

Standard Operating Procedures BSL-05 Minor Spill Cleanup of a Risk Group 2 Pathogen

1. Scope:

This SOP describes how to clean up a small spill of a Risk Group 2 pathogen to ensure that it is properly decontaminated and to minimize the risk of contamination of the surrounding area.

Currently UNBC does not use pathogens in a large scale. All volumes must be included in an Internal Permit application. A risk assessment must be completed prior to the start of any Risk Group 2 project to ensure the parameter of this SOP is sufficient.

2. Responsibilities:

This SOP should be followed by anyone using or working with Risk Group 2 pathogens (e.g. undergraduate student, graduate student, principal investigator)

Prior to working in the lab, you are required to watch the “Containment Level 2 Laboratory Operation Practices” available on blackboard and complete an orientation session with the Biosafety Officer.

3. Material:

When working with pathogens there should be a Spill Kit assembled prior to commencement of any procedures. A spill kit needs to contain with example photos below:

1. Paper towels
2. Disinfectant (appropriate for the pathogen)
3. Gloves
4. Autoclave/Biohazard bag
5. Black sharpie
6. Minor biohazard Spill form
7. Forceps
8. Specific Pathogen Safety Data Sheet (PSDS)



4. Safety:

After a minor spill it is important that the pathogen be properly killed and the spill area decontaminated to avoid contamination of the local area.

I. GENERAL PRACTICES

- Be familiar with the Pathogen Safety Data Sheet (PSDS) for your pathogen and incorporate any special requirements in the spill procedures.
- Use the appropriate disinfectant as listed in your permit and in the PSDS.
- IF the spill occurs outside of a Biological Safety Cabinet (BSC), clear the lab area for approximately 15 minutes to allow aerosols to settle before proceeding with clean up.
- If the spill occurs outside of a BSC additional PPE such as a mask or respirator should be used during clean up (Refer to your PSDS).
- If the spill occurs inside a BSC, slowly remove your hands from the BSC and allow the BSC to run for 10 minutes to allow aerosols to settle before proceeding with clean up.
- If inside a BSC, follow all working procedures to ensure the BSC contains aerosols/pathogen within the BSC while providing protection to the user. Refer to BSL-04 Working in a Biological Safety Cabinet.
- Remove the lab coat you were wearing during the spill in case it became contaminated. Ensure it is properly decontaminated and cleaned.
- Don a clean lab coat before cleaning up a spill.
- Always move slowly and deliberately when cleaning up a biohazard spill to minimize the production of aerosols during clean up.

5. Procedure:

1. While allowing the aerosols to settle; retrieve the Biohazard Spill Kit.
2. Don a fresh pair of gloves.
3. Carefully cover the spill with paper towels.
4. Gently pour disinfectant over the area. Begin at the outside edges of the spill and work your way toward the centre. Using a gentle flooding action will reduce the creation of more aerosols.
5. Let sit for 30 minutes contact time.
6. Use forceps to pick up any broken glass and put them in a leak proof, puncture resistant container.
7. Pick up the saturated paper towels, adding more if required. Dispose of all material in an autoclavable bag.
8. Wipe up the spilled area with additional paper towel.
9. Clean and disinfect the area a second time.
10. Clean and disinfect any items that may have been contaminated.
11. Autoclave all waste material before disposal.

6. Records:

All minor spills of a Risk Group 2 pathogen require the completion of a Minor Spill Form and must be reported to the Biological Safety Officer and/or Laboratory Safety Committee. The spill will also need to be recorded in the Inventory Control logbook.

7. List of attachments:

Refer to appropriate Material Safety Data Sheet for specific Pathogen.

8. History:

Created by Lydia Troc Oct 27, 2015.

9. Approval: