

STANDARD OPERATING PROCEDURE 4

TITLE: SPILLAGE AND LEAKAGE

Purpose All manipulations of PVB samples will aim to minimise the opportunity for spillage to occur, nevertheless some spillages can occur. The steps necessary are described according to the potential site of spillage.

Scope BioBank Staff

Responsibilities HSE, HTA and local rules (e.g. CL3)

Materials Tresolin K, paper towels, Haz-Tab granules (Biosafety Spill Kit)

Equipment Waste containers, autoclave bags

PROCEDURES ACCORDING TO THE SITE OF SPILL/LEAKAGE

Biobottles Or Sealed Centrifuge Buckets In The CL3 Unit

Should leakage be observed in these vessels prior to opening, they are to be left unopened for 24hrs to minimise creating an aerosol. The MSC should be left on & a notice placed on the MSC to explain the situation. The Departmental Safety Officer should be informed. After 24hrs, the containers should be opened & decontaminated by soaking in Tresolin K to a 20% final concentration for 24hrs & then rinsed in tap water.

Spillage Inside The MSC

Minor spillage/blood spots: The spillage should be treated with 20% Tresolin K and then absorbed into paper towels which should then be discarded in the dry waste bucket in the MSC.

Larger spillages: The MSC should be left on and a notice placed on the MSC to explain the situation. The Departmental Safety Officer should be informed. The spill should be contained using absorbent towels or the Haz-Tab granules in the **Biosafety Spill Kit** located in room 3.26 of the CL3 unit. The area should be wiped clean with paper towels dampened in Tresolin K, then concentrated Tresolin K solution (20%) applied for 1 hour. The spill should be mopped up with paper towels and rinse thoroughly with water.

Spillage Outside The MSC But In The CL3 Unit

For spills occurring outside the MSC but within the CL3 unit, the action to be taken must be that described in the Codes of Safe Working Practice (Appendix A1) for work with that particular pathogen, taking into account the nature of the pathogen and the amount and location of the spill, *i.e.* if fumigation is necessary.

The external contact should be summoned via the Lone Worker Alarm to assist in taking emergency action if required. Should there be a risk that the spill has released aerosol to contaminate regions beyond the area of spillage, other personnel within the CL3 unit should be notified and possibly evacuated and the necessary safety procedures implemented.

A notice should be placed on the door of the contaminated room explaining the situation. The spill should be contained using the absorbent towels or the Haz-Tab granules in the **Biosafety Spill Kit** located in room 3.26 of the CL3 unit. The area should be wiped clean with paper towels dampened in Tresolin K, then concentrated Tresolin K solution (20%) applied for 1 hour. The spill should be mopped up the spill with paper towels and rinsed thoroughly with water.

The Departmental Safety Officer should be informed.

Spills To The Body

Contaminated clothing should be removed and placed into double-bagged autoclave bags for disposal. All exposed skin should be thoroughly but gently washed with soap and rinsed thoroughly with water. Great caution should be used so as not to introduce small abrasions in the skin.

The Departmental Safety Officer should be informed.

Spillage Outside Of The CL3 Unit

All samples transported outside of the CL3 unit (see section D7 of this SOP) should be transported when frozen, in storage boxes placed in a tied clinical waste bag to minimise any chances of spills. In the unlikely event of a spill occurring, a portable spill kit, which is kept in the lobby (room 3.25) of the CL3 unit should be taken when transporting samples.

Disposal Of Waste In The CL3 Unit

Waste materials (contaminated plastics, Vacutainers, pipettes, tips etc.) generated during the processing of samples should be placed in a sealed labelled waste pot containing Tresolin K to a 20% final concentration. The contents will be mixed by inversion when the container is full and stored for at least 24hr at room temperature. Liquid in the container will be decanted by pouring through a sieve (used solely for this purpose) and flushed with excess cold water down the sink. Solid waste will be rinsed copiously with cold running water and then double-bagged with autoclave bags. The innermost bag will be sealed with autoclave tape and an indicator slip will be placed between the bags so that the verification strip can be read.

The autoclave bag containing the dry waste collected in the MSC will be sealed with autoclave tape within the MSC and then double-bagged with a second autoclave bag. An indicator slip will be placed between the gaps so that the verification strip can be read.

All waste will be decontaminated in the pass-through autoclave between room 3.26 (inside CL3 unit) to room 3.25 (*i.e.* in the lobby-(room 3.25) of the CL3 unit), as specified in the Codes of Safe Working Practice for the CL3 unit (Appendix A1 – section I/C7-8).

General

All spills should be recorded in the Incident Book, and in the personal health file of the worker. The College Biological Safety Officer must be advised of the incident, who will notify the HSE as appropriate.

Cross Referenced SOPs