

Biological Waste Management

Laboratory Personnel

Biological Waste: includes but is not limited to the following: potentially infectious materials to humans, animals, and plants, genetically modified materials, bodily fluids, animal carcasses, and human and animal tissues (pathological waste). Always use personal protective equipment (lab coat, safety glasses, latex or nitrile gloves) when collecting and handling biological waste.

Solid Biological Waste Collection and Handling: Cardboard biowaste boxes can be used for solid biowaste and pathological waste. Labs must ensure that the following measures are taken to avoid leaking boxes:

1. **Avoid placing liquids in cardboard boxes.** If it is unavoidable, then add enough absorbent materials to capture all liquid
2. **Avoid Punctures:** Collect plastic serological pipettes and other waste in a manner that avoids puncturing the plastic bag. If punctures become an issue, request a supply of "Pipet Keepers".
3. **Biological Waste Boxes: using the procedures below:**
 1. Assemble the box using packing tape.
 2. Line box with a red bag
 3. Place BSL1 and BSL2 solid biowaste inside the red bags within the cardboard box
 4. Closed sharps single-use containers can be disposed of in the cardboard boxes. Sharps must be placed in an appropriate sharps container
 5. When the box is $\frac{3}{4}$ full, tie a knot to close up the red bags and tape the box shut with packing tape
 6. Write the date, faculty/lab name, building name, room number, and phone extension on the top of the box
 7. On the side of the box, you will find a list of waste types. Write a check mark to indicate what type of biological waste is inside
 8. Contact EHS for pickup



Sharps:

- All sharps must be disposed of into an approved, puncture resistant, sharps container.
- Sharps used with genetically modified and biological materials must be collected in red biohazard sharps containers for disposal.
- Do not overfill the sharps container.
- Never force materials into a sharps container.
- Never reach into the sharps container.
- Do not remove the lid from the container.
- When sharps container is $\frac{3}{4}$ full, place it in a biowaste box.
- Contact EHS when biowaste box is full

Pathological Waste: Animal carcasses/body parts, human organs/tissues, and discarded material saturated with body fluids must be labeled “pathological waste” to indicate the required treatment method. Regular biowaste treatment is not adequate for the disposal of pathological waste. Line the box with TWO red bags and to avoid odor, pack & transfer waste from freezer/fridge to box when ready to pick up.

Liquid Biological Waste:

Human blood, animal blood, human tissue culture, body fluids, liquid growth media, etc.

- Liquid biological waste must be treated with an appropriate disinfectant before sink disposal. Bleach can be used for disinfecting genetically modified cultures, BL1 and BL2 liquid biological waste for sink disposal. Use a final concentration of 10% bleach to liquid waste. For waste with a high organic content, use 20% bleach.
- Allow a minimum contact time of 20 minutes before drain disposal.
- Carefully pour the disinfected liquid waste down the sink drain and flush with generous amounts of water.

Personal Protective Equipment

- At a minimum, wear gloves and safety glasses whenever there is a potential exposure to blood or other potentially infectious materials.
- Double glove if hand contact is expected.
- Wear a face mask or face shield if there is a splash risk.
- Wear a disposable gown, coveralls, or lab coat if contact with clothing is expected.
- Wear disposable booties if shoe contamination is expected.
- Use a pocket mask or other barrier device when performing CPR.

Spill Clean-Up Procedure

- Isolate the area to minimize exposure to people in the area.
- Gather the needed clean-up supplies (disinfectant, absorbent material, PPE).
- Put on required PPE.
- Use tongs, forceps, or dustpan and brush to pick up broken glass or other sharps.
- Cover the spill with absorbent material such as paper towels or absorbent powder.
- Slowly pour the disinfectant on the absorbent material and saturate the material completely.
- Allow the disinfectant to soak the area for at least 20 minutes or the duration of the contact time on the manufacturer label.
- Place the absorbent material in a biohazard bag.

- Clean spill area again with disinfectant and dispose of materials in biohazard bag.
- Carefully remove PPE to prevent direct skin contact. Place disposable PPE in biohazard bag. Soak reusable PPE and equipment (i.e., safety glasses, tongs) in disinfectant solution.
- Wash hands with soap and water.
- Contact EHS for disposal of waste.

Am I required to get a hepatitis B vaccine?

If you may come into contact with blood or other potentially infectious materials as part of your job, you are eligible to receive the hepatitis B vaccine series at no cost. You may choose to accept or decline the vaccine. If you decline the vaccine, you will be required to complete the Hepatitis B Vaccine Declination Form. You may initially decline the vaccine and choose to accept it at a later date.

What happens if I am exposed to blood or other potentially infectious materials?

Immediately wash exposed skin with soap and warm water and flush eyes or mucous membranes using an eyewash or running water. Immediately notify your supervisor and/or EHS and seek medical attention at the Occupational Health Center during working hours or a local emergency room after hours.

Contact EHS- for biowaste disposal container, to schedule a waste pickup, or for more information regarding proper biohazardous waste disposal. (x3333)