

## Anti Contamination Procedure

### 1 PURPOSE

To provide information regarding good laboratory practice which shall be applied at all times when working in examination, sampling and analytical workflow areas in Forensic Biology.

### 2 SCOPE

This document describes procedures which are to be employed when performing examinations, sampling and handling of exhibits.

This document applies to both staff members and visitors.

This document does not include procedures performed in the DNA suite. See associated documents.

### 3 PRINCIPLE

The principle of good laboratory practice has been introduced to reduce the risk of accidental contamination which may occur within the laboratory during the examination process. This contamination may arise from a number of potential sources including:

- From sample to sample
- From scientist to sample

### 4 ASSOCIATED DOCUMENTATION

17117	Procedure for Case Record Documentation and Evidence Management
<a href="#">17120</a>	Operational Practices in the DNA Dedicated Laboratories
17140	Procedure for Basic Hair Screening
<a href="#">17142</a>	Examination of Items
17185	Detection of Azoospermic Semen in Casework Samples
<a href="#">17186</a>	The acid Phosphatase Screening Test for Seminal Stains
17189	Examination For & Of Spermatozoa
<a href="#">17193</a>	Phadebas Test for Saliva
22871	Change Management

### 5 DEFINITIONS

**Dirty** – Areas of the department where exhibits are examined and sampled or pieces of equipment which are considered likely to come into contact with traces of body fluid present on exhibits (laboratory computers, digital camera, fridges etc). These may also be designated by taped areas (yellow lines).

**Clean** – Areas of the department where exhibits are not examined or sampled – office areas. No PPE is to be worn in these areas.

### 6 LABORATORY ARRANGEMENT

- Each work station will be uniquely identified with locations recognised by AUSLAB.

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- Trolleys or examination boxes, with all consumables required during sampling are provided within each laboratory. Generally there will be one trolley per work station. Any consumables used from the trolleys are replaced by operational staff each week. However where required the examining scientist should maintain the levels of stock in the trolley.
- Dirty and clean areas distinguished by a taped line on the floor – Physical barriers to be installed during lab refurbishment. Staff will be notified of any temporary changes by e-mail and a sign showing the designated areas will be placed at the entrance to the area. PPE should not be worn outside these areas.
- Dirty equipment, defined as any piece of equipment which is for communal use, is to remain within the Laboratory and should not be transferred into a clean area unless it has been de-contaminated.
- When entering a dirty area you are required to wear the appropriate protective clothing.
- Laboratory coats, masks, gloves and hats are not permitted within the clean areas.
- Operational staff or examining scientist's can empty the bio hazard bags which are full. The bags are to be sealed with zip seals and placed in the yellow wheelie bins. The wheelie bins are emptied once a week. If the wheelie bins are full before they are due for emptying, Rhonda Mallett should be contacted, either by email or telephoning (49024) and a request made to have them emptied.

## **7 PROCEDURE FOR SAMPLING – USE OF LABORATORY**

- Disposable lab coats only – no fabric coats to be worn.
- Hats/ masks to be changed daily unless examining particularly dirty/heavily stained items.
- Gloves are to be changed in-between each exhibit and frequently throughout the duration of an examination if it is required
- Benches are to be cleaned with bleach and then alcohol in-between each examination and a fresh piece of brown paper used. The exception to this is the Volume Crime sampling area, where this procedure is not appropriate. In this situation, it is sufficient that a clean sheet of paper is used in-between each examination. Cleaning of the bench before and after an examination session is still necessary. It is also advisable that the scientist cleans the bench down at regular intervals during the examination session.
- Suspect and victim exhibits are to be examined in different areas.
- The location of each workstation is to be recorded on the notes and in the FBX page in AUSLAB.
- Lab coats are to be changed in the following circumstances:
  - In-between the examinations of suspect and victim exhibits. This change will coincide with a change of bench
  - If an item is particularly dirty/heavily blood stained and there is a distinct possibility that body fluids have been transferred onto the lab coat.
  - Apart from the above instances, it is not necessary to change lab coats in-between each exhibit/case. If the exhibits are small (swabs, Cig butts etc) and there is no perceived risk of transfer of body fluid onto lab coats then the coats may be discarded at the end of the day.
  - In the Analytical area lab coats shall be changed once per week unless there is a perceived risk of transfer of body fluids onto the lab coats. Lab coats being used should be labelled with the date they were first used so that they can be discarded after one week of use.
- Clean gloves are to be worn when using dirty communal items – photocopier, computers, camera etc.
- Exhibits are not to be stored on benches overnight. If an examination is not completed by end of day, all exhibits are to be re-bagged, sealed and placed in team trolleys. If

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leaving an item part way through examination for a short break, they should be either placed back into the exhibit bag or left on the bench, covered in brown paper.

- Benches should be clear at the end of the day with the exception of sharps bins which can stay on benches.
- Drying rails are to be cleaned before and after use with bleach.
- Instruments (including scalpel handles, forceps and scissors) are flamed in alcohol between items.
- Fridge and freezer handles shall be routinely cleaned, at least once a day.
- Biohazard cabinets are to be cleaned with bleach and alcohol prior to use, and after each use. Gloves are to be strictly used when working in biohazard cabinets. Fresh gloves are to be used prior to commencing work in the biohazard cabinet each time. Do not use the same gloves to handle things inside the biohazard cabinet after handling anything outside the cabinet.
- All PPE i.e. gloves, gowns, masks, head covers, as well as paper towels used to wipe benches, etc, are to be disposed of only in biohazard bins. All biohazard bins must have the appropriate biohazard bin liners.

### 8 MONTHLY CLEAN AND ENVIRONMENTAL MONITORING

- Each month an extensive clean is to take place within each dirty area. This is to include cleaning of items not cleaned during the normal examination process i.e. chairs, computers, fridge handles, etc.
- Environmental monitoring is to take place each month. Swabs from selected dirty areas are taken for analysis. This is done prior to the monthly extensive cleaning. The results of the monitoring will be circulated to the team during the monthly Biology Team Meetings.
- Any contaminating profiles found that do not match profiles in DNAMaster FTA samples or staff profiles should be added to the Staff Match Macro as "unknown Profile" and given the next consecutive number The OQI number should also be included for future reference.

### 9 DECONTAMINATION OF ITEMS

If an item is removed from the dirty (examination) area, it is to be decontaminated with bleach and alcohol before returning it to the dirty area.

### 10 NEW TECHNOLOGY / CHANGES TO EXAMINATION OR TESTING AREAS

Any introduction of new technology or changes to the physical layout or process that will cause a significant impact or change shall be documented in the Change Management system. Risks of potential contamination can then be assessed as part of the Change Process. Very minor changes that have very little impact can be managed by notification at the team meetings.

### 11 AMMENDMENT HISTORY

Revision	Date	Author/s	Amendments
0	25 Jan 2005	S Cave	New document
1	15 Oct 2007	N Govind	PPE to go only in a biohazard bin. Fresh gloves only in biohazard cabinet. Fridge & freezer handles cleaned daily.
1	April 2008	QIS2 Migration Project	Headers and Footers changed to new CaSS format. Amended Business references from QHSS to FSS, QHPSS to CaSS and QHPS to Pathology Queensland