Package Leaks

Examine outer packaging

Leaks or evidence of leaks
1. Contain package
2. Notify UAB Biosafety @ 934-2487
3. Notify Sender

No evidence of leaks
Examine inner packaging/contents in BSC - if there is a leak:
1. Notify Sender
2. Notify UAB Biosafety @ 934-2487

Category A or Select Agent: Biosafety responds and reports to CDC
Category B: Follow Spill Cleanup Procedure
Spill Kit

All of these items can be stored in a five (5) gallon bucket with lid. The bucket can also serve as a container for the waste that is generated by the cleanup. The bucket should be labeled indicating this is a spill kit.

A basic spill kit should include but is not limited to:

- Latex/surgical gloves
- Safety glasses/ goggles/ face shield/ mask
- Disposable lab coats
- Aprons or gowns
- Absorbent material to contain spill (Paper towels, Spill boom or pillows, vermiculite)
- Small disposable plastic broom and dust pan
- Biohazard bags for biohazardous material only – Ziploc for others
- Small bottle of detergent cleaning solution
- Disinfectant (appropriate to agent used in lab)
- Shoe Covers
- Biohazard Stickers
- Copy of Spill Cleanup Plan
Spill Cleanup Procedure

• Wear appropriate PPE for the potential infectious material encountered.
  
  o This could include gloves, lab coat, face shield, goggles, dust mask, HEPA mask, etc.

  o Think exposure routes and protect yourself accordingly.

  o If the spilled material can be transmitted via the inhalation route then clear the area and warn others of the spill.

  o Wait 30 minutes and then enter the area. This will allow aerosols to settle or be captured by the building exhaust. Keep in mind that if a liquid or fine powder has spilled, aerosolization has taken place.

• Assess the spill!

• What was spilled?

• Liquid or solid?

• Infectious or non-infectious?

• Concentrated or non-concentrated?

• Water-based or not?

• If a liquid, does it have a high vapor pressure – will it evaporate quickly?

• Is it toxic?

• Is it corrosive?

• Was the aerosol in containment or not?
• In BSC or fume hood or not? (Cat A MORE potent!) Follow SOP!

• Was it infectious, concentrated

• Is it a large spill or a small spill?
  
  o A large spill is generally defined as sufficient quantity that if spilled tends to seek its own level. In other words it runs to a low point.

  o The main concept that would cause one to treat the large spill differently is with containment in mind. One would want to make sure the spill did not spread and contaminate other areas.

• **Disinfect** by covering the spill with absorbent towels and carefully pouring a suitable disinfectant on the area. When pouring the disinfectant start at the edge and spiral in toward the center of the spill. Select a disinfectant that is specific for the agent(s) used in your lab. Heavy soil load or high protein content may alter a disinfectant’s effectiveness and pre-cleaning may be required (as with blood spills). Remember two factors are associated with proper disinfection: concentration of the disinfectant and contact time. Follow the manufacturer's directions.

• **Disposal**
  
  o After the area has been thoroughly disinfected carefully place all the materials in the proper medical waste container.

  o Contaminated glass should never be handled with hands (even gloved hands).

  o Use tongs, dust pan and broom, hemostats, etc. and carefully place the broken glass in an approved sharps container.

  o The rest of the spill cleanup waste and disposable PPE can then be placed in red bags for proper disposal as medical waste.

  o Carefully wash your hands with soap and water.

  o Report incident to lab manager or PI as soon as possible and if warranted to OH&S as directed by lab manager or PI.
Spills in a Biosafety Cabinet

- Leave biosafety cabinet blower motor turned on during cleanup.

- If necessary, flood work surface, as well as drain pans and catch basins below the work surface, with disinfectant appropriate for agent.

- Wipe cabinet walls, work surfaces, and inside the front view screen with disinfectant.

- Lift front exhaust grill and tray, and wipe all surfaces. Ensure no paper towels or soiled debris has blown into the area below the grill.

- Expose non-autoclavable materials to disinfectant for recommended contact time before removing from the biosafety cabinet.

- Run biosafety cabinet 10 minutes after cleanup before resuming work or turning cabinet off.

- When a spill overflows into the interior of the cabinet, more extensive decontamination of the cabinet is required. If in doubt about the procedure, contact the UAB OH&S at 934-2487

**First Aid**

- Eye Contact – Promptly flush eyes with water for 15 minutes and seek medical attention.

- Ingestion – Encourage the victim to drink large amounts of water or call Poison Control (4-4606) and seek medical attention

- Skin Contact - Promptly and thoroughly wash the affected area with soap and water and remove any contaminated clothing.

- Complete the Accident/ Injury Report and send and cases of injury or suspected injury to the Workplace or the University Hospital Emergency Department.