Biohazard Spill Kit

The Biohazard Spill Kit (Figure 1.) should be geared toward the type of biohazards you are working with and should include, but is not limited to:

- Biohazard Spill Clean-up instructions
- PPE (e.g. gloves, goggles, and N95 respirator for 2 people)
- Disposable shoe covers
- Absorbent paper towels and absorbent pads
- Appropriate disinfectant (e.g. bleach)
- Bucket (use also to store spill kit contents)
- Tongs or forceps to pick up broken glass or contaminated sharps
- Red biohazardous sharps container
- Sturdy plastic bags and autoclave bags
- Biohazard spill warning signage and flagging tape

All non-disposable items should be compatible with the disinfectant to be used or able to be autoclaved. The items should also fit in bags for disinfection or in the autoclave bag.

Small Biohazardous Spill (less than ~50 mL):

- Advise lab occupants of the spill and secure the area
- If aerosols from the spilled material poses a significant risk, evacuate the lab, close the door and contact EHRS
- If you are not able to clean up the spill, or it is unsafe to do so, evacuate the lab, post a ”Do Not Enter” sign on the door and contact Campus Security and EHRS
- If safe to do so, wearing a lab coat, gloves and safety glasses, use tongs or forceps to remove any broken glass for autoclaving
- Cover the spill with paper towels and an appropriate disinfectant
- Don’t spray the spill directly with disinfectant, rather soak paper towels in the disinfectant and place over the spill to prevent the generation of aerosols
- Wait for the appropriate contact time
- Collect all paper towel or absorbent material and autoclave before disposing
- Wipe area of the spill again with disinfectant
- Dispose of gloves in autoclave bag
- Disinfect any non-disposable equipment that cannot be autoclaved
- Wash hands
Biohazard Spill Response Procedures

Large Biohazardous Spill:

- Advise lab occupants of the spill and secure the area
- Evacuate the lab, taking the spill kit with you, and place a “Do Not Enter: Biohazardous Spill” sign on the door
- Remove contaminated clothing and decontaminate
- Decontaminate contaminated skin if required
- Contact supervisor and EHRS
- Allow aerosols to settle for at least 30 min, and if safe to do so, have 2 people re-enter the lab to clean up the spill
- Wearing a lab coat, gloves, safety goggles, shoe covers and face protection if required, use tongs or forceps to remove any broken glass for autoclaving
- Pour disinfectant around the spill in concentric circles. To reduce aerosol generation do not pour directly onto the spill
- Cover the spill with paper towels soaked with more disinfectant, working from the perimeter to the centre of the spill
- Wait for the appropriate contact time
- Collect all contaminated materials and dispose of in autoclave bag
- Disinfect any non-disposable equipment that cannot be autoclaved
- Wash hands
- Submit an incident report to EHRS using the online form

Spill in a biosafety cabinet:

- Keep the BSC running after the spill and during cleanup procedure
- If gloves were contaminated from the spill, don new gloves
- Pour an effective disinfectant in concentric circles to cover the spill. If necessary, flood the work surface in the BSC as well as the drain pans and catch basins below the work surface. Ensure drain valve is closed before flooding with disinfectant
- Wipe all equipment with a suitable disinfectant
- Allow disinfectant to act for an appropriate contact time
- Collect disinfectant through the drain valve
- Wipe up residual disinfectant with paper towels
- Wipe down all surfaces with disinfectant again
- Dispose of all contaminated materials via the appropriate waste stream (e.g. autoclave)
- Remove PPE (treat gloves as contaminated) and wash hands
- Allow the BSC to run for 10 minutes after the spill has been cleaned up before shutting off

Spill in a centrifuge:

- Close the centrifuge and wait at least 30 minutes for aerosols to settle
- Remove centrifuge rotor/cups/buckets and centrifuge tubs, place in a container to prevent leaks, and place in the BSC. Watch for broken glass
- Remove any broken glass from the centrifuge using tongs or forceps, and dispose into a biohazardous sharps container
- Use an appropriate disinfectant to decontaminate the inside chamber of the centrifuge
- Use an appropriate disinfectant to decontaminate the rotor/cups/buckets/tubes inside the BSC