

## Biosafety Spill Procedure

**Scope:** This procedure should be used by all laboratories and facilities that fall within the IBC's purview.

**Purpose:** This spill procedure should be used to clean up spills involving biohazardous material, which includes viable infectious, pathogenic, or toxin-producing agents, prions, biologically-derived toxins, recombinant nucleic acids or organisms that have the potential to affect the health of humans, animals, plants, or the environment.

This SOP should be made specific to your laboratory and the agents you work with by filling in the blanks below. Once the SOP is complete, please post this information in the laboratory for all personnel to follow. If this procedure is inadequate for your particular situation, create a lab specific spill SOP and submit to the IBC for review and approval.

The following is a summary of the steps to take when cleaning up a spill:

### The ABC's of Cleaning up a Spill

**A**lert others

**B**ody protection is required, wear appropriate PPE

**C**ontain spill to prevent spread of contamination

**D**econtaminate spill and equipment with appropriate disinfectant and contact time

**E**liminate contaminated items (i.e. paper towels, PPE) and treat as biohazardous waste

**F**reshen up by washing hands and any exposed areas

**G**o to PI immediately to report spill if  $\geq 10$  mLs outside BSC or if it is a select agent or toxin (any amount)

### Spills inside of a Biological Safety Cabinet (BSC) or other primary containment devices:

- Alert people in immediate area of spill.
- Protect your body by wearing gloves and a lab coat during the decontamination procedure, at a minimum. Based on risk assessment, the following PPE is also required: \_\_\_\_\_.  
(list additional PPE)
- Contain the spill by placing absorbent material at the spill's perimeter to prevent the spread of contamination.
- Decontaminate the spill using \_\_\_\_\_.  
(list appropriate disinfectant)
  - Place paper towels soaked with the disinfectant directly on the spill or pour the disinfectant around the spill and allow this solution to flow into the spill.
  - Do not pour disinfectant directly on the spill to avoid creating aerosols.
- Decontaminate for \_\_\_\_\_ minutes.  
(list appropriate contact time)
- Use paper towels to wipe up the spill, working from the edges into the center. Dispose of as biohazardous waste.
- Decontaminate all equipment and utensils inside the BSC. Items that are not readily or easily surface decontaminated should be carefully placed into autoclave bags and removed for further treatment.

- If the spill entered grilles of the BSC, apply disinfectant to the grills, allow for appropriate contact time, and empty the drain pan through a tube into a collection vessel containing disinfectant. Flush the drain pan with water and reattach the drain cap.
- Remove PPE and any contaminated clothing and decontaminate by autoclaving or soaking in disinfectant.
- Wash your hands and any other exposed areas with soap and water before exiting the laboratory.

### Spills outside of a Biological Safety Cabinet (BSC) or other primary containment devices:

- Alert people in immediate area of spill.
- Protect your body by wearing gloves and a lab coat during the decontamination procedure, at a minimum. Based on risk assessment, the following PPE is also required: \_\_\_\_\_.  
(list additional PPE)
- If risk assessment dictates that you should wear respiratory protection and you are not wearing respiratory protection at the time of the spill, follow proper exit procedures and evacuate the laboratory. Make sure to remove all PPE and any contaminated clothing prior to exiting. Wait 30 minutes to allow aerosols to dissipate before reentry.
- Ensure that laboratory doors are closed and post warning signs to prevent others from entering the laboratory.
- While wearing the appropriate PPE, contain the spill by placing absorbent material at the spill's perimeter to prevent the spread of contamination.
- Decontaminate the spill using \_\_\_\_\_.  
(list appropriate disinfectant)
  - Place paper towels soaked with the disinfectant directly on the spill or pour the disinfectant around the spill and allow this solution to flow into the spill.
  - Do not pour disinfectant directly on the spill to avoid creating aerosols.
- Decontaminate for \_\_\_\_\_ minutes.  
(list appropriate contact time)
- Use paper towels to wipe up the spill, working from the edges into the center. Dispose of as biohazardous waste.
- Horizontal surfaces should also be decontaminated due to dispersal of aerosols.
- Remove PPE and any contaminated clothing and decontaminate by autoclaving or soaking in disinfectant.
- Wash your hands and any other exposed areas with soap before exiting the laboratory.
- Report the spill to the PI if the spill occurred outside the BSC and is greater than 10 mLs.
  - Report the incident to the BSO 4-3203 immediately
  - Send a Laboratory Incident Report form (<http://compliance.okstate.edu/ibc/forms>) to BSO at 223 Scott Hall within 7 days

### Personnel Exposure

In the event that a substance enters the mouth, eyes, lungs, or penetrates/comes in contact with skin, follow the instructions below and seek immediate medical attention.

- Alert others in the laboratory.
- Remove all contaminated PPE and clothing.
- Treat the exposed area by washing with soap and water or flushing with water.
- Post warning sign on the laboratory door.
- Report the incident to the PI.
- Seek medical attention.

On-site emergency assistance can be obtained by dialing 911. Bring the appropriate MSDS to the provider to aid in medical treatment.