

What is Biological Waste?

Biological waste is any material that contains or has been contaminated by a biological agent. Biological waste includes, but is not limited to, Petri dishes, pipettes, tissue culture flasks, syringes, needles, and cell culture media. All biological waste (noninfectious and infectious) generated during laboratory research must be disposed of in the proper container. EH&S will work with the department and faculty members to ensure proper hazardous waste treatment and/or disposal.

Solid Waste

Plastic pipettes, pipette tips, petri dishes, culture flasks, paper towels, bench paper, biohazardous animal bedding, and gloves contaminated with infectious, potentially infectious, or genetically modified materials or organisms including invertebrates.

1. Collect solid biological waste directly into a red bag with the "biohazard" label.

- The biohazard bag must meet specific tear resistance (ASTM D1922 and D1709)
- The red biohazard bag must be placed in a rigid container. Containers shall be leak resistant, have tight-fitting covers, and be kept clean and in good repair. The container shall be labelled with biohazard stickers.

2. Dispose of the Tabletop containers into the larger biohazard container in the laboratory (1x/week).

3. Department/Laboratory personnel are responsible for transporting the laboratory waste to the collection area.

4. EH&S will conduct a weekly pickup (collection area) and dispose of the waste via an approved vendor.

Liquid Waste

Liquid waste, e.g., cell culture media and serum, are deactivated either by autoclave or chemical disinfection.

Most liquid waste can be deactivated with bleach.

1. Chemically disinfected with a 1:10 final dilution (vol/vol) of household bleach

2. Swirl flask contents and allow a contact time of 30 minutes

3. Pour down a sink drain connected to the campus sewage system and flush the plumbing with an excess of water



Sharps Contaminated with Biological Waste

Sharps are items that are capable of puncturing, cutting or abrading the skin, e.g., needles, scalpel blades, slides and cover slips. Place sharps in a container that is red, rigid, puncture resistant, leak-proof and labeled with the biohazard symbol.

1. Do not place items that have been contaminated with chemicals (refer to chemical waste guide sheet)

2. Do not go over the "fill line"

3. Close the container and secure the lid when it reaches the fill line

4. Place the full sharps container next to the laboratory biohazard waste container (weekly pick up).

- This indicates the container is ready for disposal

Pharmaceutical Waste

Pharmaceuticals used for treatment in a clinic setting (human and animal), as well as teaching and research must be disposed of and managed properly. Some specific drugs or the active ingredients are hazardous wastes and could harm human health or the environment if disposed of improperly. Other antiseptics, pain killers, antibiotics, etc. still require proper management and must not be disposed of into sanity sewer system or normal trash.

1. Place expired and unwanted pharmaceuticals drugs in appropriate container

2. Notify EH&S via RSS WASTE when the container is ready to pick up.

Animal Carcasses (Pathological) Waste

Animal carcasses and animal waste from experimental research procedures are disposed of as biohazardous materials (e.g., pathological waste). The Animal Research Facility oversees the collection and disposal of animals housed in the facility.

The Farm Units, in the College of Agriculture, have procedures in place to dispose of farm animal carcasses via an approved vendor. The animal waste produced in the veterinary clinic and Farm Units is disposed of as pathological waste. EH&S coordinates waste collection and pick-up through an approved vendor.

Dry Biohazardous Waste – Dispose the following materials in a red biohazard bag placed in a bin or container with biohazard labels on each of three sides and the top of it:

- Contaminated cultures, petri dishes, and culture flasks
- Plastic pipet tips
- Wastes from infectious agents, such as bacteria, viruses, or live or attenuated vaccine
- Waste contaminated with excretion or secretion from infectious humans or animals
- Paper Towels, KimWipes, bench papers contaminated biohazardous materials



Sharps – Dispose the following materials in a sharps container:

- Hypodermic needles
- Pasteur pipettes
- Blades, microscopic slides, dental wires
- Any contaminated material which can puncture or penetrate the skin or a red bag



Pathological Waste– The following materials should be disposed of immediately after they are generated. Contact EH&S for a white pathological waste container and to make pick-up arrangements.

- Human or animal tissues injected with a human pathogen or are potentially infectious.
- Animal carcasses are to be treated according the CPP Animal Care Facility policies. Currently, animals injected with:
 - Non-infected carcasses and Infectious disease agents, or viral vectors must be placed in a red biohazard bag then placed in the freezer.
 - High hazard chemicals or toxins can be placed in a labeled Ziploc bag and placed in the freezer. Contact EH&S for disposal.



Outdated Pharmaceuticals – Used or expired pharmaceuticals are placed into specific HDPE containers.

- Chemotherapy – yellow body, white top
- Pharmaceuticals (general, non-RCRA) – white body, blue top

