

Biological Spill Procedures

Biohazard Spill Clean-Up Procedures

Since spills of biological materials will happen, it is important to be prepared prior to dealing with the problem. Laboratories working with biohazards should have a basic biological spill kit ready to use at all times. For most instances the basic kit can be assembled with materials already used in the laboratory. Although it is preferable to have the content of the spill kit in one location, as long as the materials are easily accessible to everyone in the lab, prior assembly might not be necessary. However, ready assembled spill kits are available through laboratory and maintenance supply stores.

Basic Biological Spill Kit:

- Disinfectant (e.g., bleach to water solution 1: 10 concentration, prepared fresh)
- Absorbent Material (e.g., paper towels)
- Waste Container (e.g., biohazard bags, sharps containers)
- Personal Protective Equipment (e.g., lab coat, gloves, eye and face protection)
- Mechanical Tools (e.g., forceps, dustpan and broom)

The following procedures are provided as a guideline to biohazardous spill clean-up and will need to be modified for specific situations. As with any emergency situation, stay calm, call campus police at 6911 if necessary, and proceed with common sense. Call the OEHS at 2170 if further assistance is required especially if the spill outgrows the resources in the laboratory.

Spill Inside a Centrifuge

- Have a complete biological spill kit ready to go before you start the cleanup.
- Clear area of all personnel. Wait 30 minutes for aerosol to settle before attempting to clean up the spill.
- Wear a lab coat, safety goggles and gloves during clean up.
- Remove rotors and buckets to the nearest biological safety cabinet.
- Thoroughly disinfect inside of centrifuge.
- Remove contaminated debris after disinfection, place in appropriate biohazardous waste container(s) and autoclave before disposal.

Spill Inside the Laboratory (BSL-2, RG-2)

Clear spill area of all personnel. Wait for any aerosols to settle before entering the spill area. Remove any contaminated clothing and place in biohazard bag for further processing by laundry (UAH or department). Wear a disposable gown or lab coat, safety goggles and gloves. Have a complete biological spill kit ready to go before you start the cleanup.

Initiate cleanup with disinfectant as follows:

- Cover spill with paper towels or other absorbent material containing disinfectant.
- Encircle the spill with disinfectant (if feasible and necessary), being careful to minimize aerosolization.

- Decontaminate and remove all items within spill area. Remove broken glassware with forceps or broom and dustpan and dispose in sharps container. Do not pick up any contaminated sharp object with your hands.
- Remove paper towels and any other absorbent material and dispose in biohazard bags.
- Apply disinfectant to the spill area and allow for at least 10 minutes contact time to ensure germicidal action of disinfectant.
- Remove disinfectant with paper towels or other absorbent material and dispose of in biohazard bag.
- Wipe off any residual spilled material and reapply disinfectant before final clean up.
- Wipe equipment with equipment compatible disinfectant (e.g., non-corrosive). Rinse with water if necessary.
- Place disposable contaminated spill materials in biohazard bags for autoclaving.
- Place contaminated reusable items in biohazard bags, or heat resistant pans or containers with lids before autoclaving.
- Reopen area to general use only after spill clean-up and decontamination is complete.
- Inform all personnel and laboratory supervisor about the spill and successful clean up as soon as possible.

Spill Inside the Biological Safety Cabinet (BSL-2, RG-2)

- Have a complete biological spill kit ready to go before you start the cleanup.
- Wear lab coat, safety goggles and gloves during clean up.
- Allow cabinet to run during clean up.
- Soak up spilled material with disposable paper towels (work surface and drain basin) and apply disinfectant with a minimum of 10 minutes contact time.
- Wipe up spillage and disinfectant with disposable paper towels.
- Wipe the walls, work surface and any equipment in the cabinet with a disinfectant soaked paper towel.
- Discard contaminated disposable materials in biohazard bag(s) and autoclave before discarding as waste.
- Place contaminated reusable items in biohazard bags, or heat resistant pans or containers with lids before autoclaving and further clean up.
- Expose non-autoclavable materials to disinfectant, 10 minutes contact time, before removal from the BSC.
- Remove protective clothing used during cleanup and place in a biohazard bag for further processing by laundry (UAH or department).
- Run cabinet at least 10 minutes after cleanup and before resuming work.
- Inform all users of the BSC as well as the laboratory supervisor about the spill and successful clean up as soon as possible.

Spill Outside the Laboratory, During Transport on Campus

Always transport biohazardous materials in an unbreakable well-sealed primary container placed inside a leak-proof, closed and unbreakable secondary container, labeled with the biohazard symbol (plastic cooler, bio-specimen pack, etc.).

Should a spill of RG-2 material occur in the public, contact OEHS. Do not attempt to clean up the spill without the proper personal protective equipment and spill clean-up material.

Should the spill occur inside a car, leave the vehicle, close all doors and windows, and contact the OEHS for assistance.