinephrine and serotonin?	

mOR muopioid receptor, *DAT* dopamine transporter, *GABA* gamma aminobutyric acid
Adapted from: Nutt DJ & Nestor LJ. Chapter 6 Pharmacodynamics of addictive substances p. 38–39. Addiction. Second edition. Oxford Psychiatry Library. Oxford University Press, Oxford 2018

Treatment of Opiate Withdrawal

A careful history and thorough physical examination should be carried out to establish the nature and severity of the withdrawal syndrome prior to treatment; use of a clinical opiate withdrawal scale (COWS) may assist in the assessment [58, 59]. Symptomatic treatment of the opiate withdrawal syndrome can often be achieved using a combination of drugs such as loperamide for diarrhea; metoclopramide or buccal prochlorperazine for vomiting; mebeverine hydrochloride or hyoscine

WIT.0043.0086.0433

Table 12.4 Diagnostic criteria for substance dependence

1.	Tolerance, as defined by either of the following: (a) A need for markedly increased amounts of the substance to achieve intoxication or desired effect (b) Markedly diminished effect with continued use of the same amount of the substance
2.	Withdrawal, as manifested by either of the following: (a) The characteristic withdrawal syndrome for the substance (refer to criteria A or B of the criteria sets for withdrawal from specific substances). (b) The same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms.
3.	The substance is often taken in larger amounts or over a longer period than was intended.
4.	There is a persistent desire to use the substance or unsuccessful attempts to cut down or control substance.
5.	A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
6.	Important social, occupational, or recreational activities are given up or reduced because of substance use. (c) The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

From: Diagnostic and Statistical Manual of Mental Disorders (DSM-5), 2013 American Psychiatric association

Table 12.5 Medical syndromes in heroin users

Syndrome (onset and duration)	Characteristics
Opiate intoxication	Conscious, sedated "nodding"; mood normal to euphoric; pin-point pupils
Acute overdose	Unconscious; pin-point pupils; slow shallow respirations
Opiate withdrawal	
Anticipatory 3–4 h after the last fix (as acute effects of heroin subside)	Fear of withdrawal, anxiety, drug-craving, drug-seeking behavior
Early 8–10 h after last fix	Anxiety, restlessness, yawning, nausea, sweating, nasal stuffiness, rhinorrhea, lacrimation, dilated pupils, stomach cramps, increased bowel sounds, drug-seeking behavior
Fully developed 1–3 days after last fix	Severe anxiety, tremor, restlessness, piloerection (cold-turkey), vomiting, diarrhea, muscle spasms (kicking the habit), muscle pain, increased blood pressure, tachycardia, fever, chills, impulse-driven drug-seeking behavior
Protracted abstinence	Hypotension, bradycardia, insomnia, loss of energy and appetite, stimulus-driven opiate cravings

From: Ling and Wesson [56]

butylbromide for abdominal cramps and paracetamol or nonsteroidal anti-inflammatories for generalized aches. However overall there is low efficacy of non-opioid drugs in treating opioid withdrawal with only benzodiazepines having a moderate positive effect [60]. Benzodiazepines are not recommended in the routine treatment of opiate withdrawal in this setting as such drugs may affect cognition and therefore fitness to be interviewed.

WIT.0043.0086.0434

Substitution treatment may be required in more severe cases of opiate dependence using a choice of methadone, buprenorphine, or dihydrocodeine [61]. As street heroin varies in purity, the starting dose cannot be accurately estimated on the basis of the amount of street drug used. Therefore, substitution therapy should be titrated against the symptoms and signs of withdrawal. For example, dihydrocodeine may be commenced in a dose of 90–120 mg three times a day, with the dose being increased if the patient has demonstrable clinical signs of opiate withdrawal [62].

Methadone

Methadone is a synthetic opioid drug, used widely in the treatment of opioid dependence with a long duration of action so it can be given once a day. There are a number of formulations including liquid, tablet and injectable. Liquid methadone for the treatment of opioid dependence is available in a number of strengths: the usual form is methadone oral solution 1 mg/mL, which is typically green, although there is a color-free mixture; methadone oral concentrate, not commonly used, is available in two strengths: 10 mg/mL (blue) and 20 mg/mL (brown).

It is important to remember that the effect of a particular dose of methadone will depend on the individual's tolerance to opioids. Tolerance can develop within 2 weeks of commencing daily use but also disappears as quickly as it develops so that a previously safe dose may prove fatal. Peak concentration is achieved 4 h after consumption and the drug has a half-life of 10–25 h after a single dose and 13–55 h after repeated doses. It is highly lipid soluble and it takes several repeated doses before tissue reservoirs are full. As long as it is clinically safe to do so, prescribed methadone, from a community drug/primary care center should be continued while in custody, as long as it is clinically safe to do so.

Buprenorphine

Buprenorphine is an opioid with mixed agonist-antagonist properties, less of a risk in overdose when taken alone. It is taken sublingually, and self-administration of the drug in the custodial environment must be personally supervised by a suitably qualified HCP who should observe the patient for 5 min to ensure that the drug has fully dissolved [63]. This is essential to prevent hoarding and further misuse [64], for example, by snorting in prison. The tablets are available in a variety of strengths and also in combination with naloxone. Different formulations of buprenorphine including e.g. freeze-dried wafer formulations; and depot preparations are now available. Peak concentration is 90–150 min, with peak effects 1–4 h post dose. The duration of action is related to dose—with a low dose of 2–4 mg effects last for up to 12 h, whereas with a higher dose of 16–32 mg effects may last for up to 48–72 h. Buprenorphine is usually administered once a day because of its long duration of action. It is essential that prescribed buprenorphine from a community drug/primary care center, should be continued in custody, as long as it is clinically safe to do so. Precipitation of opioid withdrawal can occur in someone commencing

WIT.0043.0086.0435

buprenorphine who is dependent on large doses of opioids or other opioid analgesics if this is started when the person is not in withdrawal.

Naloxone

Naloxone is an opioid antagonist that reverses the effects of severe intoxication (Table 12.5). The use of naloxone may precipitate withdrawal in addicted patients, but in initial doses of 0.4–0.8 mg it is relatively safe, with little risk of vomiting, seizures, hypotension, hypertension, or cardiac arrest [65]. The half-life of naloxone is shorter than that of most opiates, and therefore a period of observation in the hospital is required after administration. It is recommended to give half the dose intravenously and half intramuscularly (absorption is slower and the antidotal activity prolonged); this is useful, as often individuals discharge themselves once awakened. It is recommended to give oxygen or bag-valve-mask ventilation where RR < 10/min or SpO_2 < 92% (on air) [66]. Where severe opioid intoxication is suspected, an emergency ambulance must be called immediately and naloxone given.

Intranasal naloxone has been used in the prehospital care environment and found to be a safe and effective first line prehospital intervention in reversing the effects of an opioid overdose, avoiding fatalities, and helping to reduce the risk of needle stick injury [67, 68]. Nasal naloxone is now available in the UK as Nyxoid® a single-dose nasal spray containing 1.8 mg of naloxone (as hydrochloride) in a 0.1 mL solution (two nasal sprays are included in the carton) [69]. It is indicated for emergency administration for known or suspected opioid overdose in adults and adolescents aged 14 years and over and there should be a response within 2–3 min of administration. Heroin may be taken in combination with cocaine ("snowball"), and the use of naloxone in this situation may precipitate ventricular dysrhythmias [70, 71].

Benzodiazepines

Benzodiazepines produce physical and psychological dependence and are only recommended for limited periods (4 weeks) [72]. The drugs are commonly misused either illicitly, which usually involves high doses, or by persistent therapeutic use at a lower dose. The pharmacologic properties of the benzodiazepines are hypnotic, anxiolytic, muscle relaxant, and anticonvulsant and are produced by enhancing gamma-aminobutyric acid (GABA) transmission. There are increasing reports of the use of illicitly manufactured alprazolam, etizolam and diclazepam, often used by young people with alcohol, the concentration of drug in the pills varying widely [73].

Manifestations of intoxication and withdrawal are given in Table 12.6. Tolerance usually develops after continuous use, slowly for those drugs that have a long half-life but more quickly for the short-acting drugs. Benzodiazepines are well absorbed from the gastrointestinal tract after oral administration; food can delay the rate but not the extent of absorption.

WIT.0043.0086.0436

Table 12.6 Manifestations of sedative-hypnotic drug intoxication and withdrawal

Mild	Sedation, disorientation, slurred speech, ataxia, nystagmus, amnesia
Severe	Coma, hypoventilation, hypotension, hypothermia, depressed or absent corneal, gag, and deep tendon reflexes
Withdrawal	Anxiety, insomnia, irritability, agitation, anorexia, tremor, disordered perceptions, seizures

Side effects of use include drowsiness, memory impairment especially anterograde amnesia at therapeutic doses, the risk increasing at high dosages. There is controversy about whether benzodiazepine use alone can result in disinhibited or impulsive behaviour [72]. Anxiolytics lower tolerance to alcohol and in high doses produce mental confusion similar to alcohol intoxication. The interaction between alcohol and benzodiazepines results in a potentiation of the CNS effects. In general, however, they have a very high toxic-therapeutic ratio and doses 15–20 times therapeutic dose may not cause serious side effects [74].

Sudden cessation of benzodiazepines can lead to a recognized withdrawal syndrome with anxiety symptoms, disordered perceptions, and major complications such as seizures and psychosis. A long-acting benzodiazepine such as diazepam or chlordiazepoxide is preferable in treating symptoms of withdrawal and preventing the major complications.

Flumazenil is a specific benzodiazepine antagonist used for the reversal of benzodiazepine-induced sedation and coma. When overdosage is suspected, it can be used in patients who would otherwise need intubation and ventilation [75] but care should be taken when mixed overdoses are suspected [76]. Complications such as convulsions, dysrhythmias, heart block, and cardiac arrest suggest that its use in the prehospital environment should not be encouraged [77].

Z-drugs

Z-drugs (zaleplon, zolpidem and zopiclone) non-benzodiazepine hypnotic drugs have similar effects to benzodiazepines and are relatively safe unless mixed with other central nervous depressants. Physical and psychological dependence occurs and there may be impairment of memory and cognition.

Pregabalin and Gabapentin

Pregabalin and gabapentin have been increasingly misused in recent years [78]. These drugs are used in the treatment of epilepsy, generalized anxiety disorder, for the relief of neuropathic pain, postherpetic neuralgia, diabetic peripheral neuropathy, fibromyalgia, and as an adjunct therapy for partial seizures. Clinical effects include euphoria, improved sociability, and relaxation. Adverse effects include significant CNS depression resulting in drowsiness, sedation, respiratory depression, and at the extreme, death. The majority of related deaths are in those who are also

WIT.0043.0086.0437

taking opioids. Withdrawal effects have been described including headache, nausea, anxiety, diarrhoea, flu-like illness, convulsions, nervousness, depression, pain, hyperhidrosis and dizziness suggestive of physical dependence. Detainees receiving prescribed pregabalin or gabapentin should have their treatment continued whilst in police custody as long as it is clinically safe to do so. Detainees misusing these drugs should be treated symptomatically.

Barbiturates

Barbiturates are used in the treatment of epilepsy and for the induction of anesthesia. They became less commonly misused following the introduction of benzodiazepine drugs but may be used by polydrug users. Mild intoxication may result in slurred speech, over sedation, ataxia, and nystagmus, while severe intoxication may present with coma, absent reflexes, hypothermia, hypotension, and respiratory depression. There is a narrow margin between therapeutic dose and serious toxicity. Physical and psychological dependence occurs, and the withdrawal syndrome is similar to that of benzodiazepine withdrawal, with a greater risk of seizures. Benzodiazepines may be used to prevent the withdrawal syndrome associated with barbiturates.

Illustrative Case *An elderly male was found collapsed in the street with a suspected opiate overdose and was taken to hospital by police. He was wanted on a warrant so after assessment at the hospital he returned to custody. The HCP was called to assess whether he was fit to be detained. The male gave a history of epilepsy currently well controlled on phenobarbitone. He also said that he was dependent on heroin. On examination he was found to be drowsy with impaired co-ordination and an unsteady gait. Further discussion with the patient revealed that he had taken an overdose of his prescribed drug phenobarbitone as he had no access to heroin and was experiencing symptoms of opiate withdrawal. The HCP telephoned the local poisons centre for advice and it was recommended that he return to hospital for a further assessment/observation.*

Solvents

Volatile substance abuse (VSA) is the deliberate inhalation of fumes given off by volatile substances (solvents) to achieve intoxication and can occur at any age but is a particular problem among adolescents. Adhesives, aerosols, anesthetics, dry cleaning agents, fuel gases, nail varnish, and paint stripper are among the substances inhaled, either directly from their containers, from a plastic bag placed over the nose and mouth, from impregnated rags, or sprayed directly into the mouth.

Regular users may have nasal sores, “glue-sniffer’s rash” (perioral dermatitis), and have the odor of solvents on their breath. Acute effects begin within minutes [79] and may last 15–45 min; persistent abnormalities may occur in severe chronic abusers (Table 12.7) [80].

WIT.0043.0086.0438

Table 12.7 Manifestations of solvent intoxication and abuse [206]

Mild	Euphoria
	Disinhibition
	Dizziness
	Slurred speech
	Lack of coordination
	Sneezing and coughing
Moderate	Lethargy, stupor
	Hallucinations
	Nausea, vomiting
	Diarrhea
	Nystagmus
	Ataxia
	Tremors
	Myalgias
	Paresthesia
Severe	Coma
	Seizures
Chronic	Cerebellar syndrome: ataxia, nystagmus, tremor (toluene)
	Fatigue, difficulty in concentrating
	Parkinsonism (toluene)
	Peripheral neuropathy: symmetrical, motor, mainly involving hands and feet (*n*-hexane and naphtha)

Table 12.8 Deaths from volatile substance misuse

Acute	Direct	Immediate
		Postponed
	Indirect	Trauma
		Aspiration
		Asphyxia
		Drowning
Delayed	Direct	Liver failure
		Renal failure
		Liver tumors
		Bone marrow depression
		CNS involvement

From Shepherd [78]

Most acute direct VSA-related deaths result from cardiac dysrhythmias due to "sensitization" of the myocardium to adrenaline; deaths may also occur from indirect effects or may be delayed (Table 12.8) [81]. Animal experiments confirm that myocardial sensitivity may continue for hours after the initial inhalant exposure [82]. Tolerance may develop, and psychological dependence after long-term use and a withdrawal syndrome similar to delirium tremens has been described [83].

WIT.0043.0086.0439

Lysergamides, Tryptamines, and Phenethylamines

Hallucinogenic (psychedelic) drugs include lysergamides (LSD), tryptamines (mushrooms), and phenethylamines (mescaline, 2CB, 25B-NBOMe) [53].

Lysergic acid diethylamide (LSD) is usually taken orally in a dose of 75–100 μg with effects occurring within 60 min. There is a recovery period of 10–12 h where there may be periods of normal perception and cognition alternating with degrees of intoxication, which may affect fitness for interview.

Acute effects include tachycardia, hypertension, pyrexia, dilated pupils, sweating, flushing. Emotional lability, euphoria and anxiety, distortion of time, visual and auditory illusions (although true hallucinations can occur), and synesthesia, with a mixing of the sensory input—"seeing" sounds or "hearing" smells—may all occur [84].

Both enjoyable and unpleasant effects, a "bad trip," may occur in a first-time user or with repeated use. Psychiatric adverse effects have been described, which include anxiety and panic attacks, self-destructive behavior, hallucinations, acute psychosis, and major depressive reactions. Polydrug users may use benzodiazepines to alleviate anxiety and panic attacks. Hallucinogen persisting perceptual disorder (HPPD) and flashbacks may occur. Dependence does not occur and there is no recognized withdrawal syndrome. Sensitivity to the effects drug may be reduced (tachyphylaxis).

The use of hallucinogenic mushrooms, which grow wild in many areas of Europe [85] and in the United States, though more commonly are cultivated, has been increasing. Mushrooms are usually eaten or made into tea. The effects due to tryptamines, psilocybin and psilocin, are dependent on dose and the individual reaction and sensitivity to psilocybin, previous experiences and the setting. The effects [86] range from mild feelings of relaxation, giddiness, euphoria, visual enhancement (seeing colours brighter), visual disturbances (moving surfaces, waves), to delusions, altered perception of real events, images and faces, or real hallucinations. The sensory distortions may be coupled with restlessness, incoordination, feelings of anxiety, impaired judgement of time or distance, sense of unreality or even depersonalisation. These effects may be termed 'bad trips' by users and can also involve panic reactions and psychosis-like states. Physiological effects may include dizziness, nausea, weakness, muscle aching, shivering, abdominal pain, dilation of pupils (mydriasis), mild-to-moderate tachycardia, tachypnoea, hypertension, but the body temperature remains normal.

Ecstasy (MDMA) [51]

3,4-Methylenedioxymethamphetamine, or "ecstasy," is commonly taken in an oral dose of 75–120 mg as a recreational drug within the dance culture or "rave" scene for its central stimulant and psychedelic effects (Table 12.9). The effects last for 4–6 h with tolerance developing to the acute effects. Problems occur because of its use with other drugs for example alcohol, cocaine, and ketamine. There is little evidence for

WIT.0043.0086.0440

Table 12.9 Effects of MDMA (ecstasy)

Psychological	Euphoria, heightened awareness, improved sense of communication
Neuropsychiatric	Anxiety, insomnia, depression, paranoia, confusion, panic attacks, psychosis
Chronic	Depression, drowsiness, anxiety, panic disorder, aggressive outbursts, psychosis, memory disturbance
Medical	Tachycardia, hypertension, dry throat, bruxism, trismus, sweating, pyrexia, nausea, vomiting, anorexia, loss of coordination with ataxia, dilated pupils, nystagmus, hot and cold flushes, hyperreflexia

Table 12.10 Summary of the severe acute harms following the use of ecstasy

Hyperthermia/hyperpyrexia
Serotonin syndrome
Dilutional hyponatremia and hyponatremic encephalopathy
Acute psychiatric presentations: anxiety, panic, psychosis
Other isolated physiological syndromes: cardiac events, liver failure, pneumomediastinum

long-term physical dependence on MDMA, because of the different pharmacological action of MDMA having more effect on brain serotonin and less on brain dopamine function, but some withdrawal effects such as low mood are frequent.

Adverse effects (Table 12.10) such as a polydipsia, hyponatremia, and catatonic stupor have been reported [87, 88]. An acute rise in antidiuretic hormone (arginine vasopressin [AVP]) accompanied by a small fall in plasma sodium has been shown following the ingestion of MDMA. Therefore, in view of the risk of hyponatremia, individuals who take such drugs should avoid drinking fluid in excess of the body's requirement. This may be difficult because MDMA reduces the perception of thirst and impairs judgment [89], and people tend to overcompensate and consciously overdrink.

Regular users may habitually use chewing gum to overcome the effects on the jaw muscles. The clenching of teeth in the acidic environment caused by carbonated (fizzy) drinks will result in an increased likelihood of tooth wear on the back teeth [90]. Other adverse effects have been described including jaundice and hepatotoxicity [91]; flashbacks and psychosis [92]; pneumomediastinum [93]; urinary retention [94]; hyperthermia; coagulopathy [95]; rhabdomyolysis; and cardiovascular complications resulting in death [96–98]. MDMA differs from other stimulants, such as cocaine and amphetamines, in that it rarely causes paranoid feelings or aggression although the development of chronic paranoid psychosis has been described after heavy misuse of the drug [99] and the serotonin syndrome [100, 101] (altered mental state, hyperthermia, and autonomic dysfunction) has also been reported following MDMA ingestion. With regard to chronic psychological effects, there may be cognitive deficits affecting memory and recall from serotonergic neurotoxicity. 3,4-Methylenedioxymethamphetamine (MDEA) is an analog of MDMA with similar effects. 3,4-Methylenedioxyamphetamine (MDA) and *para*-methoxyamphetamine (PMA) may also be used as recreational drugs.

WIT.0043.0086.0441

Cocaine and Crack

Cocaine occurs naturally in the leaves of the coca plant Erythroxylum coca, which grows predominantly in South America. Cocaine hydrochloride is a white powder that is usually snorted but can be taken orally. Crack is prepared by mixing cocaine hydrochloride with sodium bicarbonate and water and heating it. The cocaine base precipitates out and forms small "rocks" as it cools. Crack may be smoked in a pipe or heated on foil with the vapor inhaled. Both crack and cocaine may be injected.

The onset of action and plasma half-life varies depending on the route of use, very rapidly if taken intravenously or smoked compared with when snorted. The duration of effects will also vary with route of administration. Ingestion of stimulant drugs such as cocaine or amphetamine results in activation of the sympathetic nervous system with resulting euphoria followed by irritability, depression, insomnia, and paranoia (Table 12.11).

Tolerance occurs to the psychological effects of cocaine. Deaths may occur, most commonly from cardiac dysrhythmias, acute coronary syndrome, excited delirium, and stroke. Cocaine is atherogenic and induces coronary artery constriction [102]. Chronic effects include perforation of the nasal septum and rhinorrhea, and long-term use may result in a range of psychiatric problems and vascular diseases.

Cocaine produces a physical and psychological dependence, the severity of which will vary depending on the method of administration, being more severe if the drug is smoked or injected than if snorted. Dependence may result in a particular strong craving for the drug, followed by a withdrawal syndrome or "crash" with irritability, insomnia, depression, and anxiety on cessation. In conditions of police custody, the depression and inability to sleep may lead to acts of self-harm and suicide, and close supervision may be required, with consideration given to prescribing hypnotics and antidepressants.

Amphetamine-Type Stimulants (ATS)

ATS such as amphetamine and methamphetamine are usually found as white powders taken nasally, orally, intravenously, or with methamphetamine smoked. Clinical effects are similar to those of cocaine (Table 12.11), although amphetamine has a longer half-life of 6–12 h, so the duration of euphoria is longer. "Ice" is a very pure form of methamphetamine hydrochloride (98–100% pure), which is usually smoked like crack cocaine.

Table 12.11 Effects of cocaine and amphetamine intoxication

Initial low dose	Euphoria, insomnia, dry mouth, hyperthermia, tachycardia, hypertension, increased respiration, sweating, dilated pupils
With increasing dose	Irritability, impulsivity, aggressiveness, agitated delirium, paranoia, delusions, seizures

Tolerance occurs with long-term use and psychological dependence with a withdrawal syndrome of depression, anxiety, and sleep disturbance. "Speed runs" describe repeated use over a period of days with several grams of amphetamine used daily. At the end of the "run," the user may sleep for several days. Alcohol, sedative-hypnotic drugs, and heroin may be used to reduce the anxiety caused by amphetamine or, alternatively, amphetamine may be used to reduce the sedative effects of such drugs.

The diversion and abuse of methylphenidate, used in the treatment of attention deficit hyperactivity disorder (ADHD), has also been reported [103].

Serotonin syndrome may occur with the use of ATS and this is a potentially life-threatening reaction. Therapeutic drugs, for example, antidepressants such as selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants, opiate analgesics including tramadol, are associated with the serotonin syndrome.

Illustrative Case *A female who had a history of depression and drug use with previous admissions to psychiatric hospitals, was found by police in an agitated state. The police used their powers under section 136 of the Mental Health Act 1983 to remove her to a place of safety, in this case a police station. She was agitated and violent, and was put in a cell in a 'safety suit'. A doctor observed her through the wicket but did not enter the cell and said he would call the community mental health team. She was seen to be perspiring and had removed some of her clothes. An hour later she was slumped in a corner of the cell and was found to be unresponsive. Attempts at resuscitation in the police station were unsuccessful and she was pronounced dead. The cause of death was given as serotonin syndrome.*

Chemsex is a term used mostly in relation to men who have sex with men (MSM) to describe the use of drugs during sexual activity, which is increasingly associated with unsafe sexual practices, and sexually transmitted infections [104]. Three drugs are associated with this behaviour—methamphetamine, mephedrone and gamma hydroxybutyrate. These drugs cause sexual disinhibition and high-risk sexual practices.

Khat

Khat consists of the young leaves of the Catha edulis plant and is usually chewed for its stimulant effect when fresh but may be drunk as an infusion of leaves. In the UK khat is consumed almost exclusively within communities from East Africa and the southern Arabian Peninsula [105]. The main components are cathinone and cathine, with effects similar to those of amphetamine, resulting in euphoria, increased alertness, anorexia; anxiety and insomnia may occur.

The Advisory Council on the Misuse of Drugs (ACMD) noted that khat use has the potential to develop into dependency but this is much less likely than dependency on stimulants like amphetamine, and more like the type of dependency seen with caffeine [106]. Withdrawal symptoms are reported, but do not necessarily imply a withdrawal syndrome and are more comparable to a 'morning after' experience.

WIT.0043.0086.0443

Marijuana

Marijuana is the most commonly used illicit drug in the UK and the United States. It is obtained from the Cannabis sativa plant, and the principal active ingredient, accounting for the majority of effects, is delta-9-tetrahydrocannabinol (THC). There are a number of forms, including hashish (a resin), herbal cannabis (a green-colored preparation made from the leaves of the plant), and "skunk" or sinsemilla a potent form of the cannabis plant with high levels of THC on average 14.2% (as opposed to 6.3% in resin) [107], which is grown indoors using hydroponic techniques, in nutrient-rich liquids rather than soil, under grow lights or greenhouse conditions. The onset of effects is reported as being more rapid, and the hallucinogenic properties are heightened. Cannabis resin usually contains cannabidiol (CBD) thought to be protective against some of the dangerous effects of THC; sinsemilla does not contain CBD.

Cannabis is usually smoked but can be ingested as, for example, "cannabis cookies." One "joint" typically contains 10–30 mg of THC and has an onset of action of 10–20 min with effects lasting 2–3 h. Acute effects include conjunctival injection; rise in blood pressure; an increase in heart rate; sedation and euphoria, occasionally panic attacks and paranoia in some users; altered perceptions of space and time; impaired learning and memory; difficulty problem solving; and loss of coordination.

Tolerance has been shown to develop to many effects of cannabis including the "high" with chronic use, and an abstinence syndrome has been described with disturbed sleep, decreased appetite, restlessness, irritability, and sweating. Withdrawal symptoms are usually mild and short-lived, although they may be more severe in heavy regular users and especially in those who are heavy users of tobacco.

Cannabis increases the risk of psychosis especially in frequent users and may be responsible for transient exacerbations in psychotic features in those with significant mental illness. Psychotic episodes may be precipitated by relatively small quantities of high potency cannabis.

Synthetic cannabinoid receptor agonists [108] may present as vape fluids, impregnated on paper, or sprayed on flammable plant material sold as herbal tea or incense. The desired effects which occur within minutes of smoking, include relaxation, euphoria, disinhibition, but these may be followed by adverse effects such as convulsions, anxiety, bizarre behavior, amnesia, confusion, panic attacks, hallucinations, paranoia delusions, and psychosis. Duration of action is variable between 1 and 8 h. There is evidence that chronic use may be associated with tolerance which develops more quickly than for other forms of cannabis. Symptoms of intoxication are usually self-limiting and resolve spontaneously. Management of toxicity is symptomatic and supportive.

Image and Performance Enhancing Drugs (IPEDs)

IPEDs are substances used with the intention of altering or improving a person's appearance or abilities [109]. There are a range of drugs that may be used:

WIT.0043.0086.0444

- Anabolic steroids and gym drugs
- Nootropics—modafinil, methylphenidate, amphetamine (used to increase cognitive functioning by students)
- Botox, dermal fillers and tanning drugs (melantan)

Any of these drugs given by injection may lead to potential health risks from direct damage from injection, blood-borne viruses, and infections or inflammation at injecting sites, especially with counterfeit substances.

Anabolic (anabolic androgenic) steroids may be taken orally or intramuscularly by body builders or other individuals who want to enhance their physical appearance. Research has shown that injections of testosterone enanthate increase muscle size and strength, especially when combined with exercise [110]. To achieve the desired effect, different steroids are taken in cycles, with rest periods in between, a regime known as "stacking," or, alternatively, increasing doses of the same steroid are taken, a so-called drug pyramid [111]. Most of the steroids sold in the UK are counterfeit rather than produced by legitimate pharmaceutical companies. Consequently, they may contain a different steroid from the one indicated on the bottle, and scant reliance can be placed on the reported dose as they may have little or no steroid in them at all [112].

General effects of anabolic steroids [109, 112] include baldness, acne, raised blood pressure, fluid retention, and a reduction in high-density lipoprotein cholesterol. Long-term effects include liver and kidney damage. Gynecomastia may occur, and the prostate gland may swell, resulting in impaired micturition. Most of these effects are dose-dependent and more likely with prolonged administration.

While the drug is being taken, there is a significant reduction in testosterone production by the testes so that sperm output and quality are decreased, and a return to normal can take many months after drug use is stopped. The effect on sex drive is variable, but overall it seems that the sex drive increases at the beginning of a steroid-using cycle, and then decreases to below normal after several weeks of use. Drive may remain below normal levels even after the drug is stopped until such time as the testes start producing testosterone again. There may also be a reduction in size of the testicles [113].

In women menstrual irregularities are reported, with permanent enlargement of the clitoris. There may also be growth of facial and body hair, male pattern baldness, and decreased breast size. Abuse of sex steroids by recreational body builders may be an unrecognized cause of subfertility [114].

Liver function tests may show abnormalities that usually return to normal once the drug is stopped. Drug-induced jaundice can be caused by temporarily impaired excretory function, and peliosis hepatitis, in which the liver tissue is replaced by blood-filled cysts, may occur, as can liver tumors [115].

Initial use may result in stimulatory effects such as increased confidence, decreased fatigue, heightened motivation, agitation, irritability, and insomnia, which may progress to argumentative and aggressive behavior and major mood disturbances including depression, mania, and hypomania [116, 117]. "Roid rage," which may be associated with violent crimes [118], seems to require a high dose of steroids over several weeks, as may occur when "stacking."

WIT.0043.0086.0445

Other Body Building Drugs

Polypharmacy is common among anabolic steroid users [119]. Other drugs may be used by body builders, including tamoxifen to reduce or prevent gynecomastia; diuretics to counteract the fluid retention caused by anabolic steroids; thyroxine to increase the rate of metabolism, which might theoretically increase the ability of anabolic steroids to boost physical strength [120]; and beta human chorionic gonadotropin to alleviate testicular atrophy [121]. Nalbuphine (Nubain) is an opioid agonist/antagonist analgesic used for the treatment of moderate to severe pain, and dependence has been reported associated with anabolic steroid use [122].

Furthermore, there has been a case report of a 21-year-old body builder who was admitted after taking excessive amounts of insulin intravenously; apparently insulin is advertised in body building magazines as having anabolic properties [123]. The recreational use of caffeine to toxic levels has been reported in a body builder who presented with a grand mal seizure [124]. Clenbuterol, which is a sympathomimetic agonist (used as an oral bronchodilator in some European countries but not licensed for human use in the UK or the United States), is said to have an "anabolic-like" effect but at high dose may cause cardiac dysrhythmias, tremor, and serious hypokalemia [125].

Gamma-Hydroxybutyrate and Gamma-Butyrolactone

Gamma-hydroxybutyrate (GHB) is a naturally occurring substance in the human brain structurally related to GABA [126]. Gamma-butyrolactone (GBL) is converted to GHB in vivo post ingestion. GHB has been used as an anesthetic (although it has little analgesic effect), to alleviate narcolepsy, and to treat alcohol and opiate dependence [127]. It is available as a colorless, odorless liquid, powder, or capsule taken orally, rarely injected. GHB is rapidly absorbed, with peak plasma concentrations occurring after 30–60 min following oral administration. It has a half-life of 20–30 min [128], and effects can last from 45 min to 8 h [129].

Initial effects include euphoria followed by profound sedation, confusion, agitation, and amnesia; nausea, vomiting, and diarrhea; ataxia, seizures, hypotonia, and tremor; vertigo and dizziness; bradycardia, hypotension, and hypothermia; coma; and respiratory collapse.

There is a narrow margin between intoxication and coma [130], and the clinical effects are potentiated by use of other CNS depressant drugs such as alcohol, opiates, benzodiazepines, and neuroleptics [131]. Tolerance and physical dependence after high-dose use can develop with a withdrawal syndrome, which may include insomnia, muscular cramping, tremor, and anxiety [127]. Symptoms of withdrawal from GHB are broadly similar to those for alcohol, although of a more rapid onset, and can be treated symptomatically or with benzodiazepines or baclofen [53]. A rapid deterioration into delirium may occur in more frequent high-dose dependent users. Seizures have been reported, though less commonly than with alcohol withdrawal [132]. It may be difficult to manage in custody so hospital admission should be considered.

WIT.0043.0086.0446

Illustrative Case *Stephen Port was convicted in 2016 for the murder of four men after administering fatal doses of GHB* [133]. *He was aroused by the passivity of his victims (somnophilia). The bodies of three young men, in their 20s, were found in a churchyard; all had bottles of GHB in their pockets* [133]. *Somnophilia, the desire to have sex with an unconscious, sleeping or comatose person, who is unable to respond is a paraphilia, and is distinct from cases where a substance is administered to a victim in order to take advantage of them* [134].

Ketamine

Ketamine is a commercially available anesthetic for intravenous and intramuscular use. It is commonly used for recreational purposes. It is a predominately a sedative drug but has dissociative, anesthetic, psychostimulant and analgesic actions [135]. Ketamine is a member of a group of compounds known as arylcyclohexylamines, this group also includes phencyclidine and methoxetamine. These substances produce a wide range of effects but primarily they all act as non-competitive antagonists at glutamate receptors of the *N*-methyl-D-aspartate (NMDA) sub-type [135].

It is available illicitly most commonly in powder form, occasionally as a liquid, but can also be found as a tablet [53]. It usually taken intranasally ("snorted"), but also orally, smoked, and by the intravenous route. The onset of effects depends on the route of administration: intranasally within 5–30 min, intravenously within 30 s and last about 30 min. Tolerance develops after repeated use, with a decreased duration of effect [53].

Ketamine has a wide margin of safety unless taken in combination with other drugs. A dose-dependent depression of respiration may occur, and this can be a particular problem when taken with other respiratory depressant drugs such as benzodiazepines, alcohol, or opiates occasionally resulting in death [136, 137].

Physical effects may include hypertension, palpitations, nausea, and vomiting, slurred speech, nystagmus, lack of coordination, and seizures. On recovery, "emergence phenomena" may occur, with psychological dissociation or out of body (flying or floating) sensations, confusion, hallucinations, synesthesia, and depersonalization [138]. Such dissociative states may result in the individual becoming divorced from reality, and these effects, coupled with possible loss of coordination and pronounced analgesia, can result in serious accidents to users. Ketamine has been found to induce acute and severe impairment of working, episodic, and semantic memory when used frequently [139]; some of these effects have continued 3 days after drug ingestion [140]. Such cognitive impairment may impact on a detainee's fitness for interview. There is currently little evidence about physiological withdrawal but a psychological withdrawal syndrome including anxiety, drug craving, tremulousness and palpitations has been described [135].

Ketamine use is associated with damage to the urinary system—ketamine induced uropathy [141]. This may result in dysuria, painful hematuria, urge incontinence, frequency and urgent urination, nocturia, obstruction of the urinary tract.

Alkyl Nitrites

The alkyl nitrites are volatile yellowish clear liquids that have a distinctive sweet smell. All the nitrites have vasodilatory properties and are used as a euphoric relaxant within the dance culture and to relax the anal sphincter and enhance sexual performance. The effect of inhaling the vapor, usually from the bottle or poured onto a cloth, is instantaneous and very short-lived, resulting in a "rush," but adverse effects such as dizziness, flushing, tachycardia and palpitations, headache, cold sweats, and hypotension may occur [142, 143]. Swallowing of volatile nitrites as opposed to inhaling them may result in severe methemoglobinemia [144, 145].

Novel Psychoactive Substances

Novel psychoactive substances (NPS), previously known as 'legal highs' [146], are constantly being identified see Table 12.12. There have been differing legislative strategies with regard to these substances in various jurisdictions. In the UK NPS have been banned collectively under the Psychoactive Substances Act in 2016. As with all illicit substances there will be variation in the quality of content and dose received by an individual and the effects may be unpredictable depending on individual tolerance and where the drugs have been used in combination with other substances, including alcohol. HCPs should have a low threshold for early referral to an emergency department. Public Health England have a website for healthcare professionals to report cases of suspected harm with illicit substances: https://report-illicit-drug-reaction.phe.gov.uk/. Use of NPS may influence a detainee's fitness for interview and a period of rest may be required before any interview takes place.

Table 12.12 Novel Psychoactive Substances (adapted from [33])

Depressants	GHB, GBL
	Nitrous oxide
	Dissociative drugs Ketamine Methoxetamine
Stimulants	Cocaine, synthetic cocaine derivatives Piperazines Amphetamine-type substances Methamphetamine MDMA, MDA, PMA, PMMA Mephedrone Ethylphenidate Synthetic cathinones Pipradrols and derivatives
Hallucinogens	Lysergamides LSD Tryptamines Phenethylamines
Emerging drugs	New benzodiazepines
	New synthetic opioids
	Others

Alcohol

Alcohol may be involved in crime in two ways: alcohol-defined offences such as 'drunkenness' offences (drunk and disorderly/drunk and incapable), or driving with excess alcohol (Chap. 14); or offences where alcohol may have been involved, e.g. the offender was under the influence of alcohol at the time of the offence.

Crime statistics show a clear association between alcohol intake and criminal behavior, the association being most marked in relation to violent crimes. The Crime Survey England and Wales covering 2016/2017 found that in 46% of all violent incidents victims believed offenders to be under the influence of alcohol [147]. Alcohol was a particularly prevalent factor in violent incidents between strangers in figures from 2013/2014, 64% of which were perceived to be alcohol-related [148]. In Scotland the figure of alcohol-related violent crime was 42% in 2016/2017; this is almost 100,000 alcohol related violent crimes each year [149]. In Scotland in 22% of violent crime the victim had been drinking [149] and 20% of prisoners report being drunk at the time of their offence [150].

The UK Government published a Crime Prevention Strategy in 2016 recognizing that the relationship between alcohol and violence is complex and the link between alcohol and non-violent or acquisitive crime is less well developed [151].

Alcohol is important in clinical forensic medicine because of its link with criminal activity and by virtue of the significant role it plays in a large number of assessments regarding fitness for detention [35, 36, 152, 153]. In police custody in Scotland 18–34% of detainees have alcohol problems mostly at the dependency end of the spectrum [154]. Accordingly, a thorough understanding of the metabolism, effects, and problems associated with alcohol is essential for any HCP practicing in this field, not least because the detainees with alcohol problems, particularly those with gross intoxication, are an extremely vulnerable group for whom police custody may be inappropriate [155]. This is particularly important when assessing an intoxicated detainee in police custody. Indeed, the HCP's first duty in examining such individuals should be to exclude pathologic conditions that may simulate intoxication, as failure to do so may lead to deaths in police custody [156].

Alcohol use disorder (AUD) has been defined in DSM 5 (Table 12.13).

The Metabolism of Alcohol

Ethanol, hereafter referred to as alcohol, is produced by the fermentation of sugar by yeast, a process that halts at a concentration of alcohol by volume of about 15% because of the death of yeast above these levels. There is wide variation in the alcohol content of different alcoholic beverages. HCPs must bear this in mind when trying to assess intake of alcohol.

One unit in terms of an alcoholic drink in the UK is 8 g of alcohol. In the European Union there is a requirement [157] for the labelling of alcohol content of beverages of higher than 1.2% alcohol by volume (ABV). Labelling requirements are required in many jurisdictions [158].

WIT.0043.0086.0449

Table 12.13 DSM 5 Alcohol Use Disorder (AUD)

1	Alcohol is often taken in larger amounts or over a longer period than was intended.
2	There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
3	A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
4	Craving, or a strong desire or urge to use alcohol.
5	Recurrent alcohol use resulting in a failure to fulfil major role obligations at work, school, or home.
6	Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
7	Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
8	Recurrent alcohol use in situations in which it is physically hazardous.
9	Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
10	Tolerance as defined by either the following: (a) A need for markedly increased amounts of alcohol to achieve intoxication or desired effects (b) A markedly diminished effects with continued use of the same amount of alcohol.
11	Withdrawal, as manifested by either of the following: (a) The characteristic withdrawal syndrome for alcohol (b) Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms.
	The presence of at least 2 of these symptoms indicates **Alcohol Use Disorder (AUD)**. The severity of the AUD is defined as: **Mild**: The presence of 2 or 3 symptoms **Moderate**: The presence of 4 to 5 symptoms **Severe**: The presence of 6 or more symptoms

A unit in the UK equates to:

- A single small shot (25 mLs) of spirits ABV 40%
- Beer 250 mLs ABV 4%
- Wine 76 mLs 13%

To work out how many units there are in any drink multiply the total volume of the drink in mLs by its ABV (measured as a percentage) dividing the result by 1000:

Strength (ABV) × volume (mL) ÷ 1000 = units.
So in a pint (568 mL) of lager (ABV 5.2%):
5.2 (%) × 568 (mL) ÷ 1000 = 2.95 units

In the United States, one 'standard' drink contains 14 g of pure alcohol; in Australia a standard drink is any drink containing 10 g of alcohol [159]. Research from the European Union shows a variation between 8–20 g in what is described as a standard drink [160].

WIT.0043.0086.0450

Most people who have alcohol in the body have drunk it, although it can be absorbed into the systemic circulation through the lungs (blood alcohol concentrations of up to 50 mg/100 mL have been achieved after breathing alcohol/air mixtures for several hours) [161]. Little or no alcohol is absorbed through the intact skin of adults.

Once ingested, alcohol is subsequently absorbed into the body by a process of passive diffusion that occurs across the mucosal surfaces of the gastrointestinal tract. As liquids pass quickly through the mouth and esophagus, little absorption takes place until alcohol has reached the stomach. The rate of absorption is maximal in the duodenum, because its mucosa is thinner and blood supply more abundant than that of the stomach. Accordingly, any condition that delivers drink into the small intestine more quickly than normal, such as gastrectomy, will lead to more rapid absorption and an earlier, higher peak blood alcohol level.

As soon as alcohol enters the bloodstream, mechanisms for its removal come into action. Some 5–10% of the total amount absorbed is excreted unchanged in breath, urine, and sweat [162], an important factor that allows the estimation of blood alcohol concentrations from the levels in urine and breath. The remaining 90–95% of alcohol is oxidized in the liver by alcohol dehydrogenase to form acetaldehyde, and this is further metabolized to acetate (acetic acid). As alcohol dehydrogenase becomes saturated at relatively low alcohol concentrations, it soon reaches its maximum working rate, and alcohol elimination proceeds at this constant rate [163].

The rate of absorption is very much faster than the rate of elimination, and this fact gives rise to the characteristic blood–alcohol curve, as described by several researchers (Fig. 12.1) [164, 165]. Generally speaking, the peak blood alcohol concentration is reached 30–60 min after drinking, although the range may be anything from 20 min to 3 h. However, the peak blood alcohol concentration, the time taken to reach the peak, the area under the blood–alcohol curve, and the time taken to reach a zero blood alcohol level vary from person to person and within the same person over time [166]. Indeed, a large number of factors can influence the kinetics of alcohol.

Sex and Weight

Alcohol is highly hydrophilic, so once it enters the systemic circulation it is distributed evenly throughout total body water (V_d or the volume of distribution). In general, the larger the person the larger the V_d, so that if two different sized males drink the same quantity of alcohol, a higher peak concentration will be reached in the lighter of the two because he will have a smaller V_d for the alcohol to distribute itself throughout. Similarly, because women have more body fat compared with men, and fat contains no water, higher peak alcohol levels are achieved in women than in men of the same weight. The V_d of alcohol for adult males has been shown to be about 0.70, compared with 0.60 for adult females [162].

WIT.0043.0086.0451

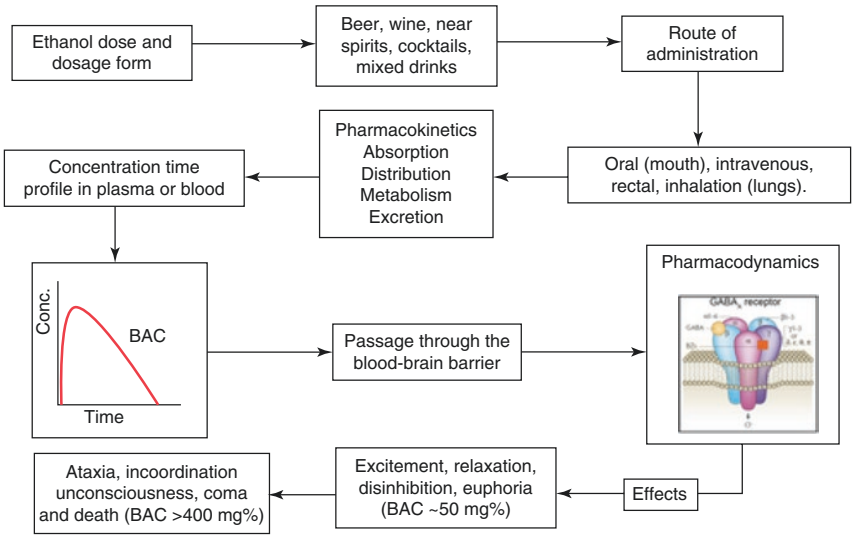


Fig. 12.1 From: Jones AW Alcohol, its absorption, distribution, metabolism, and excretion in the body and pharmacokinetic calculation. WIREs Forensic Sci 2019;e1340

Duration of Drinking

If a volume of alcohol is consumed over a prolonged period, it may be eliminated almost as quickly as it is absorbed, giving rise to a much lower peak alcohol concentration.

Nature of the Drink Consumed

The rate of alcohol absorption increases with the concentration of the ingested solution up until levels of between 10% and 20%, at which point absorption is maximal. Because alcohol is absorbed by passive diffusion, the rate of absorption is slower with drinks of lesser strength because of a lower concentration gradient. Furthermore, the larger volumes involved may also delay gastric emptying and further slowdown absorption. By contrast, when the alcohol concentration of drinks exceeds 20% the alcohol irritates the gastric mucosa and pyloric sphincter, causing increased secretion of mucus and delayed gastric emptying, thus slowing down absorption. Carbonation of drinks may also increase the rate of absorption of alcohol although this effect does seem to be variable [167].

Food in the Stomach

Studies have shown that eating a full meal before drinking can reduce the peak alcohol level by an average of 9–23% [162, 168–170]. The presence of food in the

WIT.0043.0086.0452

stomach reduces the rate of gastric emptying, dilutes the alcohol that enters the stomach, and limits the contact between the alcohol and the gastric mucosa. Alcohol absorption is slowed for all these reasons.

Physiologic Factors and Genetic Variation

Factors such as stomach wall permeability, blood supply to the alimentary tract, and the rate of gastric emptying will vary from person to person, and from time to time in the same person. All of these will have a bearing on the shape of the blood–alcohol curve.

Drugs

The interaction between alcohol and drugs, either prescribed or illicit, is important because so many detained persons take other drugs in conjunction with alcohol. Generally speaking, the most important interactions involve drugs altering the way a subject responds to a given amount of alcohol in the blood, for example, because the drug has CNS depressant effects that add to those of alcohol. However, a number of drugs may influence the rate of alcohol absorption by virtue of their effect on the rate of gastric emptying (Table 12.14).

Rate of Elimination

The rate of elimination of alcohol has been determined experimentally. Reported values range from about 10 mg/100 mL of blood per hour (mg/dL/h) to 25 mg/dL/h,

Table 12.14 Drugs that affect the rate of stomach emptying and so influence the rate of alcohol absorption

Drugs that slow gastric emptying
Drugs with anticholinergic actions, such as
Atropine
Chlorpromazine
Tricyclic antidepressants
Drugs with an adrenergic action, such as
Amphetamines
Drugs with an opioid action, such as
Antidiarrheal medicines
Codeine and dihydrocodeine
Diamorphine (heroin)
Methadone
Dextropropoxyphene (in co-proxamol)
Drugs that hasten stomach emptying, such as
Metoclopramide
Cisapride
Erythromycin

Adapted from Ferner [161]

WIT.0043.0086.0453

with an average of 15–18.6 mg/dL/h [163, 171] (approximately equivalent to the elimination of 1 unit of alcohol per hour in a 70-kg male). Habituation to alcohol is the single most important factor affecting the rate of elimination. One recent study reported the rate of ethanol disappearance in 22 alcoholics as ranging from 13 to 36 mg/dL/h, with an average of 22 mg/dL/h [172]. The increased rate of elimination is thought to be because chronic alcoholics have facilitated liver enzyme systems.

Effects of Alcohol

Alcohol acts as a CNS depressant, which in small doses interferes with cortical function, but which in larger doses may depress medullary processes. The apparent stimulatory effects of alcohol occur because it acts first on the so-called higher centers of the brain that govern inhibition. The signs of intoxication are given in Table 12.15.

While there is general agreement on the sequence of clinical effects caused by drinking alcohol, the blood alcohol concentrations at which these effects occur vary considerably in different subjects. The difference in susceptibility is most marked between habituated and non-habituated drinkers, but tolerance to the effects remains very variable even within these broad categories [173, 174]. Table 12.16 provides a guide to the general effects. It should be noted that the effects are more pronounced when blood alcohol levels are rising than when falling. This is known as the Mellanby effect and is thought to be due to an acute tolerance to alcohol that develops during intoxication [175]. Some specific effects are discussed below.

Table 12.15 Signs of alcohol intoxication

• Disinhibition/labile effect;
• Sedation;
• Concentration/attention/memory difficulties;
• Smell of alcoholic liquor;
• Tachycardia;
• Hypertension;
• Flushing;
• Nystagmus;
• Pupil size—may be normal or dilated;
• Sluggish pupillary reaction to light;
• Poor co-ordination;
• Romberg's positive;
• Ataxia.
Severe intoxication/overdose
• Alteration in mental state;
• Hypoglycaemia;
• Respiratory depression;
• CNS depression (coma with pin-point pupils);
• Depressed or absent corneal, gag or deep tendon reflexes;
• CVS depression.

WIT.0043.0086.0454

Table 12.16 Sequence of central nervous depressant effects of alcohol

Stage of influence	Blood alcohol concentration (mg/100 mL)	Clinical effect
Sobriety	10–50	Often no obvious effect
		May feel "relaxed"
Euphoria	30–120	Mild euphoria with increased talkativeness
		Decreased inhibitions
		Increased self-confidence
		Impaired fine motor skills
Excitement	90–200	Emotional instability
		Poor sensory perception
		Impaired memory and comprehension
		Incoordination and loss of balance
Drunkenness	150–300	Disorientation, mental confusion
		Disturbances of vision (e.g., diplopia)
		Decreased pain sense
		Increased incoordination with staggering gait
		Slurred speech
Stupor	250–400	General inertia approaching paralysis
		Marked lack of response to stimuli
		Inability to stand or walk
		Vomiting, incontinence of urine and feces
Coma	350–500	Coma and anesthesia
		Depressed or absent reflexes
		Cardiovascular and respiratory depression
		Possible death
Death	Over 450	Death from respiratory depression

Nystagmus

As the eye is effectively part of the CNS, it is one of the easiest parts of the body to examine in order to detect the effects of alcohol; the most extensively studied ocular effect of alcohol intoxication is nystagmus. Alcohol can cause nystagmus through at least two mechanisms. By acting on the vestibular system, it can cause positional alcohol nystagmus (PAN) [176], detected when the patient is lying supine with the head turned to either the left or right. Horizontal gaze nystagmus (HGN) results from the inhibition of the smooth pursuit system and the impaired ability to maintain eccentric gaze [177] brought about by alcohol's effect on ocular movements via neural mechanisms [178].

PAN occurs in two stages [179]. The first stage, PAN I, is associated with acute elevation of blood alcohol, tending to occur about 30 min after alcohol ingestion. In PAN I the fast phase of nystagmus is in the direction toward which the head is turned. PAN II normally occurs at about 5–6 h after drinking and is characterized by nystagmus in the opposite direction to that seen in PAN I.

WIT.0043.0086.0455

HGN is a jerky eye movement noted when gaze is directed to one side. The fast phase of HGN is in the direction of gaze, and it becomes intensified at a more eccentric gaze position [178]. Although HGN can be seen in normal individuals at extreme lateral gaze [180], when detected at lesser deviations it is considered pathologic. An angle of onset of 40° or less from the midline has been found to be a sensitive indicator of a blood alcohol level in excess of 100 mg/100 mL [178]. While some authors have maintained that blood alcohol levels of over 80 mg/100 mL are consistently associated with HGN [181], others have found that it is absent in just under 40% of drivers with an average blood alcohol of 120 mg/100 mL (range 9–218 mg/100 mL) [182]. As HGN may be noted in a number of pathologic conditions including the ingestion of sedative and tranquilizing drugs [183], its presence should not be taken as proof of alcohol intoxication, especially as evidence in cases of driving while intoxicated (DWI) [184]. It is perhaps for these reasons that the Kansas Supreme Court, when assessing the admissibility of HGN evidence in drink driving prosecutions, decided that "the reliability of HGN evidence is not currently a settled proposition in the scientific community" [185].

Pupillary Changes

In the early stages of alcoholic intoxication, the pupils are said to dilate, often becoming pinpoint as the level of intoxication advances, particularly when the state of coma is reached [186]. However, some commentators report the pupils as being normal-sized in alcohol intoxication [187], with current advice favoring the view that pupil size may be normal or dilated.

Alcohol may slow the pupillary response to light, such an effect being one of the more reliable eye signs of intoxication albeit a difficult one to detect clinically.

Slurred Speech

Speech production is a complex motor activity. As it requires a high degree of coordination, it can be a sensitive index of alcohol intoxication [188]. Reliable changes in speech are produced at blood alcohol levels above 100 mg/100 mL [189], although the effects of lower blood alcohol levels have been variable.

Cardiovascular Effects

Moderate doses of alcohol cause a slight increase in blood pressure and pulse ate, [190, 191]. However, the most prominent effect with higher doses is a depression of cardiovascular functions. This depression is probably a combination of central effects and direct depression of the myocardium [175].

Metabolic Effects

HCPs need to be aware that severe hypoglycemia may accompany alcohol intoxication because of inhibition of gluconeogenesis. Alcohol-induced hypoglycemia, which develops within 6–36 h of heavy drinking, typically occurs in an undernourished individual or one who has not eaten for the previous 24 h. The usual features of hypoglycemia, such as flushing, sweating, and tachycardia, are often absent, and the person may present in coma.

Death from Alcohol Poisoning

Alcohol intoxication may result in death due to respiratory or circulatory failure or as a result of aspiration of stomach contents in the absence of a gag reflex. Levels of blood alcohol above 500 mg/100 mL are considered to be "probably fatal" [192], although survival at much higher concentrations is now well documented. In 1982, for example, the case of a 24-year-old woman with a blood alcohol level of 1510 mg/100 mL was reported. She had gone to the hospital complaining of abdominal pain and was noted to be conscious but slightly confused. Two days later her pain had eased, her blood—alcohol level fallen, and she was able to leave the hospital and return home [193].

Death associated with blood alcohol levels below 350 mg/100 mL suggests that other complicating factors are present. Most commonly this will be an interaction between alcohol and some other drug that has also been ingested.

Diagnosis of Intoxication

The terms alcohol intoxication and drunkenness are often used interchangeably. However, a distinction between these terms is justified as people may exhibit behavioral changes associated with drunkenness when they believe they have consumed alcohol but actually have not [194] (Table 12.17).

Alcohol Dependence

Alcohol use disorder is a major risk factor for serious health, social, and economic problems [196]. Early identification of those who are dependent on alcohol increases the possibility of successful treatment [197] and brief intervention by the HCP seems both feasible and acceptable [198].

It is essential that custody staff ensure that those who are identified on risk assessment with an alcohol problem and/or are suspected of being dependent on alcohol should call a HCP to fully assess the detainee, and whether in view of the proposed length of detention, early treatment is required to prevent the major complications of withdrawal (see below).

WIT.0043.0086.0457

Table 12.17 Differential Diagnosis of Alcohol Intoxication [195]

Differential diagnosis	Clinical marker(s)
Other Intoxicants	
Drugs of abuse Cocaine/Amphetamines-type stimulants Opiates Prescribed medication: benzodiazepines, anti-psychotic medications	Personal history of use Information from police (National computer database) Drug possession/drug paraphernalia identified during police search (e.g. citric acid) Disproportionate mental stimulation Injection marks, excessive sedation Medications found/prescriptions, hospital appointment cards
Infections (Sepsis)	History/Examination for source of infection Pyrexia Meningism
Head injury	History of head injury, particularly at time of arrest Visible head injury Localising neurological signs
Metabolic causes Hypoglcaemia Hyperglycaemia/diabetic ketosis	MEDIC ALERT bracelets Blood glucose measurement Blood glucose measurement/urinalysis for ketouria
Other electrolyte disturbance	Diuretic use, other comorbid conditions (cancer, heart failure etc.)
Hepatic encephalopathy	Signs of chronic liver disease, ascites
Other	
Seizures/post-ictal states Acute psychiatric conditions Hypoxia/hypercapnia	Confusion/disorientation Abnormal mental state examination Pulse oximetry

However, obtaining accurate and reliable information about a person's drinking habits can be extremely difficult. The use of an alcohol screening questionnaire is essential in identifying alcohol problems [199]. The Alcohol Use Disorders Identification Test (AUDIT) identifies persons whose alcohol consumption has become harmful or hazardous to health [200] and is probably the best screening instrument in this environment [201]. This can be used in combination with the Severity of Alcohol Dependence Questionnaire (SADQ) [202].

Alcohol Withdrawal

All HCPs working in the custody environment should be skilled in the assessment of detainees with AUD, including alcohol withdrawal. Detainees with marked alcohol dependence may develop withdrawal symptoms before the alcohol level is zero. Alcohol withdrawal symptoms and signs include: agitation, tremor, sweating, fever, tachycardia and hypertension. Complications of severe withdrawal include seizures, hallucinations, confusion, disorientation, aggressive behaviours and delirium tremens. The use of a tool such as Clinical Institute Withdrawal Assessment for Alcohol (CIWA) [203] is recommended. The severity of the symptoms depends

WIT.0043.0086.0458

mainly on the amount and duration of alcohol intake, although other factors, such as concurrent withdrawal from other drugs, such as benzodiazepines, may contribute to the clinical picture. Detainees at high risk, with a past history of severe withdrawal with seizures or previous delirium tremens should be transferred to hospital. Treatment should be given using a long acting benzodiazepine in custody, such as diazepam or chlordiazepoxide. A symptom-triggered regimen for drug treatment for people in acute alcohol withdrawal should only be used in hospital or in other settings where 24-h assessment and monitoring are available [204].

Alcohol Withdrawal Delirium

The essential diagnostic feature of this disorder is a delirium that develops after recent cessation of or reduction in alcohol consumption. Traditionally referred to as delirium tremens, this withdrawal state typically begins 72–96 h after the last drink, so it is uncommon within the normal span of detention in police custody. However it may occur earlier (after 24 h). The delirium is characterized by impaired attention and memory, disorganized thinking, heightened suggestibility, disorientation, reduced level of consciousness, perceptual disturbances, and agitation. Vivid, and often terrifying, hallucinations may occur. Usually these are visual, but other sensory modalities (e.g. auditory or tactile) may be involved. The disorder usually coexists with other features of alcohol withdrawal, for example, autonomic hyperactivity, which is usually severe. Alcohol withdrawal delirium is a medical emergency with a mortality rate of about 5%. Once diagnosed, the detained person with delirium requires urgent hospitalization.

Withdrawal Seizures

Seizures are typically single and generalized. They tend to occur between 6 and 48 h after the last drink and while they are not life threatening, their importance lies in the fact that about one third of those with seizures will go on to develop alcohol withdrawal delirium.

Alcoholic Hallucinosis

The essential features are auditory or visual hallucinations, which develop either during or after a period of heavy alcohol consumption.

Cardiac Arrhythmias

The frequency of tachyarrhythmias in alcohol withdrawal is high, probably because of high adrenergic nervous system activity. Sudden deaths in alcohol withdrawal are

WIT.0043.0086.0459

most likely due to such dysrhythmias. Adequate sedation will play a part in preventing such unwanted occurrences happening in police custody, although those with severe alcohol withdrawal are best admitted to the hospital, where they can be placed on a cardiac monitor.

Wernicke's Encephalopathy and Korsakoff's Psychosis

Wernicke's encephalopathy is a medical emergency which may be precipitated by alcohol withdrawal, or intercurrent illness, such as sepsis. Features include disturbance of consciousness (ranging from mild confusion to coma), double vision, ophthalmoplegia, nystagmus, and ataxia. The disorder is due to a poor intake, or absorption of, thiamine and has a high mortality (up to 20% in the acute stage). Korsakoff's psychosis often emerges as a chronic disorder after an episode of Wernicke's encephalopathy. This usually presents as impairment of short-term memory with inability to learn new information and compensatory confabulation. Korsakoff's psychosis probably represents irreversible brain damage secondary to the combined toxicity of alcohol and metabolic derangement due to thiamine deficiency.

Memory Problems Associated with Alcohol

'Blackouts' associated with use of alcohol suggests transient memory loss which may be induced by intoxication but there is no loss of consciousness. There is a significant association between the BAC and the level of amnesia reported. As the BAC increases the likelihood of complete memory loss (blackout) or fragmentary memory loss (grayout) increased [205].

Detainees who have severe AUD may have a form of dementia with mild to moderate impairment of short- and long -term memory.

Key Points

- The management of detainees with substance use disorders can be challenging in the custody environment. HCPs should be aware of drug trends in their area of practice.
- Early assessment and prompt treatment of alcohol dependent detainees is essential to prevent the complications of withdrawal.
- If drug facilitated crime, including and drug facilitated sexual assault, is suspected the appropriate forensic samples should be taken.
- Detainees are entitled to have their prescribed medication continued in custody as long as it is clinically safe to do so. This includes opiate substitution treatment such as methadone or buprenorphine.

Self-Assessment Exercises

1. List the symptoms and signs of stimulant intoxication?
2. How would you treat gamma-hydoxybutyrate (GHB) withdrawal in custody?
3. What is the half-life of methadone? How does this inform the need for treatment?
4. What is Korsakoff's psychosis and how should it be treated?

Acknowledgments Acknowledgment to Dr. Guy Norfolk not involved in this revised edition.

References

1. Faculty of Forensic & Legal Medicine & The Royal College of Psychiatrists (2019) Substance misuse in detainees. Guidelines for clinical management. Fifth edition. Report of a Medical Working Group. See Appendix A—Competences for clinicians working with detainees with substance use disorders in police custody, in press
2. https://www.ndtms.net/
3. Home Office (2018) Drug misuse: findings from the 2017/18 Crime Survey for England and Wales Statistical Bulletin 14/18. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729249/drug-misuse-2018-hosb1418.pdf. Accessed 31 May 2019
4. Substance Abuse and Mental Health Services Administration (2017) Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD. https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf. Accessed 30 May 2019
5. Peacock A, Gibbs D, Sutherland R et al (2018) Australian Drug Trends 2018. Key findings from the National Illicit Drug Reporting System (IDRS) Interviews. National Drug and Alcohol Research Centre, UNSW Australia, Sydney. https://ndarc.med.unsw.edu.au/sites/default/files/National%20IDRS%20Interview%20Report%202018%20FINAL_0.pdf. Accessed 30 May 2019
6. Randall C, Crane J (2014) Tramadol deaths in Northern Ireland: a review of cases from 1996 to 2012. J Forensic Leg Med 23:32–36
7. Crawford C, Clare T, Sharpe C, Wright C (2018) United Kingdom drug situation: focal point annual report 2017. https://www.gov.uk/government/publications/united-kingdom-drug-situation-focal-point-annual-report. Accessed 30 May 2019
8. DEA Intelligence Report (2018) 2016 National Drug Price and Purity Data. https://ndews.umd.edu/sites/ndews.umd.edu/files/dea-2016-national-drug-price-purity-data.pdf. Accessed 30 May 2019
9. Crime Statistics Australia Purity & Forensic Analysis. http://crimestats.aic.gov.au/IDDR/4_purity-forensic/. Accessed 30 May 2019
10. UNODC. World Drug Report 2019. https://wdr.unodc.org/wdr2019/. Accessed 27 June 2019
11. EMCDDA. European Drug Report Trends and Development 2019 http://www.emcdda.europa.eu/system/files/publications/11364/20191724_TDAT19001ENN_PDF.pdf. Accessed 27 June 2019
12. Zuccato E, Chiabrando C, Castiglioni S, Bagnati R, Fanelli R (2008) Estimating community drug abuse by wastewater analysis. Environ Health Perspect 116(8):1027–1032

WIT.0043.0086.0461

13. EMCDDA. Perspectives on drugs. Wastewater analysis and drugs: a European multi-city study. 2019 http://www.emcdda.europa.eu/system/files/publications/2757/POD_Wastewater%20analysis_update2019.pdf. Accessed 30 May 2019
14. Measham FC (2019) Drug safety testing, disposals and dealing in an English field: exploring the operational and behavioural outcomes of the UK's first onsite 'drug checking' service. Int J Drug Policy 67:102–107
15. National Statistics Publication (2019) NHS Scotland. Drug-Related Hospital Statistics Scotland 2017/2018. https://www.isdscotland.org/Health-Topics/Drugs-and-Alcohol-Misuse/Publications/2019-05-28/2019-05-28-DRHS-Report.pdf. Accessed 30 May 2019
16. Burden of Disease Study 2016 (2018) The global burden of disease attributable to alcohol and drug use in 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet Psychiatry 5(12):987–1012. https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(18)30337-7/fulltext. Accessed 27 June 2019
17. HM Government. Serious Violence Strategy. April 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/698009/serious-violence-strategy.pdf. Accessed 01 June 2019
18. Home Office & Public Health England. Increase in crack cocaine use inquiry: summary of findings March 2019. https://www.gov.uk/government/publications/crack-cocaine-increase-inquiry-findings/increase-in-crack-cocaine-use-inquiry-summary-of-findings. Accessed 01 June 2019
19. UNODC World Drug Report 2018. https://www.unodc.org/wdr2018/. Accessed 01 June 2019
20. Florentin TR, Logan BK (2019) Toxicological findings in 1000 cases of suspected drug facilitated sexual assault in the United States. J Forensic Legal Med 61:56–64
21. Association of Chief Police Officers; Operation Matisse: investigating drug facilitated sexual assault. November, 2006
22. ACMD Drug Facilitated Sexual Assault (DFSA) (2007). https://www.gov.uk/government/publications/acmd-drug-facilitated-sexual-assault-dfsa-2007
23. UNODC (2011) Guidelines for the forensic analysis of drug facilitating sexual assault and other criminal acts. http://www.unodc.org/documents/scientific/forensic_analys_of_drugs_facilitating_sexual_assault_and_other_criminal_acts.pdf. Accessed 01 June 2019
24. FFLM. Recommendations for the collection of forensic specimens July 2019. www.fflm.ac.uk, https://fflm.ac.uk/wp-content/uploads/2015/08/06-Aug-Rec-Collection-Samples.pdf
25. Faculty of Clinical Forensic Medicine Committee. Evidence Based Forensic Sampling Standards. February 2018 Royal College of Pathologists of Australasia. https://www.rcpa.edu.au/
26. Xiang P, Shen M, Drummer OH (2015) Review: drug concentrations in hair and their relevance in drug facilitated crimes. J Forensic Legal Med 36:126–135
27. Cuypers E, Flanagan RJ (2017) The interpretation of hair analysis for drugs and drug metabolites. Clin Toxicol. https://doi.org/10.1080/15563650.2017.1379603
28. Anderson LJ, Flynn A, Pilgrim JL (2017) A global epidemiological perspective on the toxicology of drug facilitated sexual assault: a systematic review. J Forensic Legal Med 47:46–54
29. Hagemann CT, Helland A, Spigset O, Espnes KA, Ormstad K, Schei B (2013) Ethanol and drug findings in women consulting a Sexual Assault Center—associations with clinical characteristics and suspicions of drug-facilitated sexual assault. J Forensic Legal Med 20(6):777–784
30. Jones AW, Kugelberg FC, Holmgren A, Ahlner J (2008) Occurrence of ethanol and other drugs in blood and urine specimens from female victims of alleged sexual assault. Forensic Sci Int 181(1–3):40–46
31. Jones AW, Holmgren P (2003) Urine/blood ratios of ethanol in deaths attributed to acute alcohol poisoning and chronic alcoholism. Forensic Sci Int 135(3):206–212
32. Jones AW (2006) Urine as a biological specimen for forensic analysis of alcohol and variability in the urine-to-blood relationship. Toxicol Rev 25(1):15–35

33. Faculty of Forensic & Legal Medicine & The Royal College of Psychiatrists (2019) Substance misuse in detainees. Guidelines for clinical management. Fifth edition. Report of a Medical Working Group. In press
34. Stark MM (2016) Substance misuse: methods of administration. In: Payne-James J, Byard RW (eds) Encyclopedia of forensic and legal medicine, vol 4, 2nd edn. Elsevier, Oxford, pp 406–410
35. Rekrut-Lapa T, Lapa A (2014) Health needs of detainees in police custody in England and Wales. Literature review. J Forensic Legal Med 27:69–75
36. Sondhi A, Williams E (2018) Health needs and comorbidity among detainees in contact with healthcare professionals within police custody across the London Metropolitan Police Service area. J Forensic Legal Med 57:96–100
37. McKinnon IG, Thomas SDM, Noga HL, Senior J (2016) Police custody healthcare: a review of health morbidity, models of care and innovations within police custody in the UK, with international comparisons. Risk Managem Healthcare Policy 9:213–226
38. ACMD (2019) ACMD Report—Drug-related harms in homeless populations and how they can be reduced. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810284/Drug-related_harms_in_homeless_populations.pdf. Accessed 30 June 2019
39. Clinical Guidelines on Drug Misuse and Dependence Update. Independent Expert Working Group (2017) Drug misuse and dependence: UK guidelines on clinical management. Department of Health, London. https://www.gov.uk/government/publications/drug-misuse-and-dependence-uk-guidelines-on-clinical-management. Accessed 30 June 2019
40. Stark MM, Norfolk GA, Rogers DJ, Payne-James JJ (2002) The validity of self-reported substance misuse amongst detained persons in police custody. J Clin Forensic Med 9:25–26
41. Stark MM (2016) Substance misuse: medical effects. In: Payne-James J, Byard RW (eds) Encyclopedia of forensic and legal medicine, vol 4, 2nd edn. Elsevier, Oxford, pp 400–405
42. http://www.sdf.org.uk/what-we-do/reducing-harm/infection-outbreak-control/anthrax/
43. Karch SB, Drummer OH (2016) Medical consequences of opiate abuse. In: Karch's pathology of drug abuse. CRC Press, Boca Raton, pp 561–506
44. Norfolk GA, Gray SF (2003) Intravenous drug users and broken needles—a hidden risk? Addiction 98:1163–1166
45. The National Institute for Health and Clinical Excellence (NICE) (2007) Drug misuse in over 16s: psychosocial interventions: quick reference guide. CG51 Quick reference guide. https://www.nice.org.uk/guidance/cg51. Accessed 28 June 2019
46. Prochaska JO, Clemente CC (1984) The transtheoretical approach: crossing traditional boundaries of therapy. Dow Jones-Irwin, Homewood
47. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/118069/DIP-Operational-Handbook.pdf. Accessed 14 Mar 2019
48. Royal College of Psychiatrists (2018) Our Invisible Addicts. https://www.rcpsych.ac.uk/usefulresources/publications/collegereports/cr/cr211.aspx. Accessed 16 Mar 2019
49. ACMD Ageing cohort of drug users 2019. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/809092/Ageing_cohort_of_drug_users.pdf. Accessed 27 June 2019
50. Tennant F, Shannon J (1995) Cocaine abuse in methadone maintenance patients is associated with low serum methadone concentrations. J Addict Dis 14:67–74
51. Gossop M, Marsden J, Stewart D, Kidd T (2003) The National Treatment Outcome Research Study (NTORS): 4–5 year follow-up results. Addiction 98:291–303
52. Jones A, Weston S, Moody A, Millar T, Dollin L, Anderson T, Donmall M (2007) The drug treatment outcomes research study (DTORS). Home Office. www.homeoffice.gov.uk/rds. Accessed 28 June 2019
53. Abdulrahim D, Bowden-Jones O, on behalf of the NEPTUNE Expert Group (2015) Guidance on the Management of Acute and Chronic Harms of Club Drugs and Novel Psychoactive Substances. Novel Psychoactive Treatment UK Network (NEPTUNE),

WIT.0043.0086.0463

London. http://neptune-clinical-guidance.co.uk/wp-content/uploads/2015/03/NEPTUNE-Guidance-March-2015.pdf. Accessed 29 June 2019
54. Stark MM, Payne-James JJ, Scott-Ham M (2014) Symptoms and signs of substance misuse, 3rd edn. CRC Press, Boca Raton
55. Phillips GT, Gossop M, Bradley B (1986) The influence of psychological factors on opiate withdrawal syndrome. Br J Psychiatry 149:235–238
56. Ling W, Wesson DR (1990) Drugs of abuse: opiates, in addiction medicine (special issue). West J Med 152:565–572
57. De Wet CJ, Reed LJ, Glasper A, Moran P, Bearn J, Gossop M (2004) Benzodiazepine co-dependence exacerbates the opiate withdrawal syndrome. SSA Symposium Abstracts. Addict Biol 9(1):100
58. Wesson DR, Ling W (2003) The Clinical Opiate Withdrawal Scale (COWS). J Psychoactive Drugs 35(2):253–259
59. Tompkins DA, Bigelow GE, Harrison JA, Johnson RE, Fudala PJ, Strain EC (2009) Concurrent validation of the Clinical Opiate Withdrawal Scale (COWS) and single-item indices against the Clinical Institute Narcotic Assessment (CINA) opioid withdrawal instrument. Drug Alcohol Depend 105:154–159
60. Hermann D, Klages E, Welzel H, Mann K, Croissant B (2005) Low efficacy of non-opioid drugs in opioid withdrawal symptoms. Addict Biol 10:165–169
61. Robertson JR, Raab G, Bruce M, McKenzie JS, Storkey HR (2006) Addressing the efficacy of dihydrocodeine versus methadone as an alternative maintenance treatment for opiate dependence: a randomized controlled trial. Addiction 101:1752–1759
62. Stark MM, Gregory M (2005) The clinical management of substance misusers in police custody—a survey of current practice. J Clin Forensic Med 12:199–204
63. Stark MM (2009) Substance misuse. In: Stark MM, Rogers DJ, Norfolk GA (eds) Good practice guidelines for forensic medical examiners. Royal Military Police. GPG Editors, Oxford
64. Tompkins CNE, Wright NMJ, Waterman MG, Sheard L (2009) Exploring prison buprenorphine misuse in the United Kingdom: a qualitative study of former prisoners. Int J Prison Health 5(2):71–87
65. Yealy DM, Paris PM, Kaplan RM, Heller MB, Marini SE (1990) The safety of prehospital naloxone administration by paramedics. Ann Emerg Med 19:902–905
66. https://www.sps.nhs.uk/articles/what-naloxone-doses-should-be-used-in-adults-to-reverse-urgently-the-effects-of-opioids-or-opiates/. Accessed 27 June 2019
67. Ashton H, Hassan Z (2006) Intranasal naloxone in suspected opioid overdose. Emerg Med J 23:221–223
68. Doe-Simkins M, Alexander Y, Walley AY, Epstein A, Moyer P (2009) Saved by the nose: bystander-administered intranasal naloxone hydrochloride for opioid overdose. Am J Public Health 99:788–791
69. See for more information: https://www.nyxoid.com/uk. Accessed 16 Mar 2019
70. Hunter R (2005) Ventricular tachycardia following naloxone administration in an illicit drug misuser. J Clin Forensic Med 12:218–219
71. Merigian KS (1993) Cocaine-induced ventricular arrhythmias and rapid atrial fibrillation temporarily related to naloxone administration. Am J Emerg Med 11:96–97
72. Baldwin DS, Aitchison K, Bateson A et al (2013) Benzodiazepines: risks and benefits. A reconsideration. J Psychopharmacol 27(11):967–971. https://www.bap.org.uk/pdfs/BAP_Guidelines-Benzodiazepines.pdf. Accessed 27 June 2019
73. PHE. RIDR Dashboard Summary 2019. https://report-illicit-drug-reaction.phe.gov.uk/_assets/files/190508_RIDR_Dashboard_May_2019_FINAL.pdf. Accessed 27 June 2019
74. Benowitz NL (2007) Medical complications of drug abuse. In: Karch SB (ed) Drug abuse handbook. CRC Press, Boca Raton, pp 616–618
75. Roald OK, Dahl V (1989) Flunitrazepam intoxication in a child successfully treated with the benzodiazepine antagonist flumazenil. Crit Care Med 17:1355–1356

76. Hojer J, Baehrendtz S, Matell G, Gustafsson LL (1990) Diagnostic utility of flumazenil in coma with suspected poisoning: a double blind randomised controlled study. BMJ 301:1308–1311
77. Katz Y, Boulos M, Singer P, Rosenberg B (1992) Cardiac arrest associated with Flumazenil. BMJ 304:1415
78. ACMD (2016) Pregabalin and Gabapentin Advice. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/491854/ACMD_Advice_-_Pregabalin_and_gabapentin.pdf. Accessed 30 June 2019
79. Al-Alousi LM (1989) Pathology of volatile substance abuse: a case report and a literature review. Med Sci Law 29:189–208
80. Ron MA (1986) Volatile substance abuse: a review of possible long-term neurological, intellectual and psychiatric sequelae. Br J Psychiatry 148:235–246
81. Shepherd RT (1989) Mechanism of sudden death associated with volatile substance abuse. Hum Toxicol 8:287–292
82. Taylor GJ, Harris WS (1970) Cardiac toxicity of aerosol propellants. JAMA 214:81–85
83. Merry J, Zachariadis N (1962) Addiction to glue sniffing. BMJ 2:1448
84. Leikin JB, Krantz AJ, Zell-Kanter M, Barkin RL, Hryhorczuk DO (1989) Clinical features and management of intoxication due to hallucinogenic drugs. Med Toxicol Adverse Drug Exp 4:324–350
85. European Monitoring Centre for Drugs and Drug Addiction (2006) Thematic papers—hallucinogenic mushrooms: an emerging trend case study. http://www.emcdda.europa.eu/publications/thematic-papers/mushrooms. Accessed 29 June 2019
86. EMCDDA. Hallucinogenic mushrooms drug profile http://www.emcdda.europa.eu/publications/drug-profiles/mushrooms. Accessed 29 June 2019
87. Maxwell DL, Polkey MI, Henry JA (1993) Hyponatraemia and catatonic stupor after taking "ecstasy". BMJ 307:1399
88. Kessel B (1994) Hyponatraemia after ingestion of "ecstasy". BMJ 308:414
89. Henry JA, Fallon JK, Kicman AT, Hutt AJ, Cowan DA, Forsling M (1998) Low-dose MDMA ("ecstasy") induces vasopressin secretion. Lancet 351:1784
90. Redfearn PJ, Agrawal N, Mair LH (1998) An association between the regular use of 3,4, methylenedioxy-methamphetamine (ecstasy) and excessive wear of the teeth. Addiction 93:745–748
91. Shearman JD, Chapman RWG, Satsangi J, Ryley NG (1992) Misuse of ecstasy. BMJ 305:309
92. Creighton FJ, Black DL, Hyde CE (1991) "Ecstasy" psychosis and flashbacks. Br J Psychiatry 159:713–715
93. Levine AJ, Drew S, Rees GM (1993) "Ecstasy" induced pneumomediastinum. J R Soc Med 86:232–233
94. Bryden AA, Rothwell PJN, O'Reilly PH (1995) Urinary retention with misuse of "ecstasy". BMJ 310:504
95. Chadwick IS, Curry PD, Linsley A, Freemont AJ, Doran B (1991) Ecstasy, 3–4 methylenedioxymethamphetamine (MDMA), a fatality associated with coagulopathy and hyperthermia. J R Soc Med 84:371
96. Brown C, Osterloh J (1987) Multiple severe complications from recreational ingestion of MDMA ("ecstasy"). JAMA 258:780–781
97. Dowling GP, McDonough ET, Bost RO (1987) "Eve" and "ecstasy". A report of five deaths associated with the use of MDEA and MDMA. JAMA 257:1615–1617
98. Campkin NTA, Davies UM (1992) Another death from Ecstasy. J R Soc Med 85:61
99. McGuire P, Fahy T (1991) Chronic paranoid psychosis after misuse of MDMA (ecstasy). BMJ 302:697
100. Sternbach H (1991) The serotonin syndrome. Am J Psychiatry 148:705–713
101. Mueller PD, Korey WS (1998) Death by "ecstasy": the serotonin syndrome? Ann Emerg Med 32:377–380
102. Karch SB, Drummer OH (2016) Chapter 1: Cocaine. In: Karch's pathology of drug abuse. CRC Press, Boca Raton

WIT.0043.0086.0465

103. ACMD (2016) Diversion and illicit supply of medicines. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/580296/Meds_report-_final_report_15_December_LU__2_.pdf. Accessed 23 June 2019
104. O'Donoghue O (2016) What you need to know about chemsex. Commentary 1:16–17
105. Houses of Parliament 2013 Post Note Minimising the harms of Khat. https://researchbriefings.parliament.uk/ResearchBriefing/Summary/POST-PN-449. Accessed 23 June 2019
106. ACMD (2005) Khat: assessment of risk to the individual and communities in the UK. https://www.gov.uk/government/publications/khat-report-2005%2D%2D6. Accessed 23 June 2019
107. Potter DJ, Hammond K, Tuffnell S, Walker C, Di Forti M (2018) Potency of Δ9–tetrahydrocannabinol and other cannabinoids in cannabis in England in 2016: Implications for public health and pharmacology. Drug Test Anal 10:628–635. https://onlinelibrary.wiley.com/doi/full/10.1002/dta.2368. Accessed 23 June 2019
108. Abdulrahim D, Bowden-Jones O, on behalf of NEPTUNE group (2016) Harms of Synthetic Cannabinoid Receptor Agonists (SCRAs) and Their Management. Novel Psychoactive Treatment UK Network (NEPTUNE), London. http://neptune-clinical-guidance.co.uk/wp-content/uploads/2016/07/Synthetic-Cannabinoid-Receptor-Agonists.pdf. Accessed 30 June 2019
109. Lifeline Project (2016) Image and performance enhancing drugs IPEDS literature review. http://www.lifeline.org.uk/articles/ipeds/. Accessed 30 June 2019
110. Bhasin S, Storer TW, Berman N, Callegari C, Clevenger B, Phillips J et al (1996) The effects of superphysiologic doses of testosterone on muscle size and strength in normal men. N Engl J Med 335:1–7
111. Kennedy M (1990) Athletes, drugs and adverse reactions. Adverse Drug React Bull 143:536–539
112. ACMD (2010) Consideration of anabolic steroids. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/119132/anabolic-steroids.pdf. Accessed 30 June 2019
113. Stanley A, Ward M (1994) Anabolic steroids—the drugs that give and take away manhood. A case with an unusual physical sign. Med Sci Law 34:82–83
114. Lloyd FH, Powell P, Murdoch AP (1996) Anabolic steroid abuse by body builders and male subfertility. BMJ 313:100–101
115. Creagh TM, Rubin A, Evans DJ (1988) Hepatic tumours induced by anabolic steroids in an athlete. J Clin Pathol 41:441–443
116. Su T, Pagliaro M, Schmidt PJ, Pickar D, Wolkowitz O, Rubinow DR (1993) Neuropsychiatric effects of anabolic steroids in male normal volunteers. JAMA 269:2760–2764
117. Pope HG, Katz DL (1994) Psychiatric and medical effects of anabolic-androgenic steroid use. Arch Gen Psychiatry 51:375–382
118. Corrigan B (1996) Anabolic steroids and the mind. Med J Aust 165:222–226
119. Baker JS, Graham M, Davies B (2006) Gym users and abuse of prescription drugs. J R Soc Med 99:331–332
120. Perry HM, Wright D, Littlepage BNC (1992) Dying to be big: a review of anabolic steroid use. Br J Sports Med 26:259–261
121. Littlepage BNC, Perry HM (1993) Misusing anabolic drugs: possibilities for future policies. Addiction 88:1469–1471
122. McBride AJ, Williamson K, Petersen T (1996) Three cases of nalbuphine hydrochloride dependence associated with anabolic steroid use. Br J Sports Med 30:69–70
123. Elkin SL, Brady S, Williams IP (1997) Bodybuilders find it easy to obtain insulin to help them in training. BMJ 314:1280
124. FitzSimmons CR, Kidner N (1998) Caffeine toxicity in a bodybuilder. J Accid Emerg Med 15:196–1970
125. Perry HM, Littlepage BNC (1992) Misusing anabolic drugs. BMJ 305:1241–1242
126. Roth RH, Giarman NJ (1970) Natural occurrence of gamma-hydroxybutyrate in mammalian brain. Biochem Pharmacol 19:1087–1093
127. Galloway GP, Frederick SL, Staggers FE Jr, Gonzales M, Stalcup SA, Smith DE (1997) Gamma-hydroxybutyrate: an emerging drug of abuse that causes physical dependence. Addiction 92:89–96

128. Ferrara SD, Zotti S, Tedeshi L, Frison G, Castagna F, Gallimberti L et al (1992) Pharmacokinetics of gamma-hydroxybutyric acid in alcohol dependent patients after single and repeated oral doses. Br J Clin Pharmacol 34:231–235
129. Luby S, Jones J, Zalewski A (1992) GHB use in South Carolina. Am J Public Health 82:128
130. Dyer JE (1997) ER admission cases discussed, in getting the scoop on GHB: the new recreational drug. Presented at the 49th Annual Meeting of the American Academy of Forensic Sciences, New York
131. Dyer JE, Kreutzer R, Quatrrone A, Kizer KW, Geller RJ, Smith JD et al (1991) Multistate outbreak of poisonings associated with the illicit use of gammahydroxybutyrate. JAMA 265:447–448
132. Wood DM, Brailsford AD, Dargan PI (2011) Acute toxicity and withdrawal syndromes related to gammahydroxybutyrate (GHB) and its analogues gamma-butyrolactone (GBL) and 1,4-butanediol (1,4-BD). Drug Test Anal 3(7–8):417–425. https://doi.org/10.1002/dta.292
133. Openshaw J (2016) RV Stephen Port: sentencing remarks of Mr Justice Openshaw. Courts and Tribunals Judiciary, London, UK
134. Pettigrew M (2019) Somnophilia and sexual abuse through the administration of GHB and GBL. J Forensic Sci 64:1
135. ACMD (2013) Ketamine—a review of use and harm. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/264677/ACMD_ketamine_report_dec13.pdf. Accessed 30 June 2019
136. Moore KA, Kilbane EM, Jones R, Kunsman GW, Levine B, Smith M (1997) Tissue distribution of ketamine in a mixed drug fatality. J Forensic Sci 2:1183–1185
137. Gill JR, Stajic M (2000) Ketamine in non-hospital and hospital deaths in New York City. J Forensic Sci 45(3):655–658
138. White PF, Way WL, Trevor AJ (1982) Ketamine: its pharmacology and therapeutic uses. Anaethesiology 56:119–136
139. Morgan CJA, Muetzelfeldt L, Curran HV (2009) Ketamine use, cognition and psychological wellbeing: a comparison of frequent, infrequent and ex-users with polydrug and non-using controls. Addiction 104:77–87
140. Curran HV, Morgan C (2000) Cognitive, dissociative and psychogenic effects of ketamine in recreational users on the night of drug use and 3 days later. Addiction 95(4):576–590
141. Wood D, Cottrell A, Baker SC, Southgate J, Harris M, Fulford S, Woodhouse C, Gillatt D (2011) Recreational ketamine: from pleasure to pain. BJU Int 107(12):1881–1884
142. Sigell LT, Kapp FT, Fusaro GA, Nelson ED, Falck RS (1978) Popping and snorting volatile nitrites: a current fad for getting high. Am J Psychiatry 135:1216–1218
143. Schwartz RH, Peary P (1986) Abuse of isobutyl nitrite inhalation (rush) by adolescents. Clin Pediatr 25:308–310
144. ACMD (2016) ACMD Review of alkyl nitrites ('poppers'). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/508179/Poppersadvice.pdf. Accessed 30 June 2019
145. Stambach T, Haire K, Soni N, Booth J (1997) Saturday night blue—a case of near fatal poisoning from the abuse of amyl nitrite. J Accid Emerg Med 14:339–340
146. Scott-Ham M, Stark MM (2016) Substance misuse: legal highs. In: Payne-James J, Byard RW (eds) Encyclopedia of forensic and legal medicine, vol 4, 2nd edn. Elsevier, Oxford, pp 394–399
147. Office for National Statistics ONS (2018) Data on alcohol related incidents, years ending March 2011 to March 2017, Crime Survey for England and Wales. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/adhocs/009372dataonalcoholrelatedincidentsyearsendingmarch2011tomarch2017crimesurveyforenglandandwales. Accessed 04 May 2019
148. ONS (2015) Violent crime and sexual offences—alcohol-related violence. Findings from the 2013/14 Crime Survey for England and Wales and police recorded crime over the same period on violent crime and sex offences. https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/compendium/focusonviolentcrimeandsexualoffences/2015-02-12/chapter5violentcrimeandsexualoffencesalcoholrelatedviolence. Accessed 04 May 2019

WIT.0043.0086.0467

149. Scottish Government (2018) Scottish Crime and Justice Survey 2016/17: main findings. Scottish Government, Edinburgh
150. Carnie J, Broderick R (2015) Scottish prison service prisoner survey 2015. Scottish Prison Service, Edinburgh
151. Home Office. Modern crime prevention strategy March 2016. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509831/6.1770_Modern_Crime_Prevention_Strategy_final_WEB_version.pdf. Accessed 04 May 2019
152. Payne-James JJ, Keys DW, Wall I, Jerreat PG, Dean PJ (1997) Alcohol misuse in clinical forensic medicine. J Clin Forensic Med 4:17–19
153. Ceelen M, Dorn T, Buster M et al (2012) Healthcare issues and healthcare among detainees in police custody. J Forensic Legal Med 19:324–331
154. Graham L, Fischbacher CM, Stockton D, Fraser A, Fleming M, Greig K (2015) Understanding extreme mortality among prisoners: a national cohort study in Scotland using data linkage. Eur J Public Health 25(5):879–885
155. Best D, Kefas A (2004) The role of alcohol in police-related deaths. Analysis of deaths in custody (Category 3) between 2000 and 2001. Police Complaints Authority, London
156. Norfolk GA (1998) Deaths in police custody during 1994: a retrospective analysis. J Clin Forensic Med 5:49–54
157. European Regulation 1169/2011 Article 28 Annex X11. https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1438197510750&uri=CELEX:32011R1169. Accessed 04 May 2019
158. International Alliance for Responsible Drinking (IARD) (2018) Beverage alcohol labeling requirements. http://www.iard.org/resources/beverage-alcohol-labeling-requirements/. Accessed 04 May 2019
159. The Australian Government. Department of Health. http://www.alcohol.gov.au/internet/alcohol/publishing.nsf/content/standard. Accessed 05 May 2019
160. Mongan D, Long J (2015) Standard drink measures throughout Europe; peoples' understanding of standard drinks and their use in drinking guidelines, alcohol surveys and labelling. Health Research Board. http://www.rarha.eu/Resources/Deliverables/Lists/Deliverables/Attachments/14/WP5%20Background%20paper%20Standard%20drink%20measures%20HRB.pdf. Accessed 04 May 2019
161. Ferner RE (1996) Forensic pharmacology. Medicines, mayhem, and malpractice. Oxford University Press, Oxford
162. Baselt RC (2008) Disposition of alcohol in man. In: Garriott JC (ed) Medicolegal aspects of alcohol, 5th edn. Lawyers & Judges, Tucson
163. Holford NHG (1987) Clinical pharmacokinetics of ethanol. Clin Pharmacokinet 13:273–292
164. Wilkinson PK, Sedman AJ, Sakmar E, Earhart RH, Kay DR, Wagner JG (1977) Pharmacokinetics of ethanol after oral administration in the fasting state. J Pharmacokinet Biopharm 5:207–224
165. Jones AW (2019) Alcohol, its absorption, distribution, metabolism, and excretion in the body and pharmacokinetic calculation. WIREs Forensic Sci 1:e1340
166. Jones AW, Jonsson KA (1994) Between-subject and within-subject variations in the pharmacokinetics of ethanol. Br J Clin Pharmacol 37:427–431
167. Roberts C, Robinson SP (2007) Alcohol concentration and carbonation of drinks. The effect on blood alcohol levels. J Forensic Leg Med 14:398–405
168. Schultz J, Weiner H, Westcott J (1980) Retardation of ethanol absorption by food in the stomach. J Stud Alcohol 41:861–870
169. Sedman AJ, Wilkinson PK, Sakmar E, Weidler DJ, Wagner JG (1976) Food effects on absorption and elimination of alcohol. J Stud Alcohol 37:1197–1214
170. Jones AW, Jonsson KA (1994) Food-induced lowering of blood-ethanol profiles and increased rate of elimination immediately after a meal. J Forensic Sci 39:1084–1093
171. Walls H, Brownlie AR (1985) Drink, drugs & driving, 2nd edn. Sweet & Maxwell, London
172. Jones AW, Sternebring B (1992) Kinetics of ethanol and methanol in alcoholics during detoxification. Alcohol Alcohol 27:641–647

173. Urso T, Gavaler JS, Van Thiel DH (1981) Blood ethanol levels in sober alcohol users seen in an emergency room. Life Sci 28:1053–1056
174. Sullivan JB, Hauptman M, Bronstein AC (1987) Lack of observable intoxication in humans with high plasma alcohol concentrations. J Forensic Sci 32:1660–1665
175. Garriott JC (2008) Pharmacology and toxicology of ethyl alcohol. In: Medicolegal aspects of alcohol, 5th edn. Lawyers & Judges, Tucson
176. Money K, Myles W (1974) Heavy water nystagmus and effects of alcohol. Nature 247:404–405
177. Behrens MM (1978) Nystagmus. J Opthalmol Clin 18:57–82
178. Aschan G (1958) Different types of alcohol nystagmus. Acta Otolaryngol Suppl 140:69–78
179. Aschan G, Bergstedt M, Goldberg L, Laurell L (1956) Positional nystagmus in man during and after alcohol intoxication. Q J Stud Alcohol 17:381–405
180. Goding GS, Dobie RA (1986) Gaze nystagmus and blood alcohol. Laryngoscope 96:713–771
181. Belton H (1987) Lateral nystagmus: a specific diagnostic sign of ethyl alcohol intoxication. N Z Med J 100:534–535
182. Eakins WA (1977) Clinical signs and the level of blood alcohol. Police Surg 11:8–15
183. Willoughby EW (1987) Nystagmus and alcohol intoxication. N Z Med J 100:640
184. Booker JL (2004) The Horizontal Gaze Nystagmus test: fraudulent science in the American courts. Sci Justice 44(3):133–139
185. Moczula B (2008) Alcohol and the law: the legal framework of scientific evidence and expert testimony. In: Garriott JC (ed) Medicolegal aspects of alcohol, 5th edn. Lawyers & Judges, Tucson
186. British Medical Association (1954) The recognition of intoxication. Report of a special committee of the British Medical Association. BMA, London
187. Tennant F (1988) The rapid eye test to detect drug abuse. Postgrad Med 84:108–114
188. Johnson K, Pisoni DB, Bernacki RH (1990) Do voice recordings reveal whether a person is intoxicated? A case study. Phonetica 47:215–237
189. Martin CS (2007) Measuring acute alcohol impairment. In: Karch SB (ed) Drug abuse handbook. CRC Press, Boca Raton, pp 318–319
190. Potter JF, Watson RDS, Skan W, Beevers DG (1986) The pressor and metabolic effects of alcohol in normotensive subjects. Hypertension 8:625–631
191. Kelbaek H, Gjorup T, Brynjolf I, Christensen NJ, Godtfredsen J (1985) Acute effects of alcohol on left ventricular function in healthy subjects at rest and during upright exercise. Am J Cardiol 55:164–167
192. Kaye S, Haag HB (1957) Terminal blood alcohol concentrations in 94 fatal cases of alcoholism. JAMA 165:451–452
193. Johnson RA, Noll EC, Rodney WM (1982) Survival after a serum ethanol level of 1.5 per cent. Lancet 2:1394
194. Rix KJB (1989) 'Alcohol intoxication' or 'drunkenness': is there a difference? Med Sci Law 29:100–106
195. Stark MM, Holmes J (2014) The alcohol-intoxicated person in custody: diagnosis, differential diagnosis and management. Acad Forensic Pathol 4(2):198–205
196. BMA (2017) Tackling alcohol-related harm. http://bmaopac.hosted.exlibrisgroup.com/exlibris/aleph/a23_1/apache_media/5XCI46SMRP4XJKAQ7TJUKL3YL1R16I.pdf. Accessed 28 June 2019
197. Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. Clinical guideline [CG115] Published date: February 2011. https://www.nice.org.uk/guidance/cg115/chapter/1-Guidance#identification-and-assessment. Accessed 28 June 2019
198. Deehan A, Stark MM, Marshall EJ, Hanrahan B, Strang J (1998) Drunken detainees in police custody: is brief intervention by the forensic medical examiner feasible? Crim Behav Ment Health 8:214–221
199. https://www.gov.uk/government/publications/alcohol-use-screening-tests

WIT.0043.0086.0469

200. Babor TF, Ramon de la Fuente J, Saunders J, Grant M (1992) AUDIT, The alcohol use disorders identification test: guidelines for use in primary health care. World Health Organization, Geneva
201. Raistrick D, Heather N, Godfrey C (2006) Review of the effectiveness of treatment for alcohol problems. National Treatment Agency for Substance Misuse, London
202. https://www.smartcjs.org.uk/wp-content/uploads/2015/07/SADQ.pdf. Accessed 16 Mar 2019
203. http://www.cbhallc.com/Documents/4a-DETOX%20Guidelines.pdf. Accessed 30 June 2019
204. NICE. Alcohol-use disorders: diagnosis and management of physical complications. Clinical guideline [CG100] 2017. https://www.nice.org.uk/guidance/cg100
205. Perry PJ, Argo TR, Barnett MJ et al (2006) The association of alcohol-induced blackouts and grayouts to blood alcohol concentrations. J Forensic Sci 51(4):898–899
206. Benowitz NL (2007) Medical complications of drug abuse, Solvents. In: Karch SB (ed) Drug abuse handbook, 2nd edn. CRC Press, Boca Raton

WIT.0043.0086.0470

Deaths in Police Custody

13

Richard T. Shepherd

Learning Objectives

Outline the main causes of death in police custody.
Describe acute behavioral disturbance and excited delirium.
Demonstrate the ability to verify life extinct.
Understand the requirement of a death in custody investigation.

Introduction

Healthcare Professionals (HCP) will, in all probability, have to deal with a death in police custody at some point in their career. This chapter aims to provide a broad basis for the understanding of the disease processes, the mechanisms that may lead to death, and also to outline the current thinking behind deaths associated with restraint.

Definition

When considering any death associated with detention by officials of a state, caused by whatever means, each state will define, according to their own legal system, the situations that are categorized as being "in custody" [1]. The worldwide variation in these definitions continues to cause considerable confusion in any discussion of this subject. For the purposes of this chapter "in custody" relates to any individual who is either under arrest or otherwise under police control and, while similar deaths may occur in prison, on psychiatric wards or in other situations where people are detained against their will, it is the deaths specifically associated with police detention that will form the basis for the discussion here.

R. T. Shepherd (✉)
Chester University London, London, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_13

WIT.0043.0086.0471

Having defined the broad parameters of the subject, it is important to distinguish between the different types of custodial deaths since it is deaths that are related to direct police actions (acts of commission) that seem to cause the greatest concern to the family, the public and the press. It is also important to remember that police involvement in the detention of individuals extends beyond direct physical contact and includes a "duty of care" to that individual and any "lack of care "in this situation may be termed "act of omission". Lack of police action, or "care", has also been responsible for deaths in custody. These acts are considerably harder to define and sometimes result from the police being placed in, or assuming, a role of caring (for instance, in states of alcoholic intoxication or acute psychiatric conditions) that are beyond their competence or which they are not equipped or trained to fulfil.

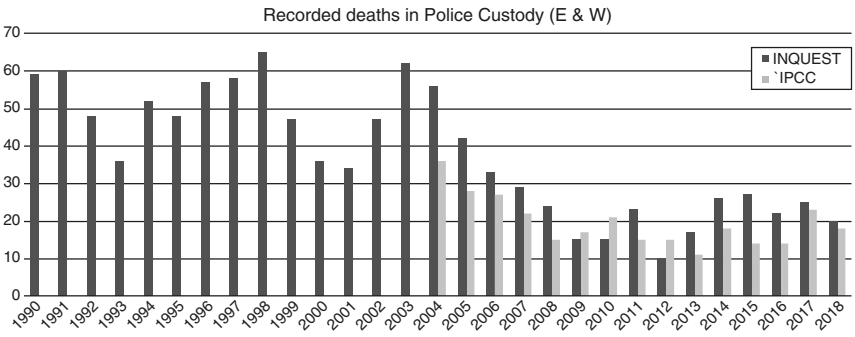
Police involvement with an individual can also include those who are being pursued by the police either on foot or by vehicle, those who have been stopped and are being questioned outside the environment of a police station, and those who have become unwell through natural causes while either in contact with, or in custody, of the police.

The definitions of "death in custody" are therefore wide, and attempts at setting definitions that cover all aspects of such deaths are fraught with difficulty. Any definition will have to cover a multitude of variable factors, in various circumstances and with a wide variety of individuals [2, 3]. The crucial point is that, in a civilized society, the police owe a duty of care to each and every member of the public with whom they have contact and it is essential that every police officer, whether acting or reacting to events, understands and is aware of the welfare of the individual or individuals with whom he or she is dealing.

Statistics

The lack of a standard international definition of "death in custody" means that the simple comparison of the published raw data from different countries is of limited value. The number of deaths in police custody in England and Wales from 2004 to 2018 recorded by Dame Angiolini's report [2], INQUEST [4], and the Independent Office of Police Conduct (IOPC), previously known as the Independent Police Complaints Commission (IPCC) [5], shows considerable variation year on year, and also between the different data sets (Graph 13.1). This data must be treated with considerable care since any changes in the death rates may not be the result of changes in the policy and practice of care for detainees but other, undetermined, factors such as increases or reductions in arrest rates over the period as a result of changes in local policing procedures or central governmental policy.

The National Deaths in Custody Program (NDICP) has monitored deaths occurring in prison, police custody and youth detention in Australia since 1980. The Australian Institute of Criminology (AIC) has coordinated this program since its establishment in 1992 following a recommendation of the Royal Commission into Aboriginal Deaths in Custody (RCIADIC). The most recent figures from 2016 to



Graph 13.1 Deaths in police custody in England & Wales

2017 show that 17 deaths occurred in police custody and custody-related operations. Most deaths in police custody in 2016–2017 resulted from external trauma injuries and gunshot wounds (n = 5 each); four were self-inflicted, four were the result of a justifiable homicide, four were accidental, three resulted from natural causes, and two had an 'other' or unknown manner of death [6].

By comparison, and looking more closely at one published set of statistics, those from the IOPC, investigating deaths in police custody in England and Wales in 2017/2018, fatalities were noted in the following categories [7]:

- 29 road traffic fatalities
- 4 fatal shootings
- 23 deaths in or following police custody
- 57 apparent suicides following police custody
- 170 other deaths following police contact that were subject to an independent investigation

It is concerning that the number of deaths in, or following, police custody, has increased to 23 which is the highest figure recorded in 10 years. From 2004/2005 to 2008/2009, there was a year-on-year reduction in the number of deaths in or following police custody from 36 deaths in 2004/2005 to 15 deaths in 2008/2009. Over the next 2 years, the number of deaths in custody increased to 21 in 2010/2011, before falling back to 15 in 2011/2012 and 2012/2013. There was a further reduction, to 11, in 2013/2014. In 2014/2015, the number rose again to 18 and deaths following apparent suicide rose, although this increase is in part the result of improved identification of cases.

The Home Secretary (UK) in July 2015 announced that an independent review into Deaths in Custody was to be carried out by Dame Elish Angiolini QC [2]. The report of this review, published in 2017, made 110 recommendations on a variety of

Table 13.1 Themes in causes of death in police custody

• Drugs, alcohol, mental health—co-morbidities
• Missed drug swallowing
• Intoxication—actual level and masking other medical issues (and with time withdrawal)
• Failure to perform an adequate risk assessment—risk factor in itself
• Failure around the checks and rousing by custody staff
• Consider restraint
• Written and verbal handover to custody staff by HCPs (communication)

areas including: restraint, custody environment, health and wellbeing, funding for families and family support, communications, investigations, coroners and inquests, accountability, training, learning, statistics and research.

Natural causes have been the most common known cause of deaths in police custody in England and Wales between 2004/2005 and 2014/2015, accounting for 51% of causes of death in this period. Drugs and/or alcohol also featured as in the causes of death in around half of deaths (49%), and an even higher proportion of those who died had an association with drugs or alcohol (82%). A significant number of themes have been identified (Table 13.1).

Investigation of Deaths in Custody

Legal Framework

In England and Wales the death of any individual who is detained in prison or under the Mental Health Act must be reported to the Coroner, however if the individual is detained by a police officer in a public place, a police vehicle or in a custody suite then there is no obligation to report the death to HM Coroner although in practice all such cases are referred. The Home Office has recommended [8] that all deaths falling into even the widest definition of "in custody" should be subject to Coronial Inquest [9] and hence a full inquiry into the facts and a full postmortem examination should be performed. In the UK Article 2 (The Right to Life) of the European Convention of Human Rights is invoked which accepts that all deaths occurring in custody should be fully investigated and considered by the legal system. However, not every country will follow this, and some local variations can and do occur outside the European Union, this is particularly so in the USA.

Protocol

No standard or agreed protocol has been devised for the postmortem examination of these deaths and, as a result, variation in the extent of the examination and the subsequently reported details is to be expected. A general Code of Practice and

WIT.0043.0086.0474

performance standards for Forensic Pathology [10] has been published and any pathologist considering performing an examination of a death in custody would be well advised to consider that document with care before proceeding. Despite this, the differences in the procedures and the number and type of the specialist tests performed inevitably results in considerable variation in the pathological detail available as a basis for establishing the cause of death and hence available for presentation at any subsequent inquest or criminal proceeding. The absence of a defined protocol hinders considerably the analysis of the results of these examinations and makes even the most simple comparisons unreliable. There is always a need for a properly established academic study of all of these deaths, such as that performed by Lindon and Roe [1] in 2014 for the UK government. As a joint venture by Department of Health, Department of Justice and the Home Office, the Independent Advisory Panel on Deaths in Custody was constituted to inform and advise the joint Ministerial Board on Deaths in Custody [11].

In the UK, the IPCC was replaced by the IOPC in January 2018. The IOPC continues to have a major role in the management of the investigations of all deaths in custody and it also investigates many of the more serious complaints, including allegations of misconduct against the police in England and Wales. Other jurisdictions will have similar investigative organizations: The Police Ombudsman of Northern Ireland (PONI) investigates deaths in custody (https://www.policeombudsman.org/Home). In Scotland the role of the Police Investigations and Review Commissioner (PIRC) was introduced in 2013 when the police service of Scotland was established (https://pirc.scot/about-us/).

Terminology

In addition to the lack of reproducibility of the postmortem examinations, the terminology used by the pathologists to define the cause of death, particularly in the form required for the registration of the death, may often be idiosyncratic, and similar disease processes may be denoted by different pathologists using many different phrases. For example, damage to the heart muscle caused by narrowing of the coronary arteries by atheroma may be termed “Ischemic Heart Disease” or it may be called “Myocardial Ischemia due to Coronary Atheroma” or even rarely by the “lay” terminology “Heart Attack” [10]. This marked variation in terminology may often lead to confusion, particularly among lay people, attempting to understand the cause and the manner of death. Much research [3, 12] has been produced based upon such lay assessments of the pathological features of a death and this has, at times, resulted in increased confusion rather than clarification of the issues involved.

If the issues regarding the definition of “in custody”, the variation in the postmortem examinations, the production of postmortem reports, and the analysis of subsequent specialist tests, all raise problems within a single country, then the consideration of these deaths internationally produces almost insuperable conflicts of medical terminology and judicial systems.

WIT.0043.0086.0475

Deaths Related to the Phases of the Police Custodial Process

In an attempt to add some clarity to the situation, it is possible to state that whatever national definition of "in custody" is used, a number of phases of the custodial process can be identified and the types of deaths which occur during these different phases can be analyzed. Clearly a death, either sudden or delayed, may occur for many different reasons even in the absence of police but since it is the involvement of police that is the *sine qua non* of "in custody" deaths, the first phase must be considered to be the presence of police officers at the scene. Subsequently, an arrest may be made with or without the use of restraint techniques and the prisoner will then be transported to a police station.

This transport will most commonly involve a period within a police vehicle which may be a car, a van with seating or some other vehicle. Many factors may determine the type of transport used and the possible positions of the individual with the vehicle. Arrival at the police station will be followed by various assessments initially by non-medical personnel and decisions will be made regarding detention. Healthcare professionals (HCPs) may become involved, immediately or later, in the decision making process regarding fitness of the individual to be detained.

Detention in a police station will be followed by a period, or periods, of interview interspersed with periods of time incarcerated, usually alone, within a cell. Following interview the individual may be released with no further action/under investigation, they may be charged and then released or charged and detained to appear before a court. It is at this point that custody moves from the Police to other authorities, usually to the prison service.

When considering the types of death that can occur during each of these phases, six main groups can be identified based on the reported causes of death. The groups are:

- Natural deaths
- Deaths associated with accidental trauma
- Deaths related directly to the use of alcohol
- Deaths related to the use of other drugs
- Deaths associated with self-inflicted injury
- Deaths associated with injuries deliberately inflicted by a third party

It is clear that different factors may lead directly to, or play a major part in, the death of an individual while in custody and that different factors will play their part at different phases in the period of custody (see Table 13.2).

Acute alcohol intoxication or the deleterious effects of drugs are, in most cases, likely to have a decreasing effect with time as they are metabolized or excreted from the individual's body. They are therefore most likely to cause death in the post arrest and early detention phases and it is important to note that their effects will be least visible to those with the "duty of care" while the individual is out of sight, detained within a cell—particularly if they are alone within that cell. Similarly the effects of

WIT.0043.0086.0476

Table 13.2 Expected types of deaths in different phases of custody

	Natural	Accidental trauma	Alcohol	Drug	Self-inflicted	Deliberately inflicted
Pre-arrest	++	+++	++	++	±	±
Arrest	++	+++	++	++	±	+++
Detention	+	+	+++	+++	++	++
Interview	+	+	++	++	+++	+
Charge	+	+	–	–	+++	±

trauma, whether accidentally or deliberately inflicted, are most likely to become apparent in the early phases of detention and it would only be on rare occasions that the effects of such trauma would result in fatalities at a later stage although this has occurred on several occasions in particular with head injuries [13]. Conversely death resulting from self-inflicted injuries are unlikely to occur in the pre-arrest and the arrest phases of detention but can and do occur when the individual is placed in a cell and is not under immediate and constant supervision. Cell design has improved notably with the removal of potential ligature points along with the increasing use of monitoring by CCTV, but unless the detainee is constantly supervised opportunities may still arise to self-harm.

Deaths from natural causes on the other hand can occur at almost any time during the period of arrest and detention. It is possible that the stress (whether emotional or physical or both) associated with the initial phases of arrest and with the subsequent, more emotionally stressful phases during detention are likely to precipitate the death of the susceptible individuals through the effects of sympathetic stimulation and the release of adrenalin. Deaths from natural causes should be reduced by the clinical assessment of this vulnerable group of patients by competent HCPs with the appropriate knowledge, skills and experience. Custody staff must also ensure proper supervision of detainees from the time of their initial arrest and throughout the period of detention (see Chap. 9).

It is, however, quite clear that the deaths described in many reports are not "pure" i.e. they are not attributable to any one single category. Individuals with heart disease may also be under the influence of alcohol; individuals under the influence of alcohol or drugs may also have suffered trauma, either accidental or deliberate, prior to or during their detention. In determining the cause of death it can therefore be extremely difficult to give weight to each of the factors that could be identified during the period of detention. There is clearly great need for early assessment and accurate diagnosis of natural disease (physical or psychiatric), of alcohol or drug intoxication or withdrawal, and for the identification, documentation, and treatment of all types of trauma.

The removal of an individual's freedom places upon the police a duty of care to that individual and it is only by the active assessment of each and every person entering police custody and the continuing care of that individual that the number of deaths in custody can be reduced.

WIT.0043.0086.0477

Causes of Death

Natural Causes

Apart from a few unusual cases, deaths due to natural causes while in police custody fall into the groups of disease processes that are commonly associated with sudden natural death in the community.

Cardiovascular Disease

The most common cause of death in the community and of sudden death in particular, is cardiac disease, and within this group those deaths recorded as being due to ischemic heart disease or coronary atheroma are the most common. The exact definitions and criteria for the pathological diagnosis of significant ischemic heart disease [14] are not within the scope of this chapter. While there is a clear increase in the incidence of this cause of death with age [15], it is important to remember that a small percentage of people in the younger age groups, most commonly those with hypercholesterolemia and hyperlipidemia, may also have significant coronary artery disease and since it is the younger age groups that are more likely to be arrested by the police these few individuals may assume great significance.

The significance of coronary atheroma is that individuals with this disease are particularly prone to the development of dysrhythmias during periods of stress when the adrenaline-induced tachycardia results in a decreased ability to perfuse areas of the myocardium during diastole which may result in the development of ischemic ectopic electrical foci. Deaths may be preceded by the development of classical cardiac chest pain or it may present with sudden collapse and death without prior warning.

Individuals suffering from significant myocardial hypertrophy due to chronic hypertension are also at greater risk during periods of stress. Once again it is the older age groups that are most commonly affected by essential hypertension which may also render these individuals susceptible to focal lack of myocardial perfusion during periods of tachycardia. In addition to these two disease processes, there are also the much rarer diseases or syndromes that may cause sudden death which are possibly more significant in the context of "deaths in custody" since some of them tend to affect younger age groups in particular. Congenital valvular disease (e.g. floppy mitral valve disease) and congenital myocardial disease (e.g. the cardiomyopathies) may both render an individual more susceptible to sudden cardiac death and, as with ischemic or hypertensive heart disease, sudden death is more likely when the sympathetic stimulation which is associated with stress, (emotional and/or physical) has resulted in tachycardia.

Genetic research has now identified a genetic basis for many other sudden cardiac deaths in the younger age groups. These genetically mediated disease processes (for example, the prolonged QT syndrome) are often known by the generic term "channelopathies" and can sometimes be diagnosed in life by ECG, however

WIT.0043.0086.0478

after death their presence and hence their possible relationship to the sudden death, can be inferred only from the detection of specific gene defects [16]. The examination for these specific gene markers in any sudden death in police custody must now be considered essential especially in the absence of other causes of death.

Myocarditis and rheumatic heart disease are rare causes of death in young individuals although such deaths may occur without any prior indication of a disease process in individuals in police custody and elsewhere.

Other cardiovascular causes of sudden death are also, for the most part, age related. The rupture of atheromatous aortic aneurysms is a disease almost entirely confined to late middle and old age while the rarer forms of aortitis and collagen diseases of the aorta [17], which may also result in rupture, are more commonly seen in the younger age groups. The diseases that are not age related may be associated with a long history of alcohol or drug abuse and the long term effects may result in alcoholic cardiomyopathy, cocaine-related myocardial scarring, or other coronary artery or myocardial effects that can result in a sudden death even after long-term abstinence from, or just short-term lack of, alcohol or the preferred drug(s) of abuse.

Pulmonary emboli can cause sudden death or they may present as dyspnea and chest pain. It is most unusual for deep venous thrombosis of the leg veins to be present in a young active male; however, the association between some types of the combined oral contraceptive pill and the development of thromboses has been known for some time [18] and may render a small subgroup of the female population at greater risk of pulmonary emboli than the general population.

Central Nervous System

The stress associated with arrest and detention in custody may also have significant effects upon the cerebro-vascular system and may, in susceptible individuals, precipitate intracerebral hemorrhage by the rupture of congenital or acquired aneurysms or from other vascular malformations. Ruptured "berry" aneurysms will result in the development of acute subarachnoid hemorrhages. It is less likely that these intracranial hemorrhages will result in sudden death but they may result in sudden unconsciousness which leads ultimately to death. Clearly the distinction between hemorrhage due to a natural disease process and that due to trauma will need to be established and a specialist neuropathological examination will be required should death occur.

As with the heart, the possibility that an infectious process within the central nervous system is the cause of sudden collapse and death must be considered. It is however unlikely that meningitis or encephalitis will present without any prodromal symptoms. Epilepsy is unlikely to develop de novo following arrest and detention but epilepsy can, and does, lead to sudden collapse and death and a pre-existing history of epilepsy is clearly important. Any individual known to suffer from epilepsy should be monitored with the utmost care and their prescribed medication continued.

WIT.0043.0086.0479

Other forms of intracranial pathology that may lead to sudden death include tumors, both benign and malignant, and such rarities as the development of colloid cysts of the ventricular system.

Endocrine

Diabetes mellitus should raise similar concerns to those associated with epilepsy since poorly controlled diabetes may on occasions be the direct cause of sudden death. Diabetes generally, through its association with an increased incidence of arterial disease, is a major factor in the development of coronary artery disease in the younger age groups. At postmortem consideration must be given, in all cases of sudden death in a young individual but particularly when there is a history of diabetes mellitus, to the sampling of the vitreous humor in an attempt to determine the blood glucose level at the time of death. The samples need to be taken as soon after death as possible to avoid postmortem utilization of the intraocular glucose yielding erroneous results [13].

Other Causes

There are many other natural disease processes that could theoretically lead to sudden collapse and death. Amongst these is asthma, a disease that is usually unlikely to lead to sudden death if adequately treated and supervised but which may, if untreated and unsupervised and in stressful circumstances, result in the individual being found dead in their cell. Other disease processes include the development of hemoptysis, from tuberculosis or pulmonary malignancy, or hematemesis, from peptic ulceration or esophageal varices, which can be life threatening and which may, because of the bleeding, be considered to be the result of trauma rather than a natural disease process. These cases should present no problem to an experienced pathologist following a full postmortem examination.

Conclusion

The significant feature when considering possible natural causes of death of an individual in police custody is that some diseases can lead to rapid collapse and death with no prior warning in a young individual who is apparently fit and well immediately prior to the collapse. There is no method that the police can use to determine which of the individuals they encounter will be suffering from these diseases or from a genetic abnormality that may lead to electrical disturbances within the myocardium. Indeed many of these disease processes can only be diagnosed after complex medical testing following the taking of a full medical history.

The fact that many of these diseases are rare in the age group that is most likely to be detained in custody places additional burdens upon the police officers required

WIT.0043.0086.0480

to care for these individuals and also upon the HCPs required to examine and treat them in the police station. The difficulties that these cases present to the pathologist lies in the need to have an awareness of all of the possible natural causes of sudden death and the need for a careful determination, and if necessary exclusion, of all of these causes—cardiac, neurological, endocrine etc., before forming the conclusion that some other factor has resulted in death.

Accidental Trauma

It is clear that determining if trauma is the result of an accident or not, may depend on the "eye of the beholder". As an example of this it is impossible at postmortem to determine if the injuries caused following a fall from a window during arrest were the result of an accidental fall, an intended jump, or a deliberate push from that window since any points of contact with the building during the descent and the contact with the ground will result in the same injuries whatever the initial "cause". Pathologically the only features of relevance in determining the exact cause of the initiation of the descent are the identification of specific gripping, holding or other restraining injuries that could have occurred prior to the descent or the identification of marks or injuries that may or may not be present (for instance to the fingers) that could be ascribed to attempts to hold on to a window ledge etc. All of the injuries or marks found on the body will have to be correlated with witness statements both from the police and from any other parties present at the time of the fall. Often the true interpretation of many of the injuries and marks found during the postmortem will only become clear when these statements are considered.

In general terms, however, accidental trauma can be caused by many events during the course of an arrest. Falls onto the ground may occur from a height or from standing. Gripping and restraining injuries are commonly present on many areas of the body but are likely to be most common on the arms. The site and significance of the injuries present will depend on the descriptions of the events before, during and after the arrest.

It is essential that all injuries, no matter how apparently trivial, present on a detained individual are carefully documented by the HCP who examines the detainee whether at a police station or elsewhere. Contemporaneous photographs are always extremely helpful in these circumstances and all injuries should be photographed both with and without a measuring scale (see Chap. 4). The ageing of bruises is fraught with difficulties and the documentation of any observed colors and the changes of colors in bruises by the HCP can be of importance. However many factors such the nature of the light (natural, fluorescent, etc.) in which the injuries are viewed may cause significant apparent differences and in addition inter-observer variations may render simple verbal descriptions less reliable. Careful photography with the mandatory inclusion of a standard color strip in the photographs is essential if later review of color is to be if any value.

In terms of a cause of death few of the minor injuries will be relevant but they may provide an indication of the extent and degree of the force that was applied to

WIT.0043.0086.0481

effect an arrest and, as such, they can be of immense value. Injuries present in sites that are known to be of high risk, for instance around the neck, must be examined, documented and interpreted with particular care. All of the injuries need to be interpreted in the light of witness statements and can provide very useful corroborative evidence.

Alcohol and Drug Related Deaths (See Chap. 12)

Alcohol

Alcohol is one of the most commonly used drugs in the world. The small ethyl alcohol molecule can pass easily through the blood–brain barrier to the CNS where it has direct suppressant effects on the whole of the central nervous system. At low concentrations the specialized cells of the cerebral cortex are affected but as the concentration increases the depressive effects involve the higher areas of the brain resulting in increasingly disinhibited behavior. Still higher levels of alcohol result in the depressant effects involving the lower levels of brain function, including the vital cardiorespiratory centers in the midbrain and the medulla, predisposing the intoxicated individual to cardiorespiratory depression or arrest. Alcohol levels in excess of 300 mg/dL are considered to be potentially lethal although some individuals have survived, usually with medical attention, with far higher levels. Some, it must be remembered, have died with far lower levels of alcohol in their blood stream.

The effects of alcohol are however not confined to the brain, there is also marked peripheral vasodilation resulting in increased heat loss which may, on occasions, lead to hypothermia. The adverse effects of alcohol on the coronary circulation, particularly when associated with significant coronary atheroma may lead to myocardial ischemia and the development of dysrhythmias and sudden death.

Alcohol also has marked diuretic effects and when combined with the ingestion of large quantities of fluid (particularly in beer and lager drinking) this may result in electrolyte disturbances particularly hyponatremia.

The chronic effects of alcohol involve many of the internal organs; alcoholic cardiomyopathy, hepatic steatosis and cirrhosis are the most common and all can lead to sudden death.

Alcohol may also be a major factor in causing death by predisposing the individual to accidental trauma and by obscuring the effects of that trauma [13, 19]. This is particularly the case in head injuries when the changes in conscious level are attributed to the effects of alcohol rather than an identified or unidentified head injury.

Alcohol is also a gastric irritant and may precipitate vomiting when taken in excess. This, combined with the effects of decreased consciousness and the reduced laryngeal reflexes associated with intoxication, result in a significantly increased risk of aspiration of vomit into the airways and death. Such an event is unpredictable and, without constant supervision, unpreventable.

The anesthetic effects of alcohol may also result in deaths from asphyxiation. These deaths are the result of the intoxicated individual moving into, or being placed or left, in a position that impedes respiration either by occlusion of the external respiratory orifices, the internal airways (particularly the larynx), or restricts the free movement of the chest wall. These positions may result from lying face down on a bed, marked extension or flexion of the neck or lying across an edge with the head down. Deaths resulting from impairment of respiration in this manner classically result in profound asphyxial changes involving the upper body and these deaths are ascribed to postural asphyxia.

The metabolism of alcohol follows pathways that results in temporary increase of toxic chemicals including ketones (acetaldehyde, β-hydroxybutyrate etc.) in the blood. These metabolic products result in raised blood acidity and cause further disturbances in sodium/potassium, glucose and other metabolic pathways. If the natural balancing chemical buffers of the body are overcome and the blood acidity falls significantly, cardiac dysrhythmias can be produced and sudden death can occur. Postmortem analysis of the blood for β-hydroxybutyrate (BHB) is now readily available and should always be performed in all custodial deaths.

Given the speed with which an individual under the influence of alcohol can die from either the aspiration of vomit or from postural asphyxia it is very doubtful if a police station cell is the correct environment for their recovery from intoxication.

Illustrative Case *A homeless male was arrested by police for the theft of alcohol. He was unkempt and smelt of intoxicating liquor. He was slurring his speech and had an unsteady gait. The custody officer authorized his detention and on the risk assessment it was noted that the detainee said he drank alcohol every day. The detainee was placed in a cell, and as he was currently intoxicated with alcohol, he was checked and roused every half hour for four hours to ensure that his condition was improving. He was then left for a period of undisturbed sleep, though was observed hourly. Unfortunately there was a change of shift in the police station and the fact that the detainee was most likely alcohol dependent was not communicated to the incoming shift team. The detainee was found dead in the morning some 16 hours after his arrest. CCTV footage confirmed that he had seizure in the night prior to his death.*

Drugs

Drug use is now so ubiquitous in western society that any examination of a detainee by a HCP must include a very careful evaluation of drug use whether in the past or recently. The skill of the HCP will undoubtedly be stretched to the full in the evaluation of the history given and this is discussed fully in Chap. 12; much may depend on the failure to continue prescribed medication as on the failure to identify a detainee who is misusing substances who then suffers from withdrawal whilst in custody.

WIT.0043.0086.0483

In terms of deaths in custody all drug use, whether social, misuse or therapeutic, is relevant [1–4, 13, 19] and the possibility that a detainee may have used just one drug or a combination of drugs with or without alcohol prior to death must be positively excluded. A full drug screen on blood and, if available, urine is imperative. Some laboratories will also examine samples of bile and/or liver to detect evidence of previous drug abuse. At postmortem the contents of the whole bowel must be examined to determine if packets or 'wraps' of drugs have been ingested in order to prevent detection during arrest 'body swallowers' or 'body packers'.

The management of acute drug intoxication is a matter of clinical judgment but with adequate medical care it is unlikely that, except in exceptional circumstances, drug intoxication alone will to lead to sudden death in custody.

Deliberate Injuries

Baton Blows

Blows from a baton are usually easily identified in that forceful blows produce the classic "tram line" type injuries on the skin. "Tram line" injuries are typical of a blow from a linear blunt object, the areas of the skin that are most traumatized are not those at the middle of the site of contact where the skin is most evenly compressed but rather at the margins on the contact site where the stretching and distortion of the skin, and hence the damage to the underlying tissues including the blood vessels, is most pronounced. A linear object will, almost by definition, have two such margins which run parallel and a blow from such an object results in two, linear, parallel bruises hence the terminology "tram line".

Blows from a baton may also result in deeper bruising, nerve damage and fractured bones. The deeper injuries tend to reflect the use of greater force but it is not possible to correlate with any degree of certainty the amount of force needed to cause a particular injury in any one individual.

It is essential for both the HCP who examines a living victim of a blow to the head from a baton (or from any other cause) and the pathologist who performs a post mortem examination to remember that significant cerebral trauma can have been caused even in the absence of obvious external trauma or skull fractures. It would be a matter of prudence to assess with great care anyone who has received, or complains of receiving, a head injury from a baton, or from any other cause, and to consider carefully if referral to hospital for a full neurological assessment would be advisable (see Chap. 9).

Neck Holds

Pressure on and around the neck is well known to be a potentially lethal action [13]. Death can be caused following compression of the neck by any one of four mechanisms or by a combination of two or more of them.

WIT.0043.0086.0484

- Airway obstruction by direct compression of the larynx or trachea or by the pressure on the neck raising the larynx upwards and causing the superior aspect of the pharynx to be occluded by the base of the tongue. This can be achieved by pressure of a forearm across the front of the neck, sometimes called the "Choke Hold".
- Occlusion of the veins in the neck. The low pressure in the venous system and the thin yielding nature of the vein walls makes venous occlusion more easily achievable than arterial occlusion; however, the large reserve capacity of the venous system makes it unlikely that rapid death would result even if complete occlusion was achieved, unless some other factor supervened.
- Compression or occlusion of the carotid arteries. This is harder to achieve than venous occlusion due to the higher pressure in the arterial system and the thickness of the arterial walls; however, the effects of occlusion will become apparent much quicker. Saukko and Knight [13] record that occlusion of the carotid circulation for a period of 4 min or more may result in brain damage and Reay et al. [20] demonstrated significant changes in blood flow in the face of five individuals who were subjected to compression of the carotid arteries by the application of a "sleeper hold" in experimental conditions. A sleeper hold is applied when the upper arm compresses one side of the neck and the forearm the other and the larynx rests in the "V" formed by the elbow.
- The fourth mechanism by which death can occur during pressure to the neck results from stimulation of the vagus nerve by direct pressure in its course down the neck or as a result of stimulation of the carotid sinus. Vagal stimulation results in bradycardia which may progress to asystole or, in some cases, immediate asystole.

Mercy et al. [21] reviewed 20 deaths where neck holds had been applied and concluded that in 19 of these cases the application of the neck hold was associated with the death. Conversely, Kowai [22] concluded that the use of the Choke Hold could take between 10 and 20 s to cause unconsciousness and therefore it was safe. Clearly they did not experience the vagal effects of this hold in their experiments. The research of Sauvagneau and Geberth based on videos of fatal autoerotic hangings [23, 24] confirms that unconsciousness is lost after approximately 10 s of neck pressure but that the pressure usually needs to be applied for between 2 and 6 min for death to ensue.

Neck holds are commonly used in many forms of wrestling or martial arts and in these situations they are seldom associated with fatalities possibly because of the ability of the person held to indicate their willingness to submit to a referee and so cause the hold to be released. No such authority is present during a restraint by police and perhaps this is why fatalities are recorded in this situation. In the United Kingdom, the use of neck holds by police during restraint is specifically prohibited and officers are warned during their training of the potentially fatal effects of applying any pressure to the neck. In the USA, however, neck holds are an approved method of restraint.

The pathological examination of deaths associated with compression of the neck requires a detailed and careful dissection of the neck structures [25]. The finding of

WIT.0043.0086.0485

injuries to the muscular, cartilaginous, vascular, or neural components of the neck must, however, be interpreted in the light of the events of the restraint, the actions of the restrainers and the subsequent resuscitation (if any). Pressure on the neck to maintain an airway following cardiac or respiratory arrest may result in bruising which could be confused with pressure prior to, or indeed causing, that arrest. Therapeutic insertion of cannulae during active resuscitation by paramedics or in the hospital very commonly leads to quite marked hemorrhage into the neck which, while it is unlikely to be confused with bruising caused by a neck hold, may mask any bruising that was present.

Pressure on the neck is not, of course, the only mechanism whereby an individual may suffer anoxia or asphyxiation. Any action that occludes, partially or completely, the mouth and/or the nose will result in difficulty in breathing and may result in asphyxiation.

Restraint Asphyxia (See Chap. 7)

The area of restraint that has always caused most concern relates to asphyxiation during the act of restraint. It has been known in forensic circles for many years that individuals may asphyxiate if their ability to breathe is reduced by the position in which they are placed or into which they fall [26]. This type of asphyxiation is commonly associated with alcohol or drug intoxication or, rarely, with neurological diseases which prevent the individual extracting themselves from a position that either occludes, partially or completely, their mouth and nose or which limits the freedom of movement of the chest wall. Death resulting from these events has been described as Postural Asphyxia to indicate that it was the posture of the individual that resulted in the airway obstruction rather than the action of a third party.

In 1988, research by Reay et al. [27] was published which was initially thought to show that, in laboratory conditions, the placing of an individual in the hog-tie position significantly increased the time taken to return to resting blood oxygenation levels following moderate exercise. “Hog-tying” is a form of restraint where the detainee is placed face down and the hands are tied together and then to the feet. Reay concluded that positional restraint (hog-tying) had “measurable physiological effects”. In 1992, Reay published a paper [28] which recorded six cases where, in his opinion, individuals had died as a result of “hog-tying” and being placed prone in police vehicles. This paper raised the possibility that asphyxiation was occurring to individuals when they could not move themselves to safer positions because of the type of restraint used by the police. The concept of “restraint asphyxia”, albeit in a specific set of circumstances, was born.

Since the description of deaths in the prone, hog-tied position, Reay’s original concepts have been extended to account for many deaths of individuals simply under restraint but not in the hog-tied position. The term “restraint asphyxia” has been widened to account for these sudden and unexpected deaths during restraint. Considerable pathological and physiological controversy exists regarding the exact effects of the prone position and hog-tying in the normal effects upon respiration.

WIT.0043.0086.0486

Further experiments by Chan et al. [29] have cast considerable doubt on Reay's thesis although other experiments by Roeggla et al. [30] appear to support the original theory. While the physiological controversy continues, it is clear to all those involved in the examination and investigation of these deaths that there is a small group of individuals who die suddenly and apparently without warning while being restrained.

Physiological research on simulated restraint revealed [31, 32] that restraint did produce reductions in the ventilatory capacity of the experimental subjects but that this did not impair cardiorespiratory function. In two of the eight healthy subjects, breath holding following even moderate exercise was found to induce hypoxia-related dysrhythmias and it was noted that arterial oxygen saturation fell rapidly even with short breath hold times, especially if lung volume was reduced during exhalation.

The problem that currently faces the forensic pathologist is the determination of the cause or causes of these deaths. This is made harder since there are seldom any of the usual asphyxial signs to assist and, even if those signs are present, it is difficult to assign weight or significance to them since similar changes can be caused simply by resuscitation [33].

The major features of asphyxiation are cyanosis, congestion and petechial hemorrhages [13]. These features are seen to a greater or lesser extent in many, but not all, cases of asphyxiation. They often are completely absent in many plastic bag asphyxiations and in hanging, they have variable presence in manual strangulation and they are most commonly seen in ligature strangulation. But their most florid appearance are in deaths associated with postural asphyxia or crush asphyxia cases where death has occurred slowly and where it is associated with some form of pressure or force reducing the ability of the individual to maintain adequate respiratory movement, either from outside the body or from the abdominal contents splinting the diaphragm.

It is of interest then that these features, if present at all in these cases, are, at most, scanty and do not reflect their appearance in other cases of crush asphyxia suggesting that different mechanisms are the cause of death in these two sets of circumstance.

The individuals who die during restraint are not infrequently under the influence of drugs (particularly cocaine) or alcohol, they may be suffering from some underlying natural disease (particularly of the cardiovascular system) or they may have suffered some trauma. These "additional" factors are sometimes seized upon by pathologists and courts to "explain" the death, sometimes even in the face of expert opinion that excludes the additional factor from playing a major part in the death [34].

It would seem that there is a sub-group of the population who are either permanently or at times and for whatever reason susceptible to the effects of restraint whether those effects be mediated entirely or indeed partially through decreased respiratory effort or some other factor.

It should be noted that an individual who is suffering from early, or indeed late, asphyxiation may well struggle more and more in an attempt to breathe and, during a restraint, this increased level of struggling may be perceived by police officers as

an renewed attempt to escape resulting in further restriction of movement and subsequent exacerbation of the asphyxial process. Officers need to be taught that once restrained these further episodes of struggling may signify imminent asphyxiation and not continued attempts to escape—that they may represent a struggle to survive and that the police must be aware of this and respond with that in mind.

Homicide

There have been a number of cases where individuals have been murdered in the cell by another inmate. These deaths are most commonly associated with blunt trauma but strangulation, stabbing and other methods may be employed if suitable weapons are available. It is also evident that individuals have been deliberately assaulted and killed by police officers during arrest and detention.

The HCP should always be aware of the possibility that excessive force may have been applied by the police or that deliberately homicidal injuries may have been inflicted. If injuries are present on any individual in their care these injuries must be carefully documented and, if they are beyond that which the HCP considers reasonable in the circumstances, their concerns should be expressed immediately to a senior officer, a legal representative of the detainee, and through an official complaints procedure. The HCP also has the duty to ensure that no further harm comes to that person.

Self-Inflicted Injuries

Suicidal deaths in custody are a cause for continuing public concern. The methods used are variable but reflect the materials available to the individual at that time.

Hanging

In order to effect a hanging suicide the individual must have two things; an object that can be made into a noose and a point to fix it to. In addition they must be able to place their body so that at least some of their own body weight can be used to apply pressure to their neck via the noose.

The materials and objects that can be made into a noose are legion and vary from the obvious (ties, belts, shoelaces, etc.) to the unusual (underwear, shirts, etc.). In order to attempt to reduce the possibility of hanging suicides, many cells in police stations have been redesigned and attachment points for the noose (pipes, bars, etc.) have been removed or covered. The lack of these obvious points did not, however, previously deter some individuals who placed the bed “on end” and used the upper end as the fixing point. Installation of fixed beds or benching should preclude the use of that method in future. It must be remembered that hanging can still be achieved, although is clearly more difficult, from a low suspension point and any

WIT.0043.0086.0488

protrusion from a wall or fitment in a cell can potentially be used as the upper attachment for the noose.

In addition to removal of the fixing points, attempts have been made to remove the items that have been used as nooses in the past and belts, shoelaces, etc. are sometimes taken from prisoners. Paper clothing has been used although this has not been entirely successful as it entails removing all of the individual's clothing which is clearly impractical in many cases and may raise problems with human rights, and any paper clothing strong enough to withstand any degree of wear would also be strong enough to act as a noose.

The key to preventing hanging suicides lies in the careful evaluation of all individuals who are to be detained (see Chap. 9) and in the design of the cells in which they are held to preclude any possible point for the attachment of a noose.

Given the speed with which hanging can be effected [23, 24], it is most unlikely that anything other than a permanent watch over the suicidal detainee would provide a foolproof method to prevent hanging in a cell. A cycle of 15 min checks will allow more than ample time for an individual to hang themselves and cannot be considered to be adequate protection against this type of suicide.

Ligature Strangulation

As the possibility of suspension is reduced by the changes in the design of the cells, the possibility of other forms of self-asphyxiation are likely to increase. Self-strangulation by ligature is considered to be possible but difficult [13]; since the pressure has to be applied to the neck in these cases by the conscious muscular effort of the hands and arms, it follows that when consciousness is lost and the muscular tone lessens the pressure on the ligature will decrease, the airway obstruction and/or the vascular occlusion will cease and death will generally be averted. If, however, the ligature is knotted or if the material is "non-slip" and looped around itself then it is possible for the individual to apply the pressure to the neck and for that pressure to be maintained even after consciousness is lost and, as a result, death may follow.

As with hanging, the key to preventing these deaths lies in careful evaluation and, if necessary, the removal of items of clothing and observation.

Incised Injuries

All detainees should be carefully searched before incarceration and any sharp objects, or objects that could be sharpened, must be removed. The extent of the search will probably depend on the mental state of the individual and the possibility of an intimate search to exclude weapons concealed in the vagina or rectum should be considered in those individuals considered most at risk. Death from deep incised wounds to the neck or arms can occur very quickly, even if found before death has occurred the effects of profound blood loss may make death inevitable despite attempts at resuscitation.

Drugs

When considering the possibility of suicide using drugs while in police custody the two key factors are, once again, evaluation and searching. Careful searching (possibly including intimate searches in some cases) will prevent the ingestion of drugs by an individual after they have been placed in the cell. The HCP must always be aware of the possibility that excessive quantities of a drug, or drugs, were taken prior to arrest and detention which may exert their effect when the individual is in the cell.

Acute Behavioral Disturbance

Acute behavioural disturbance (ABD) is a term covering a wide range of presenting conditions. In police custody probably the commonest causes are substance misuse (especially stimulant use) and psychiatric disorders. However the differential diagnosis includes a number of conditions:

- psychiatric disorders
- substance misuse (stimulants—cocaine, amphetamine, methamphetamine; synthetic cannabinoids)
- serotonin syndrome
- anticholinergic syndrome
- sepsis
- head injury
- hypoglycaemia
- seizures
- hypoxia
- thyroid storm
- akathisia

ABD and excited delirium or excited delirium syndrome (ExDS), are terms often used interchangeably with only about one third of cases of ABD presenting as ExDS, the most severe end of the spectrum of disturbance [35]. The definition of ExDS has been defined as 'a state of extreme mental and physiological excitement, characterized by extreme agitation, hyperthermia, hostility, exceptional strength, and endurance without apparent fatigue' [36]. It should be noted that Luther V Bell, an American physician, first described ExDS in 1849 [37]. There has been controversy over this diagnosis which is currently not recognized in the Diagnostic Statistical Manual (DSM-V) and the International Classification of Disease (ICD-9). However the diagnosis is recognized as a distinct entity by emergency physicians and medical examiners/pathologists [38] in the USA.

Where ABD/ExDS is suspected individuals should be taken directly to the local hospital emergency department as this is a time critical medical emergency. However should a detainee be taken into police custody the duty HCP needs to recognize the features of ABD/EXDS (Table 13.3) and advise that immediate hospitalization is

WIT.0043.0086.0490

Table 13.3 Clinical Features of ExDS

Tactile hyperthermia
Does not fatigue
Naked/inappropriately clothed
Rapid breathing
Sweating profusely
"Superhuman" strength
Increased pain threshold/tolerance
Constant/near constant activity
Glass attraction-destruction
Non-responsive to others presence
Violent behaviour

required for urgent treatment for the agitation, hyperthermia and acidosis. Whilst awaiting transfer to hospital preliminary steps can be made with regard to diagnosis and causation but any delay to definitive treatment should be avoided. Preliminary steps may include de-escalation and pre-tranquilization.

Guidelines on the management of suspected ABD in police custody are available for these situations [39].

There appears to be significant morbidity and mortality associated with these conditions but the high mortality rate may be due to definition inconsistency and reporting bias [40]. If a death in police custody is suspected to be a result of ABD/ExDS it is essential that a forensic pathologist is involved to conduct the post-mortem and interpret the relevant toxicological analyses. In a cocaine-related death, for example, the plasma levels of cocaine may only be modestly elevated, the heart will invariably be abnormal (enlarged) with microscopic evidence of myocardial remodeling, secondary to chronic cocaine use [41]. Relatives may wish to have an independent pathologist present as is standard practice in the United Kingdom.

Illustrative Case *A young male had taken amphetamines and then started exhibiting bizarre behavior, agitation, paranoia, hallucinations, aggression, overheating, and extreme strength. He left his house in only his underwear. His parents called the police. He was restrained with leg restraints and handcuffs, a spit hood was applied, and he was taken to a police station. During a period of over an hour he remained restrained by six officers. Eventually a forensic physician suggested that he needed to go to hospital as he had taken drugs. An ambulance was called and the male was taken to a police van where he was restrained by three police officers in a caged area. He stopped breathing, and although transported directly to hospital, he died later that day.*

Role of the HCP Following a Death in Custody

If a death occurs in the police custody venue then a HCP may be called to pronounce life extinct. If that HCP has been involved in the earlier care of the deceased then he/she should advise the police that another HCP should be asked to confirm that life is extinct. This avoids any later suggestion of collusion or cover-up.

WIT.0043.0086.0491

Table 13.4 Verification of life extinct [43]

Absence of carotid pulse over 1 min
Absence of heart sounds over 1 min
Absence of respiratory movements and breath sounds over 1 min
Fixed, dilated pupils
No corneal reflexes
No motor response to painful central stimulus e.g. supra-orbital pressure, trapezius squeeze

The HCP who attends to confirm life extinct (Table 13.4) should make very careful records of the scene and condition of the body [42]. However the police will guide the HCP as to the exact extent of the examination till a suitably qualified forensic pathologist arrives at the scene.

Advice should be sought urgently from the forensic pathologist as to whether the body temperature should be obtained; this could help identify deaths from ABD/ExDS and may assist in the determination of the time of death (often a critical factor when the IOPC come to investigate the deaths and questions are asked about the frequency of visits by custody staff). The HCP should ensure that the Scene of Crime Officer/Crime Scene Investigator takes the ambient temperature.

Whenever a death in custody occurs the actions of any HCPs who have been involved in the care of the detainee may be considered during the investigation. Therefore, HCPs should appraise their Clinical Lead/Line Manager/Medical Director of the incident in order to receive advice and support.

The IOPC, Coroner (or equivalent) and internal investigations branch of the police force involved will all be carrying out investigations. There is also a clinical governance requirement for the clinical forensic medical service to review the assessment and treatment of any detainee who dies in police custody to ensure that any lessons are learnt as soon as possible.

Conclusions

The problem for the police remains that while approaching and restraining an individual they cannot know the background or the medical history nor can they have any idea of the particular (or peculiar) physiological responses of that individual. The statistics may suggest that the techniques that have been designed and taught for restraint, and the care of the individual after restraint, appear to be leading to safer restraint by police (and prison officers) of the most vulnerable sections of the community. Unfortunately restraint-related deaths caused by untrained civilian "security" guards appear to be becoming more common—and almost impossible to trace statistically.

The considerable interest by Government and by the public in all forms of deaths in custody over many years now has resulted in the increased availability of reliable and up-to-date statistics. The increased attention to these deaths has also resulted in the necessity for the much more detailed "ECHR Article 2 compliant" inquests

however the inordinate length of time taken by the legal system, both Coronial and Criminal, to complete their consideration of these deaths frustrates much of the immediate understanding of the mechanisms of each individual death and undoubtedly increases the distress of many families, and also of the police officers involved in such a death.

Key Points

Deaths in police custody are particularly important for the following reasons:

- there is always the suspicion that the death was due to an act of commission or omission by the police;
- they are frequently a cause of public concern and create media interest;
- they will always be investigated by independent police officers and the IOPC (or equivalent);
- they are usually subject to a Coroner's inquest (or equivalent) and occasionally are the subject of a public inquiry.

Self-Assessment Exercises

1. What are the main causes of deaths in police custody?
2. What is the definition of Excited Delirium (ExDS)? What are the clinical features of ExDS?
3. What examination is required to verify life extinct?

References

1. Lindon G, Roe S (2017) Deaths in police custody: a review of the international evidence. Home Office Research Report 95. October 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/655710/Deaths_in_police_custody_A_review_of_the_international_evidence.pdf. Accessed 26 May 2019
2. Angiolini E (2017) Report of the independent review of deaths and serious incidents in police custody. October 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/655401/Report_of_Angiolini_Review_ISBN_Accessible.pdf. Accessed 26 May 2019
3. Grant JR, Southall PE, Fowler DR, Mealey J, Thomas EJ, Kinlock TW (2007) Deaths in custody: a historical appraoch. J Forensic Sci 52(5):1177–1181
4. Inquest (2019) Deaths in police custody. https://www.inquest.org.uk/deaths-in-police-custody. Accessed 26 May 2019
5. Independent Police Complaints Commission. Deaths in or following police contact. https://webarchive.nationalarchives.gov.uk/20170914112705/http://www.ipcc.gov.uk/page/deaths-during-or-following-police-contact. Accessed 04 June 2019
6. Gannoni A, Bricknell S (2019) National deaths in custody program: deaths in custody in Australia 2016–2017 AIC reports Statistical Report 13. file:///C:/Users/marga/Downloads/sr13_national_deaths_in_custody_program.pdf. Accessed 26 May 2019
7. Independent Office of Police Conduct. Deaths during or following police contact: Statistics for England and Wales 2017/2018. https://www.policeconduct.gov.uk/sites/default/files/

Documents/statistics/deaths_during_following_police_contact_201718.pdf. Accessed 04 June 2019
8. Home Office (1969) Circular No 35 of 1969. HMSO, London
9. Matthews P (2014) Jervis on Coroners. Sweet & Maxwell, London
10. Code of practice and performance standards for forensic pathology in England, Wales and Northern Ireland. https://www.rcpath.org/uploads/assets/uploaded/d7aac1e1-0925-4cbc-8d870f713abad8c1.pdf. Accessed 26 May 2019
11. Independent Advisory Panel on Deaths in Custody. http://iapdeathsincustody.independent.gov.uk/. Accessed 26 May 2019
12. Death in Custody Working Group of the Community-Police Consultative Group for Lambeth (1996) Lessons from tragedies. Deaths in Custody in the Metropolitan Police District 1986–1995
13. Knight's Forensic Pathology (4th ed) Saukko P, Knight B. 2016 CRC Press, Boca Raton
14. Davies MJ, Robertson WB (1975) Diseases of the coronary arteries. In: Pomerance A, Davies MJ (eds) The pathology of the heart. Blackwell Scientific, Oxford, pp 81–126
15. Deaths. Office for National Statistics. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsregistrationsummarytables/2017. Accessed 26 May 2019
16. Spillane J, Kullmann DM, Hanna MG (2016) Genetic neurological channelopathies: molecular genetics and clinical phenotypes. J Neirol Neurosurg Psychiatry 87:37–48
17. Berry CL (1992) Arteritis. In: McGee JO, Isaacson PG, Wright NA (eds) Oxford textbook of pathology. Oxford University Press, Oxford, pp 842–852
18. Park M, Jeon G (2017) Pulmonary embolism in a healthy woman using the oral contraceptives containing desogestrel. Obstet Gynecol Sci 60:232–235
19. Heide S, Henn V, Kleiber M, Dressler J (2010) An avoidable death in police custody? Am J Forensic Med Pathol 31(3):261–263
20. Reay DT, Holloway GA (1982) Changes in carotid blood flow produced by neck compression. Am J Forensic Med Pathol 3:199–202
21. Mercy JA, Heath CW, Rosenberg ML (1990) Mortality associated with the use of upper-body control holds by police. Violence Vict 5:215–222
22. Koiwai EK (1987) Deaths allegedly caused by the use of "choke holds" (shime-waza). J Forensic Sci 32:419–432
23. Sauvageau A, LaHarpe R, Geberth V et al (2010) Agonal sequences in eight filmed hangings: analysis of respiratory and movement responses to asphyxia by hanging. J Forensic Sci 55(5):1278–1281
24. Sauvagneau A, Geberth VJ (2013) Autoerotic deaths practical forensic and investigative perspectives. CRC Press, Boca Raton
25. Vanezis P (1989) Techniques of examination. In: Pathology of neck injury. Butterworths, London, pp 22–27
26. Bell MD, Rao VJ, Welti CV (1992) Positional asphyxiation in adults: a series of 30 cases from the Dade and Broward County, Florida medical examiners offices from 1982 to 1990. Am J Forensic Med Pathol 13:101–107
27. Reay DT, Howard JD, Fligner CL, Ward RJ (1998) Effects of positional restraint on oxygen saturation and heart rate following exercise. Am J Forensic Med Pathol 9:16–18
28. Reay DT, Fligner CL, Stilwell AD, Arnold J (1992) Positional asphyxia during law enforcement transport. Am J Forensic Med Pathol 13:90–97
29. Chan TC, Vilka GM, Neuman T, Clausen JL (1997) Restraint position and positional asphyxia. Ann Emerg Med 30:578–586
30. Roeggla M, Wagner A, Muellner M et al (1997) Cardiorespiratory consequences to hobble restraint. Wien Klin Wochenschr 109:359–361
31. Cummin ARC, Roberts CA, Cary NRB, Adams L (2000) The effect of breath holding on arterial oxygen saturation following exercise in man. J Physiol 525P:31P
32. Hood IC, Ryan D, Spitz WU (1998) Resuscitation and petechiae. Am J Forensic Med Pathol 9:35–37

WIT.0043.0086.0494

33. Rao VJ, Welti CV (1988) The forensic significance of conjunctival petechiae. Am J Forensic Med Pathol 9:32–34
34. O'Halloran R, Frank JG (2000) Asphyxial death during prone restraint revisited: a report of 21 cases. Am J Forensic Med Pathol 21:39–52
35. Baldwin S, Hall C, Bennell C et al (2016) Distinguishing features of excited delirium syndrome in non-fatal use of force encounters. J Forensic Legal Med 41:21–27
36. Wetli CV, Fishbain DA (1985) Cocaine-induced psychosis and sudden death in recreational cocaine users. J Forensic Sci 30:873–880
37. Bell LV (1849) On a form of disease resembling mania and fever. Am J Insanity 6:97
38. Vilke GM, Payne-James J, Karch S (2012) Excited delirium syndrome (ExDS): redefining an old diagnosis. J Forensic Legal Med 19:7–11
39. FFLM (2019) Acute Behavioural Disturbance (ABD) guidelines on management in police custody. April 2019. https://fflm.ac.uk/wp-content/uploads/2019/05/AcuteBehaveDisturbance_Apr19-FFLM-RCEM.pdf. Accessed 26 May 2019
40. Gonin P, Beysars N, Yersine B et al (2018) Excited delirium: a systematic review. Acad Emerg Med 25(5):552–565
41. Karch SB, Drummer OH (2016) Karch's pathology of drug abuse, 5th edn. CRC Press, Boca Raton
42. FFLM (2018) Sudden Death. Forensic Notes. April 2018. https://fflm.ac.uk/wp-content/uploads/2018/04/Sudden-Death-Pro-Forma-Dr-B-Butler-and-Dr-M-Stark-April-2018.pdf. Accessed 27 May 2019
43. Department of Health (2019) Guidelines for Verifying Life Extinct (VLE) 2019. https://www.health-ni.gov.uk/sites/default/files/publications/health/Guidelines%20for%20Verifying%20Life%20Extinct.pdf. Accessed 27 May 2019

WIT.0043.0086.0495

Traffic Medicine

14

Ian F. Wall and Margaret M. Stark

Learning Objectives

To describe the medical conditions that significantly affect fitness to drive.

To recall the legal limits for alcohol in blood, breath and urine.

To be able to demonstrate the procedure for taking samples from suspected drink and drug drivers.

To explain the effects of common illicit drugs on driving.

To discuss the limitations of Field Impairment Tests.

Introduction

The United Nations established a road safety collaboration in 2011 with the aim of saving lives: the 'Decade of Action for Road Safety 2011–2020'. However the number of road traffic deaths is still rising and the most recently reported figure was 1.35 million in 2016, but the rate of death relative to the size of the world's population remains constant [1]. There are number of key risk factors that are essential to prevent road traffic deaths; these include reducing speed, drink driving, use of motorcycle helmets, seat belts and child restraints. Currently, 123 countries, representing nearly six billion people, have laws that meet best practice for at least one of the five key behavioral risk factors [1].

The estimated road traffic death rate per 100,000 of the population varies. In 2016 in Australia it was 5.6 per 100,000 compared to United States 12.4 and United Kingdom 3.1 [1]. However in the UK there has been little reduction in road deaths

I. F. Wall (✉)
Teesside University, Middlesbrough, UK
e-mail: ianwall@doctors.org.uk

M. M. Stark
Faculty of Forensic and Legal Medicine, Royal College of Physicians, London, UK

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5_14

WIT.0043.0086.0496

since 2010 and number of seriously injured casualties have increased [2]. Driving a motor vehicle is a complex task requiring a reasonable level of physical fitness, accurate perception, and appropriate judgment. All these factors can be affected by drugs and alcohol, greatly increasing the risk of accidents. Many medical conditions (and their treatments) may impair fitness to drive and will first be considered.

Medical Aspects of Fitness to Drive

Licensing requirements depend on the type of vehicle driven, with more stringent requirements for commercial purposes and multi-axle vehicles.

The legal basis of fitness to drive in the UK lies in the following legislation:

- The European Third Directive on driving licenses (2006/126/EC) effective in the UK in January 2013
- The Road Traffic Act 1988
- The Motor Vehicles (Driving Licences) Regulations 1999 (as amended).

According to Section 92 of the Road Traffic Act 1988:

- A relevant disability is any condition which is either prescribed in regulations or any other disability where driving is likely to be a source of danger to the public. A driver who is suffering from a relevant disability must not be licensed, but there are some prescribed disabilities where licensing is permitted provided certain conditions are met.
- Prospective disabilities are any medical conditions that, because of their progressive or intermittent nature, may develop into relevant disabilities in time e.g. Parkinson's disease and early dementia. A driver with a prospective disability may be granted a driving license for up to 5 years, after which renewal requires further medical review.

In many jurisdictions, including Canada and the United Kingdom, it is the motorist's responsibility to inform the licensing authority of any relevant medical conditions. Similar requirements generally apply in the United States, except that several states (California, Delaware, Nevada, New Jersey and Utah) actually require physicians to report patients with seizures (and other conditions that may alter levels of consciousness) to the department of motor vehicles [3]. Similarly, in two states in Australia (South Australia and the Northern Territory), reporting of patients with seizures (or indeed if the practitioner believes that the person is physically or mentally unfit to be licensed) is compulsory and there are penalties for doctors not reporting [4]. Drivers themselves have a legal responsibility to inform the licensing authority of any injury or medical condition that affects their driving ability, and physicians should take great pains to explain this obligation. Occasionally, especially when dealing with patients suffering from dementia, ethical responsibilities

WIT.0043.0086.0497

may require doctors to breach confidentiality and notify patients against their will or without their knowledge [5]; this situation will be considered later.

Requirements vary in different countries and in different jurisdictions within the same country. When in doubt about the appropriate course of action, physicians or other healthcare professionals should consult the appropriate guidelines. In the United Kingdom, the Driver and Vehicle Licensing Agency (DVLA) has made available a detailed guide for assessing fitness to drive for medical professionals [6]. In Australia, the Austroads Guidelines for Assessing Fitness to Drive provides information [4] and similarly in New Zealand, the NZ Transport Agency [7]. In the European Union, where EC directives have developed basic standards but allow different countries to impose more stringent requirements, there is still considerable variation from country to country. The situation is even more complicated in the United States, where each state sets its own rules, and where Federal regulations for commercial vehicles apply as well. Often, much of the required regulatory information can be acquired via the internet, or from organizations and foundations representing patients who have the particular disease in question [8].

It should be assumed that all adults drive; drivers with disabilities should be given special consideration and may require modification of their vehicle or have certain personal restrictions applied.

Cardiovascular Diseases

A number of studies have demonstrated that natural deaths at the wheel are fairly uncommon and that the risk for other persons is not significant [9, 10]. Even so, requirements for commercial drivers are generally much more rigid than for individuals, and in the United States, the Federal Highway Administration prohibits drivers with angina or recent infarction from driving. The length of prohibition varies from state to state. Restrictions for noncommercial car driving, after first acute myocardial infarction, are 4 weeks in United Kingdom (though only 1 week if treated by percutaneous coronary intervention) but only 2 weeks in Australia (2 days if treated by percutaneous coronary intervention). In the United States, they are entirely at the discretion of the individual physician. In general, myocardial ischemia itself is not considered an absolute driving disqualification, provided treadmill stress testing demonstrates that moderate reserves are present [11]. Similarly, individuals with controlled hypertension are usually considered fit to drive, although physicians, no matter what country they are in, must give serious thought to just what sort of medication is used to control hypertension; clonidine, methyldopa, reserpine, and prazosin can produce somnolence and/or impair reflex responses.

Patients with dysrhythmias, treated with medication or with the implantation of a defibrillator/pacemaker, present a special set of problems [12]. The tendency in the United States has been to treat such individuals as if they were epileptics, i.e., individuals with the potential to lose consciousness at the wheel. Even then, the distinction is not absolute, as some individuals with implanted devices are at much

WIT.0043.0086.0498

higher risk for syncope than others [13], and the ultimate decision remains that of the attending physician.

Most states set minimum requirements for arrhythmia-free periods. Until fairly recently, that period was 6 months in a majority of jurisdictions but is increasingly being shortened to 3 months in many locations. In the UK, patients with implantable cardioverter defibrillators are permanently barred from holding a group 2 license, but may hold a group 1 license providing the device has been implanted for 6 months and has not administered therapy (shock and/or symptomatic antitachycardia pacing) [6].

Epilepsy

Epilepsy is the commonest cause of collapse at the wheel, accounting for approximately 30% of such incidents. In the United Kingdom, epilepsy is a Relevant Disability for purposes of the Traffic Act 1988 (Prescribed Disabilities being severe mental impairment, sudden attacks of disabling giddiness, and inability to meet eyesight requirements) and car driving is not allowed for at least 1 year after a seizure. Here too, restrictions vary from country to country. All 50 of the United States restrict the licenses of epileptics if their seizures are not well controlled by medication. Most states require a 6-month seizure-free period and a physician's statement confirming that the individual's seizures have, in fact, been controlled and that the individual in question poses no risk to public safety. The letter from the physician is then reviewed by a medical advisory board, which may or may not issue a license. In the United States, even if the patient, at some later date, does have a seizure and cause an accident, the physician's act of writing to the board protects him or her from liability under American law, provided the letter was written in good faith.

Withdrawal of antiepileptic medication is associated with a risk of seizure recurrence. One study showed that 41% of patients who stopped treatment slowly developed a recurrence of seizures within 2 years compared with only 22% of patients who continued treatment [14]. Austroads [4] and the DVLA [6] give detailed guidance on driving after physician approved medication reduction. The legal consequences of discontinuing medication, without a physician's order, can be quite devastating. Patients who stop taking antiseizure medication of their own volition and then cause an accident may face future civil liability and possibly even criminal charges if they cause physical injury [15]. Of course, rules vary from country to country, but, in general, a seizure patient who does not inform the appropriate regulatory agency may face dire consequences (including even the legitimate refusal of the insurance carrier to pay for damages).

Diabetes

Diabetes-related hypoglycemia may lead to confusion or loss of consciousness, or from complications of the disease itself, e.g., retinopathy causing visual problems or peripheral vascular disease causing limb disabilities. In the UK, all diabetics

WIT.0043.0086.0499

must meet the criteria to drive and must notify the DVLA. Group 2 license (bus and lorry) requirements are strict, although insulin treated drivers are allowed to drive subject to regular blood glucose testing even on days when not driving, 2 hourly monitoring when driving and an annual review by an independent specialist in diabetes [6]. Similar strict licensing requirements also apply in Australia [4].

In the United States, the situation varies from state to state and states identify drivers with diabetes in a number of ways. In at least 23 states [16] drivers are asked directly if they have diabetes whereas in other states drivers are asked some variation of a question about whether they have a condition that is likely to cause altered perception or loss of consciousness while driving. In some states, physicians are specifically required to notify authorities of the patient's diabetic conditions. As with seizure patients, failure to notify may expose the patient to both civil and criminal liability. Studies have shown that the single most significant factor for drivers with diabetes appears to be a recent history of severe hypoglycaemia, regardless of the type of diabetes or the treatment used [17].

Vision and Eye Disorders

The two most important aspects of vision in relation to driving are visual acuity and visual fields. Visual acuity may simply be defined as the best obtainable vision with or without spectacles or contact lenses. Most countries require a binocular visual acuity greater than 6/12 for licensing purposes. In the United Kingdom, the eyesight requirements are in good daylight, ability to read the registration mark fixed to a vehicle registered under current standards at a distance of 20 m with letters and numbers 79 mm high by 50 mm wide on a car registered since 1 September 2001 or at a distance of 20.5 m with letters and numbers 79 mm high by 57 mm wide on a car registered before 1 September 2001. The minimum field of vision for safe driving is generally regarded as at least 120° on the horizontal when measured with a Goldman III4e target or its equivalent [6].

Ethical Considerations

While it is generally a patient's responsibility to inform the licensing authority of any injury or medical condition that affects their driving, occasionally ethical responsibilities may require a doctor to inform the licensing authorities of a particular problem. If a patient has a medical condition that renders them unfit to drive, the doctor should make sure the patient understands that the condition may impair their ability to drive. If the patient is incapable of understanding this advice, e.g., due to dementia, the doctor should inform the licensing authority immediately [18].

If patients continue to drive when they are not fit to do so, the doctor should make every reasonable effort to persuade them to stop. The doctor may decide to discuss concerns with the patient's relatives, friends and carers as long as the patient agrees.

WIT.0043.0086.0500

If this still does not persuade the patient to stop driving and the doctor is of the opinion that the patient's refusal to stop driving leaves others exposed to risk of death or serious harm, the doctor should disclose relevant medical information immediately, in confidence, to the medical adviser of the licensing authority. Before disclosing this information, the doctor should inform the patient of the decision to do so, and once the licensing authority has been informed, the doctor should also write to the patient to confirm that disclosure has been made and make a note on the patient's record [18].

Alcohol and Driving

Globally it is estimated that 5–35% of all road deaths are reported as alcohol related [1]. In the UK a *drink-drive accident* is a reported incident on a public road in which someone is killed or injured, where at least one of the motor vehicle drivers or riders involved met one of the following criteria:

- failed a roadside breath test by registering above 35 μg of alcohol per 100 mL of breath (in England and Wales) or 22 μg (in Scotland)
- refused to give a breath test specimen when requested by the police (other than when incapable of doing so for medical reasons)
- died, within 12 h of the accident, and was subsequently found to have more than 80 mg of alcohol per 100 mL of blood (in England and Wales) or 50 mg (in Scotland) [19].

The provisional central estimate of the number of deaths in accidents with at least one driver over the alcohol limit for 2017 is 290 with the central estimate of the number of drink-drive casualties of all severities in 2017 is 8660, a decrease of 4% on 2016 [19].

Metabolism of Alcohol [20]

Alcohol is absorbed through the stomach and duodenum. Absorption is dependent on many factors, including age, sex [21], weight and adiposity of the individual, duration of drinking, nature of the drink, and presence of food in the stomach. Alcohol dehydrogenase in the gastric mucosa may contribute substantially to alcohol metabolism (gastric first-pass metabolism), but this effect is generally only evident with low doses and after eating. Studies of alcohol dehydrogenase activity in gastric biopsies of women suggest a significant decrease in activity in women compared with men, which could explain why women have higher peak blood alcohol levels and are more susceptible to liver damage after consumption of smaller quantities of alcohol when compared with men [22]. Further details of alcohol metabolism are given in Chap. 8. Once absorbed, alcohol is eliminated at a fairly constant rate, with 90% being metabolized in the liver and the remainder excreted unchanged in

WIT.0043.0086.0501

urine, breath, and sweat. The rate of elimination in moderate drinkers may vary between 10 and 20 mg/100 mL blood/h, with a mean of 15 mg/100 mL blood/h. Individuals dependent on alcohol, undergoing detoxification, have elimination rates of 19 mg/100 mL blood/h or even higher [23]. This increased rate of alcohol burn off is thought to be a consequence of increased activity of hepatic microsomal enzymes (P450IIE).

Effects of Alcohol on Performance

Alcohol affects mood and behavior, causing euphoria (which is particularly significant in risk taking), but it also produces central nervous system depression. Even at low doses, there is clear evidence that alcohol impairs performance, especially as the faculties that are most sensitive to alcohol are those most important to driving, namely complex perceptual mechanisms and states of divided attention. In a review of over 200 papers [24], a variety of behavioral aspects were examined including reaction time, tracking, concentrated attention, divided attention, information processing, visual function, perception, psychomotor performance, and driver performance. Most of the studies showed impairment at 70 mg/100 mL blood, but approximately 20% showed impairment at concentrations between 10 and 40 mg/100 mL blood.

The definitive study on the relationship between risk of accident and blood alcohol concentration (BAC) was performed in the 1960s in Grand Rapids, Michigan by Borkenstein and Dale [25]; data were collected on 5895 drivers involved in accidents and on 7590 drivers not involved. Comparison of the two groups disclosed that an accident was statistically more likely at blood alcohol levels greater than 80 mg/100 mL blood, with accidents occurring more frequently as follows:

Blood alcohol (mg/100 mL)	Accident occurrence
50–100	1.5 times as frequently
100–150	4 times as frequently
Over 150	18 times as frequently

Further analysis of the data by Allsop [26] quantified the risks for different ages and different drinking habits. On average, the risk doubles at 80 mg/100 mL, increasing sharply to a 10-times risk multiplier at 150 mg/100 mL and a 20-times risk multiplier at 200 mg/100 mL blood. For inexperienced drivers and infrequent drinkers, the sharp increase occurs at much lower levels, whereas for the more experienced drinking driver it may not occur until 100 mg/100 mL (Fig. 14.1).

This research contributed to some countries lowering the allowable BAC for legal driving and in Australia, Canada, the United States and more recently in Scotland. Different concentrations and rules are also applied for younger and/or inexperienced drivers in some countries. As an example, most states in Australia require a zero alcohol level for probationary drivers during their first 3 years of licensing. Further evidence of the relationship between crash risk and blood alcohol levels has been shown by Compton et al. [27] who studied drivers in California and

WIT.0043.0086.0502

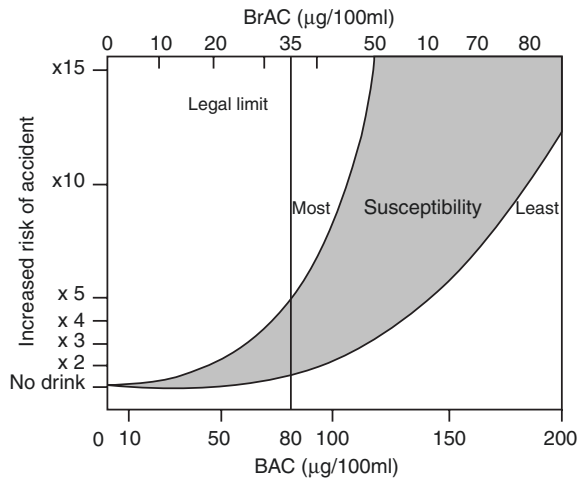


Fig. 14.1 Risk of road traffic accidents related to level of alcohol in the blood and breath. *BAC* blood alcohol concentration, *BrAC* breath alcohol concentration. Permission by Greenwich Medical Media

Florida. This research, surveying a total of 14,985 drivers, produced results that were in agreement with previous studies in showing increasing relative risk as blood alcohol levels increase, with an accelerated rise at levels in excess of 100 mg/100 mL blood. However, after adjustments for missing data (hit-and-run drivers, refusals, etc.), the result was an even more dramatic rise in risk, with the relative risk of crash involvement being significantly elevated at blood alcohol levels of 40 mg/100 mL. More recent research now has concluded that there is strong evidence that someone's ability to drive is affected if they have any alcohol in their blood with drivers with a BAC of between 20 and 50 mg/100 mL having at least three times greater risk of dying in a vehicle crash [28].

Road Traffic Legislation

In the United Kingdom, this research led to the introduction of the Road Safety Act 1967, which set a legal driving limit of 80 mg/100 mL of blood (or 35 µg/100 mL of breath or 107 mg/100 mL of urine). This law also allows mandatory roadside screening tests and requires the provision of blood or urine tests at police stations. The Transport Act 1981 provided that quantitative breath tests, performed with approved devices, could be used as the sole evidence of drunk driving. Although the level for drivers in England and Wales is currently set at 80 mg/100 mL of blood, in practice drivers are not usually prosecuted at blood levels below 87 mg/100 mL of blood because, during the analysis, a series of results by gas chromatography (which must fall within three standard deviations (or 6%) of each other) is averaged, and then 6% (or 6 mg below 100 g/100 mL) is deducted from the result, which is then reported as not less than × mg/100 mL of blood. The North report [29] (see later) recommended that in the United Kingdom, laboratories should apply a 3% allowance to the analysis of blood and urine specimens.

WIT.0043.0086.0503

The legal limits in Scotland were reduced on 5 December 2014 to 50 mg/100 mL of blood (or 22 μg/100 mL breath or 67 mg/100 mL of urine). Recent research [30] has shown that this reduction was not associated with a reduction in road traffic accidents. One plausible explanation cited was that the legislative change was not suitably enforced—for example with random breath testing measures. However a study in the US evaluated the effects of lowering the BAC from 0.10 g/dL to 0.08 g/dL across all 50 states and the District of Columbia and provided strong evidence of the relationship between lowering the BAC limit for driving and the general deterrent effect on impaired driving fatal crash rates [31].

Lower legal limits in Northern Ireland were passed in April 2016 at 50 mg/100 mL of blood and 20 mg/100 mL for learner, novice or professional drivers to bring the levels in line with those in Ireland but have so far not been enacted.

In Australia, the legal limit is set at 50 mg/100 mL for fully licensed drivers for all states but lower levels are in place for other categories of drivers and vary by state e.g. a zero limit for drivers on a learner permit or probationary license, bus and taxi drivers and drivers of trucks over 15 tons.

In the United States, many states have enacted "zero tolerance" laws, and the detection of any alcohol in an individual younger than age 21 is grounds for license revocation.

Equivalent Limits in Other Body Fluids

Statutes have been used to establish BAC equivalents in other tissues and breath. Not infrequently, alcohol concentrations will be measured in accident victims taken for treatment at trauma centers. However, there are two very important differences between alcohol measurements made in hospitals and those made in forensic laboratories; first, in hospitals, standard international units (SI) are the norm, the mole is the unit of mass, the liter is the unit of volume, and alcohol concentrations are reported in mmol/L. In forensic laboratories, results are expressed as gram/deciliter or liter, or even milligrams per milliliter, and measurements are made in whole blood, not serum or plasma. Because 1 mL of whole blood weighs, on average, 1.055 g, a BAC of 100 mg/dL is actually the same as 95 mg/100 g or 21.7 mmol/L [23].

There is another, even more important, difference between serum/plasma and whole blood. The former contains 91.8% water, while the latter contains only 80.1% water. Because alcohol has a very large volume of distribution, this difference in water content means that alcohol concentrations measured in serum/plasma will be higher than concentrations measured in whole blood by approximately 14%. In practice, if plasma alcohol concentrations are to be introduced as evidence, they should be related back to whole blood concentrations using an even higher ratio (1.22:1), which corresponds to the mean value, ±2 standard deviations. As mentioned earlier, if whole blood is tested, drivers are not usually prosecuted at blood levels below 87 mg/100 mL of blood [23].

WIT.0043.0086.0504

Table 14.1 Prescribed blood alcohol levels in various jurisdictions

Australia	50	France	50	Poland	20
Austria	50	Germany	50	Romania	0
Belgium	50	Greece	50	Russia	0
Bulgaria	50	Hungary	0	Slovakia	0
Canada	80	Italy	50	Sweden	20
Czech Republic	0	Lithuania	40	Spain	50
Denmark	50	Luxembourg	50	Turkey	0
Ireland	50	Netherlands	50	US	80
Finland	50	Norway	20		

Breath testing is equally problematic. The instruments used are calibrated to estimate the concentrations of alcohol in whole blood, not plasma or serum. To estimate the serum or plasma alcohol concentration from breath measurements, a plasma/breath ratio of 2600:1 must be used (because, as explained above, whole blood contains 14% less alcohol). In Europe, but not necessarily in the United States or Australia, two specimens of breath are taken for analysis, and the specimen with the lower proportion of alcohol should be used as evidence.

Bladder urine, because it contains alcohol (or other drugs) that may have accumulated over a long period, is generally not considered a suitable specimen for forensic testing, especially since the presence of alcohol in the urine only proves that alcohol is present in the body. Alcohol concentrations in bladder urine cannot be used to infer the blood levels reliably. Even so, U.K. legislation and most U.S. states still allow drivers the option of providing breath, blood, or urine specimens, but as of 1999, the State of California has dropped the option of providing urine samples, and other states are considering similar actions. Under the new California provisions, police can still request a urine test if a suspect's breath test is negative [32].

Other options are available in the case of alcohol-related fatalities. Comparison of alcohol concentrations in vitreous and blood can provide a good indication of whether concentrations were rising or falling at the time of death (alcohol is distributed mainly in water and the water content of vitreous is lower than that of blood). Urine obtained from the kidney pelvis can also be used, since its alcohol content can be precisely related to blood concentration [33].

Legal Limits in Other Jurisdictions

Table 14.1 shows alcohol limits for various countries but many countries have graduated penalties depending on the BAC.

Countermeasures

A number of measures are in place to discourage drivers from drinking, and they have had a considerable degree of success.

Lowering the Legal Limit

When the legal limit was reduced in Sweden from 50 to 20 mg, there was a fall in casualties [34]. It has been estimated that a similar reduction in the United Kingdom would save 50 lives, prevent 250 serious injuries, and eliminate another 1200 slight injuries each year. In 1998, a cost/benefit analysis suggested that this would save £75 million a year [35]. However, the UK Government decided not to implement this reduction. In 2010 the UK Government commissioned a report [29] by Sir Peter North QC to review current drink/drugs driving legislation. He again recommended the lowering of the legal limit to 50 mg but again the UK government decided not to implement this change. Other recommendations were made in his report for drink and drug driving and many of these will be mentioned later in this chapter.

Widening Police Breath Testing Powers

At present, in the United Kingdom, a police officer may stop any person driving a motor vehicle on the road, but that does not necessarily mean that the officer can administer a breath test. The number of breath tests continues to fall in the UK with only 325,887 breath tests carried out by police in 2017, the lowest number since the data collection began in 2002 [36].

In the United States, police officers can require a breath test only if there is reasonable cause to suspect that the person detained has alcohol in their body, has committed a moving traffic offense, or has been involved in an accident. However in Canada mandatory alcohol screening became law in 2018 giving police the authority to demand a breath test of any driver even in the absence of suspicion or cause.

In Finland, random breath testing along with a legal limit of 50 mg/100 mL of blood was introduced in 1977; highly visible check points are established, and typically, 8–12 policemen with breath alcohol screening devices are placed along the center of the road, the sites being chosen so that it is impossible for a driver to avoid being tested. All drivers are tested except those of emergency vehicles. The procedure takes only seconds to perform, the system receives general public support [37], and it has resulted in a marked reduction in the number of accidents and injuries.

In NSW, Australia, random breath testing started in 1982 and trauma from fatal crashes involving alcohol has dropped from about 40% of all fatalities to 15% in 2017 with police conducting about five million breath tests each year in NSW [38].

Ignition Interlocks for Repeat Drink-Drive Offenders

These devices prevent the car ignition from being started unless the concentration of breath alcohol blown into the device is below a predetermined level, often well below the legal limit. Thereafter, during the journey, the driver is required to undertake random rolling retests. A failure of these tests activates the vehicle's lights and horn. All states in the United States have some type of ignition interlock law and several states have made them mandatory or highly incentivized for all convicted drunk drivers, even first time offenders. The same applies in Australia with all States and territories having laws relating to interlock programs. From 1 October 2014 in Victoria, Australia, anyone who loses their license or learner permit due to a drink-driving offense is required to install an alcohol interlock in any vehicle they drive as a condition of relicensing [4]. Results in the United States have shown that repeat offenses

WIT.0043.0086.0506

occur rapidly once the restriction is removed [39]. However, in Alberta, where there is closer supervision of the program, supplemented by counseling, more long-term improvements have been experienced. Though they are currently not the subject of any legal penalty in the United Kingdom, interlock devices can be purchased on a private basis. The North report recommended that best practice on interlock devices should be rolled out throughout the transport industry in the United Kingdom [29].

High-Risk Offender Scheme

A special program in England, Wales, and Scotland was introduced in 1983, and the criteria widened in 1990 to cover drivers who were convicted of having a BAC in excess of 200 mg/100 mL blood, or refusing to provide an evidential specimen, or two offenses involving BACs in excess of 80 mg/100 mL blood within a 10-year period. This group accounts for about 30–40% of drunk driving offenders in Britain. To regain their licenses at the end of a period of disqualification, the drivers must undergo a medical examination (including blood tests to discover biochemical evidence of excessive alcohol consumption) to demonstrate with reasonable certainty that they are not alcohol abusers [6]. Similar statutes apply in the United States. In California, drivers found to have a BAC greater than 200 mg/100 mL, in addition to whatever other sanctions are imposed, are required to attend a 6-month educational program [32]. In the United States, penalties for drunk driving may be "enhanced" under special circumstances, such as a second conviction for drunk driving, or speeding at the time of arrest, or the presence of a child in the car, or the causation of property damage or injury.

Procedural Issues

While the procedures involved may seem very simple, numerous technical defenses have been raised in most countries around the world. Not surprisingly, many of these challenges are very similar, no matter the country in which they are offered. Challenges to the U.K. Road Traffic Act are illustrative of the problem.

Definitions

Section 5(1) of the Road Traffic Act 1988 (subsequently referred to as RTA) states that: if a person drives or attempts to drive a motor vehicle on a road or other public place, or is in charge of a motor vehicle on a road or other public place, after consuming so much alcohol that the proportion of it in his or her breath, blood, or urine exceeds the prescribed limit, he or she is guilty of an offense. Unfortunately, the word "drive" is not actually defined, but in fact, three points need to be proved: first, that the person is in the driving seat or has control of the steering; second, that the person charged must have something to do with the propulsion of the vehicle; and finally, that what the individual was doing must fall within the normal meaning of driving.

Attempting to drive has produced an abundance of case law, but it has been held that acts of mere preparation, e.g., checking the engine, finding keys, or opening the

WIT.0043.0086.0507

car door, do not amount to attempting to drive but steps on the way to what would have been driving, if not interrupted, may amount to an attempt, e.g., putting the key in the ignition. However, in a test case in the UK, when police found a man asleep in his van with the doors locked while over the legal limit, judges ruled by a majority decision that the laws that led to his conviction were "disproportionate" and "violated the presumption of innocence" to which he was entitled under Article 6(2) of the European Convention on Human Rights [40].

In Section 185(1) of the RTA, a motor vehicle is defined as a "mechanically propelled vehicle intended or adapted for use on a road"—the words "mechanically propelled" are intended to have a very wide meaning and will cover any transmission of power from the engine to the wheels by mechanical means. Similar regulations are to be found throughout the EU, and if further evidence is needed as to just how vague the definition of "mechanically propelled" may be, one needs only to consider the arrest, in 1997, of a paraplegic Scandinavian who was arrested (and tried) for unsafe driving of his wheelchair.

In Section 192(1) of the RTA, the word "road" is defined as any highway and any other road to which the public has access and includes bridges over which a road passes. Public place is a question of fact for the court to determine. In English law, a car park attached to a public house was held, during opening hours, to be a public place as it was attached to a tavern that offered its services to all members of the public, whereas the same car park would not be regarded as a public place if it were attached to a private club [41].

"In charge" is a question of fact, not law. As a general rule, the person remains in charge until he or she takes the vehicle off the road unless some intervening act occurs, e.g., handing keys to another person prevents him or her from retaining control. There is a statutory defense in that a person shall be deemed not to be in charge if he or she can prove that, at the time, the circumstances were such that there was no likelihood of his or her driving the vehicle while the proportion of alcohol in the blood was over the prescribed limit. The fact that the driver was injured or that the vehicle was damaged may be disregarded by the court if it is put forward as a defense. The court is therefore entitled to consider what the position would have been had the defendant not been prevented from driving by damage or injury. Of course, the state must always prove that the defendant was actually driving the car. That may prove difficult if, as is the case in many accidents, there are no witnesses.

Breath Testing

Section 6(1) of the RTA conferred the power to require a breath test only to officers in uniform. The courts have already ruled against a challenge where the officer was not wearing his helmet [42]. In the United Kingdom, the breath test may be taken either at or near the place where the officer makes a request for one. Normally, that would be at the roadside, but not necessarily at the scene of the offense. If an accident occurs owing to the presence of a motor vehicle on a road or other public place, a police officer may require any person who he or she has reasonable cause to believe was driving or attempting to drive, or in charge of the vehicle at the time of the

WIT.0043.0086.0508

accident, to provide a specimen of breath for a breath test. The test may be taken at or near the place where the requirement was made or, if the police officer thinks fit, at a police station specified by the officer. The North report [29] recommended that type approval and deployment of portable evidential breath testing equipment should be completed no later than the end of 2011. So far this has not materialized. In the United States, roadside breath testing, with non-evidentiary screening devices, is permitted only in "zero tolerance" states, with drivers under age 21 years. Evidential breath machines have been used at the roadside in Australia for many years.

In the United Kingdom, a person failing to provide a specimen of breath without reasonable excuse is guilty of an offense. A reasonable excuse would include someone who is physically or mentally unable to provide a sample, or if the act of providing the sample would, in some way entail risk to health. In most U.S. states, refusal to submit to a breath (or blood or urine) test is admissible as evidence in criminal proceedings, and as a rule, leads to license suspension, even if guilt is not proved in court. In some states, refusal is actually considered a separate crime. This somewhat strange situation comes about because most U.S. states, and most other countries, have per se laws for alcohol: an alcohol level above some preset limit is, by law, proof of intoxication [43, 44].

Section 6 of the RTA allows police prescribed limit of 35 μg of alcohol a driver without a warrant if the breath test is positive, or if the driver fails or refuses to provide a specimen of breath, and the officer has reasonable cause to suspect alcohol in his or her body. Additionally, if an accident occurs owing to the presence of a motor vehicle on a road or public place, and a police officer reasonably suspects that the accident involved injury to another person, then for the purpose of requiring a breath test or arresting a person, the officer may enter (by force if need be) any place where that person is or where the officer reasonably suspects the person to be.

Hospital Procedure

In the United Kingdom, patients at a hospital do not have to produce a breath test or provide a specimen for a laboratory testing unless the practitioner in immediate charge of their case has been notified and does not object on the grounds that the requirement would be prejudicial to the proper care and treatment of the person. In the United States, forensic blood samples can be taken from unconscious patients who are not able to give informed consent. Legislative changes in the UK in the Police Reform Act 2002 give Health Care Professionals (HCPs) similar powers with a few subtle differences in that blood can be taken providing the person has been involved in an accident, the doctor is satisfied that the person is not able to give valid consent (for whatever reason which could include mental health problems), and the person does not object to or resist the specimen being taken [45]. After death, a coroner can order that the blood alcohol level be measured (remembering always that the value measured will be 14% lower than had serum or plasma been measured at a clinical laboratory). In the United States, Medical Examiners and Coroners do not require special permission to measure ethanol (or any drug for that matter) and they do so routinely. Ethanol concentrations in vitreous humor are made and may be introduced in court. However, no fixed relationship between postmortem blood and

WIT.0043.0086.0509

vitreous concentrations is recognized in law. Additionally, when bodily harm has resulted, or when there is evidence of criminal activity (such as leaving the scene of an accident), then it is within the power of the officer to order that blood be drawn, even if the suspect is unwilling or unconscious.

Police Station Procedure

Police may require a suspect to provide either two breath samples in the UK (other jurisdictions, e.g. NSW Australia, may only require one breath sample), for analysis by means of an approved device, or a sample of blood or urine for laboratory testing. This is usually done at a police station, since it is almost unheard of for a hospital in the United Kingdom or the United States to be equipped with an evidentiary breath testing device. Blood or urine samples can only be collected at a police station or hospital. In the United Kingdom, such a request cannot be made at a police station unless the constable making the requirement has reasonable cause to believe that, for medical reasons, a specimen of breath cannot be provided, or at the time the requirement is made, an approved breath analysis device is not available, or not practical to use, or that the suspected offense is one under Section 3A or 4 of the RTA, and the constable making the requirement has been advised by a HCP that the condition of the person might be due to some drug. This situation does not occur in the United States where, if appropriate staff are available, both blood and urine may be obtained at the police station.

In the United Kingdom, if a specimen other than breath is required, police may demand either a urine or blood test. If blood cannot be obtained as, e.g., might well be the case in a chronic intravenous drug user, then a urine sample must be provided within 1 h of the request for its provision being made and after the provision of a previous specimen of urine. In the United States, urine specimens are generally not considered admissible proof of intoxication. A very large number of studies have shown that the ratio between blood alcohol and pooled urine is highly unreliable and unpredictable [46, 47]. Ureteral urine, on the other hand, has an alcohol concentration 1.3 times greater than blood [33]. Collection of ureteral urine is often attempted at autopsy, but, for obvious reasons, is not an option with living patients. However, blood and not urine can only be taken for Section 5A suspected offenses (see below for more detail).

Breath samples can only be analyzed with approved devices—evidential breath-testing machines (EBM) such as those used in the UK e.g. Intoximeter EC/IR, Lion Intoxilyzer 6000 or CAMIC Datamaster. In Australia this includes models approved by the National Measurement Institute from Drager and Lion (https://www.industry.gov.au/data-and-publications/certificates-of-approval/16-eba). Only officers trained to use the machine are allowed to carry out the intoximeter procedure, and if two breath samples are taken, the lower of two readings is taken. The subject must not have smoked for 10 min or have consumed alcohol or used a mouth spray or mouthwash, taken any medication, or consumed any food for 20 min before the breath test.

If the reading is below the prescribed limit of 35 μg of alcohol per 100 mL of breath, no action is taken unless impairment through drugs is suspected. If that is the

WIT.0043.0086.0510

case, a forensic physician or other healthcare professional should be called. If the level is between 36 and 39, no prosecution can occur unless there is impairment. If the level is 40 or more, the person is charged with an offense, the previous "statutory option" of the person having the option to replace a breath sample between 40 and 50 μg with a sample of blood or urine having been removed following a recommendation of the North report [29] in the Deregulation Act 2015. Different rules and regulations, but with much the same intent, apply in other countries.

Blood Samples

A blood sample may be required in the following circumstances:

- if the suspect is in hospital; or
- in the police station if:
  - the EBM is not available or faulty,
  - the readings are unreliable with a breath difference more than 15%
  - there is the presence of interfering substances;
  - there is a medical reason for failing to provide breath;
  - it is under the excess specified drugs Section 5A RTA 1988.

It is wise to have a standardized routine for this procedure, if only to help prevent some of the technical defenses that are frequently raised in court. RTA blood alcohol kits are available with all the necessary equipment, and similar kits are sold in the United States, although their use is not mandatory. Whether or not a kit is used, appropriate chain of custody forms must be completed, and the record must reflect that alcohol-containing swabs were not used to cleanse the skin (actually, studies have shown that alcohol swabs contribute negligibly to the final result, but the issue has been raised in court) [48].

The police officer should identify the HCP (doctor, nurse or paramedic), to the person and the HCP should obtain witnessed informed consent. The HCP must then determine whether there are any medical reasons why a sample of blood cannot be taken. It is for the HCP to decide where the sample of blood is taken from. The sample should be divided equally between the two bottles and shaken to disperse the preservative. The bottles should be labeled and placed in the secure containers and caps applied. The driver is allowed to retain one sample, which is placed in an envelope and sealed. The driver is then given a list of analysts. Finally the HCP must ensure that the person is fit to be detained or released.

Under U.S. law, blood may be taken even if the driver objects, providing the driver has been involved in an accident leading to injury, or a crime has been committed. Most U.S. states have statutes that excuse hemophiliacs and patients taking anticoagulants from blood testing [32]. In the UK it is suggested that the HCP should attempt to take blood no more than three times with the patient's consent, case law [49] having determined that the person might have lost confidence in the HCP. If the HCP fails to obtain a blood sample then the driver has fulfilled the statutory requirement.

WIT.0043.0086.0511

Impairment Under the Road Traffic Act (Section 4)

The medical examination and procedure to be adopted when it is suspected that a person is unfit through drink or drugs will be considered later in this chapter under Section "Drugs and Driving."

Complex Defenses

Numerous technical defenses have been advocated over the years, and HCPs should be aware of the most common. Failure to provide a sample of breath, blood or urine will be considered separately.

Failure to Provide a Sample of Breath

Unless there is a reasonable excuse, failure to provide a specimen of breath, blood, or urine is an offense under Section 7 of the RTA. In the United States, refusal leads to automatic license suspension and, in some states, may actually constitute a separate crime; police are under an obligation to make sure that drivers are made aware of that fact. The motorist must understand the mandatory warning of prosecution if a specimen is not produced. Failure to understand, at least in the United Kingdom, is a reasonable excuse for the non-provision of a sample [50]. The decision as to whether there is a medical reason not to supply a sample of breath is left to the police officer and is summarized in case law. There is no provision or requirement at that stage for a HCP to be summoned or to give an opinion (Table 14.2).

The role of an Appropriate Adult (AA) (support person) to assist vulnerable individuals with making the decision regarding providing a sample under the Road Traffic Act has recently been clarified. If the individual agrees to provide the sample there is no requirement for an AA to be present. However, if the person detained has declined to provide a sample, the court stated in *Miller v DPP* [55] that there was a very real possibility that the presence of an AA would have calmed the detainee and led him to behave differently and make different choices from those he in fact made.

Table 14.2 Medical reasons for failing to provide a breath sample

Injury to mouth, lip or face
Tracheostomy, rib or chest injury
Respiratory problems such as asthma, acute infections or chronic conditions
Neurological problems, such as facial palsy
Phobia of catching AIDS from using intoximeter [51]
Shock if it renders the driver physically or mentally unable to provide the specimen [52]
Severe alcohol intoxication [53]
Short stature [54]

WIT.0043.0086.0512

The AA can assist the detainee in understanding the gravity of his decision not to provide a specimen.

Many cases have been challenged on the basis that the person was unable to blow into the intoximeter due to respiratory problems. Research has now clarified some of these situations. Spirometry has shown that if a person has a forced expiratory volume in 1 s (FEV_1) of less than 2.0 L and a forced vital capacity (FVC) of less than 2.6 L, then that person would generally be unable to use a breath alcohol testing device [56]. A further study of healthy people of small stature (less than 166 cm tall) showed that if their FEV_1, FVC, and peak expiratory flow rate (PEFR) were greater than 2.31, 2.61, and 330 L/min, respectively, then they should be capable of supplying a suitable breath sample [54]. While these papers were particularly useful as most HCPs do not have access to spirometry but do have access to a simple peak flow reading in the custody situation, most of the breath testing machines that were used in the study no longer exist, the respiratory function values cannot be applied to breath testing devices in current use.

A study in Victoria, Australia, showed that persons with an FEV_1 greater than 1.5 L could provide an adequate screening sample on the Lion Alcolmeter SD2 roadside screening device [57] and that, with an FEV_1 greater than 1.0 and FVC greater than 1.75, individuals were able to provide adequate samples on the Drager Alcotest 7110 (as used in Victoria) evidentiary breath testing machine.

A study [58] on the current Lion Intoxilyzer 6000 concluded that some subjects with lung diseases might have difficulty in providing evidential breath samples. The study showed that 9 of the 30 patients with lung disease failed to provide an evidential sample of breath and was performed on patients who had types of lung disease at the severe end of the spectrum. Importantly, what the research also showed was that many patients had sufficient FVCs of more than 1.5 L and should, in theory, have been able to satisfy the machines' requirements of 1.2 L but still could not, in practice, provide a sample possibly because of the long periods needed for exhalation and recovery.

A recent fashionable defense is that the presence of a metal stud through a hole pierced in the tongue invalidates the breath alcohol test because of the prohibition against foreign substances in the mouth and because of the potential for the jewelry to retain alcohol and interfere with the breath test. However, experimental work has shown that the rates of elimination of mouth alcohol were no different in subjects with a tongue stud as opposed to controls and that, for the purposes of breath alcohol testing, oral jewelry should be treated the same as metallic dental work and left in place without affecting the outcome of the breath test [59].

Failure to Provide a Sample of Blood

First, there must be a definite request to provide a sample of blood. In Kuldip Singh Gill v. DPP [60], it was held that a driver could not be convicted of failing to supply a specimen of blood or urine if he or she was not requested to do so. Where the sample of blood is taken from is solely the choice of the HCP (or, in the United States, the emergency room physician). In Solesbury v. Pugh [61], the defendant was found guilty of failing to supply a specimen, as he would only

WIT.0043.0086.0513

allow a sample to be taken from his big toe, which the doctor was not prepared to do.

It is reasonable for the person to request that his or her own doctor takes the sample of blood, providing this does not delay the sample being taken [62]. In the United Kingdom, if the patient's own doctor and HCP are both present, the person can choose whether the doctor or HCP took the sample. Similar rules apply in the United States, where statutes generally spell out that financial responsibility for such services rests with the driver and not the state. In the United Kingdom, and probably in the United States as well, if a sample of blood is provided but the doctor spills the sample, then the law has been complied with on the basis that removal of the syringe from the vein by the doctor completes the provision of the specimen by the defendant [63]. In the United Kingdom, there is no legal definition on how much blood is required but the specimen must be capable of being divided into two equal parts (to enable the defendant to have a sample independently analysed if they so wished) and it is generally accepted that 5 mL should be sufficient for alcohol. If less than this is obtained, the sample should be discarded and another one attempted or the police officer advised that there is a medical reason why a sample of blood should not be provided and the urine option can then be selected. However, if the offence is for Section 5A a urine option cannot be selected. In the United States, minimum quantities are generally not written into statute. As indicated previously, alcohol swabs should not be used. In the early 1980s, one police force purchased and used swabs containing alcohol with the result that numerous convictions were later quashed [64] (Table 14.3).

Probably, the most common defense for failure to provide a sample of blood is that of needle phobia. If this is alleged, a full medical history should be obtained and enquiry made of whether the person has had blood tests before, whether ears or other parts of the body have been pierced, or whether there have been foreign travel immunizations or any other medical or dental procedure undertaken in which an injection may have been administered. Specific enquiry about the phobia should be made. British appellate judges [65] have stated that "no fear short of phobia recognized by medical science to be as strong and as inhibiting as, for instance, claustrophobia can be allowed to excuse failure to provide a specimen for a laboratory test, and in most if not all cases where the fear of providing it is claimed to be invincible the claim will have to be supported by medical evidence." Stark and Brener [66] stress the importance of having a standardized approach for assessing needle phobia using diagnostic guidelines for a definite diagnosis of a specific phobia and wisely conclude that the best way to ensure a successful prosecution is to obtain a sample, any sample for analysis! Rix [67] also gives some very practical advice for HCPs: be able to distinguish

Table 14.3 Medical reasons for failing to provide a blood sample

Poor venous access
Failure of the HCP to actually take the sample
Needle phobia—need to differentiate between 'dislike' and phobia

WIT.0043.0086.0514

between repugnance and phobia, be able to distinguish between unwillingness and inability, document the history and examination with emphasis on the presence or absence of signs of anxiety, and be sure the decision is based on firm medical evidence. Finally, record all this information, specifically note in the police record whether or not a medical condition has been identified, and then communicate this opinion to the police officers verbally.

Another common defense is that of consuming alcohol after the offense—the hip flask defense [68]. It is used almost universally and is based on the fact that while it is unlawful to have an excessive BAC at the time of driving, it is not unlawful to have an elevated blood alcohol at the time of being tested. In the United Kingdom, Section 15(3) of the RTA allows for a driver to prove that he or she had imbibed alcohol after ceasing to drive and that the amount of such consumption was the sole reason for being over the legal limit or unfit to drive, at the time he or she gave a sample for analysis. It will be necessary for a scientist to prove that it was only the post driving consumption that caused the analysis to reveal an alcohol level above the prescribed limit. The quantity of alcohol in the after-drink, the time of intake, and the age, sex, height, and body weight of the driver can all be used to calculate the theoretical expected BAC [69]. Back calculations can only ever be approximate as they are based on average values and while they are reasonable estimates for most people, they may, on occasions, fail to reflect accurately the situation of a particular individual, regardless of whether the calculation is for pre- or post-incident drinking. There are now computer programmes available to calculate these levels.

But the length a person may go to in order to avoid a conviction is illustrated by the case of Mukandiwa [70] who alleged he could not give a blood sample for spiritual reasons. He was registered as a member of the Zimbabwe National Traditional Healers Association, known as Zinatha, and was authorized to practice healing using both traditional and ritual healing. He was a spirit medium, known as a Mhondoro and, as such, had to avoid situations that drove him into a trance. The sight of blood was one such situation. The sight of blood may, he claimed, cause him to go into a trance and become violent, thereby creating serious risk of injury to his health and to others in the police station. This was held to be a reasonable excuse but subsequently overturned in the High Court, on the basis that the defendant could have looked away or closed his eyes!

Illustrative Case *A 42 year old man was arrested on suspicion of driving whilst over the prescribed limit having blown 42 μg/100 mL of breath on the police officer's hand held breath alcohol machine. At the police station, the evidential breath machine was not working and a forensic physician was requested to see him to take a sample of blood. The detainee stated that he could not provide a blood sample because he had a needle phobia. Preliminary examination revealed that his ears were pierced and he had a number of tattoos on his arms. Whilst the piercing and tattoos would suggest that he did not have a needle phobia, a more detailed history* [66, 67] *was taken and it transpired that the detainee had developed a needle phobia following a dental needle breaking during a dental extraction. It was considered*

WIT.0043.0086.0515

that he did have a genuine needle phobia and that this was a reasonable excuse for providing a blood sample and the forensic physician advised the police officer to continue the drink/drive procedure with a urine option.

Failure to Provide a Sample of Urine

If a woman is requested to provide a sample of urine, it is important to have a female officer present as it has been held that because of the embarrassment that it could involve, the refusal to supply a sample of urine could be regarded as a reasonable excuse [71]. Any embarrassment at having to urinate in front of an officer of the same sex is not regarded as a reasonable excuse for not having supplied a specimen. However, in order to pass urine, it is necessary to relax the bladder sphincter muscles; anxiety causes muscle tension and difficulty in micturition. Self-conscious feelings elicited when others are present may possibly interfere with the ability to relax the bladder sphincters. This is known as avoidance paruresis, sometimes called shy bladder, bashful bladder, or bladder shyness and may be implicated in a defense of failure to provide a sample of urine without reasonable excuse (Table 14.4).

In summary Jones and Logan [69] have outlined a number of driving under the influence (DUI) defenses—see Table 14.5. If the subject has consumed alcohol or other drink or used a mouth spray, mouthwash, drug or medication or has eaten, inhaled or taken anything, or has brought anything back from the stomach, practice in the UK is to wait for 20 min before commencing the evidential breath sampling

Table 14.4 Medical reasons for failing to provide a urine sample

Drugs such as opiates which may result in difficulty passing urine [72]
Neurological problems affecting the bladder
Presence of a catheter
Embarrassment at having to provide a sample in front of a member of the opposite sex
Chronic dialysis patient

Table 14.5 DUI defenses

Drinking after the offense—the hip flask defense
Laced drinks
Rising blood alcohol concentration
Pathological conditions or trauma
Endogenous alcohol and the auto brewery syndrome
Use of alcohol swabs for skin disinfectant
Drug-alcohol interactions
Alleged interfering substances in breath
Mouth alcohol and the use of mouthwash preparations
Regurgitation and the gastro-esophageal reflux disease
Infusion of blood or other liquids during surgical emergency treatment
Dentures and dentures adhesives

WIT.0043.0086.0516

procedure (MGDD/A 2017). If the subject has smoked (including the use of an electronic cigarette) in the last 5 min, wait 5 min before test.

Illustrative Case *A 28-year-old asthmatic woman was seen to drive a car erratically and was arrested on suspicion of driving whilst over the prescribed limit of alcohol. She gave a history of previous opiate misuse for which she had been maintained on 60 mLs of Methadone per day for the past six months. At the police station she was noticeably wheezy and the police officer elected to request a sample of blood. Two attempts at taking a blood sample were unsuccessful because she had poor venous access due to previous intravenous injections of heroin. The police officer was advised to request a sample of urine for alcohol but the detainee was subsequently unable to provide a sample of urine. She was charged with failure to provide a specimen of urine without reasonable excuse. At the subsequent trial, an expert witness opined that as Methadone can have an effect on the bladder sphincter this was a reasonable excuse* [72] *and the defendant was found not guilty.*

Postmortem Alcohol Measurements

This topic has been reviewed in depth by Pounder and Jones [33]. High postmortem alcohol concentrations do not imply that impairment was evident during life. Of 32 alcohol dependent individuals presented at an emergency room for medical treatment, only 23 had apparent behavioral abnormalities, 6 were confused, and 3 were drowsy, even though the mean alcohol concentration was 313 mg/100 mL (range 180–450 mg/100 mL) [73]. Alcohol can be measured in a number of tissues, but the most accurate picture is usually obtained when multiple sites are sampled, e.g., vitreous, gastric contents, blood, and urine (particularly if ureteral urine is available), and the alcohol concentrations compared.

Since the eye is anatomically isolated, putrefaction is delayed, and there is little problem with postmortem redistribution, vitreous measurements can be used to confirm values obtained from whole blood and urine, to distinguish postmortem alcohol production from antemortem ingestion, and to determine whether BACs were rising or falling at the time of death. Vitreous contains more water than blood so that the blood/vitreous alcohol ratio is less than 1. Ratios greater than 1 suggest that death occurred before equilibrium had been reached, i.e., blood alcohol was still rising [74]. Vitreous alcohol concentrations can be related to blood concentrations; however, there is so much intraindividual variation that extrapolation in an individual case is probably unwise and unsound scientifically.

As previously mentioned, serum and plasma contain more water than whole blood, and it follows that the alcohol content of the former will be 10–15% higher than the latter. Since postmortem measurements are made with whole blood, and since the water content of the cadaver begins to decrease almost immediately after death, estimating antemortem values with any precision is difficult, especially if only blood has been sampled. However, if samples from multiple sites are obtained, and vitreous, blood, and urine (urine as it is being formed contains 1.3

WIT.0043.0086.0517

times as much alcohol as whole blood) are all analyzed, it may be possible to make a reasonable estimate of what the alcohol concentration was at the time of death [33].

Drugs and Driving

The Scale of the Problem

Increasing alcohol levels are associated with increased risk of accidents, but fatigue, illicit drug use, and the use of prescription medication can also increase risk. In recent years there has been a great deal of research to estimate the prevalence of the use of drugs in the driving population. In the United Kingdom in 1997, over 860,000 breath tests for alcohol were carried out with a refusal (presumed positive) rate of 12% (103,000) [75]. During that same period, the Forensic Science Service dealt with only 1850 drugs/driving submissions. In a 2-week period in August 1996, the Forensic Science Service received 270 blood specimens for testing for driving with excess alcohol. Further examination revealed that 18% contained one or more drugs and, of those that fell below the legal alcohol limit, a further 18% were positive for drugs. If this 18% figure were applied to those 103,000 cases in 1997, over 18,000 cases would have been identified in which drivers had drugs in their body [76].

In October 1999, the U.K. Department of Environment, Transport and the Regions completed a 3-year study into the incidence of drugs in road accident fatalities [77]. There were a total of 1138 road user fatalities including drivers, riders of two-wheeled vehicles (34 of them cyclists), passengers in vehicles, and pedestrians; over 6% tested positive for medicinal drugs, 18% for illicit drugs (mainly cannabis), and 12% for alcohol.

In this study, urine was tested by immunoassay for the following drugs: alcohol, amphetamines, methylamphetamines (including ecstasy), cannabis, cocaine, opiates, methadone, LSD, benzodiazepines, and tricyclic antidepressants (TCAs). The incidence of medicinal drugs likely to affect driving had not significantly changed from the 1985 to 1987 study. However, illicit drug taking in drivers had increased sixfold in percentage terms, and there was a comparable increase among passengers. In addition, an increasing number had taken more than one illicit drug. In 1997, drugs were detected in approximately 90% of samples submitted to the U.K. Forensic Science Service for analysis (Table 14.6). Research in Scotland [78] showed that 6% of drivers aged between 17 and 39 claimed to have driven at some time while under the influence of drugs and 3% in the last year.

Table 14.6 Type of drug detected in samples submitted to the FSS in 1997

Amphetamine	13%	Methylamphetamine	3%
Cannabis	28%	Cocaine	6%
Opiates	16%	Methadone	7%
Benzodiazepines	24%	Others	3%

WIT.0043.0086.0518

In Europe the Driving Under the Influence of Drugs (DRUID, Alcohol and Medicines) Project performed in 13 countries over the period 2006–2011 showed that alcohol (>0.1 g/L) was detected in 3.5% of drivers, illicit drugs (mainly cannabis) in 1.9% and medicines (mainly benzodiazepines and some opioids) in 1.4% [79]. There have been studies on road traffic fatalities in the UK with an increase in the presence of illicit drugs from 3% [80] to 18% [81]. More information is becoming available worldwide about the prevalence of driving under the influence of drugs [82].

Effects of Different Drugs on driving

Cannabis

Numerous studies have been undertaken to examine the effects of cannabis on driving. One large meta-analysis of over 150 studies showed that cannabis impairs the skills important for driving, including tracking, psychomotor skills, reaction time, and performance, with the effects most marked in the first 2 h after smoking and with attention, tracking, and psychomotor skills being affected the most [83]. The study also showed that impairment is most marked in the absorption phase as opposed to the elimination phase, and that frequent cannabis users become less impaired than infrequent users. These are, for the most part, older studies, done during the 1970s. Impairment is dosage-dependent, and externally observable symptoms, e.g., impairment of psychomotor skills or the impression of absent-mindedness, disappear quickly during the early elimination phase. One study [84] carried out with volunteer marijuana smokers who were actually driving found that the main effect of marijuana was to increase lateral movement of the vehicle moderately within the driving lane on a highway [85, 86]. A UK study [87] offered further support for the view that, under the influence of cannabis, users are acutely aware of their impairment, but attempted to compensate for their impairment by driving more cautiously. Recent US studies [88] showed that the association between cannabis use and crash risk to be inconsistent. One study estimated the increased crash risk from cannabis usage to be 1.83 times that of an unimpaired driver, while another study found no association between risk of being involved in a crash and cannabis use.

The results of another study [89] suggest that alcohol and marijuana-induced impairment differ in some important respects. This study compared the effects of three doses of cannabis and alcohol (placebo, low and high doses), both alone and in combination, on the driving performance of young, novice drivers, and more experienced drivers. Alcohol was administered as ethanol (95%) mixed with orange juice in doses of approximately 0, 0.4, and 0.6 g/kg. Cannabis was administered by inhalation of smoke from pre-rolled cannabis cigarettes that contained 19 mg delta-9-THC. When the simulated driving performance of 25 experienced and 22 inexperienced drivers was tested under the nine different drug conditions, high levels of cannabis generally induced greater impairment than lower levels, while alcohol at the doses used had few effects and did not produce synergistic effects when combined with cannabis. Both cannabis and alcohol were associated with increases in speed and lateral position variability; high-dose cannabis was associated with

WIT.0043.0086.0519

decreased mean speed, increased mean and variability in headways, and longer reaction time, while in contrast alcohol was associated with a slight increase in mean speed. Given the limitations of the study, it is of great interest to further explore the qualitative impairments in driving performance associated with cannabis and alcohol separately and how these impairments may manifest in terms of crash characteristics. These results may force some reworking of commonly accepted dogma. Finally, there is the issue of testing accuracy. Controlled experiments [90] done with chronic cannabis smokers, living in a locked metabolic ward, show without any reasonable doubt that substantial whole blood THC concentrations persist multiple days after drug discontinuation in heavy chronic cannabis users. Whether or not neurocognitive impairment actually occurs with low blood THC concentrations, and how long it takes to return to normal performance, are not known.

In forensic drug driving cases the level of THC, the active metabolite, and THC-OH the initial metabolite, and THC-COOH the final metabolite, should be measured. High level of THC relative to THC-COOH is indicative of recent smoking of the drug whereas the opposite, when THC-COOH is higher, suggest that cannabis was consumed some time ago. Since the impairing effects of cannabis wear off relatively quickly, this information is very important for the interpretation of the toxicology result. The persistence of blood THC levels maybe higher and persist longer in long term heavy cannabis users [91].

Opiates

Single doses of narcotics can have marked effects on performance, such as reaction time, but the effect of a dose of opiates on driving will depend on the history of usage and whether tolerance has developed. The actual blood level will therefore not necessarily be useful in defining impairment. However, most studies of opiates among regular users suggest that they do not present a hazard or exist as a significant factor in driving. One study [92] compared driving ability between patients stabilized on methadone and those beginning or receiving an increased dose of methadone. A key finding appeared to be that patients on a maintenance dose have no psychomotor impairment in relation to driving ability; thus, clients on a methadone program should not be considered impaired in their ability to perform complex tasks such as driving a motor vehicle. In the United Kingdom, persons on a stable methadone program who have not abused other drugs for 1 year, and who have clear urine drug screening tests on a regular basis, are allowed to hold a driving license subject to annual review [6]. However, it should be remembered that users of heroin are also prone to significant use of other psychoactive drugs, such as cocaine, alcohol, and tranquilizers, all dangerous when it comes to driving.

This problem is illustrated by a study [93] from Germany. Thirty-four methadone substitution patients, all of them volunteers, were subjected to a battery of psychological tests and the results compared with those of a control group. The methadone group ($n = 34$) consisted of 25 men and 9 women (age range 18–38 years). Urine samples of approximately two thirds of the methadone patients tested positive for multiple drug use, the most frequent drug ($n = 14$) being cannabis. On psychological

WIT.0043.0086.0520

testing, the methadone substitution patients achieved lower scores on almost all tests. Performance deficits were particularly conspicuous in sustained attention, sensori-motor coordination, and reaction capability. Deficits were minimal in the 12 methadone patients who were, in fact, taking only methadone. The authors conclude that, under certain conditions, long-term methadone maintenance patients under strict medical supervision do not suffer significant driving impairment, providing that no other drugs have been taken.

These findings were further emphasized in a research paper from Norway [94], where patients enrolled in an opioid-assisted rehabilitation program are also permitted to drive a motor vehicle. Researchers investigated drivers who had been apprehended, who had methadone in their blood. Cases of driving involving methadone alone were very rare. In most cases, benzodiazepines were found with amphetamine type drugs, the most common illegal substance, followed by cannabis derivatives. No correlation between methadone concentration as judged by the Norwegian clinical test of impairment (CTI) was seen.

Heroin may be taken in a variety of ways smoking, by injection, snorting and it has a short half-life of a few minutes before being converted to an active metabolite 6-acetylmorphine (6-AM) and morphine. The active metabolite 6-AM also has a short half-life of about 10–20 min and is therefore only detected in blood for 1–2 h though it may remain in urine for 6–10 h. The presence of 6-AM in blood or urine indicate heroin usage but the period of detection is dependent on a number of variabilities including the heroin dosage, the route of administration and frequency of usage. Presence in urine gives no indication of blood level or impairment.

Cocaine and Methamphetamine

Although the argument often goes unchallenged in court, all drugs do not, by definition, produce impairment. Even though some U.S. states define "being under the influence" as synonymous with the presence of any drug, some drugs do improve performance. In fact, low-to-moderate acute doses of cocaine and amphetamine can be expected to increase positive mood, energy, and alertness, especially in nontolerant individuals [95]. It has been known since World War II that use of d-amphetamine can increase the ability to sustain attention over prolonged periods when performing monotonous tasks. For that very reason, radar operators and pilots of both Allied and Japanese armies were issued supplies of amphetamine. Many of the performance tasks related to driving can be improved, at least in the laboratory, by treatment with stimulants [96]. Although the results of one retrospective autopsy study suggest that methamphetamine users seem more likely to be involved in traffic accidents [97], a driving simulator study [98] of young people who had taken Ecstasy (MDMA) showed that basic vehicle control is only moderately affected but risk taking is increased. It seems likely that abrupt discontinuation of either drug in a chronic user could result in driving impairment, but that situation has never been tested [85]. Very large doses can result in toxic psychosis with symptoms indistinguishable from paranoid schizophrenia, a condition that is extremely unlikely to improve driving performance.

Cocaine and methamphetamine are different drugs, even if they do share some common modes of action. There have been only a few experimental studies on the

WIT.0043.0086.0521

acute effects of cocaine on performance and these are mostly restricted by methodological limitations, such as the administration of low doses. For example, controlled studies of human volunteers given modest doses of cocaine (0.58 mg/kg) failed to demonstrate significant impairment [99]. In most of the studies that have been performed in relation to driving impairment, it was not possible to calculate the associated risks because the number of positive cases was too low. However, other studies [100] clearly demonstrate that drivers under the influence of cocaine are significantly more likely to be responsible for a crash than drivers who are not under the influence of this drug (2.3 OR, 95% CI: 1.4–4.0).

Musshoff and Madea [101] measured cocaine and its principle metabolite, benzoylecgonine, in the blood of German drivers arrested for driving impairment. The finding of cocaine and benzoylecgonine indicates that cocaine was taken very shortly before a blood sample was taken. When blood samples were collected into sodium fluoride containing tubes (which prevent cocaine breakdown), the mean cocaine concentration was 836 ng/mL while that of benzoylecgonine was 669 ng. Given the short half-life of cocaine (in the order of 1 h), concentrations measured in hundreds of milligrams prove recent ingestion, as does the simultaneous detection of both cocaine and benzoylecgonine. However, the detection of benzoylecgonine in isolation cannot be construed as proof of cocaine impairment as one would expect benzoylecgonine to remain present in the blood for more than 24 h. If impairment does occur, the duration of impairment has not been measured. Any per se legislation on cocaine-induced impairment would require the presence of actual cocaine, not any of its metabolites. Once again any symptoms and signs of drug use, as well as evidence of actual impaired driving, are important in the overall conclusions as the same blood concentrations can have significantly different effects on an individual depending on whether they are a regular user and tolerance has developed.

Sedative-Hypnotics

Benzodiazepines impair psychomotor performance in nontolerant individuals, generally in a dose-dependent manner. Most of the widely prescribed benzodiazepines increase lateral lane movement and slow response time to a lead car's change in speed. Several of the benzodiazepines (oxazepam 50 mg, flurazepam 30 mg, and lormetazepam 2 mg) predictably impair driving the morning after. Diazepam (15 mg) impaired performance on a clinical test for drunkenness, which comprised 13 tests assessing motor, vestibular, mental, and behavioral functioning [102, 103]. One study [104] showed a clear relationship between dose of benzodiazepines and risk of impairment, which the authors felt probably supported a limit for benzodiazepines and driving as low as within the "therapeutic range."

Acute doses of many benzodiazepines slow response time in simple or choice visual reaction time tests and impair attentional performance and cause deficits that are not due to sedation. In fact, the impairment of sustained attention and vigilance in benzodiazepine users seems to be the direct result of some, as yet uncharacterized, direct action on perceptual sensitivity [85].

Z-drugs such as zopiclone, zolpidem and zalepon have the potential to impair driving secondary to sedative effects. Patients starting such drugs should be warned

WIT.0043.0086.0522

of the possibility of side effects. Research has shown a decline in driving ability with impaired concentration and coordination [105].

Multiple Drug Use

Polydrug use is common and can result in complex interactions, with the drugs having additive, antagonistic, or synergistic effects. Alcohol is commonly consumed in addition to abused drugs. In a study on alcohol and cannabis [106], it has been shown that when they are administered together, the result was one of additive impairment. This finding was confirmed in a UK study [107]. In the laboratory setting, however, simultaneous administration of alcohol and cocaine seems to minimize alcohol-related deficits [96]. The tendency towards polydrug abuse complicates the issue of determining which drug, if any, is responsible for impairment. In the study by Musshoff cited above [101], more than 50% of those arrested had other drugs besides cocaine present.

Antidepressants

There are many side effects associated with the use of the TCAs, e.g., amitriptyline, that are relevant to the ability to drive, such as blurred vision, slow visual accommodation, disorientation, and eye-hand coordination; the most important are the induction of drowsiness, lethargy, and sedation. An analysis of 500 road traffic accidents showed that victims who had taken TCAs had a relative accident risk 2.2 times greater than non-TCA users and that patients using TCAs with a daily dose greater than or equivalent to amitriptyline 125 mg had a sixfold increase in road traffic crash risk [108]. The newer antidepressants drugs of the 5-HT reuptake inhibitor class, e.g., fluoxetine, paroxetine or the selective serotonin and noradrenaline reuptake inhibitors (e.g., venlafaxine), have been shown to not generally affect driving performance and are safe for use by patients who drive [109].

Over-the-Counter Preparations

An increasing number of drugs can now be bought over the counter from pharmacies. Many of these preparations, e.g., cough mixtures and decongestants, contain drugs that can cause sedation, particularly the older antihistamines, e.g., chlorpheniramine and diphenhydramine. The newer non-sedating antihistamines such as terfenadine and astemizole generally do not appear to impair driving. However, one study that measured driving performance across differing doses of terfenadine found that performance was impaired at very high doses (240 mg), stressing the need to establish the behavioral effects of drugs over a range of doses [110]. The second-generation group of antihistamines is less lipophilic than the previous generation and thus cross the blood–brain barrier less readily, accounting for the lower levels of sedation observed with the newer drugs. Thus, while the second-generation antihistamines generally produce less sedation than first-generation compounds, if therapeutic doses are exceeded, the so-called non-sedating antihistamines become sedating and can impair driving.

WIT.0043.0086.0523

Assessment in the Field by Police

In the United Kingdom, if a police officer stops a driver, for whatever reason, and feels the driver is unfit to drive, it is highly likely that a roadside breath test will be carried out. That is not the case in the United States, where field breath testing is only permitted in some states, and then only for drivers under the age of 21 [32]. The laws of the United States also prevent random breath testing. Under the Fourth Amendment, searches and seizures must be reasonable. Stopping a vehicle is a seizure, but it may be construed as reasonable if the police officer has a justifiable suspicion that an offense is being committed. The procedures American officers follow in DUI cases are surprisingly similar to the procedures under the United Kingdom Section 4 RTA. To gain powers to carry out further tests, officers in most U.S. states first have to be satisfied that the driver is impaired. This then gives them the probable cause to carry out subsequent tests similar to the Section 4 procedure to prove impairment. It is quite possible that some of the newer technologies might be applied in the field to drugs other than alcohol. However, concentrations of THC and THC-COOH in oral fluid show a large variation and there is no correlation between oral fluid and urine samples from cannabis abusers. Thus, detailed information about time interval between drug use and sample collection is needed to interpret the oral fluid results properly, and the value of testing saliva has yet to be convincingly demonstrated [111].

If breath testing is negative, impairment due to drugs or medical illness must be considered. It was previously the case that in the United Kingdom, police traffic officers received little or no training in the recognition of signs and symptoms of drug effects. However, a pilot study [112] was carried out in England, Wales, and Scotland in 1999, whereby police officers were trained to perform roadside impairment tests; this study showed that forensic analysis confirmed the presence of a drug in 92% of the drivers who were suspected of taking a drug, who had failed the Field Impairment Tests (FIT), and who had provided a sample. As a consequence, FIT has been introduced across the United Kingdom with some police forces pursuing it more vigorously than others. This contrasts dramatically with the United States, where in 1979, the Drug Recognition Expert (DRE) Program was introduced. Police officers were trained to observe and document known indicators of drug use and impairment.

In 2004, the Railways and Transport Safety Act (2003) was enacted which introduced in the UK, a Code of Practice for Preliminary Impairment Tests (PIT) making it a legal requirement for motorists to undertake a roadside Preliminary Impairment Test [113]. The Act also provided for the Provision of a Preliminary Drug Test by way of sweat or saliva, though it took some time before these achieved type approval.

In the UK a PIT:

> *'may be a test of any type provided it meets the requirements and objectives of the Act and is administered in accordance with a Code of Practice used by the Secretary of State for the purpose.'*

WIT.0043.0086.0524

The PIT currently includes:

- Pupillary examination
- The Modified Romberg Balance Test
- Walk and Turn Test
- One Leg Stand
- Finger-Nose test.

The codes state it is not possible to 'pass' or 'fail' all or any one of these tests; at the conclusion of the test the constable shall be able to form an overall opinion considering together what they know of the subject's driving, their demeanor and anything learned in general conversation or observation, together with the subject's performance during the test and the observation of the pupillary examination, whether the person is impaired to drive a motor vehicle through drink or drugs. The important factor here is observation where possible of actual driving or evidence from witnesses of the manner of driving.

In the United States instead of breath testing, a series of Standardized Field Sobriety Tests (SFSTs), including test of psychomotor and divided attention skills, is conducted. The following tests are administered when alcohol-induced impairment is suspected: Walk and Turn Test, One Leg Stand, and the Horizontal Gaze Nystagmus Test. If drug use is suspected, a Romberg Balance Test is also administered. Unlike chemical tests, where refusal to submit to testing may result in immediate license suspension, drivers in the United States are not legally required to take any SFSTs; if the driver submits, however, the results can be introduced as additional evidence of impairment.

Various kinds of tests are used. They are designed to assess the individual's balance and coordination as well as the ability to follow simple instructions, i.e., to divide attention between multiple tasks. They are as follows:

- Horizontal Gaze Nystagmus: nystagmus may be caused by any number of conditions, but its presence could indicate drugs or alcohol.
- Walk and Turn: nine steps heel to toe are taken in one direction, and then the individual turns and repeats the process in the other direction. Eight impairment indicators are measured; if two of the eight are present, impairment would be indicated.
- One Leg Stand: the subject has to stand on alternate feet for 30 s while counting aloud. Failing two of the four recognized indicators indicates impairment.
- Romberg Balance Test: the subject stands with eyes closed and estimates a period of 30 s during which body sway is estimated. Some drugs alter the body's internal clock and make the test subject act faster or slower than they normally would. The test allows for a tolerance of ±10 s.

If impairment is identified, and alcohol is suspected, the driver undergoes breath testing and a similar procedure to the United Kingdom Section 5 RTA procedure is

WIT.0043.0086.0525

carried out. However, if drugs are suspected, the police officer calls for a Drug Recognition Expert (DRE) to carry out a more detailed examination.

The DRE uses a 12-step procedure:

1. Breath alcohol test: this is carried out by the arresting officer; if the reading is not consistent with the degree of impairment, the DRE is called in.
2. Interview with the arresting officer: the purpose is to ascertain baseline information including the circumstances of the arrest, whether an accident occurred, whether drugs were found, and if so, what they looked like.
3. Preliminary examination: the purpose of the preliminary examination is to determine whether there is sufficient reason to suspect a drug offense and, if possible, exclude any underlying medical problems. General observations and details of any current medical problems are ascertained, and the first pulse measurement is taken. If no signs of drug influence are found, the procedure is terminated; if any medical problems are found, a medical assessment is obtained, and if drugs are still suspected, a full assessment is carried out. If at any time during the assessment a serious medical condition is suspected, a medical opinion will be obtained.
4. Eye examination: the driver is assessed for horizontal gaze nystagmus, vertical gaze nystagmus, and convergence.
5. Divided attention tests: once at a police station, the Romberg Balance Test, Walk and Turn Test, One Leg Stand Test, and Finger to Nose Test are carried out. These are all examples of divided attention tests designed to assess balance and movement tests in addition to the subject's ability to remember instructions.
6. Vital signs examination: blood pressure, temperature, and a second recording of the pulse are performed.
7. Darkroom examination: pupil size is measured in room light and then in near total darkness, using both indirect artificial light and direct light. The mouth and nose are also examined for evidence of drug use.
8. Muscle tone: limb tone is assessed as some drugs and some drug-related syndromes (particularly the potentially deadly Serotonin Syndrome) cause rigidity, whereas others, e.g., alcohol, cause flaccidity.
9. Injection sites examination: the purpose is to seek evidence of intravenous or injection drug abuse. A third pulse reading is also taken.
10. Interrogation: a structured interview about the use of drugs is carried out.
11. Opinion: based on all the previous assessments, the DRE forms an opinion as to drug impairment and also the type of drug causing the problem, the legal standard being a reasonable degree of certainty.
12. Toxicology testing: at the same time, samples are obtained for toxicologic examination; of either a blood or urine is collected for analysis of common drugs.

Initial studies suggesting very high sensitivity and specificity for DRE examination [114] have not been confirmed in controlled laboratory studies. The results of

WIT.0043.0086.0526

the few studies that have been performed suggest that the accuracy of DRE assessment in general may not be sufficiently good to provide evidence in court fairly [85, 86]. Several field studies have indicated that a DRE's opinions were confirmed by toxicologic analysis in 74–92% of cases when DREs concluded that suspects were impaired. However, published controlled trials, in which blood levels were measured before and during DRE examination, have shown that except in the case of alcohol, DRE assessment agreed with toxicology findings only 32–44% of the time. Evidence has also been obtained [115] to indicate that older people are unable to perform the SFSTs as well as younger people.

Roadside Screening Tests

There are other options for roadside screening tests. Both sweat and saliva have been used [116]. Devices are already available, and some have been approved by the U.S. Department of Transportation for the testing of commercial drivers. Even non-volatile molecules appear in the breath, and the feasibility of even detecting amphetamine by breath testing has been demonstrated [117]. It is very likely that the scope of roadside breath testing will expand in the future. The mere detection of a drug does not prove impairment unless, of course, the jurisdiction has *per se* laws whereby the detection of drugs at some predetermined level is ruled, by law, to be proof of impairment. Roadside drug screening tests are acceptable to the public—a UK study [118] found that 98% of drivers were in favor of the principle of roadside drug screening and found the test methods of saliva or forehead perspiration generally acceptable. In the UK the North Report [29] recommended the earliest practicable type approval and supply to police stations of preliminary drug screening devices and currently two are in use in the UK; the Draeger 5000 and the Securetec Drug Wipe 3S S303G which both test for cannabis and cocaine.

Medical Examination Under Section 4, RTA

In the United Kingdom Section 7(3)(c) of the RTA states that:

> *'the suspected offence is one under Section 3A or 4 of this Act and the constable has been advised by a medical practitioner that the condition of the person required to provide the specimen* ***"might"*** *(author's emphasis) be due to some drug.'*

It is for the court to decide whether the driver is unfit to drive on the evidence before it.

Whether the examination is carried out by a HCP in London, or an emergency room physician in San Francisco, the aim of the examination is to exclude any medical condition other than alcohol or drugs as the cause of the driver's behavior. The differential diagnosis is very wide and includes head injury, neurological problems (e.g., epilepsy, stroke, cerebral tumor, multiple sclerosis), metabolic problems (e.g., hypoglycemia), hepatic or renal failure, and mental illness. The procedure should

WIT.0043.0086.0527

include introductory details, full medical history, and clinical examination. The Faculty of Forensic and Legal Medicine has developed a pro forma for this purpose (see http://www.fflm.ac.uk for the most recent version). Similar forms are not available in the United States, but there is nothing to prevent any emergency department in the United States from drafting and providing a similar document. Even if no special form is provided, most of the relevant material will have been (or at least should be) recorded in the emergency department record.

Introductory Details

These should include the name, address, and date of birth of the driver and the name and number of the police officer as well as the place and date the examination took place. In addition, various times including time a health care professional was contacted, time of arrival at police station/hospital, and time the examination commenced and ended are recorded. The HCP should note the result of any roadside breath test and/or EBM reading; roadside drug screening test; information from the arresting officer—in particular the manner of driving, why the detainee was stopped by police, etc.; the results of the Preliminary Impairment Test (PIT); and the Police Risk assessment in custody. Informed consent should be obtained.

The North Report [29] recommended that appropriately trained HCPs could undertake assessments under Section 4 RTA and this was enacted in the Deregulation Act 2015. The FFLM [119] developed a series of competencies for clinicians undertaking this type of assessment.

Full Medical History

Details of any current medical problems and details of recent events, particularly whether there was a road traffic collision that led to the arrest, should be recorded. Past medical history (with specific reference to diabetes, epilepsy, asthma, visual and hearing problems), past psychiatric history, and alcohol and drug consumption (prescribed, over the counter, and illicit) should be noted.

Interpretation of the findings on clinical examination are only possible if a detailed medical history is taken: physical, mental, drug (prescribed and illicit), as poly drug usage is the norm and dependence and tolerance will need to be considered.

Illustrative Case *A 34-year-old woman crashed her car into a tree. She was assessed by paramedics at the scene and other than a bruised lip, she had no other injuries. A roadside breath test revealed a breath alcohol level of 121 μg/100 mL of breath and she was then arrested on suspicion of driving whilst over the prescribed limit. At the police station she was tearful and distressed and was unable to provide a sample of breath for evidential purposes. In view of the lip injury the police officer decided that this was a reasonable excuse for failing to provide an evidential sample of breath. The HCP was asked to see her to take a blood sample but first decided to*

WIT.0043.0086.0528

assess her fitness for continued detention. This revealed that she was significantly depressed and had been drinking and tried to kill herself by crashing the car into a tree. She stated that on release she would make a further attempt at killing herself. A blood sample was taken but it was deemed that she was not fit for subsequent detention and her admission was arranged to a psychiatric hospital for treatment of her severe depression.

Clinical Examination

This should include general observations on demeanor and behavior, gait, a note of any injuries, speech abnormalities, the condition of the mouth, and any smell on the breath. The cardiovascular system should be examined and, as a minimum, the pulse, blood pressure, and temperature all should be recorded. Evidence of drug use should be sought, e.g., needle marks. Examination of the eyes should include noting the state of the sclera, the state of the pupils including size, reaction to light, convergence, and the presence of both horizontal or vertical nystagmus. The use of drug combinations may result in normalisation of physical signs e.g. normal sized pupils with the use of opiates and cocaine. HCPs need to be aware of 'soft signs' such pupillary reaction to light and the fact that pupil size is also dependent on lighting conditions.

The mental state should be assessed and a sample of handwriting maybe requested. Fitness for detention is of paramount importance, and any person who is not fit to be detained because of illness, injury, or drug and/or alcohol intoxication (toxic effects) and withdrawal should be transferred to hospital and not subjected an assessment under Section 4 RTA. If the person refuses to consent to an examination, it is prudent to make observations on his or her manner, possible unsteadiness, etc. and make written note of these.

Previously it was recommended that the HCPs should repeat a series of divided attention tests, as outlined in Codes of Practice [113]. Despite the fact that these tests are widely applied, Field Impairment Tests (FIT) have never been scientifically or statistically calibrated using a control group of subject drivers who had not taken any drugs. It is therefore not possible to ascertain how any individual driver would perform in the absence of possible impairment due to drugs. Neither is there any clear definition of how many components of the five tests used need to be abnormal before a judgement of impairment can be made. Arguably it would be much better to train both police and HCPs with regard to recognizing the common symptoms and signs of illicit drugs, alcohol and misused prescription drugs (Table 14.7).

Correlation between symptoms and signs of drug use and actual presence of drugs has been found to be low with true positives in subjects who had taken the drug very recently and/or in high quantities [120].

A survey of Police Surgeons' opinions within Strathclyde Police demonstrated concerns regarding the introduction of SFSTs with the Walk and Turn Test and the One Leg Stand Test causing the highest levels of concern [121]. A major review of the evidence by O'Keefe [122] concluded that these tests are not reliable and valid

WIT.0043.0086.0529

Table 14.7 Preliminary Impairment Test (UK) in relation to clinical examination

Test	Observations	Clinical relevance
Pupil examination	Size of pupils	Variation in size with age, lighting conditions, alcohol and/or drugs
	Eyes watery	Sign of opiate withdrawal
	Eyes display reddening	Sign of conjunctival infection, cannabis usage, etc.
Modified Romberg Balance Test	Test for balance	Romberg Test is positive if sways when eyes closed. Indicates impaired proprioception or vestibular dysfunction. Balance[a] affected in cerebellar disease[b] and with CNS depressant drugs.
	Internal clock	Perceptual disturbance may be seen with a range of drugs with the internal clock altered (fast or slow) and not related to the type of drug used
One Leg Stand	Balance and counting out loud	No equivalent examination in the clinical field
Finger-nose test	Test of depth perception and balance	Tests co-ordination Past pointing in cerebellar disease[b] Other tests that might be used: Dysdiadochokinesis Heel knee shin Finger tapping
Walk & Turn	Observation of walking, balancing, and processing instruction	Observation of gait Heel-toe walking may be difficult for older patients (due to the frequent coexistence of other medical conditions) even in the absence of neurological disease. Gait depends on tone, strength, balance[a], sensation and coordination. Presence of abnormalities including ataxic gait seen with CNS depressant drugs such as alcohol

[a]Balance has three components: visual, proprioceptive and vestibular
[b]The cerebellum fine tunes motor activity and assists with balance. Dysfunction results in a loss of coordination and problems with gait

tests of drug related impairment to drive and are too difficult for some groups of drug-free individuals to perform.

At the end of the examination, the clinician should decide whether there is a 'condition' present that might be due to some drug. However opinions differ on what constitutes a '*condition*' due to a drug [123]. In the case of very short-acting drugs, the observations of the police officer or other witnesses can be of crucial importance. An individual has been found guilty of driving while unfit through drugs entirely on the basis of the officer's observations and the results and opinion of the toxicologist—the police surgeon was not called to give evidence [124]. Similarly, if the police officer reports that the person was swerving all over the road, proving good evidence of impaired driving, but the HCP later finds only minimal physical signs, this may be sufficient to indicate that a condition may be present due to some short acting drug, e.g., cannabis, and that it is appropriate to proceed to the next part of the procedure. Case law [125] in the UK has held that the medical

WIT.0043.0086.0530

practitioner (and now the HCP) is entitled to take into account all relevant information relating to the person's earlier condition in determining whether there 'is a condition present which might be due to a drug'. In the United States physicians rarely if ever see individuals arrested under suspicion of impaired driving. Under U.S. law, if a suspected felony has occurred, the driver has no right to refuse testing and a physician may be called upon to draw blood for testing.

The HCP should inform the police officer whether there is a condition present that might be due to a drug and if so, the police officer will then continue with the blood/urine option as in Section 5 RTA, previously described. Consent will need to be obtained for a blood specimen. On this occasion, 10 mL of blood should be taken and divided equally into two septum-capped vials as the laboratory requires a greater volume of blood for analysis because of the large number of drugs potentially affecting driving performance and their limited concentration in body fluids; indeed, if the driver declines the offer of a specimen, both samples should be sent.

As a means of further validating FIT as an effective means of detecting drivers who are impaired due to drugs, the University of Glasgow carried out important research [126]. The drivers stopped under suspicion of impairment who were under the legal alcohol limit, but still considered impaired, were offered a FIT test. If they failed this test, they were considered as a suspect drug driver and examined by a forensic physician and a forensic sample obtained and analyzed if appropriate. Those who "passed" a FIT assessment were asked to voluntarily supply a sample of saliva, which was analyzed for drugs. In relation to the use of FIT, the assessment of impairment by a police officer using the test was supported by the clinical examination of the forensic physician in 77% of cases. Biological samples were only analyzed in 65% of this group, but significant drug use was confirmed in 94% of them. It was not possible to obtain biological specimens from drivers where the forensic physician did not corroborate the opinion of the arresting officer (23% of cases). Importantly, the study confirmed that oral fluid samples could be used to identify drugs in drivers, but of concern was the fact that, of those who were stopped and judged to be unimpaired by the police officer, 71% had drug-positive saliva samples.

In Victoria Australia [127], forensic physicians with relevant qualifications and experience act as experts for the court by reviewing all the evidence of impaired driving, the police Preliminary Impairment Test, the forensic physician's assessment, and toxicological results and provide an opinion. Very few expert opinions have been challenged in court. However, there were a number of inconsistencies in the physical examination with the drugs eventually found on toxicological examination; cases where the individual were barely conscious where a formal assessment should not even have been considered; and missed medical and psychiatric conditions.

Medical Examination Under Section 5A, RTA

Despite the introduction of impairment tests in the UK, convictions for drug driving remained low. The North report recommended that the UK Government should actively pursue research to determine the levels of active and impairing metabolites

of the following controlled drugs: opiates, amphetamines, methamphetamine, cocaine, benzodiazepines, cannabinoids, methadone and ecstasy (MDMA).

An expert panel [128] determined the respective levels based on a road safety risk based approach but following a consultation, the UK Government set a 'lowest accidental exposure limit' for the drugs most associated with illegal use and 'road safety risk based limits' for eight controlled drugs. Legislation was introduced creating a new offence making it unlawful to drive with any of the listed drugs in the body in excess of the prescribed level.

'Accidental exposure'—zero tolerance approach	Threshold limit (μg/L)
Benzoylecogonine	50
Cocaine	10
Delta-9-tetrahydrocannabinol	2
Ketamine	20
Lysergic acid diethylamide (LSD)	1
Methylamphetamine	10
Methylinedioxymethamphetamine (MDMA)	10
6-monoacetylmorphine (heroin)	5

In addition, the UK Government also set levels for certain prescription drugs based on a 'road safety risk based' approach.

'Medicinal' limit—road safety risk based approach	Threshold limit (μg/L)
Clonazepam	50
Diazepam	550
Flunitrazepam	300
Lorazepam	100
Methadone	500
Morphine	80
Oxazepam	300
Temazepam	1000
Amphetamine	250

On 2 March 2015, a new law was introduced as Section 5A of the RTA 1988 via the Crime and Courts Act 2013 making it a new offense to drive with certain controlled drugs, including some prescription drugs, above specified limits, there being no need to prove impairment in Court. Although the legislation has been introduced UK wide, it has not yet been enacted in Scotland or Northern Ireland. There is a statutory defense for drivers who have taken medicines containing specified controlled drugs in accordance with medical advice.

Thus, with the use of a drug screening device, there is no longer a need for a HCP's opinion whether the person has a *'condition that might be due to a drug'*. The levels are set in blood only as levels cannot be set in urine reliability and a urine sample cannot be used as an option for Section 5A cases.

Preliminary results [129] of the new legislation showed increasing convictions for drug driving with more prosecutions under the new Section 5A than for pre-existing

WIT.0043.0086.0532

Section 4 impairment drugs and a conviction rate of 98%. There appeared to be no evidence that users of prescribed medicines that fall into those categories of drugs covered by the legislation had been adversely affected by the new regulations.

Further research continues to try and identify if there are any other alternative biological matrices for use as an evidential sample for drug driving. An expert panel [130] recommended that consideration should be given to expand the list of type-approved screening tests to include, in addition to cannabis and cocaine, the amphetamine type drugs (methamphetamine and MDMA) and ketamine to reflect the growing use of these compounds in the driving population and that hair testing may be an appropriate matrix for re-licensing decisions as it would enable the determination of a history of past exposures to illicit or medicinal controlled substances.

Conclusions

There is an urgent need to reduce drink driving globally as this is a major contributory factor for road traffic collisions with resulting deaths and seriously injured drivers and pedestrians. Since 2014, 22 additional countries have amended their laws on one or more key risk factors to bring them in line with best practice, covering a potential additional one billion people or 14% of the world's population [1]. In the UK there have been repeated calls for Government to reduce the drink drive limit and for a review of policy to reduce unnecessary deaths [131]. There are three approaches to establishing a legal framework for drug driving—zero tolerance, an impairment standard, and a per se approach with many jurisdictions using a combination [132]. The introduction of limits for drug driving has overall simplified the process.

Key Points

- Many medical conditions affect driving. HCPs should be aware of the requirements relating to assessing fitness to drive so they can advise patients accordingly.
- Drink driving limits vary by age, jurisdiction, and type of vehicle.
- It is essential to be aware of the drink and drug driving procedures in your jurisdiction and have a process for taking samples in the police station or hospital.
- There is vast case law on drink and drug driving and it is important to be aware of common examples.

Self-Assessment Exercises

1. How would you advise an insulin dependent diabetic who wanted to apply to be a bus driver?
2. List the factors that affect the absorption, distribution, metabolism, and excretion of alcohol in the body?
3. What are the drink drive limits for alcohol in breath, blood and urine in your jurisdiction?
4. What are the common medical reasons for failing to provide a sample of blood?

WIT.0043.0086.0533

Acknowledgment Original co-author Dr. Steven Karch not involved in this edition.

References

1. WHO (2018) Global status report on road safety 2018. WHO, Geneva. https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/. Accessed 13 June 2019
2. PACTS (2018) Road safety since 2010. Update with 2017 data. http://www.pacts.org.uk/2019/01/road-safety-since-2010-update-with-2017-data/. Accessed 13 June 2019
3. Finucane AK (1999) Legal aspects of epilepsy. Neurol Clin 17:235–243
4. Austroads (2017) Assessing fitness to drive. https://austroads.com.au/drivers-and-vehicles/assessing-fitness-to-drive. Accessed 14 June 2019
5. Fitten LJ (1997) The demented driver: the doctor's dilemma. Alzheimer Dis Assoc Disord 11(suppl 1):57–61
6. Driver and Vehicle Licensing Agency (2019) Assessing fitness to drive—a guide for medical professionals. DVLA, Swansea. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/783444/assessing-fitness-to-drive-a-guide-for-medical-professionals.pdf. Accessed 14 June 2019
7. NZ Transport Agency (2014) Medical aspects of fitness to drive A guide for health practitioners. https://www.nzta.govt.nz/assets/resources/medical-aspects/Medical-aspects-of-fitness-to-drive-A-guide-or-health-practitioners.pdf. Accessed 14 June 2019
8. National Highway Traffic Safety Administration (NHTSA) and the American Association of Motor Vehicle Administrators (AAMVA) (2009) Driver Fitness Medical Guidelines Produced in cooperation with the American Association of Motor Vehicle Administrators September 2009. https://www.ems.gov/pdf/811210.pdf. Accessed 14 June 2019
9. Osawa M, Nagasawa T, Yukawa N, Nakajima Y, Seto Y, Ohki T et al (1998) Sudden natural death in driving: case studies in the western area of Kanagawa. Nippon Hoigaku Zasshi 52:315–318
10. Cheng LH, Whittington RM (1998) Natural deaths while driving: would screening for risk be ethically justified? J Med Ethics 24:248–251
11. Belkic K, Emdad R, Theorell T (1998) Occupational profile and cardiac risk: possible mechanisms and implications for professional drivers. Int J Occup Med Environ Health 11:37–57
12. Conti JB, Woodard DA, Tucker KJ, Bryant B, King LC, Curtis AB (1997) Modification of patient driving behavior after implantation of a cardioverter defibrillator. Pacing Clin Electrophysiol 20(9 Pt 1):2200–2204
13. Bansch D, Brunn J, Castrucci M, Weber M, Gietzen F, Borggrefe M et al (1998) Driving and arrhythmias. J Am Coll Cardiol 31(3):608–615
14. Medical Research Council Antiepileptic Drug Withdrawal Study Group (1993) Prognostic index for recurrence of seizures after remission of epilepsy. BMJ 306:1374–1378
15. Krumholz A (1994) Driving and epilepsy: a historical perspective and review of current regulations. Epilepsia 35:668–674
16. American Diabetes Association (2014) Diabetes and driving. Diabetes Care 37(Supplement 1):S97–S103
17. American Diabetes Association (2014) Standards of medical care in diabetes. Diabetes Care: Position Statement 37(Supplement 1):S14–S80
18. General Medical Council (2017) Ethical guidance. Confidentiality: patients' fitness to drive and reporting concerns to the DVLA or DVA. GMC, London. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/confidentiality%2D%2D-patients-fitness-to-drive-and-reporting-concerns-to-the-dvla-or-dva. Accessed 14 June 2019
19. Department for Transport (2019) Reported road casualties in Great Britain: provisional estimates involving illegal alcohol levels: 2017. 14 February 2019. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/778776/drink-drive-provisional-estimates-2017.pdf. Accessed 15 June 2019

20. Jones AW (2019) Alcohol, its absorption, distribution, metabolism and excretion in the body and pharmacokinetic calculations. WIRES Forensic Sci 1:e1340. https://onlinelibrary.wiley.com/doi/pdf/10.1002/wfs2.1340. Accessed 16 June 2019
21. Jones AW, Anderson L (1996) Influence of age, gender and blood alcohol concentration on the disappearance rate of alcohol from blood in drinking drivers. J Forensic Sci 41(6):922–926
22. Ellenhorn MJ et al (1997) Ellenhorn's medical toxicology: diagnosis and treatment of human poisoning. Williams & Wilkins, Baltimore
23. Jones AW, Pounder DJ (2007) Update on clinical and forensic analysis of alcohol. In: Karch SB (ed) Drug abuse handbook. CRC Press, Boca Raton, pp 333–37617
24. Noordzij PC, Roszbach R (1987) Alcohol, drugs, and traffic safety, in T86: Proceedings of the 10th International Conference on Alcohol, Drugs, and Traffic Safety, Amsterdam, September 9–12, 1986. Excerpta Medica, New York
25. Borkenstein RF, Dale A (1964) The role of the drinking driver in traffic accidents. Bloomington, Department of Police Administration, Indiana University
26. Allsop RE (1996) Alcohol and road accidents: a discussion of the Grand Rapids study. Road Research Laboratory. (RRL Report No 6), Harmondsworth
27. Compton RP, Blomberg RD, Moskowitz H, Burns M, Peck RC, Fiorentino D (2002) Crash Risk of Alcohol Impaired Driving in T2002 Proceedings of the 16th International Conference on Alcohol. Drugs and Traffic Safety, Montreal
28. Killoran A, Canning U, Doyle N, Sheppard L (2010) Review of the effectiveness of laws limiting blood alcohol concentration levels to reduce alcohol injuries and deaths. Centre for Public Health Excellence NICE Final Report, March 2010. http://www.nice.org.uk/media/3FE/1A/BloodAlcoholContentEffectivenessReview.pdf. Accessed 16 June 2019
29. North P (2010) Report of the review of drink drug driving law. Department for Transport, London. https://webarchive.nationalarchives.gov.uk/20100921035247/http:/northreview.independent.gov.uk/docs/NorthReview-Report.pdf. Accessed 14 June 2019
30. Haghpanahan H, Lewsey J, Mackay DF, McIntosh E, Pell J, Jones A, Fitzgerald N, Robinson M (2018) An evaluation of the effects of lowering blood alcohol concentration limits for drivers on the rates of road traffic accidents and alcohol consumption: a natural experiment. Lancet 393:321–329
31. Scherer M, Fell JC (2019) Effectiveness of Lowering the Blood Alcohol Concentration (BAC) Limit for Driving from 0.10 to 0.08 grams per deciliter in the United States. Traffic Injury Prevention 20(1):1–8
32. California Code of Regulations (1999) Title 13. Motor Vehicles, State of California
33. Pounder DJ, Jones AW (2007) Post-mortem alcohol—aspects of interpretation. In: Karch SB (ed) Drug abuse handbook. CRC Press, Boca Raton, p 37401
34. Aberg L (1993) Behaviours and opinions of Swedish drivers before and after the 0.02% legal BAC limit of 1990, in T9: proceedings of the 12th International Conference on Alcohol, Drugs, and Traffic Safety; Cologne, 1992. In: Utzelmann HD, Berghaus G (eds)
35. Department of Environment, Transport and the Regions (1998) Combating drunk-driving—next steps. A consultation document, DETR, UK
36. Home Office Police powers and procedures, England and Wales, year ending 31 March 2018 Statistical Bulletin 24/18. 25 October 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/751215/police-powers-procedures-mar18-hosb2418.pdf
37. Dunbar JA, Penttila A, Pikkarainen J (1987) Drinking and driving: success of random breath testing in Finland. BMJ 295:101–103
38. NSW Centre for Road Safety (2019). https://roadsafety.transport.nsw.gov.au/stayingsafe/alcoholdrugs/drinkdriving/rbt/index.html
39. Coben JH, Larkin GL (1999) Effectiveness of ignition interlock devices in reducing drunk driving recidivism. Am J Prev Med 16(1 suppl):81–87
40. Sheldrake v Director of Public Prosecutions (2003) EWHC 273 (Admin)
41. Pugh v Knipe. R.T.R. 286 (1972)
42. Wallwork v. Giles. 114 S.J. 36 (1969)

WIT.0043.0086.0535

43. Krause KR, Howells GA, Bair HA, Bendick PJ, Glover JL (1998) Prosecution and conviction of the injured intoxicated driver. J Trauma 45:1069–1073
44. McArthur DL, Kraus JF (1999) The specific deterrence of administrative per se laws in reducing drunk driving recidivism. Am J Prev Med 16(1 suppl):68–75
45. Faculty of Forensic and Legal Medicine/British Medical Association (September 2017) Taking blood specimens from incapacitated drivers. Guidance for doctors. https://fflm.ac.uk/publications/taking-blood-specimens-from-incapacitated-drivers/. Accessed 16 June 2019
46. Kaye S, Cardona E (1969) Errors of converting a urine alcohol value into a blood alcohol level. Am J Clin Pathol 52:577–584
47. Winek CL, Esposito FM (1981) Comparative study of ethanol levels in blood versus bone marrow, vitreous humor, bile and urine. Forensic Sci Int 17:27–36
48. Carter PG, McConnell AA (1990) Alcohol in drink driving swabs: does it make any difference? [letter]. Med Sci Law 30:90
49. R v Harling (1970) RTR.441
50. Chief Constable of Avon and Somerset v. Singh. R.T.R. 107 (1988)
51. D.P.P. v Kinnersley. The Times, December 29 D.C. (1992)
52. D.P.P. v Pearman. R.T.R. 407 (1992)
53. Young v D.P.P. R.T.R. 328 (1992)
54. Gomm PJ, Broster CG, Johnson NM, Hammond K (1993) Study into the ability of healthy people of small stature to satisfy the sampling requirements of breath alcohol testing instruments. Med Sci Law 33:311–314
55. Miller v DPP (2018) EWHC 262 (Admin)
56. Gomm PJ, Osselton MD, Broster CG, Johnson NM, Upton K (1991) Study into the ability of patients with impaired lung function to use breath alcohol testing devices. Med Sci Law 31:221–225
57. Odell M, McDonald C, Farrar J, Natsis JS, Pretto JF (1998) Breath testing in patients with respiratory disability. J Clin Forensic Med 5:45–48
58. Honeybourne D, Moore AJ, Butterfield AK, Azzan L (2000) A study to investigate the ability of subjects with chronic lung diseases to provide evidential breath samples using the Lion Intoxilyzer ® 6000 UK breath alcohol testing device. Respir Med 94:684–688
59. Logan BK, Gullberg RG (1998) Lack of effect of tongue piercing on an evidential breath alcohol test. J Forensic Sci 43:239–240
60. Kuldip Singh Gill v D.P.P. January 16 (1995)
61. Solesbury v Pugh. 1 W.L.R. 1114 (1969)
62. Bayliss v. Thames Valley Police Chief Constable (1978) Criminal Law Review. p 363
63. Beck v Watson. R.T.R. 91 (1980)
64. R v Bolton JJ. Ex p Scally 1 Q.B. 537 (1991)
65. R v Harding. R.T.R. 325 (1974)
66. Stark MM, Brener N (2000) Needle Phobia. J Clin Forensic Med 7:35–38
67. Rix K (1996) Blood or needle phobia as a defence under the Road Traffic Act of 1988. J Clin Forensic Med 3:173–177
68. Jones AW (1991) Top ten defence challenges among drinking drivers in Sweden. Med Sci Law 31:229–238
69. Jones AW, Logan BK (2007) DUI defenses. In: Karch SB (ed) Drug abuse handbook. CRC Press, Boca Raton, pp 1118–1155
70. DDP v Mukandiwa (2005) EWHC 2977
71. Rowland v. Thorpe. 3 All E.R. 195 (1970)
72. Acevedo CG, Tamayo L, Contreras E (1986) Effects of morphine in the isolated mouse urinary bladder. Gen Pharmacol 17:449–452
73. Davis AR, Lipson AH (1986) Central nervous system tolerance to high blood alcohol levels. Med J Aust 144:9–12
74. Seppala T, Linnoila M, Mattila MJ (1979) Drugs, alcohol and driving. Drugs 17:389–408
75. Rowe D (1999) Personal communication. DETR

76. Osselton MD, Owen P, Fysh R (1996) Drugs and driving, Forensic Science Service Report No. TN816. Forensic Science Service, London, p 3
77. Tunbridge RJ, Keigan M, James FJ (2001) The incidence of drugs in road accident fatalities. TRL report 495. TRL Ltd, Crowthorne, England
78. Myant K, Hope S, McIntosh J, O'Brien Y, McKeganey N, Stradling S (2006) Illicit drugs and driving. Transport Research Series. Scottish Executive Social Research, Edinburgh
79. EMCDDA (2012) Driving under the influence of drugs, alcohol and medicines in Europe: findings from the DRUID project. Publications Office of the European Union, Luxembourg. http://www.emcdda.europa.eu/attachements.cfm/att_192773_EN_TDXA12006ENN.pdf. Accessed 15 June 2019
80. Everest JT, Tunbridge RJ, Widdop B (1989) The incidence of drugs in road accident fatalities. TRL Report RR202. TRL, Crowthorne
81. Tunbridge RJ, Keigan M, James F (2001) The incidence of drugs and alcohol in road accident fatalities. TRL Report 495. TRL, Crowthorne
82. Marillier M, Verstraete AG (2019) Driving under the influence of drugs. WIREs Forensic Sci 1:e1326. https://onlinelibrary.wiley.com/doi/full/10.1002/wfs2.1326. Accessed 15 June 2019
83. Berghaus G, Scheer N, Schmidt P (1995) Effects of cannabis on psychomotor skills and driving performance—a meta-analysis of experimental studies, in T95 Proceedings of the 13th International Conference on Alcohol, Drugs, and Traffic Safety, Adelaide, 1994
84. Chait L, Pierri J (1992) Effects of smoked marijuana on human performance: a critical review. In: Murphy L, Bartke A (eds) Marijuana/Cannabinoids: neurobiology and neurophysiology. CRC Press, Boca Raton
85. Heishman S, Karch S (2000) Drugs and driving. In: Siegel J, Saukko P, Knupfer G (eds) Encyclopaedia of forensic sciences. Academic, London
86. Heishman SJ, Singleton EG, Crouch DJ (1998) Laboratory validation study of drug evaluation and classification program: alprazolam, d-amphetamine, codeine, and marijuana. J Anal Toxicol 22:503–514
87. Sexton BF, Tunbridge RJ, Brook-Carter N, Jackson PG, Wright K, Stark MM, Engelhart K (2000) The influence of cannabis on driving. TRL Report 477. TRL Limited, Crowthorne, England
88. Congressional Research Service. Marijuana Use and Highway Safety. 14 May 2019. https://crsreports.congress.gov/product/pdf/R/R45719. Accessed 15 June 2019
89. Lenné MG, Dietze PM, Triggs TJ, Walmsley S, Murphy B, Redman JR (2010) The effects of cannabis and alcohol on simulated arterial driving. Accid Anal Prev 42(3):859–866
90. Karschner EL, Schwilke EW, Lowe RH, Darwin WD, Herning RI, Cadet JL, Huestis MA (2009) Implications of plasma Delta9-tetrahydrocannabinol, 11-hydroxy-THC, and 11-nor-9-carboxy-THC concentrations in chronic cannabis smokers. Addiction 104(12):2041–2048
91. Odell M, Frei MY, Gerostamoulos D et al (2015) Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use. Forensic Sci Int 249:173–180
92. Chesher G, Lemon J, Gomel M, Murphy G (1989) The effects of methadone, as used in methadone maintenance program, on driving related skills. National Drug and Research Centre, Sydney
93. Friedel B, Berghaus S (1995) Methadone and driving. In: T95 Proceedings of the 13th International Conference on Alcohol, Drugs and Traffic Safety, Adelaide, Australia
94. Bernard JP, Morland J, Khiabani HZ (2009) Methadone and impairment in apprehended drivers. Addiction 1004:457–464
95. Koelega HS (1993) Stimulant drugs and vigilance performance: a review. Psychopharmacology 111:1–16
96. Farre M, Llorente M, Ugena B, Lamas X, Cami J (1991) Interaction of cocaine with ethanol. NIDA Res Monogr 105:570–571
97. Logan BK (1996) Methamphetamine and driving impairment. J Forensic Sci 41:457–464
98. De Waard D, Brookhuis KA, Pernot LMC (2001) A driving simulator study on the effects of MDMA (Ecstasy) on driving performance and traffic safety in T2000 Proceedings of the International Conference on Alcohol, Drugs, and Traffic Safety, Stockholm, 2000

WIT.0043.0086.0537

99. Burns M (1993) Cocaine effects on performance. In: Utzelmann H, Berghaus G, Ktoj G (eds) Alcohol, drugs and traffic safety, T92, Band 2. TUV Rheinland, Cologne
100. Soderstrom CA, Dischinger PC, Kufera JA, Ho SM, Shepard A (2005) Crash culpability relative to age and sex for injured drivers using alcohol, marijuana or cocaine. Annu Proc Assoc Adv Automot Med 49:327–341
101. Musshoff F, Madea B (2010) Cocaine and benzoylecgonine concentrations in fluorinated plasma samples of drivers under suspicion of driving under influence. Forensic Sci Int 200(1–3):67–72
102. O'Hanlon JF, Vermeeren A, Uiterwijk MM, van Veggel LM, Swijgman HF (1995) Anxiolytics' effects on the actual driving performance of patients and healthy volunteers in a standardized test. An integration of three studies. Neuropsychobiology 31:81–88
103. Barbone F, McMahon AD, Davey PG, Morris AD, Reid IC, McDevitt DG et al (1998) Association of road-traffic accidents with benzodiazepine use [see comments]. Lancet 352:1331–1336
104. Bramness JG, Skurtveit S, Mørland J (2003) Clinical impairment of benzodiazepines—relation between benzodiazepine concentrations and impairment in apprehended drivers. Pompidou Group, Strasbourg
105. Gunja N (2013) In the zzz zone: the effects of z drugs on human performance and driving. J Med Toxicol 9:163–171
106. Chesher GB, Dauncey H, Crawford J, Horn K (1996) The interaction between alcohol and Marijuana. Report to the Australian Federal Office of Road Safety. Department of Pharmacology, University of Sydney, Sydney
107. Sexton BF, Tunbridge RJ, Brook-Carter N, Jackson PG, Wright K, Stark MM, Engelhart K (2002) The influence of cannabis and alcohol on driving. TRL Report 543. TRL Limited, Crowthorne, England
108. Hindmarch I (1993) Psychiatry in Practice. Winter:23–25
109. O'Hanlon JF, Robbe HW, Vermeeren A, van Leeuwen C, Danjou PE (1998) Venlafaxine's effects on healthy volunteers' driving, psychomotor, and vigilance performance during 15-day fixed and incremental dosing regimens. J Clin Psychopharmacol 18:212–221
110. Bhatti JZ, Hindmarch I (1989) The effects of terfenadine with and without alcohol on an aspect of car driving performance. Clin Exp Allergy 19:609–611
111. Choi H, Baeck S, Kim E, Lee S, Jang M, Lee J (2009) Analysis of cannabis in oral fluid specimens by GC-MS with automatic SPE. Sci Justice 49(4):242–246
112. Tunbridge RJ, Keigan M, James FJ (2001) Recognising drug use and drug related impairment in drivers at the roadside. TRL report 464. TRL Ltd, Crowthorne, England
113. A Code of Practice (2017). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/607267/Fit_Code_of_Practice_1st_April_2017.pdf. Accessed 16 June 2019
114. Burns M, Adler E (1995) Study of a drug recognition expert (DRE) program, in T95: Proceedings of the 13th International Conference on Alcohol, Drugs, Traffic Safety, Adelaide, 1994
115. Lamping S (2007) Oral presentation. Royal Society of Medicine, London
116. Kidwell DA, Holland JC, Athanaselis S (1998) Testing for drugs of abuse in saliva and sweat. J Chromatogr B Biomed Sci Appl 713:111–135
117. Beck O, Leine K, Palmskog G, Franck J (2010) Amphetamines detected in exhaled breath from drug addicts: a new possible method for drugs-of-abuse testing. J Anal Toxicol 34(5):233–237
118. Tunbridge RJ, Rowe DJ (1999) Roadside identification of drug impaired drivers in Great Britain. 10th International Conference on Road safety in Europe, Malmo
119. FFLM (2018) Drug-driving competencies. https://fflm.ac.uk/wp-content/uploads/2018/02/Drug-Driving-Competencies-Dr-Will-Anderson-Feb-2018.pdf. Accessed 19 June 2019
120. DRUID (2012) Summary of Main DRUID Results. Driving Under the Influence of Drugs, Alcohol, and Medicines. TRB 91st Annual Meeting, Washington DC, January 2012. http://www.druid-project.eu/Druid/EN/Dissemination/downloads_and_links/2012_Washington_Brochure.pdf?__blob=publicationFile. Accessed 16 June 2019

121. O'Keefe M (2001) Drugs driving—standardized field sobriety tests: a survey of police surgeons in Strathclyde. J Clin Forensic Med 8:57–65
122. O'Keefe M (2013) An Investigation into Field Impairment Tests and an evaluation of their validity and reliability as clinical tests of drug-related impairment of driving ability. Thesis for the Degree of Doctor of Philosophy. University of Edinburgh, Edinburgh
123. Sexton BF, Tunbridge RJ, Brook-Carter N, Jackson PG, Wright K, Stark MM, Englehart K (2000) The influence of cannabis on driving. TRL Report 477, TRL Ltd for the Road Safety Division, DETR; and Sexton BF, Tunbridge RJ, Board A, Jackson PG, Wright K, Stark MM, Englehart K (2002) The influence of cannabis and alcohol on driving. TRL Report 543, TRL Ltd. for the Road Safety Division Department of Transport
124. Leetham v. D.P.P. Q.B. 488 (1998)
125. Angel v Chief Constable of South Yorkshire (2010) EWHC 883 (Admin)
126. Oliver JS, Seymour J, Wylie FM, Torrance H, Anderson RA (2006) Monitoring the effectiveness of UK Field Impairment Tests. Road Safety Research Report No. 63. Department for Transport, London
127. Odell MS (2002) Expert Opinion in DUID Cases Based on Interpretation and Observation and Toxicology in T2002 Proceedings of the 16th International Conference on Alcohol. Drugs and Traffic Safety, Montreal
128. Wolff K, Brimblecombe R, Forfar JC, Forrest AR, Gilvarry E et al (March 2013) Driving under the influence of drugs. Report from the Expert Panel on Drug Driving. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/167971/drug-driving-expert-panel-report.pdf. Accessed 15 June 2019
129. Risk Solutions (April 2017) Evaluation of the new drug driving legislation, one year after its introduction. A report for the Department of Transport. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/609852/drug-driving-evaluation-report.pdf. Accessed 16 June 2019
130. Johnston A, Wolff K, Agombar R, Clatworthy A, Cowan D et al (April 2017) Exert panel review of alternative biological matrices for use as an evidential sample for drug driving. Queen Mary, University of London The United Kingdom Department for Transport (Online), report no. RM4825 SB-2988. https://qmro.qmul.ac.uk/xmlui/handle/123456789/27903. Accessed 16 June 2019
131. Tunbridge R, Harrison R (2017) Fifty years of the breathalyser—where not for drink driving, PACTS. http://www.pacts.org.uk/wp-content/uploads/sites/2/129256_PACTS_50YearsBreathalyser_V5-1.pdf. Accessed 15 June 2019
132. Stark MM (2016) Chapter 9 Driving impairment: the main risk factors. In: Gall JAM, Payne-James JJ (eds) Current practice in forensic medicine, vol 2. Wiley, West Sussex

Index

A
Abdominal injuries, 211–212
Abrasions, 198, 207, 210
Abused children, 204, 205, 211, 212
Abusive head trauma (AHT), 197, 198, 213, 215–219, 230
Access, 24, 26, 38, 39, 41, 47–49
Accidental bruising, 201, 202
Accidental injuries, 212–214
Additional juvenile risk assessment, 319
Advisory Council on the Misuse of Drugs (ACMD), 441
AEP, *see* Attenuating energy projectiles
Agents, riot control, 239
AHT, *see* Abusive head trauma
Alcohol, 500–502
  effects of, 480
  and fitness for interview, 407–408
  influence of, 475, 481
  intoxication, 435, 452–456
  result, 480
  withdrawal, 407, 408, 444, 456–458
ALTE, *see* Apparent life threatening events
Amnesia, retrograde, 412
Amphetamine-type stimulants (ATS), 440–441
Anal swabs, 120, 122
Anatomical location, 163–164, 181, 183, 185
Apparent life threatening events (ALTE), 217, 225
Appendix, 324, 325, 335–337
Applications, 294, 299, 300
  human probe, 282
  probe-mode, 290, 295
Asphyxia, 176–178
Asphyxiation, 481, 484–486
Assailant, 167–169, 178, 179, 181, 182
Assessment and documentation, 144, 145, 400, 401, 404–406
Association of Chief Police Officers of England, 265
Asthma, 320–321
Asystole, 294, 296, 298, 300, 301
Attack, 412, 413
Attenuating energy projectiles (AEP), 258, 273–274
ATS, *see* Amphetamine-type stimulants

B
BAC, *see* Blood alcohol concentration
BBVs, *see* Blood borne viruses
Bite marks, 163, 180–189
  analysis, 180, 185–188
  evidence, 187
  plane, 185
  in skin, 180, 182
Biting, 163, 180–183
Blood, 159–161, 164, 166, 177
Blood alcohol concentration (BAC), 425, 449, 452, 453, 458
Blood borne viruses (BBVs), 344–348
Body, 144, 155, 170, 174, 176, 177, 181
Body chart, 148, 158
Body worn cameras (BWC), 257, 258
Breath test, 505, 507–508
  hospital procedure, 508–509
  police station procedure, 509–510
Bruises, 200–205, 210, 216, 230
Bruising, 155, 158–164, 169, 178, 180–182, 189, 198, 200, 202–205, 212, 219, 261–263, 266, 274
Bullet, 171, 173, 174
Buprenorphine, 431, 433–434, 458
Burns, 198, 207–210
BWC, *see* Body worn cameras

© Springer Nature Switzerland AG 2020
M. M. Stark (ed.), *Clinical Forensic Medicine*,
https://doi.org/10.1007/978-3-030-29462-5

WIT.0043.0086.0540

C
Camera, 153, 154, 184
Cannabis, 422, 423, 442, 518–519
Cardiac deaths, sudden, 476
Cardiac rhythms, 295, 300
Carers, 34, 35, 45, 196, 219, 220, 223–226
Carfentanyl, 250
Cases, 284–286, 288, 289, 292, 295, 297–302
  index, 376, 381
  new, 357, 377
Cause, 283, 288–290, 293, 301, 303
CEW, *see* Conducted electrical device
Chemical Weapons Convention (CWC), 247, 248
Chicken pox, 361–365, 388
Chief police officers, 265
Child/children, 33, 34, 36, 44, 45, 58, 160, 164, 179, 181, 182, 195–198, 200, 201, 203, 205, 207–210, 212–217, 219, 220, 223–227, 229
  condition, 220
  interaction, 219, 220
  physical abuse, 198
  young, 205, 230
Child abuse, 196, 197, 199, 205, 207, 209, 213–215, 219, 223, 227, 230
  detecting, 197
Chloroacetophenone (CN), 240, 242–244
Chlorobenzalmalononitrile (CS), 240–244, 246, 247
  exposure, 244, 246
Chronic hepatitis, 349, 354, 356
Clinical forensic medicine practice, 16, 17
Clonidine, 497
Clothing, 146, 147, 156, 172, 174, 181
CN, *see* Chloroacetophenone
Cocaine, 284, 303, 304, 520–521
Complainants and suspects, 68, 97, 98
Conducted electrical device (CEW)
  activations, 297, 298
  discharge, 289, 298, 302, 304
  exposure, 289, 292, 293, 295–296, 304, 305
  probe wounds, 287
  use, 284, 285, 292
Consent, appropriate, 33
Contact wounds, 172–174
Contaminated bedding, 346, 353, 356
Contemporary clinical forensic medicine, 11–16
Corneal abrasion, 243–245
Countries, 421–423, 425
Covert video surveillance (CVS), 227–230
Crimes, 394, 396–398, 403
CS, *see* Chlorobenzalmalononitrile
Cuffs, 266, 271
Custodial deaths, 470, 481
Custody officers, 314, 315, 327
Custody setting, 314, 321, 322, 327, 335
Custody staff, 313–318, 320, 321, 325, 326, 330, 472, 475, 490
CVS, *see* Covert video surveillance
CWC, *see* Chemical Weapons Convention

D
Dart, 288, 292, 296, 297
Deaths, 263–265, 269–271, 275, 422, 423, 435, 437, 439–441, 445, 447, 453, 455, 457
  restraint-related, 490
  sudden, 476–482
Defibrillation, 283, 298, 299
Degree, 161, 181–184
Dementia, 413–414
Dentition, 181, 183, 188, 189
Dermatitis, 244, 246, 247
Detained overnight, 313
Detained person (DP), 314, 321, 336
Detainees, 26, 27, 36, 39, 40, 50, 56, 425–429, 436, 447, 455–458
  custody, 317
  pregnant, 330
  terrorist, 335
Deterioration, 298, 301
Development, 476–478
Diabetes, 498
Diagnostic Imaging of Child Abuse by Kleinman, 213
Disclosure, 31, 38–45, 52, 54
  confidential information, 38, 41, 44
Diseases, 476–478, 488
  tropical, 385–387
Disorder, mental, 401, 402
Distortion, 183, 189
Doctor's duty, 28, 38
Documentation, 144, 145, 147, 175, 176, 179, 189
  of injuries, 145, 147
Dopamine, 431
Dose, 429, 433–435, 438, 446, 452
  high, 434, 435, 443, 444
DP, *see* Detained person
Driver and Vehicle Licensing Agency (DVLA), 497
Drink-drive accident, 500
Drink-drive offenders, 505–506
Drivers, 496

WIT.0043.0086.0541

alcohol, 500–502
with angina, 497
drink-drive offenders, 505–506
drugs and driving, 517–518
hypertension, 497
myocardial infarction, 497
Drugs, 241, 250, 317, 324, 331–333
detainees drug history, 316
recreational, 438, 439
Dysrhythmias, 497

E
Ears, child's, 224
Effect of physical illnesses on fitness for interview, 410
Electrocution, 281, 294, 299, 300, 303, 304
Electrodes, 281, 283, 284
Emotional abuse, 196, 198
England, 350, 369, 370, 377–378, 421–424, 428
Entrance wounds, 172–174
Epilepsy, 405, 410–411, 498
Escape, 290
Evidence, 30, 41, 50–57
in court, 41, 54
Excessive force, 264, 265
Excited delirium (ExDS), 488, 491
Expert, 49–52
evidence, 50, 51, 54
witness, 51, 54, 55
Expertise, 49, 50, 52, 55
Exposure
hours post, 286, 287, 291
secondary, 243, 250
Eye disorders, 499

F
Fabricated or Induced Illness (FII), 219–225, 227
Fabrication, 219, 220, 223, 224
Faculty of Clinical Forensic Medicine, 18
Faculty of Forensic and Legal Medicine (FFLM), 15, 16, 18, 24, 33, 36, 37, 50, 51
Father, 210, 211, 220, 229
Femoral fractures, 213
FFLM, *see* Faculty of Forensic and Legal Medicine
FII, *see* Fabricated or Induced Illness
Findings, 84–86, 88, 89, 91–93, 118, 119
Firearm injuries, 171
Fitness, 3
assessment of, 404, 405
detainee's, 404
person's, 406
Fixed link handcuffs, 266
FME, *see* Forensic medical examiner
Force
impact, 273
peak, 273
tactics, 257
Forensic and legal medicine, 16
Forensic medical examiner (FME), 56, 57
Forensic medicine, 2, 4, 6, 11, 16–18
principles of, 6–9, 11
specialty of clinical, 2
Forensic pathology, 1, 11, 16, 17
Forensic physicians, 1, 2, 15

G
Global Clinical Forensic Medicine, 16–19
Gloves, 345, 346, 366–369, 385
Guardian, 33, 34, 46
Guilty, 394–395

H
HCV, *see* Hepatitis C virus
Health and Care Professions Council (HCPC), 25, 28
Health care professionals (HCPs), 23, 24, 26, 34, 35, 38, 39, 41, 51, 421, 424, 425, 427–429, 436, 446, 447, 455, 456, 458, 508
Health records, access to, 39, 48–49
Heart, 283, 294, 296, 297, 300–304
Hepatitis C virus (HCV), 347, 354–356, 359, 373, 374, 383, 384, 388
High-Risk offender scheme, 506
Hospital, 426, 434, 436, 455, 457, 458
assessment, 324
Hours, 424, 425, 428, 433, 437, 438, 441, 442, 449, 451, 452, 457
Human bite marks, 180, 188, 189
in skin, 180
Hymeneal rim, 80, 82, 84, 85, 87
Hypertension, 497

I
ICDs, *see* Implantable cardioverter defibrillators
ICO, *see* Information Commissioner's Office
IDDs, *see* Intellectual and Developmental Disabilities

WIT.0043.0086.0542

IEC, *see* International Electrotechnical Commission
Illicit drugs, 316, 326, 332
Illness, child's, 220, 227
Image and performance enhancing drugs (IPEDs), 442–443
Images, 153, 154, 158, 188, 190
Implantable cardioverter defibrillators (ICDs), 294, 302
In custody deaths, 474
Independent Advisory Panel on Deaths in Custody, 473
Independent Office of Police Conduct (IOPC), 273, 470, 471, 473, 490, 491
Independent Police Complaints Commission (IPCC), 470, 473
Individual police forces, 260
Individual's neck structures, 263
Induced VF, 294, 295, 298, 299, 301, 304
Induction, 294, 295, 297, 298, 301
Infant children, 216
Infants and young children, 200
Infectious diseases, 344, 347, 361
Information, 316, 317, 328
  protected, 41
  share, 47–48
Information Commissioner's Office (ICO), 48
Injecting drug users, 368–371, 384
Injuries, 474, 479, 480, 482–484, 486
  abusive abdominal, 212
  baton, 262
  bite mark, 180, 189
  blunt contact, 155, 156
  blunt force, 155, 157, 167
  bowel, 211, 212
  crush, 217
  defense, 169, 174–175
  diffuse axonal, 218
  intraoral, 204, 205
  mixed type, 155, 157, 167
  patterned, 188, 189
  presenting, 196
  sharp, 156, 157
  sharp force, 157, 159, 174
  spinal, 214, 215, 219
  visceral, 197, 198, 212
  visible, 143, 144, 156, 182
Intellectual and Developmental Disabilities (IDDs), 328–329
Interests, best, 28, 32, 33, 37, 45, 47
International Electrotechnical Commission (IEC), 282, 296, 300
Interview style, 395
Interviewer, 394, 408
Investigation of Deaths in Custody, 472–475
IOPC, *see* Independent Office of Police Conduct
IPCC, *see* Independent Police Complaints Commission
IPEDs, *see* Image and performance enhancing drugs
Irrigation, 244–246

L
Lacerations, 86–94, 118, 198, 201, 205, 207, 210, 211
Law enforcement personnel, 275
Legal medicine specialty, 19
License, 496
Location, 84–86, 105, 128, 129
Lubricants, 99, 105, 113, 119–122

M
Magnetic resonance imaging (MRI), 213, 218, 219
Management, 25, 41, 48, 49
Margins, 166, 167, 169, 172–174
Medication
  administration of, 317–318
  detainee's, 317
Memory, 398, 399, 407, 411–413
Mental health problems, 314, 325
Mental illness/medication/injuries, 284, 285, 292, 316
Metal handcuffs, 265
Methadone, 429–431, 433, 451, 458, 459
Methamphetamine, 299, 303, 304, 520–521
Methyldopa, 497
Methyl isobutyl ketone (MIBK), 240, 241, 246, 247
Minutes, 284, 295–301, 303, 304
  subject's alertness, 299
Mother, 202, 220, 229
MRI, *see* Magnetic resonance imaging
Muzzle, 171–174

N
Naloxone, 433, 434
National Deaths in Custody Program (NDICP), 470
Neck, 480–489
  individual's, 263, 264
  injuries, 265
  pressure, 483
Nerve agents, toxic, 250
Nitrogen, 241
Non-abused children, 203

Non-lethal force, 260
Notes, 40, 48, 54, 55, 57
Novel psychoactive substances (NPS), 423, 430, 446–447
Number, 258, 260, 268, 269, 274
Nurses, 23–26, 28, 36, 50

O
Objects, 88, 89, 95, 96, 106, 155, 157, 164–166
  impacting, 155, 156, 162, 165, 166
OC, *see* Oleum capsaicin
Odontologist, 184–187
Officers, 289, 290, 292, 300, 304
Oleum capsaicin (OC), 240–244, 247
Opiate withdrawal, 430, 432, 433, 436
Opiates, 519–520
Opinion, 39, 50–54
Opiate substitution treatment (OST), 429, 458

P
PACE, *see* Police and Criminal Evidence Act
Pacemaker patients, 301–303
Pacemakers, 301–303
Pain, 153, 155, 156, 158, 175, 178, 181
Parent, 33, 34
Parental responsibility, 33–35, 58
Patient confidentiality, 47–48, 57
Patients, 144–147, 154, 162, 190, 285, 288, 294, 298, 304
Patient's consent, 31, 37, 38, 40, 41, 43
Patterned bruising, 162
Peak, 281, 282
Pelargonic acid vanillylamide (PAVA), 240, 241
Pellets, 171–173
People who inject drugs (PWID), 350–353, 357, 360, 368, 369, 371, 384
PEP, *see* Post-exposure prophylaxis
Pepper spray exposure, 247
Person, 65, 67, 70–72, 76, 96, 99, 101
  young, 34, 44
Personal confidential data, 46, 47
  access to, 47
Personal information, 41, 42, 44
Personality disorders, 395, 409, 410
Phases, 474–475
Photographic distortion, 183–186
Physical child abuse, 196, 197, 229
Physical illnesses, 399, 410
Physical restraining devices, 265–267
Physicians, 198, 199, 201, 205, 216, 220
  investigating, 198, 199
PIRC, *see* Police Investigations and Review Commissioner
Plastic wrist restraints/body cuffs, 258
Pneumothorax, 289
Police, 284, 290, 292, 299
Police and Criminal Evidence Act (PACE), 393, 395, 400, 402, 403, 409
Police custody, 313–315, 317, 319, 324, 325, 329, 330, 470, 471, 475–478, 488–490
  deaths in, 469–472, 489, 491
  environment, 315
  following, 471
  process, 474–475
Police detainees, 314
Police detention, 469
Police forces, 257, 260, 262, 264, 402
Police interview, 394–395, 410
Police Investigations and Review Commissioner (PIRC), 473
Police involvement, 470, 474
Police officers/staff, 256–258, 260, 268, 273, 344, 345, 385–387, 394, 395, 397, 400, 402, 409, 470, 472, 474, 478, 485, 486, 489, 491
  mounted, 260
  senior, 259
Police Ombudsman of Northern Ireland (PONI), 473
Police risk assessment, 321
Police station, 470, 474, 479, 481, 486, 489
Police surgeons, 1, 2, 13, 15
Police use of force, 257
PONI, *see* Police Ombudsman of Northern Ireland
Posterior fourchette, 78, 79, 85–87, 90, 91, 112, 118
Post-exposure prophylaxis (PEP), 360, 361, 388
Postmortem examinations, 472, 473, 478
Posture distortion, 183, 184
Prazosin, 497
Pressure, 482–487
Probes, 280, 283, 286, 288–290, 292, 296–299, 302
Prone position, 269, 275
Psychiatric illnesses and personality disorders, 409
Psychological dependence, 434–437, 440, 441
Psychosis, 435, 439, 442
Pulses, 282, 283, 298–300, 302
Puncture wounds, 168, 169, 173
PWID, *see* People who inject drugs

WIT.0043.0086.0544

Q
Quantity, 96, 103, 104, 112, 114–116, 123

R
RCIADIC, *see* Royal Commission into Aboriginal Deaths in Custody
Recognition, 1, 17, 19
Records, 39–41, 46–48, 56
  electronic, 46, 48
Reduction, 285, 288
Release, 40, 43
  information, 41, 43
Report, 27, 43, 47, 49, 50
Reserpine, 497
Restraint, 334, 469, 472, 483–485, 490
  asphyxia, 484–486
  positions, 269–271
  situations, 261
Retinal haemorrhages (RHs), 216, 217
Risk assessment, 314, 316, 321, 322, 325, 329, 334
  pre-release, 328
  screening, 314
Risk, increased, 294, 304
Roadside screening tests, 526
Road Traffic Act 1988, 496, 506
Road traffic death, 495
  prevention, 495
  rate, 495
Road traffic legislation, 502–503
Royal Commission into Aboriginal Deaths in Custody (RCIADIC), 470

S
Sampling, 80, 108–110, 112, 113, 119–122, 125
SARS, *see* Severe acute respiratory syndrome
SBG, *see* Spit and Bite Guard
Scaled photograph, 180, 186–189
Seconds, 293–301
Sedative-hypnotics, 521–522
Self-harm, 169–171, 320, 326–328
Self-infliction, 170
Severe acute respiratory syndrome (SARS), 343, 380, 381
Sexual assault cases, 97, 98, 102, 110, 119
Sexual assault complainants, 66, 89, 128, 129
Sexual assault services, 64, 65, 71
Sexual assault units, 69, 70, 124, 129, 130
Sexual intercourse, 89, 91, 92, 108
Shingles, 362–365
Shocks, 298, 302
Signs of child physical abuse, 198
Sites of injury, 147, 159, 166
Skeletal injuries, 198, 212, 214
  spinal, 213, 214
Skin, 204, 205, 207, 210
  overlying, 163, 181
  surface, 156, 157, 159, 161, 173, 174, 182
  wound, 169
Spermatozoa, 77, 98, 101, 110–112, 114, 116, 117, 120, 122, 124
Spit and Bite Guard (SBG), 256, 268
Statement, professional witness, 40, 50
Stimulants, 285, 303, 304
Strangulation, 162, 177–179
Subject, 469–472, 491
Subject injuries, 284
Substance misuse, 427–429
Suicidal deaths in custody, 486
Suspect, 145, 146, 189, 190, 279, 284, 285, 288, 289
Suspect biter, 180, 186–188
Suspected child, 195, 229
Swabs, endocervical, 112, 113, 116
Swine, 295–297, 301
  heart, 297
  studies, 293, 297, 298
Symptoms, 245, 246, 249, 250
  exposure, 245

T
Table, 146, 147, 153, 155–157, 160, 164, 170, 425, 426, 430–432, 434–440, 446, 447, 451–453, 472, 474, 488, 490
TARP, *see* Total appendage restraint position
TASER probe, 288
Teeth, 163, 178, 180–182, 187–189
Test, prudent patient, 30
Time, 257, 260, 261, 268–270
Time since intercourse (TSI), 98, 115, 116
Tissues, 157–159, 161, 166, 167, 172, 173, 181–183
Torture, 143, 144, 146, 175–176
Total appendage restraint position (TARP), 270
Toxicity, ocular, 244–245, 250
Treatment options, 30–32
TSI, *see* Time since intercourse

U
UAC, *see* Urine alcohol concentration
UK police officers, 260
United Nation, 495
Urine alcohol concentration (UAC), 425
Urine samples, 74, 99, 123–125
US child abuse mortality figures, 197

V
Vaccine, doses of, 352, 353, 362, 385
Vaginal penetration, 76, 85, 88, 89, 91, 98, 112, 115, 124
Vaginal swabs, 106, 107, 114–116, 122, 124
  high, 99, 113, 115
Valid consent, 29, 33
VF induction risk estimates for humans, 297
Violence, domestic, 179–180
Volatile substance, 290, 292
Vulnerabilities, detainee's, 414
Vulnerable persons, 401–403

W
Wales, 470–473
Webster, 294, 295
Withdrawal, 405, 408, 425, 427, 430, 432–435, 444, 448, 455–459
  symptoms, 430, 432, 435, 441, 442, 444, 448, 456
Witness, 51, 52, 54–57
Wound margins, 157, 172–174
Wrists, restrained, 266

X
X26, 281–283, 294, 300, 302, 303

Y
Younger age groups, 476–478

Z
Z-drugs, 435

Faculty of Forensic and Legal Medicine

Reviewed Publications

Sexual Assault – A Forensic Clinician's Practice Guide 2010

Dr Catherine White

ISBN 978-0-9564737-0-7
Price £150

The author states that the aim of this book is to provide a practical guide for clinicians dealing with sexual assault cases with easily accessible information so that this book can be used during the examination process. This aim is definitely achieved but this book is so much more!

Dr Catherine White is currently the Clinical Director of the St Mary's Sexual Assault Referral Centre (SARC) in Manchester, UK. This was the first SARC in the UK and is still setting the gold standard for other SARCs to aim for.

The book is a high quality loose leafed folder so that updates or local policies and procedures can easily be added. The text is beautifully laid out with tables and appropriate illustrations and to further support the text there are illustrative case studies, key practice points, essential references, and ideas for further reading. There is a section for useful numbers at the back of the book with space for the clinician's personal area numbers. There are also a number of appendices which include examples of pro formas from St Mary's SARC and relevant Faculty of Forensic and Legal Medicine (FFLM) documentation.

There are twenty chapters covering such topics as the basic legislation with regard to sexual offences in the UK – this small section could easily be adapted for other jurisdictions internationally; how to deal with the initial request to attend a complainant of sexual assault; the initial assessment with comprehensive detail on capacity, consent and confidentiality; specific history taking in relation to sexual assault cases; and the examination including an excellent section on anatomy with illustrative line diagrams. Other relevant topics in this field such as emergency contraception, post-exposure prophylaxis, sexually transmitted infection, and the psychological effects of sexual assault are well covered.

The chapters on injuries, forensic samples, alcohol and drugs and in relation to writing statements and attending court will be hugely relevant to all forensic physicians not only those involved in sexual assault. The last chapter is entitled supporting clinicians and suggests support structures such as peer review, appraisals, training, mentorship, supervision, and regular team liaison meetings may result in better recruitment, retention and improved clinical standards. These issues are important to all healthcare professionals working in forensic medicine.

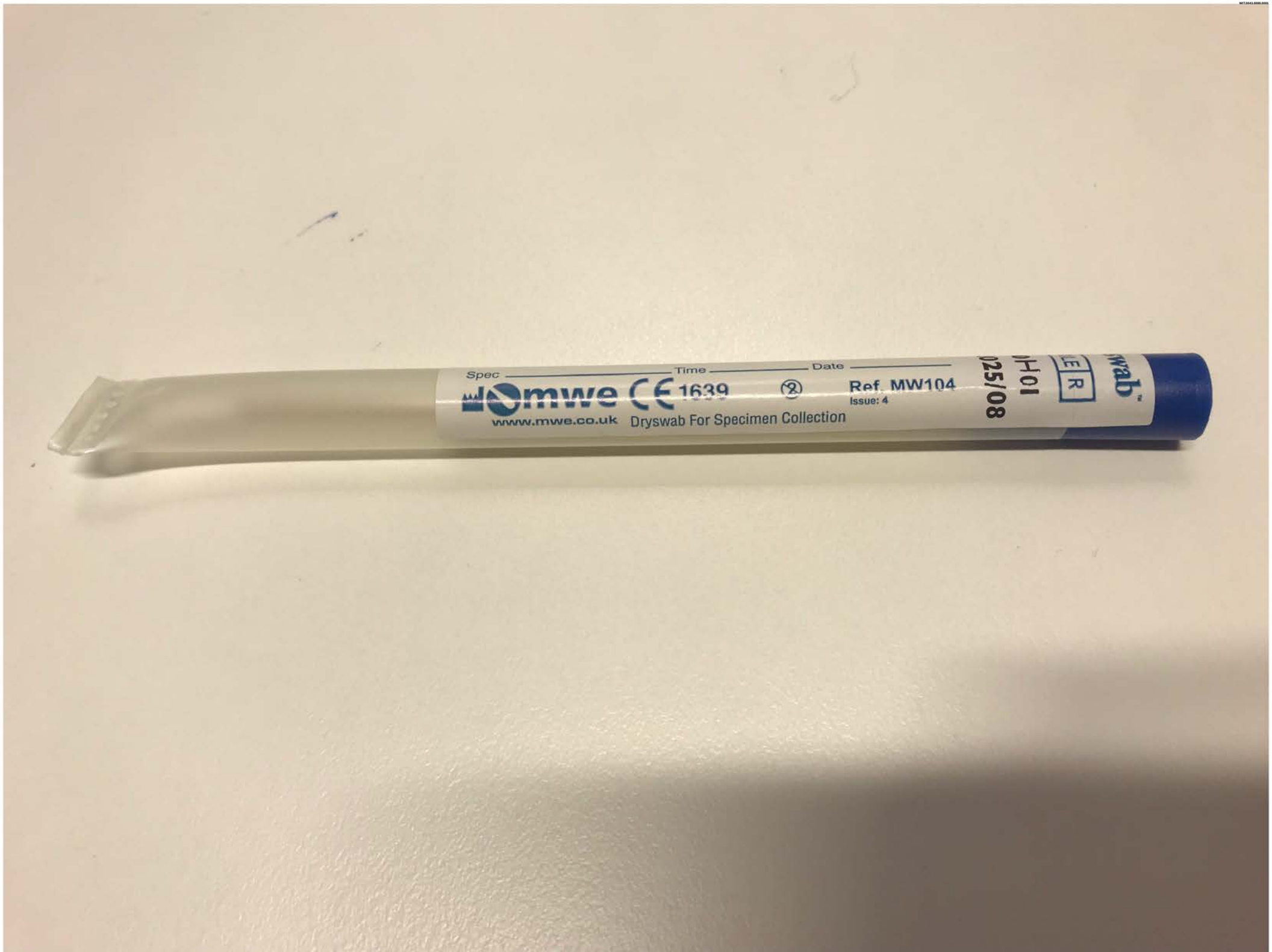
I found the section on child examination very useful even though I am not involved in child sexual abuse examinations. This chapter contains vital information on parental responsibility and safeguarding issues. It is essential that all clinicians involved in the care of children are fully aware of recent developments in this field.

In summary this book is essential reading for all those clinicians involved in sexual assault work but it will also be of interest to other healthcare professionals working in the clinical forensic field. One knows when a true expert has written a book because their knowledge and experience ensure that the content is unambiguous and authoritative.

The author Dr Catherine White has been at the forefront of her field for some years now and it is clear she has a wealth of experience, has learnt from this experience, reflected and refined her practice, and is now using her knowledge, skills and attributes to educate forensic clinicians of the future - a true master in her field.

Margaret Stark
Academic Dean, FFLM

© Faculty of Forensic & Legal Medicine, September 2010
info@fflm.ac.uk


Spec
Time
Date
mwe
CE 1639
Ref. MW104
Issue: 4
www.mwe.co.uk
Dryswab For Specimen Collection
025/08

Name
D.O.B. Hosp. No. Ward
Spec Time Date
mwe medical wire
www.mwe.co.uk
CE 0088
Ref. MW104
Dryswab For Specimen Collection
STERILE
M F

Reward Hospitality

ABN 40 010 183 669

Reward Supply Co. Pty Ltd
1 Arthur Dixon Court, Yatala QLD 4207
P.O. Box 6303 Yatala QLD 4207
Customer Service Phone: [redacted]
Accounts Phone:

QUOTATION

** Reprint **

Quote Date:	31 Aug 22
Quote No:	99354459
Valid Until:	14 Sep 22

Quote
GOLD COAST UNIVERSITY HOSPITAL
MAIN STORE
QUEENSLAND HEALTH
1 HOSPITAL BOULEVARD
SOUTHPORT QLD 4215

Customer Code	Customer Reference	Branch
99QH4604	BAGS	YATALA
Sales Contact		Sales Order No
BRAD DAVIES		99354459

Item Code	Item Description	Ordered	Shipped	B/Ord	UOM	Item Price	Total (ex)	Total (inc)
3403310	PAPER SOS BAG BROWN NO.25 540X355X165MM 100/CTN	1.00	1.00	0.00	CTN	64.65	64.65	71.12
	The above product is a buy in							
	and is not returnable							
3403306	PAPER SOS BAG BROWN NO.16 250/CTN 380X240X120MM	1.00	1.00	0.00	CTN	47.93	47.93	52.72
	.							
Charges	Shipping	1.00	1.00	0.00		9.09	9.09	10.00

Quotation Acceptance:

Name: _____
(please print full name clearly)

Position: _____

Signed: _____ Date: _____

Terms and Conditions:

This quotation is for the product only. Unless otherwise stated, delivery, unpacking & installation may incur additional charges. Once your order is confirmed it cannot be cancelled or returned for credit unless authorised by a Reward Hospitality representative. BUY IN items which are returned for credit will incur a 20% restocking fee plus associated freight costs. Please ensure you refer to the manufacturers specifications for installation, power supply, warranty & maintenance information. To place an order for the items quoted above, please confirm your acceptance of our terms & conditions by returning an official purchase order or by completing the relevant fields to the left & faxing to 07 3441 5803 or emailing yatala@rewardh.com.au.

Total Ex	$121.67
GST	$12.17
Total	$133.84

EFT DETAILS:
[redacted]

TAMPER EVIDENT®

HIGHLIGHT UNAUTHORISED ACCESS

Unit 43, 296 Bay Road, Cheltenham, Vic, 3192 Tel: [redacted] Fax: [redacted] ABN: 91 105 719 964

www.TamperEvident.com.au | Find us on Facebook

Tax Invoice:SI-102476

Delivery Address
Nathan Gould
Clinical Forensic Medicine Unit
Ground Floor Rear
9 Bay Street
Southport
QLD
4215
[redacted]

Billing Address
Sharon Hargreaves
QLD Health: Clinical & Statewide PS
Locked Mail Bag 7004
Chermside Centre
QLD
4032
[redacted]

Invoice Date:	16 Jan 2013
Your Ref:	4505602896
Invoice No:	SI-102476
Invoice Total:	$272.80
Due Date:	15 Feb 2013

Delivery Method: Australia Post Express **Expected Delivery Date**: 18 Jan 2013

Qty	Item name	SKU	Item net	Item tax	Total net
1	A5 Tamper Evident Security Bag (Box of 500) - Film: Clear Co-Ex - Sequential Numbering: 10 Digit Unique Numbering	BAG_TEB260500	$225.0000	$22.5000 (10%)	$225.00
1.00	Australia Post Express		$23.0000	$2.3000 (10%)	$23.00
			Subtotal		**$248.00**
			Taxable @ 10%		$24.80
			Total		**$272.80**
			Paid to date		$0.00

Call 1300 726 711 to pay by Visa or Mastercard
[redacted]
Cheques payable to: Tamper Evident Pty Ltd
Remittance Advice to: [redacted]

Document No
[redacted]

Sent to Finance 18/1/13

Goods
RECEIVED
18 JAN 2013
BY: Debbie

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit SER
Ph: [redacted]
Fax

Packing Note #: [redacted]

Date: 16 Jan 2013

Customer: Sharon Hargreaves
Company: QLD Health: Clinical & Statewide PS
You Reference: [redacted]
Invoice to:

Sharon Hargreaves
QLD Health: Clinical & Statewide PS
Locked Mail Bag 7004
Chermside Centre
QLD
4032

Tamper Evident

Delivery To
Nathan Gould
Clinical Forensic Medicine Unit
Ground Floor Rear
9 Bay Street
Southport
QLD
4215
[redacted]

Delivery Method: Australia Post Express

Qty	SKU	Item name	Office Use:Old Code	Shipped	This shipment	To follow
1	BAG_TEB260500	A5 Tamper Evident Security Bag (Box of 500) - Film: Clear Co-Ex - Sequential Numbering: 10 Digit Unique Numbering	TEB26		1	
1.00		Australia Post Express				

Tamper Evident
www.tamperevident.com.au
Please let us know if any of your details are incorrect so that we can update our records

RECEIVED
18 JAN 2013
BY:.....

Debbie Size - Tamper Evident bags

From: Robyn Evans
To: Debbie Size
Date: Tuesday, 20 November 2012 11:16 AM
Subject: Tamper Evident bags

HI Deb
Tamper Evident
Vendor No [redacted]
Ph [redacted]

cheers
Robyn

The Royal College of Pathologists of Australasia
ABN 52 000 173 231

Durham Hall 207 Albion Street Surry Hills NSW 2010 Australia
Telephone [redacted] Facsimile [redacted]

RCPA
The Royal College of Pathologists of Australasia

Guideline

Subject:	**Cleaning/Decontamination of Forensic Examination Suites**
Approval Date:	November 2017, March 2022
Review Date:	March 2026
Reviewed by:	Faculty of Clinical Forensic Medicine Committee
Number:	5/2017

Introduction

This Guideline lays out a set of recommendations for the cleaning and decontamination of forensic examination suites for the purposes of infection control and to minimise DNA contamination of forensic specimens. It is intended for use by forensic physicians involved in setting up or supervising the use of these facilities and any other staff members responsible for maintaining them.

The recommendations in this document should be considered as guidelines and all the details set out in it are not necessarily mandatory. Consultation with other involved parties such as building maintenance, facilities management, hospital infection control and cleaning services is highly recommended. These guidelines should be used to document procedures for each facility with documentation that these procedures have been followed being auditable.

Specialised facilities (suites) used for forensic evidence collection should be cleaned for both infection control purposes and for DNA decontamination. This Guideline provides a framework for both minimum level and best practice in cleaning, decontamination and prevention of contamination of forensic examination suites. The guideline provides protection and reassurance for all participants involved in a forensic examination including the examiner and the person undergoing the examination. It is important to:

- Demonstrate that processes to limit/prevent contamination are part of the forensic procedure; and
- To reassure the public/judicial system that the risk of contamination is being managed/minimised.

1. Principles

- It is not possible to totally prevent DNA contamination, but forensic services need procedures which minimise the risk of contamination and enhance the likelihood that contamination is detected when it occurs.
- It is important to maintain an environment that is welcoming or comfortable for the patient and not frightening or overly 'clinical'.
- Cleaning/decontamination procedures need to be safe and effective.
- Appropriate procedures for the taking of forensic samples which minimise the risk of contamination need to be adhered to.
- Offenders and victims should not be examined in the same suite.

2. Minimum Cleaning Protocol for Forensic Examination Suites

- All surfaces, including the floor should be cleaned regularly (at least after every use) with a non-corrosive detergent. The minimum interval between cleanings should be

determined in consultation with a forensic laboratory and may be dependent on environmental testing.

- Any window ledges or other surfaces that could collect dust should be included in the regular cleaning.
- Cleaning should include the medical examination room, the bathroom and toilet within the facility and the utility room as well as associated interview and waiting rooms.
- Within the medical room, the floor, examination couch, bench tops, writing desk, sink and taps need to be cleaned after every use of the suite.
- Gloves should be worn for all cleaning duties; consideration should be given to the use of gowns and overshoes to minimise the risk of DNA contamination by the cleaner.
- Cleaning of hard surfaces needs to be undertaken with a hospital grade detergent and disposable wipes.
- A register of completed cleaning tasks should be maintained.
- There should be a clear cleaning protocol for the facility cleaners. This should also include an audit schedule and should comply with any existing institutional cleaning policy.

3. Minimum Decontamination Protocol for Forensic Examination Suites

- The suite needs to be decontaminated (cleaned) after an examination to minimise DNA contamination during a subsequent examination.
- Decontamination entails the use of solutions that actively decontaminate DNA – e.g. 0.5% sodium hypochlorite (bleach) which is commonly available under a number of trade names. The solution should be freshly made up before use and must be disposed of afterwards in accordance with any applicable safe handling policies. Users should be aware of the potential for clothing damage due to the corrosive and bleaching action of hypochlorite and should wear gowns or other appropriate protective clothing when using this substance. Standard cleaning detergents do not decontaminate DNA. Most decontaminating solutions need to be left on surfaces for 3-5 minutes. Decontaminant solutions need to be wiped off using a dry white paper towel or dry cloth wipe or may be followed by wiping with 70% ethanol wipes.
- There are some detergent/DNA decontaminant combinations that could be used – e.g. Virachlor™, Actichlor™. These substances enable combined sterilization/DNA decontamination to occur.
- All work surfaces, the examination couch, examination lights, trolleys, bench tops, writing desk, sink and taps need to be decontaminated before each use of the suite.
- In general, non-disposable items such as scissors and forceps should be subjected to hospital grade sterilizing by autoclave. If this is not possible then hypochlorite solution or alcohol based wipes (for items likely to be damaged by bleach) could be used but there no guarantee that this will remove all possible DNA.
- A register of completed decontamination should be maintained. This should record the date and time of the procedure and identify the person doing the work
- Decontamination should be undertaken by cleaning staff who are trained in the procedure (it is not prudent to rely upon medical staff to undertake decontamination).
- Forensic procedures should not be undertaken if the suite has not been decontaminated since the last examination.

4. Operational Measures to Reduce the Risk of Contamination

- The suite should only be used for forensic medical purposes and not for other purposes such as general medical consultations

- The suite should provide appropriate space and equipment to undertake a forensic examination.
- There should be specific evidence kits for the collection of forensic evidence.
- Evidence kits should be stored securely and sealed to prevent interference. Unused contents of open kits should be discarded.
- Where possible other items such as speculums, linen, pillow covers etc used during the procedure should be single use or disposable.
- Plastic wrap should be used to protect difficult to decontaminate items – e.g. colposcope handles. Fresh wrap needs to be applied before each examination.
- Fresh linen needs to be placed on the examination couch immediately prior to each examination.
- A system to ensure that soiled linen is removed and fresh linen applied needs to be in place.
- There must be a system for appropriate disposal of clinical and other waste and for dealing with blood or body fluid spills. This should include notification to the cleaning staff that there has been a spillage so that the affected area can be included in the cleaning procedure. Spillages during a procedure associated with the person being examined should be soaked up with paper towels or similar items but should not necessarily prevent the remainder of the examination from proceeding.
- There must be a system to ensure any used or opened toiletries etc. are removed from the bathroom.
- Powder-free non-latex gloves need to be easily available.
- Changing gloves is an important mechanism to avoid contamination. Separate new clean gloves should be used for:
    - Decontamination/cleaning
    - Setting up equipment and items for the examination
    - Body examination
    - Genital examination
    - Collection of specimens that may leave residue on gloves
    - Collection of clothing
    - Processing of specimens including labelling and sealing samples
    - Selecting more equipment from storage
    - Using examination instruments and cameras
    - It is prudent to postpone photography until after the forensic specimens have been collected in order to avoid the risks of contamination from contact with cameras etc. that are not easily decontaminated.
- All forensic examiners should be trained in evidence collection and should adhere to appropriate swab collection techniques to avoid cross contamination.
- The use of disposable pens and pencils is preferred.
- Disposable scissors or other instruments should be used where possible.
- When using an examination area that is not a dedicated forensic suite, consideration should be given to the use of sterile plastic drapes over trolleys/work benches to protect the placement of forensic swabs etc. Appropriate decontamination is preferable).
- When using an examination area that is not a dedicated forensic suite, consideration should be given to the use of drop sheets to place over other work surfaces.
- If a forensic examiner is required to examine another person immediately following a prior forensic examination, the examiner should wash hands thoroughly and utilise a gown or surgical scrubs and double gloving techniques for the subsequent examination.
- Disposable curtains are preferred. If this is not practicable, then curtains should be washed at least every six months or when soiled. There should be adequate space between curtains and work surfaces to minimise the risk of contamination.

- The forensic examination suite should be kept locked and preferably sealed when not in use.
- Carpet and non-wipe able fabric covered chairs should not be used in the forensic suite.
- Kits or modules should be developed for use by the examiner which are DNA free. Contamination reduction tools such as bench covers, examination couch covers, patient and examiner gowns that have been decontaminated with ethylene oxide should be used whenever possible.

5. Measures to Evaluate the Risk of Contamination

- A log book should be kept detailing use of the forensic suite. This log book should record all persons who have been present in the forensic suites and the integrity of the seals (if any) that are broken when the suite is opened.
- The medical proforma should include a record of people present during an examination.
- Each forensic practitioner should have their DNA recorded on the forensic laboratory exclusion register so that contamination with their profiles can be excluded when specimens are processed.
- There should be clear documentation of any limitations of the examination environment in the medical proforma.

References

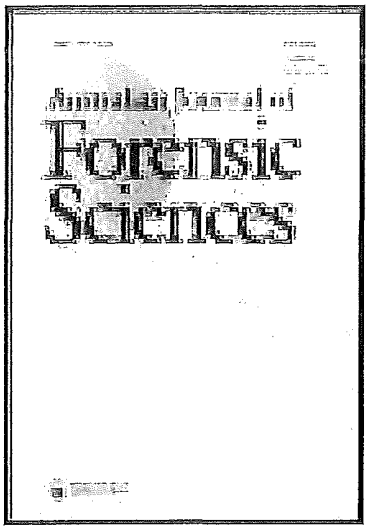
International Organization for Standardization. (2016). *Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes.* ISO 18385:2016

Gefrides, L.A., Powell, M.C., Donley, M.A., Kahn, R. (2010) UV irradiation and autoclave treatment for elimination of contaminating DNA from laboratory consumables. *Forensic Science International: Genetics, 42*(2), 89-94. doi: 10.1016/j.fsigen.2009.06.008

Faculty of Forensic and Legal Medicine. (2017). *Recommendations for the Collection of Forensic Specimens from Complainants and Suspects*. Retrieved from https://fflm.ac.uk/publications/recommendations-for-the-collection-of-forensic-specimens-from-complainants-and-suspects-3/

Forensic Science Regulator. (2016). *DNA Anti-Contamination – Forensic Medical Examination in Sexual Assault Referral Centres and Custodial Facilities*(1). Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/540116/207_FSR_anti-_contam_SARC__Custody_Issue1.pdf

This article was downloaded by: [Forensic Science Centre]
On: 25 March 2015, At: 13:05
Publisher: Taylor & Francis
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



CrossMark

Click for updates

Australian Journal of Forensic Sciences
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/tajf20

DNA contamination minimisation - finding an effective cleaning method

Kaye N. Ballantyne[ab], Renato Salemi[c], Fabio Guarino[c], James R. Pearson[a], Dale Garlepp[d], Stephen Fowler[c] & Roland A.H. van Oorschot[a]

[a] Office of the Chief Forensic Scientist, Victoria Police Forensic Services Department, Macleod, Victoria, Australia

[b] School of Psychological Sciences, La Trobe University, Bundoora, Victoria, Australia

[c] Biology Division, Victoria Police Forensic Services Department, Macleod, Victoria, Australia

[d] Business Services Division, Victoria Police Forensic Services Department, Macleod, Victoria, Australia

Published online: 18 Feb 2015.

To cite this article: Kaye N. Ballantyne, Renato Salemi, Fabio Guarino, James R. Pearson, Dale Garlepp, Stephen Fowler & Roland A.H. van Oorschot (2015): DNA contamination minimisation - finding an effective cleaning method, Australian Journal of Forensic Sciences, DOI: 10.1080/00450618.2015.1004195

To link to this article: http://dx.doi.org/10.1080/00450618.2015.1004195

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

WIT.0043.0093.0002

Australian Journal of Forensic Sciences, 2015
http://dx.doi.org/10.1080/00450618.2015.1004195

Taylor & Francis
Taylor & Francis Group

DNA contamination minimisation – finding an effective cleaning method

Kaye N. Ballantyne[a,b]*, Renato Salemi[c], Fabio Guarino[c], James R. Pearson[a], Dale Garlepp[d], Stephen Fowler[c] and Roland A.H. van Oorschot[a]

[a]*Office of the Chief Forensic Scientist, Victoria Police Forensic Services Department, Macleod, Victoria, Australia;* [b]*School of Psychological Sciences, La Trobe University, Bundoora, Victoria, Australia;* [c]*Biology Division, Victoria Police Forensic Services Department, Macleod, Victoria, Australia;* [d]*Business Services Division, Victoria Police Forensic Services Department, Macleod, Victoria, Australia*

(*Received 19 October 2014; accepted 10 December 2014*)

Recent environmental monitoring studies have highlighted a need to confirm cleaning procedures are performing to suitable levels for highly sensitive STR kits such as PowerPlex 21. To ensure that DNA contamination minimisation procedures are adequate, we have investigated the efficacy of sodium hypochlorite and a commercial, non-corrosive alternative, Virkon, at a range of concentrations for their DNA decontamination ability. Cleaning solutions were trialled across a range of body fluids and surface types, to cover the variety of potential contamination circumstances encountered within typical forensic laboratories. Given all factors tested, it was concluded that a 1% solution of sodium hypochlorite, sprayed on the surface and left for 5 min before drying and wiping with 70% ethanol, was able to remove DNA, saliva, blood, semen and skin cells from both smooth and pitted surfaces. However, safety testing revealed that the combination of hypochlorite and ethanol produced levels of gaseous chlorine at or above the recommended exposure limits. Subsequently, a cleaning protocol of 1% hypochlorite followed by distilled water was tested for efficacy, and subsequently introduced throughout the laboratory.

Keywords: DNA contamination minimisation; sodium hypochlorite; forensic; decontamination

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

Introduction

The increasing sensitivity of forensic DNA typing techniques, whilst immensely beneficial for evidentiary analyses, is creating increased challenges to contamination prevention and minimisation during evidence collection and analysis. With PowerPlex 21 now standard across Australia, full 21-locus STR profiles can be obtained from as little as 100 pg[1], compared with 0.6 ng–1.25 ng with older systems such as Profiler Plus[2]. In addition to the increased sensitivity of amplification, continuous DNA interpretation systems such as STRmix[3] are able to deconvolute more complex and highly mixed profiles than previous semi-quantitative systems, allowing the detection of contamination in more samples than ever before.

Contamination has been shown to be one of the most common causes of error in forensic DNA analyses, and can have significant and irreversible consequences for

*Corresponding author. Email: [redacted]

© 2015 Australian Academy of Forensic Sciences

WIT.0043.0093.0003

correct attribution of the source of the DNA[4]. Contamination events have been potentially involved in high profiles cases such as [redacted] (Victoria, Australia), the [redacted] (the Netherlands), [redacted] (Michigan USA), Profile N[10] (New Zealand), and [redacted] (Manchester, UK) to name just a few. In many of these instances, cross-case contamination is thought to have occurred through spatial and temporal proximity of examinations, with indications that DNA was transferred through contact with surfaces and/or tools used to examine both cases. Alternatively, contamination is thought to have occurred from a staff member during examination, or through the presence of background DNA on surfaces. A recent estimation of error rates in forensic DNA analysis from the Netherlands Forensic Institute found that contamination was one of the most common causes of error, with 0.11% of cases showing detectable contaminants across a 5-year period[4].

Previously, we have shown that the transition to the new STR typing methods results in increased detection of background DNA around the forensic laboratory[12]. The percentage of surfaces, equipment and consumables that showed detectable STR profiles increased from 23% with Profiler Plus to 69% with PowerPlex 21, with high risk items such as gloves, forceps and stickers all carrying detectable amounts of DNA. Furthermore, current cleaning protocols in use were found to be insufficient to remove contaminating DNA to levels suitable for PowerPlex 21. A review of cleaning procedures was therefore instigated, aiming to find a cleaning method suitable for use across the laboratory.

There is a surprising lack of empirical research into effective cleaning procedures suitable for forensic environments. Although several papers have investigated decontamination of plasticware and consumables[13–16], and others the effect of cleaning solutions on the ability to recover DNA profiles or perform body fluid identification tests[17,18], there are only two studies we are aware of that systematically compared cleaning solutions for surfaces and equipment[19,20]. The first compared a 5% sodium hypochlorite solution followed by a 70% ethanol wipe with the commercial DNA ZAP (Life Technologies) product, finding that there was not a significant difference between the two solutions except at the lower RFU levels. The second compared 10% sodium hypochlorite with DNA-Exitus Plus (AppliChem), finding that the two methods were comparable. However, both were relatively small studies (seven and eight samples respectively), and either utilised an in-house amplification method, or quantification only, rather than amplification with a commercial STR kit. Further, studies available to date have not investigated a range of surface types, a range of body fluids, or a range of cleaning solution concentrations, all factors that could greatly impact on decontamination levels. Other studies investigating decontamination methods focused on UV-, beta- or gamma-irradiation, ethylene oxide treatment or autoclaving, none of which are suitable for large laboratory areas such as benches or hoods, or sensitive equipment.

Outside of the forensic literature, there is immense variation in the types of solutions recommended and used, with a wide array of commercial products available. For example, Eppendorf recommends cleaning their pipettes with 5% sodium hypochlorite[12], whilst Promega suggests the use of 2–3% sodium hypochlorite for the decontamination of tools[22]. A 10% hypochlorite solution has been recommended for Gilson pipettes[23]. Commercial preparations such as DNA-Exitus Plus, DNA-Away (MBP), Trigene Advance (Trigene), DNA-Off (Pure Biotech) and others most commonly provide agarose gel electrophoresis visualisation results based on nanograms or micrograms of DNA to demonstrate the effectiveness of their product, rather than PCR analysis of minute traces of body fluids and cellular material as encountered in

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0004

forensics. Based on the studies listed above, non-forensic decontamination studies[24,25], and manufacturer information, we evaluated the applicability and suitability of cleaning methods and solutions within the forensic laboratory.

Whilst many of the commercial solutions advertise that they are able to completely remove contaminating DNA, the cost of many of these solutions was deemed prohibitive, given the high frequency and extensive cleaning required between items and cases within routine examinations. Some commercial decontamination solutions have been shown to have similar effectiveness to sodium hypochlorite[19,20] (albeit at much higher cost), or to inhibit the DNA profiling process[17]. In others, the active ingredients listed are not known to have a detrimental effect on DNA, and as such are unlikely to provide complete decontamination.

Sodium hypochlorite is known to effectively decontaminate surfaces, and is the most commonly utilised cleaning reagent in laboratories. However, the minimum concentration necessary for effective decontamination is not known. In addition, it is highly corrosive, and can cause skin and eye irritation. Therefore, the use of Virkon (DuPont) was explored as an alternative. This solution, based on the active ingredients potassium peroxymonosulfate and sodium chloride, has previously been used within a forensic laboratory[17], and provides full documentation regarding its active ingredients, ability to destroy nucleic acids, and safety. Key features of Virkon include the non-corrosive nature of the solution, and the built-in colour indicator of activity level, ensuring that out-of-date or ineffective solutions are not used.

The ability for sodium hypochlorite and Virkon at various concentrations to clean different types of body fluids, cells and DNA from a range of surfaces was explored, with the goal of finding an efficient, powerful and cost-effective cleaning method for forensic laboratories.

Methods and materials

Cleaning agent investigation

Optimal concentration

The empirical testing of sodium hypochlorite and Virkon was carried out in a three-stage approach. Initially, varying concentrations of each cleaning solution (sodium hypochlorite – 0.05% (the concentration in use at the time of the study), 1%, 5%, 10% v/v and Virkon 1, 3 and 5% w/v, selected to provide a wide range of concentrations for testing) were tested to determine their ability to destroy 'naked' DNA and DNA within saliva, both as wet and dry stains. All cleaning solutions were used within a week of dilution, and stored at room temperature, with hypochlorite protected from light.

Dried stain: Saliva (10 µl) or extracted DNA (50 ng within 10 µl of DNA IQ (Promega) extraction buffer were pipetted onto sterile glass slides and dried for 24 h. An equal amount of cleaning agent was then added to the stain, and spread by pipetting thoroughly to ensure the entire surface was covered with cleaning agent. Slides were left at room temperature for 5 min, and then immediately swabbed (wet/dry swabbing method[26]) until the surface of the slide was clean.

Wet sample: 10 µl of saliva or DNA solution was placed directly into a sterile microcentrifuge tube, with 10 µl of the cleaning agent, and mixed thoroughly by pipetting.

All samples, including control deposits not treated with any cleaning agent, were then DNA profiled as described below, with all performed in triplicate.

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0005

Surface decontamination

Following selection of the optimal concentration of the cleaning solution (1% hypochlorite and 5% Virkon), each solution was evaluated for its use on both smooth and rough surfaces, with blood, semen and skin. Controlled areas (10 cm^2) of smooth plastic, smooth steel and pitted plastic were used to simulate different environmental surfaces commonly encountered within the laboratory. For each surface, 10 µl of freshly drawn, non-coagulated blood, 10 µl of semen, or touch (hands were rubbed vigorously together before deposition; control samples showed approximately equal deposition between prints) were deposited and allowed to dry for 30 min (skin) to 2 h (blood and semen). Following this, each was cleaned by spraying the deposition thoroughly with the cleaning solution, left for 5 min, and wiped dry. All sodium hypochlorite samples were subsequently sprayed with 70% ethanol and wiped dry (as this is standard procedure with hypochlorite to remove chlorite residue to prevent corrosion). To enable direct comparison, half of the Virkon-cleaned samples were also cleaned with ethanol in the same manner. All surfaces were then swabbed in the standard wet/dry manner. All samples, including control deposits not treated with any cleaning agent, were then DNA profiled as described below, with all performed in triplicate.

Effect of ethanol on cleaning effectiveness

During initial implementation of the revised cleaning method, concerns were raised regarding the formation of hazardous gases (chloroform and/or chlorine). Following testing (described below), revised experiments were performed with 1% hypochlorite used to clean blood and skin cells deposited on smooth and pitted plastic as described above. Within these tests, half of the samples were cleaned with 1% hypochlorite as described above followed by a 70% ethanol clean, and half were cleaned with 1% hypochlorite followed by a distilled water clean. Subsequent testing regarding the effectiveness of a 5 min cleaning time utilised 1% hypochlorite with a distilled water clean, with the hypochlorite either left on the surface for 5 min or wiped dry immediately. The effect of cleaning time was tested on DNA, blood, saliva and skin deposited as described above on smooth plastic and steel, and on a selection of commonly used items from the laboratory (ruler, pen, keyboard, Hemastix bottle and a metal tape measure. All surfaces were then swabbed in the standard wet/dry manner. All samples, including control deposits not treated with any cleaning agent, were then DNA profiled as described below, with all performed in triplicate.

DNA profiling

Following sampling, DNA was extracted with DNA IQ (Promega) on a Biomek Nxp liquid handling platform (Beckman Coulter) to a final volume of 50 µl. Quantitation was performed with the Quantifiler Human DNA Quantification kit (Life Technologies), and STR amplification with the PowerPlex21 System (Promega) as per the manufacturer's recommendations on robotic platforms. All amplifications were analysed on the 3500xL Genetic Analyser (Life Technologies) according to standard laboratory methods, and analysed with GeneMapper ID-X with a baseline threshold of 175RFU, where any profiles without peaks above 175RFU were considered negative. The average number of alleles and peak height was calculated for each category – in some instances, negative profiles caused the average peak height to be below 175RFU. In all such

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0006

cases, two of the three replicates were negative, with the remaining replicate displaying low peak heights and numbers of alleles.

Chloroform and chlorine testing

In response to health and safety concerns regarding the combination of hypochlorite and ethanol, testing was performed to determine if hazardous levels of chloroform and/or chlorine were being released during cleaning. Chloroform testing was performed in several stages. Initially, a stock 12.5% solution of hypochlorite was used. Separately, either 1 mL of hypochlorite, 1 mL of (absolute) ethanol, or a mixture of 1 mL of each was added to a 500 ml Schott bottle, and passive headspace collection with charcoal tubes was performed for 1.25–1.5 h. Analytes were extracted by gravity flow with 1 ml toluene, and analysed with GC-MS.

Subsequently, environment testing was performed within a small enclosed space (Perspex glovebox, 58×55×47 cm), and within the general laboratory (large open space). For the enclosed testing, the interior of the box was sprayed with hypochlorite until visibly wet, left for 5 min, wiped, sprayed with 70% ethanol and wiped again. A charcoal tube was suspended in the box after the 5 min incubation of hypochlorite (prior to wiping and ethanol application), and allowed to passively absorb the headspace for 2 h. Within the laboratory, charcoal tubes were hung above benches (15 cm above surface, approximately face-height for most examiners) during cleaning with 1% hypochlorite and 70% ethanol, as per standard laboratory procedures. Tubes were allowed to absorb for 1 h after cleaning, during which time the benches were not used. All tubes were processed for the presence of chloroform as described above.

The presence of chlorine was detected with a handheld gas monitor (able to read 0.01–50 ppm chlorine) whilst cleaning was conducted within a controlled environment. Chlorine levels were measured during the spraying of 0.25, 0.5, 0.75 and 1% hypochlorite, during the wiping/drying of hypochlorite, and during the spraying and wiping of 70% ethanol. In addition, the level of chlorine released during a secondary water spray and wipe, following a hypochlorite spray and wipe, was investigated, as well as a three-stage clean with hypochlorite, water and ethanol. Chlorine readings were taken at both bench level and standing height.

Results and discussion

Optimal concentration of cleaning agents

Initially, the effectiveness of sodium hypochlorite and Virkon was evaluated at a range of concentrations for their ability to destroy both wet and dry extracted DNA and saliva. The positive controls of dried DNA and saliva produced, as expected, full profiles with peak heights averaging 5000–6000 RFU (Figure 1). All deposits treated with 0.05% hypochlorite produced complete profiles, with average peak heights of ~6500 RFU, and with up to 150 ng of DNA recovered from treated deposits. However, increasing the concentration of hypochlorite to 1% or greater completely eliminated all DNA from both wet and dried stains.

In contrast, Virkon was not able to destroy all DNA, particularly in saliva where 36–39 alleles were observed from samples treated with 1% Virkon, 1–38 alleles with 3% Virkon, and 0–6 alleles with 5% Virkon. It was more effective with extracted DNA, with only one wet DNA sample showing four alleles with 3% Virkon treatment

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0007

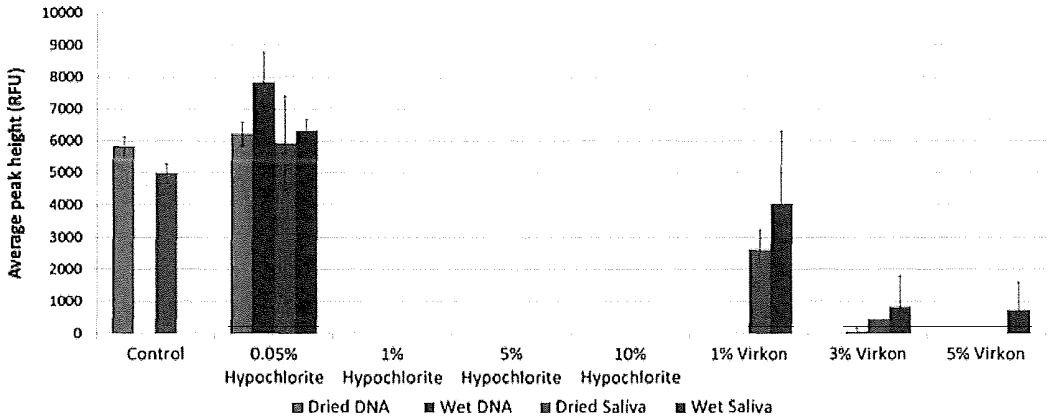


Figure 1. The effect of cleaning agent and concentration on the average peak height of alleles observed in PP21. Each bar represents three replicates; error bars represent 95% standard deviation. Controls for wet DNA and wet saliva were not performed.

(Figure 1). It is theorised that the proteins, electrolytes and cellular components within saliva may be inhibiting the active ingredients within Virkon.

From these data, it was concluded that a 1% sodium hypochlorite solution is sufficient to destroy DNA, whilst a 5% Virkon provided maximum decontamination possible for the solution. It should be noted that a higher concentration of Virkon could not be tested, as the manufacturer recommends that 4% is the maximum concentration that can be made. However, we found that 5% w/v was able to be dissolved completely, and remained stable.

Surface decontamination effectiveness

The two cleaning agents were subsequently tested for their ability to clean three different surfaces contaminated with three different body fluids. In addition, the effect of removal of Virkon residue with ethanol was tested. Substantial differences in cleaning efficacy were observed between the different conditions (Figure 2).

Hypochlorite with an ethanol wipe was able to effectively clean the contaminating body fluids on both smooth plastic and steel across all replicates. However, it was not able to completely decontaminate samples on pitted plastic, with low amounts of DNA recovered (<50 pg total) and small numbers of alleles in both blood and touch samples.

The use of Virkon alone proved to be ineffective on both blood and semen samples on all surfaces, with measureable DNA concentrations and positive amplifications in all categories. However, Virkon was most effective at removing touch deposits, with no positive amplifications for any skin samples treated with 5% Virkon alone, or 5% Virkon with ethanol.

The use of a secondary ethanol wipe subsequent to initial cleaning with 5% Virkon proved to produce contradictory results – in some cases, substantially more DNA was recovered following the use of ethanol. It is possible that as Virkon does not appear to destroy cellular DNA effectively (as seen during initial concentration testing), the ethanol may have acted as a surfactant and lysing agent, making the remaining DNA more accessible to swabbing. This did not occur with touch DNA, possibly as there is less initial DNA present, and because a higher proportion of DNA is not enclosed within

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0008

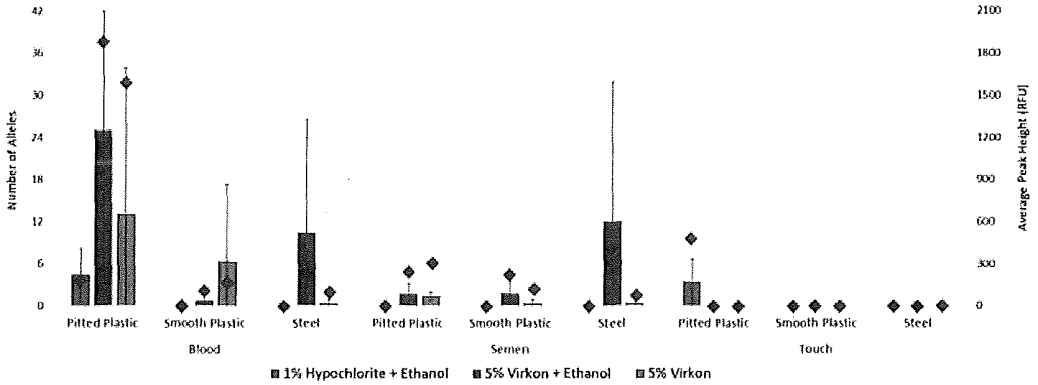


Figure 2. The effect of cleaning agents on the number of alleles (bars; left axis) and average peak heights (diamonds; right axis) observed following PP21 amplification. Each category represents three replicates; error bars represent 95% standard deviation. Average peak heights below 175 RFU represent categories where two of the three samples did not display detectable alleles (peak height of zero).

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

cellular membranes and nuclei[27,28]. However, it should be noted that in all cases except blood on pitted plastic the peak heights were very low (<500 RFU), which indicates that the vast majority of the deposited sample was destroyed/wiped away during cleaning.

The results suggested that 1% hypochlorite, followed by a secondary ethanol wipe, would be the most effective cleaning method across the range of surfaces and body fluids encountered within the laboratory. As a consequence, this method was introduced within the Biology Division at VPFSD, and environmental monitoring was performed to confirm results obtained in controlled trials. Samples from cleaned items (n=24) showed a substantial drop in the amount of background DNA, with a three-fold reduction in the levels observed, compared with that seen from similar items with 0.05% hypochlorite. Although 33% of samples taken did display detectable levels of DNA (ranging from 1 to 5 alleles; peak heights all under 500 RFU), this represents a substantial decrease in contamination levels compared with those seen previously with 0.05% hypochlorite (53% of samples positive; 1–58 alleles; peak heights under 1200 RFU)[12]. In addition, surfaces cleaned with 1% hypochlorite, which did not have detectable profiles or quantitation results did not show low-level peaks below the 175 RFU threshold, whilst those cleaned with 0.05% showed up to 28 additional alleles below the threshold.

However, following the widespread introduction of 1% hypochlorite and ethanol, concerns were raised regarding potentially hazardous gases being produced. In particular, it was postulated that the two solutions were combining to produce chloroform, resulting in headaches and eye irritation amongst staff exposed. It is known that hypochlorite can combine with substances in use in DNA laboratories such as guanidine thiocyanate (a key component in DNA IQ extraction systems) to generate toxic gas, but the combination of hypochlorite and ethanol has not yet been investigated to our knowledge, despite its general use and wide acceptance. To explore this, a range of samples were taken from liquid hypochlorite, combined liquid hypochlorite and ethanol, sprayed and wiped hypochlorite and ethanol in confined spaces, and sprayed and wiped hypochlorite in open areas. Headspace collection of vapours followed by GC-MS analysis demonstrated that chloroform is produced in high concentration when 1%

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

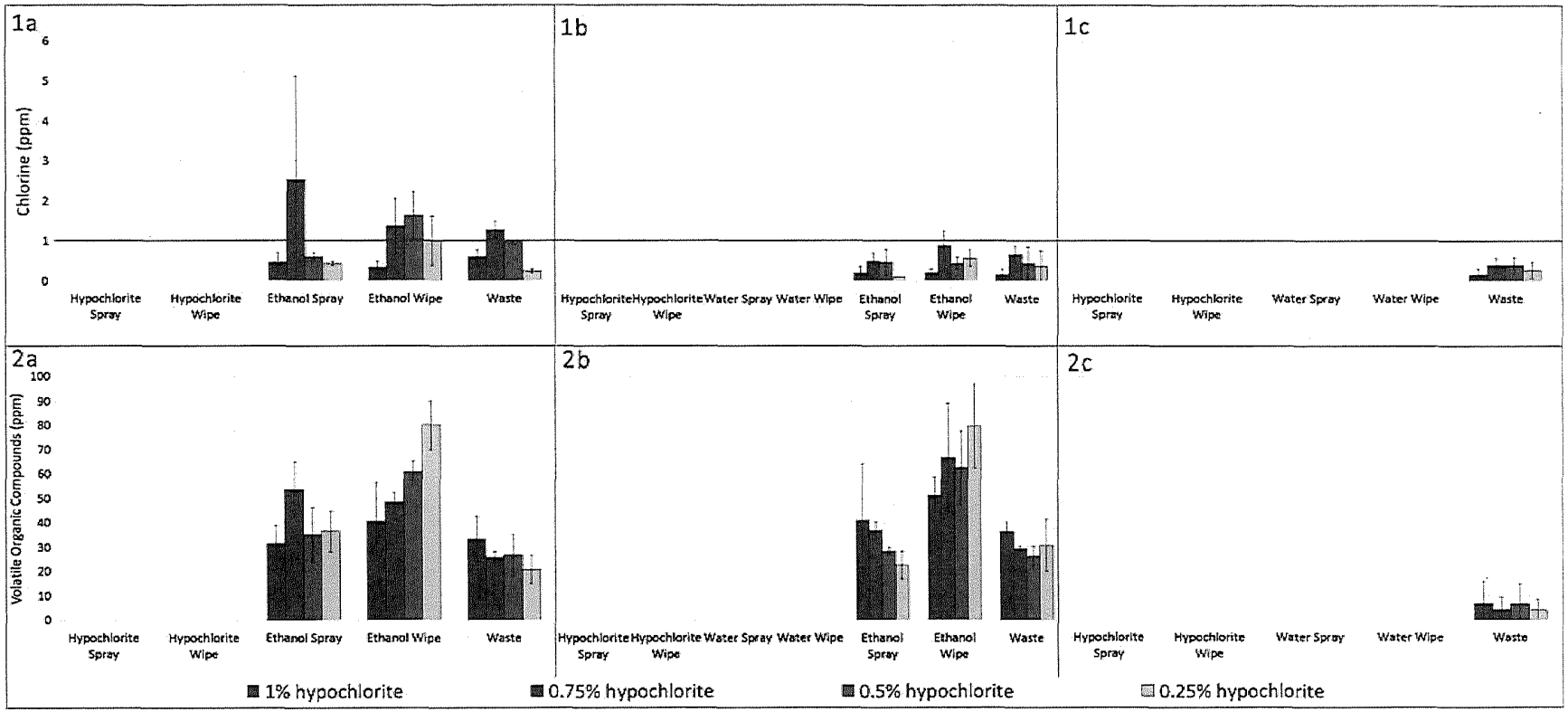


Figure 3. Emission of chlorine (top panel) and volatile organic compounds (bottom panel) during the cleaning process. Readings were taken during the spraying of hypochlorite, ethanol and water, the wiping of each, and from the waste paper towel after cleaning. The red line indicates the recommended exposure limit for chlorine (WorkSafe Australia). Panels 1a and 2a demonstrate the release of chlorine and volatile compounds when hypochlorite and ethanol are used, panels 1b and 2b hypochlorite, water and ethanol, and panels 1c and 2c hypochlorite and water.

WIT.0043.0093.0009

WIT.0043.0093.0010

hypochlorite and ethanol are mixed as liquids at room temperature within a closed environment. However, even within a small closed environment, when used according to the standard cleaning method where the hypochlorite is dried thoroughly prior to the application of ethanol, no chloroform was detected. If, however, the ethanol is sprayed onto surfaces still wet with hypochlorite, chloroform is produced at approximately 6 ppm, below the WorkSafe Australia exposure standard for chloroform at 10 ppm. Within an open laboratory environment, no chloroform could be detected above or around benches being actively cleaned with hypochlorite and ethanol.

On the other hand, analysis showed that chlorine gas was being produced during the cleaning process, at times above the recommended exposure levels, albeit briefly. Extensive testing showed that no chlorine is released upon the spraying of the hypochlorite solution itself, but that it is the application of ethanol that enables the chlorine to become vaporised (Figure 3). The amount of chlorine released is relatively constant, with detectable levels being produced with both 0.25% and 1% hypochlorite and ethanol. If water is used as the secondary cleaning solution, no detectable chlorine is produced. Chlorine can be detected in low amounts from cleaning waste (paper towel) immediately after use, but at a level below the recommended maximum exposure.

In light of the chlorine testing, the cleaning ability of 1% hypochlorite followed by distilled water was investigated. In addition, the use of a lower concentration of hypochlorite (0.25%) was investigated to further limit the potential hazard. As before, blood and skin was deposited onto smooth and pitted plastic, and cleaned in the appropriate manner. The results in Figure 4 show that whilst there was no significant difference in the decontamination of surfaces between the ethanol- and water-treated samples ($p = 0.484$), ethanol performed slightly better in the decontamination of blood samples. The 0.25% failed to destroy the DNA to a level equivalent to 1% (p=0.024).

Subsequent environmental monitoring around the laboratory of 1% hypochlorite followed by a water wipe (n=15) indicated a slight increase in the level of DNA present on items compared with the use of an ethanol wipe (from 33% of items with detectable DNA to 41%), but peak heights remained low (<400 RFU), and the number of alleles (maximum of 7 observed) indicated that only trace levels of DNA were remaining on

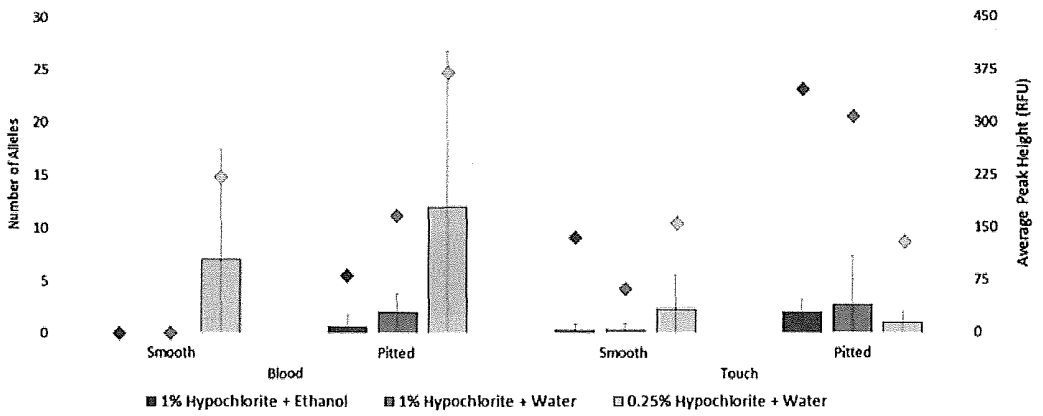


Figure 4. The effect of ethanol and hypochlorite concentration on the number of alleles (bars; left axis) and average peak heights (diamonds; right axis) observed following PP21 amplification. Each category represents three replicates; error bars represent 95% standard deviation. Average peak heights below 175 RFU represent categories where two of the three samples did not display detectable alleles (peak height of zero).

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0011

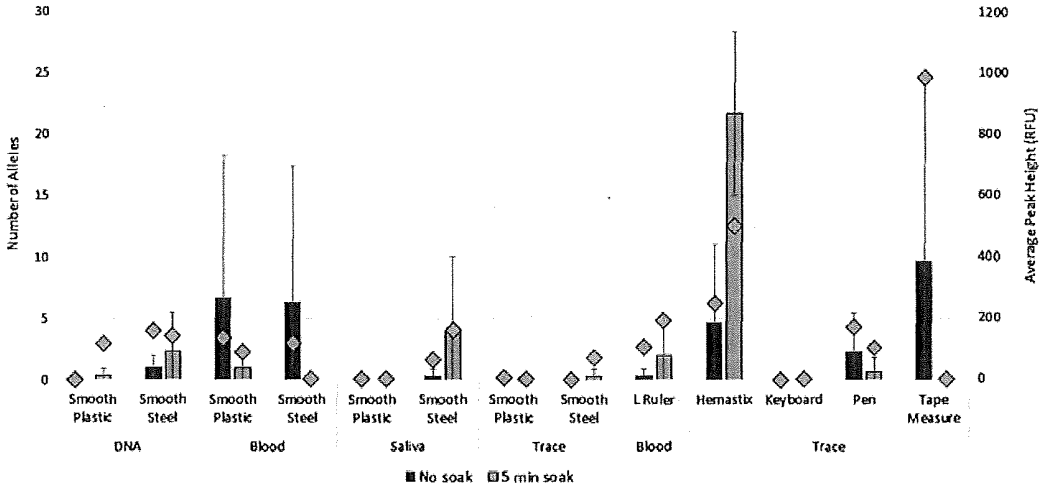


Figure 5. The effect of leaving hypochlorite to soak on the surface for 5 min on the number of alleles (bars; left axis) and average peak heights (diamonds; right axis) observed following PP21 amplification. Each category represents three replicates; error bars represent 95% standard deviation. Average peak heights below 175 RFU represent categories where two of the three samples did not display detectable alleles (peak height of zero).

items, at levels that were unlikely to be detectable if transferred. Previous research has shown that the percentage transfer of dried biological material and touch DNA is very low, generally below 1%[29,30].

To further reduce the potential exposure to hypochlorite, the effect of the cleaning time, where hypochlorite is left on the surface being cleaned for at least 5 min, was also explored. Controlled deposits of DNA, blood, saliva and skin cells on smooth plastic and steel cleaned with and without the 5 min soak time showed that overall there was little effect of time (Figure 5). Although increased quantities of DNA were observed with blood, incomplete decontamination of two of the six samples containing 19 and 20 alleles each caused this increased average. All other samples on these substrates with blood were negative. Likewise, cleaning with a 5 min soak time did not appear as effective as immediate cleaning for saliva on smooth steel in one sample (11 alleles), although the other two replicates were negative. Overall, however, there were no significant differences in levels of contamination observed, when hypochlorite was left for 5 min or cleaned immediately, in quantities recovered, number of alleles or peak heights observed (all p-values > 0.25). Subsequent testing on commonly used items likewise showed little difference between cleaning times, with an average of 3.4 alleles with peak height of 300 RFU with immediate cleaning, and 4.9 alleles and 155 RFU with a 5 min wait. Based on these data, it can be concluded that the 5 min wait time is unnecessary, although care should be taken with visible deposits of blood and with surfaces that may contain small pits and cracks, which may be difficult to clean fully.

Following the testing described above, VPFSD has introduced a 1% hypochlorite plus subsequent water wipe method of cleaning throughout the laboratory, a method that has been shown to effectively decontaminate contaminated surfaces, and is safe for use.

References

1. Ensenberger MG, Hill CR, McLaren RS, Sprecher CJ, Storts DR. Developmental validation of the PowerPlex(®) 21 system. Forensic Sci Int Genet. 2014;9:169–178.

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0012

2. Frank WE, Llewellyn BE, Fish PA, Riech AK, Marcacci TL, Gandor DW, et al. Validation of the AmpFlSTR profiler plus PCR amplification kit for use in forensic casework. J Forensic Sci. 2001;46:642–646.
3. Taylor D, Bright J-A, Buckleton J. The interpretation of single source and mixed DNA profiles. Forensic Sci Int Genet. 2013;7:516–528.
4. Kloosterman A, Sjerps M, Quak A. Error rates in forensic DNA analysis: definition, numbers, impact and communication. Forensic Sci Int Genet. 2014;12:77–85.
5. Vincent FHR. Inquiry into the circumstances that led to the conviction of [redacted] Victorian Department of Justice; 2010. Available from: https://assets.justice.vic.gov.au/.../vincentreportfinal6may2010.pdf
6. Thompson WC. Report to Victoria state coroner's inquest into death of Jaidyn Leskie, 2003. p. 10. Available from: www.bioforensics.com/articles/Thompsonreport.pdf
7. Krane DE. Report to Victoria state coroner's inquest into death of [redacted] 2003. p. 10. Available from: www.bioforensics.com/conference10/Workshop/Kranereport.pdf
8. Thompson WC. The potential for error in forensic DNA testing (and how that complicates the use of DNA databases for criminal identification). New York University: Council for Responsible Genetics; 2008. Available from: http://www.councilforresponsiblegenetics.org/pageDocuments/H4T5EOYUZI.pdf
9. Thompson WC. Tarnish on the "gold standard": understanding recent problems in forensic DNA testing. The Champion. 2006 Feb;30:10–16.
10. Strutt M. Legally scientific? a brief history of DNA evidence in the criminal justice system. Justice action; 2001. Available from: www.parliament.vic.gov.au/images/.../Forensics-Michael_Strutt_4.pdf
11. Rennison A Report into the circumstances of a complaint received from the Greater Manchester Police on 7 March 2012 regarding DNA evidence provided by LGC forensics [Internet]. Forensic Science Regulator; 2012. p. 15. Report No.: FSR-R-618. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/118941/dna-contam-report.pdf
12. Ballantyne KN, Poy AL, van Oorschot RAH. Environmental DNA monitoring: beware of the transition to more sensitive typing methodologies. Aust J Forensic Sci. 2013;45:323–340.
13. Gefrides LA, Powell MC, Donley MA, Kahn R. UV irradiation and autoclave treatment for elimination of contaminating DNA from laboratory consumables. Forensic Sci Int Genet. 2010;4:89–94.
14. Tamariz J, Voynarovska K, Prinz M, Caragine T. The application of ultraviolet irradiation to exogenous sources of DNA in plasticware and water for the amplification of low copy number DNA. J Forensic Sci. 2006;51:790–794.
15. Shaw K, Sesardić I, Bristol N, Ames C, Dagnall K, Ellis C, et al. Comparison of the effects of sterilisation techniques on subsequent DNA profiling. Int J Legal Med. 2008;122:29–33.
16. Archer E, Allen H, Hopwood A, Rowlands D. Validation of a dual cycle ethylene oxide treatment technique to remove DNA from consumables used in forensic laboratories. Forensic Sci Int Genet. 2010;4:239–243.
17. Bright J-A, Cockerton S, Harbison S, Russell A, Samson O, Stevenson K. The effect of cleaning agents on the ability to obtain DNA profiles using the IdentifilerTM and PowerPlex® Y multiplex kits. J Forensic Sci. 2011;56:181–185.
18. Harris KA, Thacker CR, Ballard D, Court DS. The effect of cleaning agents on the DNA analysis of blood stains deposited on different substrates. Int Congr Ser. 2006;1288:589–591.
19. Vandewoestyne M, Van Hoofstat D, De Groote S, Van Thuyne N, Haerinck S, Van Nieuwerburgh F, Deforce D. Sources of DNA contamination and decontamination procedures in the forensic laboratory. Int J Forensic Pract Res. 2011;2.
20. Arena A. DNA Exitus plus™ versus standard bleach solution for the removal of DNA contaminants on work surfaces and tools. Investig Sci J. 2010 Jul.
21. Eppendorf. Care and maintenance of Eppendorf pipettes [Internet]. North Ryde. [Cited 10 Oct 2014]. Available from: http://www.eppendorf.com/img/au/lhsc/care_maintenance_pipettes_eag.pdf
22. Sundquist T, Bessetti J. Identifying and preventing DNA contamination in a DNA-typing laboratory. Profiles in DNA. 2005;8:11–13.

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

WIT.0043.0093.0013

23. Mandel Scientific Company Inc. Decontamination the Gilson Pipetman family of pipettes. [Internet]. Guelph, Canada. [Cited 10 Oct 2014]. Available from: http://www.mandel.ca/support/PipetteEducation/Decontamination_2011.pdf
24. Champlot S, Berthelot C, Pruvost M, Bennett EA, Grange T, Geigl E-M. An efficient multistrategy DNA decontamination procedure of PCR reagents for hypersensitive PCR applications. PloS One. 2010;5:e13042.
25. Kemp BM, Smith DG. Use of bleach to eliminate contaminating DNA from the surface of bones and teeth. Forensic Sci Int. 2005;154:53–61.
26. Pang BCM, Cheung BKK. Double swab technique for collecting touched evidence. Legal Med. 2007;9:181–184.
27. Kita T, Yamaguchi H, Yokoyama M, Tanaka T, Tanaka N. Morphological study of fragmented DNA on touched objects. Forensic Sci Int Genet. 2008;3:32–36.
28. Alessandrini F, Cecati M, Pesaresi M, Turchi C, Carle F, Tagliabracci A. Fingerprints as evidence for a genetic profile: morphological study on fingerprints and analysis of exogenous and individual factors affecting DNA typing. J Forensic Sci. 2003;48:586–592.
29. Goray M, Eken E, Mitchell RJ, van Oorschot RAH. Secondary DNA transfer of biological substances under varying test conditions. Forensic Sci Int Genet. 2010;4:62–67.
30. Lehmann VJ, Mitchell RJ, Ballantyne KN, van Oorschot RAH. Following the transfer of DNA: how far can it go? Forensic Sci Int Genet Supp Ser. 2013;4:e53–e54.

Downloaded by [Forensic Science Centre] at 13:05 25 March 2015

View publication stats

Department of Health

Queensland Government

MEMORANDUM

To: Health Services Chief Executives, Hospital and Health Services

Copies to: Deputy Director-General, Strategy Policy and Planning Division
Deputy Director-General, Clinical Excellence Division
Chief Executive Officer, Health Support Queensland

From: Michael Walsh, Director-General, Queensland Health **Contact No:** [redacted]

Subject: **Health Service Directive: Caring for people Disclosing Sexual Assault**

File Ref: **C-ECTF-19/8477**

Thank you for participating in the consultation process on the Health Service Directive: Caring for People Disclosing Sexual Assault (the Directive) and the Guideline for the Management of Care for Adults (14 years and over) Disclosing Sexual Assault (the Guideline). I have now approved this Directive and Guideline for publication.

The Directive, which is effective from 22 July 2019, requires Hospital and Health Services to take a consistent approach to managing the clinical and psychosocial needs of people who have experienced sexual assault. It includes the person-centred provision of forensic examinations including the Just in Case option which allow victims to access a forensic examination without police involvement. This aligns with our commitment to put patients first.

The Guideline supports the management of Adult (14 years and over) Victims of Sexual Assault recognising that services can be adapted as appropriate to suit local capabilities. This will be particularly relevant during the implementation period. While effective from 22 July 2019, it is appreciated that compliance will be progressive.

The effort required by Hospital and Health Services to implement sexual assault support services is acknowledged. To support this, the Department is funding and coordinating a training program for nurses; recruiting a dedicated Assistant Director of Nursing position to lead nurses involved in sexual assault support services; and will continue to provide telephone support through the Clinical Forensic Medicine Unit, Forensic and Scientific Services, Health Support Queensland. Information and resources to support this service delivery will be made available on QHEPS.

The attached Directive and Guideline will be published on the Queensland Health Policy and Health Service Directives website at www.health.qld.gov.au/directives/html/a.

Should you require any further information, Mr Michel Lok, General Manager, Community and Scientific Services, Health Support Queensland is available to assist and can be reached via email at [redacted] or on telephone [redacted]

[redacted]

Michael Walsh
Director-General
Queensland Health

17 July 2019

Attachments:

1. Health Service Directive
2. Health Service Directive Guideline

Health Service Directive

Directive # <insert number here>
Effective Date: 22 July 2019
Review Date: 22 July 2022
Supersedes: New Directive

Caring for People Disclosing Sexual Assault

Purpose

This Health Service Directive requires Hospital and Health Services to take a consistent approach to managing the clinical and psychosocial needs of people who have experienced sexual assault. This includes the person-centred provision of forensic examinations.

Scope

This directive applies to all Hospital and Health Services (HHSs).

Principles

- Compassion – everyone disclosing sexual assault will be treated with respect, courtesy, compassion and dignity and their clinical care and any forensic examination will be responsive to their particular needs including access to, or referral to counsellors and support services.
- Person-centred care – everyone disclosing sexual assault will have access to trained clinicians who can provide timely and confidential clinical care and forensic examinations after presentation to hospital.
- Information – everyone disclosing sexual will be given clear information about their options relating to having a forensic examination and the level of involvement of police.
- Collaboration – HHSs will work effectively with the Queensland Police Service, other government agencies as well as community organisations to ensure a responsive, supportive and integrated approach to caring for people disclosing sexual assault.

Outcomes

Hospital and Health Services included in the scope of this directive shall achieve the following outcomes:

- Compliance with Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
- Compliance with the Health Service Directive Guideline: Guideline for Management of care for Adults (14 years and over) Disclosing Sexual Assault

- Compliance with the Department of Health Guideline: Conducting Child Sexual Assault Examinations (*Document Number # QH-GDL-943:2015*)
- Compliance with the informed consent requirements detailed in the Queensland Health Guide to Informed Decision-Making in Healthcare

In doing so, HHSs will provide consistently high-quality, compassionate and person-centred services to people disclosing sexual assault who present to public hospitals.

Mandatory requirements

Hospital and Health Services (HHS) will:

- Provide 24-hour access to clinical care and forensic examinations for people 14 years and over disclosing a sexual assault in accordance with the Guideline for the Management of Care for Adults (14 years and over) Disclosing Sexual Assault.
- Ensure everyone who discloses that they are the victim of a sexual assault is informed of their choices about forensic examinations and reporting the assault to police, including the benefits of early reporting.
- Provide forensic examinations to victims of sexual assault when victims choose to have a forensic examination regardless of whether victims decide to report the matter to police or decide to defer this decision.
- Ensure adherence to informed consent for all aspects of caring for people disclosing sexual assault, including clinical treatment, forensic examinations, evidence collection and storage, police involvement, referrals and the release of information to third parties.
- Provide clear information about the storage, access and destruction of forensic examination samples to victims of sexual assault who have a forensic examination but choose to defer the decision to report the assault to police.
- Provide a suitable model of care for managing paediatric sexual assault patients (under 14 years of age) within each HHS.
- Report all suspected child sexual assaults to Child Safety Services in line with the mandatory reporting and duty of care responsibilities of clinicians.
- Ensure all patients are referred to (with patient consent) and/or provided information regarding sexual assault counselling and support services.

Related or governing legislation, policy and agreements

- *Hospital and Health Boards Act 2011 (Qld)*
- *Criminal Code Act 1899 (Qld)*
- *Victims of Crime Assistance Act 2009 (Qld)*
- *Police Powers and Responsibilities Act 2000 (Qld)*
- *Guardianship and Administration Act 2000 (Qld)*

- *Public Guardian Act 2014 (Qld)*
- *Queensland Health Guide to Informed Decision-Making in Healthcare*
- *Charter of Victims' Rights*
- *Child Protection Act 1999 (Qld)*
- *Domestic and Family Violence Protection Act 2012*
- *Powers of Attorney Act 1998 (Qld)*

Supporting documents

- Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault (as amended from time to time)
- Health Service Directive Guideline: Guideline for the Management of Adults Disclosing Sexual Assault (as amended from time to time)
- Department of Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015
- Queensland Health Guide to Informed Decision-Making in Healthcare

Business area contact

Community and Scientific Services, Health Support Queensland.

Review

This Health Service Directive will be reviewed at least every three years.

Date of last review: **22/07/2019**

Supersedes: New Directive

Approval and Implementation

Directive Custodian

Chief Executive Officer, Health Support Queensland

Approval by Chief Executive

Director-General

Queensland Health

Approval date:

Issued under section 47 of the *Hospital and Health Boards Act 2011*

Definitions of terms used in this directive

Term	Definition / Explanation / Details	Source
Hospital and Health Service	Hospital and Health Services are statutory bodies and are the principal providers of public sector health services.	*Hospital and Health Boards Act 2011*
Forensic Examination	The forensic examination consists of obtaining a history as to the nature of the assault to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic samples as it relates to the alleged sexual assault. (A Sexual Assault Investigation Kit (SAIK) is used to collect DNA evidence)	Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
Child	Under the age of 18 years For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.	Department of Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015
Trained Clinicians	Forensic Examinations can be provided by: • Forensic Physician • Medical Officers who have received training in sexual assault examination • Senior Medical Officers accessing phone support from Clinical Forensic Medicine Unit • Government Medical Officers • Forensic Nurse Examiners (postgraduate qualification in Forensic Medicine) • Sexual Assault Nurse Examiners. Nurses trained in sexual assault examinations having completed a recognised short-course eg SANE 40CPD short course)	

Version Control

Version	Date	Prepared by	Comments
0.1	27/05/2019	Heath Support Queensland	*Initial Draft for consultation*
0.2	25/06/2019	Health Support Queensland	*Incorporating feedback from HHSs*
0.3	27/06/2019	Health Support Queensland	*Incorporating feedback from Queensland Police Service and updated to include forensic examinations without police involvement*
Final	15/07/2019	Health Support Queensland	*Incorporating minor change to definition section following final HHS consultation*

Health Support Queensland

Department of
Health

HS008895

12 September 2019

Mr Ron Calvert
Chief Executive
Gold Coast Hospital and Health Service
1 Hospital Boulevard
SOUTHPORT QLD 4215

Email: [redacted]

Dear Mr [redacted]

Guideline for the Management of Care for People 14 years and over Disclosing Sexual Assault

In July 2019, Hospital and Health Services (HHS) were consulted on the Health Service Directive: Caring for People Disclosing Sexual Assault which was published with an effective date of 22 July 2019. There was a related guideline titled *Guideline for the Management of Care for Adults (14 years and over) Disclosing Sexual Assault* (the guideline).

Following further clinician consultation and in line with the principle of putting patients first, it is necessary to make changes to the guideline to clarify the management of care for patients aged 14 to 17 years. Specifically, the guideline has been revised to address choices for patients aged 14 to 17 years disclosing sexual assault who are competent to make decisions relating to reporting to police and having 'just in case' forensic examinations.

It is important to note that the changes will not impact on the workload of HHSs but will clarify management of care.

The guideline has been retitled to: *Guideline for the Management of Care for People 14 years and over Disclosing Sexual Assault.* In addition, it has been transferred to a Queensland Health guideline template as was the original intention. It will be published on the Queensland Health guideline page at https://www.health.qld.gov.au/qhpolicy.

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
Telephone +61 7 3096 2110
Website www.health.qld.gov.au

Should you require any further information, Mr Michel Lok, General Manager Community and Scientific Services, Health Support Queensland, is available to assist. Mr Lok can be contacted via email at [redacted] or via telephone on [redacted]

Yours sincerely

[redacted]

Dr Peter Bristow FRACP, FCICM, FRACMA, GCM, GAICD
Chief Executive Officer

Receipt
Contents
Date / /
CSR STAFF:
DO NOT OPEN
DO NOT CUT HERE TO OPEN
UR Number ORR+
Surname
Given Name
D of B
Sex F M
Patient Address
Pcode
Ph:
HCF QHSS
Ward FBIO
Ward/Clinic FBIO
Consultant SSTOX (Supervising Scientist)
Requesting Practitioner SSTOX (Supervising Scientist)
Signature
Date / /
Extra Copies To: Dr
Address
Extra Copies To: Dr
Address
ALL collectors must complete
Time hrs
Signature
Date / /
Print Name
Collector Code
FORSS
(Just in case testing)
Please refer to the flowchart below for detailed instructions
Any routine patient care requests are to be ordered on a separate request form
BILLING CATEGORY
LAB
TEB3-4

WIT.0043.0098.0001

From: Cathy Lincoln
Sent: Thursday, 30 June 2022 11:43 AM
To: Mark Stephenson
Cc: Lara Keller
Subject: thanks for Monday visit

Mark,

Thanks so much for your time on Mon – Melanie and Ashleigh really appreciated it and it was great for me to reconnect. Please pass on our thanks to Amanda as well.

I wanted to see if we could continue a conversation around toxicology specimens for so-called 'just in case' (JIC) forensic examinations.

The inability to collect toxicology samples and also clothing items (esp underwear) from complainants who are not yet ready to speak to police within the current JIC process means that the SAIK and the JICK processes are not the same. This can be difficult for complainants to understand when they are deciding which forensic examination pathway they want to pursue. As I understood your comments, it seems we may be able to include these samples for storage at FSS alongside biological forensic swabs?

I know of at least one sexual assault case involving this office that proceeded to trial but was initially a JIC forensic examination. Toxicology issues were raised by DPP at trial and could not be addressed appropriately because of the inability to include tox samples at the time of examination, so I do believe it is worth exploring.

I have cc-ed Lara because this matter was raised in recent discussions with the Womens Safety and Justice Taskforce committee, and may be important with respect to Justice McMurdo's recommendations.

I'm happy to meet to further discuss if/when suits,

Thanks
Cathy

Dr Cathy Lincoln
Forensic Physician, Deputy Director
Gold Coast University Hospital | Forensic Medicine | Emergency Department
E: [redacted]
P: [redacted]
M: [redacted]
1 Hospital Boulevard Southport QLD 4215

Gold Coast Health

HealthSupport
Queensland

For Laboratory: Potential forensic evidence "Just in Case" Forensic Examinations

Patients who have disclosed a sexual assault but are not ready to involve police can request a forensic examination "Just in Case" they decide to make a police complaint later.

Request & Delivery of Just in Case kits

Clinicians can obtain a Sexual Assault Investigation Kit customised for Just in Case (JIC SAIK) examinations from the local Pathology Queensland Laboratory.

- Each kit will include collection swabs, tamper evident bag, pathology request form and chain of custody form.

The sealed and completed kit will be hand delivered to the Pathology Queensland laboratory for immediate transport to Forensic and Scientific Services (as per Appendix C).

- Any other items should not be accepted by the laboratory, only the sealed bag of swabs.

Pathology request form – clinician to complete

A pathology request form will be placed in an envelope on the outside of the kit (see Appendix A).

When entering the form to ensure privacy **enter the unique bag ID (see Appendix A) as the patient Surname. The additional agreed forms of identification are the first name of the patient, the date of birth and sex. (see Appendix B).**

Chain of Custody Form (See Appendix D)

Relinquished by:

At every stage the person relinquishing the package must complete the chain of custody form with their name, section/unit/date/time and whether the tamper seal was intact and sign.

Received by:

At every stage the person receiving/processing the package must complete the chain of custody form with their name, section/unit/date/time and whether the tamper seal was intact and sign.

This chain of custody form must stay with the package at all times.

Laboratory processing in AUSLAB

Register sample in AUSLAB as per table below:

Auslab Field/Information	Data Entry
UR number	ORR+
Surname	Unique bag ID (see Appendix A)
Given Names	As per request form
DOB	As per request form
SEX	As per request form
HCF	QHSS
Ward	FBIO~QHSS
Consultant	SSTOX~QHSS
Requesting Doctor	SSTOX~QHSS
Specimen	Swab
Primary site	-
Specimen site	-
Test code	FORSS
Billing category	LAB
Copy Doctor	-

Sending samples to Forensic and Scientific Services

Where samples can be sent same day

1. Sample is to be sent cool to Forensic and Scientific Services in a **dedicated** category B esky as per QIS 24545.
2. Esky must be tracked through Diagnostic Esky Tracking program sending directly to SS.
3. Call TOLL on [redacted] (see Appendix C) to arrange a same day collection.

   Note the test code FORSS will automatically add this to a SS packing list. This sample must be placed on its own packing list. There must be no other specimens placed with this.

AUSLAB Clinical and Scientific Information System

Clin

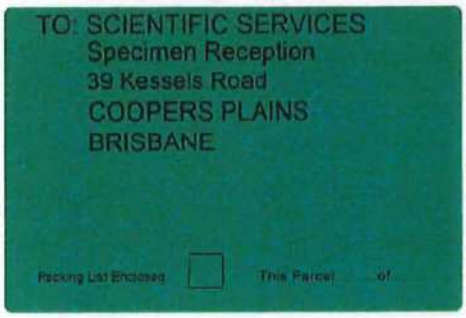
Lab [redacted] Ur [redacted] Name [redacted] Sex M

Dob [redacted] Wd ED-RDH Dr Nurse Initiate* c03:55 30-Mar-18

SPECIMEN AUDIT HISTORY

Time/Date	User	Labgrp	Test	Event
[illegible]	sys	CN		Comms Transfer to [HL7] [redacted]
09:34 04-Jul-19	sys	CN		Comms Transfer to [HL7] [redacted]
09:34 04-Jul-19	sys	CN	FORSS	Episode NOT inserted into consolidation queue OPE [redacted]
09:34 04-Jul-19	sys	CN		Comms Transfer to [HL7] [redacted]
09:34 04-Jul-19	aec2	CN	FORSS	Add Request
09:34 04-Jul-19	aec2	CN		Added to list PL SS-CN

4. Place the GREEN "To scientific services" and the hot pink "Forensic Sciences" label on the esky.



5. Place a 'keep refrigerated' label on the outside of the esky.

Where samples cannot be sent same day

6. If sample cannot be sent the same day store sample in Freezer until it can be sent. Sign that the sample has been relinquished to the freezer and indicate the storage location on the chain of custody form (Appendix D).
7. When the sample is removed from the freezer for packaging the staff member must sign in the "received by" section.
8. Proceed as per step 1 above.

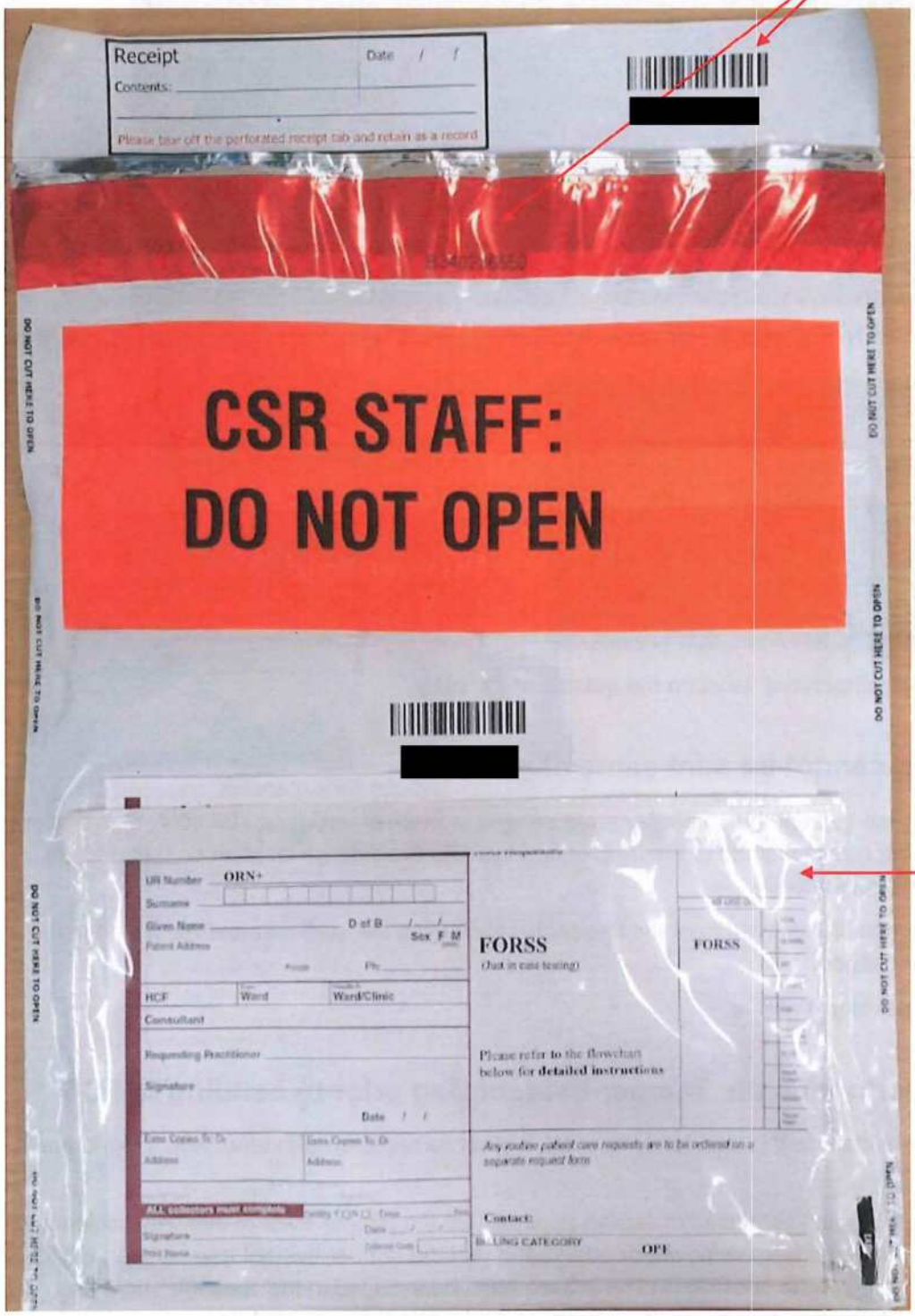
If a staff member opens the Tamper Evident Bag prior to sending to FSS

1. If the tamper evident bag is accidently opened, it must be resealed with tape, with a signature over the seal.
2. A specimen note must be placed in Auslab to detail that the tamper evident bag was accidently opened, that no items were removed or added and that the tamper evident bag was re-sealed. The date and time of the opening and re-sealing must be included in the specimen note and identified that if any other staff member observed the opening and re-sealing.
3. The opening of the tamper evident bag must be detailed on the Chain of Custody form, so that subsequent handlers of the tamper evident bag are aware that the bag was previously opened.

Appendices

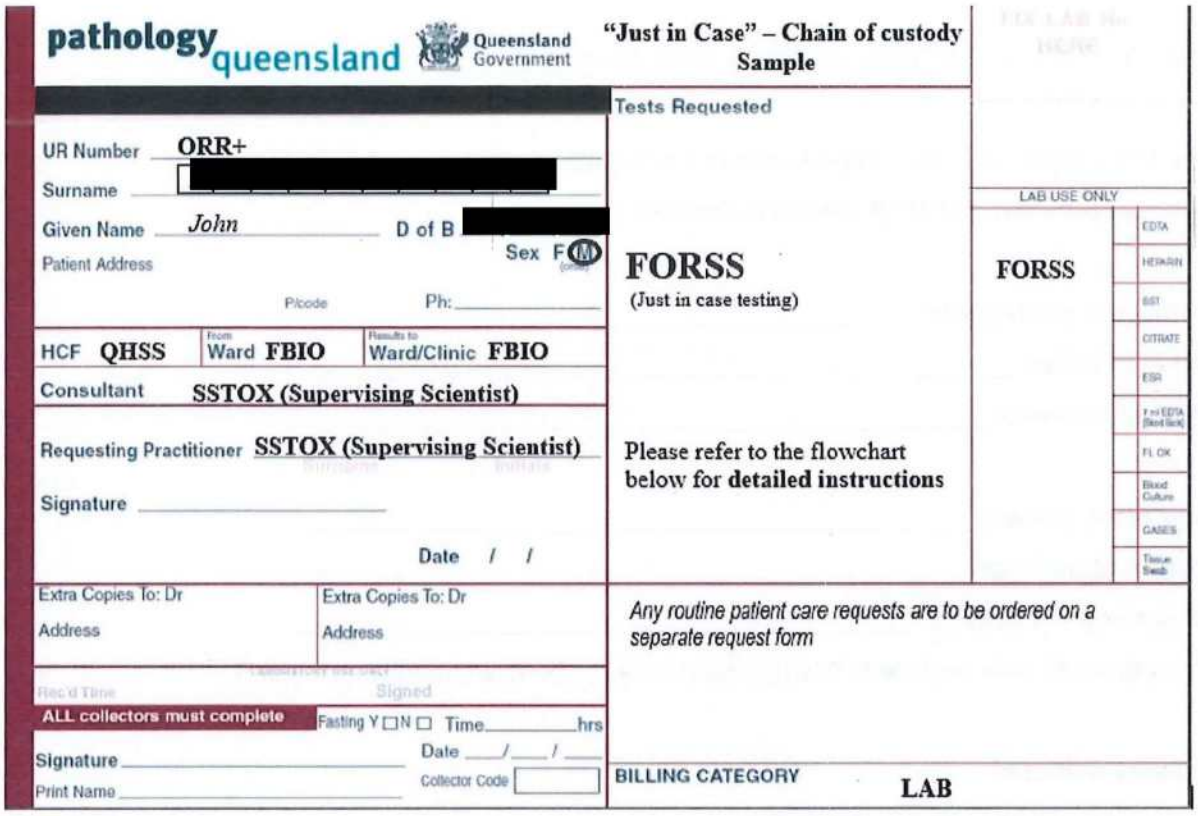
Appendix A – example Tamper Evident Security Bag

Unique Bag ID use as surname



Request form to be placed outside the Tamper Evident Security Bag

Appendix B – example of request form and instructions



pathology queensland — Queensland Government

"Just in Case" – Chain of custody Sample

UR Number ORR+

Surname [redacted]

Given Name *John* D of B [redacted]

Patient Address Sex F M

P/code Ph:

HCF QHSS | From Ward FBIO | Results to Ward/Clinic FBIO

Consultant SSTOX (Supervising Scientist)

Requesting Practitioner SSTOX (Supervising Scientist)

Signature

Date / /

Extra Copies To: Dr Address

Extra Copies To: Dr Address

Rec'd Time Signed

ALL collectors must complete Fasting Y ☐ N ☐ Time hrs

Signature Date / /

Print Name Collector Code

Tests Requested

FORSS

(Just in case testing)

Please refer to the flowchart below for **detailed instructions**

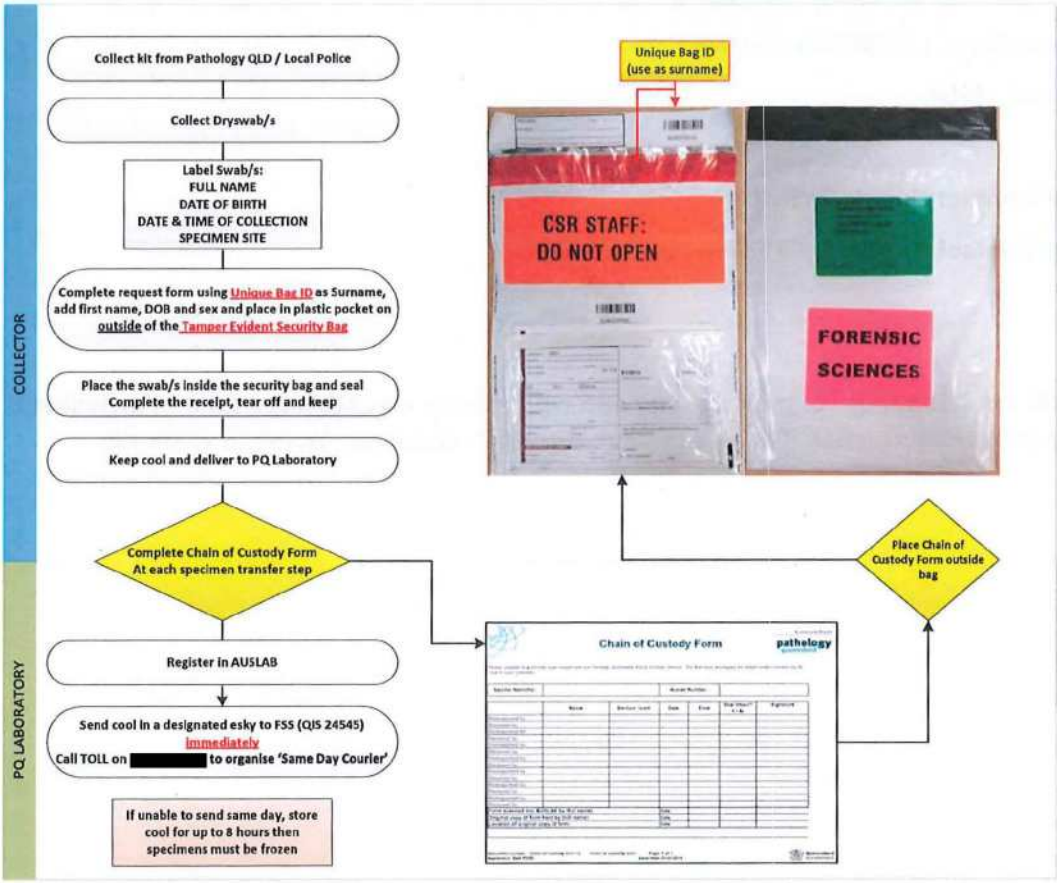
LAB USE ONLY

FORSS

EDTA, HEPARIN, SST, CITRATE, ESR, FL OK, Blood Culture, GASES, Tissue Swab

Any routine patient care requests are to be ordered on a separate request form

BILLING CATEGORY LAB



Appendix C – TOLL SAME DAY SERVICE instructions

Call TOLL on [redacted] to arrange a same day courier.

The TOLL customer service representative will require the following information:

Account number: [redacted] (Forensic & Scientific Services)

Contact at pick up site: _____

Name of caller: _____

Pick up Address:_____

How many pieces: _____

Weight of package: _____

Dimension of package: _____

Consignment note required: Yes (request courier to bring a con note with them)

Delivery address:

Scientific Services Specimen Reception

39 Kessels Road, COOPERS PLAINS

Queensland, 4108

Delivery Contact Name: Cathy Hurst

Delivery Contact Number: [redacted]

TOLL will ask it is ready for pick up now and will provide an estimated time of arrival and a booking reference number. These can be recorded in specimen notes in AUSLAB.

Appendix D: Chain of custody Form

Chain of Custody Form

Queensland Health

pathology queensland

Please complete for potentially legal samples sent via Pathology Queensland (PQ) to Forensic Services. This form must accompany the tamper evident security bag for "Just in case" collections

Satchel Identifier:		Auslab Number:	

	Name	Section / Unit	Date	Time	Seal intact? Y / N	Signature
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						
Relinquished by:						
Received by:						
Form scanned into AUSLAB by (full name):			**Date:**			
Original copy of form held by (full name):			**Date:**			
Location of original copy of form:			**Date:**			

WIT.0043.0100.0007

FORENSIC MEDICINE
GOLD COAST UNIVERSITY HOSPITAL
Telephone: [redacted]
Fax:
Email:

Gold Coast Hospital and Health Service

DATE: …… **TIME:**……

NAME OF FORENSIC PHYSICIAN: ……

PLACE OF EXAMINATION……..

Under the terms of the attached *Forensic Procedure Order*, I collected the following samples from:

NAME OF SUBJECT……**DOB** ……

Genital swabs:
- Shaft penis (wet and dry) ☐
- Glans penis (wet and dry) ☐
- Coronal sulcus (wet and dry) ☐

Other swabs:
- ……. ☐
- ……. ☐
- ……. ☐

Toxicology:
- Blood ☐
- Urine ☐

Clothing items:
- …… ☐
- …… ☐
- …… ☐
- …… ☐

I labelled and sealed the swabs into a tamper-evident security bag with ID number: ...……..…….. and handed it, together with other listed items, to:

NAME OF POLICE OFFICER: ……..……..

at (time)……. on (date)……

Signature
Forensic Physician: …… **Signature**
Police Officer: ……

SWAB SITE: _____
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **SHAFT PENIS DRY**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **PRE EXAM SURFACE CONTROL**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **POST EXAM SURFACE CONTROL**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **GLANS PENIS WET**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SAMPLE/SWAB SITE: _____
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **GLANS PENIS DRY**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SAMPLE/SWAB SITE: _____
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **CORONAL SULCUS WET**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SAMPLE/SWAB SITE: _____
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **CORONAL SULCUS DRY**
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SAMPLE/SWAB SITE: _____
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

SWAB SITE: **SHAFT PENIS WET**
Name of subject:_____
D.O.B: _____
Collected by: Collected by: _____
Date & Time of collection :_____

SAMPLE/SWAB SITE: _____
Name of subject:_____
D.O.B: _____
Collected by: _____
Date & Time of collection :_____

NAME:	DOB:

TOXICOLOGY INFORMATION
TO ACCOMPANY TOXICOLOGY SAMPLES

Give details of any alcohol or drugs consumed, periods of altered consciousness and/or memory loss:			
Any symptoms possibly related to alcohol or drug ingestion reported by patient?			
Alcohol before the incident?	YES	NO	Type/amount/time of last drink before incident?
Alcohol since the incident?	YES	NO	Type/amount/time of last drink prior to sample collection?
Drugs prior to the incident?	YES	NO	Type/amount/how taken/time of last drug ingestion before incident?
Drugs since the incident?	YES	NO	Type/amount/how taken/time of any drugs ingested since the incident?
Any prescription medications?	YES	NO	
Any 'over the counter'/herbal preparations?	YES	NO	
Any history of liver/kidney impairment?	YES	NO	
Weight of patient (kg)			Time and details of last meal?

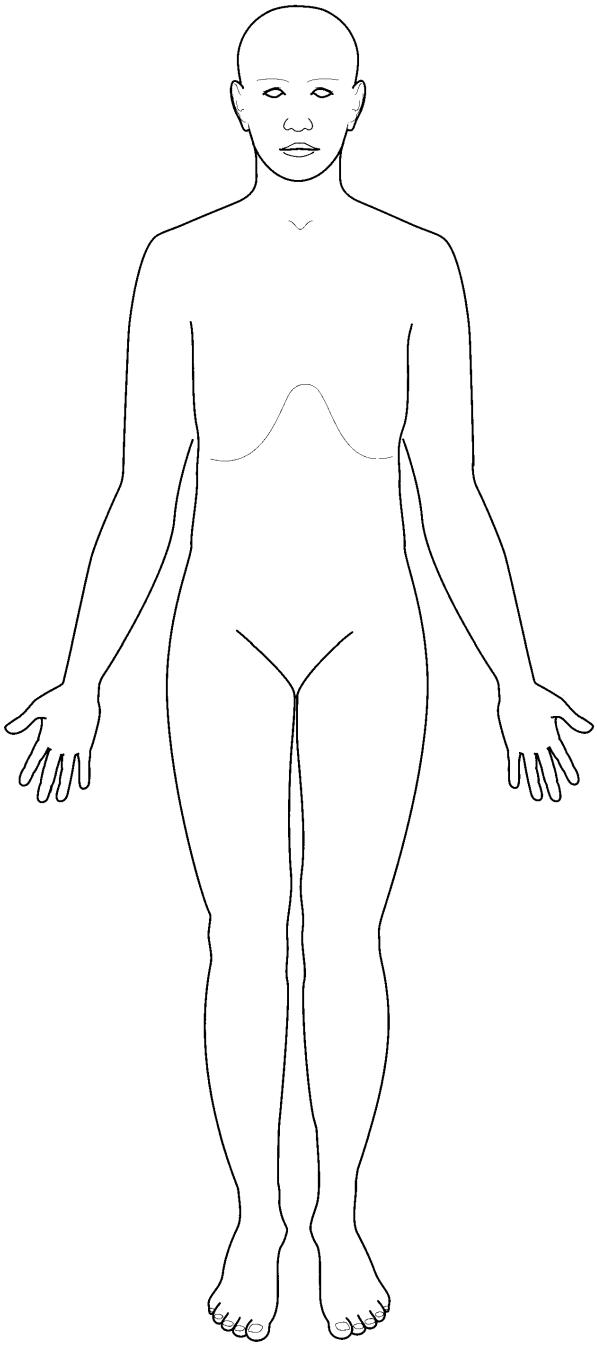
FORENSIC TOXICOLOGY SAMPLES

Collect blood and urine samples if incident occurred within previous 72 hours ASAP

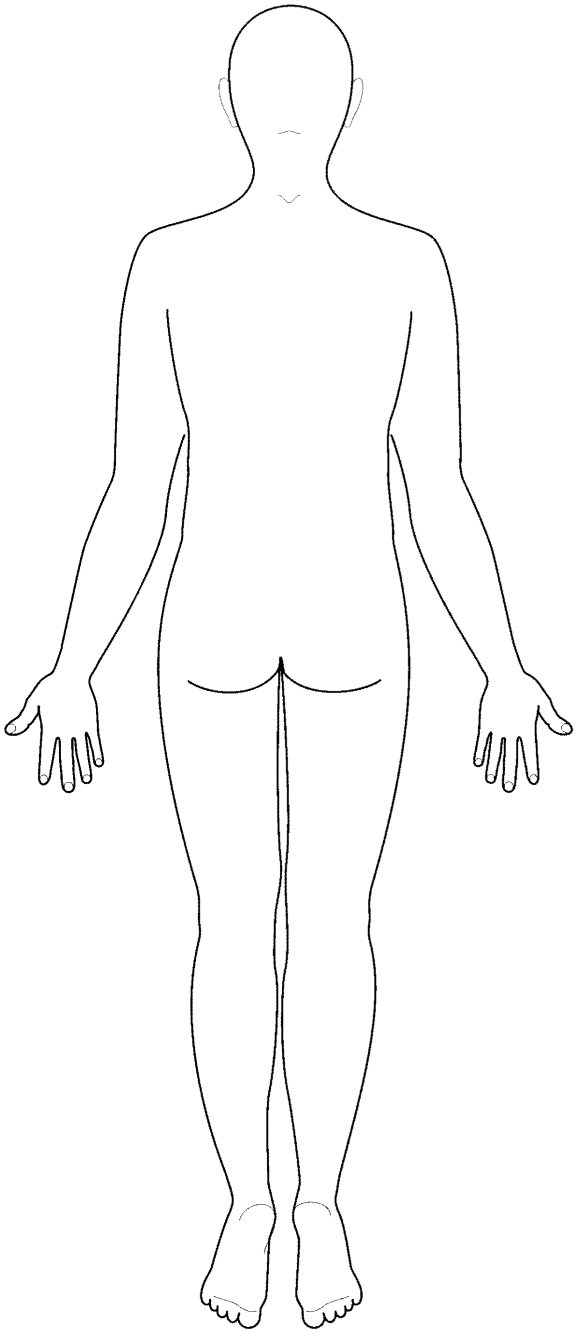
Use two separate toxicology kits (one for urine and one for blood)

DATE AND TIME BLOOD SAMPLE COLLECTED		STICKER BAR CODE	
DATE AND TIME URINE SAMPLE PASSED		STICKER BAR CODE	
Name of Examining Doctor/Nurse		Signature of Doctor/Nurse	

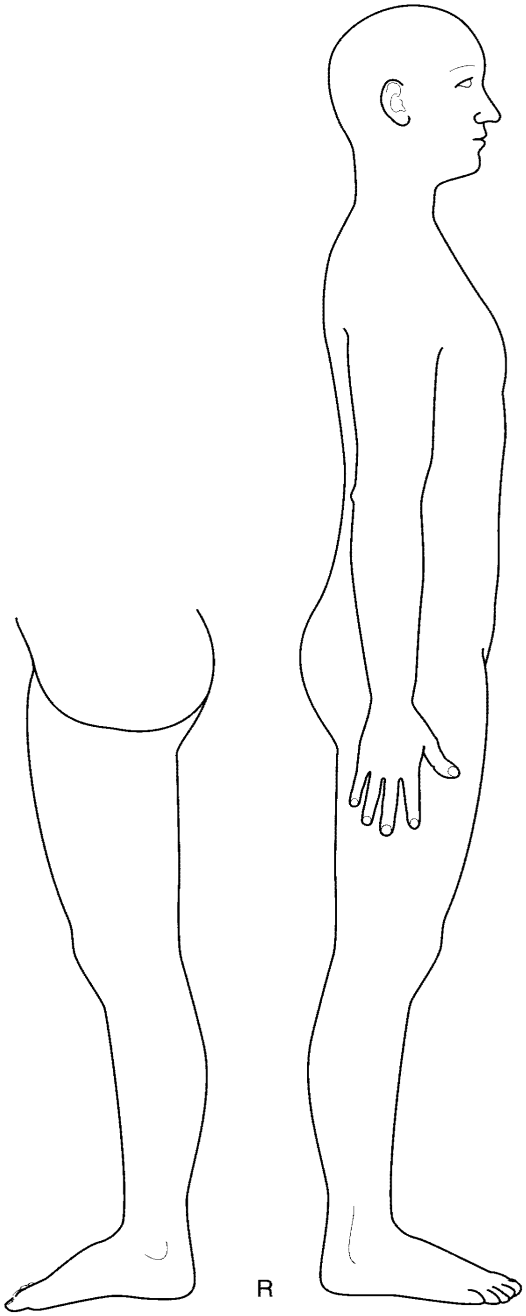
SURNAME:	**OTHER NAMES:**
DATE:	**TIME:**
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	



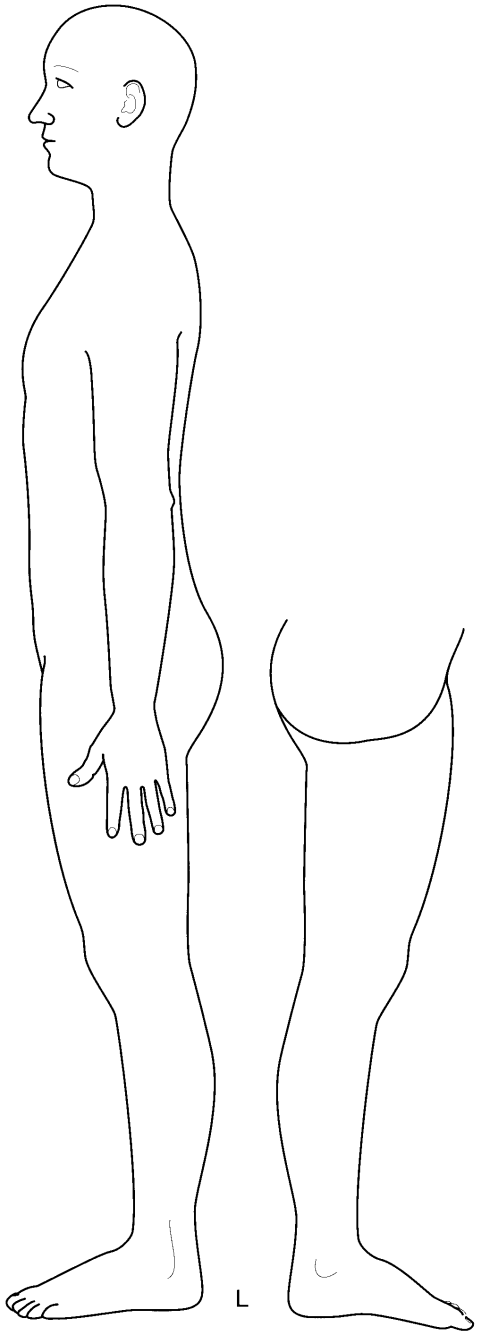
SURNAME:	**OTHER NAMES:**
DATE:	**TIME:**
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	



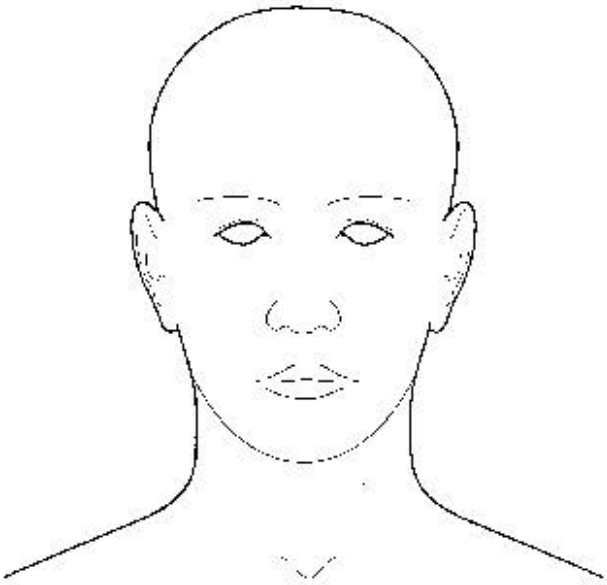
SURNAME:	**OTHER NAMES:**
DATE:	**TIME:**
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	

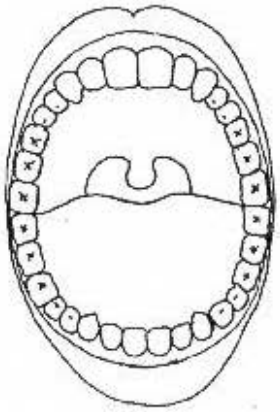


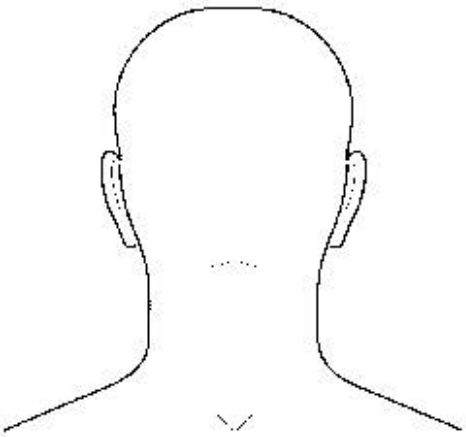
SURNAME:	**OTHER NAMES:**
DATE:	**TIME:**
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	



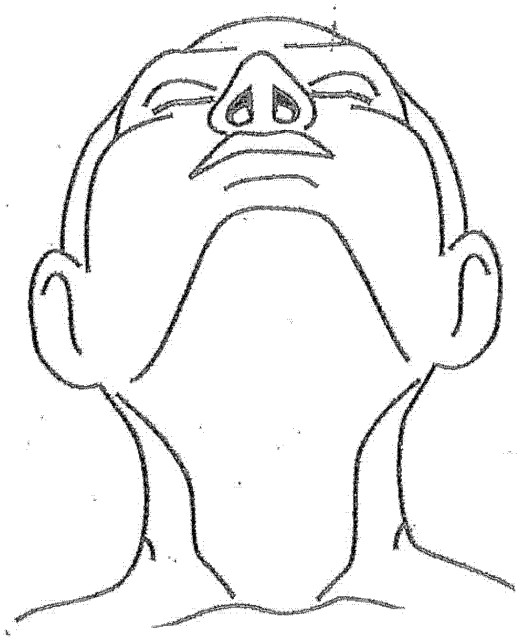
SURNAME:	**OTHER NAMES:**
DATE:	**TIME:**
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	



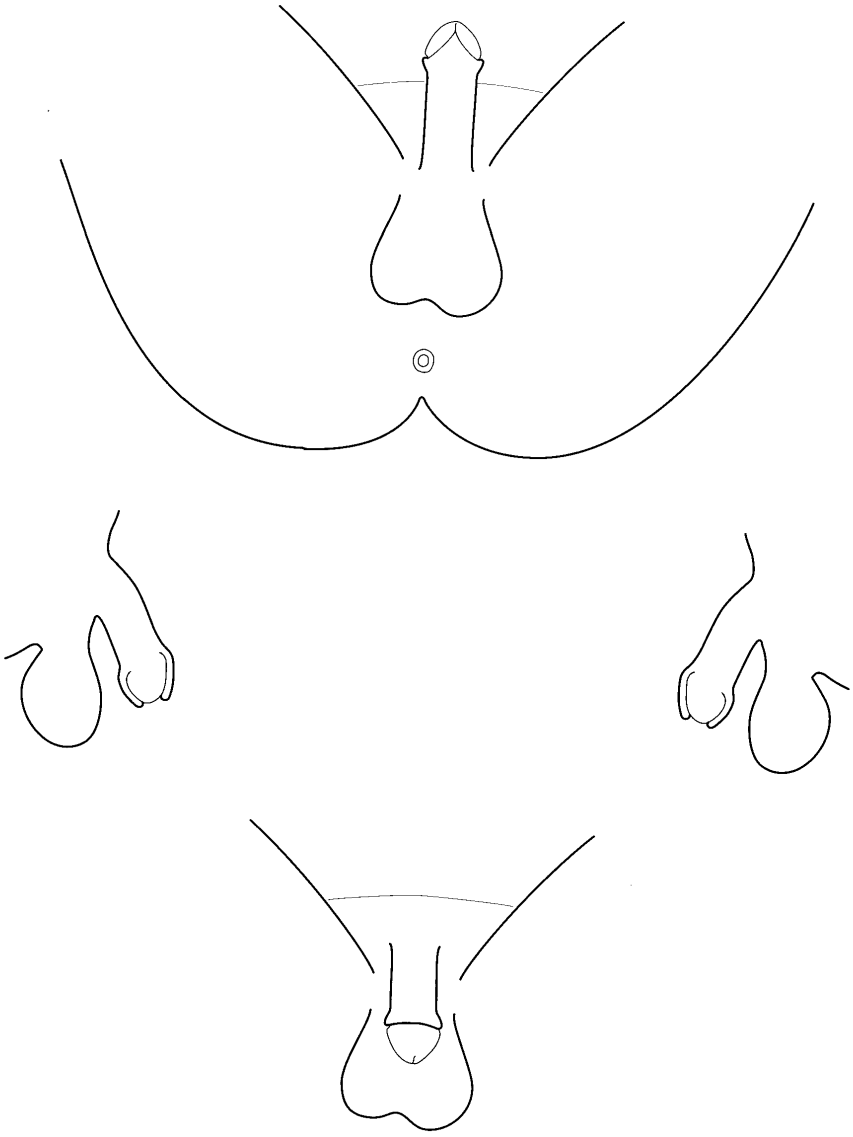




SURNAME:	**OTHER NAMES:**
DATE:	**TIME:**
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	



SURNAME:	OTHER NAMES:
DATE:	TIME:
EXAMINING DOCTOR:	
PHOTOGRAPHS TAKEN?	



MALE GENITAL ANATOMY AND METHOD OF GENITAL SWAB COLLECTION

The following information is provided to assist with an understanding of male genital anatomy and sites of sample collection.

a) The **shaft** is the elongated part of the penis.

b) The **glans penis** is the 'cap-shaped' expansion at the end of the penis.

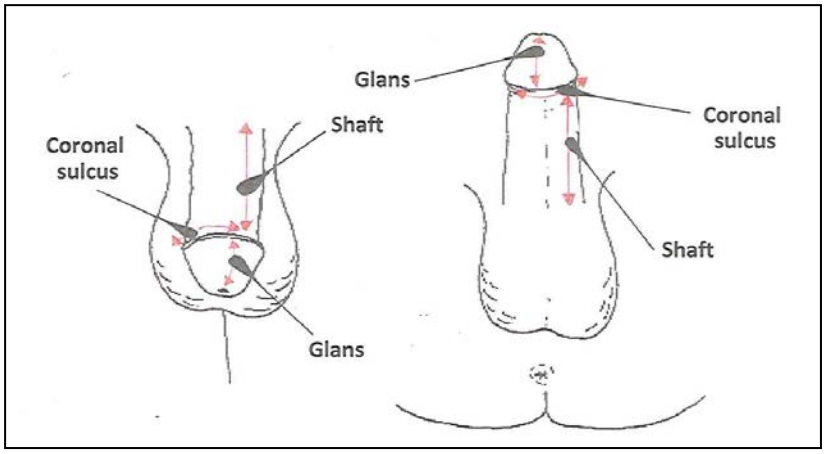
c) The **coronal sulcus** is the groove immediately underneath the corona of the glans penis, which is the rounded proximal border of the glans penis.

d) Each of the three areas described is swabbed twice;- firstly with a cotton swab moistened with sterile water, and secondly with a dry cotton swab. In an uncircumcised male, it is necessary to retract the foreskin to collect swabs from the glans and coronal sulcus.

   i. *Swabs from shaft:* whilst holding the tip of the penis so that all surfaces of the shaft are exposed, the swab is moved downwards along the length of the penis from the foreskin to the base of the penis near the scrotum. This is done 6-8 times at different sites to ensure that the majority of the shaft skin makes contact with the swab.

   ii. *Swabs from glans:* the swab is moved over the skin of the glans at 6-8 sites to ensure that the majority of the glans skin makes contact with the swab.

   iii. *Swabs from coronal sulcus:* the swab is moved along the skin circumferentially around the groove immediately beneath the corona of the glans penis.



e) At no time is a swab inserted into the urethra or 'urine passage' during this process.

From: Abigail Ryan
Sent: Tuesday, 22 October 2019 9:21 AM
To: Cathy Lincoln
Subject: RE: SAIK [redacted] Forensic Case File [redacted] Forensic Exhibit Number [redacted]

Hi Cathy,

Apologies for not replying sooner, I've been away for a few days. There's no need to attach this form to FPO samples, we can get all the relevant offence details from the police on their QP127 form.

Many thanks
Abbie

Abbie Ryan
Scientist – Evidence Recovery Team

Forensic DNA Analysis, Police Services Stream
Forensic & Scientific Services, Health Support Queensland, Queensland Health

p [redacted]
a 39 Kessels Road, Coopers Plains, QLD 4108
e [redacted] w www.health.qld.gov.au/healthsupport/businesses/forensic-and-scientific-services

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

From: Cathy Lincoln
Sent: Friday, 18 October 2019 2:24 PM
To: Abigail Ryan <[redacted]>; Miles.StevenD[SER] <[redacted]>
Subject: RE: SAIK [redacted] Forensic Case File [redacted] Forensic Exhibit Number [redacted]

Abbie,

Rather than write the sample information out on the Magistrate's Order by hand, we've designed the attached form to accompany FPO samples given there is no designated FPO sample kit. Do you want us to attach the Order as well or will police provide it separately to you?

Cathy

From: Abigail Ryan <[redacted]>
Sent: Friday, 18 October 2019 12:27 PM
To: Miles.StevenD[SER] <[redacted]>; Cathy Lincoln [redacted]
Subject: RE: SAIK [redacted] Forensic Case File [redacted] Forensic Exhibit Number [redacted]

Hi all,

Thank you for your assistance in this matter, the information received allows us the formulate an examination strategy for these swabs. We can now proceed with the testing.

Kind regards
Abbie

Abbie Ryan
Scientist – Evidence Recovery Team

Forensic DNA Analysis, Police Services Stream
Forensic & Scientific Services, Health Support Queensland, Queensland Health

p [redacted]
a 39 Kessels Road, Coopers Plains, QLD 4108
e [redacted] w www.health.qld.gov.au/healthsupport/businesses/forensic-and-scientific-services

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

From: Miles.StevenD[SER] <[redacted]>
Sent: Thursday, 17 October 2019 3:51 PM
To: Abigail Ryan <[redacted]>; Cathy Lincoln <[redacted]
Subject: RE: SAIK [redacted] Forensic Case File [redacted] Forensic Exhibit Number [redacted]

Hi Abbie,

Apologies but, When Dom VARFIS and I attended the QHSS we had Cathy Lincoln's doctors notes and QP127 with the exhibits. The person on the front counter advised us the documents were not required. The front counter person double checked with a colleague who provided the same advice. Please find enclosed with this email:

(i) Original Field property receipt
(ii) Page 1 of 2 Forensic Procedure Order
(iii) Page 2 of 2 Forensic Procedure Order with Dr Cathy LINCOLN'S notes
(iv) Statement from Dr Cathy Lincoln
(v) QP127

Police are wanting to compare the samples to DNA obtained from the offender [redacted] ([redacted]) and victim child [redacted] ([redacted]). Should you require any further information, please do not hesitate in contacting me. Many thanks –

Steven MILES
Logan Central CAIU
[redacted]

From: Abigail Ryan <[redacted]>
Sent: Thursday, 17 October 2019 13:45
To: Miles.StevenD[SER] <[redacted]>; Cathy Lincoln <[redacted]>
Subject: SAIK [redacted] Forensic Case File [redacted] Forensic Exhibit Number [redacted]

Good afternoon,

We have received a SAIK barcode [redacted] without any accompanying Medical notes or a [redacted] These notes assist in determining how these exhibits are examined. Please confirm if notes were taken during the SAIK examination and if so please forward to Forensic DNA Analysis. The SAIK has been placed on hold pending your response.
Regards
Abbie

Abbie Ryan
Scientist – Evidence Recovery Team

Forensic DNA Analysis, Police Services Stream
Forensic & Scientific Services, Health Support Queensland, Queensland Health

p [redacted]
a 39 Kessels Road, Coopers Plains, QLD 4108
e [redacted] w www.health.qld.gov.au/healthsupport/businesses/forensic-and-scientific-services

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

****

This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.

Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.

If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia [redacted] or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.

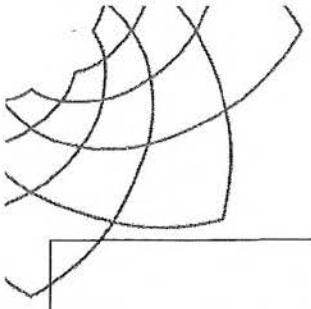
If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

Although Queensland Health takes all reasonable steps to ensure this email does not contain malicious software, Queensland Health does not accept responsibility for the consequences if any person's computer inadvertently suffers any disruption to services, loss of information, harm or is infected with a virus, other malicious computer programme or code that may occur as a consequence of receiving this email.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

****

****
CONFIDENTIALITY: The information contained in this electronic mail message and any electronic files attached to it may be confidential information, and may also be the subject of legal professional privilege and/or public interest immunity. If you are not the intended recipient you are required to delete it. Any use, disclosure or copying of this message and any attachments is unauthorised. If you have received this electronic message in error, please inform the sender or contact [redacted]
This footnote also confirms that this email message has been checked for the presence of computer viruses.
****



HealthSupport
Queensland
Forensic and Scientific Services

Sexual Assault Investigation Kit (SAIK)

Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 Telephone: [redacted]

SURNAME:	GIVEN NAMES:
DOB:	SEX: Male ☐ Female ☐
Examining Doctor / FMO / FNE: Address of examiner: E-mail address: Contact Phone Number:	Investigating Officer: Police Station: E-mail address: Contact Phone Number:
Date of SAIK Examination: Time of SAIK Examination:	Date of Assault: Time of Assault:

Sterilisation process complete for workspace & equipment Yes ☐ No ☐
Exam room details: (room number or location)

TYPE OF ASSAULT:	Digital	Penile penetration	Oral	Object penetration
Oral				
Vaginal				
Anal				
Penile				
Other	(please provide details in "Summary of Assault"):			

PREVIOUS SEXUAL ACTIVITY: Yes ☐ >7 days previous ☐
Date (if ≤ 7days) : _____
No ☐

Was previous coitus with suspect? Yes ☐ No ☐ Unknown ☐
Was condom used with previous coitus? Yes ☐ No ☐ Unknown ☐

For Female SAIK
Date of last LMP: _____

ASSAULT DETAILS

Was a condom used: Yes ☐ No ☐ Unknown ☐
Did ejaculation occur: Yes ☐ No ☐ Unknown ☐
Was a lubricant used: Yes ☐ No ☐ Unknown ☐
(if yes, please provide details in summary of assault details section)

How many offenders were involved: Male _____ Female _____
(if multiple offenders or if unknown, please detail within summary of assault details section)

SINCE THE ASSAULT, HAS THE PATIENT:

Changed Clothing:	Yes ☐ No ☐	Douched:	Yes ☐ No☐
Washed Clothing:	Yes ☐ No ☐	Urinated:	Yes ☐ No ☐
Showered / Bathed:	Yes ☐ No ☐	Defecated:	Yes ☐ No ☐
Washed Mouth:	Yes ☐ No ☐	Vomited:	Yes ☐ No ☐
Cleaned Teeth:	Yes ☐ No ☐	Had drink / food:	Yes ☐ No ☐

CASE HISTORY

Has the patient consumed a substance which may alter consciousness?
Yes ☐ No ☐ Unknown ☐

Can the patient recall and communicate the incident?
Yes ☐ No ☐ Unknown ☐

Did the assault involve any kissing / licking / biting?
Yes ☐ No ☐ Unknown ☐

If yes, locations: _____

Was there any genital / anal injury causing bleeding?
Yes ☐ No ☐

If yes, details: _____

SUMMARY OF ASSAULT DETAILS (please provide as much information as possible as this assists with DNA Analysis): _____

_____
_____
_____
_____
_____
_____ (continue on next page)

Queensland Government

Sexual Assault Investigation Kit (SAIK)

Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 Telephone: [redacted]

SUMMARY OF ASSAULT DETAILS (continued from previous):

CLOTHING AND OTHER ITEMS

Item Clothing / Sanitary Items:
Details:

Worn pre-assault: ☐ Worn post-assault ☐ Worn pre- and post-assault ☐

Item Clothing / Sanitary Items:
Details:

Worn pre-assault: ☐ Worn post-assault ☐ Worn pre- and post-assault ☐

Blood sample taken for Toxicology? Yes ☐ No ☐ Urine sample taken for Toxicology? Yes ☐ No ☐

Sexual Assault Investigation Kit (SAIK)

Forensic DNA Analysis, Forensic and Scientific Services, Department of Health
39 Kessels Rd, Coopers Plains, QLD 4108 Telephone: [redacted]

Please document the samples collected for DNA below

FEMALE SAIK SWABS:	
☐ High vaginal	☐ Low vaginal
☐ Vulval	☐ Cervical
☐ Perianal	☐ Rectal
☐ Oral	☐ Other
☐ Other	☐ Other

MALE SAIK SWABS:	
☐ Base of penis	☐ Shaft of penis
☐ Glans penis	☐ Scrotum
☐ Perianal	☐ Rectal
☐ Oral	☐ Other
☐ Other	☐ Other

BODY/SKIN SWABS: (please specify if biting, licking or kissing has occurred at site from which body swab was collected)	
☐ Location	☐ Location
☐ Location	☐ Location
☐ Location	☐ Location
☐ Location	☐ Location
☐ Location	☐ Location

FINGERNAIL CLIPPINGS/SCRAPINGS:		**DROP SHEET**
☐ Left Hand	☐ Right Hand	☐

From: Maria Nittis <[redacted]>
Sent: Monday, 12 September 2022 4:01 PM
To: Cathy Lincoln
Subject: RE: kits for offender examinations

This email originated from outside Queensland Health. DO NOT click on any links or open attachments unless you recognise the sender and know the content is safe.

The plan will be to use the new FMEK from Hazpak and dispense with a separate physical exam kit. We are getting new fingernail kits, as well, but this is being organised by Forensic Pathology (through Hazpak, as I understand)

Cheers, Maria

Maria Nittis
Head of Service
Clinical Forensic Medicine
Forensic Services

[redacted]

65 Kavanagh Street | T [redacted] | vifm.org
Southbank VIC | F
3006 Australia | M

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

From: Cathy Lincoln <[redacted]>
Sent: Monday, 12 September 2022 3:39 PM
To: Maria Nittis <[redacted]>
Subject: kits for offender examinations

Caution: Email originated outside VIFM. Do not respond, click on links or open attachments unless you trust the sender and know the content is safe.

Maria
If you have to swab/sample offenders, do you have a special kit or just use same Hazpak one as for complainants.
Cathy

Dr Cathy Lincoln
Forensic Physician, Deputy Director
Forensic Medicine | Emergency Department
Gold Coast University Hospital
E: [redacted]
P:
M:
D Block Level 5 (D5 090)
1 Hospital Boulevard Southport QLD 4215

Gold Coast Health Queensland Government

****

Disclaimer: This email and any attachments may contain legally privileged or confidential information and may be protected by copyright. You must not use or disclose them other than for the purposes for which they were supplied. The privilege or confidentiality attached to this message and attachments is not waived by reason of mistaken delivery to you. If you are not the intended recipient, you must not use, disclose, retain, forward or reproduce this message or any attachments. If you receive this message in error, please notify the sender by return email or telephone and destroy and delete all copies. Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

Queensland Health carries out monitoring, scanning and blocking of emails and attachments sent from or to addresses within Queensland Health for the purposes of operating, protecting, maintaining and ensuring appropriate use of its computer network.

****

The content of this e-mail and any attachments may be private and confidential, intended only for use of the individual or entity named. If you are not the intended recipient of this message you must not read, forward, print, copy, disclose, use or store in any way the information this e-mail or any attachment contains. If you are not the intended recipient, please notify the sender immediately and delete or destroy all copies of this e-mail and any attachments.

From: Abigail Houlding
Sent: Tuesday, 29 March 2016 10:30 AM
To: Cathy Lincoln
Subject: SAIK swabs

Good Morning,

I am the acting Senior Scientist of the Evidence Recovery Team, Forensic DNA Analysis. We are the team who process sexual assault investigation kits (SAIKs) to test for bodily fluids and DNA. We have received a number of SAIKs recently that have a large number of internal swabs in them. I just wanted to contact you to gain more of an understanding of your rationale behind collecting so many vaginal swabs.

To give you an insight on our processes here, as per our agreement with the Queensland Police Service we examine every item contained within a SAIK individually, we do not selectively test swabs based on location or collection order. Each swab gets full presumptive screening for semen, including microscopy. We then process the swabs through our analytical section which is a costly process (semen positive swabs get split into two samples with the basic process costing on average $200-$300 per sample). In collecting multiple swabs from the same site this impacts examination time, turnaround times for the results, and potentially decreases the likelihood of getting a good result from any one swab, as any foreign cellular material present is diluted across multiple swabs. It is much better to concentrate the sample onto one swab. When we examine a large SAIK this also impacts on turnaround times for other cases.

A standard female SAIK usually consists of:
1 x high vaginal swab
1 x low vaginal swab
1 x vulval swab

1 x cervical swab (if the SAIK is collected >7 days after the offence)
1 x perianal swab (if case history suggests anal assault)
1 x rectal swab (if case history suggests anal assault)
1 x oral swab (if case history suggests oral assault)
Skin swabs if semen or saliva is suspected in other areas (wet and dry swabs for these areas is fine)

Of course every case is different and as the FMO it is at your discretion which samples you collect, I understand that the patient is your main priority and you must do whatever is in their best interest. If there is some justification behind collecting multiple swabs please indicate this on the accompanying SAIK paperwork.

If you need me to explain any of our processes further, or if you require any additional information please do not hesitate to contact me.

Kind regards
Abbie

Abigail Houlding
A/Senior Scientist - Evidence Recovery Team, Forensic DNA Analysis
Police Services Stream | Forensic & Scientific Services | Health Support Queensland
Department of Health | Queensland Government
P.O. Box 594 Archerfield QLD 4108

t. [redacted]
e. [redacted] | www.health.qld.gov.au

HealthSupport
Queensland

From: Adam Griffin
Sent: Friday, 18 October 2019 4:51 PM
To: Cathy Lincoln; Ines Baptista
Cc: CFMUDirectorCorro
Subject: Re: SAIK Issues from Laboratory

Good afternoon,

I am reaching out due to concerns received from the forensic laboratory with regards to sexual assault kits they have received from your practice.

The collection of multiple swabs from the same genital region is not supported by the laboratory. The laboratory has indicated:

- collecting multiple swabs from the same intimate / internal site yields little benefit with respect to increased recovery of forensically relevant information;
- the examination of swabs collected as part of a Sexual Assault Investigation Kit is a particularly labour intensive process, kits containing extra samples that are of limited benefit greatly add to the time taken to complete examinations AND
- this increases time and number of events of interpretation and reporting.

The collection of two swabs (wet and dry) from skin is acceptable.

I am aware the Faculty of Forensic and Legal Medicine in the UK has issued guidelines recommending multiple swabs. I am further aware they have provided an accompanying document "the evidence" which does not contain evidence supporting double swabbing of areas other than skin. The local RCPA guidelines do not mention multiple swabs of (particularly) the endocervix.

The laboratories concerns resonate and should be taken into account when considering your practice. If a basis exists for this practice it would need to be compelling: I would welcome you sharing it.

Kind regards,
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, Queensland Health

p [redacted] m [redacted]
a 51 Herschel Street, Brisbane, 4000
e [redacted] w www.health.qld.gov.au/healthsupport

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cathy Lincoln
Sent: Saturday, 26 October 2019 12:05 PM
To: Ines Baptista; Danika Fietz; Kathleen Jackson; Nelle Van Buuren; Christine Mirakian
Subject: FW: Re: SAIK Issues from Laboratory
Attachments: SAIK swab procedure FSS 2011.docx; SAIK swabs

Dear all,

I received the email below from Director CFMU last week. The issue re ideal number of swabs to be collected as part of SAIKs has been a long-running issue of debate.

I've attached an email I received back in 2016 from an FSS scientist RE THE ISSUE explaining their procedure - she acknowledges that the collection of swabs is at the clinician's discretion. I've also attached a summary of lab approach to SAIK swabs as explained to me in 2011 after the decision was made to cease making slides 'in the field'.

FSS's issue appears to be with collection of more than one swab from 'internal (mucosal)' sites (ie low vaginal, high vaginal, endocervical, rectal) with the taking of 2 swabs (wet and dry) from skin being acceptable. To my mind, this would mean 2 swabs from inner labial, peri-anal, anal sites is acceptable.

With respect to a non-skin site, if there is residual material remaining after first swab is collected, I believe (and guidelines acknowledge) that the clinician is justified in taking a second swab - we've been asked to record the reason for collection of a second swab on the SAIK paperwork.

Any comments/different ideas welcome – we can discuss together when everyone next in.

Cathy

Dr Cathy Lincoln
Forensic Physician
P: [redacted]
M: [redacted]

From: Adam Griffin <[redacted]>
Sent: Friday, 18 October 2019 3:51 PM
To: Cathy Lincoln <[redacted]>; Ines Baptista <[redacted]>
Cc: CFMUDirectorCorro <[redacted]>
Subject: Re: SAIK Issues from Laboratory

Good afternoon,

I am reaching out due to concerns received from the forensic laboratory with regards to sexual assault kits they have received from your practice.

The collection of multiple swabs from the same genital region is not supported by the laboratory. The laboratory has indicated:

- collecting multiple swabs from the same intimate / internal site yields little benefit with respect to increased recovery of forensically relevant information;

- the examination of swabs collected as part of a Sexual Assault Investigation Kit is a particularly labour intensive process, kits containing extra samples that are of limited benefit greatly add to the time taken to complete examinations AND
- this increases time and number of events of interpretation and reporting.

The collection of two swabs (wet and dry) from skin is acceptable.

I am aware the Faculty of Forensic and Legal Medicine in the UK has issued guidelines recommending multiple swabs. I am further aware they have provided an accompanying document "the evidence" which does not contain evidence supporting double swabbing of areas other than skin. The local RCPA guidelines do not mention multiple swabs of (particularly) the endocervix.

The laboratories concerns resonate and should be taken into account when considering your practice. If a basis exists for this practice it would need to be compelling: I would welcome you sharing it.

Kind regards,
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, Queensland Health

p [redacted] m [redacted]
a 51 Herschel Street, Brisbane, 4000
e [redacted] w www.health.qld.gov.au/healthsupport

Integrity | Customers and patients first | Accountability | Respect | Engagement

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

Cathy Lincoln

From: Cathy Lincoln
Sent: Thursday, 4 May 2017 6:16 PM
To: Adam Griffin; Gary Hall; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; 'Les Gmail'; Les Griffiths; Nelle Van Buuren
Cc: CFMU; Paul Csoban; CFMUSER
Subject: RE: DNA retention baseline protocol

Thanks Adam,

I appreciate that you feel that I have the authority, as Chief Examiner, to dictate what the Faculty guidelines should be with regard to this issue; however, this is not the case.

The purpose of the forensic examination is not limited to obtaining trace evidence, but includes the identification of injury. Emergency department staff are not forensically trained; their role is to identify medical conditions including injury, that require health intervention.

I would hope that a complainant would never be 'subjected' to an intimate procedure, and that these are only ever performed with fully informed consent. Delaying forensic examinations until the following day could equally be seen as subjecting a person to unnecessary emotional distress.

I suggested that rather than make changes that appear to differ significantly from other jurisdictions, we continue as is until the release of the Faculty guidelines, which I believe are not far off.

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit SER
t [redacted]
f
m
e

From: Adam Griffin
Sent: Thursday, 4 May 2017 5:16 PM
To: Cathy Lincoln; Gary Hall; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; 'Les Gmail'; Les Griffiths; Nelle Van Buuren
Cc: CFMU; Paul Csoban; CFMUSER
Subject: RE: DNA retention baseline protocol

Hi Cathy,

Just to bring this forward again as I believe it is important you explain further. I note Ian Home's comments and questions remain unanswered by you. I have included them below to assist you.

> *It is my understanding that the forensic examination is for the purposes of trying to obtain trace evidence. If the scientific research suggests the odds of detecting trace evidence outside of the time frames for emergent examinations that Adam put forward, is exceedingly unlikely if not zero, then why would we subject someone to an intimate procedure?*
>
> *Examinations should not be done as a therapeutic procedure or to placate anyone. Surely victims would be better off being medically cleared by ED staff and then counselled by social workers.*

If they still wish to pursue an examination or have injuries that the ED staff are for whatever reason uncomfortable documenting, then this can and should be done during business hours.

If you suggest any variations to the hours proposed, then please let us all know.

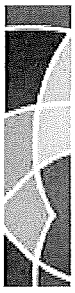
I note you have also not answered Kathy Robinson's very reasonable question and so have included it below as well:

My understanding is that our role as forensic medical officers is to attend to the "collection and documentation of medico-legal evidence ***where appropriate".*** *Is it not our ability to decide the appropriateness of the intimate examination (a decision based partly upon our knowledge of published data on DNA retention times), a component of what helps define us as a medical specialty?*

You provided a case example in your email: please provide what you would consider the appropriate response to a digital penetration greater than 15 hours after, and your basis.

In your role as chief examiner of the college, I feel that Ian and Kathy in particular would benefit from your response.

Kind regards,
Adam



Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Adam Griffin
Sent: Thursday, 27 April 2017 5:51 PM
To: Cathy Lincoln; Gary Hall; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; 'Les Gmail'; Les Griffiths; Nelle Van Buuren
Cc: CFMU; Paul Csoban; CFMUSER
Subject: RE: DNA retention baseline protocol

Thanks everyone for your responses,

Cathy, I appreciate the reactivation of the conversation to address your particular issues. Have you any suggestions regarding any alternate time frames?

These guidelines represent timely access. They have a basis in the ability to detect DNA substantially falls

and (importantly) plateaus after this time, remaining at a low level.

I note Ian Home's comments and questions remain unanswered by you and you could go some way to credibility by addressing them. I have included them below to assist you.

> *It is my understanding that the forensic examination is for the purposes of trying to obtain trace evidence. If the scientific research suggests the odds of detecting trace evidence outside of the time frames for emergent examinations that Adam put forward, is exceedingly unlikely if not zero, then why would we subject someone to an intimate procedure?*
>
> *Examinations should not be done as a therapeutic procedure or to placate anyone. Surely victims would be better off being medically cleared by ED staff and then counselled by social workers.*
>
> *If they still wish to pursue an examination or have injuries that the ED staff are for whatever reason uncomfortable documenting, then this can and should be done during business hours.*
>
> *If you suggest any variations to the hours proposed, then please let us all know.*

I note you have also not answered Kathy Robinson's very reasonable question and so have included it below as well:

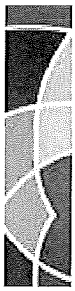
> *My understanding is that our role as forensic medical officers is to attend to the "collection and documentation of medico-legal evidence* ***where appropriate".*** *Is it not our ability to decide the appropriateness of the intimate examination (a decision based partly upon our knowledge of published data on DNA retention times), a component of what helps define us as a medical specialty?*

You provided a case example in your email: please provide what you would consider the appropriate response to a digital penetration greater than 15 hours after, and your basis.

In your role as chief examiner of the college, I feel that Ian and Kathy in particular would benefit from your response. No college guidelines exist, of course.

That you believe our service should be driven by political rather than a medical/evidentiary basis is fascinating.

Kind regards,
Adam



Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cathy Lincoln
Sent: Thursday, 27 April 2017 10:10 AM
To: Adam Griffin; Gary Hall; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; 'Les Gmail'; Les Griffiths; Nelle Van Buuren
Cc: CFMU; Paul Csoban; CFMUSER
Subject: RE: DNA retention baseline protocol

Thanks Adam,

I acknowledge your reference to the ability to use our clinical acumen in relation to examination time frames but would comment that these guidelines are not in fact 'patient-centred'.

Timely access to forensic examination is a central principle of the healthcare response to sexual assault. Patient/complainants who are told to come back the next day or required to wait for a forensic examination unnecessarily, may be less likely to proceed with a complaint.

It could be argued that someone presenting to a police station or at an emergency department at say 11pm, reporting digital vaginal or anal penetration, or penile oral penetration that took place at 9am that day, should not be required to go home and come back, or sit in an emergency department until the next day for a forensic examination.

There is also the potential that delaying forensic examination until the next day will mean the examination then occurs outside recommended guidelines, reducing the likelihood of evidence retrieval.

Could this be a politically sensitive decision in relation to the CFMU response to sexual violence? Aside from necessary discussion around evidence retrieval and 'patient-centred' care, we need to be cognisant that recent history has shown that politics will ultimately drive our service delivery.

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit SER
t [redacted]
f
m
e

From: Adam Griffin
Sent: Wednesday, 26 April 2017 6:51 PM
To: Gary Hall; Cathy Lincoln; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; 'Les Gmail'; Les Griffiths; Nelle Van Buuren
Cc: CFMU
Subject: RE: DNA retention baseline protocol

Thank you all again for those who contributed to the discussion.

I have only received positive comments. As such the information below will stand as our reference point.

I think we will look to revising this annually, with a similar call around.

Those who wish to provide an alternative standing point with some evidence basis: I only ask that you quote the relevant aspect of the reference basis when providing this.

I have copied in our kind administration staff here with the below table: could you please look to placing a review date of 1 May next year?

Many thanks,

Kind regards
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Adam Griffin
Sent: Wednesday, 12 April 2017 5:07 PM
To: Gary Hall; Cathy Lincoln; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Thanks for the contribution so far.

I apologise for the confusion around one entry in particular: not sure what happened there.

The principle element of this process is establishing the examinations we will perform out of hours. You will note I haven't set a maximum time for examination as I am well aware there are exceptional circumstances that can arise. Instead, the important note is the likely 'plateau' noted with regard to the chance of detecting DNA after a period of time such that there is no advantage in an emergent examination.

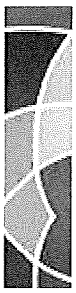
I believe this is different to the stated intention of the FFLM document around DNA retention alone and instead represents a practical and consistent response to our stakeholders such that they do not have inconsistent expectations. Minority cases/exceptional n

The absence of a maximum level should not be seen as a need to eliminate clinical judgment. Subjecting a person to an intimate examination greater than 7 days following an assault would have to have a legitimate basis to satisfy the ethical considerations of subjecting patients to unnecessary testing.

ıre of Assault	Acute examination (regardless time of day)	Non-Acute examination (8am to 1700hrs)
tal penetration: ina	12hrs	>12hrs

tal penetration:	12hrs	>12hrs
penetration	6hrs	>6hrs
inal penetration	72hrs	>72hrs
l penetration	72hrs	>72hrs
swab:	24hrs	>24hrs
swab:	24hrs	>24hrs

Kind regards,
Adam



Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Gary Hall
Sent: Wednesday, 12 April 2017 12:30 PM
To: Cathy Lincoln; Allison De Tina; Ian Home; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Thanks Cathy,

Apart from the document being long and "busy" to look at, the references cited are problematic if not confusing. A lot of them are still quite dated such as Allard; and many of the other references do not support longevity of spermatazoal survival in areas such as anus and mouth (reading the short abstracts provided). The Y-STR stuff might be more promising but until such a time as we are using these techniques in our jurisdiction I can't see the utility of testing days down the track for such cases, particularly when we are talking to emergent responses (specifically out-of-hours). I guess these are the controversies that will drive the discussion and confound the practice of CFM (specifically the domain of SA examination).

One would hope that the RCPA research this thoroughly, using current and relevant references and do not 'cut-and-paste' the English model.

Gary

From: Cathy Lincoln
Sent: Wednesday, 12 April 2017 12:03 PM
To: Allison De Tina; Ian Home; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Thanks for starting this discussion off Adam.

Attached are the FFLM UK recommendations which may be worth adding to your attachments; these are referred to by many sexual assault services nationally in the absence of an equivalent RCPA FCFM document at this time.

It's anticipated that the FCFM will develop a similar standard document for Faculty Fellows in the near future.

I will send through any other references that may be of assistance.

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit SER
t [redacted]
f
m
e

From: Allison De Tina
Sent: Tuesday, 11 April 2017 3:58 PM
To: Ian Home; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

No, not an exceptional case, she was up and about over the weekend before coming in on the Monday.

Allison De Tina
Clinical Nurse Cunsultant, Forensic Nurse Examiner

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

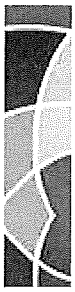
p | [redacted] **m** | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health **e** | [redacted]

From: Ian Home
Sent: Tuesday, 11 April 2017 3:54 PM
To: Allison De Tina; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Hi Ally,

T'was that not an exceptional case – lying flat on their back in ICU following the incident? A good example of the need for clinical judgement rather than rigid timeframes!

I hear 24 hours, I hear 72 hours, any advances? Going, going....sold to the person with the swab in their hand!



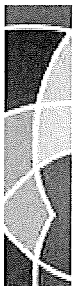
Dr Ian Home
Forensic Medical Officer

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Allison De Tina
Sent: Tuesday, 11 April 2017 3:50 PM
To: Natalie A MacCormick; Ian Home; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Ian, I'm not sure what is the recommended time frame for anal intercourse, but I know I did a SAIK on a Monday, post SA on a Friday night and got a positive hit on the sample.



Allison De Tina
Clinical Nurse Cunsultant, Forensic Nurse Examiner

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Natalie A MacCormick
Sent: Tuesday, 11 April 2017 3:42 PM
To: Ian Home; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Allison De Tina; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

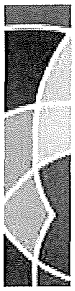
Nice table, I like it! Handy to have in my not-so-little notebook.

I definitely agree that we need to have protocol driven approach to this so we all give the same message to the Detectives.

Dr Natalie MacCormick
Forensic Medical Officer

Clinical Forensic Medical Unit, Brisbane
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel Street, Brisbane, Queensland 4000
w | Queensland Health e | [redacted]



From: Ian Home
Sent: Tuesday, 11 April 2017 3:32 PM
To: Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Allison De Tina; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Natalie A MacCormick; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Hi All,

I agree we need a standardised window for both acute and non-acute examinations. If an acute examination is done later than the agreed time, the examiner should be able (and expected) to provide an explanation for their clinical decision.

I note you left out a time for anal penetration – I'm guessing 24 hours for acute examination? The other important element is the cut-off for not performing an examination. Below is the table I used for an assignment last year....

Sample site	**Time frame for collection**
Mouth	Semen – 24hr
Skin	Epithelial cells – 12hr Bodily fluids – 48hrs
Vulval, external labia	Digital penetration – 12hr Cunnilingus – 24hr Intercourse – 5 days
Low vaginal, high vaginal, cervical	Intercourse – 5 days
Perianal, anal, rectal	Digital penetration – 12hr Intercourse – 2 days
Penile	Bodily fluids – 3 days
Fingernails	Trace evidence – 48hr
Toxicology: Blood	48hr
Urine	48hr; 5 days if drug-facilitated assault

Dr Ian Home
Forensic Medical Officer

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Adam Griffin
Sent: Tuesday, 11 April 2017 3:09 PM
To: Kadell Fotinos; Nicole Aitken; Kelly Flatley; Allison De Tina; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Home; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Natalie A MacCormick; Nelle Van Buuren
Subject: DNA retention baseline protocol

Good morning,

A few recent experiences have seen the need for consistency of expectation from requesting detectives regarding timelines for sexual assault examination. The timeframes in which we conduct forensic examinations should be shared with all investigating officers such as they are not disappointed should they be told something they were not expecting. In most cases detectives would expect a SAIK would be done in the course of an investigation and, also in most cases, this is true! There are exceptions informed through research, publications and (where such are not available) an attempt at consensus.

It is important to understand these as we do not wish to subject individuals to unnecessary intimate examination. It is also important that they do not have false expectations.

As a result I am circulating the below table for consultation. Please let me know what you think, and whether any additions are required.

I have thrown on a couple of newish references as opposed to Allard, which is still heavily referenced!

I know there was a recent Australian publication looking at variability between jurisdictions, but not really providing advice.

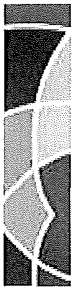
Y-STR segment testing will also certainly influence this should it be introduced here.

Kind regards
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]



HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Adam Griffin
Sent: Wednesday, 26 April 2017 6:51 PM
To: Gary Hall; Cathy Lincoln; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; 'Les Gmail'; Les Griffiths; Nelle Van Buuren
Cc: CFMU
Subject: RE: DNA retention baseline protocol
Attachments: Sexual Assault TimeFrame based on DNA Retention.doc

Thank you all again for those who contributed to the discussion.

I have only received positive comments. As such the information below will stand as our reference point.

I think we will look to revising this annually, with a similar call around.

Those who wish to provide an alternative standing point with some evidence basis: I only ask that you quote the relevant aspect of the reference basis when providing this.

I have copied in our kind administration staff here with the below table: could you please look to placing a review date of 1 May next year?

Many thanks,

Kind regards
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Adam Griffin
Sent: Wednesday, 12 April 2017 5:07 PM
To: Gary Hall; Cathy Lincoln; Allison De Tina; Ian Home; Natalie A MacCormick; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Thanks for the contribution so far.

I apologise for the confusion around one entry in particular: not sure what happened there.

The principle element of this process is establishing the examinations we will perform out of hours. You will note I haven't set a maximum time for examination as I am well aware there are exceptional circumstances that can arise. Instead, the important note is the likely 'plateau' noted with regard to the chance of detecting DNA after a period of time such that there is no advantage in an emergent examination.

I believe this is different to the stated intention of the FFLM document around DNA retention alone and instead represents a practical and consistent response to our stakeholders such that they do not have inconsistent expectations. Minority cases/exceptional n

The absence of a maximum level should not be seen as a need to eliminate clinical judgment. Subjecting a person to an intimate examination greater than 7 days following an assault would have to have a legitimate basis to satisfy the ethical considerations of subjecting patients to unnecessary testing.

Nature of Assault	Acute examination (regardless time of day)	Non-Acute examination (8am to 1700hrs)
Digital penetration: Vagina	12hrs	>12hrs
Digital penetration: Anal	12hrs	>12hrs
Oral penetration	6hrs	>6hrs
Vaginal penetration	72hrs	>72hrs
Anal penetration	72hrs	>72hrs
Skin swab: Semen	24hrs	>24hrs
Skin swab: Saliva	24hrs	>24hrs

Kind regards,
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Gary Hall
Sent: Wednesday, 12 April 2017 12:30 PM
To: Cathy Lincoln; Allison De Tina; Ian Home; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Thanks Cathy,

Apart from the document being long and "busy" to look at, the references cited are problematic if not confusing. A lot of them are still quite dated such as Allard; and many of the other references do not support longevity of spermatazoal survival in areas such as anus and mouth (reading the short abstracts provided). The Y-STR stuff might be more promising but until such a time as we are using these techniques in our jurisdiction I can't see the utility of testing days down the track for such cases, particularly when we are talking to emergent responses (specifically out-of-hours). I guess these are the controversies that will drive the discussion and confound the practice of CFM (specifically the domain of SA examination).

One would hope that the RCPA research this thoroughly, using current and relevant references and do not 'cut-and-paste' the English model.

Gary

From: Cathy Lincoln
Sent: Wednesday, 12 April 2017 12:03 PM
To: Allison De Tina; Ian Home; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Thanks for starting this discussion off Adam.

Attached are the FFLM UK recommendations which may be worth adding to your attachments; these are referred to by many sexual assault services nationally in the absence of an equivalent RCPA FCFM document at this time.

It's anticipated that the FCFM will develop a similar standard document for Faculty Fellows in the near future.

I will send through any other references that may be of assistance.

Cathy

Dr Cathy Lincoln
Deputy Director, Clinical Forensic Medicine Unit SER
t [redacted]
f
m
e

From: Allison De Tina
Sent: Tuesday, 11 April 2017 3:58 PM

To: Ian Home; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

No, not an exceptional case, she was up and about over the weekend before coming in on the Monday.

Allison De Tina
Clinical Nurse Cunsultant, Forensic Nurse Examiner

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Ian Home
Sent: Tuesday, 11 April 2017 3:54 PM
To: Allison De Tina; Natalie A MacCormick; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Hi Ally,

T'was that not an exceptional case – lying flat on their back in ICU following the incident? A good example of the need for clinical judgement rather than rigid timeframes!

I hear 24 hours, I hear 72 hours, any advances? Going, going....sold to the person with the swab in their hand!

Dr Ian Home
Forensic Medical Officer

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Allison De Tina
Sent: Tuesday, 11 April 2017 3:50 PM
To: Natalie A MacCormick; Ian Home; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Ian, I'm not sure what is the recommended time frame for anal intercourse, but I know I did a SAIK on a Monday, post SA on a Friday night and got a positive hit on the sample.

Allison De Tina
Clinical Nurse Cunsultant, Forensic Nurse Examiner

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Natalie A MacCormick
Sent: Tuesday, 11 April 2017 3:42 PM
To: Ian Home; Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Allison De Tina; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Nice table, I like it! Handy to have in my not-so-little notebook.

I definitely agree that we need to have protocol driven approach to this so we all give the same message to the Detectives.

Dr Natalie MacCormick
Forensic Medical Officer

Clinical Forensic Medical Unit, Brisbane
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel Street, Brisbane, Queensland 4000
w | Queensland Health e | [redacted]

From: Ian Home
Sent: Tuesday, 11 April 2017 3:32 PM
To: Adam Griffin; Kadell Fotinos; Nicole Aitken; Kelly Flatley; Allison De Tina; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Natalie A MacCormick; Nelle Van Buuren
Subject: RE: DNA retention baseline protocol

Hi All,

I agree we need a standardised window for both acute and non-acute examinations. If an acute examination is done later than the agreed time, the examiner should be able (and expected) to provide an explanation for their clinical decision.

I note you left out a time for anal penetration – I'm guessing 24 hours for acute examination? The other important element is the cut-off for not performing an examination. Below is the table I used for an assignment last year….

Sample site	Time frame for collection

Mouth	Semen – 24hr
Skin	Epithelial cells – 12hr Bodily fluids – 48hrs
Vulval, external labia	Digital penetration – 12hr Cunnilingus – 24hr Intercourse – 5 days
Low vaginal, high vaginal, cervical	Intercourse – 5 days
Perianal, anal, rectal	Digital penetration – 12hr Intercourse – 2 days
Penile	Bodily fluids – 3 days
Fingernails	Trace evidence – 48hr
Toxicology: Blood	48hr
Urine	48hr; 5 days if drug-facilitated assault

Dr Ian Home
Forensic Medical Officer

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

From: Adam Griffin
Sent: Tuesday, 11 April 2017 3:09 PM
To: Kadell Fotinos; Nicole Aitken; Kelly Flatley; Allison De Tina; Cathy Lincoln; Christine Mirakian; Don Buchanan; Gary Hall; Ian Home; Ian Mahoney; Katherine Robinson; Les Gmail; Les Griffiths; Natalie A MacCormick; Nelle Van Buuren
Subject: DNA retention baseline protocol

Good morning,

A few recent experiences have seen the need for consistency of expectation from requesting detectives regarding timelines for sexual assault examination. The timeframes in which we conduct forensic examinations should be shared with all investigating officers such as they are not disappointed should they be told something they were not expecting. In most cases detectives would expect a SAIK would be done in the course of an investigation and, also in

most cases, this is true! There are exceptions informed through research, publications and (where such are not available) an attempt at consensus.

It is important to understand these as we do not wish to subject individuals to unnecessary intimate examination. It is also important that they do not have false expectations.

As a result I am circulating the below table for consultation. Please let me know what you think, and whether any additions are required.

I have thrown on a couple of newish references as opposed to Allard, which is still heavily referenced!

I know there was a recent Australian publication looking at variability between jurisdictions, but not really providing advice.

Y-STR segment testing will also certainly influence this should it be introduced here.

Kind regards
Adam

Dr Adam Griffin
Director

Clinical Forensic Medicine Unit
Health Support Queensland, **Department of Health**

p | [redacted] m | [redacted]
a | 51 Herschel St, Brisbane, 4000
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

Information: Recommended Maximum Time for Routine Forensic Sample Collection

Site (on Victim)	Nature of physical contact	Time since last contact unwashed	Time since last contact if cleaned/altered
1. Around mouth	Penile-oral penetration, kissing	72 hours	NA if washed
2 (a) swabs from inside mouth and, 2 (b). mouth rinsings	Penile-oral penetration	24 hours	NA if drank / ate / cleaned teeth
Vaginal vestibule, vulva	Penile, oral, digital or other skin contact with the vulva or vaginal vestibule	72 hours	NA if washed
Vaginal canal and cervix	Penile - vaginal penetration	1 week (7 days)	Note no reduction if history of washing or menstruation
	Digital -vaginal penetration with no other body fluid transferred from assailant	72 hours	Note no reduction if history of washing or menstruation
Anus	Penile, oral, digital or other skin contact with the anus	72 hours	Note no reduction if history of washing
Skin to skin contact not listed above	Oral, digital (or other skin) or biological fluid contact with victim's skin	72 hours	NA if washed
Penile swab (no slide)	After penetrating any orifice or digital (or other skin)-penile contact. NB: The VPFSC does not identify cell types or the anatomical area of origin of any foreign DNA found.	72 hours	NA if washed
Fingernail scrapings	Eg., Scratched skin Digital penetration vagina and anus	72 hours	NA if washed

NA: Not Applicable - do not collect samples from this site unless exceptional circumstances exist

There is no upper time limit for collection of biological samples such as foreign hairs, foreign material such as ejaculate in hair, and objects such as condoms or stained (or possibly stained) clothing such as underwear but consider actions of complainant and factors that might reduce utility of sample.

Collect underwear or other items of clothing when fluids might have drained onto clothing or genital skin (including a penis) might have transferred DNA to clothing.

SEXUAL ASSAULT EXAMINATION KIT FEEDBACK FORM

NAME OF EXAMINING FMO/FNE	
CONTACT DETAILS FOR EXAMINING FMO/FNE	
NAME OF PERSON EXAMINED *(or bar code? ie more confidential ID?)*	
DATE OF SAMPLE COLLECTION	
DATE SAMPLES RECEIVED AT LABORATORY	

SAMPLE QUALITY

To be completed at time of receipt by laboratory staff (please tick appropriate box)	POOR				GOOD
	1	2	3	4	5
Condition of sample?					
Clearly and correctly labelled/bar code sticker attached?					
'Chain of evidence' maintained?					
Adequate clinical information given?					
Other comments?					

ANALYSIS RESULTS

		Tick if sample received by lab	Tick if sample analysed by lab	Any useful POSITIVE results? *(ie possibly related to person of interest)*			Was sample adequate for DNA analysis?	Any other comments?
				Sperm?	Saliva?	Other?		
Oral								
Labial								
Low vaginal								
High vaginal								
Endocervical								
Peri-anal								
Anal								
Rectal								
Penis	glans							
	shaft							
Fingernail scrapings	R							
	L							
Other:								

SCIENTIST:	DATE:

Code: [redacted] FORENSIC BIOLOGY CASE NO.: [redacted]

METROPOLITAN SARC RESULTS: FORENSIC BIOLOGY

This form is to be completed on Metropolitan cases only. A separate form exists for rural areas [redacted]

Client name: _

Doctor's name: Lincoln.

Date of specimen collection by Doctor: 27.3.03.

Date of analysis: 4.6.03

SPECIMENS PROVIDED

[Place a tick next to those specimens provided]		AP (90 secs)	PSA	Sperm - → +++	Blood	Saliva	Comments (incl. Sperm: intact or heads)	NT
1	Oral swab and smear							
2	Fingernail scrapings – Right							
3	Fingernail scrapings – Left							
4	Pubic hairs – Cut							
5	Gauze swab – Vulva	NEG		NEG				✓
6	Labial swab and smear	NEG		NEG				✓
7	Low vaginal swab and smear	NEG		NEG				✓
8	High vaginal swabs x 2 and smear	NEG		NEG				✓
9	Endocervical swabs x 2 and smear	NEG		NEG				✓
10	Gauze swab Peri-anal area							
11	Peri-anal swabs x 2 and smear							
12	Anal swabs x 2 and smear							
13	Rectal swabs x 2 and smear							
14	Urine							
15	Other swabs / samples TAMPON	NEG		NEG				✓

COPY

16 Head Hair ☐ Examined Y N Pubic combings ☐ Examined Y N Comments _

17 DNA Reference sample: Blood (EDTA) ☐ Buccal ☐ Other _

18 Clothing (list) _

Which samples were sent for DNA analysis? (List #s): FNS L+R.

NT = Not tested. **AP** (Acid Phosphatase) is a presumptive test for seminal fluid. Result reported after 90 seconds: A stronger reaction indicates the presence of greater levels of seminal fluid, but false-positives can occur (eg. yeast). **PSA** = Prostate-specific antigen.

Quality of specimens (complete this section at the time of receipt)

	Poor		→		Good
Were the swabs and smears adequately dried?	☐	☐	☐	☐	✓
Were the specimens labelled clearly and correctly?	☐	☐	☐	☐	✓
Did the chain of evidence appear to have been maintained?	N				Y
Has adequate clinical information been provided?	☐	☐	☐	☐	✓

If not, what other information should have been included? _

Other comments: _

Scientist:	[redacted]	Date:	29.7.03	Time:	0900

NOTE: Please return (by Mail, NOT Fax) this form to the relevant Doctor at:
SEXUAL ASSAULT RESOURCE CENTRE, PO BOX 842, SUBIACO, WA, 6008.

>>> On 07/12/2009 at 1:10 pm, in message <[redacted]>,
Catherine Lincoln wrote:

Bob,

With respect to the issue of no longer needing to make slides from swabs, have we had a written lab directive re that? My recollection was that when the issue of stopping making slides was last explored a few years ago, there was some question as to whether the making of a slide from a dried swab at an unspecified time after the examination may compromise the quality of the slide which as I understand it, is the crucial part of the lab's analysis process (ie swab only looked at if microscopy +ve).

I think a number of senior scientists from other States were canvassed about the idea and had reservations. I actually wrote a protocol for a simple lab study that would have proved or disproved this view, but it but it never got off the ground.
I would be very happy not to have to makes slides as slide labelling is a particularly onerous part of the process.

While we're on this subject, could we please re-visit (!) the issue of some sort of basic analysis results coming back to the examining doctor, at least so we can get some idea of the quality of our samples. Working in the current 'vacuum' that we do, we have no way of knowing whether our current practices pick up any DNA at all, let alone whether they are contaminated or not.

Cathy

Dr Cathy Lincoln
Clinical Forensic Medicine Unit

From: David Dumaine
Sent: Thursday, 15 September 2022 9:59 PM
To: Cathy Lincoln; Debbie McDonald
Subject: Re: Cleaning of Forensic rooms - URGENT

Hi Cathy,

The process we follow to clean the forensics rooms is as follow:

Our cleaner puts on the appropriate PPE (disposable gown, gloves, goggles, head cover, N95 mask). They bring their cleaning trolley but leave it outside the room.

They then proceed inside the room, wipe all surfaces (inc desks, doors and handles etc...) with microfiber cloths and divercleans which is a hospital grade bleach.

They use a special handle and cleaning cloth to wipe the walls with divercleans. if required we change the disposable curtains.

Finally the floor is mopped thoroughly with divercleans as well, upon exit the room. The door is then locked behind us.

We sign the different registers provided to ensure our staff and your team have a record of their entry into the room.

As you can see we only use one chemical called divercleans (bleach) and a range of microfiber cloths and mops.

I hope this helps.

Please let me know if you need any further information.

Cheers,

David Dumaine
Team Leader
Environmental Services – GCUH

E [redacted]
P [redacted]
goldcoast.health.qld.gov.au

Queensland Government
Gold Coast Health **always care**

Our values: Integrity | Community first | Excellence | Respect | Compassion | Empower
Jingeri. We acknowledge the Traditional Custodians of the land in which we work, live and grow, the Kombumerri, Wangerriburra, Bullongin, Minjungbal and Birinburra peoples, of the Yugambeh Language speaking nation. We also pay our respects to Elders past, present and emerging

From: Cathy Lincoln <[redacted]>
Sent: Tuesday, September 13, 2022 10:00:46 AM
To: Debbie McDonald <[redacted]u>; David Dumaine <[redacted]>
Subject: RE: Cleaning of Forensic rooms - URGENT

Thanks David,

If you could send summary directly to me, would be great.

Cathy

Dr Cathy Lincoln
Forensic Physician, Deputy Director
Forensic Medicine | Emergency Department
Gold Coast University Hospital
E: [redacted]
P:
M:

From: Debbie McDonald <[redacted]>
Sent: Tuesday, 13 September 2022 9:20 AM
To: Cathy Lincoln <[redacted]>
Subject: FW: Cleaning of Forensic rooms - URGENT

FYI

From: David Dumaine <[redacted]>
Sent: Tuesday, 13 September 2022 9:12 AM
To: Debbie McDonald <[redacted]>
Subject: Re: Cleaning of Forensic rooms - URGENT

Hi Debbie,

Not a problem. I will put a summary together when I get in later today as I work on the afternoon shift.

Thanks D.

David Dumaine
Team Leader
Environmental Services – GCUH

E [redacted]
P
goldcoast.health.qld.gov.au

Queensland Government
Gold Coast Health **always care**

Our values: Integrity | Community first | Excellence | Respect | Compassion | Empower

Jingeri. We acknowledge the Traditional Custodians of the land in which we work, live and grow, the Kombumerri, Wangerriburra, Bullongin, Minjungbal and Birinburra peoples, of the Yugambeh Language speaking nation. We also pay our respects to Elders past, present and emerging

From: Debbie McDonald <[redacted]>
Sent: Tuesday, September 13, 2022 7:53:19 AM
To: David Dumaine <[redacted]
Subject: Cleaning of Forensic rooms - URGENT

Hi David

Our director has to put together a submission this week for our services. Can you please send us a summary of what is involved with a terminal clean in our forensic examination room products used etc?

Sorry for any inconvenience.

Thanks
Debbie

Debbie McDonald
Administration Officer
Forensic Medicine

E [redacted]
P [redacted]
goldcoast.health.qld.gov.au
Gold Coast University Hospital D5 090 1 Hospital Blvd
Queensland 4215

Gold Coast Health
always care

Queensland Government

Our values: Integrity | Community first | Excellence | Respect | Compassion | Empower

Jingeri. We acknowledge the Traditional Custodians of the land in which we work, live and grow, the Kombumerri, Wangerriburra, Bullongin, Minjungbal and Birinburra peoples, of the Yugambeh Language speaking nation. We also pay our respects to Elders past, present and emerging.

From: catherinelincoln <[redacted]
Sent: Friday, 16 September 2022 8:38 AM
To: Cathy Lincoln
Subject: Diversey Divercleanse Hospital Grade Disinfectant - Ultimate Cleaning Products

This email originated from outside Queensland Health. DO NOT click on any links or open attachments unless you recognise the sender and know the content is safe.

https://ultimatecleaning.com.au/product/divercleanse-hospital-grade-disinfectant/

Sent from my Galaxy

GUIDELINES FOR DNA CONTAMINATION MINIMISATION

Updated 14072019

Forensic examinations which include collection of forensic samples for DNA analysis are performed at the following facilities:

- Gold Coast University Hospital forensic examination room *(MAU; dedicated)**
- Logan Hospital forensic examination room *(ED; dedicated)**
- Robina Hospital forensic examination room *(ED Fast-Track; not dedicated)**
- Southport watch house medical room
- Logan District watch house medical room

* Before use of hospital forensic examination rooms, check room entry register/log to confirm that room has been terminally cleaned by hospital cleaners since last examination. Disposable curtains if in use, should be changed weekly.

1. If required to do a forensic examination immediately following another examination (complainant, suspect, prisoner) without showering or change of clothes; wash hands thoroughly at site of first examination; at second examination site 'double-glove' (sterile), put on blue DNA suit, then remove outer set of sterile gloves and perform examination wearing inner set of sterile gloves (+/- others as needed).

2. Use disposable paper sheet and gown packs provided.

3. Use sterile plastic drapes for all trolley and bench top surfaces (after decontamination cleaning).

4. Use disposable items where possible (pens, rulers, scissors). When not possible, plastic wrap or bleach-sterile water wipe items pre- and post-use (for example, light handle, camera, torch, magnifying glass).

5. Changing gloves is an important means of avoiding contamination; a new set of gloves should be used for (at least) each of the following components of the pre-examination cleaning and examination process:

   - **Decontamination cleaning of trolley and bench top surfaces (non-sterile)**
   - **Setting up items for examination and making bed with disposable sheet pack (sterile)**
   - **Collecting clothing items (sterile)**
   - **General physical examination (non-sterile if not sampling; sterile if sampling)**
   - **Genito-anal examination (sterile; consider 'triple-glove')**
   - **Labelling and sealing samples (sterile)**

   Change gloves more often as needed (for example, if collecting specimens that leave residue on gloves or selecting more equipment from storage)

6. Suggested process:

DECONTAMINATION CLEAN

1. **Wearing gloves, protective apron and shoe covers, wipe the following areas with 0.5% bleach wipes *(PDI Sani-Cloth CHLOR)*;**
   a. **Examination trolley surface and drawer handles**
   b. **Bench tops**
   c. **Examination bed and pillow**
   d. **Chairs/stool**
2. **Discard used wipes.**
3. **Leave surfaces for 3-5 minutes**
4. **Remove residual bleach from all wiped surfaces using low-lint towels *(Surgi-Dry)* moistened with sterile water for injection (single use 100ml bottles), then discard used wipes.**
5. **Change gloves.**

SETTING UP FOR EXAMINATION

6. **Open sterile plastic drapes and place on examination trolley and bench tops.**
7. **Place sterile sheets/pillow slip/gown on examination bed.**
8. **Empty contents of SAIK onto examination trolley top; add any additional swabs, and other items likely to be needed during examination (speculum, anoscope etc).**
9. **Change gloves.**

COLLECTION OF CLOTHING (and blue DNA SUIT if worn by subject)

10. **Place individual clothing items into separate paper bags as appropriate.**
11. **Provide paper gown to wear.**
12. **Change gloves.**

GENERAL BODY EXAMINATION

13. **Use non-sterile gloves to examine subject's body generally, take notes and photographs.**
14. **Use sterile gloves if taking any forensic samples during general physical examination (mouth, breast, neck).**
15. **Change gloves.**

GENITO-ANAL EXAMINATION

16. **'Double' or 'triple' glove (sterile) to prepare swabs and perform genito-anal examination and sampling; this allows removal of gloves as necessary during process (for example, new gloves for swab preparation; genital examination; anal examination).**
17. **Remove gloves.**

SEALING AND LABELLING SAMPLES

18. **Wear new set sterile gloves to seal and label swabs/samples**
19. **Post-examination; wipe trolley, bench tops and examination bed with 0.5% bleach wipes *(PDI Sani-Cloth CHLOR)* and sterile water moistened low lint wipes; discard used wipes.**

NOTE: Gloves not necessary to write up notes, referral letters, hand over sealed kits to police etc.

Technical Specification

Product Details	
Product name	Sani-Cloth Chlor +1000 Canister 50 F/Free × 6 (CE)
Product Code	XP00309C01
VJT Code	VJT315

Intended Use:

Sani-Cloth Chlor is a pre-moistened, ready to use low lint chlorine wipe for disinfection and decontamination of non invasive medical devices. Sani-Cloth Chlor is a non-sterile single-use wipe containing the active ingredient, sodium hypochlorite.

Instruction for Use

Sani-Cloth Chlor is contraindicated for use as a terminal sterilant /high level disinfectant on any surface or instrument that is a)introduced into the body or b) may come into contact with the bloodstream, including broken skin or mucous membranes.

Sani-Cloth Chlor can be used to pre-clean or decontaminate non invasive medical devices prior to sterilisation or high level disinfection.

Caution:

Avoid contact with eyes, skin or clothing. Wear protective gloves whilst using wipes. Wash thoroughly with soap after handling. Discontinue use if irritation and redness develops. Do not use with ammonia or acids. Keep lid closed and store upright in a cool dry place.

Regulatory Classification	
CE marked – 93/42/EEC	Yes
Biocide – BPR 528/2012	December 2018

Applicator	
Wipe Count	50
Wipe Dimensions	200mm x 200mm
Wipe Substrate	40gsm 100% PET Spunlace

Formulation Details	
Active Ingredients	> 5400ppm Sodium Hypochlorite <1% Anionic Surfactant (detergent)

Packaging	
Packaging Type	Canister 50ct
Canister	Rigid plastic canister cylinder (White HDPE) (Height=220.5mm - Diam=103mm) (65g)
Lid	Rigid plastic, transparent canister lid (Orange PP) (Height=40mm - Diam=97mm) (22g)
Pilfer	Flexible plastic Laminate:-12 micron PET / 50 micron LDPE
Number of packs per case	6

EFFICACY TEST	
Bacteria	
US EPA Guidelines (wipe test)-	
Pseudomonas aeruginosa ATCC 15442	1min (d)
Escherichia coli O157:H7 (ATCC 35150)	1min (d)
Staphylococcus aureus ATCC 6538	1min (d)
Campylobacter jejuni ATCC 29428	1min (d)
Klebsiella pneumoniae ATCC 4352	1min (d)
Legionella pneumophila (ATC 33153)	1min (d)
Listeria monocytogenes ATCC 19117	1min (d)
Salmonella Choleraesuis ATCC 10708	1min (d)
Streptococcus pyogenes ATCC 12344	1min (d)
Acinetobacter baumannii ATCC 19606	1min (d)
ESBL Resistant Escherichia coli ATCC BAA - 196	1min (d)
ESBL Resistant Klebsiella pneumoniae ATCC 700603	1min (d)
Klebsiella pneumoniae Carbapenem Resistant ATCC BAA - 1705	1min (d)
Community acquired MRSA (NARSA NRS384) Genotype 300	1min (d)
Community acquired MRSA (NARSA NRS123) Genotype 400	1min (d)
Methicillin resistant Staph aureus (MRSA) (ATCC 33591)	1min (d)
Streptococcus pneumoniae - Penicillium Resistant (ATCC 700677)	1min (d)
Vancomycin Intermediate Resistant Staphylococcus aureus (VISA HIP 5836)	1min (d)
Vancomycin Resistant Staphylococcus aureus (VRSA) NARSA VRS1	1min (d)
Vancomycin Resistant Enterococcus faecalis	1min (d)
4-Field Test (Mechanical Action)	
EN 16615	
Enterococcus hirae (Bacteria)	1min (c)
Pseudomonas aeruginosa (Bacteria)	1min (c)
Staphylococcus aureus (Bacteria)	1min (c)
FUNGI	
US EPA Guidelines (wipe test)-	
Aspergillus niger ATCC 16404	4min (d)
Candida albicans ATCC 10231 (Yeast)	4min (d)
Trichophyton mentagrophytes ATCC 9533	4min (d)
4-Field Test (Mechanical Action)	

EN 16615	
Candida Albicans (Yeast)	1min (c)
ENVELOPED VIRUS	
US EPA Guidelines (wipe test)-	
Hepatitis B (Duck Hep.B virus used as surrogate)	1min (d)
Hepatitis C (BVD virus used as surrogate)	1min (d)
HIV - 1 Type 1	1min (d)
Herpes simplex type 2	1min (d)
Influenza avian H5N1	1min (d)
Influenza A Hong Kong	1min (d)
Human Coronavirus	1min (d)
Respiratory syncytial virus	1min (d)
NON ENVELOPED VIRUS	
US EPA Guidelines (wipe test)-Southern Research Inst.	
Adenovirus	1min (d)
Poliovirus	1min (d)
Norovirus	1min (d)
Canine parvovirus	1min (d)
Hepatitis A	1min (d)
Rotavirus	1min (d)
Rhinovirus	1min(d)
TB	
US EPA Guidelines (wipe test)-	
Mycobacterium bovis	2min (d)
SPORES	
EN13704	
B subtilis	30sec (c) /1min (d)
3-Stage Protocol (surface and wipe test)-	
C difficile	10sec (c) /5min (d)
US EPA Guidelines (wipe test)-	
C difficile	4min (d)

PDI
BE THE DIFFERENCE

How to use...
Sani-Cloth® Chlor

1 Before you start always wear gloves and an apron.

2 Refer to CoSHH sheet, label instructions and 'Use by' date.

1M AFTER OPENING

3 Fill date and details on label (add 30 days onto the day it is opened to get 'Use by' date).

Date opened-
Use by date-

4

5 VISIBLY CLEAN ? VISIBLY SOILED

Remove any visible soiling with first wipe before using additional wipes.

6

7 For 1 application use 1 wipe and follow this wipe direction.

8

Recommended surface area coverage 1m square.
Allow disinfectant to dry on surface- Contact time.

Dispose of used wipe into clinical waste.

DO'S ✓

- Check 'Use by' date on label before use.
- Pull wipe away from you when dispensing from canister.
- Close lid after dispensing.
- Keep wipes close to areas of risk by means of bracket.
- Store upright in a cool dry place.
- Dispose of wipes into clinical waste.
- Avoid contact with the skin, eyes & clothes.
- Use one wipe for the prescribed area to ensure contact time.
- Wash hands with soap&water after handling.
- Use in a well ventilated area.

DON'TS ✗

- Single use wipes only... do not re-use or over-use them.
- Avoid wipe contact with ammonia or acids.
- Not for use on soft materials, fabrics or lenses.
- Never flush or dispose of wipes in a macerator.

ORIGINAL

PDI
BE THE DIFFERENCE

*Always refer to manufacturers instructions

Aber Park, Flint, Flintshire. CH6 5EX United Kingdom. Tel. +44(0)1352 736700 Web. www.pdi-europe.co.uk

Australian Government

Department of Health
Therapeutic Goods Administration

Australian Register of Therapeutic Goods Certificate

Issued to

Thermo Fisher Scientific Australia Pty Ltd

for approval to supply

Thermo Fisher Scientific Australia Pty Ltd - Medical device cleaning/disinfecting wipe

ARTG Identifier	227283
ARTG Start date	27/08/2014
Product Category	Medical Device Included Class IIb
GMDN	58077
GMDN Term	Medical device cleaning/disinfecting wipe
Intended Purpose	A pre-treated fabric intended to wipe clean and disinfect the surfaces of medical devices and equipment between each patient use. The fabric is impregnated with a solution made of detergent(s) and antimicrobial agent(s) and is designed to help reduce the amount of dirt and microbial contamination on the surfaces of a medical device and equipment.

Manufacturer Details	Address	Certificate number(s)
Nice-Pak International Ltd	Aber Park FLINT, FLINTSHIRE, CH6 5EX United Kingdom	DV-2013-MC-07969-1

ARTG Standard Conditions

The above Medical Device Included Class IIb has been entered on the Register subject to the following conditions:

- The automatic conditions applicable to the inclusion of all kinds of medical devices in the Register are as specified in section 41FN of the Therapeutic Goods Act 1989.,
- The standard conditions that are imposed under section 41FO of the Therapeutic Goods Act 1989 when kinds of medical devices are included in the Register are as set out in the following paragraphs.,
- For a medical device included in the Register under Chapter 4 and imported into Australia, the Sponsor must ensure that information about the Sponsor is provided in such a way as to allow the sponsor to be identified.,
- Each sponsor shall retain records of the distribution of all of the sponsor's medical devices included in the Register under Chapter 4. In the case of records relating to a Class AIMD medical device, Class III medical device, or Class IIb medical device that is an implantable medical device, the distribution records shall be retained for a minimum period of 10 years. In the case of records relating to any other device, the distribution records shall be retained for a minimum period of 5 years.,
- The sponsor of a medical device included in the Register under Chapter 4 shall keep an up to date log of information of the kind specified in Regulation 5.8.,
- It is a condition of inclusion in the ARTG that the sponsor of a medical device that is an AIMD, Class III or implantable Class IIb provides three consecutive annual reports to the Head of the Office of Product Review, Therapeutic Goods Administration following inclusion of the device in the ARTG (as specified in 5.8 of the regulations). Annual reports are due on 1 October each year. Reports should be for the period 1 July to 30 June. The first report following the date of inclusion in the ARTG must be for a period of at least six months but no longer than 18 months. Subsequent reports are to be provided on 1 October for a further 2 years. The annual report must include all complaints and adverse events received by the manufacturer relating to problems with the use of the device that have been received by them over the year. For orthopaedic implant prosthesis that have been re-classified from Class IIb to Class III medical devices, annual report information must be submitted if the device meets either of the following criteria: I.The device was subject to a TGA application audit based on revision rate when the device transitioned from Class IIb to Class III; and/or II.No devices were supplied to the Australian marketplace before 30 June 2012. As per the standard automatic condition, annual reports should be submitted each year for the first three years of inclusion as a Class III medical device on the ARTG.,

- Where a medical device included in the Register, contains a substance which is included in the Fourth Schedule to the Customs (Prohibited Imports) Regulations or the Eighth Schedule to the Customs (Prohibited Exports) Regulations the Sponsor shall, at the time of importation or exportation of the medical device, be in possession of a licence and a permission for importation or exportation of each consignment of the goods as required by those regulations.,
- A sponsor shall ensure that a medical device within their control is stored and transported in accordance with the instructions and information provided by the manufacturer.

Products Covered by This Entry

1. Medical device cleaning/disinfecting wipe

Product Specific Conditions

No specific conditions have been recorded against this entry.

From: Rutherford, Peter G. [redacted]
Sent: Wednesday, 3 July 2019 11:20 AM
To: Cathy Lincoln
Cc: Deborough Macbeth; Debbie McDonald; Colleen Gann
Subject: Re: PDI Sani Cloth

Hi Cathy,

We have receive confirmation from PDI the chlorine component consists of 0.54% sodium hypochlorite.
It appears as though your calculation yesterday has been confirmed by PDI.

Is this sufficient conformation for you?

I have also provided Kate Hahn a sample of the Chlor Wipe canister and also the wall mount bracket.

Regards

Peter Rutherford
Business Development Manager - Healthcare
Thermo Fisher Scientific
128 Bluestone Circuit, Seventeen Mile Rocks, QLD 4073
Phone [redacted]
Customer Service 1300 735 292
[redacted]
www.thermofisher.com.au

The world leader in serving science

Sent from my iPhone

On 2 Jul 2019, at 11:10 am, Cathy Lincoln [redacted] wrote:

> **CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

> Peter,
>
> Thanks for taking my call this morning.
>
> If you could please confirm the hypochlorite solution concentration in the PDI SaniCloth wipes, we can be assured it meets our guideline requirement of at least '0.5%' and go ahead with the order.
>
> My understanding is that '>5400ppm sodium hypochlorite' which is stated on the tech specs document should meet criteria (given bleach solution ratio 1:10 = 0.5% = 5000ppm), but would be ideal to have this confirmed by manufacturer.
>
> I have cc-ed others involved in this issue for their information.

Cathy

Dr Cathy Lincoln

Forensic Physician, Deputy Director
Gold Coast Forensic Medicine | Emergency Department
Gold Coast Health

PO Box 755, Southport BC, Qld 4215

P: [redacted] | **F:** [redacted]
M: [redacted]
E: [redacted]

Our values Integrity | Community first | Excellence | Respect | Compassion | Empower

****
***

This email, including any attachments sent with it, is confidential and for the sole use of the intended recipient(s). This confidentiality is not waived or lost, if you receive it and you are not the intended recipient(s), or if it is transmitted/received in error.

Any unauthorised use, alteration, disclosure, distribution or review of this email is strictly prohibited. The information contained in this email, including any attachment sent with it, may be subject to a statutory duty of confidentiality if it relates to health service matters.

If you are not the intended recipient(s), or if you have received this email in error, you are asked to immediately notify the sender by telephone collect on Australia +61 1800 198 175 or by return email. You should also delete this email, and any copies, from your computer system network and destroy any hard copies produced.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

Although Queensland Health takes all reasonable steps to ensure this email does not contain malicious software, Queensland Health does not accept responsibility for the consequences if any person's computer inadvertently suffers any disruption to services, loss of information, harm or is infected with a virus, other malicious computer programme or code that may occur as a consequence of receiving this email.

Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

****
*****

Worldwide Confidentiality Note: Dissemination, distribution or copying of this email or the information herein by anyone other than the intended recipient, or an employee or agent of a system responsible for delivering the message to the intended recipient, is prohibited. If you are not the intended recipient, please inform the sender and delete all copies.
The company does not accept credit card information via fax or email. To process a payment please contact our customer service department in either Australia (1300 735 292) or New Zealand (0800 933 966).

Debbie McDonald

From: Cathy Lincoln
Sent: Wednesday, 20 July 2016 9:54 AM
To: [redacted]
Cc: Nelle Van Buuren; Debbie McDonald
Subject: RE: SAIK - please read

Lorraine,

Sorry for delay in response – I've been off with hideous flu for a week.

I don't know anything about a SAIK register at LCH.

We have one here at our Southport office to record any we use – this register was started about a year ago to address use of 'old' kits that we had at the CFMU office and some hospitals.

If you're trying to trace a particular kit, Debbie could look it up for you if you give her a number.

Cathy

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit, South East Region

From: [redacted]
Sent: Friday, 8 July 2016 2:08 PM
To: Cathy Lincoln
Subject: FW: SAIK - please read

Doc, do you know anything about the register?

From: Oresganin.Maria[SER]
Sent: Friday, 8 July 2016 2:02 PM
To: CPIU Logan [redacted]
Cc: Burkin.LorraineA[SER] [redacted]
Subject: SAIK - please read

Good afternoon all,

I attended LCH today to replenish the number of Sexual Assault and Investigation Kits held in the secure police storage unit at A&E. A register that was held in the storage unit appears to have now gone 'missing'? I will endeavor to have the register replaced at the hospital by Monday. (Unless anyone can shed any light on its whereabouts?). It is imperative that a register is maintained to ensure accountability of the kits being utilised. Distribution of the kits is currently under review by the Child Safety & Sexual Crime Group.

There are 2 further kits held in the storage cupboard at Logan CAIU. There was an investigation this past week that required investigators to attend Lady Cilento Hospital for a medical examination to be conducted. This hospital does not have local arrangements with Police to have SAIK stored at the hospital. Spare kits will be held at Logan CAIU in the event investigators are required to attend hospitals outside our district. Again, please maintain the register that is held with these kits.

In addition, a recent Sexual Violence Liaison Officer meeting I attended with counsellors at the Centre Against Sexual Violence Woodridge has revealed a significant decrease in QPS referrals for victims of sexual assault.

The emotional support of rape complainants is of particular importance and it is highly desirable that such support and counselling is made available at as early a stage as possible after initial complaint. Such support is can be provided by **The Centre Against Sexual Violence** for females aged 12 years and over and can be

contacted on the following phone number: business hours: [redacted] Information pamphlets are displayed in the waiting room at Logan CAIU. For staff at outside stations, please see me if you require further material.

If you have any issues, please contact me.

Regards,
Maria ORESGANIN
D/Sgt [redacted]
Logan District SCAN

****
CONFIDENTIALITY: The information contained in this electronic mail message and any electronic files attached to it may be confidential information, and may also be the subject of legal professional privilege and/or public interest immunity. If you are not the intended recipient you are required to delete it. Any use, disclosure or copying of this message and any attachments is unauthorised. If you have received this electronic message in error, please inform the sender or contact securityscanner@police.qld.gov.au. This footnote also confirms that this email message has been checked for the presence of computer viruses.
****

Debbie McDonald

From: Cecilia Dal Santo
Sent: Monday, 27 March 2017 2:20 PM
To: Debbie McDonald
Subject: RE: Exam kits

Hi Debbie

I have just spoken to the team at FSS about supply of kits. I will discuss further with the managing scientist as historically kits are only supplied to QPS and Metro. I will let you know when I have got further info.

Regards
Cecilia

From: Debbie McDonald
Sent: Monday, 27 March 2017 2:10 PM
To: Cecilia Dal Santo
Subject: RE: Exam kits

Thank you very much for looking into that for us. It has been very helpful.

Thanks
Debbie

Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

p | [redacted]
a | PO Box 755, Southport BC QLD 4215
w Queensland Health [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cecilia Dal Santo
Sent: Monday, 27 March 2017 11:44 AM
To: Debbie McDonald
Subject: Exam kits

Hi Debbie

Apologies for taking so long, but when I was at your office the other week you were talking about the exam kits needed in order to conduct assault examinations.

I have done some research and there are Sexual assault identification kits, supplied by the FSS DNA Analysis team on [redacted] (I have attached a photo).

The nurses at Metro order the kits from FSS and they are delivered to the office.

Hope that assists.

Regards
Cecilia

Cecilia Dal Santo
Senior Administration Manager

Office of the General Manager
Community & Scientific Support
Health Support Queensland, **Department of Health**

p | [redacted]
[redacted] 41 O'Connell Terrace, Bowen Hills Qld 4006
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

Debbie McDonald

From: Cecilia Dal Santo
Sent: Wednesday, 12 April 2017 9:17 AM
To: Debbie McDonald
Subject: RE: Exam kits

Hi Debbie

I am still helping tidying up a few things at CFMU until we get a new General Manager, can I assist you with something?

I am at Metro today, number below.

Regards
Cecilia

Cecilia Dal Santo
Senior Administration Manager

Office of the General Manager
Community & Scientific Support
Health Support Queensland, **Department of Health**
p | [redacted]
a | [redacted] 41 O'Connell Terrace, Bowen Hills Qld 4006
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Debbie McDonald
Sent: Wednesday, 12 April 2017 9:15 AM
To: Cecilia Dal Santo
Subject: RE: Exam kits

Hi Cecilia

I was wondering if you were still conducting the administration review of CFMU?

If you could let me know when you get a chance.

Thanks
Debbie

Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region

Health Support Queensland, **Department of Health**

p | [redacted]
a | PO Box 755, Southport BC QLD 4215
w Queensland Health [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cecilia Dal Santo
Sent: Monday, 27 March 2017 2:28 PM
To: Debbie McDonald
Cc: CFMU
Subject: RE: Exam kits

Ok, thanks for the update
Cecilia

From: Debbie McDonald
Sent: Monday, 27 March 2017 2:24 PM
To: Cecilia Dal Santo
Subject: RE: Exam kits

Hi Cecilia

I have already spoken to FSS DNA team and they said they will supply 30 kits to CFMU Metro and I have asked them to send these on to us.

Thanks
Debbie

Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

p | [redacted]
a | PO Box 755, Southport BC QLD 4215
w Queensland Health [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cecilia Dal Santo
Sent: Monday, 27 March 2017 2:20 PM
To: Debbie McDonald
Subject: RE: Exam kits

Hi Debbie

I have just spoken to the team at FSS about supply of kits. I will discuss further with the managing scientist as historically kits are only supplied to QPS and Metro. I will let you know when I have got further info.

Regards
Cecilia

From: Debbie McDonald
Sent: Monday, 27 March 2017 2:10 PM
To: Cecilia Dal Santo
Subject: RE: Exam kits

Thank you very much for looking into that for us. It has been very helpful.

Thanks
Debbie

Debbie McDonald
Administration Officer

Clinical Forensic Medicine Unit, South East Region
Health Support Queensland, **Department of Health**

p | [redacted]
a | PO Box 755, Southport BC QLD 4215
w Queensland Health [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

From: Cecilia Dal Santo
Sent: Monday, 27 March 2017 11:44 AM
To: Debbie McDonald
Subject: Exam kits

Hi Debbie

Apologies for taking so long, but when I was at your office the other week you were talking about the exam kits needed in order to conduct assault examinations.

I have done some research and there are Sexual assault identification kits, supplied by the FSS DNA Analysis

team on [redacted] (I have attached a photo).

The nurses at Metro order the kits from FSS and they are delivered to the office.

Hope that assists.

Regards
Cecilia

Cecilia Dal Santo
Senior Administration Manager

Office of the General Manager
Community & Scientific Support
Health Support Queensland, **Department of Health**

p | [redacted]
a | [redacted] 41 O'Connell Terrace, Bowen Hills Qld 4006
w | Queensland Health e | [redacted]

HSQ's vision | Delivering the best health support services and solutions for a safer and healthier Queensland.

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and future.

d) SAIKs and JIC kits should not differ in design; clinicians should be able to collect, the same evidence for transfer and storage when completing a JIC kit as is possible for a SAIK.

All the facts and circumstances declared in my statement, are within my own knowledge and belief, except for the facts and circumstances declared from information only, and where applicable, my means of knowledge and sources of information are contained in this statement.

I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.

TAKEN AND DECLARED before me at ## in the State of Queensland this 26th day of September 2022

[redacted] ..... [redacted] .....

Catherine Lincoln Witness – [redacted]

[redacted] ..... [redacted] .....

Catherine Lincoln 26 September 2022 Witness – [redacted] *26 September 2022*

Exhibits Index – Statement of Catherine Ann Lincoln

Question	Exhibit	Document Title
5	CL-01	Curriculum vitae Catherine Lincoln
9	CL-02	Letter AC SER QPS (Sept 2018)
9	CL-03	Letter Coroner SER (Sept 2018)
9	CL-04	Letter Coronial Registrar (Sept 2018)
9	CL-05	Letter DPP (Sept 2018)
9	CL-06	Letter GC QPS (Sept 2018)
9	CL-07	Letter MSHHS (Sept 2018)
9	CL-08	Letter QPS (Sept 2018)
9	CL-09	Letter State Coroner (Sept 2018)
11	CL-10	RCPA Faculty of Clinical Forensic Medicine Fellowship Trainee Handbook 2022
11	CL-11	RCPA Position Statement Role of the Specialist in Clinical Forensic Medicine
11	CL-12	GCUH new SMO forensic induction record
11	CL-13	GCUH supervision entrustment hierarchy
11	CL-14	GCUH forensic examination entrustment form
11	CL-15	GCUH medicolegal report log template
11	CL-16	Correspondence between RCPA and Qld Health re sexual assault training 2019
13	CL-17	GCHHS Guideline Care of Patients aged 14 years and above who have sustained reported sexual assault GL1857
13	CL-18	GCHHS Sexual assault forensic examination pathway consent GC10823
13	CL-19	GCHHS 'Just in case' forensic examination patient information brochure
14	CL-20	SARC WA forensic sample list and analysis clinician feedback (2002)
14	CL-21	SARC WA sexual assault kit contents (2022)
14	CL-22	Sanax Medical – ISO 18385 Certificate (2019)
14	CL-23	Qld Sexual offences medical protocol booklet (2004)
14	CL-24	Photograph Qld SAIK (circa 2006)
14	CL-25	Draft QHSS proposal SAIK improvement project (2006)
14	CL-26	Draft revised SAIK protocol booklet by CL – not taken up (2006)
14	CL-27	Email CL to QHSS re SAEK revision (2007)
14	CL-28	FSS CFMU Sexual Assault Toxicology form (2011)
14	CL-29	Sexual assault toxicology form (2017)
15	CL-30	FSS Medical examination form – DNA (2022)
15	CL-31	Photograph of SAIK contents (2022)
15	CL-32	Photograph (1) of Forensic Toxicology kit (2022)
15	CL-33	Photograph (2) of Forensic Toxicology kit (2022)
16, 17, 43	CL-34	Proposed sperm microscopy project by CL – not taken up (2009)
16, 17. 43	CL-35	Emails CFMU QHSS re cessation of making slides at time of collection

16, 17, 43	CL-36	SAIK swab laboratory procedure (post slide cessation) 2011
16, 17, 43	CL37	Nittis et al. Preparing semen slides in sexual assault – do they who smear first smear best? *J For Leg Med* 79 (2021) 102130
16, 17, 18	CL-38	Letter to explain staged changes to SAIK and removal of booklet AG (2012)
16, 17, 18	CL-38a	Emails re new kits between C Lincoln C Allen Jan 2014
16, 17, 43	CL-38b	Email attachment to CL-38a SAIK contents (2014)
16, 17, 43	CL-38c	Email attachment to CL-38a SAIK packaging (2014)
16, 17, 18	CL-38d	Email attachment to CL-38a Sexual Assault Investigation Form DNA (2014)
16, 17, 18	CL-38e	Email attachment to CL-38a Sexual Assault Toxicology Form (2014)
16, 17, 18	CL-39	Draft Qld SAIK form (2012)
16, 17, 18	CL-40	Photograph Qld SAIK (2014)
16, 17, 18	CL-41	Sexual offences medical protocol - not included in SAIK (2017)
18	CL-42	VIFM sexual assault proforma (16 June 2022)
16, 17, 24, 38	CL-43	Emails with FSS re proposed edit to SA interagency guidelines re reference DNA samples
16, 17, 24, 38	CL-43a	Qld SA Interagency guidelines - under review (July 2022)
16, 17	CL-44	Photograph of QPS SOC Gold Coast fingernail kit (2010)
16, 17, 22	CL-45	Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr [redacted] Victorian Department of Justice, 2010. Available from: https://assets.justice.vic.gov.au/.../vincentreportfinal16may2010.pdf
16, 17	CL-46	Photograph of 'clean' forensic swab (1) with adherent hair under label
16, 17	CL-47	Photograph of 'clean' forensic swab (2) with adherent hair under label
16, 17	CL-48	AS ISO 18385-2017 Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes - Requirements
19	CL-49	Royal College of Pathologists Australasia (RCPA) Faculty of Clinical Forensic Medicine (FCFM) list published guidelines (weblinks x 9)
19	CL-49a	Royal College of Pathologists Australasia (RCPA) Faculty of Clinical Forensic Medicine (FCFM) Guideline - Evidence Based Forensic Sampling Standards
19	CL-50	FFLM Recommendations for the collection of forensic specimens (July 2022)
19	CL-51	FFLM Recommendations for the collection of forensic specimens – the evidence (July 2022)

[redacted] 26/9/22
26/9/22

19	CL-52	FFLM Recommended equipment for obtaining forensic samples (July 2021)
19	CL53	FFLM FME form Complainant FSSC (July 2021)
19	CL-54	FFLM FME form Suspect FSSC (July 2021)
19	CL-55	FFLM Proforma for Adult Forensic Examination (May 2021)
19	CL56	FFLM Post pubertal Complainants clinical pathway (May 19)
19	CL-57	Sexual Assault Examination Dr M Nittis in Clinical Forensic Medicine – a Physician's Guide Fourth Edition (2020), Dr Margaret Stark (ed) Chapter 3 pp63-142
19	CL58	Review of Sexual Assault a forensic clinician's practice guide, Dr Catherine White
22	CL-59	Photograph (1) of forensic swabs purchased to supplement SAIKs
22	CL60	Photograph (2) of forensic swabs purchased to supplement SAIKs
22	CL-61	Invoice brown paper bags for clothing items
22	CL-62	Invoice tamper evident bags
25	CL-63	RCPA FCFM Guideline for Cleaning Decontamination Forensic Examination Suites
25	CL-64	Ballantyne KN et al (2015) DNA contamination minimisation – finding an effective cleaning method. Aust J For Sci DOI 10.1080/00450618.2015.1004195
25	CL-65	Email advice from M Nittis re use of ISO certified kits in Australia (Sept 2022)
25	CL-66	Sanax Medical – ISO 18385 Certificate 2019
25	CL-67	Email to Lara Keller re VIFM contamination reduction kits with photographs (10 Dec 2021)
26	CL68	Memo to HHS CEs (17 July 2019)
26	CL69	Attachment 1 HSD Final (22 July 2019)
26	CL70	HSQ Gold Coast HHS re inclusion 14-17 year olds JIC (12 Sept 2019)
27	CL71	Photograph (1) of JIC kit
27	CL72	Photograph (2) of JIC kit
27	CL-73	Email to Mark Stephenson re JIC kit contents add tox 6 Sept 2022
30	CL-74	For Laboratory: Potential forensic evidence 'Just in Case' Forensic Examinations
33	CL75	GCUH Suspect forensic sample form
33	CL76	GCUH Suspect sampling sticker labels
33	CL77	GCUH Toxicology form to accompany suspect samples
33	CL78	GCUH Suspect examination body diagrams
33	CL-79	GCUH Suspect examination genital diagram
33	CL-80	Procedure for taking male genital swabs (CL)
33	CL-81	Email FSS QPS re suspect sampling documentation (Oct 2019)
33	CL-82	FSS SAIK medical examination information form DNA

26/9/22

[redacted] 26/9/22

34	CL-83	Email M Nittis VIFM re kits for suspect examinations (Sept 2022)
36	CL-84	Email 2016 from FSS (Abigail Houlding) re SAIK swabs (Mar 2016)
36	CL-85	Email from A Griffin re multiple swabs (Oct 2019)
36	CL-86	Email to Gold Coast staff re criticism for taking multiple swabs (Oct 2019)
36	CL-87	Email discussion CFMU re time limit triage forensic examinations (May 2017)
36	CL-87a	Email A Griffin re DNA retention examination time limits (April 2017)
36	CL-88	VIFM Recommended maximum time for routine forensic sample collection (2021)
39	CL-89	Draft Qld Sexual Assault Kit feedback form (2007)
39	CL-90	WA SARC Kit feedback form (2003)
39	CL-91	Email CL to Director CFMU re sample feedback
41	CL-92	Email from Team Leader Environmental Services GCUH (15 Sept 2022)
41	CL-93	Diversey Divercleanse Hospital Grade Disinfectant - Ultimate Cleaning Products
41	CL-94	Pre-examination DNA clean GCFM (2019)
41	CL-95	ThermoFisher PDI Sani-Cloth Chlor - Technical Specification 201704
41	CL-96	ThermoFisher PDI Sani-Cloth TGA 227283 certificate class IIb
41	CL-97	Email from ThermoFisher re SaniCloth bleach content
21	CL-98	Emails July 2016 re supplies of SAIKs to LGH L Burkin M Oresganin
21	CL-99	Emails Apr 2017 re supplies of SAIKs to GCUH D McDonald C del Santo
21	CL-100	Emails July 2017 re provision of SAIKs to GCUH A Griffin
21	CL-101	Emails July 2017 re supplies of SAIKs to GCUH S Jacobs M Ward
21	CL-102	Emails June 2017 re supplies of SAIKs to GCUH AC Brian Codd A Griffin
21	CL-103	Emails between myself and Gold Coast CIB re CASCG communication re SAIKs (Sept 2015)
21	CL-104	Emails between myself and Logan CIB re SAIKs at Logan Hospital (October 2015)
16, 17, 18, 38	CL-105	Handwritten notes by CL during Queensland Government Interagency Sexual Assault Response Guidelines working group meeting 28 July 2022
27	CL-106	Subpoena Dr Christine Mirakian, [redacted] 17 September 2021

26/9/22.
26/9/22
[redacted]

SAIK swab procedure FSS since cessation of slide in field (2011)

Preparation of slide from swab:

- Cut piece of swab tip, place in tube and add liquid
- Agitate
- Place a droplet of fluid mixture onto slide (150µl)
- Heat fix and stain (HHE)

Examine slide (microscopy)

If see sperm, the remining part of the swab and any others are sent to the DNA lab for analysis

In the DNA lab:

- Differential lysis process to separate epithelial fraction from sperm fraction (in a male sexual assault of female, epithelial fraction mostly female DNA but may include some male DNA)
- Both fractions are analysed for a DNA profile (run through *Profiler Plus*)
- Compare results with reference DNA profile

From: Abigail Houlding
Sent: Tuesday, 29 March 2016 10:30 AM
To: Cathy Lincoln
Subject: SAIK swabs

Good Morning,

I am the acting Senior Scientist of the Evidence Recovery Team, Forensic DNA Analysis. We are the team who process sexual assault investigation kits (SAIKs) to test for bodily fluids and DNA. We have received a number of SAIKs recently that have a large number of internal swabs in them. I just wanted to contact you to gain more of an understanding of your rationale behind collecting so many vaginal swabs.

To give you an insight on our processes here, as per our agreement with the Queensland Police Service we examine every item contained within a SAIK individually, we do not selectively test swabs based on location or collection order. Each swab gets full presumptive screening for semen, including microscopy. We then process the swabs through our analytical section which is a costly process (semen positive swabs get split into two samples with the basic process costing on average $200-$300 per sample). In collecting multiple swabs from the same site this impacts examination time, turnaround times for the results, and potentially decreases the likelihood of getting a good result from any one swab, as any foreign cellular material present is diluted across multiple swabs. It is much better to concentrate the sample onto one swab. When we examine a large SAIK this also impacts on turnaround times for other cases.

A standard female SAIK usually consists of:
1 x high vaginal swab
1 x low vaginal swab
1 x vulval swab

1 x cervical swab (if the SAIK is collected >7 days after the offence)
1 x perianal swab (if case history suggests anal assault)
1 x rectal swab (if case history suggests anal assault)
1 x oral swab (if case history suggests oral assault)
Skin swabs if semen or saliva is suspected in other areas (wet and dry swabs for these areas is fine)

Of course every case is different and as the FMO it is at your discretion which samples you collect, I understand that the patient is your main priority and you must do whatever is in their best interest. If there is some justification behind collecting multiple swabs please indicate this on the accompanying SAIK paperwork.

If you need me to explain any of our processes further, or if you require any additional information please do not hesitate to contact me.

Kind regards
Abbie

Abigail Houlding
A/Senior Scientist - Evidence Recovery Team, Forensic DNA Analysis
Police Services Stream | Forensic & Scientific Services | Health Support Queensland
Department of Health | Queensland Government
P.O. Box 594 Archerfield QLD 4108

t. [redacted]
e. [redacted] | www.health.qld.gov.au

HealthSupport
Queensland

HealthSupport Queensland

Queensland Health

Clinical Forensic Medicine Unit

Sexual Assault Examination Time Frame

Consideration of DNA Retention Data to Guide Emergent Response

Nature of Assault	Acute examination (regardless time of day)	Non-Acute examination (8am to 1700hrs)
Digital penetration: Vagina	12hrs	>12hrs
Digital penetration: Anal	12hrs	>12hrs
Oral penetration	6hrs	>6hrs
Vaginal penetration	72hrs	>72hrs
Anal penetration	72hrs	>72hrs
Skin swab: Semen	24hrs	>24hrs
Skin swab: Saliva	24hrs	>24hrs

This remains a guide, and clinical acumen may be applied as regards a maximum response time. This is to assist in a consistent, patient focussed response while allowing appropriate utility of the Forensic Clinician resource.

Author: Dr Adam Griffin

Endorsed: April 27 2017

Consultation: CFMU wide

Review Date: May 1 2018

CURRICULUM VITAE: Catherine Ann LINCOLN *(updated Sept 2022)*

EDUCATION AND QUALIFICATIONS

2018	Associate Fellowship Royal Australasian College of Medical Administrators (AFRACMA)
2014	Foundation Fellowship of the Faculty of Clinical Forensic Medicine (FFCFM), Royal College of Pathologists Australasia (RCPA)
2013	PhD, Emergency Medicine (Forensic Medicine) University of Western Australia
2013	Fellowship of the Faculty of Forensic and Legal Medicine (FFLM), Royal College of Physicians, United Kingdom
2006	Forensic Toxicology Unit, Monash University
2002	Master of Forensic Medicine, Monash University
1987	MBBS, University of Western Australia

CURRENT POSITION

October, 2018-present

Director
Forensic Medicine, Emergency Department
Gold Coast University Hospital
Gold Coast Hospital and Health Service (GCHHS)

MEMBERSHIPS

Foundation Fellowship of Faculty of Clinical Forensic Medicine (FCFM), Royal College of Pathologists Australasia (RCPA)

- Faculty Committee member (2014-present)
- Chair, Curriculum Development Committee (July, 2015-2018)
- Chief Examiner FCFM, RCPA (2016 – present)
- RCPA Board Education and Assessment (BEA) member (2016 – present)

Fellowship of Faculty of Forensic and Legal Medicine (FFLM), Royal College of Physicians, United Kingdom

Australian Association of Forensic Physicians (AAFP) **no longer in existence; ceded to RCPA Faculty CFM*

- Foundation member
- Committee member and Education Officer (2009-2015)

Medico-Legal Society of Queensland (MLSQ) (2015-present)

Forensic and Medical Sexual Assault Clinicians Australia (FAMSACA)

- Member (2005- present)

Australasian College of Legal Medicine (FACLM)

- Fellow (2003-2022)
- Council member (from 2005 to 2009)

National Adult Sexual Assault Medical Committee (NASAMC) **no longer in existence; ceded to FAMSACA*

- WA representative from 1998-2003

Australian and New Zealand Forensic Medicine Society (ANZFMS)

- Council member 2004-2006

Australian Medical Association

20 September 2022

MEDICAL REGISTRATION

Medical Board of Australia (2011-present)
- APHRA Registration MED0000957905

Queensland Medical Board (2003-2011)
- Registration Number 1032607

Medical Board of Western Australia (1988-2011)
- Registration Number 8044

United Kingdom 1990-1994 (currently inactive)

MEDICAL DEFENCE

Medical Defence Association (MDA)

PROFESSIONAL BACKGROUND

October 2018 – current	Director Forensic Medicine, Emergency Department Gold Coast University Hospital
July 2005 – October 2018	Deputy Director Clinical Forensic Medicine Unit (CFMU) South East Region (SER), Queensland Health Support Queensland
May 2004 – July 2005	Acting Deputy Director Clinical Forensic Medicine Unit (CFMU) SER Responsibility for the provision of forensic medical services in the South East Queensland Region (Gold Coast and Logan).
Jan – May 2004	Forensic Medical Officer Clinical Forensic Medicine Unit (CFMU), Gold Coast
Dec 2003 – 2012	Part-time PhD student University of Western Australia (UWA) School of Primary Aboriginal and Rural Health Care Discipline of Emergency Medicine
Aug – Dec 2003	Full-time PhD student University of Western Australia (UWA) NHMRC Scholarship School of Primary Aboriginal and Rural Health Care Discipline of Emergency Medicine
1995 – Aug 2003	Director Medical and Forensic Services Sexual Assault Resource Centre (SARC) Perth, WA Responsibility for the running of the 24 hour crisis medical/forensic service for victims of sexual assault. This position involves the supervision of up to 10 doctors and participation at executive level within the organisation (part-time position with after hours on-call duties)
2002 – 2003	Sexual Health medical officer Infectious Diseases and Sexual Health Clinic Fremantle Hospital, WA.
1998 - 2000	Part-time General Practitioner Parry St Family Practice (a three doctor general practice) Fremantle, WA.
1993 - 1995	Sessional medical officer with on-call duties Sexual Assault Resource Centre (SARC) A 24 hour crisis medical/forensic service for victims of sexual assault in Perth, WA.
1994 - 1998	Part-time General Practitioner Canning Medical Centre (a four doctor general practice) Fremantle, WA.

[redacted]

20 September 2022

1992 - 1993	Trainee General Practitioner Kimbolton Medical Centre, Cambridgeshire, UK A year as trainee GP in a five doctor rural general practice servicing an area of 150 sq miles and providing care to approx 5000 patients. The position involved after hours on-call duties.
1992-1993	Sessional medical officer, Almond Rd Family Planning Clinic St Neots, Huntingdon, Cambridgeshire.
1991 - 1992	Sessional medical officer Regents Park Clinic for Sexually Transmitted Diseases A private STD/HIV clinic in inner London.
1987 - 1992	Various resident medical officer and senior house officer positions in Western Australia and United Kingdom.

TEACHING

Queensland (2004- present)

Chief Examiner, Faculty Clinical Forensic Medicine (RCPA); inaugural curriculum development (2015-present), inaugural examination coordinator (2021)

QPS Detective training ISACURE sexual offence investigation course, Brisbane 2021-2022

RCPA Sexual assault in Forensic Pathology, four 2 hr training mannequin workshops in Qld, SA, NSW, WA. (2013-2015)

Training, supervision and peer support Forensic Medical Officers since 2007

Emergency nurses in Watch houses program, GCUH WHEN program; orientation training (2013-present)

Griffith University

- Senior Lecturer, Griffith University Medical School (2005-present)
- Medical student Year 4 Coordinator Elective/Selective co-placement with Forensic Pathology (2010-2015)
- Medical student Year 4 CLEIMS Understanding the Coronial Process (2015)
- Medical students Year 3 Structured Clinical Instruction Model (SCIM) sessions *'Introduction to Clinical Forensic Medicine'* (2006-2009)
- Medical student clinical community placement supervision Year 1 (*Health in the Community)* to Gold Coast CFMU (2005-present)
- Master of Legal Medicine, Course Lecturer (2006)

Bond University

- Medical students (Year 3), *'Medicolegal aspects of Domestic Violence'* (2007)

GCHHS and Logan Emergency Medicine staff teaching *'Forensic Medicine in the Emergency Department'*, '*Statements, Reports and Going to Court'* (annually)

GCUH Intern Orientation, '*Coronial Issues for Interns'* and *'Forensic Medicine for Hospital Doctors'* (annually)

Nurses in Watch-houses program, Southport and Beenleigh domiciliary, agency and emergency department nurses in-service training (2004-2016)

QPS Watch house Police Officers, Southport and Beenleigh Watch houses; in-service training (2004-2016)

Western Australia (1996 – 2003)

Clinical lecturer UWA Medical School in principles of medical care and forensic assessment of sexual assault victims (1995-2004) and general principles of clinical

forensic medicine (2000-2004), to the following groups:

- Fifth year medical students, University of Western Australia (UWA): groups of 20 students for 3 hr workshops 5 times yearly, supervision of students on 2 week optional attachments to SARC
- RACGP Family Medicine Program trainees (basic and advanced level), WA
- Resident Medical Officers in Gynaecology, King Edward Memorial Hospital for Women, Perth, WA.
- Rural General Practitioners as part of continuing medical education provided by Rural Divisions of General Practice and WA Centre for Rural and Remote Medicine.
- College of Emergency Medicine trainees, QEII Medical Centre, Perth, WA
- Assistance with developing and providing resources for PBL cases for medical students, UWA

Teaching to other professional bodies in WA in clinical forensic medicine and sexual assault medicine:

- Police - recruits, uniformed officers and detectives (WA Police Service)
- Lawyers - Dept of Public Prosecutions Court Vacation Conferences and Postgraduate Education Program (WA DPP)
- Judiciary - Annual W.A. District Court Judges' Conference
- Forensic Science Diploma/Masters Course, University of WA
- Emergency Nurses Association Continuing Education Program, WA
- King Edward Memorial Hospital Midwives Continuing Education Program
- Prison Health Services Postgraduate Education Program, WA
- Rural Health Care Professionals – nurses, health workers, social workers, psychologists, WA
- Sexual Health Clinicians – WA Postgraduate Education Program

EDITORIAL REVIEW

Journal of Forensic and Legal Medicine, Elsevier, United Kingdom (since 2005)

- Member of International Editorial Board

PROJECTS / RESEARCH

i) PhD research; University of Western Australia, Department of Emergency Medicine. *"A prospective study of macroscopically detected genital injury in women of reproductive age after consensual and non-consensual vaginal penetration*" 2004-2012

ii) Collaborative research; *'Watch House Emergency Nurse (WHEN) trial',* Gold Coast Forensic Medicine, Gold Coast University Hospital and Health Service, Griffith University, Queensland Police Service and Queensland Ambulance Service 2013-present; Queensland Emergency Medicine Research Fund (QEMRF) grants received.

iii) Collaborative research; *'Evidence-based forensic sampling in sexual assault',* Forensic Biology, PathWest, WA and Forensic Biology Queensland Health Scientific Services (QHSS) 2005-2007

iv) Collaborative research; *'The use of an alternate light source to facilitate detection of corroborative trace evidence in forensic examination of sexual assault victims'*, Perth SARC and WA PathCentre, 2000-2002

v) Supervised two year audit of Sexually Transmitted Infection Management in a Sexual Assault Service, Perth, WA 2002 (co-presented with Dr Oenone Allen at Australasian Sexual Health Physicians Conference, Perth, 2002)

vi) GP Coordinator *"Reskilling GPs in Sexually Transmitted Disease Management",* a six month project involving a series of seminars and lectures for GPs in sexually transmitted infection management, 1996

vii) *"Sexual assault and Injury - a descriptive study of general body and genital injury in recent sexual assault"* 1994/1995 (unpublished)

viii) Undergraduate research supervised by Dr Judy Straton, UWA *"Methods of stress reduction in First Year Resident Medical Officers at Perth's three teaching hospitals"*

20 September 2022

PUBLICATIONS

i) Refereed journal articles – lead author

Lincoln C A (2018) *Sexual Assault: Forensic Examination in the Living and Deceased.* Academic Forensic Pathology 8(4), 912-923
https://doi.org/10.1177/1925362118821490

Lincoln C. et al, Response to Letter to the Editor re *Macroscopically detected female genital injury after consensual and non-consensual vaginal penetration: a prospective comparison study.* Journal of Forensic and Legal Medicine, 28: 50-53 (2014)

Lincoln, C. et al, *Macroscopically detected female genital injury after consensual and non-consensual vaginal penetration: a prospective comparison study*. Journal of Forensic and Legal Medicine, 20(7): 884-901, (2013)

Lincoln C. et al, *The use of an alternative light source to detect semen in clinical forensic medical practice.* J Clin For Med (2006)

Lincoln C., *Genital Injury: Is It Significant? A Review of the Literature.* Med Sci Law, 41:4, 206-216, (2001)

Lincoln C.A. and Riley R., *Intra-arterial injection of Propofol*, Anaesthesia and Intensive Care, 18(2): 269-270 (1990)

ii) Refereed journal articles – contributing author

Crilly J, Brandenburg C, Kinner SA, Heffernan E, Byrnes J, Lincoln C, Gardiner P, Davidson P, Somerville A, Wilson D, Green D, Thomas S. Healthcare in police watch-houses: A challenge and an opportunity. Medical Journal of Australia Vol 217 No 6 19 Sept 2022 https://online.fliphtml5.com/iewqy/mtsw/#p=1

Crilly J, Lincoln C, Scuffham P, Byrnes J, Timms J, Becker K, van Buuren N, Fisher A, Murphy D, Zhang P, Kinner S, Green D. The impact of a 24/7 nursing presence in a police watch-house on police presentations to the emergency department. *Australian Health Review,* published online 12 October 2020.
https://doi.org/10.1071/AH19294

Julia Crilly, Josea Polong-Brown, Cathy Lincoln, Jo Timms, Ken Becker, Paul Scuffham, Nelle Van Buuren, Andrew Fisher, Danny Murphy, David Green
A structure and process evaluation of a police Watch House Emergency Nurse (WHEN) model of care, International Emergency Nursing 47 (2019)
https://doi.org/10.1016/j.ienj.2019.100790

[redacted]

20 September 2022

iii) **Other articles, reviews, book chapters**

Lincoln C, *Forensic and Emergency Medicine: a natural partnership,* Australian College of Legal Medicine newsletter (2008)

Lincoln C and Higgins G, *Forensic Pathology and Clinical Forensic Medicine: what's the difference?,* Australian College of Legal Medicine newsletter (2007)

Forensic Medicine on the Gold Coast, Division of General Practice newsletter, Gold Coast 2007

Forensic Medicine in the Emergency Department, GP-Government Medical Officer newsletter, 2006

Lincoln C. and McBride P., *Genital Injury and Its Significance in Sexual Offence Trials*, Brief: Law Society of WA Magazine, 27:1, 14-16 (2000)

Contributing author to *Adult Sexual Assault (FOR 2005) Module* in postgraduate Masters in Forensic Medicine course, Monash University (1999/2000) subsequently used in *Sexual Assault Nursing Module* in Graduate Certificate in Nursing (Forensic), Monash University (2005)

Sexual Assault Resource Centre Manual (1997)

iii) **Conference papers**

Lincoln C. *Frontline forensic medicine - working with emergency departments* Pathology Update, Royal College of Pathologists Australasia (RCPA), Sydney 4-6 March 2022

Lincoln C. *Mainstreaming clinical forensic medicine: Transitioning to a hospital-based service*. Pathology Update, Royal College of Pathologists Australasia (RCPA), Sydney 20-22 March 2021

Crilly J, Lincoln C et al. *Care delivery for patients arriving to the Emergency Department by Police*. Applied Research in Crime and Justice Conference, Brisbane February 2016. *(accepted poster)*

Lincoln C, Crilly J et al. *Reducing risks and improving health outcomes for prisoners in watch houses: do Emergency Department nurses in the custodial setting make a difference?* Pathology Update, Royal College of Pathologists Australasia (RCPA), Melbourne February 2016

Lincoln C., John O'Neill-Fuller, *Proposed Training and Continuing Education requirements for Faculty Clinical Forensic Medicine (FCFM).*RCPA Pathology Update, Melbourne Convention Centre, 27-28 February 2014.

Lincoln, C., *24/7 nurses in watch houses; necessity or overkill?* Forensic Medicine and Science Sydney Conference 15-16 November, 2013

Lincoln C., *A prospective study of macroscopically detected genital injury in women of reproductive age after consensual and non-consensual vaginal penetration.* 21st International Symposium on the Forensic Sciences, Australia and New Zealand Forensic Science Society (ANZFSS), Hobart 23-27 September 2012

Lincoln C., *Macroscopically detected genital injury after consensual and non-consensual vaginal penetration in women of reproductive age: a prospective study.* International Assoc. of Forensic Sciences (IAFS) and World Police Medical Officers 19th Triennial meeting, Funchal, Madeira, Portugal, 12-17 September 2011.

Lincoln C., *Sex and 'consensuality': a medico-legal perspective,* 20th International Symposium on the Forensic Sciences, Australia and New Zealand Forensic Science Society (ANZFSS), Sydney, 5-9 September 2010

Lincoln C., *Self-inflicted Injury: patterns and pitfalls,* Australian College of Legal

Medicine (ACLM) Annual Scientific Meeting Adelaide Oct 2009

Lincoln, C., *Doctors at Death Scenes*, Australian College of Legal Medicine (ACLM) Annual Scientific Meeting, Canberra July 2007

Lincoln C., *Doctors and Police at death scenes: a collaborative approach*
Lincoln C., *Clinical Forensic Medicine on the Gold Coast: setting up a Unit from 'scratch'*, 18th International Symposium on Forensic Sciences, Australia and New Zealand Forensic Science Society (ANZFSS), Perth, April 2006

Lincoln C., *Doctors and Sexual Assault: Comparison of Two Models of Sexual Assault Forensic Medical Service Provision*
Lincoln C. and Turbett G., *Forensic Specimens in Sexual Assault: where do we draw the line?*
Lincoln C., *Keeping Prisoners Alive.*
International Association of Forensic Sciences (IAFS) 17th Triennial Meeting, Hong Kong August 2005
Lincoln C., *Medical Evidence in Sexual Offence Trials*, ACLM Annual Scientific Meeting, Gold Coast July 2005

Lincoln C., *Medical Evidence in Sexual Offence Trials: A two year audit of data relating to evidence given by doctors in sexual offence trials*. American Academy of Forensic Sciences (AAFS) 56th Annual Meeting, Dallas, Texas, USA February 2004

Lincoln C., *"The Forensic Vulva",* Australia and New Zealand Vulvar Society (ANZVS) Annual Update, September 2004

Lincoln C., *"Forensic Aspects of Sexual Assault",* Annual Summer Forensic Symposium, WA Centre for Pathology and Medical Research, 2003 and 2004

Lincoln C., *"Medical Evidence in Sexual Offence Trials",* Annual Australasian Sexual Assault Symposium (DSAC and NASAMC), Christchurch, New Zealand. June 2003

Lincoln C., *Sexual Assault: Responding to Disclosure*. Royal Australian College of General Practitioners (RACGP) 45th Annual Scientific Meeting. Perth, Western Australia. October, 2002

Lincoln C., *"Genital injury: Is it significant",* Annual Australasian Sexual Assault Symposium (DSAC and NASAMC), Perth, Western Australia, May 2002

Lincoln C., McBride P and Christie E., *The Use of an Alternative Light Source (ALS) in the Forensic Examination of Sexual Assault Victims*. International Association of Forensic Sciences (IAFS) 16th Meeting, Montpellier, France September, 2002

McBride P. and Lincoln C., *Genito-anal Examination after Sexual Assault: A Client Perspective*. Australasian Sexual Health Physicians (ASHP) Conference Perth, May 2002

Lincoln C. and McBride P., *The Use of an Alternate Light Source (ALS) to Identify Forensically Useful Biological Fluids*. 6th International Conference in Clinical Forensic Medicine of the World Police Medical Officers (WPMO), Sydney, Australia. March 2002

Lincoln C., McBride., Turbett G., and Garbin C., *A Protocol for the Use of an Alternate Light Source to Facilitate Detection of Corroborative Trace Evidence in Sexual Assault Investigations*, 7th Indo Pacific Congress on Legal Medicine and Forensic Sciences (INPALMS) Melbourne, September 2001

[redacted]
20 September 2022 [redacted]

Lincoln C., *Speculum Use in Adult and Adolescent Sexual Assault Examinations*, Sexual Assault Workshop, Australasian Sexual Health Physicians (ASHP) Conference, Sydney, May 2001

Lincoln C., *Use of Colposcopy in Forensic Sexual Assault Examination of Adults and Post-pubertal Adolescents*, Sexual Assault Workshop, Australasian Sexual Health Conference, Sydney, May 2001

iv) **Case Reports**

Lincoln C and Turbett G., *Case Study: Investigating Sexual Assault, Plenary Session*, INPALMS (7th Indo Pacific Congress on Legal Medicine and Forensic Sciences) Melbourne, September, 2001

INVITED PRESENTATIONS

'Collaboration at the Coalface; doctors and police at death scenes'. Queensland Police Service, Forensic Services Group Leadership Conference, Brisbane Supreme Court. 20 August 2015.

'Doctors at death scenes' Queensland Police Service, Gold Coast Scene of Crime Officers (SOCO) training seminar, 25 Aug 2014 and 27 Aug 2014

'Macroscopic genital injury detection after consensual and non-consensual vaginal penetration', Forensic Nurse Examiners Conference, Brisbane, 25/26 October, 2012

'Sexual Assault for Forensic Pathologists', co-presentation of 2 hr workshop, Royal College of Pathologists (RCPA) Update, Sydney, 9-11 March 2012

'Medical Evidence in Sexual Assault', Southport and Beenleigh Offices of the Director of Public Prosecution (DPP) Southport, May 2009

'*Emergency Medical Issues in Watch houses'*, Queensland Police Service (QPS) Watch house Managers Conference, Brisbane June 2009

'Doctors at Death Scenes', QH Forensic and Scientific Services (FSS) 'Mind-mapping' lunchtime seminar, Brisbane, September 2008

'Sexual Assault in the Living', Royal College of Pathologists of Australia (RCPA), Pathology Update, Sydney, March 2008

'The Health of Victims of Abuse', Plenary Panel session member, 15th Annual Women's Health Conference, Gold Coast February 2008 '

'Doctors at Death Scenes' Australian College of Legal Medicine (ACLM) Annual Scientific Meeting, Canberra July 2007

"Genital injury in Sexual Assault", Sexual Assault Services Qld teleconference, July 2004

"Dealing with Victims – Sexual Assault", Masters in Criminology course, Crime Research Centre, Law School UWA, 2002

"Sexual Assault - a forensic perspective"
Postgraduate Lunchtime Lecture Series, King Edward Memorial Hospital,
2001 and 2002

Panel Presentation, Sexually Transmitted Infection and Sexual Assault
Sexual Assault Management Workshop, 15th CrimTrac ANZFSS Conference, 2000

Panel Presentation, *"Sexual Misconduct and Health Professionals"*
Health Consumers Council Conference, Perth 1999
Presentation to Female Genital Mutilation Taskforce Committee, 1999

[redacted]

20 September 2022

"Sexual Assault and the Child-bearing Woman"
King Edward Memorial Hospital Midwife Postgraduate Education Program, 1999

"Sexual Assault - a team approach to a health care issue"
Postgraduate Lunchtime Lecture Series, King Edward Memorial Hospital, 1998

'Sexual assault and forensic sampling', Presentation to the National Forensic Science Special Advisory Group meeting, Perth1998

Sexual Assault: Case Study Presentation, National Conference on Sexual Assault, Sydney, 1997.

"Sexual Assault and Injury; a descriptive study of recent sexual assault" National Conference on Sexual Assault, Perth, 1996.

"Re-skilling General Practitioners in Sexually Transmitted Disease Management"
A series of 8 seminars/workshops over a 6 mth period, 1995

Case Study Presentation, National Institute of Forensic Science Conference on Medicolegal Aspects of Adult Sexual Assault, Adelaide, 1994

EDUCATIONAL EVENTS ORGANISED

One day Australian Association Forensic Physicians (AAFP) seminar, *'Forensic Medicine in the Clinical World'*, Brisbane, May 2012 (40 attendees)

Two day *Sexual Assault Symposium* in association with annual Sexual Health Physicians Conference, Perth, 2002 (80 attendees)

20 September 2022

Health Support Queensland

Department of
Health

SC180305

20 September 2018

Mr Brian Wilkins
Assistant Commissioner, South East Region
Queensland Police Service
[redacted] Surfers Paradise Police Complex
68 Ferny Way
SURFERS PARADISE Qld 4217

Email: [redacted]
:

Dear Mr Wilkins

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
Phone: [redacted]
Email: [redacted]

Dr Lincoln will be in contact with you shortly and will discuss communication processes and rostering arrangement commencing on October 1, 2018.

I am confident these new arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Support
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
Telephone [redacted]
Website www.health.qld.gov.au

Health Support Queensland

Department of
Health

SC180305

17 September 2018

Mr James McDougall
Coroners Court of Queensland – Southern Region
GPO Box 103
SOUTHPORT Qld 4215

Email: [redacted]

Dear Mr McDougall

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. All enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
Phone: [redacted]
Email: [redacted]

Dr Lincoln will be in contact with you shortly and will discuss communication processes and rostering arrangement commencing on October 1, 2018.

I am confident these new arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Services
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
Telephone [redacted]
Website www.health.qld.gov.au

Health Support Queensland

Department of
Health

SC180305

17 September 2018

Ms Ainslie Kirkegaard
Coronial Registrar
Coroners Court of Queensland
GPO Box 1649
BRISBANE Qld 4001

Email: [redacted]

Dear Ms Kirkegaard

Transfer of South-East Region Clinical Forensic Medicine Unit (CFMU) to Gold Coast Hospital and Health Service (HHS).

Health Support Queensland (HSQ) has recently completed an organisational change that will result in the transfer the forensic medicine services undertaken in the South-East Region (the area from the South Logan River to the New South Wales border) to the Gold Coast Hospital and Health Service.

The transfer of service responsibilities will occur on Monday, 1 October 2018. Enquiries related to the provision of forensic medical services in the South-East Region after this date should to be directed to:

Dr Cathy Lincoln
Deputy Director
Clinical Forensic Medicine Unit South East Region
Phone: [redacted]
Email: [redacted].

Please note that arrangements for the provision of forensic medical advice in relation to a healthcare related death (Form 1A) will continue to be managed through the Brisbane office of the CFMU. There is no change to these processes which reflects the preferences of your office.

I am confident the revised arrangements will ensure the continued provision of forensic medical services in the Gold Coast and Logan region.

Yours sincerely

[redacted]

Michel Lok
General Manager
Strategy, Community and Scientific Services
Health Support Queensland

Health Support Queensland
41 O'Connell Terrace
Bowen Hills
Queensland 4006 Australia
Telephone [redacted]
Website www.health.qld.gov.au

STATEMENT OF CATHERINE ANN LINCOLN

I, Catherine Ann Lincoln, **Forensic Physician and Deputy Director, Forensic Medicine, Emergency Department, Gold Coast University Hospital,** of 1 Hospital Blvd, Southport, Queensland 4215, do solemnly and sincerely declare that:

Qualifications and experience

Question 2 - List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained.

1. I qualified with a Bachelor of Medicine and Bachelor of Surgery from the University of Western Australia in 1987.
2. I have a Master of Forensic Medicine degree from Monash University (2002) and a PhD in Forensic Medicine from the University of Western Australia (2013).
3. I am a Foundation Fellow of the Faculty of Clinical Forensic Medicine (Royal College of Pathologists Australasia) and the Faculty of Forensic and Legal Medicine (Royal College of Physicians, United Kingdom).
4. I am an Associate Fellow of the Royal Australasian College of Medical Administrators (AFRACMA).

Question 3 -Detail your work history since you graduated from university.

5. I worked as an intern and resident medical officer in public teaching hospitals in Western Australia (Perth, Port Hedland and Kalgoorlie) between 1987 and 1990 (emergency medicine, orthopaedics, general medicine, general surgery, sexual health, psychiatry).
6. I worked as a senior house officer in public and private hospitals in the United Kingdom between 1990 and 1993 (general medicine, general surgery).
7. I worked as a full time general practitioner in Kimbolton, Cambridgeshire for 12 months in 1992-1993.

[redacted]

8. I worked as a part time general practitioner with a primary focus in women's health and as a sexual health clinic medical officer in Perth, Western Australia from 1993 to 2002.
9. I directed the Sexual Assault Medical Forensic Service in Western Australia from 1994 to 2003, employed full time by the Sexual Assault Resource Centre (SARC), King Edward Memorial Hospital for Women, West Australian Department of Health.
10. I was employed full time by Queensland Health as the sole forensic physician for the Gold Coast from 2004-2006, also providing forensic services to Logan.
11. I was Deputy Director, Clinical Forensic Medicine Unit (CFMU), South East Region (Gold Coast and Logan) from 2005 to 2018, employed full time by Queensland Health.
12. I have been employed full time by the Gold Coast Hospital and Health Service as Forensic Physician and Director, Forensic Medicine, Emergency Department since October, 2018.
13. In the course of my work, I have personally examined over 1000 patients alleging recent sexual assault and over 3000 consensually sexually active female patients.
14. The subject of my PhD thesis was *"Macroscopically detected female genital injury after consensual and non-consensual vaginal penetration: a prospective comparison study"*.

Question 4 - Identify any appointments to any boards and/or committees

15. I was appointed as the inaugural Chief Examiner for the Royal College of Pathologists Australasia (RCPA) Fellowship in Clinical Forensic Medicine (FFCFM) training program in 2015. From 2015-2021, I lead a team of CFM specialists at the RCPA in the development of a detailed and innovative fellowship training curriculum. In 2021, I oversaw the first formal examination in CFM, leading to the inaugural award of FFCFM (RCPA) by examination.
16. I am a member of the RCPA Faculty of Clinical Forensic Medicine (FCFM) Committee and sit on the RCPA Board of Education and Assessment (BEA).
17. I sit on the Editorial Board for the Elsevier Journal of Forensic and Legal Medicine.

18. I am a member of the Queensland Health Sexual Assault Interagency Guideline Working Group.
19. I am a member of the GCUH Watch house Emergency Nurse (WHEN) research committee.

Question 5 - Attach a current curriculum vitae

20. See ***Exhibit CL-01 - Curriculum vitae Catherine Lincoln***.

Current unit's functions and processes

Question 6 - Identify the name of the unit you currently work in as part of the Gold Coast Hospital and Health Service. What are the roles and functions of your unit? Who do you report to?

21. I work as Director of the Forensic Medicine service which is structurally part of the Emergency Department at the Gold Coast Hospital and Health Service (GCHHS).
22. I report to Dr David Green, Director of Emergency Department.
23. The GCHHS Forensic Medicine service is responsible for provision of forensic services to Gold Coast and Logan Police Districts, and Gold Coast University Hospital, Robina Hospital Logan Hospital involving those aged 14 years and over. In summary, the service;
    a) Provides forensic examinations for the Gold Coast and Logan areas at three hospitals (GCUH, Robina Hospital and Logan Hospital).
    b) Has responsibility for healthcare provision to Southport and Logan District Watch houses.
    c) Provides medicolegal reports at the request of police and Office of the Director of Public Prosecutions (ODPP) in relation to clinical forensic examinations and clinical forensic matters not involving examination (eg review of material, toxicology, etc).
    d) Assists the South Eastern Coroner with review of clinical matters relating to death (within scope).

Question 7 - Identify the duties/responsibilities of your position.

24. As Director of Forensic Medicine, I:

a) Have responsibility for provision of clinical forensic medicine services to police, courts and the coroner (excluding Form 1A and Cause of Death advice) in Gold Coast and Logan Police Districts.

b) Provide leadership of clinical forensic medical services in Gold Coast and Logan Police Districts, and at Gold Coast, Robina and Logan Hospitals.

c) Comply with the provisions of appropriate legislative and regulatory policies as they relate to clinical forensic medical services.

d) Supervise nine (2.375fte contracted and 2 casual) forensic physicians and two (1.6fte) administration officers and clinical oversight of up to 10 watch house emergency nurses (WHENs).

e) Provide impartial medico-legal advice and reports to police, ODPP, government agencies and departments.

f) Have responsibility for the GCHHS Forensic Medicine department budget.

g) Participate in teaching and research activities that directly support defined clinical objectives.

h) Support education and training programs at both undergraduate and postgraduate levels.

i) Recruit and train doctors working in the department.

25. As a forensic physician providing frontline services, I am responsible for:

a) Provision of timely, efficient and competent clinical forensic medical services.

b) Participation in 24 hour 7 day forensic roster.

c) Maintenance of current best practice, knowledge and clinical expertise, of medical and forensic practice.

[redacted]

d) Maintenance of knowledge and qualifications required as an expert witness, across the full spectrum of clinical forensic medical practice

Question 8 - Identify how many staff you are responsible for, and outline their roles (eg physicians, nurses, administrative staff etc)

26. In my current role, I have responsibility for the following staff;
    a) Nine (2.375fte contracted; 2 casual) forensic physicians.
    b) Two (1.6fte) administration officers.
    c) Clinical supervision of up to 10 watch house emergency nurses (WHENs) employed by the GCUH Emergency Department and working at Southport and Logan District police watch houses.

Question 9 - When was the unit you currently work in created? Is it supervised by the state-wide Clinical Forensic Medicine Unit (CFMU); and if not, when did it detach from the CFMU (if it ever did)? Explain the reasons for, and the background to, your unit detaching from the CFMU.

27. The Gold Coast Hospital and Health Service (GCHHS) Forensic Medicine service was established in October, 2018 after the separation of the Gold Coast/Logan Clinical Forensic Medicine Unit (CFMU) from the Brisbane CFMU.
28. The separation resulted from concerns raised about the provision of forensic services to the Gold Coast community under a centralised model for the provision of clinical forensic services was instigated in Queensland. If required, further information in relation to this could be sought from Dr David Green, Director of Emergency Department, GCHHS and Dr David Spain, Emergency Physician and Deputy Director of Emergency Department, GCHHS at the time.
29. The GCHHS Forensic Medicine service is structurally part of the Emergency Department.

30. The state-wide CFMU does not supervise the GCHHS Forensic Medicine service; relevant state-wide policies and standards issued by the Director CFMU are applied within the jurisdictional requirements of the HHS.

See ***Exhibits***

CL-02 Letter AC SER QPS (Sept 2018)

CL-03 Letter Coroner SER (Sept 2018)

CL-04 Letter Coronial Registrar (Sept 2018)

CL-05 Letter DPP (Sept 2018)

CL-06 Letter GC QPS (Sept 2018)

CL-07 Letter MSHHS (Sept 2018)

CL-08 Letter QPS (Sept 2018)

CL-09 Letter State Coroner (Sept 2018)

Question 10 - Who administers sexual assault investigation kits (SAIKs) at your unit? Do nurses administer SAIKs? Does your unit also administer just-in-case kits? If so, is there any difference in who administers just-in-case kits?

31. All sexual assault forensic examinations whether at the request of police (using Sexual Assault Investigation Kits or SAIKs) or without police involvement (so-called 'Just in Case' kits or JIC kits) are performed by forensic physicians. Our service does not currently employ nurses.

Question 11 - Detail the training that practitioners undertake in order to be able to administer SAIKs. Have you designed the training process? How was it designed and to what training standards does it seek to apply with (if any)? Identify and attach your unit's training guides, manuals and policies (including any entrustment forms).

32. I developed the GCUH workplace-based skills training program to prepare doctors to conduct sexual assault forensic examinations (including use of SAIKs and JICKs) to align with the entrustment process required for the Faculty of Clinical Forensic Medicine Fellowship training program curriculum and the credentialling requirements

for Gold Coast Hospital and Health Service Senior Medical Officers (Forensic Medicine). This training combines simulated mannequin and real patient examinations and can take between three and six months to achieve 'entrustment level 4' depending on level of roster participation.

See ***Exhibits:***

CL-10 RCPA Faculty of Clinical Forensic Medicine Trainee Handbook 2022

CL-11 RCPA Position Statement Role of the Specialist in Clinical Forensic Medicine

CL-12 GCUH new SMO forensic induction record

CL-13 GCUH supervision entrustment hierarchy

CL-14 GCUH forensic examination entrustment form

CL-15 GCUH medicolegal report log template.

33. A range of resources and reading material to complement the skills-based training is provided to all new SMOs including RCPA Faculty of Clinical Forensic Medicine standards and UK Faculty of Forensic and Legal Medicine recommendations and guidelines (already provided in response to Notice 2022/00107).

34. Requirements for employment with the service include enrolment in the Monash University Master of Forensic Medicine degree. Attendance at state and national sexual assault workshops, seminars and conferences is encouraged and supported by GCHHS.

35. In 2019, the RCPA sought clarification from Queensland Health in relation to training standards and requirements for sexual assault examinations.

See ***Exhibit CL-16 Correspondence between RCPA and Qld Health re sexual assault training 2019***

Question 12 - Broadly, what skills and experience are necessary to correctly conduct a forensic medical examination?

36. A clinician undertaking sexual assault forensic examination requires:

    a) Good communication and interpersonal skills.

b) Broad general medical experience ideally including emergency medicine, primary care, gynaecology, psychiatry, addiction medicine and sexual health care.

c) Sound knowledge of pathophysiology of disease and trauma.

d) Sound knowledge of genito-anal anatomy (surface and internal).

e) Experience in examination of 'normal' female genitalia (external and internal) preferably gained in primary care, emergency medicine, gynaecology, sexual health, obstetrics where patients have not been recently traumatised.

f) Experience in examination of 'normal' ano-rectum preferably gained in primary care, emergency medicine, sexual health, surgery where patients have not been recently traumatised.

g) Competence in clinical reasoning and a methodical and analytical approach to the interpretation of findings.

h) Ability to work effectively within a multidisciplinary team (police, social workers, other health care professionals).

Question 13 - How do complainants/victims come into contact with your unit? Do they approach your unit directly, or do police bring complainants to your service?

37. Sexual assault patients/complainants come into contact with the GCHHS forensic service after reporting an incident to police or after presenting to one of the three emergency departments covered by the service (GCUH, Robina or Logan Hospitals).

a) If a patient/complainant makes a report to police, police contact the duty forensic physician who notifies the emergency department social worker and triage nurse of imminent arrival.

b) If a patient/complainant presents to an emergency department without having spoken to police, an ED social worker discusses options for healthcare and forensic examination (SAIK or JICK) and contacts duty forensic physician accordingly.

See ***Exhibits:***

CL-17 GCHHS Guideline Care of Patients Aged 14 and above who have Sustained Reported Sexual Assault GL1857

CL-18 GCHHS Sexual Assault Forensic Examination Pathway Consent_GC10823

CL-19 GCHHS 'Just in case' forensic examination patient information brochure

Sexual assault investigation kits (SAIKs)

Question 14 - Explain your experience in using and/or designing SAIKs in Western Australia and Queensland prior to 2018.

Western Australia 1994-2003

38. I commenced working as a part time medical officer at the Sexual Assault Resource Centre (SARC), Western Australia Department of Health in 1994. Part of my role was to provide sexual assault forensic examinations.

39. In 1995, I became Director of the SARC Sexual Assault Medical Forensic Service, a position I held until 2003. During this time, I developed female and male forensic examination kits (SAEK), an early examination kit (EEK) and a comprehensive manual outlining details of forensic and medical care of patients who reported sexual assault. I sought information from other States and collaborated with PathWest Forensic Biology scientists to ensure the kits met the needs of both clinicians and laboratory staff.

40. The WA SARC kits were put together by SARC staff and included swabs, slides, yellow top containers, gauze wipes, sticker labels and a 25 page medical record which included pages to record details of the incident and relevant information, body diagrams and sample list.

41. The WA SARC kits were used state wide. They were distributed to regional hospitals around the state for use by hospital doctors together with a sexual assault examination equipment box containing necessary items to perform forensic examinations (eg speculum, anoscope, stationery, camera) for use in conjunction with the kits. SARC

doctors also used the equipment boxes when required to examine patients at other hospital sites in the metropolitan area.

42. At this time, the WA PathWest Forensic Biology laboratory provided written feedback to clinicians re quality of samples collected in each sexual assault examination kit.

See ***Exhibit CL-20 SARC WA forensic sample list and analysis clinician feedback form (2002)***

43. Recent personal communication with Dr Kym Farrington, current SARC WA Medical Forensic Head of Department confirmed that the sexual assault kits used by SARC forensic clinicians are now produced by Sanax Medical (ISO standard 18385 approved). The kits are not dissimilar to those developed when I worked there in 2003, however are now unisex and categorised as small, medium and large to cater for different time since incident (TSI) scenarios. Toxicology kits are separate items.
See ***Exhibits***
CL-21 SARC WA sexual assault kit contents (2022)
CL-22 Sanax Medical - ISO 18385 Certificate (2019)

44. During this time, I was invited by the National Institute of Forensic Science (NIFS) to provide information in relation to clinical forensic sexual assault kits to national Special Advisory Groups (or SAGs).

Queensland 2004-2018

45. I commenced work as a Forensic Medical Officer on the Gold Coast, Queensland in January 2004. I was employed by Queensland Health Clinical Forensic Medicine Unit (CFMU) and based in an office at Surfers Paradise Police Centre, Ferny Ave, Surfers Paradise. Part of my role was to provide sexual assault forensic examinations at the request of police; I examined patients at Gold Coast University Hospital and Logan Hospital using the Sexual Assault Investigation Kits (SAIKs) in use in Queensland at that time.

See ***Exhibits***

CL-23 Qld Sexual offences medical protocol booklet (2004)

CL-24 Photograph Qld SAIK (circa 2006)

46. In 2006, I was asked by Dr Robert Hoskins, Director, CFMU at the time, to suggest any appropriate improvements to the Queensland SAIK and to participate as co-lead in a collaborative SAIK improvement project with Forensic Biology staff at the John Tonge Centre, Queensland Health Scientific Services.

47. I drafted a revised SAIK booklet to address challenges for regional doctors required to perform forensic examinations infrequently with limited training. My suggested booklet changes were not taken up and my recollection is that the SAIK Improvement project was not completed because of laboratory staff changes.

See ***Exhibits***

CL-25 Draft QHSS proposal SAIK improvement project (2006)

CL-26 Draft revised SAIK protocol booklet by CL – not taken up (2006)

CL-27 Email CL to QHSS re SAEK revision (2007)

48. In the early years of my employment as an FMO in Queensland (around 2004-2007), I tried to engage with Forensic Biology staff at Queensland Forensic and Scientific Services (QHFSS) in relation to Early Evidence Kits (EEKs) which I had developed for use in Western Australia and found to be useful to preservation of evidence in regional areas while a person was awaiting transfer to hospital. I felt Queensland might benefit similarly. However, this idea was not taken up. EEKs are now in routine use in a number of Australian states.

49. During the same time period, I endeavoured to interest Forensic Biology staff in adding other samples I had found to be of value in WA, to the Queensland SAIK, namely first void urine, gauze wipe genitalia, oral rinse and inner thigh swabs. Because forensic clinicians at SARC in WA routinely received notification of the analysis results for samples taken in forensic examinations, I was aware that these samples had the potential to detect semen/sperm, and I was keen to improve evidence collection in

Queensland in the same way. These suggestions were not taken up. I recall being told by Forensic Biology staff that QHFSS did not have a centrifuge, a piece of equipment required to 'spin down' fluid such as urine of saliva/water to concentrate cells such as sperm. When I explored the possibility of purchasing a centrifuge, I found that centrifuges were relatively inexpensive however I was unable to generate any interest from the laboratory or Director CFMU at that time in purchasing one.

50. I designed a sexual assault toxicology form to accompany blood and/or urine specimens for toxicological analysis which was included in the SAIKs in 2011.

See ***Exhibits***
CL-28 FSS CFMU Sexual Assault Toxicology form (2011)
CL-29 Sexual Assault Toxicology form (2017)

51. I have used the Queensland SAIKs for all sexual assault forensic examinations that I have done at the request of police since employed as a Forensic Medical Officer by the CFMU and Forensic Physician by the Gold Coast Hospital and Health Service (2004 – present).

52. I was not directly involved in any SAIK design or consultation process after 2006 but have provided feedback to Director, CFMU in relation to various changes to the SAIKs since that time.

Question 15 - List the contents of the current SAIK.

53. The current SAIK contains:
    a) Six (6) unlabelled wooden swabs
    b) One paper drop sheet in clip-seal plastic bag
    c) One 3 page FSS 'Medical examination information form – DNA' and one 1 page 'Sexual assault toxicology' form; placed in a clip-seal plastic bag.

These items are provided in an open clear tamper proof bag to be used for sealing exhibits into, at completion of forensic examination.

See ***Exhibits***

CL-30 FSS Medical examination form – DNA (2022)

CL-31 Photograph of SAIK contents (2022)

54. Toxicology kits used for sexual assault are the same as those used for traffic offences; one for urine and one for blood. They are separate to the SAIK.

See ***Exhibits***

CL-32 Photograph (1) of Forensic Toxicology kit (2022)

CL-33 Photograph (2) of Forensic Toxicology kit (2022)

55. Individual clothing items are placed into brown paper bags and labelled/sealed. Police may provide these bags at the time of examination but the service also purchases them to have a ready supply.

Question 16 - How long have you been working with Queensland SAIKs? Has the SAIK model changed during that time? If so, provide details.

Question 17 - Have any of the changes to the SAIK model improved or worsened the SAIK model? If yes, explain how and when the change was.

Question 18 - In relation to any change that saw the removal of diagrams/space for diagrams on the booklet provided with the SAIK, what is your view of that change? What communication, if any, did you have with Dr Adam Griffin concerning such changes?

****Please note that I have addressed Questions 16, 17 and 18 in paragraphs 56-100***

56. I have used the Qld SAIKs for all sexual assault forensic examinations done at the request of police since employed as a Forensic Medical Officer by the CFMU and Forensic Physician by the Gold Coast Hospital and Health Service (2004 – present).

57. It is difficult to be accurate about the timing of some of the SAIK changes because we did not receive formal notification of all changes, and supplies of older kits were still being utilised by police for some time before they were supplied with updated versions.

58. I understand the following changes to have occurred during the period 2004-2022:

Cessation of clinician-made slides at time of swab collection

59. Between 2007 and 2009, there were discussions between Forensic Biology and CFMU about the possibility of ceasing the making of slides by examining clinicians at the time of swab collection (that is, smearing a glass slide with a swab containing adherent biological material) and for slides to be made in the laboratory by scientists at a later time from the swab.

60. The making of slides by clinician at the time of examination was routine practice in other States and the process I was familiar with in WA. The reason given by the laboratory for the proposal to cease the making of slides by clinicians was the poor standard of smears collected by some clinicians doing these examinations and a desire to achieve more consistent smear collection (certain thickness, area smeared, etc).

61. As a non-scientist but having completed a Master of Forensic Medicine degree at Monash University in 2002 which included a module covering some basic principles of forensic science (Elements of Forensic Science), my understanding of forensic biology processes with respect to forensic samples collected after sexual assault, was that two swabs should be taken from each site, the first used to make a smear on a slide to be examined microscopically for sperm and potentially used to test for acid phosphatase (AP) and/or prostatic specific antigen (PSA) and the second retained for DNA extraction if indicated.

62. While the cessation of slide-making at time of swab collection was attractive to clinicians because of the additional steps required to label glass slides and create the smears, I had concerns about the potential loss of evidence given the smears would likely be made from a dried swab at some time after the initial examination and I could find no published data to reassure me that evidence collection would not be compromised. I sought advice from a number of other State laboratories who indicated that they did not consider this to be appropriate and said they would advise against it.

63. I suggested a simple comparison study to determine whether making slides in the laboratory after a delayed period of time rather than by the clinician at the time of swab

collection, would have any effect on the likelihood of detection of sperm/DNA. This suggestion was not taken up.

See ***Exhibit CL-34 Proposed sperm microscopy project by CL – not taken up (2009)***

64. I sought clarification in 2009 from Forensic Biology scientists via the CFMU Director at the time, that evidence would not be compromised by the cessation of slide-making by clinicians and was told in an email that swabs would be tested for DNA if any doubt about the slide. One disadvantage outlined by the scientists was that if a swab was mouldy, creation of a slide in the laboratory would not be possible indicating that storage issues and delays in kit transfer to the laboratory had the potential to affect the outcome of sample analysis.

See ***Exhibit CL-35 Emails CFMU and QHSS cessation of making slides at time of collection***

65. Slide-making by clinicians at time of swab collection was subsequently ceased and slides were no longer included in the SAIKs. In 2011, I sought clarification about the analysis processes used by Forensic Biology in 2011 about which I made a note for my own understanding.

See ***Exhibit CL-36 SAIK swab laboratory procedure post slide cessation (2011)***

66. I acknowledge that laboratories in different jurisdictions use different processes to analyse sexual assault forensic examination kits and that there is variation in relation to tests carried out on kit samples (eg reporting time since intercourse estimates). However, I believe that poor quality slide creation is a training issue and could have been addressed with appropriate education and instructive resources.

67. I understand from discussion with Dr Maria Nittis, Head of Department, Clinical Forensic Medicine at the Victorian Institute of Forensic Medicine (VIFM) that the Hazpak SAIK currently in use in Victoria, contains slides with a clearly marked area indicating where the examining clinician should make the smear from the swab, to some extent mitigating inconsistency of material deposited.

68. Dr Nittis published a peer-reviewed article in 2021 in relation to research carried out collaboratively between clinicians and laboratory staff in NSW, exploring the necessity for slides in SAIKs.

See ***Exhibit CL-37 Nittis et al. Preparing semen slides in sexual assault – do they who smear first smear best? J For Leg Med 79 (2021) 102130***

Other SAIK changes

69. In 2012, changes were made to the SAIKs which were explained in a letter to Forensic Medical Officers (FMOs) from Dr Adam Griffin, Director CFMU at the time. I was not involved in this process. The key changes appeared to be that the requirement to collect reference DNA samples from a victim/complainant was removed (removal of EDTA blood tubes from kits) and that the medical record booklet was to be phased out and replaced with a three page form to record only information of value for the laboratory.

a) In Jan 2014, I sought clarification from Cathie Allen who was at that time Managing Scientist Forensic DNA Analysis and Forensic Chemistry, FSS, about new SAIKs after a query from Dr Sally Jacobs, one of my staff. Dr Jacobs had received a query from Bundaberg in relation to new SAIKs and had been forwarded an email thread showing that Ms Allen had informed Dr Griffin, then state wide Director CFMU re SAIK changes in July, 2013 with attached images of the new SAIKs. This information, it appeared, had not been shared with Gold Coast forensic clinicians. Ms Allen summarised the changes in her email response to my query (January 2014) and attached photographs of the new kits.

b) Because police throughout the state (including Gold Coast and Logan) seemed to have variable supplies of different versions of the SAIKs, and as a result of poor communication to clinicians about the SAIK changes, we did not have accurate information about which kits were the most recently updated and should be in use. There did not appear to be support for de-commissioning old versions of SAIKs in order to use newer versions, possibly due to financial considerations.

c) As the Gold Coast forensic service was part of the Queensland Health FSS CFMU with four full time forensic medical officers employed by Qld Health at that time, and because we periodically responded to calls for advice from around the state in relation forensic services, I felt that we should have been kept informed of the SAIK changes. I was Deputy Director, CFMU SER at that time with responsibility for clinical forensic service provision to Gold Coast and Logan police districts at that time.

See ***Exhibits***

CL-38 Letter to explain staged changes to SAIK and removal of booklet Dr Adam Griffin (2012)

CL-38a Emails re new kits between C Lincoln C Allen Jan 2014

CL-38b Email attachment to CL-38a SAIK contents (2014)

CL-38c Email attachment to CL-38a SAIK packaging (2014)

CL-38d Email attachment to CL-38a Sexual Assault Investigation Form DNA (2014)

CL-38e Email attachment to CL-38a Sexual Assault Toxicology Form (2014)

CL-39 Draft SAIK form (2012)

Removal of medical record booklet from SAIK

70. Around 2012, I became aware from discussions with forensic colleagues that there was much debate about who should be financially responsible for Qld SAIKs and that the medical record booklets were considered an expensive component. This was around the time of proposed SAIK changes explained to us in a letter from Dr Adam Griffin mentioned above.

71. At that time, I raised concerns with Dr Griffin about removing the medical record booklet from the SAIK and the potential for examiners to disregard the value of injury documentation without a series of body diagrams to use and the implications for regional clinicians required to do sexual assault forensic examinations infrequently. He told me that examining clinicians could access their own diagrams and add them to

their files if they so wished. He did not appear concerned that forensic examinations by clinicians unfamiliar with the necessary process, might be compromised.

72. I also raised concerns with Dr Griffin that without readily available carbon copy booklets as previously, police would not receive a copy of the examination findings at the time of the examination for inclusion in the evidentiary brief. He replied that clinicians could photocopy diagrams and give to police if they so wished. I have done this with my own cases in an effort to ensure investigators have the necessary information immediately, however it is an additional onerous task for clinicians at the end of a lengthy process and is not done in most instances because of time constraints.

73. Proposals at that time to include unique identifier 'bar code' stickers in the SAIKs to affix to swabs and samples were not progressed though I have seen them used in other evidence kits by Scene of Crime Police Officers. I believe these would have enhanced SAIK evidence collection quality.

74. Since about 2014, SAIKs have not contained a medical record with diagrams. We utilised our own sourced diagrams and stored these in forensic files.

See ***Exhibit CL-40 Photograph Qld SAIK (2014)***

75. In August 2017, Dr Griffin disseminated a sexual assault examination medical protocol and record to all CFMU staff (Document number 34442V1). This was not included in the SAIKs and I'm not aware if it was also disseminated to others around the State who might be required to perform sexual assault forensic examinations.

See ***Exhibit CL-41 Sexual offences medical protocol - not included in SAIK (2017)***

76. While the diagrams and instructions in this medical protocol and record are of value, there is confusing reference to the use of unique identifier bar code stickers which have never eventuated, and to the taking of DNA reference samples using a separate kit which is not provided with the SAIK by police. Examiners are required to photocopy the SAIK laboratory form for their own reference when writing the examination report and if police request information about injuries, the diagrams must be photocopied.

77. In summary, the design of the Queensland SAIK and necessary documentation is not user-friendly for examiners thus creating the potential to compromise evidence collection.

78. In my view, the format and contents of the recently updated Victorian Institute of Forensic Medicine (VIFM) SAIK-equivalent proforma document is ideal for recording details of sexual assault forensic examinations.

See ***Exhibit CL-42 VIFM sexual assault proforma (16 June 2022)***

Removal of reference DNA sampling items

79. I understand that around that time, reference DNA sampling had changed from blood (EDTA tube) to saliva sampling (sponge-type swabs) and was to be done using a separate newly designed kit which was not to be included in the SAIK.

80. Since this time, I understand that police have collected reference DNA samples from complainants and offenders.

81. I have never received a supply of these kits from FSS or police or been given training in how to use them.

82. Removal of the reference DNA sampling aspect from the SAIKs reduced the duration of clinician time needed to conduct the forensic examination.

83. The issue of reference DNA samples has recently been re-visited during review of the Qld Sexual Assault Interagency Guidelines by the Interagency Guidelines Working Group lead by the Department of Justice and Attorney General. I was recently invited to join this working group and attended my first meeting on 28 July 2022. I did not receive a copy of minutes of this meeting but recorded my own notes at the time.

See ***Exhibits***

CL-43 Emails with FSS re proposed edit to SA interagency guidelines re reference DNA samples

CL-43a Qld SA Interagency guidelines - under review (July 2022)

CL-105 Handwritten notes made by CL during Queensland Government Interagency Sexual Assault Response Guidelines working group meeting 28 July 2022

84. I believe reference DNA samples could reasonably be collected by clinicians. However, because the clinician would need to obtain informed consent from the sexual assault patient/complainant before doing so, they would require information and assurances in relation to processing of the sample, how long it would be kept for, where it would be stored, and whether there is potential for it to be included in the criminal DNA database.

Removal of fingernail clippings/scrapings bags

85. The SAIKs available in 2004 contained small clip-seal bags labelled 'fingernail scrapings/clippings'. My recollection is that clinicians used either toothpicks to collect material from under the nails or nail scissors to cut nails for later examination in the laboratory. The scrapings or clippings were placed into the bags provided but neither toothpicks or scissors were provided in the kits so had to sourced by clinicians.

86. Around 2006, I attended an international forensic conference and brought back a wedge-shaped swab designed to optimise retrieval of material from under fingernails. I gave the swab to the Director, CFMU at the time and suggested we discuss the possibility of including in the SAIKs with Forensic Biology. This idea was not taken up.

87. Around 2010, I was informed by a Gold Coast Scenes of Crime Officer (SOCO) that police were using specially designed fingernail kits to retrieve material from under fingernails. I was unable to obtain these kits from FSS or police for use in sexual assault forensic examinations.

See ***Exhibit CL-44 Photograph of QPS SOCO Gold Coast fingernail kit (2010)***

88. The current SAIKs do not contain any receptacle or equipment to collect fingernail scrapings or clippings; these can be important in corroborating a struggle between victim and perpetrator or merely establishing contact with a perpetrator.

89. My current practice is to request that police organise collection by a SOCO using the specifically designed fingernail kit, however I am uncertain whether or not this occurs.

90. I believe that inclusion within the SAIK of equipment to collect material from under fingernails or fingernail clippings or provision of a fingernail kit together with the SAIK would be preferable to ensure all possible evidence can be collected by the clinician at the time of examination.

Changes to swabs in SAIKs (number, loss of labelling)

91. At some time in the last 10 years, possibly following the cessation of slide-making by clinicians and removal of slides from the kits, the number of swabs provided in a SAIK was reduced to six (6).

a) My recollection of using the SAIKs prior to this change, was that there was an additional label was affixed to the swab overlying the manufacturer's identification swab label; these additional labels identified swab sites and provided space for the examiner to record identifying details such as date and time of collection, and name of examiner. Each swab was clearly identified by site; in particular, denoting individual male or female genital sites.

b) No single forensic examination ever required the use of all swabs provided because some were designated to be taken from male genital sites and some female genital sites. In addition, because not all cases involved allegations of penetration of three orifices (oral, vaginal, anal) or the need for skin swabs or swabs to detect saliva from bites/licking, there were usually 'spare' swabs within each SAIK that could be utilised and re-labelled as having been taken from a different site. I recall doing this fairly frequently; using a thick black marker to obscure the pre-typed 'site' and re-labeling with the site the swab was actually collected from.

c) Extrapolating from the forensic sample lists on page 19 (female) and page 22 (male) of the Qld Sexual offences medical protocol booklet (2004) **[see Exhibit CL-23],** I would estimate that there were probably 10-15 swabs provided in each SAIK prior to the change which reduced the SAIK total swab number to six.

92. Six swabs is not enough to take even one swab from all relevant sites in certain cases, let alone two swabs from each site as is recommended in other jurisdictions. For example, an allegation of oral, vaginal, anal penetration with a penis requires sampling

from mouth, inner labia, low vagina, high vagina, peri-anal skin, anus, rectum +/- endocervix.

93. Recommendations in 2010 Vincent Report of the Inquiry into the Circumstances that led to the Conviction of Farah Abdulkadir Jama included:

a) the taking of additional control swab/s from the examination trolley surface to provide an opportunity to confirm that the working surface upon which equipment is set up, was free from DNA should there be a subsequent concern re contamination (see item 8; Attachment B, page 74).

b) Each kit to contain sufficient swabs to cater for most examinations so that extra kits will need to be 'broken into' for more swabs only rarely (see item 13; Attachment B, page 75)

c) Swabs should have polyester tips and plastic or metal stems. Current Qld SAIK swabs are cotton tipped with wooden stems. Cotton does not yield DNA as readily as synthetic fibre and wood apparently inhibits the PCR reaction.

See ***Exhibit CL-45 Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010*** Available from:
https://assets.justice.vic.gov.au/.../vincentreportfinal16may2010.pdf

94. In my experience, swabs with wooden stems are more likely to break during sample collection which creates clinical risk when used to sample internal sites such as the vagina or anus.

95. Within the last 10 years, the labels previously affixed to swabs in the kits to denote sites required for sampling (e.g. 'low vaginal', 'high vaginal' etc) were removed; the swabs now provided in the SAIK are not distinguishable. This change may have been in preparation for the planned introduction of unique identifier bar code stickers which did not eventuate. This means that when setting up for an examination, clinicians are required to identify swabs themselves to prevent mix-up of swabs on the trolley while examining the patient and reaching for swabs while holding a speculum or anoscope in

position with the other hand. It also provides challenges for clinicians who do these examinations infrequently and may need prompting as to relevant sites to sample.

Changes to SAIK bag containing necessary items, used for sealing collected evidence for transfer to laboratory

96. Around 2014, the SAIK bag containing the items required for collection of evidence during a sexual assault forensic examination changed from an A4-sized padded brown paper envelope to a clear A4-sized tamper evident security bag. Neither were sealed when provided to the clinician by police with contents readily able to fall out and the potential for external contamination.

97. To avoid contamination of contents, the Gold Coast and Logan forensic service has endeavoured for many years to source SAIKs in batches of at least 30 from QPS, to minimise handling and transport of individual kits by investigating police at the time of each examination.

98. Another recommendation of the 2010 *Vincent Report* was that all equipment should be certified DNA-free and drawn from a sealed single-use kit to reduce the opportunity for contamination. (see item 2, Attachment B, page 73).

    See ***Exhibit CL-45 Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010***

99. I have personally come across two 'clean' swabs drawn from two separate SAIKs with hairs adherent to the under-surface of the manufacturer's swab label. There are a number of possible sources of such contamination including the swab manufacturer, the person who puts together the SAIKs or during transport and handling of the SAIK by police prior to examination.

    See ***Exhibits***

    CL-46 Photograph of 'clean' forensic swab (1) with adherent hair under label

    CL-47 Photograph of 'clean' forensic swab (2) with adherent hair under label

100. It is clear that the current SAIKs in Queensland are not fit for purpose and do not meet Australian Standard ISO 18385: 2017.

See ***Exhibit CL-48 AS ISO 18385-2017 Minimizing the risk of human DNA***

Question 19 - Identify any relevant forensic medicine guidelines or standards concerning how an intimate medical examination should be conducted and what items and consumables should be used in that examination. Advise if any of those guidelines are more widely accepted than others, or if they refer to evidence-based research.

101. While there are many good resources in the area of forensic medicine, the most valuable with respect to sexual assault medical examination and forensic sampling in my view are:

a) The Royal College of Pathologists Australasia (RCPA) Faculty of Clinical Forensic Medicine (FCFM) published guidelines:

See ***Exhibit CL-49 Royal College of Pathologists Australasia (RCPA) Faculty of Clinical Forensic Medicine (FCFM) list published guidelines (weblinks x 9)***

Guideline - Evidence Based Forensic Sampling Standards
Guideline - Assessment of Capacity to Consent to Examination and Forensic Procedures
Guideline - Cleaning/Decontamination of Forensic Examination Suites
Guideline - Clinical Forensic Assessment and Management of Non-Fatal Strangulation
Guideline - Compulsory and/or Intimate Body Examinations of Persons in Custody
Guideline - Medical Review of Clinical Forensic Medical Reports
Guideline - Photography for Clinical Forensic Medicine
Guideline - The Presence of Chaperones during Intimate Forensic Medical Examinations.
Guideline - Sexually Transmitted Infection Management in Patients Who Have Experienced Sexual Violence

See in particular ***Exhibit CL-49a Royal College of Pathologists Australasia (RCPA) Guideline - Evidence Based Forensic Sampling Standards***

b) The Royal College of Physicians (United Kingdom) Faculty of Forensic and Legal Medicine (FFLM) published recommendation/guidelines. I have already provided fifteen (15) relevant FFLM documents in response to Notice 2022/00107; I have re-attached seven (7) of particular note:

See ***Exhibits***

CL-50 FFLM Recommendations for the collection of forensic specimens July 2022

CL-51 FFLM Recommendations for the collection of forensic specimens – the evidence July 2022

CL-52 FFLM Recommended equipment for obtaining forensic samples July 2021

CL-53 FFLM FME form Complainant FSSC July 2021

CL-54 FFLM FME form Suspect FSSC July 2021

CL-55 FFLM Proforma for Adult Forensic Examination May 2021

CL-56 FFLM Post pubertal Complainants clinical pathway May19

c) Clinical Forensic Medicine – a Physician's Guide Fourth Edition (2020), Dr Margaret Stark (ed) ISBN 978-3-030-29461-8 Springer (textbook), Chapter 3 Sexual Assault Examination.

See ***Exhibit CL-57 Sexual Assault Examination Dr M Nittis in Clinical Forensic Medicine – a Physician's Guide Fourth Edition (2020), Dr Margaret Stark (ed) Chapter 3 pp63-142***

d) Sexual Assault - a Forensic Physician's Practice Guide 2010, Dr Catherine White ISBN 978-0-9564737-0-7 (textbook)

See ***Exhibit CL-58 Review of Sexual Assault a forensic clinician's practice guide Catherine White.***

e) Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010

See ***Exhibit CL-45 Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010***

102. These texts and publications are evidence-based in so far as is possible in a field such as clinical forensic medicine where research is challenging for a multitude of reasons. I have personal experience of the difficulties faced by researchers in this field, having completed a PhD in forensic medicine at University of WA in 2013.

103. In most Australian jurisdictions, limited collaboration between laboratory scientists and forensic clinicians, together with the lack of scientific feedback to clinicians about analysis results and quality of the samples they collect, does not foster an environment for evidence-based decision-making in relation to SAIK development and improvement. However, due to efforts to achieve agreement with forensic scientists to provide formal forensic clinician feedback re SAIK analysis, some Australian states such as WA and NSW, have managed to conduct valuable research to inform future forensic practice.

Question 20 - Do the documents referred to in para 19 provide guidance as to what type of swabs and how many swabs (or similar devices) should be used in conducting a typical SAIK? If yes, what do those documents advise?

104. These documents and texts together provide valuable information to inform decisions in relation to sexual assault forensic examination, SAIK structure and content.

105. While SAIK development must involve laboratory scientists to ensure design meets analysis requirements, kit design by necessity is within the purview of the clinicians who collect evidence. Appropriate clinical proformas which prompt inexperienced examiners, bar-coded sticker labels and provision of all necessary items to collect any forensically relevant material to assist clinicians enhances evidence collection significantly. In my view, poor engagement with clinicians in development of SAIKs in Queensland has compromised the quality of forensic evidence collection.

106. Achievement of a nationally agreed standard SAIK is ideal. This can only happen with collaboration between a nationally recognised professional body for forensic clinicians such as the RCPA Faculty of Clinical Forensic Medicine (FCFM), state and territory forensic laboratories. Any such kit must be 'fit for purpose' for both clinicians and laboratories and meet relevant Australian Standards (ISO 9001; 2015 and 18385: 2017). See ***Exhibit CL-48 AS ISO 18385-2017 Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes – Requirements***

a) I do not have a copy of ISO 9001; 2015 but understand it to relate generally to quality management systems for wider application across many workplaces.

b) I do not have direct knowledge of whether or not it is a necessary requirement for scientific laboratories to adhere to ISO 9001; 2015 but would think that most laboratories would endeavour to do so with respect to systems management. The following weblinks may assist with an understanding of the scope of this particular Standard.

ISO 9001:2015(en), Quality management systems — Requirements

107. It could be argued that involvement of state Offices of the Directors of Public Prosecution (ODPPs) and police in discussions about what should be contained with forensic evidence kits would add value. Correlation of evidence gathering processes with legal requirements for the prosecution of offences can only enhance the forensic value of evidence kits.

108. Some accredited forensic kit providers in Australia (eg Hazpak, Sanax) have for some years worked closely with forensic clinicians to design DNA-free kits which meet relevant Australian Standards (ISO-18385; 2017) and are 'fit for purpose'; purchase of these kits by various States and territories will assist in achieving some degree of national consistency.

[redacted]

Question 21 - How do you obtain or order the SAIKs used at your unit?

109. On occasion, police will bring a SAIK with them to the hospital when they bring a patient/complainant for examination; they may or may not bring other necessary items such as toxicology kits or paper bags to collect clothing items.

110. In the past, when we were not permitted by CFMU Director Dr Adam Griffin/FSS to keep supplies of SAIKs at hospital examination sites, there were delays for patients and extensive call-out periods for forensic clinicians because some investigating police did not know where kits were kept in their District or how to source them. Invariably, the most significant delays resulting from this situation were after hours.

111. Our service orders SAIKs and forensic toxicology kits from the Queensland Police Service. I understand that they are sourced centrally from QPS Child Abuse & Sexual Crime Group Admin [redacted].

   a) On the Gold Coast, kits are picked up from Southport Police Station and delivered to our office at GCUH by the hospital police liaison officer. Contact person for ordering kits is Di Smith, Administrative Supervisor, Southport Police Station. [redacted]

   b) In Logan, kits are ordered by our service from Logan Criminal Investigative Branch (CIB) and delivered to the Police Beat at Logan Hospital where the nurse responsible for oversight of the forensic examination room retrieves them.

112. All SAIKs and forensic toxicology kits are stored securely in locked forensic examination areas at each hospital facility where clinicians provide forensic examinations.

113. The coordination of access to increased numbers of SAIKs and forensic toxicology kits (up to 30 at a time) to avoid unnecessary delays for patients and staff, has improved significantly in recent times with the establishment of hospital police offices/beats at Logan and Gold Coast hospitals. My understanding was that QPS were reluctant to provide supplies of kits in larger quantities because of financial concerns in relation to 'SAIK wastage'.

[redacted]

a) In September 2015, I spoke with Acting Detective Senior Sergeant Barbara Briggs from Child Abuse & Sexual Crime Group (CASCG) in Brisbane who told me that SAIKs could no longer be accessed 'free of charge' from QPS South East Regional office as had been the arrangement previously. She said that her section was provided with the SAIKs by QHFSS and was responsible for disseminating them to CIBs/CPIUs around the State; FMOs were to access the kits from local police only.

See ***Exhibits***

CL-103 Emails between myself and Gold Coast CIB re CASCG communication re SAIKs (Sept 2015)

CL-104 Emails between myself and Logan CIB re SAIKs at Logan Hospital (Oct 2015)

b) In 2017, the Gold Coast service office sought assistance from Dr Griffin and Brisbane CFMU to access SAIKs for storage at Gold Coast and Logan examination facilities to reduce delays for patient/complainants and clinicians. Dr Griffin's view was that a supply of SAIKs at examination facilities was unnecessary and that police officers should provide SAIKs to clinicians on a case-by-case basis at the time of forensic examination. This was despite proven delays relating to the lack of availability of SAIKs, and criticism by Dr Griffin of the Gold Coast forensic service for the length of time taken by Gold Coast clinicians to conduct forensic examinations.

See ***Exhibits***

CL-98 Emails July 2016 re supplies of SAIKs to LGH L Burkin M Oresganin

CL-99 Emails Apr 2017 re supplies of SAIKs to GCUH D McDonald C del Santo

CL-100 Emails July 2017 re provision of SAIKs to GCUH A Griffin

CL-101 Emails July 2017 re supplies of SAIKs to GCUH S Jacobs M Ward

CL-102 Emails June 2017 re supplies of SAIKs to GCUH AC Brian Codd A Griffin

114. Between about 2014 and 2017, our service was accused of 'wasting kits' by Dr Griffin; he raised concerns that we were using SAIKs for the purposes of 'just in case' (JIC) forensic examinations (ie examinations without police involvement) prior to the instigation of the JIC initiative which commenced state wide in 2019. This is not the case; 'just in case' forensic examinations were not provided at our service until the Health Service Directive was issued re same in 2019. Clinicians providing services in the Gold Coast/Logan areas have only ever used SAIKs for police-requested forensic examinations. All completed SAIKs are handed by the examining clinician to the investigating police officer at the end of the forensic examination, and police issue a Field Property Receipt (FPR) for the SAIK. Both SAIK and FPR identification numbers are logged on the Gold Coast/Logan forensic service master register against the case file details.

Question 22 - Does your unit use the existing Queensland SAIK model in each SAIK examination? Why/why not? Do your staff regularly use additional equipment or consumables not contained in the standard kit? If yes, identify what further consumables are typically used and why they are used? Where do you source those further consumables from?

115. Clinicians employed by the GCHHS service use the existing Queensland SAIK for all police-requested forensic examinations, frequently supplemented with additional swabs, yellow-top containers and brown paper bags.

a) Additional forensic (dry) swabs may be required to ensure sampling from all relevant sites depending on scenario (eg oral, anal, vaginal) and that all visible potentially valuable material is retrieved from a site. If residual material remains after use of one swab at a particular site, a second or third swab may be taken from the same site.

b) Yellow top containers, tamper evident bags and brown paper bags of variable sizes may be required to collect items of potential forensic value such as tampons or debris/material retrieved from the vagina or anus that will not remain adherent to a swab, sanitary pads, underpants and other clothing items.

116. Additional forensic (dry) swabs used by our service are the same as those used for the Queensland SAIKs. They are purchased from BioMerieux Pty Ltd Australia, North Ryde, NSW; product code MW104-800.

See ***Exhibits***
CL-59 Photograph (1) of forensic swabs purchased to supplement SAIK.
CL-60 Photograph (2) of forensic swabs purchased to supplement SAIKs

117. Staff wearing personal protective equipment (PPE) transfer forensic dry swabs from the packets of 100 or so they are supplied in, to smaller clip-seal plastic bags which each hold 6-8 swabs. This process is carried out in the DNA sampling area on sterile plastic drapes. Clip-seal bags of extra swabs are stored in the forensic examination trolley for clinician convenience if/when required. This is an onerous process and the purchased swabs are not ideal (that is, not 'DNA-free', cotton-tipped with wooden stems) but are the same brand used in the current SAIKs. They are used as supplements to the standard SAIK swabs (6) when more than 6 swabs are required. The decision to use this process (rather than the opening of a second SAIK to access extra swabs) came about because of criticism in the past by CFMU Director/FSS of our service for 'wasting kits'.

118. Yellow top containers are used less frequently but may be necessary to collect certain items. These are sourced from hospital supplies.

119. Brown paper bags in various sizes for clothing items are sourced from Reward Hospitality at Yatala, Qld.

See ***Exhibit CL-61 Invoice brown paper bags for clothing items***

120. Tamper evident bags with unique numbering are purchased from Tamper Evident in Cheltenham, Victoria.

See ***Exhibit CL-62 Invoice tamper evident bags***

Question 23 - Do your staff also take a blood and urine sample from a sexual assault complainant? If so, is the equipment used in taking those samples also part of the SAIK model, or are they provided separately by Gold Coast HHS or QPS?

121. If forensic toxicology is requested as part of a sexual assault forensic examination by investigating police, typically if there is concern re 'drink-spiking' of the complainant, clinicians use standard forensic toxicology kits for this purpose; a separate kit with its own unique identifier is used for each sample; that is, one for urine sample and one for blood sample.

    See ***Exhibits***

    CL-32 Photograph (1) of Forensic Toxicology kit (2022)

    CL-33 Photograph (1) of Forensic Toxicology kit (2022)

122. Forensic toxicology kits are provided separately by QPS; sometimes police will bring them with the patient/complainant to the hospital but generally we use forensic toxicology kits ordered in bulk from QPS and stored in secure forensic examination rooms at each hospital facility.

Question 24 - Do your staff take a reference DNA sample from persons who are subject to a SAIK? If yes, identify what equipment is used to take that reference sample, and where the equipment comes from.

123. Clinicians at our service do not take reference DNA samples from patients having a SAIK completed because we do not have access to reference DNA sampling kits (saliva or blood) and have not received training in this sampling process.

124. Clinicians could collect reference DNA samples at the time of SAIK completion, if provided with clear guidelines and information about such aspects as how the result will be used, storage and destruction of sample etc. This information is necessary to allow clinicians to obtain informed consent from the subject prior to collection of a sample of their own DNA.

Question 25 - Identify what is meant by the phrase 'DNA minimising contamination model' (or similar). Do any other states adhere to this model, and if so, which ones. Does Queensland adhere to this model? Do you know if Queensland's adherence/non-adherence to this model affects the quality of biological material taken from forensic medical examinations in Queensland?

125. I am familiar with the term 'DNA contamination minimisation' in relation to the collection of evidence from living patient/complainants and suspects. As a forensic physician, it is relevant to clinical forensic processes, the environment in which forensic examination and evidence collection occurs and the forensic kits used to collect the evidence.

DNA contamination minimisation in relation to clinical facilities and processes for evidence collection

126. As far as I am aware, services providing forensic examinations which involve sampling in Victoria, NSW, SA, WA and ACT utilise clinical DNA contamination minimisation processes in line with RCPA Faculty of Clinical Forensic Medicine guidelines.
See ***Exhibits***
CL-63 RCPA FCFM Guideline for Cleaning Decontamination Forensic Examination Suites Guideline - Cleaning/Decontamination of Forensic Examination Suites
CL-64 Ballantyne KN et al (2015) DNA contamination minimisation – finding an effective cleaning method. Aust J For Sci DOI 10.1080/00450618.2015.1004195

127. I am unable to comment upon clinical forensic practices with respect to the DNA contamination minimisation for examination facilities in Queensland beyond the service I am responsible for.

128. In our service, DNA contamination minimisation processes are used:
   a) At the three hospital sites where clinicians conduct forensic examination of patient/complainants (Gold Coast University Hospital, Robina Hospital and Logan Hospital).

b) At the two police watch houses where clinicians conduct forensic examinations of suspects (Southport and Logan District watch houses).

129. I have no specific knowledge of the quality of biological material collected in forensic medical examinations in Queensland because I am not provided with this information in my role.

130. Any forensic sampling conducted without efforts to minimise DNA contamination has the potential to compromise the quality of biological evidence.

131. I would add that currently, clinicians at our service do their utmost to minimise DNA contamination when sampling suspects in police custody at watch houses by wearing full PPE and preparing examination surfaces in line with RCPA FCFM cleaning guidelines. However, the police watch house medical rooms in which suspect examinations are required to occur are not 'dedicated DNA sampling rooms' as we have at Gold Coast University and Logan Hospitals for complainant examinations. This situation is less than ideal.

132. In my view, forensic sampling of all subjects (complainants and suspects) should take place in dedicated DNA sampling rooms. However, because the same room should not be used to examine suspects and complainants, thereby requiring two separate DNA sampling rooms, two such rooms within a hospital to cater for this requirement has been difficult to achieve. The difficulties for police associated with the transfer of suspects in custody to non-custodial facilities for the purpose of forensic procedures is also a factor in decisions about where forensic sampling procedures take place.

DNA contamination minimisation in relation to SAIK design

133. I understand from communication with forensic colleagues in Victoria, NSW and WA that these states utilise sexual assault forensic kits developed with adherence to DNA contamination minimisation standards. HazPak (NSW, Tasmania and Victoria) and Sanax (WA) are the companies currently involved in development of SAIKs with the key clinical forensic services in these states.

See Exhibits

CL-65 Email advice from M Nittis re use of ISO certified kits in Australia (Sept 2022)

[redacted]

CL-66 Sanax Medical – ISO 18385 Certificate 2019

134. Forensic kits used to collect biological material for DNA detection should meet the 2017 ISO standard 18385 which outlines the requirements to minimise contamination on products used to collect, store and analyse biological materials.

135. I understand that HazPak is one of only nine companies globally who are accredited to ISO 18385: 2017. They were certified in 2020. Sanax which supplies kits to the Sexual Assault Resource Centre in WA is also certified to this standard.

136. Forensic kit items should be as 'DNA-free' as possible, with a single use design and provided to the clinician in a sealed tamper evident bag to ensure use of an intact kit for forensic evidence collection.

137. Forensic kits should ideally be complemented with so-called 'decontamination kits' for single use and containing necessary items to carry out a forensic examination such as paper bed sheets, paper gown, sterile drapes for surfaces, gloves, pens, scissors etc.

See ***Exhibit CL-67 Email to Lara Keller re VIFM contamination reduction kits with photographs (10 Dec 2021)***

138. All kits should be labelled with unique identifiers, preferably alpha-numerical.

139. Queensland does not utilise SAIKs which adhere to DNA contamination minimisation requirements. SAIKs are provided to Qld clinicians by police unsealed (that is, 'open') meaning that contents may fall out and there is potential for material to enter the kit before clinical use. Clinicians have no means of ensuring the kits have not been contaminated prior to their use.

See ***Exhibit CL-45 Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010.***

<u>Just-In-Case (JIC) Kits</u>

Question 26 - Does your unit use JIC kits? When did the use of JIC kits commence?

140. Yes, our service provides forensic examinations using so-called 'Just in Case' (JIC) kits for people who are not ready to make contact with police to report a sexual assault.

[redacted]

141. The use of JIC kits commenced in August 2019 in response to a Health Service Directive (HSD) issued on 22 July 2019.

142. The initial HSD excluded 14-17 year olds from access to the JIC kit option, however an amendment to the HSD allowed 14-17 year olds with capacity to consent, to have a forensic examination (and JIC kit completed) without police involvement.

See ***Exhibits***

CL-68 Memo to HHS CEs (17 July 2019)

CL-69 Attachment 1 HSD Final (22 July 2019)

CL-70 HSQ Gold Coast HHS re inclusion 14-17 year olds JIC (12 Sept 2019)

Question 27 - How do you obtain these kits? Are they different to the standard SAIK model? If yes, explain how they are different.

143. 'Just in case' kits (or JIC kits) are sourced by clinicians at the time of JIC examination from the relevant hospital pathology department, usually from Central Specimen Reception (CSR).

144. JIC kits differ in external appearance from SAIKs with an opaque white plastic tamper proof bag (provided 'open' as with SAIKs) containing swabs, drop sheet and documentation, which is used to seal and secure collected evidence and paperwork for transfer to and storage at FSS. JIC kits include an additional pathology form and chain of custody form placed in a plastic pocket on the front of the opaque white plastic bag. It should be noted that they contain the same inadequate number of forensic swabs (6) as the SAIKs and no receptacles for other items with potential forensic value.

See ***Exhibits***

CL-71 Photograph (1) of JIC kit

CL-72 Photograph (2) of JIC kit

145. There is no provision for collection, transfer and storage of forensic toxicology samples or clothing items as part of the 'Just in Case' kit.

146. In June 2022, after toxicological questions could not be answered by the Prosecution (DPP) in relation to a case seen through our service, involving a woman who initially utilised the JIC kit option then later went on to report the incident to police, I raised the issue with the Head of Forensic Toxicology at FSS, Mark Stephenson. He was of the view that toxicological samples could be stored as part of a JIC kit if necessary. He told me that at the time of instigation of the JIC option in 2019, he had been led to believe that toxicology was not relevant for the JIC kit. The advice he received was clearly not obtained from a clinician involved in forensic examinations.

a) The sexual assault complainant in this matter was [redacted] she attended the Emergency Department on [redacted] and was forensically examined by Dr [redacted] at about [redacted] in relation to an incident which had occurred in the early hours of the [redacted]. She had not wanted to make contact with police at that time, so had a 'just-in-case' (JIC) kit completed rather than a SAIK. The JIC kit identification number was [redacted] Prior to the incident, Ms [redacted] had consumed alcohol and taken two alprazolam tablets. Toxicological samples (blood and urine) may be collected for up to 72 hours post-incident, but because the JIC option does not allow for transfer and secure storage of toxicology samples, they were not collected from Ms [redacted] at the time of forensic examination. Later, when Ms [redacted] decided to proceed with reporting the incident to police, they sought information about Dr [redacted] about Ms [redacted] level of intoxication, as a means of corroborating her inability to consent to sexual acts. I am uncertain if the matter has proceeded to trial or not.

See ***Exhibits***

CL-73 Email to Mark Stephenson re JIC kit contents add tox 6 Sept 2022

CL-106 Subpoena Dr Christine Mirakian, R v [redacted] 17 September 2021

147. This issue, I believe, highlights the importance of engaging with clinicians who are actively involved in doing forensic examinations when developing clinical forensic evidence kits.

[redacted]

Question 28 - When administering a JIC kit, do you or your staff supplement it with further equipment/consumables? If yes, provide details (or indicate if it is the same further equipment /consumables added when using a SAIK).

148. Yes, clinicians at our service supplement the JIC kits with swabs and receptacles for items of potential forensic value, in the same way as they do when using a SAIK, as outlined in my response to Question 22. Clinicians cannot however, add blood/urine toxicology samples or clothing items because JIC kit transfer and storage processes do not allow for this.

Question 29 - Should the content or design of the JIC kit be changed? If so, provide details and reasons for such a change.

149. The contents of the JIC kit should be the same as the 'ideal' SAIK, containing all necessary items to collect any material/items of potential forensic value, and allow for toxicology sample and clothing item collection, transfer and storage in the same way. Both SAIKs and JIC kits must be 'fit for purpose' for clinical practice and laboratory analysis and meet Australian Standard ISO 18385-2017 with respect to DNA contamination minimisation.

150. The concept behind the 'just in case' option for people who report sexual assault is that a person can have evidence collected if they are not yet ready to make contact with police. There is no basis for differential clinical evidence collection between the police SAIK and JIC kit.

Question 30 - Once a JIC is completed, who is it given to and where is it stored?

151. Completed JIC kits are lodged at hospital pathology departments (Central Specimen Reception or CSR) using a chain of Custody form to document any handling of the kit between examining clinician and CSR. See Appendix D in the Queensland Health document entitled *'For Laboratory: Potential forensic evidence "Just in Case" Forensic Examinations'*.

152. The process of transport and storage which occurs after the delivery of completed JIC kit to hospital CSR is outlined in the Queensland Health document entitled *'For Laboratory: Potential forensic evidence "Just in Case" Forensic Examinations'*.
See *Exhibit CL-74 For Laboratory: Potential forensic evidence 'Just in Case' Forensic Examinations*

Accused persons

Question 31 - Do you or your staff undertake forensic medical examinations on suspects or accused persons? If so, where are those examinations conducted? Do you consider the location at which those examinations are conducted affects the quality of the biological material sampled and/or the DNA results ultimately obtained?

153. Yes, clinicians at our service examine suspects/accused persons at the request of police. These examinations may involve examination for injury or collection of biological samples or both and take place in medical rooms at police watch houses.
154. We do not receive information about analysis results or the quality of biological material sampled from FSS, so I am unable to comment.
155. As previously outlined in paragraphs 131 and 132, the environment in which clinicians are obliged to collect evidence from suspects is less than ideal from a DNA contamination risk perspective.
156. Clinicians from GCUH Forensic Medicine endeavour to minimise DNA contamination when sampling suspects in police custody at watch houses by wearing full PPE and preparing examination surfaces in line with RCPA FCFM cleaning guidelines, using the same procedures as for sexual assault complainants. However, the police watch house medical rooms in which suspect examinations are required to occur are not dedicated to 'DNA sampling' as the rooms at Gold Coast University and Logan Hospitals are for complainant examinations.
157. In my view, forensic sampling of all subjects should take place in dedicated DNA sampling rooms. Unfortunately, because the same room should not be used to examine both complainants and suspects/accused persons, two separate dedicated DNA

sampling rooms would be required within a hospital for appropriate sampling; this is difficult to achieve. Police challenges with the transfer of suspects in custody to non-custodial facilities such as hospitals for the purpose of forensic procedures is also a factor in decisions about where suspect/accused person forensic sampling procedures take place.

Question 32 - Roughly how many forensic examinations on accused persons do your staff complete each year?

158. Annual figures for forensic examination of suspects/accused persons in Gold Coast/Logan:

Calendar year	Suspect forensic examinations
2021	20
2020	19
2019	16
2018	n/a
2017	28
2016	n/a
2015	35
Financial year	**Suspect forensic examinations**
2014/15	41
2013/14	37
2012/13	35
2011/12	37
2010/11	16
2009/10	35
2008/09	19
2007/08	27
2006/07	27
2005/06	29

Question 33 - What equipment/kit does your staff use to conduct these forensic medical examinations? If you do not use a SAIK when conducting forensic medical examinations,

explain why you do not use the SAIK. What document/booklet, if any, does a forensic physician in your unit complete when undertaking such an examination?

159. In Queensland, there is no forensic evidence kit designed for use when examining suspects/accused persons.

160. When sampling suspects/accused persons, clinicians at our service use forensic dry swabs (purchased from BioMerieux Aust Pty Ltd and prepared by staff as outlined in points 103 and 104), clear tamper evident plastic bags obtained from police (smaller version of that used for SAIKs), and documentation, sticker labels and body diagrams developed by our service.

See ***Exhibits***

CL-75 GCUH Suspect forensic sample form

CL-76 GCUH Suspect sampling sticker labels

CL-77 GCUH Toxicology form to accompany suspect samples

CL-78 GCUH Suspect examination body diagrams

CL-79 GCUH Suspect examination genital diagram

CL-80 Procedure for taking male genital swabs (CL)

161. If police request toxicology samples, we use the standard forensic toxicology kits as for complainants to blood and urine samples.

162. The completion of a clinical form to accompany samples and provide relevant information, document chain of custody for samples is appropriate clinical practice. Police understand and support this but have received negative feedback from the laboratory in relation to written input from clinicians.

See ***Exhibit CL-81 Email FSS QPS re suspect sampling documentation Oct 2019***

163. Clinicians at our service don't use the SAIK for suspect examinations primarily because the clinical documentation is designed for victim/complainants.

See ***Exhibit CL-82 FSS SAIK medical examination information form DNA***

164. Police do not associate SAIKs with suspect examinations and therefore do not provide these to clinicians prior to a suspect forensic examination.

165. We have been criticised in the past by Dr Adam Griffin/FSS for 'wasting SAIKs' and given they are not designed for suspect examinations, felt that use for this purpose could be viewed as problematic.

166. The SAIK could conceivably be adapted for use in both complainant and suspect sampling for sexual offence investigation, However, given the need to make these kits as 'user-friendly' as possible for clinicians who do these examinations relatively infrequently, separate kits for each type of examination is preferable.

Question 34 - Detail any knowledge you have of how the equipment used for accused person examinations in Queensland differs to the equipment used in other Australian states and territories?

167. I understand from communication with Dr Maria Nittis, Head of Department, Clinical Forensic Medicine at the Victorian Institute of Forensic Medicine (VIFM) that HazPak forensic kits are currently under review in Victoria. Victorian forensic clinicians are collaborating with HazPak to design complainant and suspect kits, each to be used in conjunction with a decontamination kit. Appropriate documentation proformas for each kit are designed and disseminated to examiners by forensic clinicians at the Victorian Institute of Forensic Medicine (VIFM).

See ***Exhibit CL-83 Email M Nittis VIFM re kits for suspect examinations (Sept 2022)***

168. I have no knowledge of suspect examination forensic kits used in other states or territories.

Question 35 - Do your staff take a reference DNA sample from accused persons when they conduct a forensic medical examination on that person? If yes, what equipment is used to take that reference sample, and where does the equipment come form?

169. No. We have never been asked by police to take reference DNA samples from suspects/accused persons.

Communication and feedback

Question 36 - Have you been criticised or been given negative feedback by any person in management at the CFMU, QH or other stakeholder agencies about how your unit conducts SAIKs or the equipment you use in conducting SAIKs? If so, provide details of the criticism (who made it, approximately when the feedback was made, and whether it is a fair criticism). If that criticism or negative feedback was provided by email or other documentary form, attach that correspondence.

Multiple swabs from single site

170. In 2016, I received an email from Abigail Houlding, A/Senior Scientist, Forensic DNA Analysis, FSS raising concerns re the number of swabs taken in SAIKs from our service. She acknowledged in her email that the number of swabs collected was at the discretion of the examiner, but said too many swabs impacted turnaround times for other casework. I felt uneasy about this given that other jurisdictions (including Western Australia and United Kingdom) routinely collect (at least) two swabs from each site. However, I modified my practice to collect only the number of swabs required to retrieve macroscopically visible material. By this I mean that if I collected, for example, one high vaginal swab but visible residual material remained in the high vagina after taking this swab, I took a second swab. I labelled swabs as '1' and '2' and endeavoured to record my rationale for the second swab in these cases. My primary concern during a SAIK is to maximise the potential for evidence collection.

See ***Exhibit CL-84 Email 2016 from FSS (Abigail Houlding) re SAIK swabs (Mar 2016)***

171. In 2019, I received an email from Dr Griffin about a member of my staff who had collected more than one swab from a genital site, in line with FFLM (UK) guidelines. I did not agree with his interpretation of the available resources (FFLM and RCPA) but forwarded his email to my team for their information.

See ***Exhibits***

CL-85 Email from A Griffin re multiple swabs (Oct 2019)

CL-86 Email to Gold Coast staff re criticism for taking multiple swabs (Oct 2019)

Triage and cut-off time limits for forensic examination

172. In May 2017, Dr Griffin sought to revise guidelines in Queensland for triage of requests for sexual assault forensic examinations based on so-called cut-off limits for detection of sperm/DNA. I was concerned that he was seeking to base important decisions re timing of forensic response to sexual assault complainants solely upon the likelihood of detection of biological material when the presence of genital injury to corroborate a penetrative act or bodily injury to corroborate a struggle between complainant and perpetrator is equally important to investigators.

173. Dr Griffin's suggestions did not appear to align with those of key services in other states and I was concerned that this non-alignment may lead to an adverse event. I believe that Queensland procedures should seek to align where appropriate and reliable with the practice of our peers. In my view, collaborative discussion at a national level with other clinical forensic services was an essential process before changing forensic response triage procedures.

See ***Exhibits***

CL-87 Email discussion CFMU re time limit triage forensic examinations (May 2017)

CL-87a Email A Griffin re DNA retention examination time limits (April 2017)

CL-88 VIFM Recommended Maximum Time for Routine Forensic Sample Collection

Question 37 - If any person in management from the CFMU, QH, or other stakeholder agency has provided positive feedback about how your unit conducts SAIKs or the equipment you use in conducting SAIKs, provide details (who made it and approximately when the feedback was made).

174. I cannot recall receiving any positive feedback from CFMU or FSS in relation to SAIKs collected or equipment used to collect evidence in sexual assault cases. On occasion,

forensic clinicians from Brisbane have sought advice from our service in relation to our protocols and procedures for clinical DNA contamination minimisation processes, which we have provided.

175. On occasion, investigating police will communicate SAIK analysis results to clinicians in our service, in relation to specific cases, primarily to seek advice about interpretation of a positive swab result at a particular body site. This is appropriate with regards clinical queries outside the expertise of laboratory staff, such as method of swab collection, description of anatomical site, comment on potential movement of material between sites, etc.

Question 38 - Have police officers or the QPS provided any feedback to you about having to take reference samples themselves? Who do you think should take reference samples, and why? Have you communicated with Dr Griffin about this topic; if so, explain the nature of your communication with him about this topic.

176. Some years ago, I was asked to take a reference DNA sample from a sexual assault patient/complainant by a police officer who was not aware that we were not provided with or trained in use of specialised reference DNA kits. I explained this to him, and since then, as I understand the situation, Gold Coast and Logan police perform this sampling at the time of complainant statement completion. This approach appeared to have some merit, as it meant that personal reference DNA sampling of complainants was not being carried out unless the investigation was to proceed.

177. Having said that, my view in relation to the issue of reference DNA collection from complainants was recently sought by FSS and I responded that I do not consider it problematic for clinicians to take these samples at the time of the SAIK, as long as clear information can be provided about what will happen to the sample and its analysis result, to permit clinicians to obtain fully informed consent from patients. Hospital clinical governance requirements also specify certain provisions around involvement of their staff in this type of sampling.

178. I have not communicated directly with Dr Griffin in relation to this topic but was present at a meeting of the Queensland Sexual Assault Interagency Guidelines Working

Group lead by the Department of Justice and Attorney General on 28 July, 2022 which he attended, where the issue of reference DNA samples was discussed.

See ***Exhibit CL-105 Handwritten notes made by CL during Queensland Government Interagency Sexual Assault Response Guidelines working group meeting 28 July 2022***

179. I later provided email advice re the wording of a paragraph about this issue in the Guideline document, at the request of acting Executive Director FSS Helen Gregg; I understand Dr Griffin was included in the email thread.

See ***Exhibit CL-43 Emails with FSS re proposed edit to SA interagency guidelines re reference DNA samples***

180. As outlined earlier in response to Question 24, my view is that reference DNA samples could reasonably be collected by clinicians at the time of SAIK collection. However, because the clinician would need to obtain informed consent from the sexual assault patient/complainant before doing so, they would require information and assurances in relation to processing of the sample, how long it would be kept for, where it would be stored, and whether there is potential for it to be included in the criminal DNA database

Question 39 - Does your unit or do your staff receive any communication or feedback from QHFSS or Queensland Police Service about the SAIKs you conduct in particular cases and the quality of biological samples that are taken in those cases?

181. QHFSS do not communicate or provide feedback about the analysis of SAIKs completed or the quality of biological samples collected to any of the clinicians in my service despite a number of approaches to FSS over the years to discuss the possibility of doing so and explain the benefits.

182. In or around 2007, I designed a sample feedback form template based on the SAIK feedback form in use in WA prior to 2004; I provided this to CFMU Director at the time.

See ***Exhibits***

CL-89 Draft Qld Sexual Assault Kit feedback form (2007)

CL-90 WA SARC Kit feedback form (2003)

183. In 2009, I emailed the CFMU Director to request consideration of sample analysis feedback again.

See ***Exhibit CL-91 Email CL to Director CFMU re sample feedback (2009)***

184. I am not aware whether FSS provides sample analysis/quality information to the Brisbane CFMU or Dr Griffin. If they do, it is not forwarded to clinicians at our service.

185. As outlined in response to Question 37, on occasion, investigating police will communicate SAIK analysis results to clinicians in our service in relation to specific cases, primarily to seek advice about interpretation of a positive swab result at a particular body site. This is entirely appropriate with regards clinical queries outside the expertise of laboratory staff such as method of swab collection, description of anatomical site, comment on potential movement of material between sites, etc.

186. Police do not and have never provided information to clinicians at our service in relation to the quality of biological samples collected.

187. Police routinely provide clinicians with Certificates of Analysis in relation to toxicological analysis of blood and urine samples they collect, for the purpose of interpretation.

Question 40 - Would you be assisted by the provision of such feedback? Why/why not? What type of similar feedback, if any, have you been given in past roles during your career?

188. As a forensic clinician, being informed about a positive or negative swab result or the quality of a sample collected, provides valuable feedback which can inform and improve future practice.

189. Clinicians working in 'therapeutic' medicine (as opposed to 'forensic' medicine) are used to receiving results for the tests they order; however most working in forensic medicine find it challenging not to receive any information about the analysis results of forensic swabs and other evidence they have collected.

190. In my experience of receiving laboratory feedback re forensic samples, namely in WA between 1995 and 2003, I found that provision of information to forensic clinicians about SAIK sample analysis:

a) Enhances and informs future clinical practice,

b) Provides a valuable opportunity for quality assurance,

c) Assists with clinical teaching, learning and skill development,

d) Has the potential to create a source of evidence-based information to inform decision-making about such questions as appropriate samples to collect, maximum timing for collection of samples etc.

e) Fosters a collaborative relationship between clinicians and laboratory staff with the potential for much-needed cross-discipline research in this area.

191. I believe that information-sharing between clinicians and laboratories can be carried out in such a way that legal evidentiary processes are not compromised.

Physical facilities

Question 41 - Describe the physical facilities or rooms at the Gold Coast HHS in which SAIKs are administered? Do you oversee the procedures used in cleaning those rooms/facilities? Provide details of what equipment is used and to what standard (if any) they are cleaned? Are the rooms secured?

192. Forensic examinations using SAIKs are carried out by GCHHS clinicians at three locations:

a) Gold Coast University Hospital (GCUH) Emergency Department (~100 per year)

b) Logan Hospital (LGH) Emergency Department (~ 70 per year)

c) Robina Hospital (RBH) Emergency Department (~25 per year)

193. GCUH and LGH have dedicated DNA sampling rooms within the Emergency Departments. These rooms remain locked when not in use and can only be accessed by clinicians and cleaners by swipe access key. The rooms are cleaned 'terminally' to HHS Infection Control standard after each examination and the room locked.

194. RBH has a specified room in the Emergency Department (not solely for forensic use) which is cleaned 'terminally' to HHS Infection Control standard prior to a forensic examination and locked until commencement of examination.

See Exhibits

CL-92 Email from Team Leader, Environmental Services, GCUH (15 Sept 2022)

CL-93 Diversey Divercleanse Hospital Grade Disinfectant - Ultimate Cleaning Products

195. A proposal to include a dedicated DNA sampling room at RBH Emergency Department has been submitted as part of RBH Emergency Department renovation.

196. The forensic service oversees cleaning procedures and documentation for the DNA sampling rooms. At GCUH and LGH, clinicians are responsible for requesting cleaner attendance immediately following the use of the room and all cleaners are required to complete a cleaning log book as well as a room entry register log. Cleaners at RBH are required to complete a cleaning log book after terminal clean of forensic room pre-forensic examination. Clinicians do not proceed with a forensic examination without checking that a terminal clean has occurred.

197. Prior to forensic examination and SAIK completion, examining clinicians conduct a 'pre-examination surface DNA clean' by wiping down all surfaces in the room with bleach, followed by sterile water after a period of 3-5mins, using low-lint paper cloths. This process is also used at the two sites where suspects are forensically examined and samples taken by clinicians (that is, Southport and Logan District Watch houses).

See ***Exhibits***

CL-94 Pre examination DNA clean GCFM (2019)

CL-95 ThermoFisher PDI Sani-Cloth Chlor - Technical Specification 201704

CL-96 ThermoFisher PDI Sani-Cloth TGA 227283 certificate class IIb

CL-97 Email from ThermoFisher re SaniCloth bleach content

Question 42 - Explain why you have adopted any cleaning standards referred to when answering the question immediately above.

198. The processes described in response to Question 41 have been adopted to ensure practice is in line with recommendations for DNA contamination minimisation in the following documents (also referred to in response to Question 25):

a) RCPA FCFM Guideline for Cleaning Decontamination Forensic Examination Suites

b) Vincent FHR. Inquiry into the circumstances that led to the conviction of Mr Farah Abdulkadir Jama. Victorian Department of Justice, 2010.

c) Ballantyne KN et al (2015) DNA contamination minimisation – finding an effective cleaning method. Aust J For Sci DOI 10.1080/00450618.2015.1004195

Other issues

Question 43 - Explain the change that occurred in around 2009 whereby persons conducting SAIKs no longer had to produce slides. Did that make the job of conducting a SAIK easier or more difficult. Do you consider this has, of itself, affected the quality of biological material collected?

199. I have addressed this issue in my response to Questions 16 and 17 at paragraphs 58-67.

Question 44 - Identify and detail any other concerns, criticism or feedback you have of the current Queensland SAIK model, the JIC kits or the current processes for collecting biological material for forensic DNA testing in sexual assault matters. Attach supporting documents if necessary.

200. I have nothing additional to include other than to re-state that I believe that:

a) While SAIKs and JIC kits must be 'fit for purpose' for both clinicians and laboratory staff, their design is rightly within the purview of clinicians. They should be developed collaboratively by clinicians and laboratories.

b) SAIKs and JIC kit production must meet ISO Standard 18385; 2017.

c) Feedback to clinicians re sample analysis and quality is an important quality assurance tool and has the potential to provide evidence-based information to inform SAIK development and continued improvement.

d) SAIKs and JIC kits should not differ in design; clinicians should be able to collect, the same evidence for transfer and storage when completing a JIC kit as is possible for a SAIK.

All the facts and circumstances declared in my statement, are within my own knowledge and belief, except for the facts and circumstances declared from information only, and where applicable, my means of knowledge and sources of information are contained in this statement.

I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.

TAKEN AND DECLARED before me at ## in the State of Queensland this ## day of ## [month] 2022

[redacted].

Catherine Lincoln Witness

.....

Catherine Lincoln 26 September 2022 Witness [redacted] *26 September 2022*

Gold Coast Hospital and Health Service

Guideline

Document ID GL1857

Care of Patients Aged 14 and above who have Sustained Reported Sexual Assault

Gold Coast Hospital and Health Service / Emergency Services

1. Purpose

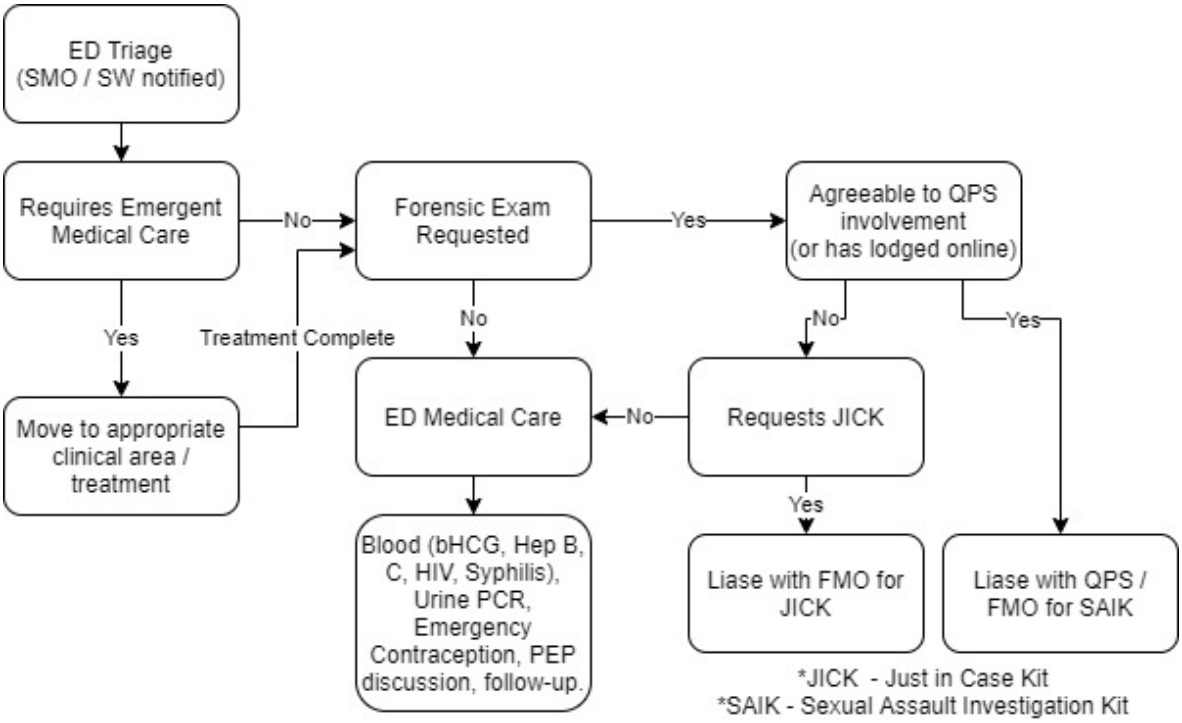
To provide patient centred care for patients aged 14 and above who have reported a sexual assault (SA). This is to facilitate trauma informed psychosocial interventions and appropriate medical assessment and management in a timely manner. The management includes forensic evidence collection when required

2. Scope

This guideline applies to all Clinical Staff within the Emergency Departments (ED) of the Gold Coast Hospital and Health Service (GCHHS).

3. Guideline for Care of Patients Aged 14 and above who have Sustained Reported Sexual Assault

This guideline has two parts and the overall process is summarised by the flowchart below:



Section 3.1 describes usual ED reception of all patients who present for care. It describes triage and streaming of patients to ensure urgent medical care is prioritised. It also describes when Forensic Physician (FP) assessment is requested.

Section 3.2 describes routine ED care for those patients who do not wish to undergo forensic examination. This aims to provide appropriate management including pregnancy prevention, prevention of disease transmission, appropriate medical follow-up and psychosocial support (PSS) in a timely manner for those who do not proceed to the Forensic Physician (FP) assessment.

3.1. Initial Triage, Referral and Management in ED of reported Sexual Assault

3.1.1. At triage patients requiring urgent ED Medical Assessment are identified through usual triage process and streamed to the appropriate area. The consultant on duty (or registrar overnight) should be notified to facilitate these assessments.

3.1.2. In unstable patients or patients with suspected major injuries, clinical care by hospital staff should proceed as the immediate priority.

3.1.2.1. For patients with apparent minor vaginal or rectal bleeding likely from reported assault, ED medical assessment may be by history and review of vital signs and general status, with intention to avoid loss or contamination of evidence/DNA.

Senior ED consultant advice and discussion with the FP may be required.

3.1.3. Internal examination for evidence collection is best done by an FP and using the appropriate forensic kit.

Combined FP and gynaecology team assessment may be indicated in occasional stable patients or in cases of doubt regarding severity and need for surgical care (e.g. bleeding genito-anal injury or possible intra-vaginal/intra-rectal foreign body).

In such cases, the ED consultant and gynaecological team may request FP involvement for evidence collection. The aim is to perform a single intimate examination for assessment, evidence collection and treatment purposes wherever possible.

3.1.4. All patients should be referred to the ED Social Worker (SW) by triage nurse for psychosocial intervention upon arrival/triage.

3.1.4.1. SW must also be advised if they are currently requiring immediate ED medical care. Social work is available at GCUH 24 hours a day.

3.1.5. The ED social worker will have a trauma informed approach and give information regarding options for the patient.

SW have a process, as described in the 'Quick Reference Guide' (Appendix 6); these include:

1. Referral to Queensland Police Service (QPS) and FP
2. Referral to ED medical officer (EDMO) for medical care
3. Referral to Gold Coast Centre Against Sexual Violence (GCCASV)
4. Other Counselling

Patients may require one or more of these services.

3.1.6. If SW is not available at Robina (after hours), nurse in charge and clinicians who require telephone advice regarding SW process please contact:

GCUH ED SW (24 hour service) on 5687 5817, 5687 7992 or via switchboard.

A referral to SW can be made via Overnight Referral Book held at triage for follow up providing consent has been obtained.

3.1.7. All patients will remain under the care of the ED throughout their stay.

3.1.8. The FP service is considered a consultation service for patient centred care of sexual assault (SA).

Patients requiring FP examination will remain in ED except for the time of FP examination. This will occur in a designated forensic examination room to reduce potential for DNA contamination.

3.1.9. If the patient is wearing clothes from the time of incident, please encourage the patient to remain in their clothing and ask that they await the FP prior to showering.

3.1.9.1. Should the patient need to pass urine, the first catch may be valuable forensically (toxicology, DNA).

Police will typically provide an appropriate forensic suit if required.

3.1.9.2. Cases that present >7 days after alleged sexual assault will in most instances not benefit from evidence collection by the FP.

In such cases Emergency Department Medical Officer (EDMO) assessment may be more appropriate. Cases of doubt can be discussed by the ED medical team with the FP on call.

3.1.10. FP response is expected to occur within 2 hours of request for forensic examination.

An FP assessment typically includes:

- injury documentation,
- collection of samples;
- and other evidence and medical care after SA.

3.1.11. In discussion with and while awaiting FP, collection of blood and urine samples for testing as below, can help:

- Reduce the patients ED length of stay,
- provide valuable information about Hep B and pregnancy status,
- and assist with risk stratification on arrival of the FP.

These can also be collected by FP at time of forensic examination if police are requesting toxicology samples to avoid multiple venepuncture.

3.1.12. Some patients will opt <u>not to proceed</u> with forensic examination after speaking with police; they should be offered ED medical assessment described below in 3.2, alternative follow up should they decline.

3.1.13. Forensic examination following police contact will always utilise the more comprehensive Sexual Assault Investigation Kit (SAIK), not the Just In Case Kit (JICK) and will be handed to QPS.

The patient retains option not to proceed with police process.

3.1.14. Those seen by the FP would be anticipated to receive good medical care as appropriate after sexual assault.

3.1.15. The FP will complete a brief record of the attendance in the GCHHS medical record.

3.1.16. The FP may need assistance to provide that care.

The FP will communicate (verbally and in writing) appropriate orders in relation to further management of the patient by ED staff.

3.1.17. ED Nursing staff will assist with a chaperone if required, and collection of non-forensic pathology samples if required as ordered by the FP.

3.1.18. ED Nursing staff can facilitate drug administration if this is charted by the FP.

3.1.19. The FP may, after assessment, request ED medical assistance if unexpected findings require emergency care.

This handover of care should be documented by the FP.

The intent of the above is to ensure appropriate patient-centred care and avoid any unnecessary repeated assessments by numerous clinicians.

All staff are also reminded of their mandatory reporting obligations with respect to suspected sexual offences against children (person aged under 16 years old or a person under 18 with an impairment of the mind.)

Refer to PRO1518 Caring for Children undergoing Sexual Abuse/Assault Examinations for patients under the age of 14.

3.2. Medical Management for reported Sexual Assault where FP assessment is not performed.

For those patients who remain under ED care (i.e. not for FP/QPS intervention), the ED medical officer will do the following.

NOTE: Below is a summation/checklist and please see the appendices for full detailed information.

Assess:

- Assess and treat any injury.
- Document alleged incident and injuries in detail.
- Assess risk for HIV: Post Exposure Prophylaxis needs to be considered if assailant was known to be HIV positive, was known to be a male who had sex with males, or was from high risk country such as Africa, SE Asia or PNG. Other factors increasing risk include bleeding genital injury, multiple perpetrators.
- Assess risk of Hep B: Prior immunisation status?
- Assess risk of pregnancy: Prior contraception?
- Assess risk of sexually transmitted infection.
- Assess medical Hx, medications and allergy.

Investigations:

- STI baseline screening
  - Urine Chlamydia / Gonorrhoea PCR
  - Hep B, Hep C, HIV, Syphilis serology.
- FBC ELFT if considering PEP.
- BHCG if possibly pregnant.
- All other testing may be deferred until follow up.

Management:

a) Consider HIV risk: If high risk HIV exposure or uncertainty contact ID physician for advice. If PEP commenced, starter packs (A or B) located in medication rooms in Minors (GCUH) and Acute (Robina), contain the first 3 days treatment only. Those started on PEP must be urgently referred to GC Sexual Health Clinic for follow up and to access remainder of PEP course - see details in Appendix 1

b) Consider Hepatitis B Immunity - Hep B vaccination; if not vaccinated or vaccination status unknown, give first dose Hep B vaccine. (Consider Hep B immunoglobulin at follow up before 72hrs if proven not immune and high-risk exposure cases) – see details Appendix 2

c) Consider Emergency Contraception – unless good contraceptive cover, consider Levornogestrol 1.5mg orally as a single dose, up to 72hrs post reported assault, or if 72hrs -120hrs post incident - consider Ulipristal acetate – see details Appendix 3

d) Consider STI prophylaxis if anticipate unreliable to follow up – see details Appendix 4

e) Consider Tetanus Prophylaxis – ADT if indicated

f) Arrange appropriate follow up – see detailed recommendations Appendix 5.

4. Supporting / Relating Documents and Reference Material

Policy Instruments

(POL, PRO, PLA, WI, GL, MEDPRO, MEDSO)

- *PRO1518 Caring for Children undergoing Sexual Abuse/Assault Examinations*

External Documents

- Nil

Online Documents

(Clinical forms and GOV documents (information sheets etc.))

- *Assisted Referral Form Gold Coast Centre Against Sexual Violence (GCASV)*
- *Sexual Assault Presentation without prior Police contact*
- *Sexual Assault Presentation with Police (14 years and over)*

References and Suggested Readings

- Nil

5. Definition of Terms

Term	Definition	Source
FP	Forensic Physician	
SW	Social Worker	
ED	Emergency Department	
SA	Sexual Assault	
SAIK	Sexual Assault Investigation Kit	
JICK	Just In Case Kit	

6. Compliance Requirements and Obligations

Legislation and other compliance requirements	• N/A
National Safety and Quality Health Service (NSQHS) Standards 2nd Ed.	• Standard 3 Preventing and Controlling Healthcare Associated Infections • Standard 5 Comprehensive Care
Other Standards	• N/A
Health Service Directive	• N/A

7. Consultation

Key stakeholders who reviewed this version are:

- Dr Scott Paget, Forensic Medical Officer / Emergency Consultant Gold Coast Forensic Medicine
- Dr Cathy Lincoln, Deputy Director Gold Coast Forensic Medicine
- Dr Danika Fietz, Forensic Medical Officer Gold Coast Forensic Medicine
- Kym Tighe, Social Worker Gold Coast Hospital and Health Service
- Dr Kylie Alcorn, Infectious Disease Specialist Gold Coast Hospital and Health Service
- Dr Maree O'Sullivan, Sexual Health Clinician Gold Coast Hospital and Health Service
- Dr Caroline Thng, Sexual Health Clinician Gold Coast Hospital and Health Service
- Lauren Grant, Emergency Pharmacist Gold Coast Hospital and Health Service

8. Committee Endorsement

- ED Guideline Committee – 14/07/2021
- GC Medicines Advisory Committee - 18/08/2021

9. Approval and Implementation

Delegated Lead: Deputy Medical Director, Emergency Department

Responsible Authority: Medical Director, Emergency Department

Approving Officer: Clinical Director, Emergency Department, Emergency and Specialty Services

Approval date: 08/09/2021

Effective from: 09/09/2021

Next Review Date: 14/07/2024

Supersedes: GL1857v1 Care of Adult Patients who have Sustained Reported Sexual Assault

Keywords: *sexual assault, forensic physician, forensic evidence, post exposure prophylaxis, PEP*

10. Development and Approval History

Version No	Developed by	Content authorised by	Approved by	Date of Effect
1	Dr David Spain, Deputy Medical Director Emergency Department	Dr David Green, Medical Director Emergency Department	Matthew Lunn, Director of Nursing IACS	20/02/2019
2	Dr Scott Paget, Forensic Medical Officer / Emergency Consultant Gold Coast Forensic Medicine	ED Guideline Committee	Dr David Green, Clinical Director, Emergency Department, Emergency and Specialty Services	09/09/2021

11. Appendices

- Appendix 1 Assessing need for HIV prophylaxis
- Appendix 2 Hepatitis B risk assessment and management post sexual assault
- Appendix 3 Emergency Contraception post sexual assault.
- Appendix 4 Prophylaxis of Sexually Transmitted Infection post sexual assault
- Appendix 5 Follow up
- Appendix 6 Quick Reference Guide

Appendix 1

Assessing need for HIV prophylaxis

The risk of HIV following sexual assault in Australia is very low. Despite the low likelihood of infection, HIV remains a concern for victims and should be discussed. Giving a realistic estimation of risks may provide reassurance to the victim.

HIV prophylaxis is infrequently required following sexual assault but should be considered if assailant was known to be HIV positive, was known to be a male who had sex with males, was a known IVDU or was from high HIV risk country such as Sub-Saharan Africa, SE Asia or PNG. Known homosexual IVDU as the perpetrator are a potential high-risk group also for HIV. Transmission risk is also higher if the SA resulted in bleeding genito-anal injury. *Refer to ASHM guidelines for table summarising quantitative risks in different sexual activity scenarios.

Routine baseline status for HIV should be undertaken. For pre HIV counselling please refer to the HIV-pre and post-test counselling information and patient brochures located at https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/hiv-aids

For high risk cases or any concerns, discuss each case individually with on call ID consultant.

Post exposure prophylaxis starter drug packs are kept in treatment room in ED Minors (GCUH) and Acute (Robina) – these are authorised by ID consultant who will advise which starter pack to use. Most will require PEP Pack A (two drug regimen) – please ensure you follow correct procedures in its administration and documentation. They must be instituted within 72hrs. Follow up of these patients is as an outpatient to GC Sexual health Clinic.

Common side effects are nausea, headaches, lethargy (up to 1/3 of patients cease these drugs before completion due to side effects) More serious side effects include liver toxicity. Baseline FBC and ELFT are required before starting.

<u>PEP Drug Regimen</u>

PEP Pack A: (2-drug regimen)
Tenofovir 291mg/ Emtricitabine 200mg. Dose: 1 tablet once daily

PEP Pack B: (3-drug regimen)
Tenofovir 291mg/ Emtricitabine 200mg. Dose: 1 tablet once daily
PLUS
Raltegravir 400mg BD. Dose: 1 tablet TWICE daily.

Appendix 2

Hepatitis B risk assessment and management post sexual assault

If Immunised – pathology testing only to confirm immunity and review and follow up of Hep B status. This may be done at follow up.

Hepatitis B Immunoglobulin is not routinely required.

No immunisation or partial immunisation -

If incomplete immunisation then give a booster.

If no prior immunisation –

Start immunisation for Hep B plus recommend further vaccination at 1month and 6 months. Also, consider 400 units IM Hepatitis B IG in a non-immune patient within 72 hrs particularly if exposure to member of high risk group for hepatitis B (Indigenous, men who have sex with men, injecting drug user, person from countries where hepatitis B is endemic). Most effective within 24 hours, but can be delivered up to 14 days post assault. A repeat Hepatitis B IG is also required at one month. Gold Coast sexual health clinic is happy to provide this service. GP can alternately provide this.

Follow up is necessary as repeat Hep B vaccination is required at 1 month and 6 months.

Appendix 3

Emergency Contraception post sexual assault.

If patient has good effective contraception this is not required e.g. Implanon, Mirena coil in situ, no missed OCP pills in last menstrual cycle Discuss benefits of morning after pill. Generally very safe and if any risk of pregnancy should be given.

If indicated, Levornogestrol 1.5mg orally as a single dose, as soon as possible up to 72hrs following event.
(ONLY EFFECTIVE IF USED WITHIN 72 HOURS (3 Days) OF ALLEGED ASSAULT)

More effective the earlier it is used. Consider offering oral antiemetic if patient known to have nausea with the drug, however very few (1.4 – 5.0%) patients vomit with the progesterone-only emergency contraceptive and antiemetics are not routinely recommended.

If presentation is >72hrs and less than 120hrs an alternate Ulipristal acetate is likely more effective. It can be obtained by private prescription at cost approximately $50. It is contraindicated in patients with liver disease, asthma requiring steroids, with breast feeding and less effective if using antacids or Proton Pump inhibitors.

Advise pregnancy test if next period late or different from normal.

Appendix 4

Prophylaxis of Sexually Transmitted Infection post sexual assault

Risk of STI such as chlamydia, gonorrhoea and trichomonas is overall low. Options of treatment prophylactically in ED or STI screens in 2 weeks to determine need should be considered depending on patient demographics, anticipated patient compliance and patient choice. This patient group are reported to have low attendance at arranged follow up appointments so opportunistic treatment should be considered in ED.

Chlamydia is the most frequently encountered STI that would be amenable to prophylaxis. Prophylaxis should be given in the ED if it is difficult to ensure compliance by follow-up of patient.

Azithromycin 1g orally stat.

These patients still require follow up STI screening with a urinary PCR at 2 weeks post SA as the above does not prevent other infections.

Other bacterial STIs have a very low prevalence on the Gold Coast. For high-risk or complex exposures (e.g. multiple assailants, assailant from population group with high rates of STI), contact Gold Coast Sexual Health Service (07 5576 9033) for advice or if after hours give:

Ceftriaxone 500mg IM with 2mls 1% lignocaine / Ceftriaxone 500mg IV stat - same if pregnant

PLUS

Azithromycin 1gm orally stat - same if pregnant

Appendix 5

Follow Up

All patients should be referred for follow up including pathology results and recommended ongoing testing. Most patients are suitable for medical follow up with their general practitioner.

Patients with more complex or high-risk exposures should be referred to Gold Coast Sexual Health Clinic for follow-up, as should patients with concerns about confidentiality or who require access to a free service.

Please ensure you complete a letter to the sexual health clinic in Southport and provide the patient with the clinic number (07 5576 9033) these will be available in the sexual assault pack. They also have a website https://www.goldcoast.health.qld.gov.au/our-services/sexual-health

Patients who are commenced on HIV post-exposure prophylaxis should be urgently referred to Gold Coast Sexual Health Service clinic for ongoing supply of medication and specialised management of antiretroviral drugs.

SW will recommend appropriate Sexual Assault Service and other psychosocial services.

Patients to be advised of QH 24hour sexual assault counselling help line – 1800 010 120. Local options including Gold Coast Centre Against Sexual Violence (GCASV) 07 55911164 and website www.stopsexualviolence.com should be provided. Additional contacts are available from https://www.casv.org.au/links/. Resources for counselling including an Assisted Referral Form where we refer patients to Gold Coast Centre against sexual violence with their consent. These are located in the Sexual Assault Pack. The sexual assault pack is located in the social work resource folder in triage reception of both EDs.

General literature from the sexual assault pack should be provided.

If the patient agrees please leave a referral for social work to follow up the next morning in SW referral book at triage desk to ensure trauma informed psychosocial care.

Appendix 6

Quick Reference Guide

A. Patient presents with Police

Required: Routine ED triage
Refer to Social Work
Police call Forensic Physician (FP) to request forensic examination - (QPS SAIK)

Option: *QPS involved means process is SAIK,* ***cannot be JICK***

B. Patient attends after talking/making contact with Police (e.g. referred following attendance at police station, arrived by QAS after police attendance at scene, online QPS report - not ARO) **but police are NOT at the ED with patient.**

Required: Routine ED triage
Refer to Social Worker
SW contacts Police to attend
Police contact FP to request Forensic Examination

Option: *QPS involved means process is SAIK,* ***cannot be JICK***

C. Patient presents to ED without prior contact with Police.

Required: Routine ED triage
Refer to Social Worker
Social Worker discusses the following options with patient:

1. Healthcare response only – no QPS no forensic examination
2. Forensic examination – QPS involvement (SAIK)
3. Forensic examination – No QPS involvement (JICK)

➡ **If patient opts for forensic examination**

Required: SW to complete Forensic Examination Pathway Consent form for those patients who present without Police
(insert date of examination; copy for patient, copy for ieMR and copy for FP)

➡ **If patient opts to discuss with Police**

Required: SW to call QPS to attend
QPS contact FP to request forensic examination (using SAIK)

or Patient may decide not to have forensic examination following discussion with QPS

or Patient may have forensic examination via QPS Pathways (SAIK) and decide not to proceed later (patient contacts QPS direct)

➡ **If patient does not want QPS involvement**, but requests forensic examination

Required: SW calls FP to request 'just in case' forensic examination (using JICK).

Please note:
Contact with QPS can only be made with patients consent – use Sexual Assault Forensic Examination Pathway consent form or document clearly in records.
Any involvement with QPS necessitates completion of police SAIK – not JICK.

SAIK = Sexual Assault Investigation Kit JICK = Just in Case Kit

Queensland Government

Gold Coast Health

SEXUAL ASSAULT FORENSIC EXAMINATION PATHWAY CONSENT

Facility: _____

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Date of birth: Sex: ☐ M ☐ F ☐ I

Doctor / Social Worker Name: _____ Date: _____/_____/_____

Forensic Medical Examination (please initial)

➢ _____ **I consent to a forensic medical examination**

- I understand I can stop the examination at any time.

Reporting Pathway (please initial **one** statement only)

➢ _____ **I have chosen to make a formal report to police**

- I give permission for information gathered and any evidence collected during this examination to be released to police

➢ _____ **I have chosen NOT to make a formal report to police**, at this time

- I understand that by delaying a report to police, interviews cannot be conducted with suspects or witnesses and evidence that would normally be collected by police may be permanently lost
- I understand I can later change my mind and make a report, but it may then be more difficult or impossible to obtain sufficient evidence to support future criminal proceedings
- I understand the evidence collected will not be analysed but will be stored for a **maximum period of 12 months from date of forensic examination** _____/_____/_____, before being destroyed and I must attend a police station before this time if I change my mind and wish to proceed with a formal report
- I understand that a Social Worker may contact me in the next few days to provide support and follow up referrals if required

Patient's name (print): _____

Patient's signature: _____ Date: _____/_____/_____

Guardian name (print): _____ Relationship to patient: _____

Guardian signature: _____ Date: _____/_____/_____

Witnesses' name (print): _____ Designation: _____

Witnesses' signature: _____ Date: _____/_____/_____

SEXUAL ASSAULT FORENSIC EXAMINATION PATHWAY CONSENT

DO NOT WRITE IN THIS BINDING MARGIN

Do not reproduce by photocopying

All clinical form creation and amendments must be conducted through Health Information Services

Date Reviewed – 10/2020

00050:GC10823

DO NOT SCAN THIS PAGE INTO ieMR

INFORMATION TO SUPPORT DISCUSSION ABOUT FORENSIC EXAMINATION PATHWAY CONSENT

Informed Consent to Sexual Assault Forensic Examination

Sexual assault forensic examination:

The purpose of a forensic examination is to document any potential injuries and to obtain swabs for DNA analysis to contribute to a police investigation. The parts of the body examined for injuries and the sites of sample collection depend on the information provided by the patient. The forensic doctor only needs enough information about what happened to guide the examination process and does not require great detail.

Forensic examination for police reporting pathway:

Any information provided as part of the forensic examination will be made available to the police to assist with the investigation process.

The patient can change their mind at any time in the future by letting police know that they do not want to proceed.

Forensic examination for non-police reporting pathway
(so-called 'just in case' option):

If the patient is reluctant to talk to police at time of presentation, a forensic examination can be done to collect evidence for a police investigation at some point in the future. Information and samples will not be provided to police.

Forensic examination does not provide all the evidence police need to proceed with an investigation. Without police involvement, important evidence may be lost: for example:-

- witnesses cannot be interviewed
- clothing and toxicology samples cannot be collected
- crime scene assessment cannot occur
- CCTV cannot be accessed

This may make it more difficult to obtain sufficient evidence to support future criminal proceedings. There is also a small chance that samples may deteriorate over time.
Any DNA evidence that is collected without police involvement will not be tested but will be stored for a period of twelve months before being destroyed. The patient must attend a police station before this time if they change their mind and wish to proceed with a formal police report.

The decision to undergo a forensic examination or not rests entirely with the patient.

DO NOT WRITE IN THIS BINDING MARGIN

Just In Case
Forensic Medical Examinations

Important Considerations

- A forensic examination is best completed within 72 hours of the assault. If you present outside this time, there may not be sufficient evidence present to warrant an examination.
- If an examination is completed, samples will be kept for 12 months, after which time they will be disposed of. Just In Case samples are not tested.
- The JICK gathers a smaller number of forensic samples and may reduce your case options as opposed to a full forensic medical examination.
- It is your responsibility to contact police if you wish to make a formal complaint.
- By delaying a police investigation, other evidence may be lost which will impact the future success of any complaint.
- Record details of the assault to help you remember if you wish to speak with police in the future.

Contacting Police

If you decide to make a formal complaint to police you can do so by contacting PoliceLink on **131 444** or by attending your local police station.

Additional information about police reporting options can be found on the QPS website: **www.police.qld.gov.au**.

IN CASE OF EMERGENCY:
CALL QUEENSLAND POLICE ON 000

FOR NON-URGENT MATTERS:
CALL POLICELINK ON 131 444

Other important information

For further information, please contact:

Social Work (Emergency Department)
Social Work and Support Services

Gold Coast University Hospital
T: 1300 744 284

Robina Hospital
T: (07) 5668 6000

Interpreter services

Gold Coast Health provides interpreter services for patients attending the hospital who are from non-English speaking backgrounds. If you require the assistance of an interpreter, please indicate this on your registration form and advise the hospital prior to any medical appointments.

Interpreter services are provided free-of-charge to all patients who require the service, including non-Medicare patients.

Gold Coast Health information
goldcoast.health.qld.gov.au

PUB.0253_Apr2021

Just In Case

Forensic medical examinations: your rights and choices

Gold Coast Health
always care

Queensland Government

Sexual assault is a crime

Sexual assault is any unwanted or forced sexual act which a person does not consent to. This includes any sexual behaviour which makes a person feel threatened, frightened or uncomfortable.

Sexual assault can happen to anybody. It is never the victim's fault. Sexual assault is about power and control. In many cases, the offender is known and trusted. This includes a family member, close friend, or neighbour.

Queensland Health recognises the serious social, emotional, medical and legal impact a sexual assault may have and recognises the importance of victims being provided with:

- dignity and respect
- confidentiality and privacy
- timely and appropriate service
- information about legal rights, options and processes in a non-judgmental and sensitive manner, heard and supported.

Your Options

Deciding what to do can be difficult. Queensland Police Service strongly encourages anyone who has experienced a sexual assault to contact them to discuss the available reporting and support options.

As a victim of sexual assault, you have several reporting options available to you. These include:

1. Reporting the assault to police, which typically includes a forensic medical examination and initial interview at the hospital. You will be supported by a social worker during this process and informed about what happens in a forensic examination and police investigation.
2. Requesting to have a forensic examination to occur "Just In Case" you want to report to police in the future.
3. Providing police with details of the assault anonymously through the Alternative Reporting Option (ARO). No action will be taken but your information may assist police strategies to target offenders and reduce repeat offending. https://forms.police.qld.gov.au/sexassaultsurvey
4. Choosing not to report the assault in any way.

Whatever decision you make, you will always be provided with the necessary medical care as well as referrals to counselling and support services.

Just In Case Forensic Medical Examinations

You may be uncertain about making a complaint and not feel ready to speak with police. It can be very difficult to make decisions after you have had a traumatic experience. If you feel undecided about reporting the assault to police but might want to do so at a later time, a 'Just In Case' examination may be available.

If you choose this option, a forensic medical examination will take place and any samples collected will be stored by Queensland Health's Forensic and Scientific Services. These samples will not be tested unless you proceed with a formal police complaint.

You will need to sign a consent form that you understand that your sample

- will be stored by Queensland Health
- will only be sent for testing and provided to police if you proceed with a complaint to police
- will be destroyed after 12 months if no complaint is made.

If you select the Just In Case Examination, you may wish to record the date of the examination and place of examination for your records below:

_____

_____

What is a Just In Case Forensic Medical Examination?

You will be asked to briefly describe what happened to you and then a physical examination will be done to assess any injuries and collect samples.

It is an intimate examination undertaken by a specially trained doctor or nurse.

A Just In Case Kit (JICK) is used to collect samples. The JICK will be handled sensitively and securely to ensure it can be used as evidence if you do wish to proceed with a police complaint at a later time.

Support Following Sexual Assault

Gold Coast Centre Against Sexual Violence
The Gold Coast Centre Against Sexual Violence (GCCASV) is a free, confidential service for women who have experienced sexual violence at any time in their lives. It provides professional crisis support and counselling along with ongoing support through therapeutic and educational groups. Your privacy and choices will be respected at all times.

Phone: 5591 1164
Web: www.stopsexualviolence.com

Other Support Services

Statewide Sexual Assult Hotline
7 days per week, 7:30 AM -11:30 PM

Phone: 1800 010 120

National Sexual Assault, Family And Domestic Violence Counselling Line
24 hours, 7 days per week

Phone: 1800 737 732 (1800RESPECT)

Victim Assist Queensland
Open during business hours

Phone: 1300 546 587

From: Maria Nittis [redacted]
Sent: Tuesday, 6 September 2022 12:56 PM
To: Cathy Lincoln
Subject: Proforma
Attachments: VIFM Proforma 160622.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

This email originated from outside Queensland Health. DO NOT click on any links or open attachments unless you recognise the sender and know the content is safe.

- Some laboratories have ISO 9001:2015 accreditation which relates to quality control.
- Any new kit should be manufactured by a lab that meets the 2017 ISO Standard 18385 – this outlines the requirements to minimise contamination on products used to collect, store and analyse biological materials.
- Hazpak is one of only 9 companies globally who are accredited to ISO18385. They were certified in July 2020.
- NSW use them. NSW supplies kits to Tasmania. They are about to create our new kits in Victoria.

Cheers, Maria

Maria Nittis
Head of Service
Clinical Forensic Medicine
Forensic Services

[redacted]

65 Kavanagh Street
Southbank VIC
3006 Australia
[redacted]
vifm.org

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

The content of this e-mail and any attachments may be private and confidential, intended only for use of the individual or entity named. If you are not the intended recipient of this message you must not read, forward, print, copy, disclose, use or store in any way the information this e-mail or any attachment contains. If you are not the intended recipient, please notify the sender immediately and delete or destroy all copies of this e-mail and any attachments.

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

Victorian Institute of Forensic Medicine Forensic Medical Examination Record

Confidential

EXAMINER DETAILS			
LAST NAME		FIRST NAME	
DESIGNATION	REGISTRAR ☐	FMO ☐	VIFM SENIOR ☐
	SENIOR REGISTRAR ☐	NURSE ☐	OTHER

SENIOR EXAMINER DETAILS (if required)			
LAST NAME		FIRST NAME	
CONTACTED	DATE	TIME	
COMMENTS			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

INFORMANT DETAILS

FAMILY NAME		FIRST NAME	
RANK		VP NUMBER	
UNIT		DX	
PHONE		OTHER	

CALL DETAILS

DATE		TIME	
REQUIRED MORE INFORMATION	YES ☐ NO ☐	TIME INFORMATION RECEIVED	

BACKGROUND INFORMATION

ASSAULT DETAILS

DATE		TIME	
If uncertain of exact time, please provide a possible time range			
DATE FROM		TIME FROM	
DATE TO		TIME TO	
COMMENTS			
DATE ARRIVED AT EXAM			

TIMES		
LEFT FOR EXAM	ARRIVED AT EXAM	
COMMENCED EXAM	COMPLETED EXAM	
LEFT EXAM SITE	ARRIVED BACK / AT NEXT JOB	
COMMENTS		

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

CASE TYPE

SEXUAL ASSAULT ☐	COMPLAINANT ☐	OFFENDER ☐
	JUST IN CASE ☐	FAMILY VIOLENCE YES ☐ NO ☐
PHYSICAL ASSAULT (non family violence) ☐	COMPLAINANT ☐	OFFENDER ☐
PHYSICAL ASSAULT (family violence) ☐	COMPLAINANT ☐	OFFENDER ☐
POLICE ASSAULT ☐	ON POLICE OFFICER ☐	BY POLICE OFFICER ☐
	FAMILY VIOLENCE YES ☐ NO ☐	
OTHER		

ASSESSMENT TYPE

INJURY DOCUMENTATION ONLY	YES ☐ NO ☐	COMMENTS:
BIOLOGICAL SPECIMENS ONLY	YES ☐ NO ☐	COMMENTS:
BOTH	YES ☐ NO ☐	COMMENTS:
OTHER	YES ☐ NO ☐	COMMENTS:

FACILITY VIFM ☐

CRITICAL CARE UNIT	SECASA MONASH ☐	CASA HOUSE ROYAL WOMEN'S ☐	ECASA MAROONDAH ☐
	NCASA AUSTIN ☐	WCASA SUNSHINE ☐	
MULTIDISCIPLINARY CENTRE (MDC)	DANDENONG ☐	WYNDHAM ☐	FRANKSTON ☐
	GEELONG ☐	BENDIGO ☐	MILDURA ☐
	MORWELL ☐	BARWON ☐	
HOSPITAL	NAME		SUBURB
POLICE STATION	NAME		SUBURB
OTHER FACILITY	NAME		SUBURB

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

This is a Just in Case (JIC) Assessment ☐

CONSENT FOR EXAMINATION

- This examination is for medical purposes and to gather evidence that might inform a police investigation
- The examiner will explain each part of the examination and you can decline any part of the examination at any time
- Information provided and examination findings may form the basis of a report to police
- The information provided with your consent, will be stored securely by the Victorian Institute of Forensic Medicine (VIFM)
- Information (including images) may be viewed by other VIFM staff for purposes of peer review or by authorised staff in accordance with VIFM's privacy policies
- There is no guarantee that any of the findings / evidence collected will benefit your case
- Information and evidence collected will be handed to police (if you consent to this) and may then be taken to a forensic laboratory for testing
- The information that you provide, the examination findings and any other evidence gathered may be used in court
- Undertaking this examination does not oblige you to continue with police or legal action

I consent to:	Tick if appropriate	Initial
A physical examination	☐	
Collection of forensic samples	☐	
Release of information / samples to police and consent to have those samples tested	☐	
Sharing of any information with relevant agencies with regards to either my health or investigation of the alleged incident	☐	
The use of non-identifying data for purposes of teaching and education	☐	

The patient did / does not consent to:

SIGNATURES

LAST NAME	FIRST NAME	
SIGNATURE	IF NOT PATIENT ☐	DATE
EXAMINER SIGNATURE		DATE
INTERPRETER YES ☐ NO ☐	ID	
INTERPRETER LAST NAME	FIRST NAME	
SIGNATURE		

Consent provided by / discussed with:

PATIENT	☐	APPOINTED MEDICAL TREATMENT DECISION MAKER (AMTDM)	☐
GUARDIAN with authority to make medical decisions (VCAT)	☐	VCAT (VCAT)	☐
PATIENT'S SPOUSE OR DOMESTIC PARTNER (Spouse)	☐	PRIMARY CARER (PC)	☐
ADULT CHILD / PARENT / ADULT SIBLING (AC/P/AS)	☐		
TREATING PSYCHIATRIST (Psych)			
TREATING DOCTOR (Doctor)			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

This is a Just in Case (JIC) Assessment ☐

CONSENT FOR IMAGING

- The best way to document injuries is to provide a written description, draw them on a diagram and image them.
- Any images that are taken, with your consent, will be stored securely by the Victorian Institute of Forensic Medicine (VIFM).
- Images may be viewed by other VIFM staff for purposes of peer review or by authorized staff in accordance with VIFM's privacy policies
- Any images collected may be sent to police as part of the evidence collected from your examination.
- Images may subsequently also be viewed by lawyers, judge, jury (or other parties legitimately involved in any subsequent court case / investigation)
- Even if you consent to images being taken, you can choose to not have images taken of certain parts of your body. You will let the examiner know and this will be noted

I consent to:	Tick if appropriate	Initial
Images being collected	☐	
The use of non-identifying images for purposes of teaching and education	☐	

SIGNATURES

LAST NAME	FIRST NAME	
SIGNATURE	IF NOT PATIENT ☐	DATE
EXAMINER SIGNATURE		DATE
INTERPRETER YES ☐ NO ☐	ID	
INTERPRETER LAST NAME	FIRST NAME	
SIGNATURE		

Consent provided by / discussed with:

PATIENT	☐		APPOINTED MEDICAL TREATMENT DECISION MAKER (AMTDM)	☐	
GUARDIAN with authority to make medical decisions (VCAT)	☐		VCAT (VCAT)	☐	
PATIENT'S SPOUSE OR DOMESTIC PARTNER (Spouse)	☐		PRIMARY CARER (PC)	☐	
ADULT CHILD / PARENT / ADULT SIBLING (AC/P/AS)	☐				
TREATING PSYCHIATRIST (Psych)					
TREATING DOCTOR (Doctor)					

Additional Comments

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

PATIENT DETAILS

SEX	FEMALE ☐ MALE ☐ OTHER ☐
ADDITIONAL INFO (If "Other")	
CONTACT DETAILS	PHONE 1: PHONE 2:
	EMAIL:
	ADDRESS:
	Safe to leave message on phone / email or to mail: ☐

MEDICAL AND SURGICAL HISTORY

CURRENT MEDICATIONS

ALLERGIES **YES** ☐ **NO** ☐

MEDICATION	REACTION

CONTRACEPTION INFORMATION

IMMUNISATION INFORMATION

Hepatitis B	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

PRESENT AT HISTORY

NAME	ROLE

HISTORY PROVIDED page one

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HISTORY PROVIDED page two

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

TECHNOLOGY FACILITATED VIOLENCE (TFSV) YES ☐ NO ☐

Medium used	Dating App ☐	Social Media ☐	Other ☐
Name of medium (if known)			
How long ago was first online contact		Was this the first physical meeting	Yes ☐ No ☐
If not, how long between first online contact and first meeting in person?		If they have met in person before, how many prior face to face meetings	

Strangulation occurred: YES ☐ NO ☐

STRANGULATION CHECKLIST	YES	NO	UNSURE	STILL PRESENT	ADDITIONAL INFORMATION
Loss of consciousness or memory	☐	☐	☐	☐	
Difficulty or pain with breathing after assault	☐	☐	☐	☐	
Incontinence of urine / faeces	☐	☐	☐	☐	
Cough after assault	☐	☐	☐	☐	
Vomiting after assault	☐	☐	☐	☐	
Nose bleed after assault	☐	☐	☐	☐	
Tinnitus after assault	☐	☐	☐	☐	
Tender throat (internal) after assault	☐	☐	☐	☐	
Tender neck (external) after assault	☐	☐	☐	☐	
Trouble swallowing after assault	☐	☐	☐	☐	
Swelling neck / tongue	☐	☐	☐	☐	
Injury inside mouth from assault	☐	☐	☐	☐	
Limb weakness / Paraesthesia after assault	☐	☐	☐	☐	

Change in voice No Change ☐ Croaky ☐ Hoarse ☐ Breathy ☐ Unable to project ☐ Voice cuts out ☐

If any symptoms were present, indicate for how long they lasted after the assault and whether or not they are still present

Additional Comments

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

SUMMARY OF NON-CONSENSUAL ACTS Patient has no recollection of assault: ☐

ASSAILANT ONE - Referred to in history as:

COMPLAINANT ANATOMY	OFFENDER ANATOMY				
	PENIS	CONDOM	EJACULATION	DIGIT	TONGUE / MOUTH
VAGINA	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
ANUS	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
MOUTH	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
PENIS		Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
Comments:					

ASSAILANT TWO - Referred to in history as:

COMPLAINANT ANATOMY	OFFENDER ANATOMY				
	PENIS	CONDOM	EJACULATION	DIGIT	TONGUE / MOUTH
VAGINA	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
ANUS	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
MOUTH	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
PENIS		Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
Comments:					

ASSAILANT THREE - Referred to in history as:

COMPLAINANT ANATOMY	OFFENDER ANATOMY				
	PENIS	CONDOM	EJACULATION	DIGIT	TONGUE / MOUTH
VAGINA	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
ANUS	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐
MOUTH	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
PENIS		Yes ☐ No ☐ Unsure ☐	Yes ☐ No ☐ Unsure ☐		
Comments:					

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

POST ASSAULT ACTIVITY

Activity	Once	More than once	No	Not relevant	Comment
Used sanitary tampon / pad / menstrual cup	☐	☐	☐	☐	
Showered / bathed / swam	☐	☐	☐	☐	
Douched	☐	☐	☐	☐	
Cleaned teeth / mouth	☐	☐	☐	☐	
Urinated	☐	☐	☐	☐	
Defaecated	☐	☐	☐	☐	
Vomited	☐	☐	☐	☐	
Eaten food	☐	☐	☐	☐	
Drank	☐	☐	☐	☐	
Changed Clothes	YES	☐	NO	☐	

Gynaecological Information	Yes	No	Not Sure	Comment
Menstruating at time of assault	☐	☐	☐	
Menstruating at time of exam	☐	☐	☐	
Reached menopause	☐	☐	☐	
Date of last menstrual period			Estimated time if actual date not known:	
Patient Pregnant	☐	☐		How many weeks:

Recent Relevant Sexual Activity

No recent relevant sexual activity ☐ **Not asked** ☐

			Barrier used	When
Receptive Penile Oral (last 24 hours)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Receptive Penile Vaginal (last 4 days)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Receptive Penile Anal (last 2 days)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Insertive Penile Oral	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	
Insertive Penile Anal (last 3 days)	Y ☐ N ☐ N/A ☐	With Offender ☐ Other ☐	Y ☐ N ☐	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

TOXICOLOGY COLLECTED	YES ☐	NO ☐	
EXAMINER DETAILS			
LAST NAME		FIRST NAME	
ORGANISATION	CFM (VIFM) ☐		
DESIGNATION	REGISTRAR ☐	FMO ☐	VIFM SENIOR ☐
	SENIOR REGISTRAR ☐	NURSE ☐	OTHER
POLICE OFFICER DETAILS			
LAST NAME		FIRST NAME	
RANK		VP NUMBER	
UNIT		DX	
PHONE		OTHER	

TOXICOLOGY SAMPLE COLLECTION			**S:**	
SAMPLE	DATE	TIME	COLLECTOR	VIFM SECURITY SEAL
URINE				
BLOOD				
COMMENTS:				

REASON FOR SAMPLING					
Were the drugs / alcohol all voluntarily consumed / Was there a suspected spiking incident / Was the patient forced / coerced into taking any of the drugs or alcohol (involuntary)?					
ALL VOLUNTARY	☐	SUSPECTED SPIKING	☐	INVOLUNTARY	☐

ALCOHOL CONSUMPTION PRIOR TO ASSAULT (provide best estimations or time ranges)			
Date drinking started		Time drinking started	
Date drinking finished		Time drinking finished	
Additional Comments			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HISTORY REQUIRED FOR ALCOHOL BACK CALCULATION	
Weight of patient (kg)	Height of patient (cm)
Additional info:	
Please indicate if any alcohol was consumed **within 12 hours** after the assault: Provide further details e.g. amount, when drinking started and stopped.	YES ☐ NO ☐

DRUGS THAT POTENTIALLY MIGHT BE FOUND IN TOX SAMPLES	
GHB SUSPECTED: YES ☐ **NO** ☐ **DIDN'T ASK** ☐	
Please provide information regarding drugs / medications taken within the last 72 hours Include amount, date and last time consumed, mode of administration etc. if known	
Name drug / medication	
Name drug / medication	
Name drug / medication	
Name drug / medication	
Name drug / medication	
Name drug / medication	
Additional Comments:	
CANNABIS USED IN LAST 2 WEEKS: YES ☐ **NO** ☐ **DIDN'T ASK** ☐	
Additional information e.g. last taken date and time	

SYMPTOMS THAT MAY INDICATE DRUG AFFECT AT TIME OF ASAULT			
Slurred speech ☐	Difficulty Walking ☐	Vomiting ☐	Memory Loss ☐
Weakness ☐	Difficulty Speaking ☐	Difficulty Moving ☐	Dizziness ☐
Blurred Vision ☐	Difficulty Concentrating ☐	Confusion ☐	Falls / Accidents ☐
Increased Sociability ☐	Increased Sweating ☐		
ADDITIONAL COMMENTS:			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

PRESENT AT EXAMINATION

NAME	ROLE

GENERAL OBSERVATIONS

TRIAGE DATA	**Not triaged** ☐		Unable to obtain triage data ☐	
Blood Pressure	Pulse Rate	GCS	Oxygen Sat	Temp

CONTAMINATION REDUCTION ISSUES

IMAGES

Images Taken YES ☐ NO ☐	FIRST IMAGE	LAST IMAGE

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

FORENSIC SAMPLES **IS THIS A JUST IN CASE KIT? YES ☐ NO ☐**

SAMPLES COLLECTED YES ☐ NO ☐	EASY COLLECT REFERENCE SWAB TAKEN ☐ Ensure this is packaged separately
TIME PERIOD BETWEEN INCIDENT AND SAMPLING	

ORAL SAMPLES YES ☐ NO ☐

			Looking for DNA from			
Peri-oral (around lips)	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Oral rinse			☐			
	☐	☐	☐	☐	☐	☐

FEMALE GENITAL SAMPLES YES ☐ NO ☐

			Looking for DNA from			
External Labial	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Vulval	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Low Vaginal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Transvaginal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
High Vaginal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Endocervical	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐

ANAL SAMPLES YES ☐ NO ☐

			Looking for DNA from			
Perianal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Anal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Rectal	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

SKIN SAMPLES YES ☐ NO ☐

Site			Looking for DNA from			
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐

MALE GENITAL SAMPLES YES ☐ NO ☐

Circumcised	Yes ☐	No ☐	Looking for DNA from			
Penile Shaft	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Coronal Sulcus	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
Glans	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐
	Swab ☐	Slide ☐	Semen ☐	Epithelial cells ☐	Saliva ☐	Blood ☐

FINGERNAIL SAMPLES YES ☐ NO ☐

RIGHT HAND			LEFT HAND		
Thumb ☐	Swab ☐	Clipping ☐	Thumb ☐	Swab ☐	Clipping ☐
Index ☐	Swab ☐	Clipping ☐	Index ☐	Swab ☐	Clipping ☐
Middle ☐	Swab ☐	Clipping ☐	Middle ☐	Swab ☐	Clipping ☐
Ring ☐	Swab ☐	Clipping ☐	Ring ☐	Swab ☐	Clipping ☐
Little ☐	Swab ☐	Clipping ☐	Little ☐	Swab ☐	Clipping ☐

ADDITIONAL ITEMS YES ☐ NO ☐

Item	Description	Bag number
Sanitary Product	Tampon ☐ Pad ☐ Cup ☐	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

UNDERPANTS YES ☐ NO ☐		
Collected in FMEK ☐	Collected for police ☐	Police had already collected them ☐
Description		
When were they worn? (e.g. during / immediately after)		
Did the offender touch them	Yes ☐	No ☐
	Not Certain ☐	
Where were they touched		

BRA YES ☐ NO ☐		
Collected in FMEK ☐	Collected for police ☐	Police had already collected them ☐
Description		
When were they worn? (e.g. during / immediately after)		
Did the offender touch them	Yes ☐	No ☐
	Not Certain ☐	
Where were they touched		

ADDITIONAL CLOTHING YES ☐ NO ☐		
Item	Description	Specific area where touched, if known.

HANDOVER TO POLICE YES ☐ NO ☐ **HANDOVER TO COUNSELLOR** YES ☐ NO ☐

FMEK No YES ☐ NO ☐

TOX No YES ☐ NO ☐

CLOTHING BAGS No YES ☐ NO ☐

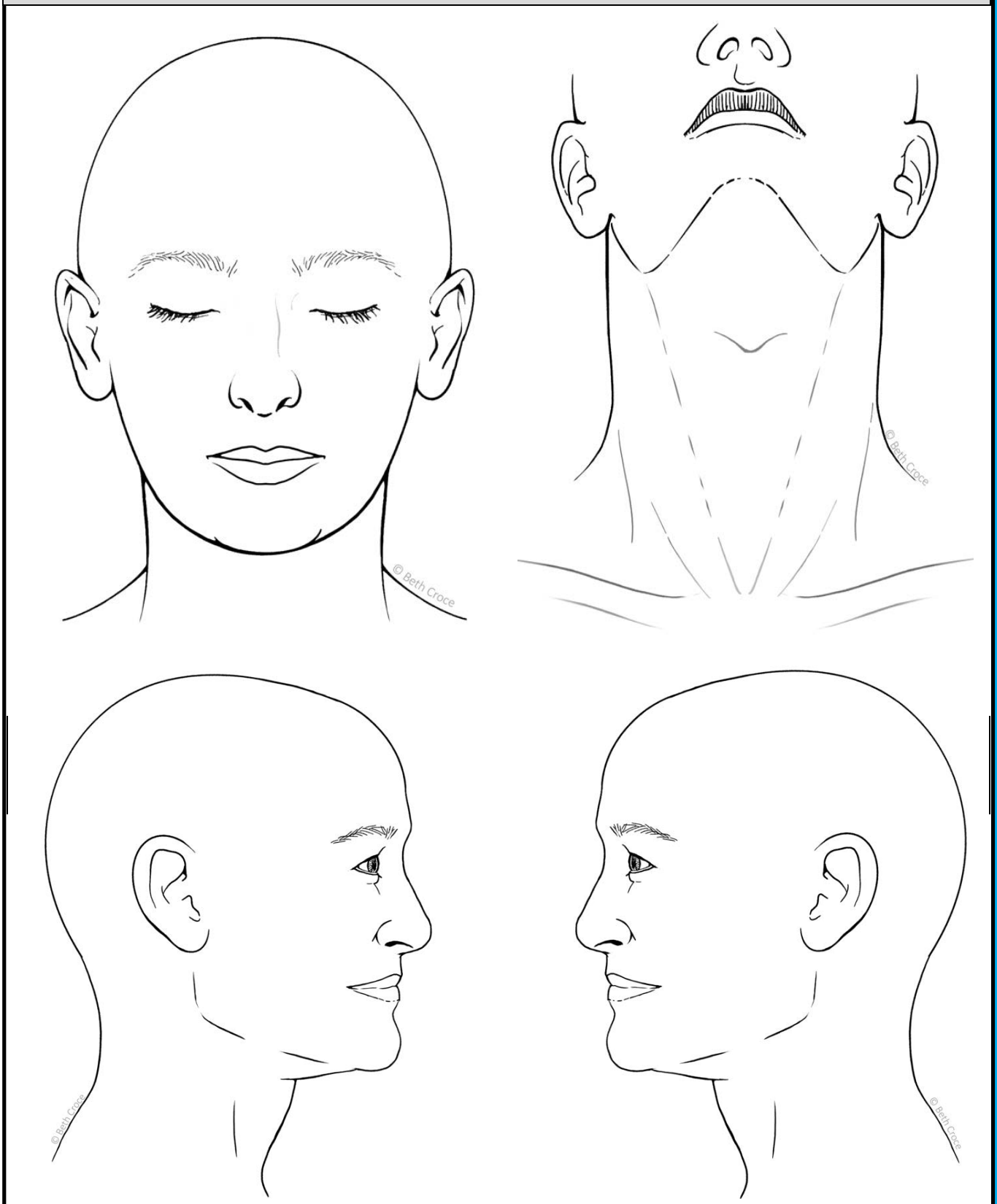
HANDED TO

DATE AND TIME: **SIGNED:**

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HEAD

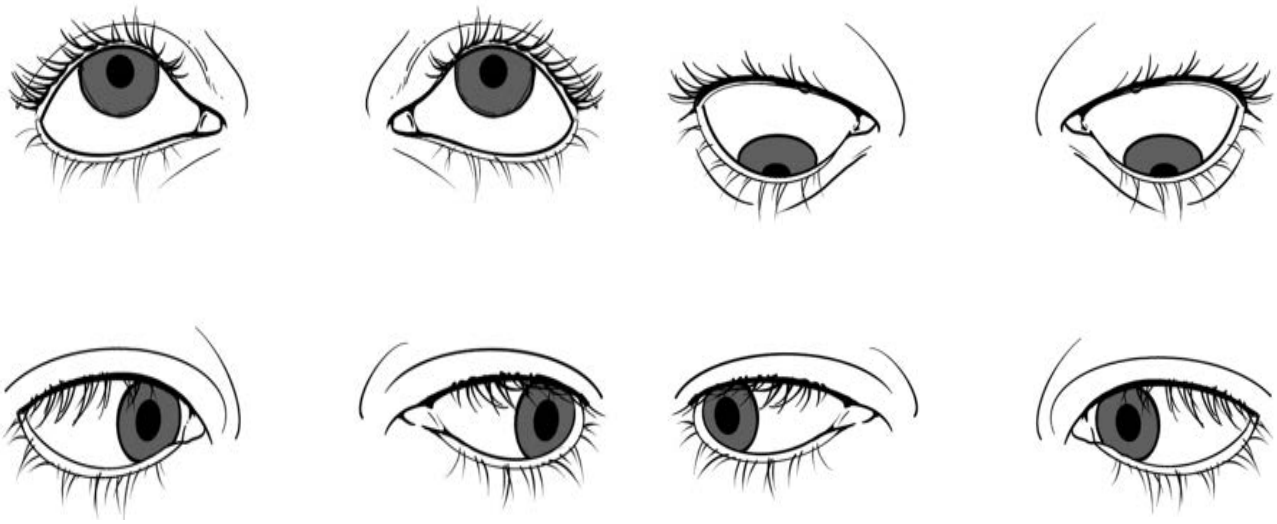


AREAS EXAMINED	SCALP ☐	FACE ☐	INSIDE MOUTH ☐	NECK ☐	OUTER EARS ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

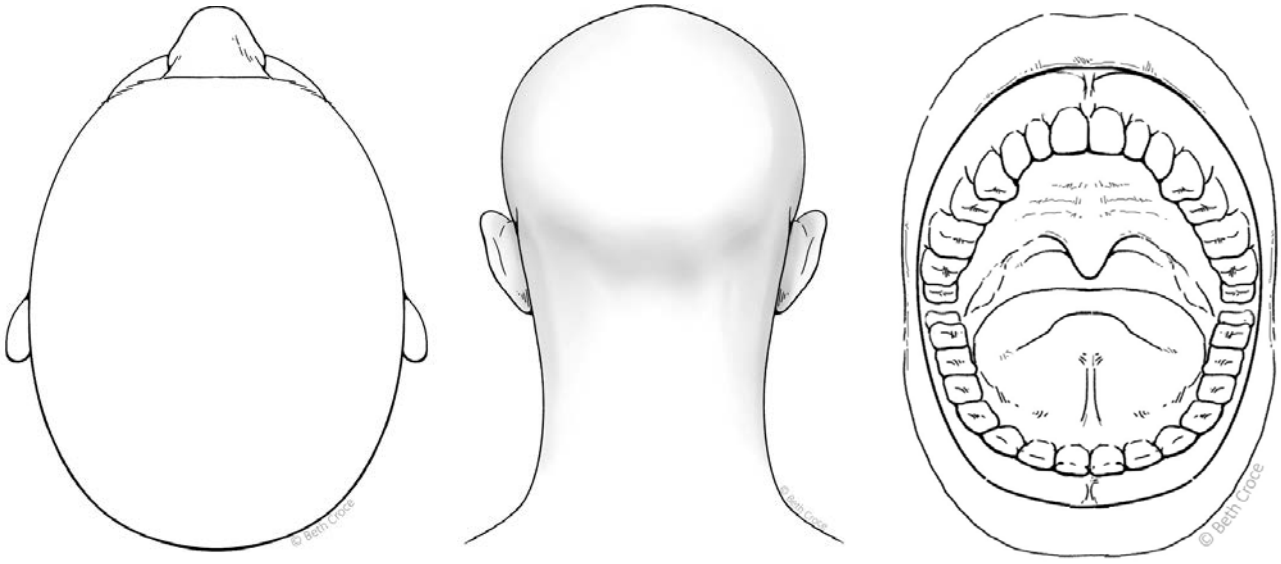
FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HEAD



Ophthalmoscope findings

Otoscope findings



VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

STRANGULATION EXAM **UNDERTAKEN** ☐ **NOT UNDERTAKEN** ☐

SIGN	YES	NO	ADDITIONAL INFORMATION
Drooling	☐	☐	
Stridor	☐	☐	
Dyspnoea	☐	☐	
Clearing throat	☐	☐	
Obvious change to voice	☐	☐	
Ongoing cough	☐	☐	
Injury to neck - especially bruises and abrasions	☐	☐	
Petechiae seen Yes ☐ No ☐	External auditory canal ☐ Tympanic membrane ☐ Face ☐ Neck ☐ Upper chest ☐ Conjunctiva ☐ Soft palate ☐		
Subconjunctival haemorrhage	☐	☐	
Tender laryngeal cartilage	☐	☐	
Loss of laryngeal click	☐	☐	
Subcutaneous crepitus	☐	☐	
Haemotympanum or perforation	☐	☐	
Paraesthesia / weakness	☐	☐	

If symptoms present, indicate for how long they lasted after the assault and whether or not they are still present

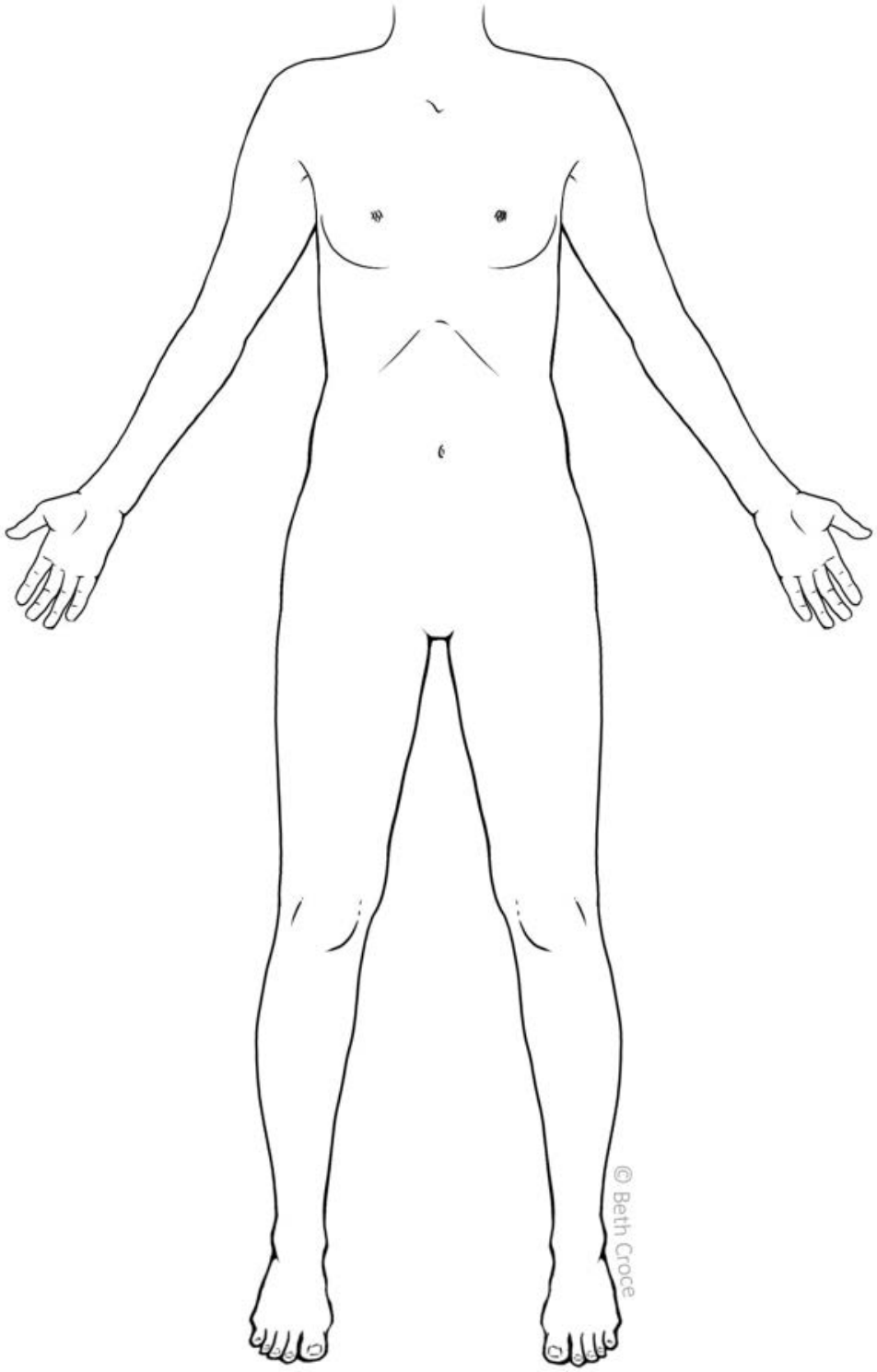
Additional Notes

If patient requires referral for additional tests, please note here:

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

FRONT OF BODY

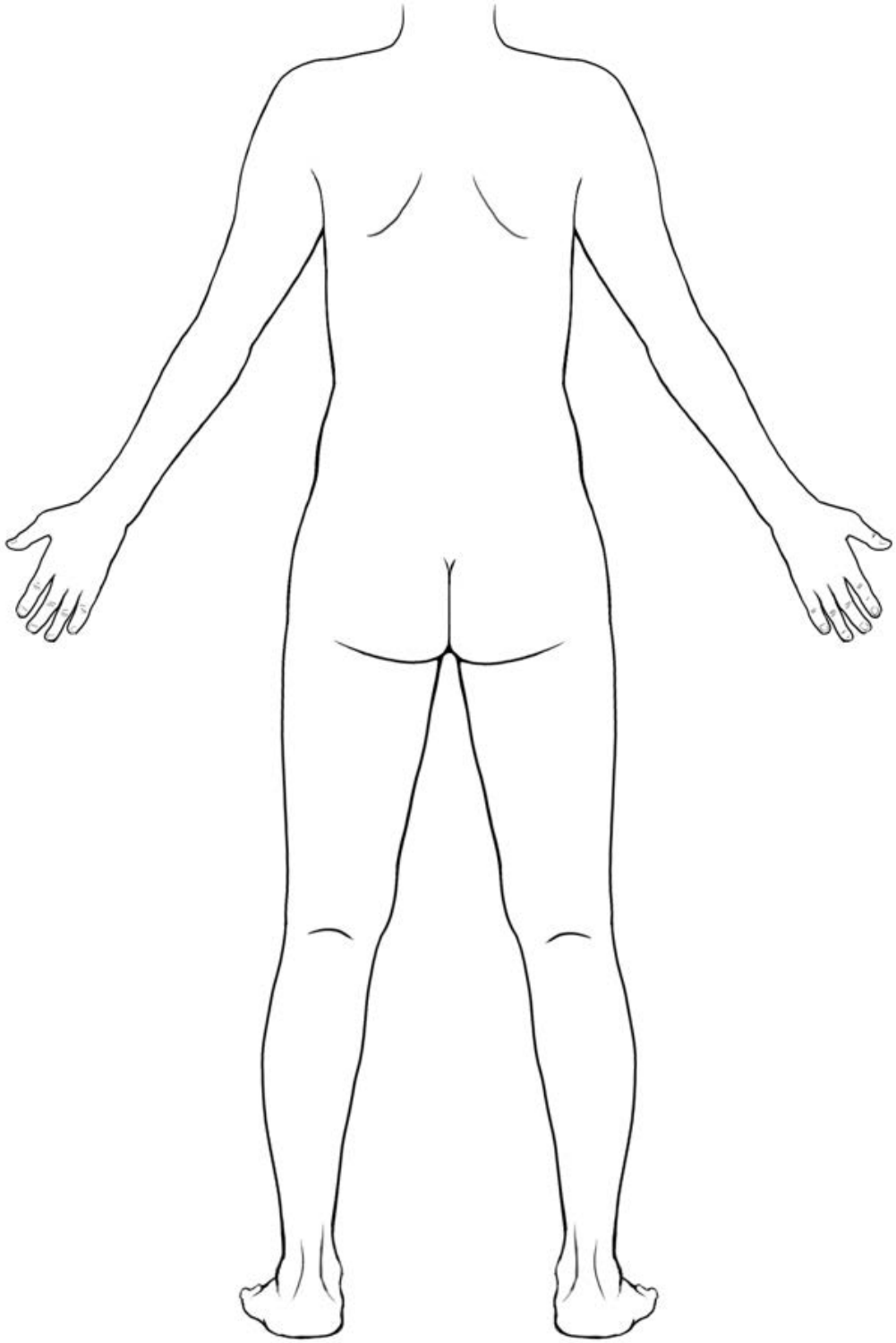


AREAS EXAMINED	CHEST ☐	ABDOMEN ☐	ARMS FRONT ☐	LEGS FRONT ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

BACK OF BODY

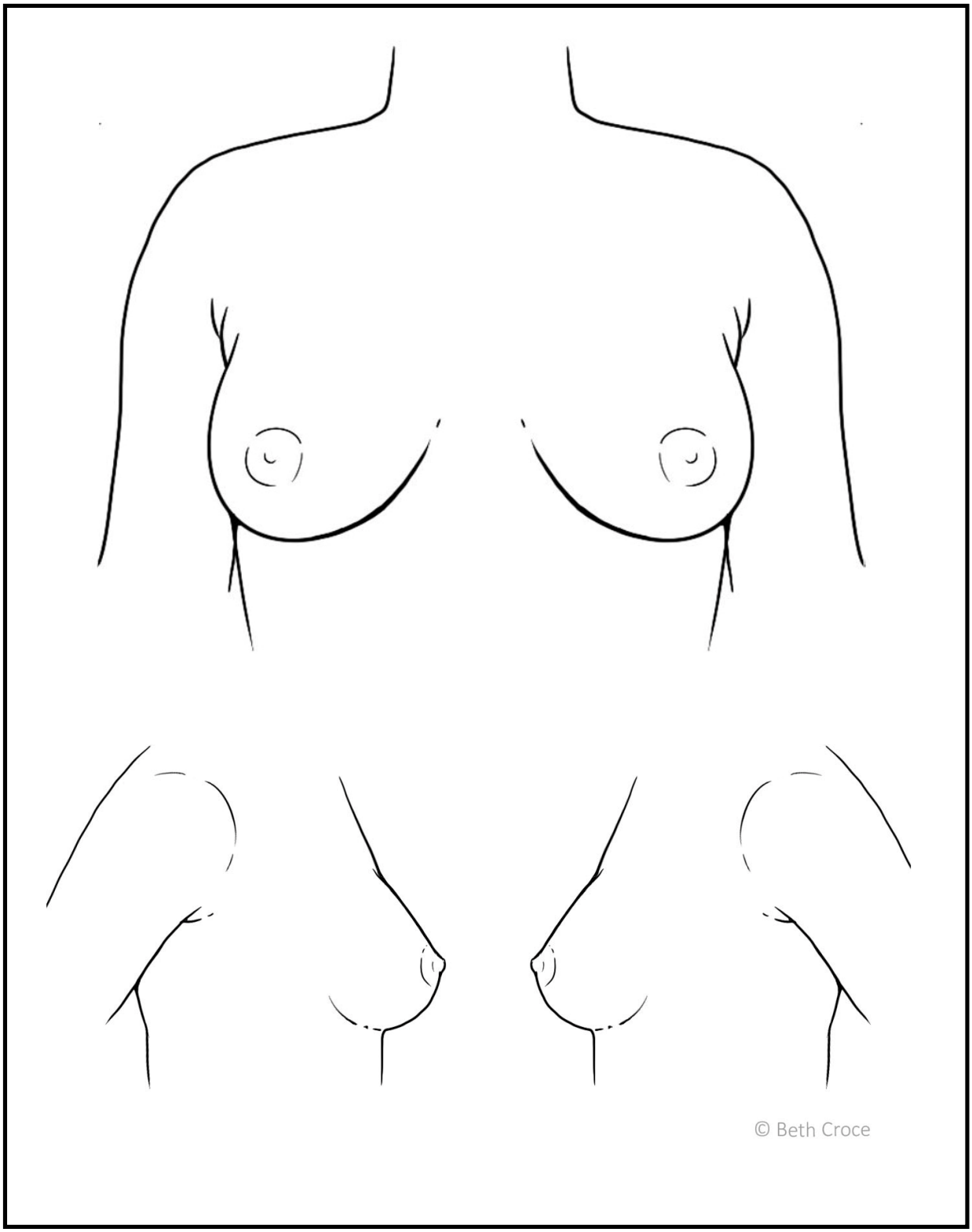


AREAS EXAMINED	UPPER BACK ☐	LOWER BACK ☐	BUTTOCKS ☐	ARMS BACK ☐	LEGS BACK ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

BREASTS

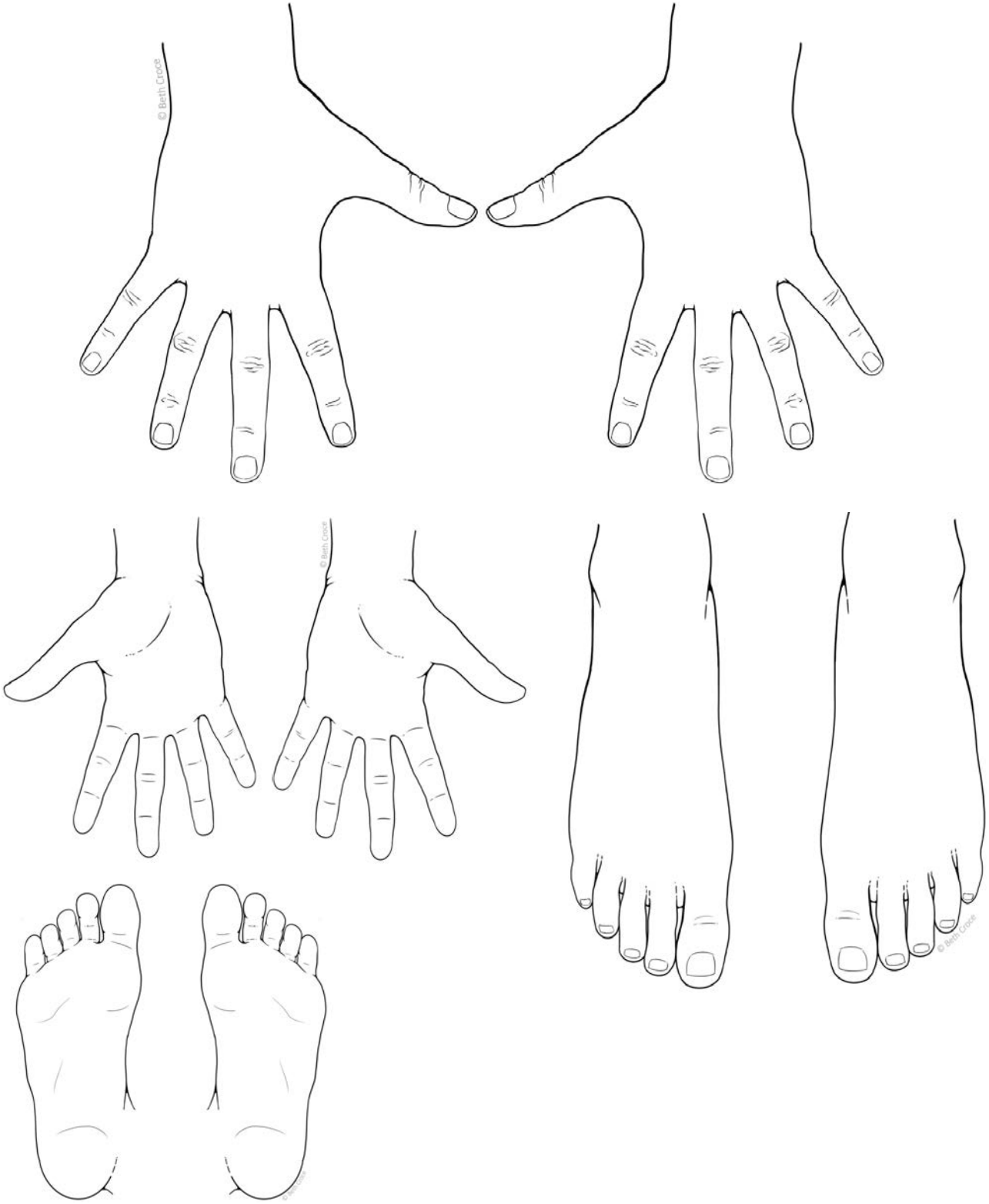


AREAS EXAMINED	BREASTS ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

HANDS and FEET

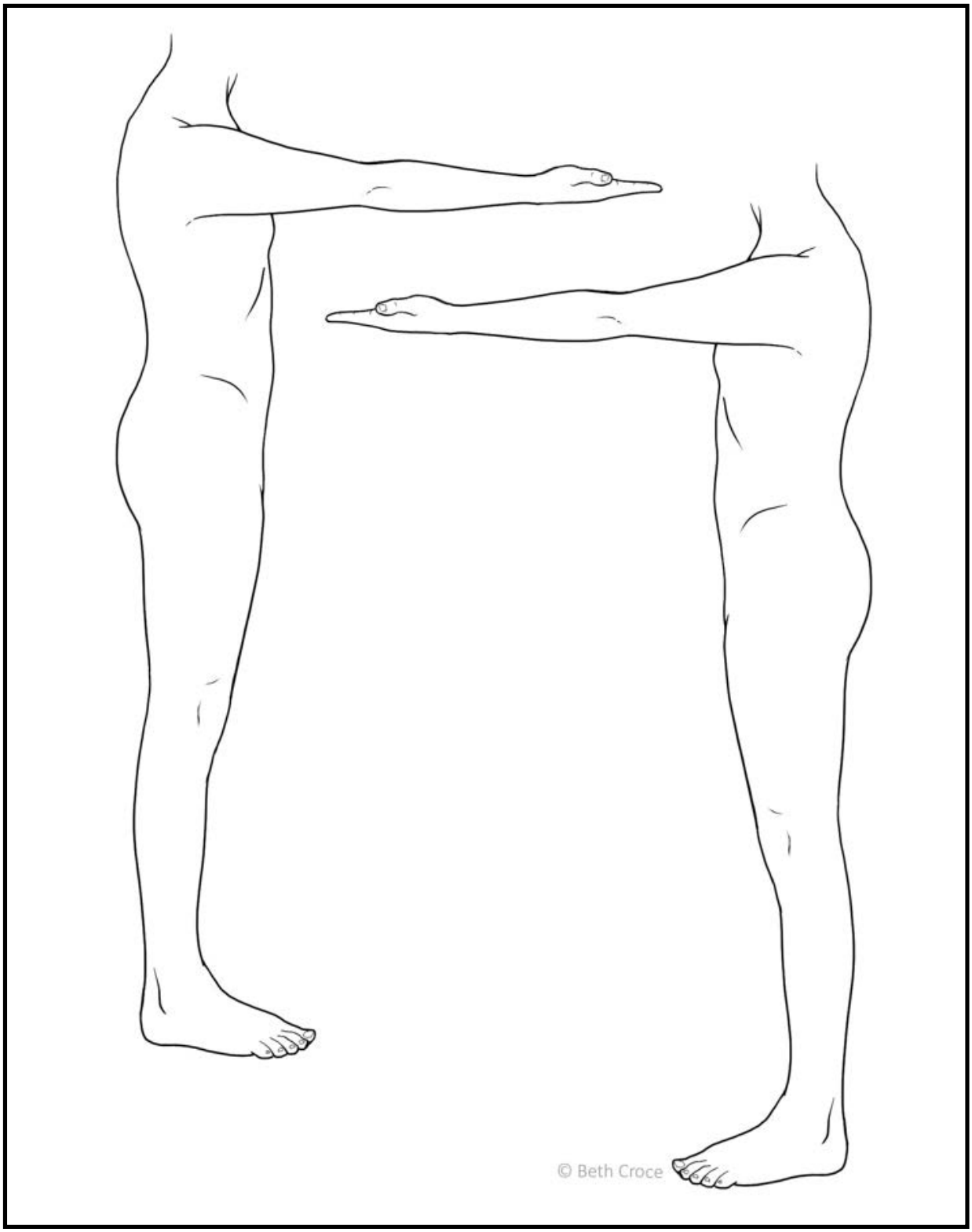


AREAS EXAMINED	BACK HANDS ☐	PALMS ☐	TOP FEET ☐	SOLES FEET ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

OUTER BODY

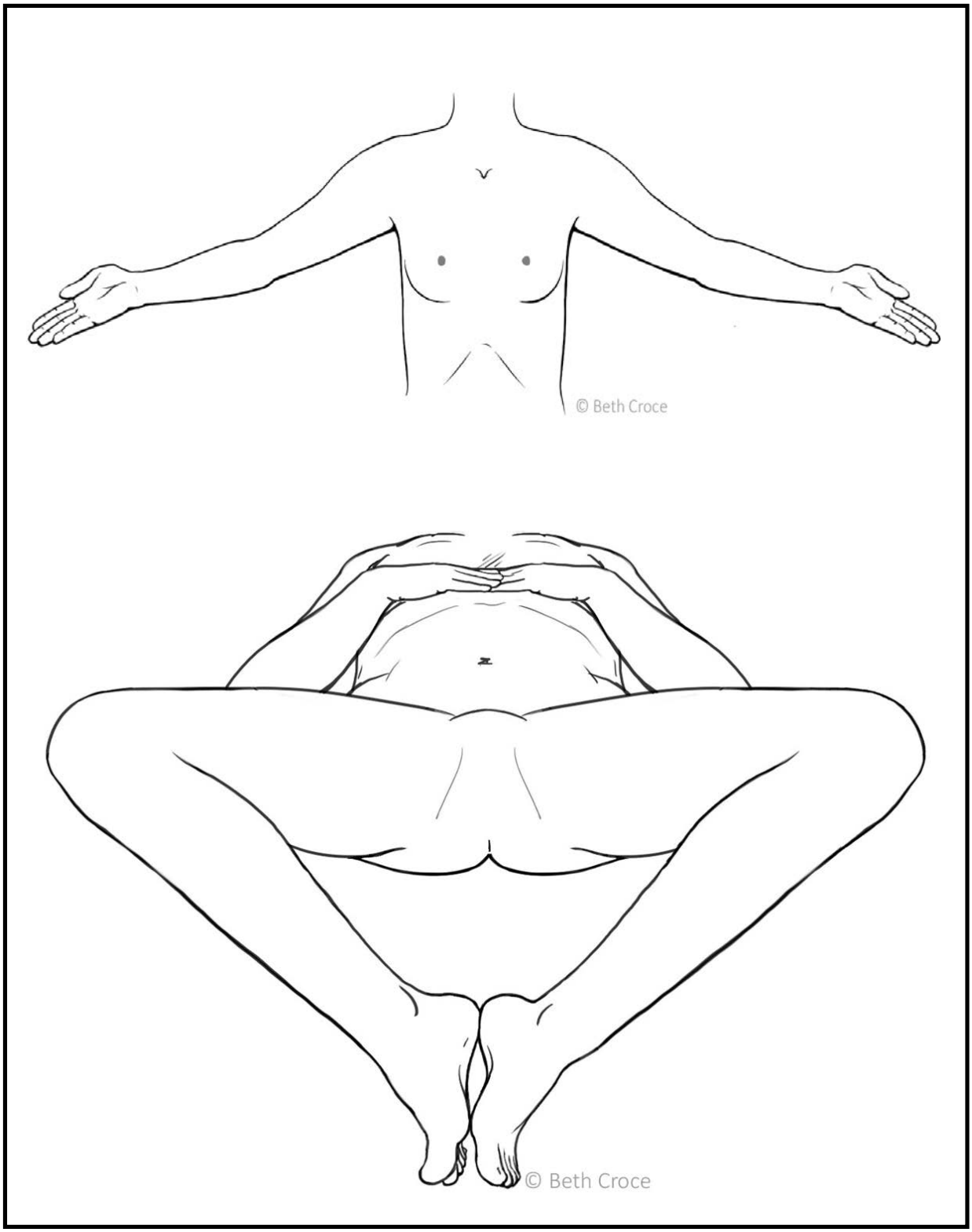


AREAS EXAMINED	OUTER ARMS ☐	SIDES OF CHEST ☐	HIPS ☐	OUTER LEGS ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

INNER ARMS / LEGS / BREASTS

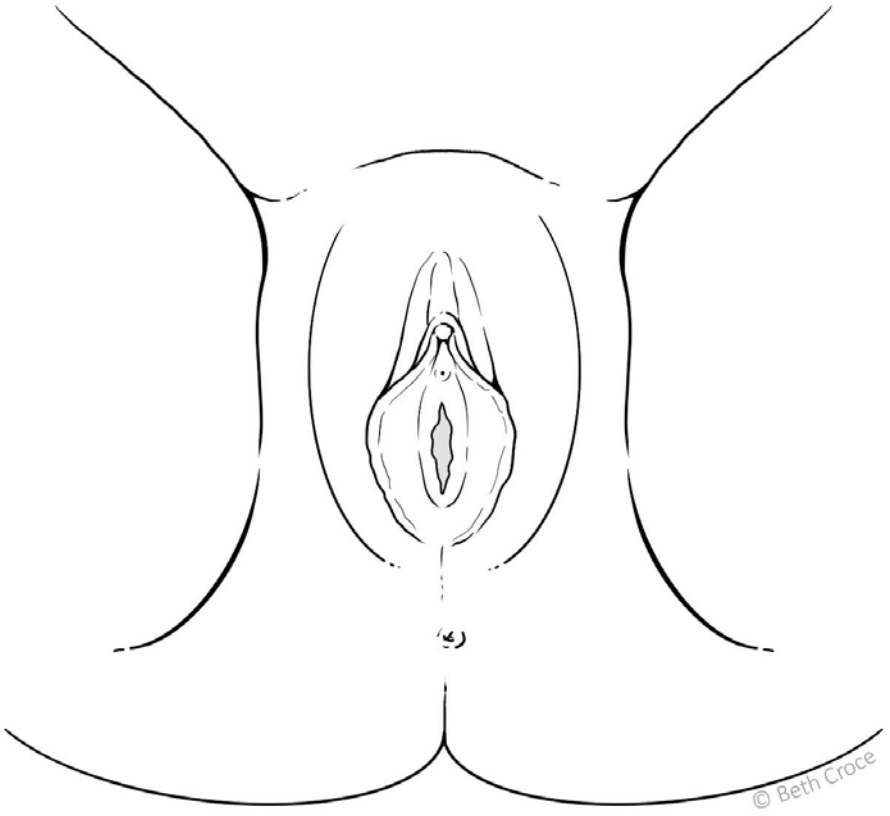


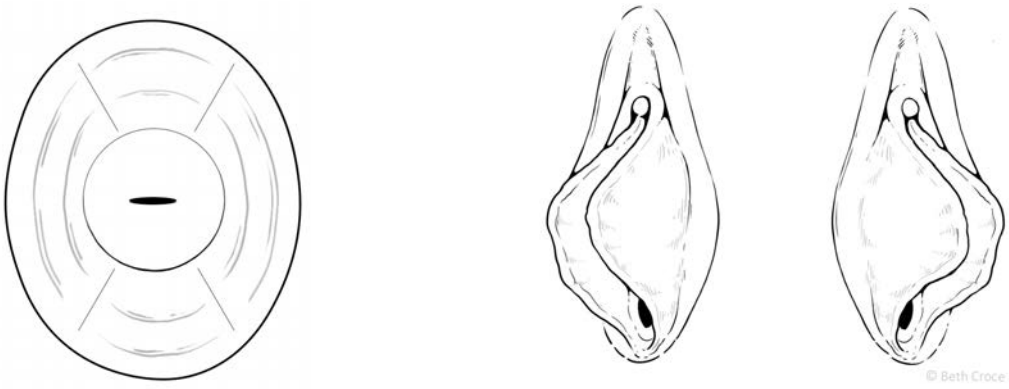
AREAS EXAMINED	INNER ARMS ☐	INNER LEGS ☐	

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

FEMALE GENITALIA





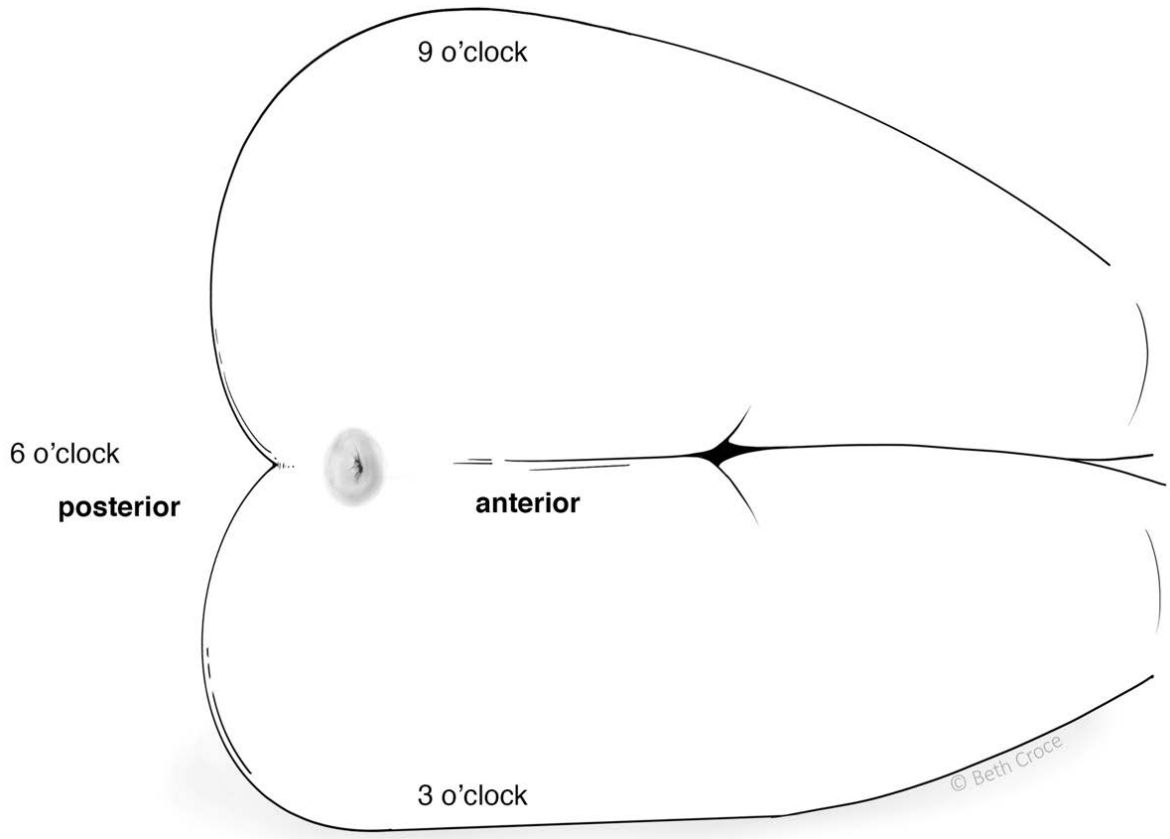
SPECULUM	COMPLETE ☐	INCOMPLETE ☐	NOT PERFORMED ☐
REASON:			

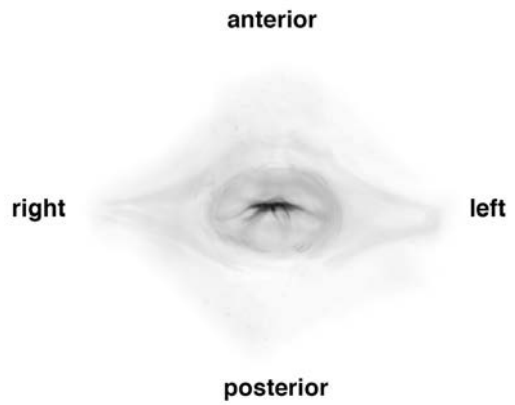
AREAS EXAMINED	MONS ☐	LABIA MAJORA ☐	LABIA MINORA ☐	FOSSA NAVICULARIS ☐
	URETHRA ☐	CLITORIS ☐	HYMEN ☐	POSTERIOR FOURCHETTE ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

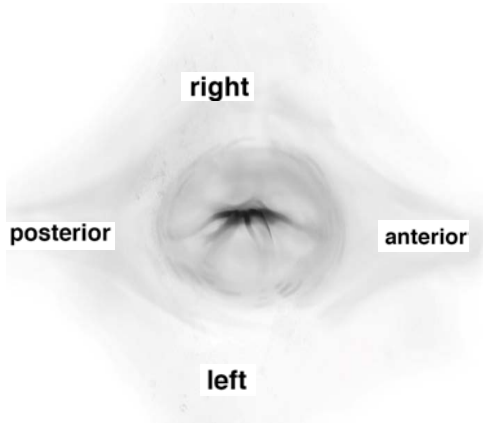
FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

ANUS and PERIANAL AREA





Patient Lying on Back



Patient in Left Lateral Position

PROCTOSCOPY	COMPLETE ☐	INCOMPLETE ☐	NOT PERFORMED ☐

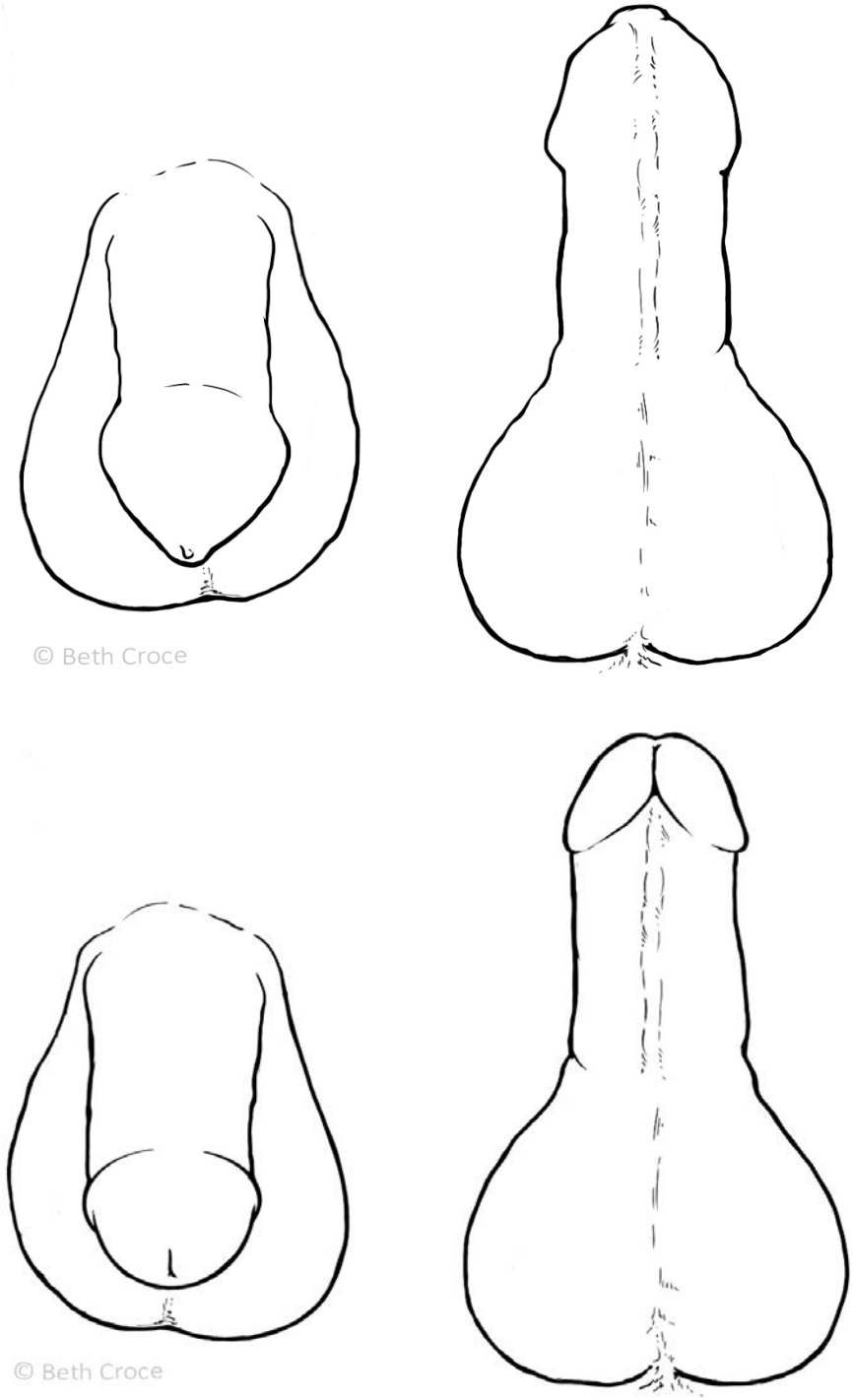
FINDINGS

AREAS EXAMINED	PERIANAL ☐	ANUS ☐	RECTUM ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

MALE GENITALIA



CIRCUMCISED	☐
NOT CIRCUMCISED	☐

AREAS EXAMINED	PENIS ☐	FORESKIN ☐	SCROTUM ☐	TESTICLES ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	
DOB	UNKNOWN ☐

Referral Letter to Health Services - Assault			
DATE PRESENTATION		TIME PRESENTATION	
PRESENTED TO		FACILITY	
FORENSIC EXAMINER		DESIGNATION	
DATE / TIME OF ALLEGED ASSAULT			
DETAILS OF ALLEGED ASSAULT	Receptive Anal ☐ Receptive Vaginal ☐ Receptive Oral ☐ Other		
INJURIES OF SIGNIFICANCE			
OTHER ISSUES OF CONCERN			
SEXUAL HEALTH FOLLOW UP RECOMMENDED (2 weeks, 3 months +/- 6 months)			
Medications provided	Levonorgestrel ☐	Azithromycin ☐	HIV NPEP ☐
	Hepatitis B immunisation ☐		
Other			
Baseline tests taken today	FBC ☐	UEC ☐	LFT ☐
	Hep B (sAg, sAb, cAb) ☐	HIV screen ☐	Syphilis screen ☐
	Urine Chlamydia PCR ☐	Urine Gonorrhoea PCR ☐	
HIV Risk Factors	MSM ☐	High prevalence country of origin ☐	Known HIV ☐
Would you please send me a copy of any unexpected outcomes with your patient's permission?			
EXAMINER SIGNATURE			
Forensic Medical Officer / Nurse Examiner—Victorian Institute of Forensic Medicine—Phone (03) 9684 4480			

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

ISSUES and OTHER NOTES

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	FMEK
DOB	UNKNOWN ☐

TELEPHONE ASSESSMENT FOR THOSE PATIENTS BEING SENT TO AN MDC			
	YES	NO	INFORMATION
Will the assessment start at 20:00 or earlier	☐	☐	
Has there been a head injury	☐	☐	
Is the patient pregnant	☐	☐	
Has there been a history of memory loss	☐	☐	
Has there been a history of loss of consciousness	☐	☐	
Is there confusion	☐	☐	
Is there significant intoxication	☐	☐	
Is the re significant drowsiness	☐	☐	
Has there been strangulation	☐	☐	
Has there been significant smothering or mechanical chest or abdomen compression	☐	☐	
Is there a history of seizures	☐	☐	
Is there bleeding from injuries including anal or genital	☐	☐	
Is the victim of sexual assault male	☐	☐	
Is the alleged offender from an area of high HIV prevalence	☐	☐	
Is the patient immunized against Hepatitis B	☐	☐	
Is the patient able to walk unaided	☐	☐	
Are there acute signs of mental health issues e.g. agitated, delusional, suicidal, selfharm, auditory hallucinations,	☐	☐	
Is there significant intellectual delay?	☐	☐	
Other concerns?	☐	☐	

Based on the above, has a decision been made to go to the hospital instead? YES ☐ NO ☐

VICTORIAN INSTITUTE OF FORENSIC MEDICINE

FAMILY NAME	URL
GIVEN NAME	
DOB	UNKNOWN ☐

MEDICAL CERTIFICATE	
DATE	
This is to certify that:	
Is / has been suffering from a medical condition and will be / has been unfit for work / school	
Condition (optional):	
From (Date):	
To (Date): (inclusive)	
Examiner's name:	
Examiner's signature	

EXAMINER's CONTACT DETAILS	
C/O Clinical Forensic Medicine Unit, Victorian Institute of Forensic Medicine, 65 Kavanagh Street, Southbank. 3006.Melbourne.	
Phone:	(03) 9684 4480
Email address:	

BUREAU VERITAS
Certification

Certificate of Compliance

Awarded to

SANAX MEDICAL

15 EXHIBITION DRIVE, MALAGA, WA 6090
AUSTRALIA

Bureau Veritas certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards indicated below

STANDARD

ISO 18385:2016

SCOPE OF SUPPLY

PROVISION OF CLEAN ROOM PREPARED DNA AND EVIDENCE COLLECTION KITS

Original Approval Date: **21 November 2016**

Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: **20 November 2022**

To check the validity of this certificate please call tel. **1800 855 190**

Further clarification regarding the scope of this certificate and the applicability of the Management System requirements may be obtained by consulting the organisation.

Certificate Number: **AU003760-1**

[redacted]

Date: **22 November 2019**

Andrew Mortimore
General Manager - Bureau Veritas Certification

Managing office: Bureau Veritas Pty Ltd, 3/435 Williamstown Road, Port Melbourne, Victoria, 3207

Issuing office: Bureau Veritas Pty Ltd, 3/435 Williamstown Road, Port Melbourne, Victoria, 3207

BUREAU VERITAS

From: Cathy Lincoln
Sent: Friday, 10 December 2021 12:03 PM
To: Lara Keller
Subject: FW: Contamination reduction kit
Attachments: DSC_0119.JPG; DSC_0120.JPG; DSC_2764.jpg; DSC_3565.jpg; Gloves.pdf.jpg; Outer kit.jpg

Lara,

Just for your information, these are the sort of kits being used in other states for clinical forensic examinations involving sampling (Vic and NSW at least).

They allow forensic sampling to be done when there is no dedicated stocked clinical forensic sampling room managed by a CFM service as we have at GCUH and Logan Hospitals. Everything necessary is included for the clinician; essentially a SAIK or Offender Sampling Kit is used together with a DNA contamination reduction kit (sheet, gown, surface covers, pens etc) for each examination.

As discussed there are many problems with current SAIKs in Qld (unsealed, contaminated swabs provided, wooden swab sticks with potential to break) and we have no offender kit at all. The potential for contamination is significant especially when examinations are carried out in an ED without a dedicated service with an understanding of the DNA contamination issues.

I understand VIFM are currently negotiating with HazPak (based in Dandenong, Vic) to purchase these kits for their CFMU.

Cathy

Dr Cathy Lincoln
Forensic Physician
Deputy Director, Forensic Medicine,
Gold Coast University Hospital
[redacted]

From: Maria Nittis [redacted]
Sent: Wednesday, 8 December 2021 9:56 AM
To: Cathy Lincoln <[redacted]
Subject: Contamination reduction kit

This email originated from outside Queensland Health. DO NOT click on any links or open attachments unless you recognise the sender and know the content is safe.

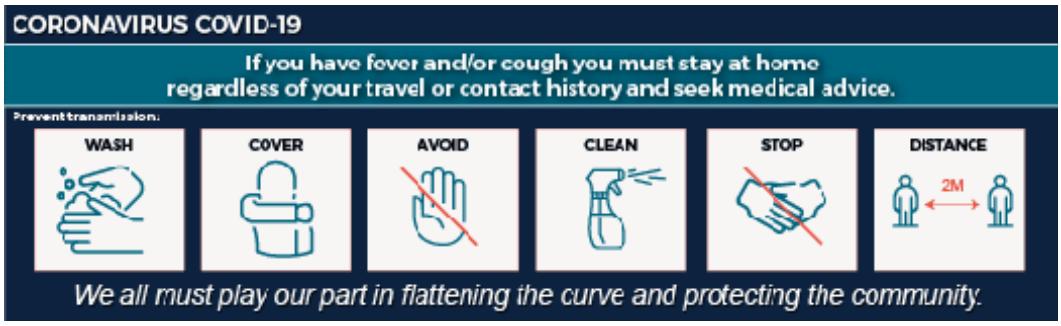
It includes examination bed cover, patient privacy sheet, gloves (medium and large – 9 pairs of each I think), patient gown and examiner gown, examination trolley cover

Maria Nittis
Head of Service
Clinical Forensic Medicine

[redacted]

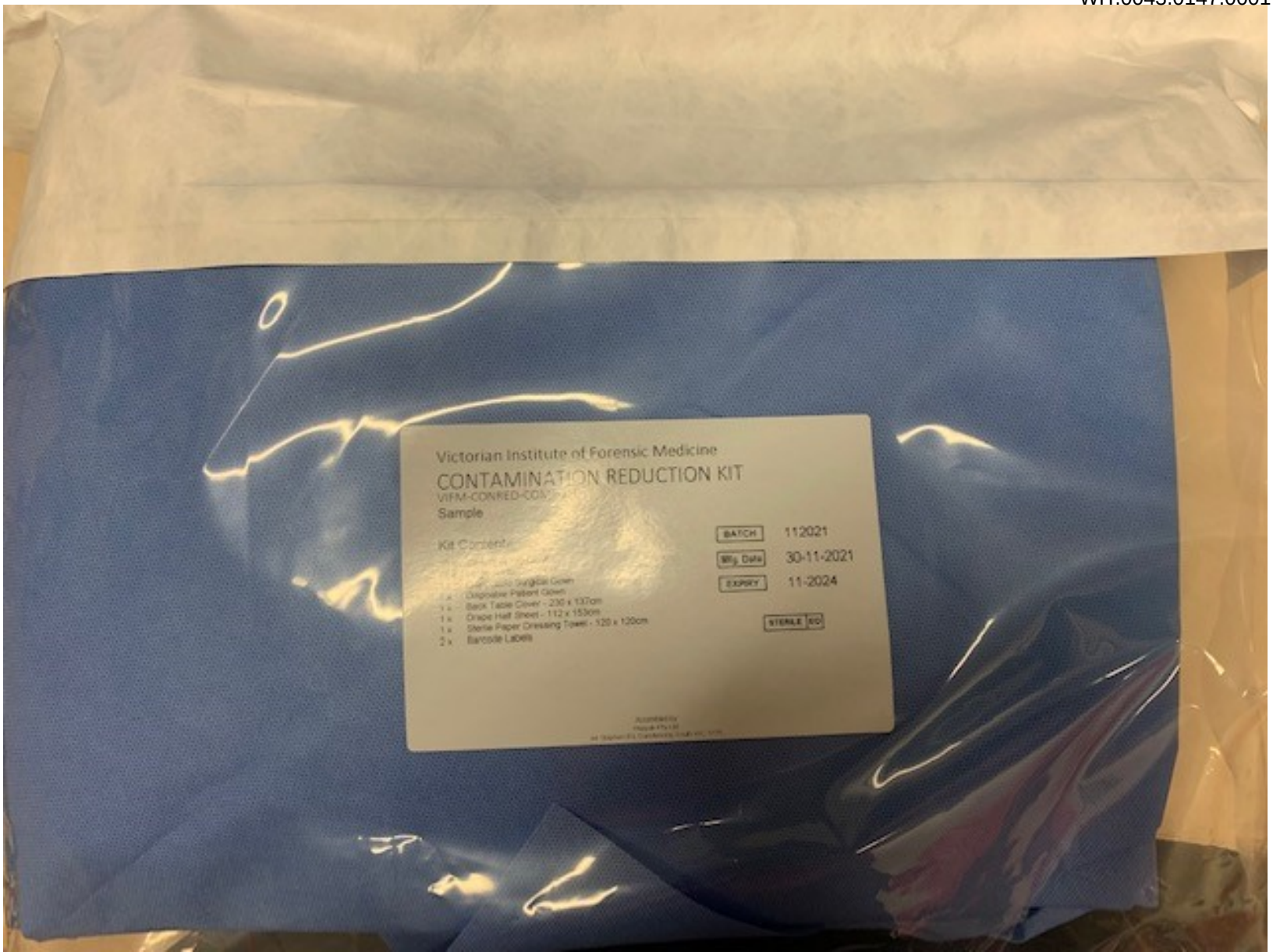
65 Kavanagh Street
Southbank VIC
3006 Australia
[redacted]
vifm.org

VICTORIAN INSTITUTE
OF FORENSIC MEDICINE



The content of this e-mail and any attachments may be private and confidential, intended only for use of the individual or entity named. If you are not the intended recipient of this message you must not read, forward, print, copy, disclose, use or store in any way the information this e-mail or any attachment contains. If you are not the intended recipient, please notify the sender immediately and delete or destroy all copies of this e-mail and any attachments.

L
M


Victorian Institute of Forensic Medicine
CONTAMINATION REDUCTION KIT
Sample
BATCH
112021
Mfg. Date
30-11-2021
EXPIRY
11-2024
Disposable Patient Gown
Back Table Cover - 230 x 137cm
Drape Half Sheet - 112 x 153cm
Sterile Paper Dressing Towel - 120 x 120cm
Barcode Labels
STERILE EO

PENS AND SCALES

Exhibits Index – Jacqueline Jane Thomson

Question	Exhibit	Document Title
5	JJT-1	Curriculum vitae – Jacqueline Thomson
8	JJT-2	Caring for people disclosing sexual assault Health Service Directive
10	JJT-3	ECAV Grad Cert in medical & Forensic Management of Adult Sexual Assault
10	JJT-4	UND, Master of Nursing (forensic nursing)
14	JJT-5	Number of SANEs in Queensland as of 8 October 2022
15	JJT-6	PDC61656 (Sexual Assault Nurse Examiner Course) CQU 1
15	JJT-7	PDC61656 (Sexual Assault Nurse Examiner Course) CQU 2
18	JJT-8	Guideline for the Management of care for people 14 years and over disclosing Sexual Assault
18	JJT-9	Conducting Child Sexual Assault Examinations Guideline
23	JJT-10	CQHHS Credentialing process for defining a specific scope of clinical practice for nurses and midwives
23	JJT-11	Draft SANE CSoP Template
27	JJT-12	SAIK non-conformance email from FSS
27	JJT-13	Communication to SANE-FNE CoP re SAIK non-conformance

STATEMENT OF JACQUELINE JANE THOMSON

I, **Jacqueline Jane Thomson, Assistant Director of Nursing,** of 51 Herschel Street, Brisbane do solemnly and sincerely declare that:

Question 1 – State your full name and current position/title at Queensland Health (QH).

1. Jacqueline Jane THOMSON, Assistant Director of Nursing, Clinical Forensic Medicine Unit, Forensic and Scientific Services.

Qualifications and experience

Question 2 – List your tertiary qualifications, the year you obtained them, and the institute from which the qualifications were obtained.

2. My tertiary qualifications are as follows:

- 2022 - Master of Business Administration candidate - Griffith University, Queensland
- 2021 - Introduction to the medical and forensic management of adult sexual assault - NSW Education Centre Against Violence
- 2015 - Graduate Certificate in Policy Analysis - Griffith University, Queensland
- 1996 - Bachelor of Nursing (Post-Registration) - Queensland University of Technology
- 1994 - Midwifery Certificate - Royal Women's Hospital, Queensland
- 1991 - General Nursing Certificate - Royal Brisbane Hospital, Queensland
- AHPRA Registration No: NMWOOO1439881 - Registered Midwife (Qld)
- AHPRA Registration No: NMWOOO1439882 - Registered Nurse (Qld)

Question 3 – Detail your work history since you graduated from university.

[redacted] [redacted]

Jacqueline Jane Thomson

3. I am a senior nurse and midwife and have worked in Queensland Health for over 34 years. I have worked across rural and metropolitan settings with expertise in tertiary and primary level nursing and maternity care. For the past 14 years, I have worked in various units within the Department of Health in middle and senior management roles and have achieved many successes in the development, implementation, and evaluation of major legislative reform, as well as state-wide programs of work and projects regarding the improvement in the delivery of healthcare services.

Queensland Health	34 years and 3 months		
	Clinical Forensic Medicine Unit, Forensic and scientific services	March 2020 - current	Assistant Director of Nursing
	Office of the Deputy Director General, Clinical Excellence Queensland	August 2018 – March 2020	Manager
	Healthcare Improvement Unit, Clinical Excellence Queensland	October 2016 – August 2018	Manager
	Office of the Chief Nursing ad Midwifery Office, Office of the Director-General	March 2015 – October 2016	Director of Nursing and Midwifery
	Clinical Access and Redesign Unit, Health Systems Innovation Branch	September 2013 – March 2015	Principal Project Officer
	Patient Safety Quality Improvement Service,	August 2010 –	Principal Project Officer

[redacted] [redacted]

Jacqueline Jane Thomson Witness

	Centre for Healthcare Improvement	September 2013	
	Maternity Unit, Primary, Community and Extended Care Branch	June 2008 – August 2010	Principal Project Officer
	Women's and Children's Unit, Kingaroy Hospital	March 2005 – June 2008	Nurse Unit Manager

Employment history 1988 - 2005

June 2004 – March 2005	Acting After Hours Nurse Unit Manager – Level 3 Theatre, Admissions and Staff Unit Royal Children's Hospital and Health Service District
March 2003 – June 2004	Clinical Nurse School Based Youth Health Nurse Program Royal Children's Hospital and Health Service District
April 2002 – January 2003	Project Officer AO5 Quality Management The Prince Charles Hospital Health Service District
July 2001 – April 2002	Clinical Nurse Alcohol and Drug Service Indooroopilly Community Team The Prince Charles Hospital Health Service District

[redacted] [redacted]

Jacqueline Jane Thomson Witness

March 1994 – July 2001	Registered Nurse/Midwife Neonatal Intensive Care Nursery Royal Brisbane and Women's Hospital Health Service
July 1999 – April 2000	Practice Nurse McDowall Village Medical Centre, Brisbane
March 1993 – March 1994	Student Midwife Royal Women's Hospital, Brisbane.
May 1992 – March 1993	Registered Nurse Royal Children's Hospital, Brisbane
August 1991 – May 1992	Registered Nurse Royal Brisbane Hospital, Brisbane
July 1988 – August 1991	Student Nurse (General) Royal Brisbane Hospital, Brisbane.

Question 4 – Detail your appointments to any boards and/or committees. Include the year appointed, the year you ceased your position on the board or committee, and the purpose of the board or committee.

4. Not applicable.

Question 5 – Attach a current CV.

5. Please see Exhibit JJT-1.

[redacted] [redacted]

Jacqueline Jane Thomson Witness

Your role and unit

Question 6 – Provide an overview of your responsibilities, identify the unit you work in, and identify the role and function of that unit.

6. In my role, I:

- Provide high level contemporary, strategic, operational, and professional nursing leadership and management to Clinical Forensic Medicine Unit nursing personnel that provide healthcare at the Brisbane City Watchhouse;
- Work collaboratively with internal and external stakeholders to shape corporate and clinical governance within the Brisbane City Watchhouse;
- Administer the Sexual Assault Nurse Examiner Program including, but not limited to professional support, system support, education, research, and professional leadership;
- Utilise clinical expertise when providing sexual assault policy advice to the Minister, the Director-General, Deputy Director-General, senior departmental executives and stakeholders that may have significant political, community and business impacts; and
- Lead in facilitating initiatives and outcomes of the SANE-FNE Community of Practice to support professional, clinical, and organisational imperatives for Hospital and Health Service Sexual Assault Services.

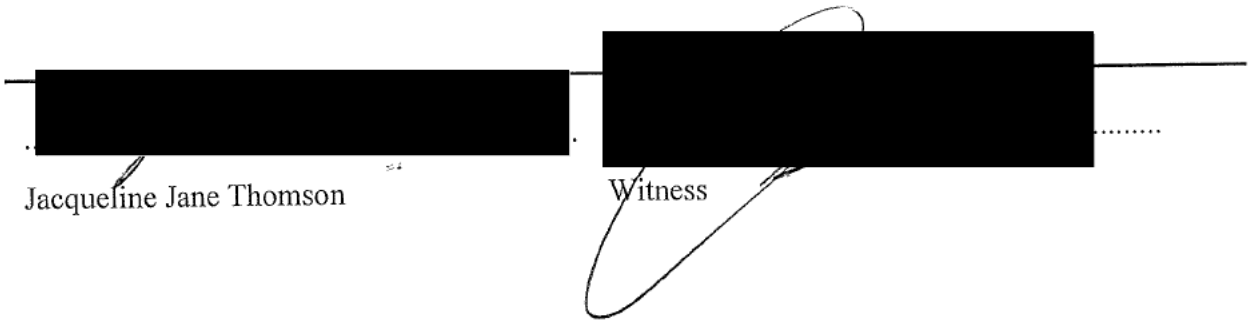
7. I work within the Clinical Forensic Medicine Unit (CFMU), Forensic and Scientific Services located at 51 Herschel Street, Brisbane City QLD 4000.

8. The role of CFMU is to provide medicolegal services for the State of Queensland. The scope of CFMU includes:

- examining victims and alleged perpetrators in criminal investigations at the request of the Queensland Police Service;

- providing state-wide education and 24/7 support to clinicians performing adult sexual assault forensic examinations;
- overseeing the sexual assault nurse examiner (SANEs) program;
- providing advice to the Queensland Police Service and the Queensland Ambulance Service around Natural Causes Deaths;
- medicolegal reporting and statement writing for criminal matters including:
  - documenting and interpreting injuries of victims of crime and alleged offenders
  - interpreting toxicology reports
  - assessing clinical effects and toxicology of alcohol and drugs
  - performing traffic medicine assessments (fitness to drive, drugs and driving, medical conditions and driving)
  - assessing medical fitness to appear in court or at an interview;
- medicolegal reporting and statement writing for the Coroners Court of Queensland including:
  - reviewing healthcare-related deaths
  - preparing reports for complex death investigations
  - interpreting post-mortem toxicology results;
- providing expert evidence to the courts; and
- providing healthcare advice to Queensland Police Service watch houses.

Question 7 – Outline who you report to, who reports to you, the staff you are responsible for and their positions, roles, and responsibilities.



Jacqueline Jane Thomson

Witness

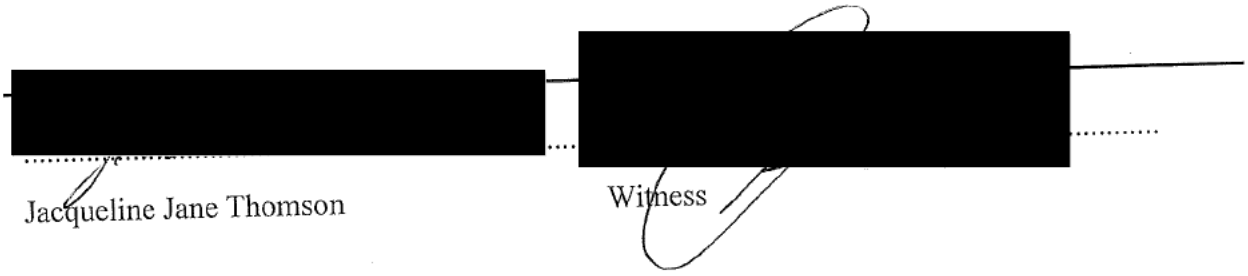
9. I report operationally to Dr Adam Griffin, Director, CFMU. I am budgeted for 3.25 FTE nursing positions. I have a head count of 5 nursing personnel (permanent and temporary) and a casual nursing pool of 2 nurses.

10. All nurses employed by CFMU are Clinical Nurse Consultants (CNCs) at the Nursing Grade 7 classification. They work to top of scope and are accountable for the advanced clinical practice and provision of clinical assessment, planning and treatment, based on critical analysis of symptoms and medical history as well as:

- Being accountable for outcomes and achievement of service performance targets;
- Being responsible for a specific portfolio and /or the completion of discrete projects;
- Being responsible for the implementation of clinical governance;
- Participating in quality initiatives and research to inform practice and practice change;
- Contributing to budget integrity and fiscal management; and
- Complying with professional standards, contemporary HR requirements, organisational principles, policy and procedure and legislative requirements.

Question 8 – Who is ultimately responsible for nurses conducting forensic medical examinations in in Queensland? If it is not you or the Clinical Forensic Medicine Unit (CFMU), clarify your role and the role of the CFMU with respect to such nurses.

11. Since July 2019, HHSs have been responsible for ensuring the delivery of essential, accessible, and sustainable sexual assault services in Queensland. A range of enabling instruments were developed and implemented to support the introduction of Caring for People Disclosing Sexual Assault Health Service Directive (Please see Exhibit JJT-2). Additionally, Queensland Health has, and continues to provide re-current funding to enable HHSs nurses and midwives to undertake training to provide sexual assault services (the targeted funding provides for backfill, associated travel costs and provision for nurses from remote HHSs). Furthermore, HHSs receive funding on a quarterly basis to cover recall costs for each sexual assault examination performed.



Jacqueline Jane Thomson Witness

12. I am responsible for the administration of the Sexual Assault Nurse Examiner Program including, but not limited to professional support, system support, education, research, and professional leadership.

13. Clinical Forensic Medicine Unit medical personnel revised the original SANE program, conduct quarterly SANE workshops, and provide clinical advice 24 hours a day, seven days a week.

Type of nurse examiners

Question 9 – Can any nurse employed or engaged by QH conduct a forensic medical examination of a sexual assault complainant or a person accused of sexual assault? If no, what type of nurses can conduct such examinations?

14. No. For a Queensland Nurse and/or Midwife to conduct a forensic examination they must have completed the relevant qualifications. In the case of a FNE (Forensic Nurse Examiner), a Graduate Certificate in Forensic Medicine or a Graduate Certificate in Medical and Forensic Management of Adult Sexual Assault is required. As a SANE, they are required to have completed an appropriate SANE academic course.

15. SANEs are not permitted to conduct a sexual assault examination on a person accused of sexual assault. A FNE is authorised to do so.

16. A SANE can provide a Statement of Fact but cannot offer opinion. FNEs can provide expert opinion.

17. For clinicians doing this work who do not have appropriate qualifications and expertise in the field, they should be working closely within a supportive multi-disciplinary team environment with appropriate clinical governance, ideally at an HHS level to ensure local service needs are met.

Question 10 – What is a forensic nurse examiner (FNE)? What qualifications and/or experience are necessary for a nurse to be a forensic nurse examiner? What are their responsibilities?

18. A Forensic Nurse Examiner is a nurse who is qualified to provide consultation and testimony for legal proceedings that are either civil or criminal in nature and relate to nursing practice, care given, and opinions rendered regarding findings such as injury interpretation.

19. A high proportion of Queensland FNEs were sponsored by the Department of Health to enrol in the Master of Forensic Medicine at Monash University, Melbourne, Australia. They exited the course with a Graduate Certificate of Forensic Medicine after the successful completion of 24 credit points. Monash University no longer offer this course to nurses. The course is now only available to medical, dental or radiographer professionals.

20. Nationwide, there are two institutions that offer post graduate forensic study.

21. The New South Wales Education Centre Against Violence (ECAV) has a Graduate Certificate in Medical and Forensic Management of Adult Sexual Assault. Please see Exhibit JJT-3.

22. The University of Notre Dame Australia offers a Master of Nursing with Forensic nursing as a specialisation. Please see Exhibit JJT-4.

23. The responsibilities of Forensic Nurse Examiners include examination and treatment of victims and alleged perpetrators in investigation of all crimes against the person, including sexual assault of adults. This includes gaining informed consent, forensic history taking, evidence collection, documentation, and interpretation of injuries.

Question 11 – Approximately how many forensic nurse examiners are there currently? Are they located in every Hospital and Health Service (HHS), and is there any HHS where they are particularly concentrated?

24. As of 17 September 2021, there were 23 Forensic Nurse Examiners in Queensland.

25. Darling Downs Hospital and Health Service have five FNEs, Sunshine Coast Hospital and Health Service have six FNEs and Townsville Hospital and Health Service have 4 FNEs.

Question 12 – Are forensic nurse examiners being currently recruited and/or trained?

a. If yes, at which institution(s) are they being trained, and how many are being recruited each year?

26. Two Metro North Hospital and Health Service SANEs have recently completed the ECAV Graduate Certificate in Medical and Forensic Management of Adult Sexual Assault.

b. If no, why not?

27. Queensland Health are working to achieve a quantum of SANEs to provide an essential and sustainable service as close to home as possible for victims/survivors of sexual assault, and who are interested in completing additional study in forensic nursing. A long-term goal is to work with a local tertiary partner to provide a FNE course in Queensland.

Question 13 – What is a sexual assault nurse examiner (SANE)? What qualifications and/or experience are necessary for a nurse to be a SANE? What are their responsibilities?

28. A SANE is a qualified, experienced nurse and/or midwife that has completed the necessary training and education to provide comprehensive medical forensic care to patients that present for services following a sexual assault.

29. For Queensland HHS nurses and midwives to be considered for the SANE course, the following elements must be satisfied:

- experienced nurses or midwives (minimum of 2 years of experience as a RN/RM);
- registered with the Australian Health Practitioner Regulation Agency;
- enrolment supported by the Hospital and Health Service Executive Director of Nursing and Midwifery (or equivalent); and
- agreeable to completing all course requirements and offering a return of service obligation by participating in an on-duty and/or on-call roster to conduct sexual assault examinations for a 12-month period.

30. Responsibilities of the SANE include:

- Providing emotional support;
- Assessing for mandatory reporting status and report when appropriate;
- Gaining informed consent;
- Ensuring medical clearance has been achieved where and when necessary;
- Assessing the patient's emotional state to determine if further evaluation or treatment is necessary;
- Documenting sexual assault medical forensic history taking and perform exam;
- Noting any areas of injury, including bruising, bite marks, and scratches;
- Obtaining swabs of the victim's oral cavity, cervix, rectum, vaginal or penile areas depending on information gleaned from the forensic history;
- Collecting urine samples where appropriate;
- Administering prophylactic medications and emergency contraception;
- Coordinating referrals for proper follow-up care as needed;
- Ensuring patient/medical record confidentiality at all times; and
- Testifying as a fact witness to cases performed.

Question 14 – Approximately how many SANEs are there currently? Are they located in every HHS, and is there any HHS where they are particularly concentrated?

31. As of 8 October 2022, **97** Queensland nurses and/or midwives have completed the full SANE program and can now participate in on-shift/on-call rosters to conduct sexual assault examinations. Please see Exhibit JJT-5.

32. SANEs are in the following HHSs:

HHS	Number of SANEs	Additional information
Cairns and Hinterland HHS	13	
Central Queensland HHS	16	

Central West HHS	1	
Darling Downs HHS	7	
Gold Coast HHS	2	Gold Coast HHS do not have SANEs as they have Forensic Physicians that perform sexual assault examinations at the Gold Coast University Hospital, Robina, and Logan Hospitals.
Mackay HHS	4	
Metro North HHS	10	
Metro South HHS	1	Victims/survivors requiring a sexual assault examination are referred to the Royal Brisbane and Women's Hospital.
North West HHS		North West HHS do not have SANEs, they have Medical Officers that perform sexual assault examinations.
Sunshine Coast HHS	2	Sunshine Coast HHS have few SANEs, as they have

		FNEs that perform sexual assault examinations at the Sunshine Coast University and Nambour Hospital.
South West HHS	2	Sexual assault examinations are conducted by Senior Medical Officers or the Director of Medical Services with support from the CFMU Forensic Physician on call.
Townsville HHS	7	
Wide Bay HHS	19	
West Moreton HHS	13	
Torres and Cape HHS	1 FNE	If a sexual assault examination is required. Option 1: Is to transfer the victim/survivor to tertiary facility (Cairns). Option 2: Where a SAIK or JIC SAIK is completed by a senior medical officer they seek clinical assistance and support

[redacted] [redacted]

Jacqueline Jane Thomson Witness

		from the CFMU Forensic Physician on call.

Source: CFMU SANE and FNE data and Sexual Assault Service Assessment

Question 15 – Currently, are SANEs being recruited and/or trained?

33. Yes.

a. If yes, at which institution(s) are they trained, and how many are being recruited each year?

34. HHSs determine how many SANEs they require to ensure that they have a sexual assault service that is accessible and sustainable. The recruitment is rolling (month on month) in nature. Dates of the SANE workshops are published at https://qheps.health.qld.gov.au/fss/forensic-services/response-to-sexual-assault/sexual-assault-nurse-examiner-course. This assists the senior responsible officer at the HHS level who support the SANEs, and SANE course enrolees to pace completion of modules appropriately to ensure that they are able to attend a workshop as close as possible to coursework completion.

35. The Queensland Health Sexual Assault Nurse Examiner program is hosted on the Central Queensland University Platform. Successful students are awarded a digital badge issued by CQ University in partnership with Queensland Health to validate their knowledge and skills with their employers and recognise their professional development and valuable contribution to improved service delivery across Queensland. Please see Exhibits JJT-6 and JJT-7.

b. If no, why not?

36. Not applicable

Question 16 – Identify and attach any policies, procedures, or guidelines relevant to your responses to the questions 9 to 15.

[redacted] [redacted]

Jacqueline Jane Thomson Witness

37. Please see Exhibits JJT-6 and JJT-7.

Particular topics related to nurse examiners

Question 17 – Do forensic nurse examiners and SANEs use the sexual assault investigation kit (SAIK) produced by QH Forensic and Scientific Services (FSS), or something else, when:

a. conducting a forensic medical examination on a sexual assault complainant; and

38. Yes. SANEs and FNEs use the SAIK produced by FSS. Where appropriate, additional swabs are collected and included in the kit.

b. conducting a forensic medical examination on a person accused of sexual assault.

39. FNEs use the SAIK produced by FSS when examining a person accused of a sexual assault. When required, additional swabs are collected and included in the kit.

40. SANEs **do not** conduct examinations on persons accused of a sexual assault.

Question 18 – Do forensic nurse examiners, SANEs and/or any other nurse conduct forensic medical examinations in relation to sexual assault matters on:

a. children aged 14 to 17 years; and

41. SANEs and FNEs conduct forensic medical examinations regarding sexual assault matters on children aged 14-17 years. Please see Exhibit JJT-8.

b. children aged under 14 years (if no, are there any plans to train nurses to be able to do so)?

42. No. Not that I am aware of, although access to a paediatric sexual assault examination by clinicians with appropriate qualifications and expertise in the field across a geographically challenged state is a known gap. Please see Exhibit JJT-9

Question 19 – Is there a preference between having a forensic nurse examiner conduct a forensic medical examination compared to a SANE, or is there no relevant difference?

43. There is no preference regarding provision of care for a victim/survivor of sexual assault. Perhaps the greatest difference is seniority, exposure, and experience. FNEs have been conducting forensic examinations since 2008, whereas SANEs have been available to conduct forensic examinations since 2020. FNEs can, but SANEs **cannot** conduct an examination on a person accused of committing a sexual assault.

Question 20 – Do you consider it to be preferable for a physician or a nurse to conduct a forensic medical examination of a sexual assault complainant, or is there no difference? Do you consider it to be preferable for a physician or nurse to conduct a forensic medical examination of a person accused of sexual assault, or is there no difference?

44. Victims/survivors of sexual assault must have access as close as possible to home to an essential service, such as a forensic examination, by clinicians with appropriate qualifications. Regarding preference of profession, a systematic review by Toon et al, 2014 noted that while there was no benefit gained in terms of prosecution and conviction between FMOs and FNEs, there was a significant statistical difference between provision of clinical care and provision of a fiscally responsive service.

45. Barriers to nurse led service need to be identified for HHSs that have been funded to provide Sexual Assault Nurse Examiners for the forensic examination of complainants of rape and sexual assault.

Question 21 – If, at a particular time, a hospital has available both a physician and a nurse who are each qualified to conduct a forensic medical examination of a complainant, is there any policy or procedure stipulating which should conduct the examination?

46. No.

Question 22 – In relation to the gender of the examiner:

a. **Do you know if sexual assault complainants who present to a hospital for a forensic medical examination are asked if they have a preference for the gender of the person who conducts the examination? If yes, identify any policy or procedure concerning such.**

47. No.

b. If, at a particular time, there are persons of both gender available to conduct a forensic medical examination on a sexual assault complainant (e.g. a female physician and a male nurse; or a female nurse and a male nurse), is there any policy or procedure which permits the complainant to request a physician/nurse of a particular gender?

48. No.

Question 23 – Are there any ongoing proficiency testing or continuing professional development obligations on nurses who conduct forensic medical examinations?

49. Yes. Hospital and Health Services determine the standards of clinical practice, minimum qualifications, scope of clinical practice, timeframes that credentials and defined scope of clinical practice is granted and limitations/conditions/rescinding of authorisations/performance management issues and issues impacting health. Please see Exhibit JJT-10.

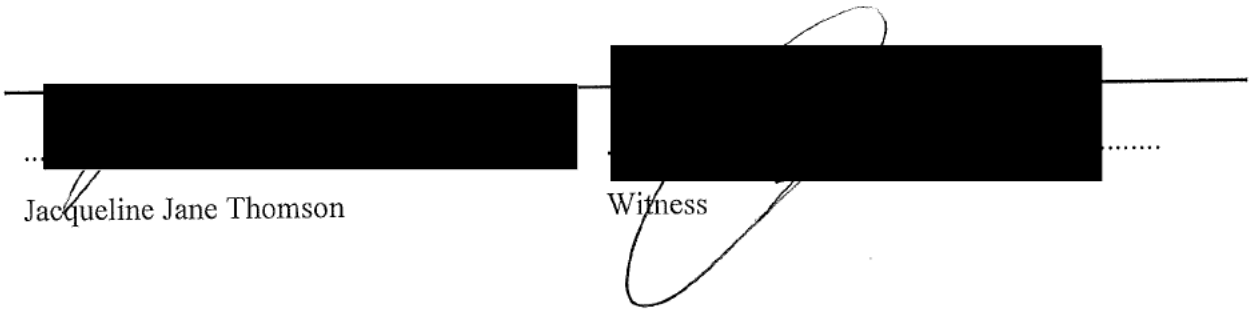
50. For a Hospital and Health Service that does not presently have a process for approval of nurses practicing as a SANE, a state-wide template has been co-designed with members of the Sexual Assault Nurse Examiner-Forensic Nurse Examiner Community of Practice (SANE-FNE CoP). This document received endorsement by members of the Statewide nursing and midwifery educator's forum on 10 October 2022. Please see Exhibit JJT-11.

51. **Question 24 – Identify and attach any policies, procedures or guidelines relevant to your responses to the questions 17 to 23.**

52. Please see Exhibit JJT-11.

<u>Other issues</u>

Question 25 – Do nurses who conduct forensic medical examinations on a complainant currently also take a reference DNA sample?



Jacqueline Jane Thomson

Witness

a. **If yes, attach any policy instructing them to do so, and identify the method by which they take a reference DNA sample.**

53. No. The current process is that QPS personnel collect the reference DNA sample on a complainant.

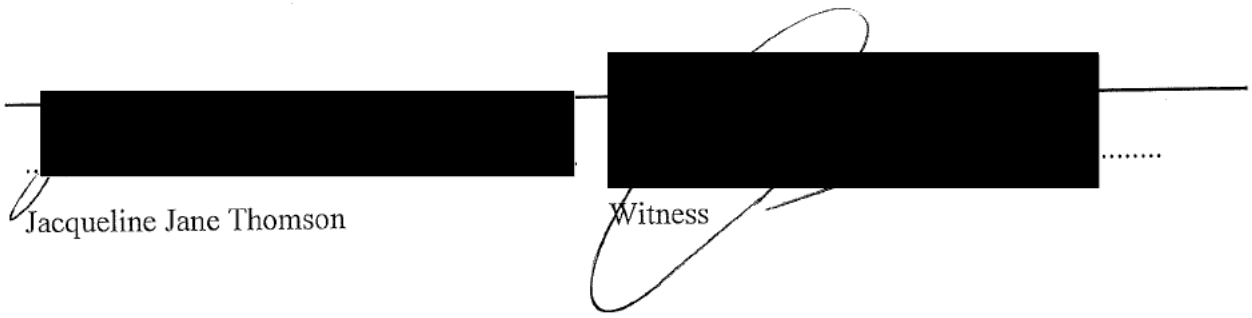
b. **If no, do you think nurses are able to competently collect reference DNA samples if required to do so? Advise if you see any problems with a nurse collecting reference samples when conducting the examination.**

54. Yes. I do not see any problems with a SANE/FNE collecting a reference sample when conducting the examination. Access to the necessary clinical consumables, education, training, and the development of supportive resources would be required. This is all very achievable. I understand that this action is completed nationally and internationally by SANEs.

Question 26 – Have any problems or concerns been identified or raised with you regarding the methods, systems or processes used by nurses in conducting forensic medical examinations? If yes, when, by who, how and what was the problem or concern? If no, confirm same.

55. Concerns have been raised from nurses/midwives with their senior responsible HHS officer upon completion of the SANE workshop regarding lack of readiness and confidence in conducting sexual assault examinations. While not mandated, where able, SANEs are buddying up with multidisciplinary colleagues that have received training in forensic examinations for their first couple of examinations before conducting examinations unsupervised.

Question 27 – Do you, SANEs, or forensic nurse examiners receive any communication or feedback from FSS or the Queensland Police Service about the SAIKs conducted and the quality of biological samples that are obtained from them – whether in particular cases or at a more systemic level?



Jacqueline Jane Thomson

Witness

56. Yes. On 31 August 2022 at 10:31 am, I received an email from the Team Leader – Evidence Recovery & Quality Team sharing issues identified by the Forensic Property point regarding SAIK non-conformance. (Please see Exhibit JJT-12). As an action I created an email that was distributed through the SANE-FNE Community of Practice drawing to members' attention a Situation, Background, Assessment Recommendation document regarding the packaging of swabs, and other biological specimens collected in a JIC/QPS SAIK. I asked that colleagues re-visit the document and ensure that practice conforms with the process for packaging. (Please see Exhibit JJT-13).

a. **Would you be assisted by the provision of such feedback, or similar consultation? Why/why not?**

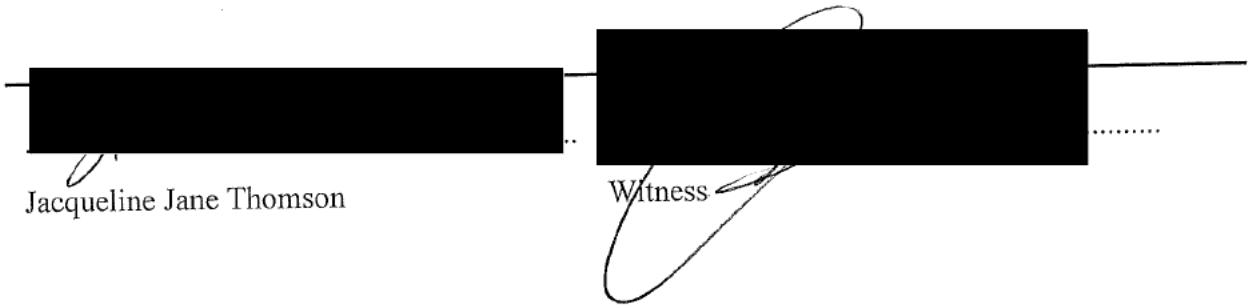
57. See above.

Question 28 – Identify and detail any other concerns, criticisms, or feedback you have of the current Queensland SAIK model and the current processes for collecting biological material for forensic DNA testing by nurses. Would you like to see any changes? Would the quality of forensic services be improved if your unit had greater visibility or a greater role across the state? Attach supporting documents if necessary.

58. The efficiency and effectiveness of centralised state-wide support and training for frontline clinical forensic services is questionable. An option is to ensure that HHSs are funded to set up integrated hospital forensic service hubs – staffed with forensically qualified Faculty of Clinical Forensic Medicine, The Royal College of Pathologists of Australia doctors, with forensically trained ED doctors and nurses that are funded separately to do the work.

59. For regional rural and remote facilities there is real opportunity for HHSs to trial using telehealth technology who present for services following a sexual assault.

60. Inability to grow the SANE program to include the monitoring and evaluation + feedback loop of sexual assault services in Queensland Hospital and Health Services, as there are no KPIs built into the Service Level Agreement with Queensland Hospital and Health Services (HHSs).



Jacqueline Jane Thomson

Witness

All the facts and circumstances declared in my statement, are within my own knowledge and belief, except for the facts and circumstances declared from information only, and where applicable, my means of knowledge and sources of information are contained in this statement.

I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 13. day of October 2022

[redacted]

Jacqueline Jane Thomson

Witness

JUSTICE OF THE PEACE (QUALIFIED)
QUEENSLAND GOVERNMENT
Reg.No.: [redacted]
DEPT. OF JUSTICE & ATTORNEY-GENERAL

CURRICULUM VITAE

Jacqueline Jane Thomson

[redacted]

Profile

With over 34 years of healthcare experience and the completion of post-graduate study, I bring to the work environment an expert and comprehensive knowledge of:

- Contemporary nursing and midwifery practice
- Effective leadership and management skills
- Advanced clinical skills
- Demonstrated expertise in business acumen, policy development and project management
- Excellence in communication skills (written and verbal) and the ability to inspire and mentor a team and individuals.

My ability to engage and work collaboratively with stakeholders (internal and external) and work successfully with lines of authority, ensures that I achieve results that are timely, tangible, and sustainable.

My career has consistently focused on establishing goals and strategy that influences quality and safety clinical outcomes, processes, and performance. I am continually in pursuit of positive results. With expertise in strategic and operational planning, change management and stakeholder engagement, as well as, my personal commitment, energy, drive and integrity; I have achieved many successes in the development, implementation and evaluation of major legislative reform, statewide programs of work and projects regarding the improvement in the delivery of healthcare services.

Summary of qualifications

2022	Master of Business Administration candidate	Griffith University, Queensland
2021	Introduction to the medical and forensic management of adult sexual assault	NSW Government, Education Centre Against Violence
2016	Breakthrough Series College Graduate	Institute for Healthcare Improvement
2015	Graduate Certificate in Policy Analysis	Griffith University, Queensland
2014	Lean Six Sigma Green Belt Certification	Department of Health, Queensland
2008	PM Plus Essentials	Department of Health, Queensland
2004	Certificate in Sexual and Reproductive Health Theory	Family Planning Queensland
1996	Bachelor of Nursing (Post-Registration	Queensland University of Technology
1994	Midwifery Certificate	Royal Women's Hospital, Queensland
1991	General Nursing Certificate	Royal Brisbane Hospital, Queensland

AHPRA Registration No: NMWOOO1439881	Registered Midwife (Qld)
AHPRA Registration No: NMWOOO1439882	Registered Nurse (Qld)

Professional affiliations

- Forensic and Medical Sexual Assault Clinicians Australia member
- Association of Queensland Nursing & Midwifery Leaders member
- QUT and Griffith University (ALUMNI)

Jacqui Thomson

Submitted abstract/s for oral/poster presentation

- Mundy, Linda; Howard, Sarah; McQueen, Liam; Thomson, Jacqueline; Hewson, Kaye. Fostering healthcare innovation in public hospitals: the Queensland experience. Australian Health Review 2018.
- Shelley Nolan, Jacqueline Thomson. Safe staffing levels in Queensland public health sector maternity units. International Council of Nurses Conference 2017.
- A/Prof Rebecca Kimble, Dr Bob Baade, Lee Jones, Catherine Love, Jacqueline Thomson. Network responds – Standardising antenatal care for Queensland Health maternity services. The Australasian Clinical Networks Conference – Network to Network 2012.

Conference presentation/s

- A/Prof Rebecca Kimble, Dr Bob Baade, Lee Jones, Catherine Love, Jacqueline Thomson. Network responds – Standardising antenatal care for Queensland Health maternity services. The Australasian Clinical Networks Conference – Network to Network 2012.

Professional development

- Unplanned Pregnancy Abortion Conference, 2019
- Private Practice Workshop, 2017
- ABF PCSI Conference, 2017
- Women in Leadership, 2017
- eHealth Queensland Expo, 2017
- 8th Obstetric Malpractice Conference, 2016
- Nursing and Midwifery Board of Australia, Privately Practicing Midwife Model of Supervision Workshop, 2015
- Practical People Management Matters for Health Workshop (Supervisors), Public Service Commission, 2014
- Ideas into action, Public Sector Conference, 2014
- Queensland Maternity Summit, 2013
- 9th Australasian Redesigning Healthcare Summit, 2013
- Aligning Quality & Cost: Improving outcomes for safety & quality in an era of reform, 2012

Information technology experience

Microsoft Office Suite including Outlook & TEAMS	TREND
Environment for Scheduling Personnel – ESP	S4/HANNA
Hospital Information System – HBCIS	Smartsheet
Hospital Pathology System – AUSLAB	RiskMan
Medical Director	Statewide Management Information System (MIS)
DSS (Panorama Necto)	SAP, Workbrain and *my*HR
Apet® 360 Pro™ (Procurement Portal)	ZOOM

Employment history

March 2020 – Current

Assistant Director of Nursing (NG10.2)
Clinical Forensic Medicine Unit (CFMU)
Forensic and Scientific Services

In this role I have:

- Provide high level contemporary, strategic, operational, and professional nursing leadership and management to Clinical Forensic Medicine Unit nursing personnel that provide healthcare at the Brisbane City Watchhouse.
- Work collaboratively with internal and external stakeholders to shape corporate and clinical governance within the Brisbane City Watchhouse.
- Developed a phased model of care that offers quality and safe healthcare to detainees, improves the use of finite human resources, satisfies partner requirements, offers sustainability, succession planning and improved the saving level of the unit by being fiscally responsible.
- Completed the Business Planning Framework and service profile for the CFMU nursing service.
- Responsible for the administration of the Sexual Assault Nurse Examiner Program including, but not limited to professional support, system support, education, research, and professional leadership.
- Collaborated with the Queensland Police Service to establish the Brisbane Watchhouse Clinical Governance Partnership. The purpose of this partnership is to provide high level, strategic leadership and systemic advice that will improve the health and well-being of persons detained in the Brisbane Watchhouse.
- Created the Sexual Assault Nurse Examiner and Forensic Nurse Examiner Community of Practice and assumed a lead role in facilitating initiatives and outcomes to support professional, clinical, and organisational imperatives for Hospital and Health Service Sexual Assault Services.
- Provided specialist sexual assault policy advice to the Minister, the Director-General, Deputy Director General, senior departmental executives, and stakeholders that may have significant political, community and business impacts.
- Sourced business intelligence (data/analytics) to substantiate performance.
- Supported colleagues to advance themselves, as well as, addressing underperformance swiftly and consistent with procedural fairness principles.
- Recruited to vacant nursing positions.
- Participated in the development of the unit COVID-19 pandemic plan.

January 2019 – March 2020

Manager, A08
Healthcare Improvement Unit
Clinical Excellence Queensland
Department of Health

At the request of the Deputy Director-General (DD-G), now the Director General, Queensland Health, I was asked to progress tranche two of the termination of pregnancy program of work. This entailed me working with Hospital and Health Services (HHSs), as well as industry bodies, peak agencies, and private health providers in the sector to ensure that:

- Suitable arrangements are in place that enable Queensland women to have access to high quality, safe and timely termination of pregnancy services.
- Public/private partnership developments are where appropriate, supported and promoted.
- Service agreements are established, monitored and reports received/actioned as appropriate.
- Specialist policy advice is provided to the Minister, the Director-General, Deputy Director General, senior departmental executives, other jurisdictions, and stakeholders on clinical issues that may have significant political, community and business impacts.
- Risks relating to the implementation of government policy on termination of pregnancy are appropriately managed.
- Communication and consultation within the ecosystem is established and maintained.

August 2018 – January 2019 Manager, A08
Office of the Deputy Director-General
Clinical Excellence Queensland
Department of Health

At the request of the DD-G, CEQ, in this role I:

- Led the complex policy work that informed the *Termination of Pregnancy Act 2018*.
- Managed the full project lifecycle to achieve implementation of the Queensland Termination of Pregnancy Act 2018 on time, within budget and to the agreed quality specifications.
- Established the Queensland Legislative Reform for Termination of Pregnancy Steering Committee to bring identified key stakeholders together to undertake project governance, formulation, and oversight, as well as assist with the coordination and implementation of the Queensland termination of pregnancy legislation.
- Prepared a range of written materials including executive correspondence, briefing material, project documentation, contract agreements and information papers concerned with the initiatives and deliverables of the project.

October 2016 – August 2018 Manager, A08
Healthcare Improvement Unit
Clinical Excellence Queensland
Department of Health

In this role I have:

- Administered the New Technology Funding Evaluation Program, Integrated Care Innovation Fund and provided oversight for the evaluation of models of care.
- Managed and coordinated the human and financial resources of the Healthcare Evaluation and Assessment of Technology (HEAT) team to ensure that business outcomes, project deliverables and deadlines are achieved.
- Provided specialist policy advice to the Minister, the Director-General, Deputy Director General, senior departmental executives, other jurisdictions, and stakeholders on technology issues that may have significant political, community and business impacts.
- Represented Queensland on the Health Technology Reference Group and the Nationally Funded Centre's Committee.

- Consulted and negotiated with internal and external clients, industry groups, and other government agencies (federal, state, and local), the public and other stakeholders.
- Wrote and/or reviewed complex reports, briefing notes, departmental and other correspondence in accordance with departmental standards.
- Actively managed staff development and performance for HEAT team members.
- Promoted and ensured compliance of work with public sector legislation, standards, policies, practices, and procedures relating to human, financial and physical resources.

March 2015 – October 2016 | Director of Nursing and Midwifery, NRG 10.4 & NRG 12
Office of the Chief Nursing and Midwifery Office
Office of the Director-General
Department of Health

In this role, I have:

- Project managed the complex policy work that informed legislating minimum nurse-to-patient ratios in the state's public-sector healthcare facilities.
- Co-led the investigation into processes and procedures as a means to improving patient safety in healthcare by a Hospital and Health Service in South-East Queensland.
- Provided professional and strategic leadership for key policy commitments of the Queensland Government related to Nursing and Midwifery.
- Influenced the removal of legislative barriers to midwifery scope of practice. For example, provided advice on the proposed changes to the DTP for Queensland midwives in the Health (Drugs and Poisons) Regulation 1996.
- Identified information from a wide range of sources including Professional Nursing and Midwifery Colleges and provided strategic analysis and advice on complex operation program, policy, and legislative issues.
- Established the Midwifery and Maternity Services Reference Group to bring consumers and leaders in the field of midwifery together to discuss and determine what actions are required to drive safe, high quality and sustainable midwifery and maternity services across Queensland.
- Provided professional advice to the Queensland Minister for Health and Minister for Ambulance Services regarding the development of midwifery services in Queensland.
- Prepared a range of written materials including two cabinet submissions, executive correspondence, briefing material, project documentation and information papers concerned with the initiatives and deliverables within the portfolio.

September 2013 – March 2015 Principal Project Officer, A07/4
Clinical Access and Redesign Unit
Health Systems Innovation Branch
Health Services and Clinical Innovation Division
Department of Health

The purpose of this position is to establish, implement and evaluate the Strategies to Improve Gastrointestinal Endoscopy Access in Queensland 2013-2015.

In this role, I was required to:

- Provide high level program management advice and direction in relation to the project initiatives.
- Identify information from a wide range of sources and provide strategic analysis and advice on complex operation program, policy, and legislative issues.
- Coordinate the day-to-day operations to deliver on project outcomes that support the Departments capacity to deliver and maintain quality gastrointestinal services.
- Provide high level liaison, consultation, and negotiation with internal and external stakeholders to achieve the program initiatives.
- Work closely with and support Hospital and Health Service colleagues and non-government healthcare providers to systematically improve the outcomes for clients and reduce the variability of service quality by contributing to the development of systems and processes (develop, monitor, and review policies, procedures, and business rules) that promote clinical governance.
- Prepare a range of written materials including executive correspondence, briefing material, speech notes, project documentation and information papers concerned with the program's initiatives and deliverables.

August 2010 – September 2013 Principal Project Officer, A07/4
Patient Safety Quality Improvement Service
Centre for Healthcare Improvement
Department of Health

Employed in a full-time capacity I planned, organised, coordinated, and supported the Statewide Maternity and Neonatal Clinical and Diabetes Network Clinical Chairs and Steering Committees to achieve their priority strategic and operational initiatives.

Principal responsibilities of this role:

- Provided authoritative strategic support and advice promoting state-wide evidence based, client-centered, value driven maternity, neonatal and diabetes care consistent with the Queensland Health Strategy.
- Accountable for the fiscal management and reporting of the networks funding.
- Identified and developed clinical practice improvement indicators using quality improvement methodologies.
- Organised bi-annual forums conducting workshop sessions to identify priority initiatives going forward.

- Organised and provided secretariat support for steering committee and work group meetings.
- Established and supported work groups using project management methodologies to achieve deliverables in scope, on time and within budget.
- Identified marketing opportunities to advance the profile of the clinical networks and working groups.
- Established and supported network systems.
- Developed and managed collaborative partnerships with identified key stakeholders to facilitate improved service responsiveness.
- Prepared submissions, briefings, and other complex reports.

June 2008 – August 2010 Principal Project Officer, A07/4
Maternity Unit
Primary, Community & Extended Care Branch
Policy, Strategy and Resourcing Division
Department of Health

In this role, I provided advice on policy and strategic leadership on clinical service issues and strategies to facilitate and support change management process relevant to maternity care, post-natal contact services and the rural maternity initiative consistent with current Queensland Health policies and program directions.

Principal responsibilities of this role:

- Provided leadership in the development of best practice maternity models of care, promoting the use of contemporary evidence-based approaches, implemented risk mitigating strategies and assisted in the development of policy, guidelines, pathways, and process.
- Investigation into processes and procedures as a means to improving patient safety in healthcare delivered by a maternity service – Tasked with examining current practices and processes and identifying areas for improvement.
- Led the development of system, processes, protocols, and guidelines to ensure the sustainability of policy directions for maternity services.
- Developed collaborative partnerships with key internal and external stakeholders to facilitate improved service responsiveness.
- Provided proactive high-level advice to senior management on clinical resource, health system reform and workforce development implications related to Queensland Health maternity services.
- Provided leadership in the development, implementation and evaluation of Queensland Government initiatives, strategies, and programs to support and implement policies and directions for maternity services.
- Prepared a cabinet submission, briefings, complex reports, and other written material.

March 2005 – June 2008 Nurse Unit Manager, NO7/4
Women's and Children's Unit, Kingaroy Hospital
West Moreton South Burnett Health Service District

As the Nurse Unit Manager for Kingaroy Medical Ward, Surgical Ward and Maternity Services. I was responsible for the leadership and management of a 42-bed unit with service deliveries that encompassed two high dependency monitored beds, diverse clinical modalities not restricted to medical, surgical, paediatrics, antenatal, postnatal, 2 bed birthsuite, nursery with CPAP and ventilatory capabilities, antenatal clinics twice a week, as well as ante-natal classes three days/month.

The unit had more than 400 births/year and conducted theatre on average three days/week. Direct nursing FTE reports was 24 which consisted of FT/PPT CN's/RN's/RM's, EEN's/casual staff and agency staff, as well as one non-nursing FTE (ward clerk).

Principal responsibilities of this role:

- Responsible for the cost centre and human resource management for the unit inclusive of:
    - Running roster validation reports, to check roster effectiveness post inclusion in Workbrain.
    - Checking for fatigue and overtime.
    - Printing daily staffing variance forms to identify and record changes for submission to Payroll Services the following business day.
    - Viewing employee and leave information as required.
    - Recording staff skills and completion of key training courses relevant for HHS accreditations.
- Provided advanced evidence based clinical care to high and low risk pregnant and non-pregnant women, neonates, paediatric, gynaecological, medical, and surgical clientele.
- Managed complaints and compliments.
- Completed the self-assessment report against all ACHS EQuIP mandatory clinical criteria, creating evidence folders, preparation and presence for on-site survey and ensuring the outcomes were achieved for identified key improvements.
- Managed clinical products including but not limited to product trials; evaluations; impress and clinical consumables.
- Managed service agreements.
- Supported clinical governance policy and framework within my area of responsibility.
- Influenced quality improvement and patient safety management at the strategic, operational and individual level.
- Explored and developed partnership models and strategies to support undergraduate and postgraduate nurses within the unit.
- Prepared articles for publication in the Health Service District newsletter and local print media as well as District representative on local radio.
- Provided after hours on call as the Executive representative as senior nursing resource officer for the hospital.

Jacqui Thomson

Employment history 1988 - 2005

June 2004 – March 2005	Acting After Hours Nurse Unit Manager – Level 3 Theatre, Admissions and Staff Unit Royal Children's Hospital and Health Service District
March 2003 – June 2004	Clinical Nurse School Based Youth Health Nurse Program Royal Children's Hospital and Health Service District
April 2002 – January 2003	Project Officer AO5 Quality Management The Prince Charles Hospital Health Service District
July 2001 – April 2002	Clinical Nurse Alcohol and Drug Service Indooroopilly Community Team The Prince Charles Hospital Health Service District
March 1994 – July 2001	Registered Nurse/Midwife Neonatal Intensive Care Nursery Royal Brisbane and Women's Hospital Health Service
July 1999 – April 2000	Practice Nurse McDowall Village Medical Centre, Brisbane
March 1993 – March 1994	Student Midwife Royal Women's Hospital, Brisbane.
May 1992 – March 1993	Registered Nurse Royal Children's Hospital, Brisbane
August 1991 – May 1992	Registered Nurse Royal Brisbane Hospital, Brisbane
July 1988 – August 1991	Student Nurse (General) Royal Brisbane Hospital, Brisbane.

Professional referees

[redacted]

Queensland Health

Caring for people disclosing sexual assault

Directive number: QH-HSD-051:2019

Effective date: 22 July 2019

Review date: 22 July 2022

Supersedes: New

On this page:

- Purpose
- Scope
- Principles
- Outcomes
- Mandatory requirements
- Related or governing legislation, policy and agreements
- Supporting documents
- Business area contact
- Review
- Approval and implementation
- Definitions of terms used in this directive
- Version control

Purpose

This Health Service Directive requires Hospital and Health Services to take a consistent approach to managing the clinical and psychosocial needs of people who have experienced sexual assault. This includes the person-centred provision of forensic examinations.

Scope

This directive applies to all Hospital and Health Services (HHSs).

Principles

- Compassion—everyone disclosing sexual assault will be treated with respect, courtesy, compassion and dignity and their clinical care and any forensic examination will be responsive to their particular needs including access to, or referral to counsellors and support services.
- Person-centred care—everyone disclosing sexual assault will have access to trained clinicians who can provide timely and confidential clinical care and forensic examinations after presentation to hospital.
- Information—everyone disclosing sexual will be given clear information about their options relating to having a forensic examination and the level of involvement of police.
- Collaboration—HHSs will work effectively with the Queensland Police Service, other government agencies as well as community organisations to ensure a responsive, supportive and integrated approach to caring for people disclosing sexual assault.

Outcomes

Hospital and Health Services included in the scope of this directive shall achieve the following outcomes:

- Compliance with Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
- Compliance with the Queensland Health Guideline: Guideline for management of care of people 14 years and over disclosing sexual assault
- Compliance with the Department of Health Guideline: Conducting Child Sexual Assault Examinations (*Document Number # QH-GDL-943:2015*)
- Compliance with the informed consent requirements detailed in the Queensland Health Guide to Informed Decision-Making in Healthcare
- In doing so, HHSs will provide consistently high-quality, compassionate and person-centred services to people disclosing sexual assault who present to public hospitals.

Mandatory requirements

Hospital and Health Services (HHS) will:

- Provide 24-hour access to clinical care and forensic examinations for people 14 years and over disclosing a sexual assault in accordance with the Guideline for the management of care of people 14 years and over disclosing sexual assault.
- Ensure everyone who discloses that they are the victim of a sexual assault is informed of their choices about forensic examinations and reporting the assault to police, including the benefits of early reporting.
- Provide forensic examinations to victims of sexual assault when victims choose to have a forensic examination regardless of whether victims decide to report the matter to police or decide to defer this decision.
- Ensure adherence to informed consent for all aspects of caring for people disclosing sexual assault, including clinical treatment, forensic examinations, evidence collection and storage, police involvement, referrals and the release of information to third parties.
- Provide clear information about the storage, access and destruction of forensic examination samples to victims of sexual assault who have a forensic examination but choose to defer the decision to report the assault to police.
- Provide a suitable model of care for managing paediatric sexual assault patients (under 14 years of age) within each HHS.
- Report all suspected child sexual assaults to Child Safety Services in line with the mandatory reporting and duty of care responsibilities of clinicians.
- Ensure all patients are referred to (with patient consent) and/or provided information regarding sexual assault counselling and support services.

Related or governing legislation, policy and agreements

- *Hospital and Health Boards Act 2011 (Qld)*
- *Criminal Code Act 1899 (Qld)*
- *Victims of Crime Assistance Act 2009 (Qld)*
- *Police Powers and Responsibilities Act 2000 (Qld)*
- *Guardianship and Administration Act 2000 (Qld)*
- *Public Guardian Act 2014 (Qld)*
- Queensland Health Guide to Informed Decision-Making in Healthcare
- Charter of Victims' Rights
- *Child Protection Act 1999 (Qld)*
- *Domestic and Family Violence Protection Act 2012*
- *Powers of Attorney Act 1998 (Qld)*

Supporting documents

- Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault (as amended from time to time)
- Queensland Health Guideline: Guideline for the management of care of people 14 years and over disclosing sexual assault (as amended from time to time)
- Department of Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015
- Queensland Health Guide to Informed Decision-Making in Healthcare

Business area contact

- Community and Scientific Services, Health Support Queensland.

Review

This Health Service Directive will be reviewed at least every three years.

Date of last review: 22/07/2019

Supersedes: New Directive

Approval and implementation

Directive Custodian

Chief Executive Officer, Health Support Queensland

Approval by Chief Executive

Director-General
Queensland Health

Approval date: 17/07/2019

Issued under section 47 of the *Hospital and Health Boards Act 2011*.

Definitions of terms used in this directive

Term	Definition / explanation / details	Source
Hospital and Health Service	Hospital and Health Services are statutory bodies and are the principal providers of public sector health services.	*Hospital and Health Boards Act 2011*
Forensic Examination	The forensic examination consists of obtaining a history as to the nature of the assault to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic samples as it relates to the alleged sexual assault. (A Sexual Assault Investigation Kit (SAIK) is used to collect DNA evidence)	Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
Child	Under the age of 18 years For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.	Department of Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015)
Trained Clinicians	Forensic Examinations can be provided by: • Forensic Physician • Medical Officers who have received training in sexual assault examination • Senior Medical Officers accessing phone support from Clinical Forensic Medicine Unit • Government Medical Officers • Forensic Nurse Examiners (postgraduate qualification in Forensic Medicine)	

- Sexual Assault Nurse Examiners. Nurses trained in sexual assault examinations having completed a recognised short-course eg SANE 40CPD short course)

Version control

Version	Date	Prepared by	Comments
0.1	22/07/2019	Heath Support Queensland	New Health Service Directive

Last updated: 22 July 2019

Links

Copyright (https://www.health.qld.gov.au/global/copyright-statement)
Disclaimer (https://www.health.qld.gov.au/global/disclaimer)
Privacy (https://www.health.qld.gov.au/global/privacy)
Right to information (https://www.health.qld.gov.au/system-governance/contact-us/access-info)
Accessibility (https://www.qld.gov.au/help/accessibility/)
Jobs in Queensland Government (https://smartjobs.qld.gov.au/jobtools/jncustomsearch.jobsearch?in_organid=14904)
Other languages (https://www.qld.gov.au/languages/)

© The State of Queensland (Queensland Health) 1996-2022

Queensland Government (https://www.qld.gov.au/)

Education Centre AGAINST VIOLENCE

NSW GOVERNMENT Health

Course Information Flyer 2023

NATIONALLY RECOGNISED

10724NAT Graduate Certificate in Medical & Forensic Management of Adult Sexual Assault

Course Number:	Location:	Coordinator:	Applications Close:
MF 1401	NSW	Sonali Panda	05 May 2023

Target Group:

- Doctors working for NSW health who are required to provide medical care and forensic examinations to adult victims of sexual assault
- Registered nurses who are training to become Sexual Assault Nurse Examiners working for NSW health who provide medical care and forensic examinations for adult victims of sexual assault.

Description: This course adheres to the Australian Qualifications Framework (AQF) and has been accredited by the Australian Skills Qualification Authority (ASQA). It is delivered by Education Centre Against Violence (ECAV) delivery partner of NSW Health RTO (code 90198). This course delivers skills based training that aims to provide graduates with the skills and knowledge to provide medical and forensic care to adult victims of sexual assault in health settings. The course has been developed specifically to meet the needs of rural practitioners.

Clinicians who complete this course may be employed in positions such as forensic nurse examiner; sexual assault nurse examiner; forensic medical examiner; medical officer sexual assault service.

Assessment tasks will include: written assignments, case portfolio, an objective structured clinical evaluation, and moot court evaluation and multiple choice questions.

This is a blended learning program. The majority of the teaching and learning occurs online via webinars and interactive modules. However, there are two compulsory three day face to face workshops held in Sydney for Sydney cohort and in Tasmania for the Tasmania cohort.

Learning Outcomes:

- Communicate effectively with diverse patients, within a specific legal framework
- Respond to the immediate and ongoing health needs of an adult male or female patient following a sexual assault
- Perform a forensic medical examination and specimen collection and document the findings and procedures
- Recognise injury types and describe the forces that produce injuries
- Fulfil your obligations to provide expert evidence to the criminal justice system within the boundaries of your expertise

Course structure

There are a total of 7 units

Units	Code	Competency Unit Title
Units of Competency	MFMASA001	Work effectively within an adult sexual assault context
	MFMTIA002	Implement a trauma informed approach to medical and forensic care
	MFMMFC003	Provide adult sexual assault medical and forensic care
	PUALAW003	Give evidence in a judicial or quasi-judicial setting
	MFMMDP004	Implement and support multidisciplinary practice
	CHCLEG001	Work legally and ethically
	MFMCSP005	Deliver culturally safe and respectful patient care to Aboriginal people

[redacted]

Education Centre AGAINST VIOLENCE | NSW GOVERNMENT Health

Semester Duration	Subjects	Dates
Semester 1 (July 2023 to October 2023)	Introductory Course and online learning Face to Face teaching (Lecture day, Moot court and Simulation workshop)	Introductory Course 31/07/2023 – 31/10/2023 **Sydney** Face to Face Workshop Dates 12/10/2023 – 14/10/2023
Semester 2 (February 2024 to June 2024)	Legal curriculum (online learning) Practice court sessions (virtual classrooms) Face to face workshop (Aboriginal cultural competency workshop, OSCE and moot court)	February 2023 **Sydney** Face to Face Workshop Dates 16/05/2024 – 18/05/2024

Course Costs:
You are responsible for funding your travel, accommodation and course fees. Should you experience any difficulty please discuss it with the Course Coordinator.

Costs:
NSW GPs – Free

NSW SANEs – Free

Pre-requisites:
To gain entry to this qualification, candidates must meet the following conditions:

Be a qualified, registered medical practitioner with a minimum of 2 years full time equivalent post graduate experience. They should be working in a field where proficiency in the assessment of common gynaecological conditions is required. Examples include(but are not limited to) General Practice, Sexual Health, Family Planning, Obstetrics & Gynaecology & Emergency Medicine
OR
Be a qualified nurse with a minimum of 3 years clinical experience or a qualified nurse practitioner. They should be working in a field where proficiency in the assessment of common gynaecological conditions is required. Examples include (but are not limited to) Sexual Health, Family Planning, Women's Health, Obstetrics & Gynaecology & Emergency Medicine.
AND
Be working in or observing at a clinical service providing medical and forensic care to people experiencing sexual assault.

All candidates will be interviewed for suitability for the course. The interview process will involve filling out a set of interview questionnaire and a telephone conversation with the Program Coordinator, Dr Eleanor Freedman.

Enquiries and Application/Expression of Interest:

Please complete the expression of interest on the ECAV website:
https://swecav.hss.health.nsw.gov.au/portal/forms/course-application-wizard?cid=236

Note: Please ensure your manager has approved your application

ECAV Course Coordinator / enquiries:
Sonali Panda | [redacted]

The course coordinator will be in contact to discuss your expression of interest in attending the course.

THE UNIVERSITY OF NOTRE DAME AUSTRALIA

Master of Nursing (Forensic Nursing)

School of Nursing & Midwifery, Fremantle Campus

The Master of Nursing (Forensic Nursing) from The University of Notre Dame Australia is a qualification designed for you if you have already completed a Graduate Diploma of Forensic Nursing. The program is run over the course of two semesters, and you will choose an area of research relevant to your specialist nursing practice.

Why study this degree?

If you want to extend your formal qualifications as a Registered Nurse, the Master of Nursing (Forensic Nursing) allows you to develop your specialist knowledge in this particular area of healthcare and operate at an advanced level.

Our Master of Nursing (Forensic Nursing) can be completed across two semesters of part-time study and you should have already completed a Graduate Diploma of Forensic Nursing at Notre Dame. You will generally choose a thesis

subject relevant to your specialist area of nursing practice, so we recommend discussing your study program with your postgraduate coordinator in advance.

Program summary

You will choose a research area relevant to their specialty of nursing practice.

Full details of the program requirements are contained in the Program Regulations (https://www.notredame.edu.au/__data/assets/pdf_file/0018/423 of-Nursing-Coursework.pdf).

Entry requirements

The program is open to Registered Nurses who have a previous degree, or to those who do not have a degree but who have accumulated a wealth of experience in nursing.

English Language Requirements

You must be able to demonstrate two years of full-time secondary, vocational or tertiary level of study in Australia, Canada, New Zealand, Republic of Ireland, South Africa, United Kingdom or the United States of America. If you do not meet these requirements you will need to sit the Academic IELTS exam and achieve a score of at least 7.0 overall and 7.0 in each sub-section (reading, writing, listening and speaking) to qualify for entry into the Master of Nursing (Forensics). This applies to Permanent Residents and Australian citizens whose first language is not English and have not completed two years full-time academic study in Australia. IELTS results will need to be verified by the Admissions Office before an offer of a place can be made. The Admissions Office reserves the right to

ask for IELTS results from any applicant. For more information, please visit www.ielts.org (https://www.ielts.org/)

Fees and costs

More information can be found at the Fees (https://www.notredame.edu.au/study/fees) page.

More information

For more information on the Master of Nursing (Forensic Nursing), please call our Prospective Students Office on [redacted]

APPLY DIRECT ¬

Need help? Ask Notre Dame

[redacted]

Duration: 1 year part-time

Campus: Fremantle

Loan Scheme: FEE-HELP

Study mode: Part-time

Code: Program Code 5114

From: Joy Jenkins [redacted]
Sent: Friday, 30 September 2022 1:00 PM
To: Jacqui Thomson
Subject: Overall snip

This email originated from outside Queensland Health. DO NOT click on any links or open attachments unless you recognise the sender and know the content is safe.

CQUniversity AUSTRALIA BE DIFFERENT

Dashboard

PDC61656 (Sexual Assault Nurse Examiner Course)

- Start Here: Course Introduction
- Introduction to Forensic Nursing and Sexual Violence: Module One
- Forensic History Taking: Module Two
- Forensic Physical Examination: Module Three
- Forensic Specimen Collection : Module Four
- Sexually Transmitted Infection Prophylaxis and Pregnancy Risk Assessment: Module Five
- Workshop: Practical
- Feedback & Digital Badge
- Archive

Site administration

Acclaim

Sexual Assault Nurse Examiner
Select Badge

Turn editing on

PDC61

COURSE PROGRESS: 0% COMPLETE

COURSE INTRODUCTION

START HERE

3 Activities

5m

Centre for Professional Development Team
Learning Design & Innovation Directorate
Tertiary Education Division
North Rockhampton Campus
[redacted]
W https://bedifferent.cqu.edu.au/
L https://www.linkedin.com/company/cquniversity-centre-for-professional-development **F** https://www.facebook.com/cqunicpd/

From: Joy Jenkins [redacted]
Sent: Friday, 30 September 2022 1:01 PM
To: Jacqui Thomson

This email originated from outside Queensland Health. DO NOT click on any links or open attachments unless you recognise the sender and know the content is safe.

CQUniversity AUSTRALIA BE DIFFERENT

Dashboard

PDC61656 (Sexual Assault Nurse Examiner Course)

- Start Here: Course Introduction
- Introduction to Forensic Nursing and Sexual Violence: Module One
- Forensic History Taking: Module Two
- Forensic Physical Examination: Module Three
- Forensic Specimen Collection : Module Four
- Sexually Transmitted Infection Prophylaxis and Pregnancy Risk Assessment: Module Five
- Workshop: Practical
- Feedback & Digital Badge
- Archive

Site administration

Acclaim

Sexual Assault Nurse Examiner
Select Badge

3 Activities

5m

MODULE THREE

FORENSIC PHYSICAL EXAMINATIC

27 Activities

3h 22m

PRACTICAL

WORKSHOP

1 Activities

2m

CQUniversity Australia acknowledges the traditional owne

Centre for Professional Development Team
Learning Design & Innovation Directorate
Tertiary Education Division
North Rockhampton Campus
[redacted]
W https://bedifferent.cqu.edu.au/
L https://www.linkedin.com/company/cquniversity-centre-for-professional-development **F** https://www.facebook.com/cqunicpd/

Queensland Health

Queensland Health Guideline

Document Number: QH-GDL-472:2019

Guideline for the Management of care for people 14 years and over disclosing Sexual Assault

1. Purpose

This guideline provides recommendations regarding best practice to support the management of people 14 years and over who have disclosed Sexual Assault. The guideline recognises that services can be adapted as appropriate to suit local capabilities.

2. Scope

This Guideline applies to all Hospital and Health Services (HHSs).

3. Aboriginal and Torres Strait Islander considerations

Hospital and Health Services should give consideration to providing cultural and gender appropriate services, including practitioners if possible.

4. Related documents

- *Hospital and Health Boards Act 2011* (Qld)
- *Criminal Code Act 1899* (Qld)
- *Victims of Crime Assistance Act 2009* (Qld)
- *Police Powers and Responsibilities Act 2000* (Qld)
- *Guardianship and Administration Act 2000* (Qld)
- *Public Guardian Act 2014* (Qld)
- *Child Protection Act 1999*
- Queensland Health Guide to Informed Decision-Making in Healthcare
- Charter of Victims' Rights
- Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault
- Department of Health Guideline: Conducting Child Sexual Assault Examinations
- Queensland Health Guide to Informed Decision-Making in Healthcare

Associated Health Service Directive

Caring for People Disclosing Sexual Assault QH-HSD-051:2019

Forms and Templates

https://qheps.health.qld.gov.au/hsq/forensics/response-to-sexual-assault

Queensland Government

5. Guideline for the management for people 14 years and over disclosing sexual assault

5.1. Principles

Hospital and Health services will have systems in place to offer adults disclosing that they are the victim of a sexual assault with medical care, psychosocial support and if required, access to a forensic examination. It is recognised that there will be local variation in how this is achieved but processes will:

- Maintain the patient's safety, confidentiality and privacy.
- Minimise further impact on a traumatised person by involving the minimum number of personnel possible in the clinical care and forensic examination and where possible offering choice of gender.
- Include support from social workers, sexual assault workers, nursing staff or relevant local non-government support services. Offer interpreter services where required.
- Recognise that investigation of sexual assault, a criminal offence, is a police matter. Patients will be encouraged to report the assault to police. However, where a patient with the capacity to consent is clear that they do not want police involved, they may choose to have a forensic examination. This may include a child aged 14 – 17 years of age who has parental consent for the examination and/or a Gillick-competent[1] child.
- Report all reasonable suspicions of child abuse and neglect in line with the mandatory reporting and duty of care responsibilities of clinicians.
- Commence within two hours of the patient's arrival in the Emergency Department and where possible by a minimum number of clinicians.
- Be based on informed consent for all aspects of the management including treatment and forensic examination. Adhere to defined meanings of consent, accounting for a person's capacity to consent, including that such capacity may require assessment if the adult person has a mental health disability, intellectual impairment or is temporarily affected by substances including alcohol.
- Recognise that a forensic examination is defined as a 'personal matter', in Part 2 of Schedule 2 of the Powers of Attorney Act, that is, not a health care matter.
- Ensure that consent for forensic examination for a person with impaired capacity can only be provided by an authorised power of attorney, (general power of attorney or Enduring power of attorney), appointed Guardian or the Public Guardian. Substituted decision-making by a statutory health attorney is not authorised for forensic examinations.
- Ensure that patients are aware that they may withdraw consent at any time.
- Ensure patients understand what happens to any samples from a forensic examination, including storage, access and destruction processes.

[1] A Gillick-competent child is one who has the capacity to consent despite being under 18 years of age. To be Gillick-competent, the child must have sufficient understanding, intelligence and maturity to appreciate the nature of the care to be provided, the consequences and risks, and the alternatives. This will vary according to the significance of the decision and factors within the child such as their maturity: Gillick v West Norfolk and Wisbech Area Health Authority [1986] 1 AC 112.

5.2. Clinical Care

1. **Nursing triage** on presentation at Emergency Department is as per all presentations including assessment for injuries and vital signs. Clinical interventions will take priority over forensic examination (*See Attachment 1*).
2. Immediately notify the Senior Medical Officer for any significantly injured or potentially unstable patients to arrange **urgent medical assessment**.
3. Offer all patients psychosocial support in a private environment, if available, and discussion of options including information to inform a decision on police involvement and a forensic examination.
4. For patients under 18 years, if a reportable suspicion[2] has been formed about a child, the treating health professional is to report that to Child Safety Services in line with mandatory reporting responsibilities of clinicians.
5. Pending consent of the patient and explanation of options, clinical staff trained in providing Sexual Assault examinations collect evidence using Sexual Assault Investigation Kit. See details in 7.3.
6. Accurate and comprehensive clinical notes should be recorded in the patient's hospital record. All clinical documentation should be made in accordance with QH-POL-280:2014 Clinical Records Management Policy as well as clinical documentation guidelines that are relevant to individual Hospital and Health Services. A forensic examination should be documented using an appropriate proforma. The forensic record is separate to the patient's clinical record. Copies of clinical documentation should only be filed in the forensic record if relevant to the forensic medical examination.
7. It is recommended that all examinations occur in the presence of an appropriate person acting as a chaperone / support person where possible.

5.3. Clinical Interventions

5.3.1. Time-critical interventions include:

- injuries sustained during the assault
- emergency contraception
- Hepatitis B vaccination +/- immunoglobulin
- HIV Post Exposure Prophylaxis (PEP)
- Chlamydia prophylaxis treatment.

5.3.2. Investigations include:

- for injuries as clinically indicated
- Beta-HCG if possibility of pregnancy pre-existing
- Full Blood Count (FBC), Electrolytes and Liver Function Tests (ELFTs) if commencing PEP
- other serology may be deferred until follow-up
- Sexually Transmitted Infection (STI) screening is recommended two weeks post episode by a relevant practitioner—this may be by referral to a general practitioner or sexual health service.

5.3.3. Clinical interventions (details in Attachment 2):

- Treat any injuries identified on assessment as clinically indicated.
- Consider Hepatitis B immunity.

---

[2] 'Reportable suspicion' about a child is defined in section 13E(2) of the Child Protection Act 1999 (Qld) as a reasonable suspicion that the child has suffered, is suffering, or is at unacceptable risk of suffering, significant harm caused by physical or sexual abuse; and, may not have a parent able and willing to protect the child from the harm. If a reportable suspicion has been formed, a written report must be given to the chief executive (section 13E(3)).

- Consider HIV risk: if high or uncertain risk HIV exposure, contact Infectious Disease physician or sexual health clinic for advice regarding PEP and follow up.
- Consider Emergency Contraception: Postinor 1 (levonorgestrel 1.5mg) up to 72 hours after reported assault or if >72hrs -120 hours, consider Ulipristal acetate.
- Consider STI prophylaxis if unreliable follow up or patient concern.
- Consider Tetanus Prophylaxis if indicated.
- Arrange appropriate follow up: this follow up will vary with site, reported events, individual circumstances and background medical issues.

5.4. Psychosocial Interventions:

Where available, the person should be referred to a Sexual Assault support service or Social Work service for post-acute support such as:

- assisting to the person to return to their usual level of functioning
- providing information about options available including their rights as a victim of crime.
- practical support, including contacting family members or support persons. If consent provided, talk to family members or support persons about how best to support the patient
- advice on 'common' responses, symptoms and reactions following a sexual assault
- psychosocial and risk assessment – physical, psychological and/or financial risk to patient and any noted child protection concerns
- information and referral, with consent, to relevant sexual assault support service.

The social worker, or other health professional, should also advise the patient of their right to:

- sexual health medical advice, treatment and follow up
- information about reporting options, including making a formal complaint to the Queensland Police Service
- referral to the Queensland Police Service via PoliceLink on telephone 131 444 to report the matter or attend any police station in their area to discuss their legal options
- Queensland Police Service's alternate reporting options
- referral to the state-wide Sexual Assault Helpline on telephone 1800 010 120.

For those under 18 years, report all suspected sexual assaults in line with mandatory reporting responsibilities of clinicians.

Where the sexual assault has occurred within an intimate personal relationship, family relationship or an informal care relationship, the patient should be informed of their option to seek protection under the Domestic and Family Violence Protection Act 2012. Where appropriate, the patient should also be referred to a specialist domestic violence service for support and assistance.

5.5. Forensic Examinations:

- Wherever possible, the forensic examination should be provided by a suitably trained clinician such as a Forensic Nurse Examiner; Nurse(s) trained in sexual assault examination; Government Medical Officer(s); Forensic Physician; or other Medical Officer(s) who have received training in forensic examinations.
- When there is no trained clinician available, a Senior Medical Officer can complete the examination accessing phone support from the Clinical Forensic Medicine Unit.
- A sexual assault investigation kit (SAIK) should be used, and a sexual assault examination record completed.
- Care should be taken to minimise the risk of DNA contamination from the room's fixtures and facilities.

- If the patient consents to a forensic examination but does not wish to make a formal complaint to police or wishes to defer this decision, then the examination is performed without notification to police. In this case, Queensland Health stores the sample centrally until such a time that the patient decides to report the sexual assault to police, or the sample is destroyed after 12 months. Patients should provide written acknowledgement that the sample will be destroyed after 12 months, unless QPS request the sample following a complaint to QPS by the patient.
- Release of patient information and specimens to police should only occur with the patient's consent.
- Examiners should ensure that chain of custody obligations are rigorously attended to, ensuring that the validity of collected forensic evidence is maintained.
- Forensic examiners with scope of practice in Adult sexual assault must NOT perform forensic examination for patients under the age of 14 years. Forensic examiners with a scope of practice in paediatric sexual assault may attend all patients 18 years and under.

6. Definition of Terms used in the guideline

Term	Definition / Explanation / Details	Source
Hospital and Health Service	Hospital and Health Services are statutory bodies and are the principal providers of public sector health services.	*Hospital and Health Boards Act 2011*
Forensic Examination	The forensic examination consists of obtaining a history as to the nature of the assault to guide the subsequent physical examination. It also includes interpretation of injuries and the collection of forensic samples as it relates to the alleged sexual assault. A Sexual Assault Investigation Kit (SAIK) is used to collect DNA evidence	Queensland Government Interagency Guidelines for Responding to People Who Have Experienced Sexual Assault.
Child	Under the age of 18 years For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.	Queensland Health Guideline: Conducting Child Sexual Assault Examinations (Document Number # QH-GDL-943:2015
Trained Clinicians	Forensic Examinations can be provided by: • Forensic Physician • Medical Officers who have received training in sexual assault examination • Senior Medical Officers accessing phone support from Clinical Forensic Medicine Unit • Government Medical Officers • Forensic Nurse Examiners (postgraduate qualification in Forensic Medicine) • Sexual Assault Nurse Examiners. Nurses trained in sexual assault examinations having completed a recognised short-course eg SANE 40CPD short course)	

7. Document approval details

Guideline custodian

General Manager, Community and Scientific Support, Health Support Queensland.

Approval officer

Chief Executive Officer, Health Support Queensland

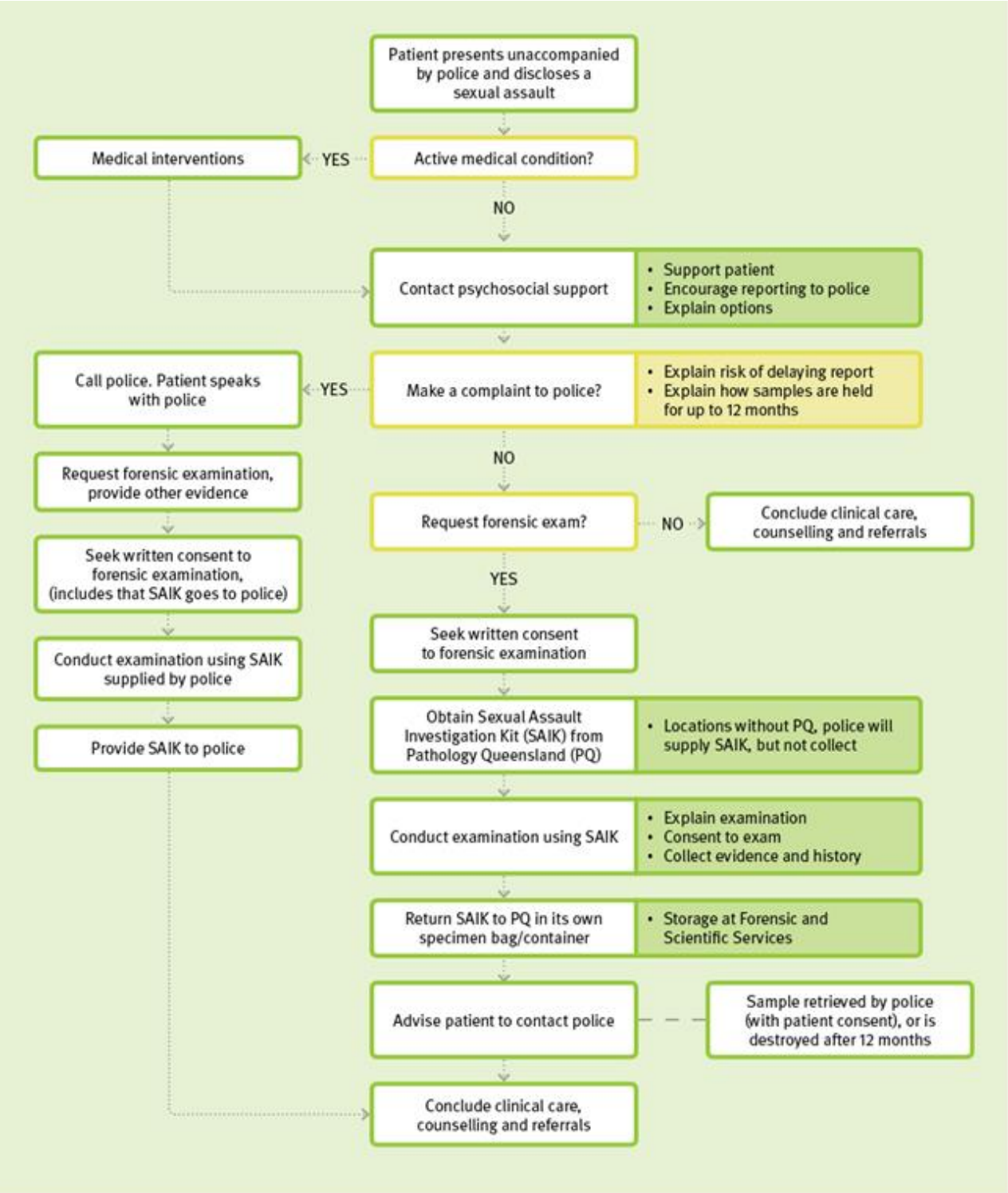
Approval date: 10 September 2019

Approval date: 10 September 2019

8. Version control

Version	Date	Prepared by	Comments / reason for update
1	22/07/2019	Health Support Queensland	New Guideline published as a HSD guideline
2	12/09/2019	Health Support Queensland	Transferred to QH guideline Updated to address specific considerations for patients aged 14-17 years based on input from subject matter experts

Attachment 1: Emergency Department sexual assault management pathway



Attachment 2: Detailed clinical interventions

Hepatitis B risk assessment and management post sexual assault

If immunised: pathology testing only to confirm immunity and review and follow up of Hepatitis B status. This may be done at follow up.

Hepatitis B Immunoglobulin is not routinely required.

If no previous immunisation, or incomplete immunisation then start the immunisation course or give a booster (i.e. only one or two prior doses).

Consider 400 units IM Hepatitis B IG in a non-immune patient within 72 hours particularly if exposure to member of high-risk group for Hepatitis B (Indigenous, injecting drug user, person from countries where Hepatitis B is endemic) or known hepatitis B. This is most effective administered as soon as possible after exposure, however can be delivered up to 14 days post assault. A repeat Hepatitis B IG is also required at one and six months. This may be provided at a sexual health clinic or via a General Practitioner.

https://immunisationhandbook.health.gov.au/resources/handbook-tables/table-post-exposure-prophylaxis-for-non-immune-people-exposed-to-a-source

Assessing need for HIV prophylaxis post sexual assault

The risk of HIV following sexual assault in Australia is very low. Despite the low likelihood of infection, HIV remains a concern for victims and should be discussed. Giving a realistic estimation of risks may provide reassurance to the victim.

HIV prophylaxis is infrequently required following sexual assault but should be considered if offender was known to be: HIV positive, a male who has sex with males (MSM), an Intravenous Drug User (IVDU) or was from a high HIV risk country such as Sub-Saharan Africa, South East Asia or Papua New Guinea. Transmission risk is also higher if the sexual assault resulted in bleeding from genito-anal injury. *Refer to the Australasian Society for HIV Medicine (ASHM) guidelines for table summarising quantitative risks in different sexual activity scenarios which can be found at:
http://www.pep.guidelines.org.au/index.php/assessment-of-the-risk-of-hiv-transmission/what-is-the-hiv-transmission-risk-exposure#table1

Routine baseline status for HIV should be undertaken. For pre-HIV counselling please refer to the HIV-pre and post-test counselling information and patient brochures located at:

https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/hiv-aids

For high-risk cases or any concerns, discuss each case individually with on call Infectious Disease consultant or local Sexual Health Clinic. Many will not be recommended Post Exposure Prophylaxis (PEP). Risk of exposure should be considered depending on sexual assault type and potential sero-prevalence of perpetrator. PEP Guidelines for non-occupational exposure to HIV can be obtained from the ASHM website.

https://www.ashm.org.au/HIV/PEP

Post-exposure prophylaxis starter drug packs should be available for the Emergency Department. These are authorised by the Infectious Disease consultant or Sexual Health Consultant who will advise which

starter pack to use. Most will require Pack A (two drugs) and it is important to follow correct procedures in its administration and documentation. They must be instituted within 72 hours. Follow up of these patients is as an outpatient to Infectious Disease or Sexual Health Clinic or other local arrangement depending on facility location.

Common side effects are nausea, headaches, lethargy (up to 1/3 of patients cease these drugs before completion due to side effects). More serious side effects include liver toxicity. Baseline full blood count (FBC) and electrolytes and liver function tests (ELFT) are required before starting.

Emergency Contraception post sexual assault

If patient has good effective contraception this is not required, e.g. Implanon, Depo provera, Mirena coil in situ, no missed oral contraceptive in last menstrual cycle.

Discuss benefits of “morning after pill”. Generally, this is very safe and should be given if there is any risk of pregnancy.

If indicated, Postinor 1 (Levonorgestrel 1.5mg) up to 72 hours should be taken immediately. It is only effective IF USED WITHIN 72 HOURS OF ALLEGED ASSAULT. It is more effective, the earlier it is used. Consider offering oral maxalon if patient is known to have nausea with the drug. However, very few patients (1.4 – 5.0 per cent) vomit with the progesterone-only emergency contraceptive and antiemetics are not routinely recommended.

If presentation is >72 hours and less than 120 hours, an alternate drug - Ulipristal acetate is likely to be more effective. It is contraindicated in patients with liver disease, asthma requiring steroids, with breast feeding and less-effective if using antacids or Proton Pump inhibitors.

Advise pregnancy test if next period late or different from normal.

Prophylaxis of Sexually Transmitted Infection post sexual assault

Overall risk of STI such as chlamydia, gonorrhea and trichomonas is low. Options of treatment prophylactically in Emergency Department or STI screens in two weeks should be considered depending on patient demographics, likely patient compliance and patient choice.

Chlamydia is the most frequently encountered STI that would be amenable to prophylaxis. After urine PCR (or swabs including throat and rectal if applicable) are collected, Azithromycin 1gm orally stat should be given prophylactically in the Emergency Department if it is difficult to ensure compliance by follow-up of patient.

These patients still require follow up STI screening with a urinary PCR at two weeks post sexual assault as the above does not prevent other infections.

Other bacterial STIs have a very low prevalence in metropolitan Queensland. For high-risk or complex exposures (e.g. multiple perpetrators, perpetrators from population group with high rates of STI), contact Sexual Health Service or Infectious Disease consultant for advice.

If risk is significant, compliance with follow up low or if advice unavailable for such cases give the following two-drug therapy (Please be mindful of Ceftriaxone Resistant Gonorrhoea – if prescribed collect a first pass urine sample for Microscopy, culture and sensitivity (MC&S) and PCR prior to treatment):

1. Ceftriaxone 500mg IM with 2mls 1 per cent lignocaine/Ceftriaxone 500mg IV stat - same if pregnant **AND**

2. Azithromycin 1gm orally stat - same if pregnant.

Follow up after reported sexual assault

All patients should be referred for follow up including pathology results and recommended ongoing testing. Most patients are suitable for medical follow up with their general practitioner, but they should be offered a choice of follow up options.

Patients with more complex or high-risk exposures should be referred to a Sexual Health Clinic or an Infectious Disease specialist for follow-up. A Sexual Health Clinic may also be offered to patients with concerns about confidentiality or those who require access to a free service.

Patients who are commenced on HIV post-exposure prophylaxis should be urgently referred to the Infectious Disease team or the local Sexual Health Service clinic for ongoing supply of medication and specialised management of antiretroviral drugs.

Refer to appropriate Sexual Assault Support Service and/or other psychosocial services such as referral to National Sexual Assault Helpline (NSAH) - 1800 737 732 which operates 24/7 and can provide phone counselling sessions.

Department of Health

Guideline

Document Number # QH-GDL-943:2015

Conducting Child Sexual Assault Examinations

1. Purpose

This Guideline provides consistency and best practice for conducting child sexual assault examinations.

2. Scope

This Guideline provides information for all employees, contractors and consultants within Queensland Health and Hospital and Health Services (HHS).

3. Related documents

Procedures, guidelines and protocols:

- Guideline for Care and Treatment Order for a Child
- Guideline for Consent in Child Protection and Management of Complex Care Cases and End of Life Decision Making
- Guideline for Health Professionals Child Safety Capability Requirements
- Guideline for Information Sharing in Child Protection
- Guideline for Reporting a Reasonable/Reportable Suspicion of Child Abuse and Neglect
- Guideline for Responding to an Unborn Child High Risk Alert.

4. Guideline for conducting child sexual assault examinations

4.1 Conducting sexual assault examinations

4.1.1 All medical practitioners shall comply with the informed consent requirements detailed in the *Queensland Health Guide to Informed Decision-Making in Healthcare*, prior to conducting sexual assault examinations in children and young people.

4.1.2 For child victims of sexual assault, under the age of 14 years, sexual assault medical and forensic examinations should be performed by a medical officer with appropriate paediatric skills including child protection and/or sexual assault medical examination training or skills.

4.1.3 For child victims of sexual assault, 14 years of age and over, forensic sexual assault examinations should be performed by a Forensic Medical Officer, Government Medical Officer, Forensic Nurse Examiner or a Medical Officer appropriately skilled to conduct forensic medical examinations.

5. Review

This Guideline is due for review on: 01 June 2020

Date of Last Review: 01 June 2018

Supersedes: Nil

6. Business Area Contact

Strategy Children and Families Unit, Strategic Policy and Legislation Branch, Strategy, Policy and Planning Division, Department of Health

7. Definitions of terms used in the guideline and supporting documents

Term	Definition / Explanation / Details	Source
Child	For the purposes of this document, a child is 'an individual under 18 years of age'.	s.8 *Child Protection Act 1999*
Forensic nurse examiner	Forensic nurse examiner means a nurse who is appointed by the chief executive (health) to perform the role of a forensic nurse examiner. They are employed by the Clinical Forensic Medicine Unit.	Forensic scientific services
Forensic sexual assault examination	This is a specific examination undertaken utilising the Sexual Assault Investigation Kit (SAIK) performed at the request of investigating police.	Forensic scientific services
Informed consent	For consent to be informed, the patient or decision maker needs to be fully aware and have an understanding of the condition, the nature and purpose of the available and proposed healthcare, and potential consequences of each option. Furthermore the patient should be aware of what is likely to occur should they choose not to receive the healthcare. This results from a process of shared decision making and the provision of information in a manner appropriate to the needs of an individual patient or decision-maker.	Queensland Health Guide to Informed Decision-Making in Healthcare (2012)
Government medical officer	A medical officer employed as a government medical officer has the ability to perform procedures under the *Coroners Act 2003*	Queensland Health Human Resources Policy C3
Medical examination	A medical examination is a physical, psychiatric, psychological or dental examination, assessment or procedure and includes forensic examination and an examination or assessment carried out by a health practitioner.	*Schedule 3 Child Protection Act 1999*

8. Approval and implementation

Guideline Custodian:

Joanna Gurd, Manager, Strategy Children and Families Unit, Strategic Policy and Legislation Branch

Responsible Executive Team Member:

Kathleen Forrester, Deputy Director-General, Strategy Policy and Planning Division

Approving Officer:

David Harmer, Senior Director, Strategic Policy and Legislation Branch

Approval date: 01 June 2018

Effective from: 01 June 2018

Version control

Version	Date	Prepared by	Comments
V1.0	01/04/2014	Kyle Fogarty	
V1.0	07/04/2014	Joanna Gurd	
V2.0	01/11/2014	Sharon McDonald	Queensland Child Protection Reform
V3.0	11/12/2014	Sharon McDonald	Consultation feedback incorporated
V4.0	28/04/2016	Kyle Fogarty	Periodic review
V4.1	01/05/2016	Joanna Gurd	Final
V4.2	28/05/2018	Joanna Gurd	Final and Periodic review

Document Title:	CREDENTIALING PROCESS FOR DEFINING A SPECIFIC SCOPE OF CLINICAL PRACTICE FOR NURSES AND MIDWIVES						
Document ID:	[redacted]	Version No:	6.0	Effective Date:	16/06/2022	Next Review Date:	31/01/2026
Document Custodian:	Director of Nursing and Midwifery Workforce Unit			Executive Sponsor:	Executive Director Nursing & Midwifery, Quality & Safety		
Endorsement:	[SIGNED] **Kylie Cookson** A/CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice Committee **Date:** 07/06/2022			Authorisation:	[SIGNED] **Dr Emma McCahon** **Chief Executive** CQHHS Health Service Chief Executive Executive Services **Date:** 15/06/2022		

Statement

Relevant nurses and midwives are required to be credentialed to have a defined specific scope of clinical practice (SoCP) granted to them before they undertake identified clinical practices or activities. This requirement is determined by the Credentialing and Defining the Scope of Clinical Practice Health Service Directive and the Central Queensland Hospital and Health Service (CQHHS) Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice (SoCP) Committee.

Person Centred Care Statement

CQHHS' intent is to deliver high-quality care that is safe, of value and to provide an ideal experience for consumers, their carers and family. Person-centred care is the foundation for achieving this. CQHHS will focus on delivering person-centred care to enable the success of achieving better outcomes for consumers, better experience for consumers and staff; and better value care. CQHHS will support consumers to engage as partners in their own care and ensure the consumers' health literacy is considered.

Intent/Purpose

This document:

- Outlines the nursing and midwifery roles within the HHS that are required to undergo the credentialing for defining a specific scope of clinical practice process.
- Describes the application and renewal processes which enables nurses and midwives to be credentialed to hold a defined specific scope of clinical practice within the CQHHS.
- Outlines the process to authorise a temporary scope of clinical practice.
- Outlines the process to mutually recognise a health professional's scope of clinical practice.
- Defines the maximum duration of a scope of clinical practice.
- Sets out the requirements for maintaining the register of nurses and midwives who intend to engage in a defined, specific SoCP within the CQHHS.
- Describes the appeal process when an application for credentialing of a defined, specific SoCP within CQHHS is denied, withheld, limited, or granted in a different form.
- Ensures all credentialing decisions are professionally led with appropriate nursing and midwifery representation and involvement from a multidisciplinary team.
- Outlines the reporting obligations to the CQHHS Board and Department of Health.

Scope

This document applies to all nurses and midwives and managers of nurses and midwives (permanent, temporary, casual and contract) who hold a specific scope of clinical practice qualification as identified in this document and who are requesting to utilise this qualification to be authorised to practice with a with a specific scope of clinical practice within CQHHS.

Policy

Credentialing refers to "*The formal process used to verify and review the qualifications, experience, professional standing and other relevant professional attributes of health professionals for the purpose of forming a view about their competence, performance and professional suitability to provide a safe, high quality healthcare service within specific environments*" (Australian Commission on Safety and Quality in HealthCare, [2015].

The CQHHS credentialing process is different from that of independent professional organisations who may also provide professional recognition through a "credentialing' process based on specific qualifications through a professional credentialling process (for example Australian College of Mental Health Nurses, Australian College of Children and Young People's Nurses or Australian Diabetes Educators Association). This process is for professional recognition and DOES NOT authorise a scope of practice within the organisation.

The SoCP for each advanced practice nurse or midwife applicant is highly individualised and therefore, determined by the environment in which the applicant is educated, experienced, competent, and authorised to practice within.

Requirements specific to nurses

- Nurses undertaking specific procedures or practices that require specific qualifications and training must have a current documented authorised SoCP.
- Privately-practicing nurses working within Queensland Health facilities, but not employed by Queensland Health need to be credentialed and have a current documented SoCP covering all work performed.

Requirements specific to midwives

- Midwives undertaking specific procedures or practices that require specific qualifications or training have a current documented authorised SoCP.

The CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice (SoCP) Committee applies the following principles as outlined in the Credentialing and defining the scope of clinical practice | Health service directive | Qld Health when reviewing applications and making recommendations for a credentialed nursing or midwifery SoCP within CQHHS.

Nurses or midwives are not authorised to perform the Specific SoCP or role associated with their qualification within Central Queensland Hospital and Health Service facility until they have received approval to do so by the Chair of the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice (SoCP) Committee via formal letter.

Specific Scope of Clinical Practice

The following table identifies the roles and maximum duration of credentialing approval outlined within the documents, by the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice Committee.

Scope of Clinical Practice	Maximum Duration
BCG and Tuberculin testing	3 years
Cervical Screening	3 years
Diabetes Educator (Nurse)	3 years
Forensic Nurse	3 years
Immunisation Program Nurse	3 years
Rural and Isolated Practice Registered Nurse (RIPEN)	3 years
Sexual Assault Nurse Examiner (SANES)	3 years
Sexual Health Program Nurse	3 years
Stomal therapy Nurse	3 years

The duration of the credentialing approval is usually three years however, this may be:
- Reviewed if the individual's role and responsibilities change
- Withdrawn if the nurse or midwife does not meet the CQHHS professional practice and conduct standards.

Initial Application Process

The line manager of the individual nurse or midwife is responsible and accountable to ensure that the nurse or midwife has been informed of the credentialing requirement for a defined SoCP, having been directed to this document and the relevant procedures, protocols and forms.

Step One:
The clinician seeking credentialing is to complete the relevant Specific Scope of clinical practice application form for the specific SoCP being requested. This is available from the Nursing and Midwifery credentialing site. The completed form is to be emailed to [redacted]

Step Two:
Following receipt of the completed application form, a link will be generated for the CGOV system and will be sent to the applicant; via the email address provided in the application form, to enable uploading of the required documents identified on the application form.

If this service is new to the facility in which the clinician practices or is a new role that meets the requirements for credentialing the service lead needs to complete the new service model application form in addition to other requirements outlined for each role.

The application for the credentialing process is reviewed by the Assistant Director of Nursing and Midwifery Workforce initially to ensure all requirements are included and then submitted for consideration to the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice Committee.

The application form and required documentation shall be placed on the agenda for consideration at the next committee meeting.

If a nurse or midwife commences employment with CQHHS and urgently requires consideration of credentialing this will be managed as an out of session endorsement.

Nurses or midwives who are utilising a specific SoCP prior to the development of this procedure are to continue using their specific SoCP if it is a requirement of their position but, will need to have an approved specific SoCP within three months of this policy being published as outlined in the transition arrangements in the documents.

Approval Process

All applications are reviewed by the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice Committee at the next scheduled meeting. The Chair and a minimum of two committee members must review each application document. Subsequently the committee will review and endorse the application. The scope of clinical practice endorsed by the committee must be clearly documented in the minutes and the scope of clinical practice register.

The Executive Director of Nursing and Midwifery Services (EDNMS) approves the recommendation from the committee. The applicant and the line manager receive notification of the outcome of the SoCP application.

Interim Credentialing

Interim credentialing to practice in a defined, specific SoCP may be recommended by the chair of the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of clinical practice (SoCP) Committee for a maximum of three calendar months or, until the next scheduled meeting of the committee in the following circumstances:

Interim credentialing approval to practice in a defined, specific SoCP may be recommended by the chairperson of the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice (SoCP) Committee for a maximum of three calendar months or, until the next scheduled meeting of the committee in the following circumstances:

- The nurse or midwife commences employment in CQHHS, and their role requires a defined SoCP.
- The nurse or midwife gains the qualification that enables practice within a defined, specific SoCP which is required or recommended for that role.
- In emergent situations as deemed appropriate by the EDNMS.

The chair will not grant interim credentialing until all required and/or requested relevant documents have been received and are deemed by the chair as complete.

The chair shall notify the applicant and their line manager within one working day of the interim approval being granted. The period of interim credentialing shall be a maximum of three months and full consideration will occur at the next committee meeting where the documents of the applicant being granted interim credentialing shall be reviewed.

An applicant can only receive interim credentialing approval once and the period of interim credentialing approval cannot exceed three months in total.

The following conditions apply to the granting of an interim SoCP:

- Approval will not exceed three calendar months
- An interim SoCP cannot be renewed
- Must be tabled at the next scheduled CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of clinical practice (SoCP) Committee meeting.

Mutual Recognition of Authorisation and Scope of Clinical Practice

If a nurse or midwife works under exactly the same SoCP in more than one Queensland Hospital and Health Service, a mutual recognition process may be undertaken to grant a mutual recognition SoCP for Central Queensland Hospital and Health Service. The CQHHS must obtain a copy of the originating HHS application form, the minutes of the meeting when the SoCP was granted and the applicants' SoCP approval letter.

The expiry date of the CQHHS approved mutual recognition SoCP must not exceed the expiry date of the SoCP approval granted by the HHS that originally granted the application. The Executive Director of Nursing and Midwifery must review and endorse the application for mutual recognition. The mutual recognition must be ratified at the next committee meeting.

Renewing Authorisation Status

Once the initial application is endorsed by the committee it is valid for a 3-year period unless a review is initiated.

Step One:
The applicant and line manager will receive a renewal reminder 3 months prior to the expiry date with an application form attached. Complete the Specific Scope of clinical practice application form and email to:

[redacted]

Completed application forms need to be returned within 2 weeks of the renewal reminder.

Step Two:
Following receipt of the completed application form, a CGOV system link will be generated and will be sent to the applicant; via the email address provided in the application form, to enable uploading of the required documents identified on the application form.

The renewal application on CGov needs to be submitted no later than 6 weeks prior to the expiry to allow sufficient time for administrative processing and committee review and endorsement. It is the applicant's responsibility to ensure these timelines are met to avoid expiry of the approved SoCP.

Nurses and midwives who have not completed the process steps outlined, will not be considered by the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice Committee to have credentialing approval on the register for their specific SoCP and therefore will not be authorised to practice within the CQHHS.

The same scope of clinical practice SoCP credentialing is not automatically granted. Documentation required will be as per Appendix 2-10 Statements.

Where legislation necessitates retraining requirements then renewal of credentialing shall be identified by the committee.

All nurses and midwives who have been previously listed on the credentialing register, but who have not submitted an application to renew their credentialing at least 4 weeks prior to expiry date will not be considered at the next committee meeting.

This will result in the nurse or midwife not being authorised to practice or to perform any activity associated with their additional qualification past the credentialing expiry date until such time as their renewal application has been endorsed by the committee.

If the role requirements of the nurse or midwife's position demand that they require credentialing to practice within a defined SoCP to continue in that position, then their position may be subject to review by their line manager in consultation with the Executive Director of Nursing and Midwifery Services.

Maternity or Extended Leave

Individual nurses or midwives who have been on leave for a period of 12 months or more are not authorised to independently practice the activities that are related to their intended defined specific SoCP until their application has been submitted and approved by the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice (SoCP) Committee.

Reporting of Authorisation Breaches

Breaches in credentialing processes and SoCP may be identified by a supervisor/manager/director in the workplace during consultation or induction. If there is a breach in credentialing i.e., notification that a practitioner has commenced work before credentialing for a defined SoCP has been approved or, a practitioner has been working outside their current SoCP, the breach is to be immediately reported to the EDNMS.

If notification is required, a Breach Notification Report Form is to be completed and forwarded to the EDNMS for signing and reporting to the Practice Leader Quality Safety Risk & Data Management. If a breach is identified through a clinical incident that was rated as a high risk or SAC1 event, or an incident which may result in media attention, a brief is to be prepared urgently for the HSCE who will provide an immediate report to the Chief Health Officer.

Practitioner request to review SoCP

A practitioner may voluntarily request a review of their SoCP at any time. This is to be recognised and encouraged as appropriate professional conduct. Where the requested change of SoCP is incompatible with service delivery needs, this should be resolved using relevant human resource management procedures, but with a primary focus on patient safety.

Appealing a Decision

- To appeal a decision made by the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of clinical practice (SoCP) Committee, a request for reconsideration must be made in writing by the applicant and submitted to the secretariat of the committee within 30 days of receipt of Credentialing outcome letter. The applicant must clearly articulate why a reconsideration of the committee's decision is requested and provide evidence to support the request.
- The individual nurse or midwife should not undertake practice within the defined specific scope of clinical practice until the outcome of an appeal has been determined.
- The Chief Executive will form a review group of a minimum of three relevant independent clinicians which will include:
  - Nursing or Midwifery Director and/or Director of Nursing
  - Nurse or Midwife with the SoCP relevant to the application.
- This committee will be convened within 20 days of receipt of an appeal. The review group will study the request for reconsideration and the additional evidence to support this request. The outcomes of the committee may include:
  - Confirmation of the original decision regarding SoCP, *or*
  - Requirement for an amendment of the original decision which may include conditions.

During each stage of the credentialing and SoCP processes, compliance with natural justice and procedural fairness must be appropriately managed and adhered to.

The appeals process:

- An applicant may lodge an appeal to the committee through the Secretariat.
- The secretariat will ensure the appeal is processed through the committee.
- An appeal committee will be convened independent to the credentialing committee.
- The Appeals Committee will consist of a relevant lead in the SoCP, an independent nurse or midwife, senior nurse or midwife, a relevant Health Professional and a relevant peer.
- Members of the Appeals Committee will ensure any conflicts of interest are declared.
- The Appeals Committee will comply with the Health Service Directives/Policy.
- The Appeals Committee will meet within one week of the minuted applicant appeal.
- The Appeals Committee chairperson will review the Appeals Committee membership prior to meeting to ensure the committee has the expertise, training and independence necessary to participate in the process and assist in the decision being appealed.
- The appointment length of the Appeals Committee will be for the duration of the resolution of the matter under consideration.
- The outcome of the appeals processes will be included in the Credentialing committee agenda to ensure outcome is communicated with members.

Clinical Documentation

Clinical documentation in the health record must be accurate, timely and needs to reflect the entirety of patient care provided, showing evidence of clinical reasoning and decision-making. The documentation must incorporate diagnostic specificity wherever possible and link treatment to diagnoses within the clinicians' scope of practice.

Roles & Responsibilities

Individual Nurses or Midwives

- Supplying their completed application form and all required and requested documented evidence through C-Gov of the educational components, professional standards and competency requirements relevant to the defined, specific scope of clinical practice.
- Minimum qualifications training, registration, experience and clinical competence required in order for a nurse or midwife to be authorised for a defined scope of clinical practice clinical practice.
- Ensuring that their practice is consistent with their credentialing status
- An undertaking to adhere to the specific compliance requirements of the National Safety and Quality in Health Care Standards, specific care standards, professional practice standards and relevant policy and procedures.

- Undertake successful self-assessment every 12 months or as identified for the specific clinical practice / activity and provide evidence of same.
- Holds a defined SoCP linked to annual performance appraisal development (PAD).
- Apply for renewal of SoCP through the CGov data base for the continuation of an existing scope of clinical practice prior to expiry of current SoCP.

Nursing Director or Director of Nursing

- Referral to the committee secretariat, where it has been identified that the standard of practice requires a defined scope of clinical practice to be granted for the organisation.
- The peer review process of assessment of credentials and clinical competence of nurses / midwives who apply to have a defined scope of clinical practice granted.
- Notify the committee if a visiting nurse or midwife not employed by CQHHS requiring SoCP.
- Ensure relevant audits are completed by an appropriate clinical peer.

Line Manager Responsibilities (NUM, Team leader or DON in rural facilities)

- Ensuring yearly updates, mandatory training and PAD are completed yearly as per CQHHS policies, by all staff recognised with a SoCP and in line with role requirements.
- Maintain a register of current staff with SoCP at ward level and reporting any breaches of SoCP to Nursing Director/ Director of Nursing and the committee through the Executive Director of Nursing and Midwifery.
- Notify the committee if a visiting nurse or midwife not employed by CQHHS, is requiring an approved SoCP.

Nursing and Midwifery Workforce Unit (NMWU)

- The NMWU Administrative Officer is the secretariat of the committee.
- Ensuring current data corresponds with C-Gov Credentialing system.
- Ensures the committee minutes are appropriately documented and all new applicants are added to the C-Gov AHPRA app (linked to AHPRA Personal Identification Exchange (PIE) system).
- C-Gov AHPRA app will ensure verification of the practitioner's current registration status through the AHRPA PIE system, and NMWU will report any breaches or changes in conditions or notifications to the EDoNM and the committee.
- Ensure all new applicants are entered into C-Gov data base and renewal reminder of SoCP is emailed out to applicants three (3) months prior expiry of SoCP.

Committee

- Reviewing the applications as per education provided, and in line with the committee terms of reference (TOR) in line with legislation, and State and local policies.
- Using applied knowledge to assign recommendation for either SoCP endorsement, the approval for SoCP with limitations/restrictions or the refusal to grant SoCP approval.
- Comply with principles of natural justice and procedural fairness as a committee member, through declaration of conflicts of interest and acting in a manor free of prejudice.
- Ensure clear accountability of the credentialing and authorisation for SoCP processes and seek advice when unclear applications for SoCP.
- The committee will not consider an incomplete application or make recommendations 'pending' further information.
- Ensuring SoCP is aligned with the Clinical Service Capability Framework (CSCF) of each SoCP application.
- Reporting and maintaining clinical governance with current National Safety and Quality Health Service Standards: Standard 1 Governance for Safety and Quality in Health Service Organisations.

Appendices

- Nil

Definition of terms

Term	Definition	Source
Appeals Committee	The Appeals Committee will be a specially convened independent committee, formed with a minimum of 5 specialist nurses or midwives and allied health practitioners. The Appeals Committee will be convened for the purpose of hearing an individual appeal and will comply with health service directives and policy.	
C-Gov data system	The C-Gov data system is a supported online interface for authorisation and credentialing of health professionals. The system offers an interface for credentialing officers, managers, individual applicants and committees. The system offers the ability to report on the authorisation and credentialing processes in the HHS.	

Clinical Service Capability Framework	The framework outlines the minimum service requirements, staffing, support services and risk considerations for both public and private health services to ensure sage and appropriately supported clinical service delivery. The Clinical Services Capability Framework for public and licensed private health facilities CSCF v3.2	Queensland Health
Competence	Competence is the application of knowledge and skills in the interpersonal relations, decision making and performance consistent with the professional practice role.	
Credentialing	The formal process used to verify and review the qualifications, experience, professional standing and other relevant professional attributes of health professionals for the purpose of forming a view about their competence, performance and professional suitability to provide a safe, high quality healthcare service within specific environments.	Australian Commission on Safety and Quality in Health Care. Credentialing health practitioners and defining their scope of clinical practice: A guide for managers and practitioners. December 2015.
Credentials	The practical experience, qualifications, professional awards and statements of competency issued by an authorised and recognised body that attest to a health professional's education, training and competence and relevant practical experience.	
Scope of Clinical Practice (SoCP)	The extent of an individual health professional's approved clinical practice within an organisation based on the individual's credentials, competence, performance and professional suitability and the needs and capability of the organisation to support the health professional's SoCP	Australian Commission on Safety and Quality in Health Care, Credentialing health practitioners and defining their scope of clinical practice: A guide for managers and practitioners. December 2015.
Scope of Practice	The full spectrum of roles, functions, responsibilities activities and decision-making capacity that individuals within that profession are educated, competent and authorised to perform	Nursing and Midwifery Board of Australia. Framework: Decision making framework for nursing and midwifery
Secretariat	Administration support for the committee and credentialing officer for the Nursing and Midwifery C-Gov System.	
Temporary Scope of Clinical Practice	Temporary SoCP may be used in circumstances when the services of a health professional without SoCP are required at very short notice or, where it is not possible to complete a full application process prior to the health professional commencing. This process strikes a balance between risks of patient harm which arises from a failure to provide an appropriately skilled health professional in a timely manner against the risks of patient harm arising from processes with reduced authorisation or credentialing requirements with less checks and balances in place.	Credentialing and defining the scope of clinical practice for medical practitioners and dentists: a best practice guideline (QH-GDL-390- 1:2017)
Immunisation Program Nurse (IPN)	Under the provisions of the Medicines and Poisons (Medicines) Regulation 2021, only appropriately authorised immunisation program nurses are able to administer and supply scheduled medicines as specified in the Extended Practice Authority 'Registered Nurses' Part D refers to 'immunisation program services'. This part provides the authority for registered nurses to administer vaccines, subject to certain limitations.	Queensland Health Source: Registration and qualifications | Queensland Health

Cervical Screening provider	A cervical screening provider has completed a recognised cervical screening training course in order to provide cervical screening services, and to monitor and maintain their clinical competency standards in line with the National Competencies for Cervical Screening Providers.	Queensland Health Source: Non-medical cervical screening providers | Queensland Health
Rural and Isolated Practice Endorsed Registered Nurse (RIPEN)	A registered nurse who has completed appropriate study in Rural and Isolated Practice, holds an endorsement, with the Australian Health Practitioner Regulation Agency, "under section 94 indicating that the registered nurse is qualified to obtain, supply and administer limited schedule 2, 3, 4 or 8 medicines appropriate to the registered nurse's scope of practice within the meaning of the current poisons standard under the Therapeutic Goods Act 1989 (Cwlth), s. 52D, to the extent necessary to practise nursing in a particular area and described and listed under the relevant drug therapy protocol, Chief Health Officer standing order or health services permit that must be compliant with relevant State and Territory legislation".	Nursing and Midwifery Board – Endorsement of scheduled medicines for registered nurses (rural and isolated practice)
Sexual Health Program Nurse (SHP)	A registered nurse who is authorised under the provisions of the Medicines and Poisons (Medicines) Regulation 2021, to be able to administer and supply scheduled medicines as specified in the Extended Practice Authority 'Registered Nurses' Part C- Sexual or reproductive health Services	Queensland Health Extended Practice Authority - Registered Nurses (health.qld.gov.au)

Supporting documents

Authorising Legislation, Policy and Standard/s:

- *Queensland Nursing Act 1992*
- Health Practitioner Regulation National Law (Queensland) 2009
- Credentialing and defining the scope of clinical practice | Health service directive | Queensland Health
- Medicines and Poisons Act 2019 – Extended Practice Authority 'Registered Nurses'
- Nursing and Midwifery Board: Registered Nurse competency standards
- NSQHS Standard 1 - Clinical Governance
- NSQHS Standard 2 - Partnering with Consumers
- NSQHS Standard 4 - Medication Safety

Procedures, Guidelines, Protocols:

- CQHHS - Consumer Health Care Rights (PDF)
- Credentialing and Defining the Scope of Clinical Practice for Nurse Practitioners & Private Practice Midwifes (PDF)

Forms and Templates:

- Breach Notification Report Form (DOC)
- New Service Application Form
- BCG and Tuberculin testing
- Cervical Screening
- Diabetes Educator (Registered Nurse or Registered Midwife)
- Forensic Nurse Examiner
- Immunisation Program Nurse
- Rural and Isolated Practice Registered Nurse (RIPEN)
- Sexual Assault Nurse Examiner (SANES)
- Sexual Health Program Nurse
- Stomal therapy Nurse

References and Suggested Reading

- Australian Charter of Healthcare Rights
- CQHHS Clinical Governance Framework (PDF)
- Consumer and Community Engagement Strategy (PDF)
- Credentialing Book of Knowledge (CBoK)
- Key legislative requirements: registered nurses and enrolled nurses

Consultation

Key stakeholders (position and business area) who were provided the opportunity to review this version are:

Name	Position and Business Area	Date of consultation
Julie Kahl	Nursing Director, Education and Research	March 2022
Kylie Cookson	A/ Executive Director of Nursing and Midwifery, Quality and Safety and Aged Care, Clinical and Rehabilitation Services	March 2022
Loraine Andizo	A/ADON Nursing and Midwifery Workforce	March 2022
Members	Nursing and Midwifery and Health Practitioner Credentialing and Defining Scope of Clinical Practice (SoCP) Committee	April 2022

Human Rights Act

Has this document been assessed and have evidence of compatibility with the *Human Rights Act Qld 2019*?

HRA Compatibility Assessment Form A	Completed	☒ Yes ☐ No
HRA Compatibility Assessment Form B (if required)	Completed	☐ Yes ☒ No - not required
HRA Compatibility Assessment Form C (if required)	Completed	☐ Yes ☒ No - not required

Risk Rating

Risk Rating	☐ Very High	☒ High	☐ Medium	☐ Low	As per QH Risk Matrix

Audit Strategy

Audit strategy	C-Gov Database Report of Authorised Nurses and Midwives will be provided to the CQHHS Nursing and Midwifery & Health Practitioner Credentialing and Scope of clinical practice Sub Committee monthly or as deemed by the committee.
Audit tool attached	No
Audit date	Monthly or as deemed by the Committee.
Audit responsibility	Chair CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining the Scope of Clinical Practice Sub-Committee.
Expected Outcome / Key Performance Indicators	100% of Nursing and Midwifery staff who practice with a Scope of clinical practice that requires credentialing approval as per this policy are authorised by the CQHHS Nursing and Midwifery and Health Practitioner Credentialing and Defining the Scope of clinical practice Sub-Committee. All breaches are reported as per this document

Key Words

Authorisation; Credentialing: Scope of Clinical Practice; regulation; Diabetes Nurse Educator, Forensic Nurse, Immunisation Program Nurse, Rural and Isolated Practice Registered Nurse, RIPEN; Sexual Assault Nurse Examiner; SANES; Sexual Health Program Nurse; BCG; Tuberculin; Stomal therapy, Clinical Practice, CQHHS

Review

This document will be reviewed as per the CQHHS Procedural Documentation Review Schedule (PDF)

Supersedes

Credentialing and Defining the Scope of Clinical Practice – Nursing and Midwifery cq_c32 v5.0 April 2020

Reasons for new document/revised document

☒ Planned/Period Review
☐ Recommendation(s) from a coronial enquiry or an incident analysis (RCA/HEAPS)
☐ Identification of gaps in existing procedures or processes
☐ Change to current service delivery model or the introduction of new equipment
☒ Change to legislation, standards, QH policy
☐ To improve an existing control or as a treatment action for an identified risk
☐ Patient Safety and Quality Improvement Service alert/notice
☐ In response to consumer feedback

Queensland Health

Forensic and Scientific Services
Clinical Forensic Medicine Unit

Sexual Assault Nurse Examiner (SANE) Credentialing Application Form

Information included on this application is for the purpose of credentialling and defining the scope of clinical practice as a SANE.

Applying for: New Application □ Renewal Application □

First Name	Last Name
Previous name: Please include previous name if that appears on certificates	
Contact Details Address:	Email:
Telephone:	Mobile:
Position:	Facility:

NEW APPLICATION (requirements)

□ SANE credentialing application form completed and signed
□ Current curriculum vitae (CV)
□ JP certified copies of qualifications – Evidence of completion of the accredited SANE course (Central Queensland University) or Forensic Nurse Examiner (FNE) course
□ Australian Health Practitioner Regulation Agency (AHPRA) registration
□ Current Career Success Plan (CSP) (first page only – signed by applicant and line manager)
□ Mandatory Training Report

RENEWAL APPLICATION (requirements)

□ SANE credentialing application form completed and signed
□JP certified education qualifications acquired since the last application
□ Current CV
□ AHPRA registration
□ Current CSP (signature page only – signed by applicant and line manager)
□ Recency of practice log
□ Clinical work submitted to quality activity mechanisms including clinical audit, peer review etc. *Please describe*
□ Mandatory training report
□ Professional development
- minimum of 50% attendance at SANE/FNE Community of Practice (SANE-FNE CoP) meetings (bi-monthly)
- minimum of 50% attendance at HHS sexual assault service meetings
- attendance at the Clinical Forensic Medicine Unit SANE-FNE CoP annual forum

□ One page (maximum) reflection on a case
□ Cultural competence training by employer complete

By signing this form, you agree that you have submitted all required and appended documentation to complete the application form and that the information provided is true and correct. Only a signed SANE credentialling application form with all tick boxes checked will be processed.

Please submit your scope of clinical practice application with all required documents to the appropriate Nursing and Midwifery Director/Assistant Nursing and Midwifery Director (or equivalent) for assessment.

Applicants Signature:…….. Date:……..

DRAFT

Queensland Government

Facility/Directorate Use Only

Application Recommended by Facility/ies (as required):		
Nurse/Midwifery Unit Manager	Name: Classification: Signature:	Date:
Comments:		
Nursing and Midwifery Director/Assistant Nursing and Midwifery Director (or equivalent)	Name: Classification: Signature:	Date:
Comments:		
Director of Nursing and Midwifery	• Registration Status Verification: AHPRA • Nil conditions or limitations • Notations • This application is complete and meets all requirements of the applied for defined scope of clinical practice. • Authorised to progress to the Nursing and Midwifery Credentialing and Defining Scope of Clinical Practice Committee.	Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐
	Name: Classification: Signature:	Date:

HHS Authorisation Only

Date application received by the Nursing and Midwifery Credentialing and Defined Scope of Practice Committee			
Defined Scope of Clinical Practice Approved	Yes ☐		No ☐
Period of Defined Scope of Clinical Practice	1 year ☐	5 years ☐	Other
Nursing/Midwifery Stream Lead *(if relevant to the position)*	Name:		Date:
	Signature:		
Chair Nursing and Midwifery Professional Stream Credentialing and Defined Scope of Clinical Practice Committee	Name:		Date:
	Signature:		
Chief Nursing and Midwifery Officer	Name:		Date:
	Signature:		

Comments:

Jacqui Thomson

From: Paula Brisotto
Sent: Wednesday, 31 August 2022 10:31 AM
To: Adam Griffin; Jacqui Thomson
Subject: SAIK feedback

Hi Adam and Jacqui,

Below are entries from the SAIK non-conformance log we had created earlier this year on Teams.

The entries below have been populated by the Forensic Property Point at receipt.

For the majority, the issue identified is the paperwork not in the CSPB, which was the topic of our discussion earlier this year and the issue identified in the communication sent to practitioners in March.

Date	QP number/Exhibit barcode	Patient Surname	Examining Clinician	Issue
[redacted]	[redacted]	[redacted]	[redacted]	Blood sample in SAIK (returned to QPS
				SAIK not packaged correctly. Deliverec
				SAIK not packaged correctly. Deliverec
				SAIK not packaged correctly. Deliverec
				Undies packaged in SAIK
				No SAIK medical notes
			[redacted]	Paperwork not in CSPB
				Paperwork not in CSPB
				Paperwork not in CSPB
				Paperwork not in CSPB
				Tox blood kit sealed within SAIK, place
				Paperwork not in CSPB
				Paperwork not in CSPB

[redacted]	[redacted]	[redacted]	[redacted]	Paperwork not in CSPB
			[redacted]s	Paperwork not in CSPB
		[redacted]		Paperwork not in CSPB
				No SAIK medical notes
			[redacted]	1 swab packaged separate to SAIK

Please let me know if you require any further information.

Thanks,
Paula

Paula Brisotto
Team Leader – Evidence Recovery & Quality Team

Forensic DNA Analysis, Police Services Stream
Forensic & Scientific Services, Prevention Division, Queensland Health

[redacted]

Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

Jacqui Thomson

From: CFMU-TSV
Sent: Wednesday, 7 September 2022 2:54 PM
To: Alison Bell; Allison De Tina; Alyce Petersen; Angela Jackson; Ann-Margaret Jakins; Bonnie Steele; Bree Medhurst; Carly Pringle; Catherine Brumpton; catryan88; Cathy Cranwell; Cecily Labuschewski; Christine Coleborn; Christine Coleborn home email; Clancy McDonald; Danielle Jackson; Debbie Ansell; Debbie Neucom; Deborah Ansell; Della Turner; Donna Holyoak; Elizabeth Clover; Elizabeth McKendry; Elizabeth Young; Ellen Paterson; Emily Andric; Emma Shipton; Emma Veronica TURNER; Faye Tomlin; Geraldine Lamberton; Gillian Wright-Jacobsen; Guy Davies; Heather Fageant; Heather Roberts; Heather Roberts home email; Helen Crabtree-Spencer; Ian Mahoney; Jacqualine McLellan; Jacqueline Haskew; Jacqui Thomson; Jasmine Johnson; Jessica Stecko; Jodie Bell; Jodie Orchard; Jody Wellington; Julia Brownlie; Kadell Fotinos; Kellie Itzstein; Kelly Flatley; Kelly Neeson; Kim Allen; Kim Rylatt; Kirby L Hudson; Kirsty Edmonds email; Kristen Weller; Kylie Cookson; Kym-Maree Briggs-Curd; Leah Pargaliauskas; Leah Ward; Linda Agius; Lisa Harrison email; Lisa Johansson; Lisa May; Lisa Jane Smith-Burgess; Liz Kennedy; Lorraine Fleming; Lydia Mirabito home email; Marilyn Lean home email; Matilda Schmidt; mels21; Melissa Illin; Michelle Mutzelburg; Michelle Pulford home email; Michelle Pulford work email; Midge Balodis; Midge Balodis home email; Natasha Barton; Nicola Whitehead; Nicole Aitken; Nicole McLaughlin; Pauline Davies; Penny Kenchington; Regina Milow; Renee Murtagh; Richard Herald; Sally Roberts; Samantha Conroy; Sarah Neal; Sarah Portas; Sharon Young; Sheila Nak home email; Simone Davies; Shoo; Stacy Ponting; Stephanie Baker; Taelia Talbot; Tamara Oloughlin; Theona Stone; Tina Gray; Vicki Muller; Vicky Piggott; Vicky Piggott home email
Subject: FW: SAIK feedback

Importance: High

Good Afternoon,
Jacqui has asked me to share the following with the SANE-FNE CoP.

Kind regards
Mel

Dear colleagues

Since March 2022, colleagues in Forensic and Scientific Services have been collecting SAIK non-conformance on a log.

From March 2022 through to July 2022, there have been 18 entries:

- *No known examining clinician identified in six of the entries*
- *Nursing personnel identified in four of the entries*

- *Medical personnel identified in eight of the entries*

For the majority, the issue identified is the paperwork not placed in the clip seal plastic bag prior to placing it in the Just in Case/Queensland Police Service Sexual Assault Investigation Kit (JIC/QPS SAIK).

In March 2022, a SBAR regarding packaging of swabs, and other biological specimens collected in a JIC/QPS SAIK was distributed. The SBAR is also available at https://qheps.health.qld.gov.au/fss/forensic-services/response-to-sexual-assault under the Sexual assault investigations kits (SAIK) heading.

To lessen risk of contamination, may I ask that colleagues re-visit the document and ensure that practice conforms with the process for packaging.

Warm regards

Jacqui

Jacqueline (Jacqui) Thomson
Assistant Director of Nursing
Forensic and Scientific Services, Prevention Division | Queensland Health
Working hours Monday to Friday

Queensland Government

Through to July

QUEENSLAND HEALTH VISION A world class health system for all Queenslanders

Queensland Health acknowledges the Traditional Custodians of the land across Queensland, and pays respect to First Nations Elders past, present and future.

Report into interviews conducted with police officers and civilian officers of the Queensland Police Service concerning the methods, systems and procedures for the collection and testing of biological material for forensic DNA testing, pertaining to the Commission of Inquiry into Forensic DNA testing in Queensland.

Introduction

1. My full name is Mark William Ainsworth and I am a former Queensland Police Service (QPS) officer with 38 years of service, resigning from the QPS in May 2018 to accept a position with the Queensland Racing Integrity Commission as the Deputy Commissioner from May 2018 until July 2021 when I retired.

2. During my police service I performed duties as a general duties officer, surveillance officer, investigator, District Duty Officer, Detective Inspector, Crime Services, Detective Superintendent, Regional Duty Officer and Director of Corruption Operations at the Crime and Corruption Commission. I performed external roles at the Australian Crime Commission as the Queensland Manager and also the National Head of Determination for the High-Risk Crime Groups. I also had the opportunity to work on the Fitzgerald Commission of Inquiry (COI), the Queensland Floods COI and the Royal Commission into Trade Union Governance and Corruption.

3. During my policing career I attended numerous serious crime incidents and volume crime matters where the detection of DNA and other forensic evidence was involved, in undertaking investigations.

Engagement by the Commission of Inquiry

4. On 23 September 2022 I was engaged by the COI into Forensic DNA Testing in Queensland as a contract investigator. I commenced in this role on 27 September 2022 and undertook interviews with QPS police and staff up until 12 October 2022. I was engaged with the COI to undertake confidential consultation with police officers, especially frontline police officers and their supervisors with an aim to discover;

   (a) Whether there are, and if so, the nature and extent of, issues with the collection, transportation and submission of biological material for forensic DNA testing; and

   (b) Whether there are, and if so, the nature and extent of, issues with the understanding and use of the results of DNA testing.

5. Annexure 'A' is a copy of the 'Terms of Engagement' from the COI in relation to the role I undertook. This document also provided an attachment of a list of core questions that I was required to ask interviewees. In some cases, other questions were also asked of officers, relevant to this COI.

6. Annexure 'B' is a copy of the suggested questions asked of interviewees.

7. In order to fulfill the engagement requirements, initially I contacted officers known to me within the QPS to determine their interest in being interviewed. Throughout the

process these officers also advised me of other officers they felt maybe interested in speaking with me. The process was for these officers to contact them and provide those officers with my contact details should they wish to be interviewed. In addition to this I did have some officers contact me off their own volition seeking interview.

8. Interview appointments were made with 40 officers, however due to a variety of reasons four officers withdrew from being interviewed. The reasons included unforeseen work commitments and a change of mind in wanting to be interviewed. The cooperation level by officers interviewed was very good and clearly highlighted their willingness to speak about their experiences in relation to DNA, consistent with the COI Terms of Reference. The professionalism and forthright responses provided by interviewees, demonstrated a passion and desire to achieve the best results they could for victims of crime, by utilising all available forensic and investigative tools.

9. The officers interviewed appeared genuine in their responses and did not openly go out of their way to criticise the QPS or the Queensland Health Forensic and Scientific Services (QHFSS), but to offer honest suggestions on what needed to change in order to benefit victims of crime and the community in general.

10. It was made clear from the outset that there was no compulsion for any officer to be interviewed and it was purely voluntary on their behalf. It was explained to all officers that the Commission were happy to proceed on a confidential basis, in that the officers' names were not to be mentioned in any document forwarded by me to the Commission. Annexure 'C' refers. It was explained to officers if they wished to provide their names they could and their names would be provided to the Commission. In total three officers out of the 36 interviewed were happy to provide their names.

11. In order to maintain confidentiality, officers were allocated a Person Number and that was the only reference to officers. The person number and associated officers name was retained by myself and not passed to any third party. At the commencement of the interview some antecedent type questions were asked including the officer's role, rank, years of service and Region/District they currently worked in. At the conclusion of asking these particulars, officers were asked if they consented to the digital recording of their responses to my questions. If officers consented then the digital recording commenced after the antecedent details were obtained. 33 officers consented to being digitally recorded.

12. Interviews were conducted of officers from across the state in order to obtain the various geographical challenges relating to issues around DNA, collection, transportation and analysis. A focus of the interviews was largely on front line officers ranging from investigators to supervisors, officers in charge of work units, forensic officers and prosecutors.

13. The breakdown of **positions of officers** and ranks interviewed are as follows:

(a)	Investigators	12
(b)	Scenes of Crime Officers (SOCO)	8
(c)	Scientific Officers	6
(d)	Prosecutors	7
(e)	Forensic Coordinators	2
(f)	Forensic Managers	1

14. **Ranks of officers interviewed are as follows:**

(a)	Detective Inspector	1
(b)	Inspector	1
(c)	Detective Senior Sergeant	2
(d)	Senior Sergeant	6
(e)	Detective Sergeant	8
(f)	Sergeant	16
(g)	Senior Constable	2

Questioning Sequence:

15. The COI provided 25 questions in general to be asked of interviewees. The first series of questions were asked under the subheading of **Collections** and related as follows:

    (a) Questions 5 all officers except prosecutors.

    (b) Questions 7,8 to officers not forensic officers or prosecutors

    (c) Questions 8 – 11 for forensic officers only

    (d) **Forensic Medical Examinations** was the next subheading and contained the following.

    (e) Question 12 to all officers except prosecutors

    (f) Officers who answered yes to Question 12 were then asked questions 13 – 18.

16. **Results of DNA testing** was the next subheading and contained the following.

    (a) Questions 19 – 24 was asked of all officers interviewed

17. **Other issues** was the final subheading and all officers were asked this question.

18. During the course of the interviews with officers the most common issues they were concerned about across the board included.

    (a) QHFSS results a lack of understanding across the board of what results meant and the difficult nature to interpret results.

    (b) QHFSS results results such as 'No DNA detected' and 'DNA insufficient for further processing' have had a huge impact on most officers interviewed. Many officers considered on receiving results of this nature nothing further could be done in relation to the DNA the result pertained to, most felt there was no DNA so end of story.

    (c) Several QPS forensic officers were left second guessing their own capabilities as forensic officers when constantly receiving the above-mentioned results. This especially applied to lack of DNA in blood and semen samples.

    (d) Many officers, since learning of what the above-mentioned results actually do mean are concerned that they could have actually requested further testing of the initial results which may have led to a different outcome. Many officers felt the above issue has seriously let victims of crime down and also the community.

    (e) Transportation of DNA and other exhibits from regional and remote parts of the state is an ongoing issue and impacts on timeliness of having DNA samples delivered to the QHFSS facility and for analysis to be undertaken. Officers in these areas and even in some areas closer to Brisbane e.g., Wide Bay Police District spoke of frustrations in the transportation process.

    (f) Almost all Forensic officers believed their equipment was adequate for them to undertake their roles but all indicated the QPS needs to ensure monitoring of international crime scene trends and technology is maintained to ensure best practise.

    (g) Senior Investigators in particular raised concerns with the perceived lack of DNA sampling from persons charged with an indictable offence. Several senior officers (officers in charge) advised they have a focus on ensuring DNA is taken relating to these circumstances and have an expectation their staff to do so. One officer advised the state is sitting at 31% compliance with this particular practise. Other officers advised that it is currently a focus of QPS Management to ensure this practise is undertaken by all staff involved in the arrest of a person on indictable offences.

Collection

19. Officers interviewed stated attendance at crime scenes is their bread and butter duties, and policies and procedures for major serious crimes are consistent and have been around for many years. Investigators stated they attend the crime scene and make sure

[redacted]

Mark Ainsworth Witness [redacted]

the scene is secure to enable forensic officers the best possible chances of collecting exhibits for examination including DNA exhibits. Investigators stated that they consult heavily with forensic officers at major crime scenes and work in well with one another. Consultation continues all the way throughout including prioritisation of exhibits to be sent to the QHFSS for analysis.

20. Officers spoke about triaging DNA exhibits and prioritising them to send to QHFSS for analysis. Officer's stated they can only send a certain number of exhibits to the QHFSS at anyone time and priority exhibits will have a quicker turnaround time usually between 3 days to a week. Prioritisation of exhibits involving major crime investigations is undertaken in consultation with investigators, forensic officers including forensic coordinators. Forensic Coordinators interviewed stated they can send 25 exhibits to the QHFSS in a batch and the top five which are listed as a priority one will be analysed first followed by five at a time after that.

21. With respect to volume crime advice was provided that officers can only send through one or a maximum of two exhibits for DNA analysis at a time. The forensic coordinators interviewed stated that they can negotiate with staff at the QHFSS regarding the examination of other DNA exhibits located at the scene.

22. Two investigators stated they could understand the priority system and consider it necessary as the QHFSS has a big workload and consideration has to also be given to other police officers and their investigations that may rely on DNA evidence.

23. SOCO officers provided information about a state-wide project underway in a number of regions in relation to volume crime. If a member of the public phones through a break and enter etc or submits an online report, the report or information is forwarded to a SOCO office for a SOCO to take charge of the matter. SOCO's advised they will contact the victim and discuss what possible evidence is present prior to attending the scene. If a determination is made that there could be evidence at the scene the SOCO will attend and undertake a forensic examination. Their attendance at these scenes can also include advice to the victim about property security and prevention.

24. Forensic officers interviewed stated scientific officers will attend most scenes of major criminal matters and that call is generally up to the forensic coordinator. SOCO officers can undertake most scene examinations but rely on scientific officers for specialist examinations which may include blood splatter patters or impression evidence.

25. One hundred percent of investigators interviewed praised forensic officers in relation to their dedication, quality of work at crime scenes and their ability to located, collect exhibits. SOCOs stated crime scene attendance and collection is their daily tasking and officers stated you adopt a routine to undergo the examination.

26. Investigators were asked about taking DNA samples from persons arrested for indicatable offences. Of those interviewed all investigators who do make arrests for indicatable offences do take DNA evidentiary samples and take the samples themselves. Officers interviewed stated that in the case of taking an intelligence sample, they will check the persons details on Qprime and if they have DNA already on the system they will not take an Intelligence sample. If there is no DNA on the system for

[redacted]

Mark Ainsworth Witness [redacted]

the person, an intelligence sample will be taken. Generally, watchhouse staff will take intelligence samples at the same time as taking identifying particulars.

27. Two officers stated further education is required for front line officers to ensure they understand the benefits and importance of taking evidentiary and intelligence DNA samples. Two officers from the North Coast Region stated their region is currently focussing on the taking of DNA samples and they are encouraging their staff to do so.

28. Investigators stated they rarely have any trouble having forensic officers attend crime scenes either for major crime or volume crime matters. All investigators stated that obviously Homicide, rapes and other serious crimes get forensic officer priority. Investigators in the Brisbane Metropolitan area stated they have scientific officers at their door step and have no issues in getting them to attend scenes. They indicated there was no issues with transportation of exhibits by forensic officers to the QHFSS and for serious offences this occurs in a very timely manner. Investigators stated SOCOs look after volume crime exhibits from locating, lodging as an exhibit and arranging their transportation to the QHFSS.

29. Regional detectives interviewed stated sometimes there is a wait to have scientific officers attend major crime scenes. Officers stated in Queensland scientific officers are based in Brisbane, Coomera, Rockhampton, Townsville and Cairns. On occasions crime scenes have to be locked down for a longer period of time to allow scientific officers to travel and attend the scene. Investigators stated they will always attend when requested.

30. A number of regional and remote detectives identified difficulty in having DNA exhibits sent to the QHFSS mainly based on the tyranny of distance. They stated in major matters if an Investigation Centre has been established, exhibits maybe flown to Brisbane by the exhibit officer during the running of the operation. In other cases, exhibits are stored appropriately in police station exhibit rooms and will be transported to Brisbane when an exhibit run occurs. This can vary depending on the area from once a month to once a fortnight. This can cause significant delays then in getting a result back in a timely manner.

31. Officers stated that in the regional areas, DNA intelligence exhibits (mouth swabs) are mostly forwarded by registered post to Brisbane. Evidentiary samples are hand delivered to ensure continuity and safety of the exhibit.

32. Several investigators commented on the operating hours of the QHFSS in particular not working weekends or public holidays. One Senior Detective provided the following example and a positive resolution arising from this example.

    (a) The officer would like to see staff from the QHFSS be rostered on weekends as on some occasions undue delays are caused in investigations where QHFSS are not working weekends or public holidays. e.g., quick turn arounds for DNA examinations where a murder suspect is outstanding and still in the community, risk to the community.

    (b) [redacted] – the Rape and Murder of [redacted]. The body of [redacted] was found on [redacted]

[redacted]

and significant DNA samples were taken from her body, including a substance that appeared to be a large quantity of semen.. Investigators had no suspects for this violent murder and were keen to solve the matter quickly to ensure public safety. They were advised to submit their Top 5 exhibits for DNA analysis which they did. They were advised of a 5-day turnaround of the DNA analysis. Due to the lateness in the week and the seriousness of the matter the QPS paid overtime for QHFSS staff to work the weekend to ensure the 5-day turnaround commenced asap. A result of no male DNA came back on the Sunday afternoon. A request was made to rework the samples and at 3pm the following Friday a DNA match was obtained which identified a male person. Evidence obtained from further investigations on the suspect accompanied by the DNA match, led to the arrest and successful conviction of the offender.

(c) The ability for the QHFSS to work on weekends/public holidays or be available to work weekends and public holidays can be crucial to serious Crime matters where offenders are outstanding.

Collection – Forensic Officers only

33. Seventeen forensic officers were interviewed as part of this process and were questioned regarding issues relating to the collection of biological material, staffing levels, inability to attend crime scenes, equipment and contamination issues at crime scenes. In relation to equipment sufficiency, all officers interviewed were happy with their current operational equipment and said it was sufficient for completion of their jobs. One officer stated generally if they need equipment they get it promptly. A scientific officer [redacted] stated equipment is currently sufficient, however technical capabilities of equipment is increasing all of the time and the service need to keep abreast of equipment out there. The officer suggested the engagement of a Research and Development officer in Scientific would be valuable with regards to keeping up with current equipment and technological trends for scientific officers and SOCO officers. The officer stated Technical Advisory Groups for each scientific speciality meet yearly. These advisory groups are attended by scientific officers from each Australian jurisdiction and information sharing on trends, technology and equipment are shared.

34. Contamination of crime scenes was discussed and two officers said they have had issues with volume crime where SOCO's may not be able to attend for sometime. One officer stated in 2020, general duty officers were diverted away from attending volume crime matters and SOCO's attended. He stated this only occurred if matters were reported through police link where the jobs were detailed to SOCOs. He stated on receiving the job they review the information, contact the complainant and make an informed decision if there is value in SOCO's attending the job. He stated on attending, the usual crime scene examinations are conducted, however if the complainant has further information (identifying a witness etc) then the SOCO staff will run that out as well. He believes if this occurs a further 15 to 20 minutes is added to each job. The officer stated this creates a risk for contamination at crime scenes by complainants.

35. Another officer [redacted]. Transportation can sometimes

difficult to get to crime scenes in a timely manner. Transportation can include planes, ferries and water police. Time delays to get to crime scenes can have an effect on contamination of scenes but they do the best they can to have a clean scene.

36. Half of the Forensic Officers interviewed stated they did not believe contamination at point of collection is a major issue these days. All Forensic officers have provided their DNA for elimination purposes only. Recorded in a DNA elimination data base controlled by the Inspector, Scientific Services. SOCO's can choose to be advised if they have contaminated a scene. E.g., not wearing a mask when taking fingerprints then their DNA turns up at the scene after DNA examination. Officers could elect at the time of providing their DNA if they wished to be advised of any contamination issues. 90% of the officers who spoke about this process have elected to be advised if their DNA is identified at a scene as in their view, provides good education on how to operate more efficiently at crime scenes in reducing contamination.

37. Almost all of the forensic officers interviewed felt their crime scene collection processes were down pat. A number of officers stated their policies and procedures are very stringent and are governed by NATA requirements. Policies and procedures are managed by the Quality Management Unit, Scientific Services and are very specific regarding collection practises. All policies and procedures are on the forensic intranet and officer's tuff books for in field reference.

38. In relation to staffing, one officer stated the Scientific Section rosters are getting pretty lean. The officer provided the following scientific staff numbers spread over the state:

    (a) Brisbane 5, Coomera 2, Rockhampton 2, Townsville 2, Cairns 5.

39. The officer stated the current burn out rate for scientific officers is currently high due to high workloads and distressing scenes they attend. Another forensic coordinator interviewed stated they would like to see more scientific officers in the state. The officer stated it takes a long time to become qualified as a scientific officer having all authorisations. The officer stated in [redacted] view this impacts on providing a 24/7 response. e.g., Officer stated it took [redacted] 6 years to obtain authorisations relevant to major crime examinations. (Scientific Officers have to have specific authorisations for every skill set they have e.g., Impressions one authorisation, blood splatter patterns – another authorisation).

40. Nine out of seventeen officers interviewed had no issues with staffing levels, two officers as above had the mentioned concerns, two other officers said their roster was affected by staff sickness and two further staff indicated they were short staffed. Contrary to this, an officer interviewed from a remote part of Queensland who is the only SOCO for 230 000km2 was happy that [redacted] was the only SOCO in that area, and whilst [redacted] was always travelling and on-call [redacted] stated there is insufficient work for [redacted] to have another SOCO working with [redacted]

41. All forensic officers interviewed clearly understood their policies and procedures and knew where they could be found for easy reference and how they relate to NATA accreditations. They were happy with the governance around forensic procedures including collection.

[redacted]

Mark Ainsworth Witness [redacted]

42. Officers stated there is currently no refresher course for forensic officers. Officers stated pre-Covid there was an advanced scenes of crime course which forensic officers attended. The officers stated the course ran for one week in Brisbane, once per year and would cover topics such as new crime scene examination techniques, brain storming sessions with other SOCOs from around the state, guest speakers and also provided the opportunity to share ideas and innovation with other officers. Most officers advised that refresher training has ceased, however there is an understanding that a new refresher course is currently being developed for forensic staff. Four officers stated that you could apply to attend a specific course off your own back and generally you would be supported to attend. These courses include blood splatter training which runs for a week.

43. Several officers stated they would like to see refresher training on DNA or even some basic training in understanding what DNA results mean when they come from QHFSS. Several highlighted the COI has uncovered a major issue pertaining to DNA results which many forensic officers were not previously aware of.

44. Ongoing proficiency testing is regular for all forensic officers consisting of the following:

(a) A NATA accredited on-line virtual crime scene product where one person in each forensic office is to complete the session once a year. This learning is called, 'After the Fact.' Advice from several officers is that all trainee forensic officers must compete this course. Formerly every officer had to complete it each year and there was a different level for Sergeants and Senior Sergeants then another level for Constables/Senior Constables.

(b) On job assessment of SOCOs by a supervisor. This occurs once every two years where a supervisor will attend active crime scenes and assess the SOCO undertake a crime scene examination including collection of exhibits, packaging of exhibits and the associated paperwork including data entry.

(c) Scientific officers are assessed every twelve months on every authorisation they possess e.g., Impressions, ballistics – assessed every twelve months.

(d) Scientific officers must complete an 'After the Fact' training module on line every twelve months on their authorisations as well.

(e) Scientific officers are considered 'Experts' in various authorisations and must also undergo a Court assessment every twelve months. This assessment is either done by a senior scientific officer, a prosecutor – QPS/DPP or an investigator. If the officer has not attended court in that twelve-month period then a mock court is held where the officer can be assessed. Such assessments are NATA requirements.

(f) A SOCO, officer in charge stated she undergoes an office audit every twelve months conducted by the Quality Control Manager in line with NATA requirements.

(g) The same officer stated every two years a NATA person will conduct an audit of her office checking dates on consumables, exhibit management. She stated since COVID, these audits have been desk top audits only.

45. Every Forensic officer indicated their initial training was adequate and prepared them well for their future careers in that field. Over the years (15 to 20 years) SOCO training changed in duration from a six-month course to the current twelve-month model which consists of a five week in class training component in Brisbane where staff learn about photography, fingerprinting and scientific work. At the conclusion of this course, they work under the supervision of a Field Training Officer for a period where they are watched, trained and assisted in undertaking SOCO roles. During this period, they are required to meet five competencies. Several senior SOCO's stated the latest course is very good and believe the quality of trainee SOCO's coming through are very good. A forensic coordinator commented that the current SOCO initial training is probably better than previous initial training and the officer has noted the quality of work from these new officers is to a very high level.

46. A number of SOCOs stated after initial training a lot further learning is undertaken on the job as they attend crime scenes, two officers stated most SOCO work is repetitive in nature and SOCOs develop a routine for crime scene examination and collection.

47. Scientific officers stated their training included three residential courses of about 6 weeks duration, each conducted in Brisbane. The training consisted of three modules.

(a) Module 1 this module covered amongst other learnings, DNA education on DNA, presumptive testing and screening techniques.

(b) Module 2 Expert witness training, speciality training including impressions, blood splatter patterns etc.

(c) Module 3 Amalgamation of all training plus training in microscopes, ballistics, bomb scene requirements, radiation scenes.

48. In relation to Module 1 several officers stated QHFSS staff attended and provided education on DNA. This module also included a tour of the QHFSS facilities, only to the extent of what each area did and nothing more detailed as to processes. After completion of module one, officers were paired up with a Sergeant supervisor and worked under complete supervision until deemed competent. Once deemed competent officers could undertake crime scene examinations in relation to module one learnings only.

49. The same process occurred after module two and generally at the conclusion of module three, if deemed competent, officers would generally be signed off to work on their own. Officers stated there was always other more experienced officers available to assist if required.

50. Whilst forensic officers believe their initial training was adequate, most officers indicated they would like to see refresher training re-introduced and would like to see more training in DNA including an educational tour of the QHFSS where they could see the processes utilised by biologists and scientists and obtain an understanding of

the capabilities of testing as well as technical advancements in DNA analysis, at those facilities. As part of further DNA training most officers commented they would like to see explanations on the interpretation of DNA results. Some officers did understand the results. A forensic scientist with the QPS indicated that DNA is rapidly changing and refresher training is critical in the areas of degradation of DNA, nuclear DNA and to further learn on developing trends and collection processes.

51. A forensic coordinator [redacted] stated [redacted] completely understands DNA and has completed Tertiary studies on DNA but has no idea regarding the interpretation of reported results or extraction procedures undertaken by QHFSS. The officer stated further education is required in relation to changing DNA techniques and evolving modern technologies. The officer stated [redacted] has learnt more about DNA from monitoring the DNA COI than what [redacted] has learnt in the last [redacted] years in the field.

Forensic Medical Examinations

52. All investigators interviewed have in the past or currently, had experience with complainants/accused persons undergoing forensic medical examinations. Generally, investigators arrange the forensic medical examination and transport the complainant/accused to the location for the examination to occur. At the conclusion of the examination medical professionals hand the sexual assault investigation kit (SAIK) to the investigating officer for exhibit lodgement and transportation to QHFSS.

53. SOCO's will on occasions attend forensic medical examinations for the purpose of photographing injuries generally at the direction of the medical professional undertaking the examination. SOCO's do not have involvement in taking possession of SAIK. Several SOCO's stated the best understanding of what exhibits they manage and transport is whatever a SOCO locates, collects and takes possession of they will lodge the item/s as an exhibit and take charge of transportation for analysis.

54. All Scientific officers interviewed have not been involved in a forensic medical examination in recent times.

Forensic Medical Examinations – for officers who have been involved

55. Responses to this series of questions was predominantly from investigators. Whilst some SOCO officers indicated attending forensic medical procedures for the purpose of taking photographs they were unable to provide responses to the remaining series of questions under this category.

56. Investigators provided differing outcomes as to who provides medical examinations. Three officers stated the Government Medical Officer (GMO) in their respective areas would provide this service, whilst nine officers stated either the GMO does not provide this service or there is no GMO in their area. Five officers advised that their respective area uses Forensic nurses to undertake these examinations. One officer from a remote location advised the local Doctor who is Head of Emergency willingly assists police with forensic medical examinations.

57. Across the board, investigators stated generally the complainant does not get a choice of the gender for a forensic medical procedure due largely to the difficulty of locating

[redacted]

Mark Ainsworth

Witness [redacted]

Medical professionals to undertake the same. In cases where a male medical professional is undertaking the examination of a female victim/accused, investigators will facilitate a female officer to be present for the examination. Several investigators indicated that forensic nurses are mostly female and no issues occur with gender choice in those cases.

58. Three investigators have had experience where medical practitioners have refused to assist with forensic medical procedures based on inexperience in process and not wanting to be subject to Court processes. One officer from [redacted] provided the following example.

(a) This is very disjointed in his area, and according to this officer very frustrating. Most times they are directed to the [redacted] for forensic medical examinations, other times they go to the [redacted] Neither the [redacted] nor [redacted] hospitals do these procedures

(b) No GMO's in his area.

(c) E.g., [redacted] Rape matter that occurred at [redacted] victim had mental health issues and was under the care of a State Guardian. Investigators contacted the [redacted] who would not receive this complainant as there was another patient they had who could not be in contact with the complainant. Investigators contacted the [redacted] who refused to assist, telling the investigator to attend [redacted] hospital. The investigator advised [redacted] does not perform these tests, they were then told to go to the [redacted] The investigator then contacted the GMO in [redacted] who would not do the examination and redirected them to the [redacted] The investigator contacted the [redacted] again and on this occasion agreed to do the examination provided the state guardian was present.

(d) Whilst this negotiating was occurring the victim's carer took the victim home to get a change of clothes. The victim decamped and injured herself. Sexual assault examination undertaken when she was conveyed to the [redacted] for treatment to her injuries.

(e) This officer relayed another example where he took a sexual assault victim to the [redacted] at 10pm one night. The victim was admitted through emergency then sent to the hospital social worker for consultation. When this was concluded the forensic nurse was contacted and the medical examination was commenced at 3am.

(f) The officer said in these examples, **'Victim Centric'** is a complete failure. He stated he advises his staff to take a laptop to the hospital to take the victims statement whilst awaiting the medical procedure

59. Another officer provided an example of difficulties in forensic medical examinations.

(a) He stated in his area GP's will not assist in forensic medical procedures and provided an example [redacted] - a female was raped at [redacted] she attended the

[redacted] hospital and was refused a medical examination, [redacted] Hospital refused and the victim was driven to [redacted] some three and a half hours away.

(b) The complainant was very cooperative and the examination was undertaken in [redacted] DNA was obtained and a person was arrested for the offence of rape.

(c) The officer said as an OIC of a CIB he is a member of the Sexual Violence Liaison officer network which includes all OIC's of CIBS, CPIU and Crime Intelligence staff. At these meetings they discuss issues particularly withdrawal of complaints to assess what are the prevailing issues with sexual assault withdrawals, solved sexual assaults and rapes. He stated he raised the above example at the meeting. He stated he later spoke to a senior person at the [redacted] Hospital about the [redacted] matter and since that time so far, things have improved.

60. All investigators stated they have never had any issues in obtaining SAIK's, most police stations have a supply and hospitals in some areas also have supplies. This is not an issue.

61. Investigators stated there are varying places where complainants wait to undergo a forensic medical examination. Several investigators stated hospitals in their area have a triage room where the complainant can wait in a private area, others stated that in their area complainants have to be admitted to the hospital through emergency sections, whilst on other occasions complainants wait at police stations, prior to transport to a medical facility for examination. Officers stated for a 'victim centric' approach the triage room is ideal for complainants to wait in. Times vary in waiting for a medical examination depending on the time of day or night, the location and the availability of medical professionals. A couple officers stated on occasions they have had complainants who will not wait for a forensic medical examination, resulting in no forensic medical procedure being undertaken. The officers stated this does not stop the investigation but impacts on the investigation with that lack of possible evidence.

62. Investigators take possession of SAIKs from the medical professional and they arrange transportation to the QHFSS for analysis. As previously stated in this report, the tyranny of distance does impact on delivery times to the QHFSS. Investigators highlighted that forensic officers do not process other exhibits relating to a rape or sexual assault examination until the results of SAIKs come back from QHFSS. Officers stated result turnaround times are varying. One officer provided the following example.

(a) The rape of a female at [redacted] ([redacted] refers). This example is one of a quick turnaround by the QHFSS. Sample was taken on 23 January [redacted] and delivered on 28 January [redacted] to the QHFSS. On 8 February [redacted] processing of the sample commenced. On 2 March [redacted] the results came back to the DNA Management Unit and a phone call was received by the investigator. A profile was identified leading to a criminal charge.

(b) The officer stated the investigator consulted with the QHFSS to have the sample tested quickly as they had a suspect and wanted to execute a search warrant on the suspects residence. He stated QHFSS were helpful on this occasion.

(c) The officer stated in the case of major crimes especially homicide, he personally finds the QHFSS do a decent job in turnaround times.

63. Investigators interviewed from regional and remote areas indicated that sometimes there are delays in getting SAIKs to the QHFSS based upon when the station undertakes exhibit runs to Brisbane. If the matter is urgent (Rape) the investigator will arrange delivery time within 24 to 48 hours.

64. Out of the eight investigators who could answer this question (excluding senior officers who have no recency in this area) seven of the officers stated it is up to the investigating officer to undertake a DNA reference sample from a complainant. One officer stated in his area the forensic nurse will take the DNA reference sample. All officers stated that consent from the complainant is always obtained for this reference sample and there are really no issues with this occurring. One officer stated complainants in his experience have no issue providing the reference DNA sample as the procedure is non-invasive. Officers indicated the DNA reference sample is taken at varying times either before or after the forensic medical examination. If a complainant is waiting a while for the forensic medical examination a statement and DNA reference sample will be taken then. One officer stated it would be good for complainants to have the reference sample taken at the same time of the forensic medical examination, in the interests of complainant's welfare. Other officers did not see this as an issue.

65. A [redacted] officer spoken to regarding the timing of complainant reference samples and forensic medical examinations provided information pertaining to this issue which he was very passionate about.

(a) The officer stated he was aware of a document produced and signed by the Commissioner of Police and several Directors General supporting the taking of DNA reference samples by Medical Practitioners at the same time as forensic medical examinations. He believes the document was titled, 'Response to Sexual Assaults.'

(b) The officer [redacted] stated it concerned the obtaining of a reference sample from a complainant by the GMO at the time of the forensic medical examination. He said two SAIK group reference meetings were held, the last being on 15 December 2021. He said at the first reference group meeting (date he could not recall) attendees were in favour of the above-mentioned strategy occurring, however Dr Adam Griffin would not agree and the matter has not progressed. He said this matter has been ongoing since 2014.

(c) He said the benefit of implementing this strategy was two-fold:

(i) Consideration for the welfare of the complainant - undergoing examinations at the same time rather than two separate examinations.

(ii) Timeliness of the examination of the SAIK and reference sample both arriving at the QHFSS at the same time. Eliminates the SAIK being delivered one day then the sample being delivered at a later time.

(d) He stated an Executive Briefing Note (EBN was submitted after the second SAIK reference group meeting regarding the incident [redacted].

66. Officers interviewed indicated varying times for QHFSS turnaround time for SAIK examinations. One officer indicated he has no issues with the turnaround time whilst others indicated turn around times ranging from 30 days to six months. Another officer commented that there were significant delays in getting these results back. Several investigators indicated delays in getting SAIK results back impacted on the processing of other exhibits collected for the particular offence, as generally no other scene exhibits will be processed until the SAIK results are known. Officers stated that the time delays in having SAIK's analysed impacts on the investigation timeline and consequentially impacts on the complainants. Four officers stated they have no issues with turnaround times for SAIK analysis.

(a) One officer stated he has experienced significant delays in getting SAIK results back in a timely manner to the point of delaying the investigation.

(b) He stated he would have thought the testing of SAIK material by the QHFSS should be reasonably quick in that there is either DNA there or there isn't particularly in the case of rape offences.

Results of DNA testing

67. All officers interviewed were asked questions in relation to the above subheading. It appears advice of results differs in varying areas according to investigators. One certainty is that results are uploaded on Qprime as a supplementary entry usually by the DNA Management unit. Notable differences exist for advice regarding major criminal matters as compared to volume crime matters. Volume crime results are often advised through a supplementary entry on the Qprime system. Investigators stated in the case of major criminal matters generally they will receive a phone call advising of the result from the DNA Management Unit or the forensic coordinator followed up by an email. Two investigators from specialised investigation units maintain a close liaison with QHFSS staff and their forensic coordinators and do not have an issue being advised of results in a timely fashion. Notable differences exist for advice regarding major criminal matters as compared to volume crime matters. Volume crime results are often advised through a supplementary entry on the Qprime system. Some examples of investigators comments are:

(a) Notification of results is pretty good at the moment.

(b) This officer liaises with the QHFSS scientist chasing very specific updates regarding items being analysed. He has found staff at the QHFSS very helpful and forthcoming with information when he contacts them.

(c) He said generally for serious criminal matters he will receive a phone call with the results followed up by an email and an update to the Qprime entry. Emails come from the DNA management unit.

(d) He stated in the past he has contacted a QHFSS scientist to provide an explanation of the results in a non-scientific manner so he can clearly understand what the result means.

68. Another investigator provided:

(a) He usually has to go chasing the results and he rarely receives a phone call about positive result.

(b) He described the process of result advice as very inefficient and relies on searching the Qprime data base for results, where they are listed under Forensic supplementary.

(c) He stated the DNA unit uploads the results and they are generally forwarded to the Forensic Coordinator as well.

(d) The officer stated the sample will get processed at the QHFSS - a scene link report will go on Qprime - this will then be forwarded as per the usual process to the Crime Manager to the OIC of the relevant unit and then to the investigator.

(e) He said this method of receiving advice regarding DNA is very clunky and a far better system in his view would be a phone call followed up by an email to advise of results. He said in order for this to occur workload considerations of QHFSS/DNA Management Unit staff needs to be taken into consideration.

(f) He provided an example of a murder in his area, [redacted] where a fingerprint was located on a note that was located. The fingerprint of a co-offender was identified on the note and the result was sent through the Qprime process as described above. He stated he only became aware of the identification talking to a SOCO at a later time. He stated this could quite easily occur with DNA identifications as well. The officer stated the communication process of DNA results is an area that needs review to ensure results are provided in a timely manner.

69. It is very apparent from speaking to investigators that ad hoc advice systems exist regarding DNA results. The safety net is Qprime and the Forensic Register which, whilst providing result information, does not necessarily advise the officer of a timely result.

70. Police prosecutors indicated they receive advice of DNA results when they receive a brief of evidence (BOE) which will either contain a statement from a QHFSS person and /or certificate of analysis. Sometimes on receiving a BOE the investigating officer will advise the prosecutor that DNA results are pending if no statement/certificate is attached. One OIC provided the following:

(a) The officer stated in his area they are very invested in their District including early engagement in major crimes with investigators and forensic officers. This involvement includes providing advice to obtaining an understanding of evidence that will most likely be dealt with by staff at his unit in due course. During this process they may become aware of DNA evidence/results. Apart

from this process he receives advice regarding DNA in the form of a BOE which will contain QHFSS statements and or certificates.

71. An officer [redacted]

72. She stated that the DNA Results unit would upload these results on Qprime and the Forensic Register. She stated on occasions she would receive calls from investigating officers querying what specific results meant. She recalled most of the inquiries were surrounding ratios provided on the analyst certificate and a difficulty in interpreting the same.

73. Two OIC SOCO stated generally they will receive an email regarding results for both major criminal matters and volume crime matters where a result is positive. No notification is received for a negative DNA result. They stated phone calls are received by them for DNA positives for major crime. Both officers stated the current system works well in their area. 90% of SOCO's interviewed stated for major crime matters they will generally receive a phone call from the forensic coordinator advising of positive DNA results followed up by an email. They receive no notification of negative DNA results and can access all information regarding DNA outcomes on the Forensic register or Qprime. A forensic manager interviewed stated he does not receive advice regarding DNA results and does not need to in his position. He stated he can check Qprime or the Forensic register if he needs a result.

74. A SOCO interviewed provided the following:

    (a) The officer stated she is often advised of results but not always made aware and she does not know what are the circumstances are as to why or why not they are advised of DNA results.

    (b) She stated in the past she has received email advice about positive hits for DNA samples she has taken. She believes this email is generated by the QHFSS and is also uploaded on the forensic register.

    (c) If there is no match for the DNA example then no email is received, the forensic register is updated to indicate this.

    (d) The officer believes there has to be a better system for result notification, however she has no suggestions as to what that may be. She stated the pure quantity of samples examined by the QHFSS must be taken into consideration when considering a better system for results. E.g., It is not practical to send out 200 emails for 200 samples examined.

75. Thirty-six officers interviewed were questioned regarding their understanding of the result, 'No DNA detected' Out of these twenty-six officers had no understanding that a sample with the result 'No DNA detected' may contain sufficient DNA to obtain a full or partial profile.

Officer type	No understanding	Understanding
Investigator	9	2
Prosecutor	5	1
SOCO	8	2
Scientific Officer	2	4
Forensic Coordinator	1	1
Forensic Manager	1	0

76. Officers stated their understanding of 'No DNA detected' included taking the terminology on face value in that no DNA was able to be located, some officers believed that there was not enough DNA in the sample to detect DNA. The officers that were aware that further DNA testing could be undertaken with regards to such a result were as follows: One officer worked in the DNA Management unit, two investigators, one SOCO and one scientific officer working in specialist units with close liaison to the QHFSS, one prosecutor learnt about this with his involvement in investigation centres working closely with scientific officers and investigators.

77. One OIC of a SOCO unit provided the following:

(a) [redacted] understands, 'No DNA detected' to mean there is No DNA in the sample and that is the end of the process for that sample. [redacted] has had this result numerous times over the years.

(b) This officer could never understand how no DNA was found in blood samples.

(c) The officer did not know this and is very angry as [redacted] tries her best at all crime scenes to get a result for the victim or investigator and prior to this COI finding [redacted] was second guessing [redacted] about [redacted] DNA swabbing ability.

(d) The officer stated she was not aware [redacted] could get further testing done with this type of result. In [redacted] office, they now monitor results more closely and will send matters back for reworking if they feel it is necessary.

78. Several staff could not understand the results of 'No DNA being detected' from a number exhibits sent for DNA analysis to the QHFSS and stated that you just trusted the results as they were the experts.

79. Officers were largely unaware as to what could be done with the DNA samples that returned the above-mentioned result. Eleven investigators and SOCO staff believed there was nothing further that could be done with these results and the hope of obtaining DNA was dead in buried in these cases. Four officers (investigators/SOCOS) stated that they have in the past sent items back for retesting on obtaining these results, whilst

seven officers including two officers from specialist units advised they would send the sample to another laboratory for further testing. A couple of examples below from officers interviewed referring to having matters sent back for retesting to the QHFSS facility or to another laboratory in another jurisdiction.

(a) The officer recalled a serious assault [redacted]. The offender entered the male's residence and seriously assaulted him in the house. Exhibits were sent to the QHFSS for DNA testing and the results came back as no DNA detected. The investigator requested retesting of the samples and again the same result came back. The officer could not believe no DNA was located on the victim's clothes or inside the house. A short time later this complainant died from unrelated matters and no further retesting occurred.

(b) A second officer provided this example in relation to a [redacted] murder [redacted]

(c) Samples for DNA comparison were found on carpet in the deceased's residence. QHFSS could not detect any DNA during their analysis of exhibits and had no other equipment to rework the sample. Sample then sent to either a New Zealand/Victorian laboratory for examination and DNA was lifted.

80. On the whole, officers interviewed advised that if they wished to have DNA samples retested they would need to seek the approval of their forensic coordinator who would enter discussions with the DNA Management unit. This response related to both results of 'No DNA detected' and 'DNA insufficient for further processing.'

81. All officers interviewed were questioned regarding their understanding of the result, 'DNA insufficient for further processing '. Out of these twenty-seven officers had no understanding that a sample with the result 'No DNA detected' may contain sufficient DNA to obtain a full or partial profile.

Officer type	**No understanding**	**Understanding**
Investigator	9	2
Prosecutor	5	1
SOCO	8	2
Scientific Officer	3	3
Forensic Coordinator	1	1
Forensic Manager	1	0

82. Officers stated their understanding of 'DNA insufficient for further processing' included taking the terminology on face value in that there was not enough DNA

present in the sample for analysis. Some officers believed that there was some levels of DNA present but not enough for providing a profile, others believed there was a low threshold of DNA present. Eighteen officers were aware that further DNA testing could be undertaken with regards to such a result were as follows: two investigators, one SOCO and one scientific officer working in specialist units with close liaison to the QHFSS, one prosecutor learnt about this with his involvement in investigation centres working closely with scientific officers and investigators, six other investigators, one SOCO, three scientific officers both forensic coordinators and the one forensic manager.

83. Officers advised of other types of DNA results they recall receiving from the QHFSS laboratory. These include:

(a) DNA detected – straight forward outcome, profile located and person identified.

(b) Mixed profile- more than one profile present.

(c) Two-person mixed profile understanding is what it actually says.

(d) Three-person mixed profile- difficulty in separating profiles to identify a person.

(e) Complex mixed profile – understanding that this profile could not be separated, too many contributors within the profile to obtain a singular profile, multiple samples detected with no singular profile.

(f) DNA unsuitable for meaningful interpretation

(g) DNA profile indicates a presence of possible low-level DNA which is below the forensic DNA analysis reportable threshold – this result was forwarded to an investigator on [redacted] and was in relation to a sexual assault matter.

84. Officers were interviewed regarding training or instruction they had received in relation to DNA including the meaning of the different types of results. All police officers have undertaken basic DNA sample taking as a requirement prior to taking DNA samples from people. SOCOs receive DNA training as part of their initial training to become a SOCO and scientific officers receive training in DBNA in their initial training course. These courses consist of presentations provided by QHFSS staff and includes a visit to the QHFSS facility. No specific training is provided as to the QHFSS processes. Updates are provided in the form of emails or advice to all forensic officers regarding changes to DNA. Refresher courses did touch on aspects of DNA specifically to collection, emerging trends and evolving DNA changes.

85. Almost every officer interviewed, indicated a desire to have some urgent training on interpretation of DNA results particularly since their learnings from the COI interim report. Officers stated even an aide memoir containing what the DNA results mean would be a good start. (See further in recommendations section of this report)

86. The question of the importance of DNA evidence in identifying an offender or conducting an investigation was asked. All interviews stated DNA evidence was very

important and very good evidence. The majority of officers qualified this by stating DNA evidence needed to be supported and/or used in conjunction with other investigative strategies to gain the full benefit of DNA as solid evidence. A number of officers stated DNA is critical in putting a person present at a scene and eliminating people from offences.

87. Prosecutors indicated DNA evidence can mean the difference between a plea or a trial and they find it rare for DNA evidence to be challenged in summary trials or committal hearings. Some described it as excellent evidence.

88. Investigators use DNA evidence for providing direction for investigations e.g., who was present at a scene, where was the DNA located, how did it get there? Investigators involved in historic major criminal investigations rely heavily on DNA evidence to reinvigorate historic matters. The below example highlights the importance of DNA in those investigations.

(a) The officer stated most of the exhibits he deals with are degraded, making detection of DNA profiles somewhat difficult. He stated his team will be advised of a degradation index on exhibits which provides a degradation level of the exhibit.

(b) The officer stated his unit specifically look for quantitative DNA data, or the quantity of DNA in a sample/exhibit. He stated by requesting this level his team can make informed decisions on further testing of an item. He stated different laboratories have different thresholds for DNA. He stated his team are not concerned if the DNA is above or below that threshold and just require quantity numbers, in order for them to make strategic investigative decisions. E.G. If the QHFSS has a higher threshold than the New Zealand (N.Z.) Environmental Science Research (ESR) laboratory, then they will send the sample to N.Z for analysis. He stated they have previously had success in undertaking this strategy.

(c) The officer provided an example of a [redacted] Rape and Murder of [redacted] Some fingerprint evidence was located of the suspect in a van later linked to the offender. A review of exhibits held into this matter identified low copy DNA from a vaginal swab taken off the deceased [redacted]. The quantity of the DNA was quantified resulting in the sample being sent to the NZ ESR lab who conducted an analysis and provided a DNA profile linked to the offender. This evidence along with other forensic evidence led to the arrest of [redacted] who was convicted of the rape and Murder [redacted]. The officer stated these type of quantitative DNA results is a very good tool to send exhibits to other labs who can undertake further testing.

Other Issues – Recommendations

89. Officers were asked to provide any suggestions on what could be done better in collecting biological material for DNA testing or in communicating and training

[redacted]

COMMISSIONER FOR DECLARATIONS
Reg.No [redacted]
DEPT. OF JUSTICE & ATTORNEY-GENERAL

Mark Ainsworth

Witness/ [redacted]

officers and staff about the results of forensic testing. Most officers provided suggestions regarding a range of matters.

Result interpretation and QHFSS capabilities

90. Probably one of the most critical recommendations officers would like to see is a clear aid-memoire or other educational document that is set out in plain English for the interpretation of results from DNA testing that comes out of QHFSS. Many of the officers interviewed stated they were not scientists in did not understand the current methodologies in reporting DNA outcomes particular where scientific figures and ratios are provided. This education could also include what the processes are that are used by QHFSS in eliciting DNA profiles and what other options are available if no quality DNA samples are identified.

91. As indicated by two officers during interview, a specialist unit utilises DNA QUANT data to make strategic decisions about further DNA testing including are their other laboratories available to undertake specific types of testing. Both officers stated the QHFSS staff were very helpful in providing advice regarding further testing and capabilities of laboratories however it appears this testing capability in relation to QUANT data is not widely known in the QPS. From interviews conducted of the two officers, it would appear that QUANT data is obtained from every DNA sample analysed and is entered onto relevant computer systems at the QHFSS. Whilst the data may not be peer checked at that stage, it would provide significant information as to what further testing could be undertaken rather than just producing a result of 'No DNA detected' or 'DNA insufficient for further processing.' This capability needs to be marketed for QPS officers and used to obtain further benefit from DNA testing and the possibility of solving more criminal offences.

92. Consideration of renaming results of DNA to ensure simplicity in understanding and not to discount any further testing possibilities in the mind of investigators or forensic staff. EG. Is there sufficient DNA for an intelligence profile?

93. Several officers would like to see a review of QHFSS hours of operation to provide out of office hours responses to better support the QPS.

94. Case conferencing between investigators, forensic officers and QHFSS staff has occurred ad hoc, depending on the QPS unit and the investigation at hand. Officers have commented on the benefit of this type of consultation with the QHFSS and the value they provide to investigations. Whilst workloads and case files are intense case conferencing on a wider range could not occur but perhaps some consideration could be given to establishing a QHFSS liaison team who could provide a similar service to what is mentioned here. The benefits would be far reaching.

Training

95. A number of officers have identified the need to have an educational tour through the QHFSS facility to receive instruction and to gain an understanding on how the facility operates with respect to DNA. Whilst forensic officers have had visits to the QHFSS in the course of their training, such visits were a look and see without any proper tuition provided regarding processes for DNA extraction. Officer believe this would greatly

enhance their knowledge on what occurs with respect to DNA at the QHFSS but could also generate ideas on how they can better obtain DNA at crime scenes. Several police prosecutors also indicted a desire for something similar in order to provide them with knowledge of process which could assist them in Court matters where a QHFSS person is providing evidence. It could also assist them in understanding statements are little clearer.

96. A scientific officer would like to see enhanced communications between the QHFSS and the QPS. She would like to see joint training days where the QHFSS could gain an understanding of the way the QPS operates and QPS staff could understand the way the QHFSS operate. The officer would like to obtain a better understanding of what QHFSS can and can't do. She would like to see more open dialogue.

97. A number of forensic officers would like to see the reintroduction of refresher training as it were pre-COVID. Officers talked about the great value in those days in educating them and keeping them up to date with trends, emerging patterns and technology.

98. Further education to all QPS officer regarding the importance of taking DNA off persons charged with indictable offences. These samples would be either in the form of an evidentiary sample for the matter being investigated or an intelligence sample if the person did not have a DNA profile on the National system.

Transportation of DNA exhibits to QHFSS

99. A number of remote and regional officers indicated they would like to see a project undertaken around the transportation of exhibits to Brisbane from remote and regional areas of the state to expedite transporting samples to Brisbane. Suggestion of overnight courier service or a model similar to what the Australian Federal Police have which is also courier based. Officers believe this would be a huge benefit to officers in those areas as well as a benefit for complainants whose matters could be expedited.

Other comments during interview

100. The officer stated she would hate to think how many investigations have been discontinued as a result of the issues identified by the COI in the interim report which would have affected further testing being undertaken. She said how many victims have been let down and how many offenders are still walking around the street, who have committed serious and volume crimes. ***(Police Prosecutor)***

101. Frustrations occur where whole blood samples are forwarded and a result comes back from QHFSS of 'No DNA detected/Insufficient DNA for further processing. The officer spoke about a [redacted] Murder at [redacted] where a shirt of the suspect was located hidden away. She took the shirt back to the lab and undertook multiple swab samples of what she believed was blood from the shirt. She undertook a haematology test to the stains which indicated the presence of blood on the shirt. The result took sometime to indicate the presence of blood. The samples were sent to the QHFSS lab and the result came back as No DNA detected. The officer thought this was very unusual that no DNA could be detected. She further stated that in her view she had to rely on the experts at the QHFSS that nothing had been located and that they have undertaken every test they could on the items. ***(Scientific Officer)***

102. Officer stated in his view crime scene examination is generally done very well pertaining to collection, he stated once material goes to QHFSS then the fuzziness starts – you will never know what you are going to get back. ***(Scientific Officer)***

103. The officer would like to see Forensic Officer training including training in DNA to be bench marked against interstate and overseas jurisdictions to ensure forensic officers are operating with the latest knowledge and capabilities. He said this is needed to keep up with the constantly changing science environment. He would like to see it a pre-requisite that the Superintendent at Forensic Services does have a scientific/SOCO background where they can understand scientific processes, challenges and be able to apply a scientific brain to forensic vision and strategies. Someone who can drive forensic capability into the future. He stated in the AFP, WAPOL and SAPOL – Forensic services are run by Civilian Scientists including doctors and allows for a greater knowledge than a manager without a scientific background. ***(SOCO)***

104. Consider a name change to change their current focus e.g., 'Queensland Crime Laboratory.' Have the QHFSS transferred to the QPS. ***(Investigator)***

105. The process undertaken in interviewing these officers hopefully will provide the Commission with information you were seeking. Thankyou for the opportunity to undertake these interviews.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this [redacted] day of October 2022

[redacted]

Mark Ainsworth Witness [redacted]

Commission of Inquiry into Forensic DNA Testing in Queensland

[redacted] | [redacted] | PO Box 12028, George St Qld 4003 | www.dnainquiry.qld.gov.au

Our ref: COI/DOC/22/

23 September 2022

Mr Mark Ainsworth

Sent: [redacted]

Dear Mark

Re: Commission of Inquiry into Forensic DNA Testing in Queensland

Interviews with staff and officers of the Queensland Police Service (QPS) concerning the methods, systems and procedures for the collection and testing of biological material for forensic DNA testing

1. Thank you for agreeing to assist the Commission of Inquiry into Forensic DNA Testing in Queensland (**the Commission**). The Commission commenced on 13 June 2022 and is required to deliver its final report by 13 December 2022. The Terms of Reference require the Commission to make full and careful inquiry in an open and independent manner with respect to:

   a) whether the methods, systems and processes used by the Queensland Police Service and the Forensic and Scientific Services for forensic Deoxyribonucleic Acid (DNA) collection, testing and analysis are, and have been, reliable, conducted in accordance with best international practice, and result in, and have resulted in, accurate reporting of the presence of DNA in samples submitted for testing and accurate matching of DNA samples; and
   b) whether, if such methods, systems or processes are not, or have not been, reliable, or conducted in accordance with best international practice, or do not result, or have not resulted, in accurate reporting or accurate matching, the reasons for any such failure.

Background

2. The Queensland Police Service (**QPS**) is responsible for the collection of biological material for forensic DNA testing. The one exception to this is the collection of biological material by way of forensic medical examination. Queensland Health staff undertake forensic medical examinations on complainants and accused and obtain samples from those persons. However, QPS are involved in this process by, for example, transporting the samples of biological material once they are taken.

3. Samples of biological material are sent to the DNA laboratory at Queensland Health Forensic and Scientific Services (**FSS**) for DNA testing. The results of that testing are later communicated to QPS via a database called the Forensic Register.

4. QPS do not generally provide physical items to FSS for testing. Rather, QPS officers take samples from a crime scene or physical item, and produce an in-tube exhibit suitable for analysis at FSS without further handling. This 'sub-sampling' process occurs either in-situ at a scene or in QPS laboratories. In some cases, whole physical items are sent to FSS. For example, cigarette butts, condoms and female sanitary items are sent directly to FSS.

5. The QPS Forensic Services Group is involved in the management of the collection of biological material for forensic DNA testing, liaises with FSS, and oversees the receipt of results from FSS.

Commission of Inquiry into Forensic DNA Testing in Queensland

[redacted] | PO Box 12028, George St Qld 4003 | www.dnainquiry.qld.gov.au

6. There are two types of police officers who collect material for forensic DNA testing: Scenes of Crime Officers (**SOCOs**) and Scientific Officers. They are, collectively, referred to as Forensic Officers. For the purposes of your work, we have also referred to Forensic Coordinators as Forensic Officers.

7. Other QPS staff are obviously involved in investigating alleged offences and dealing with the results of forensic DNA testing of biological samples, such as first-responders, investigators and prosecutors.

8. Against this background, the Commission of Inquiry seeks better understanding of the views and experiences of police officers about collecting and submitting biological material for forensic DNA testing, and the level of understanding of police officers about the results of forensic DNA testing.

Your engagement

9. You are engaged to undertake confidential consultation with police officers, especially frontline police officers and their supervisors, with an aim to discover:

    a. whether there are, and if so, the nature and extent of, issues with the collection, transportation and submission of biological material for forensic DNA testing; and
    b. whether there are, and if so, the nature and extent of, issues with the understanding and use of the results of DNA testing.

10. We **enclose** a list of questions to assist you with a semi-structured interview process (**Attachment 1**), but you are able to ask such further questions as you consider appropriate.

11. We understand that you will, at first instance, use your contacts within the Queensland Police Service to identify a number of persons you will approach to engage in that confidential consultation. If any interviewees suggest other people who may be willing to engage with you, or if other police officers approach you, you are able to engage with such people. Importantly, we would like you to speak to:

    a. forensic officers (scenes of crime officers, scientific officers, forensic coordinators);
    b. staff and officers who are not forensic officers but who are involved in the investigation of, or response to, instances of crime, including at least some who have experience in investigations in which a forensic medical examination occurs; and
    c. police prosecutors (who will, in effect, only be asked questions 1 to 4 and 19 to 25 in Attachment 1).

12. While the interviews are to be semi-structured, we request that you ensure each person is asked questions 19 to 24 and their response for each question is noted.

13. We also **enclose** some information about the confidential nature of your interviews (**Attachment 2**) that you can explain to each interviewee. In short, although we will ask you to report the position, rank, number of years of service and district of each interview, we will not receive the name or age of the interviewee, the station they work at, or any other details about the interviewee that might cause them to be identified. If an interviewee is concerned that their position, rank, years of service and district are likely, in combination, to identify them, this should be noted and the Commission will make best efforts not to disclose all that information to other parties in a way that might identify the interviewee.

14. The Commission would prefer that each interview be audio-recorded for accountability and record-keeping purposes. If an interviewee requests that the interview not be recorded, you are able to conduct that interview without a recording, but it is important that you keep detailed notes in that case.

Commission of Inquiry into Forensic DNA Testing in Queensland

[redacted] | [redacted] | PO Box 12028, George St Qld 4003 | www.dnainquiry.qld.gov.au

15. Although the default position is that each interview is to be conducted on a confidential basis, the Commission would like you to enquire of each interviewee whether they would be willing to have their response made public, or to give evidence at a public hearing.

16. We ask that, when you meet each interviewee, you do so at a location other than the interviewee's workplace, and not while they are wearing their uniform.

17. The Commission would be grateful to receive a brief update from you, each day or couple of days, which identifies the rank, position and geographical location of any interviewees you have spoken to since your last report, as well as a very brief description of the kinds of information you gathered from the interview.

18. The Commission anticipates that you will consult, as widely as possible, for a period of approximately two and a half weeks commencing Monday 26 September 2022. This consultation period may be extended by agreement with the Commission.

19. In order to consult as widely as possible, the Commission understands that you might travel to different locations across Queensland. Reasonable travel and accommodation costs will be reimbursed by the Commission in accordance with the terms of your contract of engagement.

20. The QPS and Queensland Police Union of Employees are being informed that you have been engaged to undertake this work.

Timing

21. Following that period of consultation, please provide a written report summarising your findings. The Commission would like to receive the report as soon as possible after the end of your consultation period, and, if possible, by **13 October 2022**. Upon receipt of that report, the Commission may wish to call you to give evidence about your findings at a public hearing, potentially between **19 and 21 October 2022**.

Contact

22. Thank you in advance for your assistance. If you have any questions about your engagement, please do not hesitate to contact counsel assisting Joshua Jones at [redacted] or [redacted]

23. Your primary points of contact at the Commission will be Joshua Jones and Carl Tessmann; the latter can be contacted at [redacted] or [redacted]

Yours sincerely,

[redacted]

Walter Sofronoff KC
Commissioner
Commission of Inquiry into Forensic DNA Testing in Queensland

Encl.

Attachment 1 – Questions for Police Officers

Personal details

Questions for all persons

1. Position
2. Rank
3. Years of service
4. District/region

Collection

Questions for all persons except police prosecutors

5. What is your involvement with collecting biological material for forensic DNA testing? (For example, a scenes of crime officer (SOCO) may regularly take DNA samples from the site of property crime or violent crime; a uniformed officer may identify the need to contact a SOCO to attend a scene of crime, and take DNA samples from an accused).

Questions for persons who are not a forensic officer[1] or a police prosecutor

6. If you are involved in arresting or charging accused persons, how often, when you arrest or charge a person with an indictable offence, do you take a DNA sample from that person?

7. Are you aware of any issues or problems related to the collection, transportation or submission of biological material? This may include, for example, issues with the availability of forensic officers to attend a crime scene, delays in transporting biological material, contamination issues, or security issues at property points. Provide examples if possible.

Questions only for forensic officers

8. Are you aware of any issues or problems related to the collection of biological material? For example, being short-staffed and unable to attend all crime scenes, equipment is deficient or insufficient, there are contamination issues, or other procedures are generally not followed. Provide examples if possible.

9. What is the key policy (or policies) related to collecting and dealing with biological material?

10. What refresher training do you receive, and how often does it occur? What ongoing proficiency testing do you undertake?

11. Do you feel that your initial training and refreshing training is adequate? If not, why not? What training would you like to receive, if any?

[1] For the purposes of these questions, 'forensic officers' are Scenes of Crime Officers, Scientific Officers and Forensic Coordinators.

Forensic medical examinations

Questions for all persons except police prosecutors

12. Do you have (currently or in the past) any involvement with complainants and/or accused who undergo forensic medical examinations, or any other indirect involvement with forensic medical examinations, including involvement with the equipment used or transportation of the samples produced?

Questions only for persons who answer 'yes' to question 12

13. Who conducts forensic medical examinations in your area? Does a complainant or accused get to choose the gender of the medical examiner? Have you experienced any issues with the availability or willingness of medical practitioners to conduct forensic medical examinations, either on a complainant or an accused?

14. Who is responsible for providing the practitioner with a sexual assault investigation kit (**SAIK**)? Where are SAIKs stored, and where are they obtained from, if you know? Have you ever had issues with the availability of SAIKs?

15. Where do complainants wait for a medical practitioner to become available to conduct a SAIK, and how often do they typically wait?

16. How are SAIKs transported to the Queensland Health DNA Laboratory? How long does that typically take, if you know? Have you had instances where it has taken more than two weeks for the SAIK to reach the DNA laboratory? If yes, provide details.

17. In your experience, is a reference sample taken by the medical practitioner while administering a SAIK or is it later taken by a police officer? If later taken by a police officer, have complainants every complained about having to undergo a further DNA test?

18. Have you observed any issues with respect to forensic medical examinations, or SAIKs (such as the turn around time for results of testing, or restrictions on the ability to submit other samples for testing during this time), or do you have any suggested improvements in this area?

Results of DNA testing

All persons must be asked questions 19 to 24

19. Are you ever advised of the results of DNA testing?

    a. If yes, how are you notified of those results? (Identify if the type of notification varies between the type of sample taken, or the type of result).
    b. If no, would you like to be made aware of the results of the DNA testing of biological material that you collect or are involved with?

20. In relation to the result '*No DNA detected*' (or similar)

    a. What is your understanding of this result? If you have not seen this result-type before, confirm same.
    b. Prior to the public release of the Commission's interim report, did you understand that there may be sufficient DNA in a sample reported as "No DNA detected" to get a full or partial profile?
    c. What options did you consider were available for further testing if such a result was received, if any.
    d. [*If the person advises they understood further testing was available:*] Who did you understand could request further testing?

21. In relation to the result '*DNA insufficient for further processing*' (or similar)

    a. What is your understanding of this result? If you have not seen this result-type before, confirm same.
    b. Prior to the public release of the Commission's interim report, did you understand that there may be sufficient DNA in a sample reported as "DNA insufficient for further processing" to get a full or partial profile?
    c. What options did you consider were available for further testing if such a result was received, if any.
    d. [*If the person advises they understood further testing was available:*] Who did you understand could request further testing?

22. What other results do you recall receiving? What is your understanding of those results?

23. Have you ever received any training or instruction in DNA evidence, including the meaning of the different result types?

24. Do you find DNA evidence is often or sometimes important in identifying an offender, deciding how to investigate a case or building a case against an accused? If yes, provide examples. Provide details if other types of evidence are typically more important than DNA evidence.

Other issues

Questions for all persons

25. Do you have any suggestions about what could be done better in collecting biological material for DNA testing, or in communicating and training officers and staff about the results of forensic DNA testing?

Attachment 2 – Confidentiality information for police officers

The Commission of Inquiry into Forensic DNA Testing in Queensland is considering, among other things, whether the methods, systems and processes for the collection of biological material for DNA testing is reliable and conducted in accordance with best international practice. As a result, the Commission is trying to understand:

a. the nature and extent of any issues with the collection, transportation and submission of biological material for forensic DNA testing; and
b. the nature and extent of officers' understanding and use of the results of forensic DNA testing.

As a result, it is important the Commission hears directly from police officers.

Your responses will be anonymous.

I will ask you to provide some information about you and the district where you work as a police officer, however, you will not be able to be identified from these responses.

You will not be asked to provide your name, date of birth, age or address.

I will not ask you to sign any consent to participate in this interview for anonymity purposes.

When I report on my findings from this consultation process to the Commission, I will inform the Commission of your responses, but not in a way that can identify you. Although your responses will be able to be taken into account by the Commission in undertaking its work, no individual survey participant will be identified or identifiable in the Commission's report, and your responses will be treated with respect and confidentiality.

SUPPLEMENTARY REPORT

Report into interviews conducted with police officers and civilian officers of the Queensland Police Service concerning the methods, systems and procedures for the collection and testing of biological material for forensic DNA testing, pertaining to the Commission of Inquiry into Forensic DNA testing in Queensland.

1. As previously stated during the course of my role I conducted interviews of eight SOCO's from various locations across the State. The question of contamination of DNA during the collection process was asked of each officer (Question 8). In addition to paragraphs 34 to 36 of my initial report (pertaining to officers' responses to contamination), I would like to add the following.

2. Three out of the eight SOCO's interviewed indicated difficulty at crime scenes when using trace DNA tape lifting equipment. The officers stated that the tape is very difficult to work with in that the tape tends to roll back on itself when officers are attempting to insert it into the exhibit tube. One officer described the tape lift equipment as similar to a clear sticky tape substance which they dab down onto stains at a crime scene to try and lift DNA. The officer stated the tape is mostly used on porous surfaces including clothing. Officers were concerned regarding the possibility of contamination of a sample whilst attempting to place the tape lift into the exhibit tube. This contamination can occur by the SOCO themselves during this process.

3. One officer would like to see if there is a better methodology in existence for lifting trace DNA other than the current tape lift, in order to prevent possible contamination of the exhibit.

TAKEN AND DECLARED before me at Brisbane in the State of Queensland this 20th day of October 2022

[redacted] ....[redacted]

Mark Ainsworth Witness [redacted]

COMMISSIONER FOR DECLARATIONS Reg.No.: [redacted] OF JUSTICE & ATTORNEY-GENERAL