**Guidance for Biological Spills Training**

Some laboratories will use a combination of biological, chemical and GM hazards and the training must consider ALL hazards present, as the response may be different or moderated if different types of spills are concomitant. This document considers biological agents only.

**Information and training of emergency procedures in the event of a spill**

Within the context of emergency training, users of laboratory space must be informed and trained in the actions expected in the event of a spill. The contents of training must include;

* The findings of the relevant risk assessments to the work activity.
* Specific procedures for the relevant biological agent, particularly difference for spills of prions and respiratory pathogens
* There must be a set of foreseeable incidents recorded in the facility ‘code of practice’ so users can be trained in the recommended response to their occurrence
* The hazards of foreseeable spills
* Contents and location of the spill kit
* What the spill kit is suitable and NOT suitable for.
* How to use the spill kits
* The size and nature of a spill that can be tackled without competent assistance
* Lone workers must have access to spill kits, be competent to respond to a spill and be capable of raising the alarm.
* Reporting of ALL spills to [riskNET](https://www.ucl.ac.uk/safety-services/node/1619), as there may be a legal requirement to report them to the competent authority
* Reporting of ALL spills to laboratory managers so that spill kits can be replenished.
* When periodic refresher training is carried out and how it is recorded
* A schedule of drills must be planned and written in the facility ‘code of practice’ and carried out to ensure users are familiar with the emergency procedures for foreseeable incidents. The results of the drills must be recorded, reviewed and the findings circulated to all users.

**The following, with content appropriate to the activities of the workplace, as defined in the emergency response documents should be included.**

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| **Guidance for the content of training for spills of biological agents** |
| **Define the biological spill**Complete training for each different procedure that is required in the event of a spill of each defined biological agent. For example, the response toa spill of blood born viruses and respiratory pathogens will be different. |
| **Initiating Event*** Define a major and minor spill of each of the foreseeable events that require a DISTINCT RESPONSE
* Outside a MSC is a major spill

Inside the MSC depends on the spill volume, titer, infectious dose, and route of transmission as defined by risk assessment. If the spill is not wholly accessible it is a major spill.* Define the initiating event after which an emergency response SHALL be followed.
* Event definition and response will also be different, depending on the hazard type, i.e. BBV, Respiratory pathogen, Prion
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| **Immediate response for MINOR spill*** Response if there is no injury or contamination

Define PPE requiredDefine disinfectantDetermine risks from aerosolsResponse if it is a contained spill (centrifuge)Procedure, including methods, use of disinfectant, waste disposal Reporting* Response if an individual is injured

First aid provision, first aider contact, first aid kit location and procedures for assistance.Splashes, skin or eye, and skin damage (see major spills) |
| **Immediate response for MAJOR spill*** Response if there is no injury or contamination

Raising the alarmLaboratory evacuation procedureHow to make work safe. Define evacuation route (this may be different for respiratory viruses)Location and use of ‘NO ENTRY’ signageRisks from aerosols (different risks from respiratory viruses)Response if it is a contained spill (centrifuge)Emergency contacts* Response if an individual is injured

Raising the alarmEmergency contacts.First aid provision, first aider contact, first aid kit location and procedures for assistance. Decontamination (see below) for splashes, skin or eye, and skin damage* Response to contamination

Role of the affected party;Raising the alarm to call for assistance, including lone working arrangementsRemoval of contaminated clothing, retention of RPE (for respiratory viruses)Laboratory evacuation procedureUse of ‘DO NOT ENTER’ sign and prevention of further entry or further use of the facility. Role of assistance;Decontamination kit contents, location, and how to use themDefine PPE requiredUse of ‘DO NOT ENTER’ signFirst aid (see above)Clothing removal (if required)Splashed skin and eye decontamination.Define personal decontamination procedure and if further decontamination is required (shower)Spare clothesAccessing medical treatmentDecontamination of clothing, and waste disposal. |
| **Short term Response**Assessing risks and plan for the clear up and/or fumigation of the facility with the CL3 or other laboratory manager. Allowing settling (centrifuges) or ventilation/MSC extraction to clear aerosolsThe use of the laboratory during clean-upProcedure to determine if fumigation is necessary.Procedure for clean-upDefine PPE for clean-upDefine disinfectant for clean-up |
| **Long term response**MSC fumigation procedure, Estates and contractor rolesCL3 facility fumigation procedure, Estates and contractor rolesThe role of departmental business continuity plans |
| **Follow Up procedure to business as normal**Return to normal requirements (certification or verification of fumigation and decontamination) and timescalesLessons learnt, communication and of best practiceRevision of COP |
| **Additional information**Content of Biological Spill kitLocation of spill kitsLocation of decontamination kitsLocation of NO ENTRY signLocation of spare clothingLocation of alarm system instructions, and procedures for its useLocation of PPE for emergency responsePerson responsible for spill kits, and checks that spill kits are fullEmergency contact details; CL3 Manager, Biological Safety Advisor, HoD, Safety Services |
| **Drills procedure for emergency responses, its frequency and recording** |
| **Recording of emergency training and where it is kept** |
| **All spills must be reported on riskNET** |

**Document control**

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