

10. Spillages

Despite precautions taken to avoid exposure to hazardous materials during normal use, unforeseen accidents may occur in which release of biological agents or chemicals occurs unexpectedly. An immediate response is required to:

- remove workers from the affected area;
- identify the nature and extent of the risks created by the spillage; and
- clean up the spillage.

In order to achieve this, staff from each laboratory need to ensure that:

- risk assessments are available in which appropriate clean up procedures for spillages of hazardous compounds is incorporated;
- materials and protective clothing are available to clean up the spillage;
- suitable persons are involved in the cleaning up of spillages; and
- resultant waste is disposed of suitably.

Any students (PG or undergraduate) involved with a potentially dangerous spillage must evacuate the area immediately and contact their supervisor. The supervisor should assess the extent of the risk. Small spillages of bacteria can be cleaned up and disinfected without causing too much disruption. Spillage of small quantities of chemicals that give off toxic vapours, however, is likely to require a greater extent of evacuation and notification to the Security (x3939).

Response to spillages

In the event of a [serious spillage emergency](#), especially with a hazard to breathing:

- Evacuate the area (affected room, corridor or building, as necessary), seal off access to the area, attach 'no entry' signs to doors accessing the area, if possible.
- Contact Security (ext. 3939 or 01224 273939) – within or out-with office hours. (Please note [the IMS Spillage Response Team is no longer in operation](#)). Identify the location and the substances involved in the spillage. They will attend and decide whether the Scottish Fire and Rescue Service (SFRS) need to be called.
- Inform your supervisor, lab PI and/or IMS Safety Co-ordinator.
- Complete an online accident investigation report for the incident (see [Section 7](#))

If the spillage is [less serious](#) (small volumes and no hazard to breathing),

- 1) Consult the risk assessments from the laboratory for hazard information on released materials. NB. Ability to mount an appropriate spillage response should be planned at time of ordering any material, especially when hazardous.
- 2) Contact your supervisor/Principal Investigator or an IMS Safety Coordinator for advice. **For more serious incidents, contact Security (x3939), who will determine whether to contact the Scottish Fire and Rescue Service (SFRS).** Only the SFRS are regularly trained in the use of respiratory protective equipment for these serious incidents.
- 3) If the spillage can be cleaned up without any hazard to breathing, clear the immediate area. Wear suitable protective clothing (safety goggles, gloves, laboratory coats, aprons, overshoes; see [procedure P.31](#)) from spillage kits in the lab. Work in pairs where necessary.
- 4) Dispose of hazardous waste in a suitable fashion (see [section 13](#)).
 - Waste contaminated by hazardous chemicals must be securely contained in bags or bins and collected for incineration.
 - Microbiologically contaminated waste must be fully disinfected/sterilised by autoclaving before disposal.
- 5) Emergency procedures following the release of living organisms are dealt with in [procedure P.19](#).
- 6) Complete an accident investigation report on the incident (see [section7](#)).