# BI Waste Disposal Policy – Biohazardous

1. This policy covers waste disposal of biological waste, or biowaste, which includes biohazards, items that have come into contact with biohazards, anything labeled with a biohazard symbol, or items that may “appear” to be associated with biohazards.
   1. For general laboratory waste, hazardous (chemical) waste, sharps (including glass) and pipette tips that are not biohazardous, refer to the BI Laboratory Waste Disposal Policy - General and Hazardous.
2. Wear the appropriate PPE when handling laboratory waste. Refer to applicable SDS/PSDS and the BI PPE Policy.
3. If using a BSC, ensure waste containers are inside the BSC prior to working.
4. The appropriate chemical or method for biohazardous waste decontamination or disinfection is dependent on the biological agent and/or material. Refer to biological agent risk assessments and supporting information (e.g. SDS/PSDS).
5. BI users should consult BI staff for any assistance with biological waste disposal.
6. To dispose of biohazardous waste from non-culture laboratories, consult BI staff.

## Solid Biohazardous Waste Disposal Boxes

1. Solid biowaste must be double-bagged or double-contained in designated biohazard disposal boxes.
2. BI CL-2 culture laboratories house designated biohazard cardboard disposal boxes, which are double-lined, either with two yellow biohazard bags, or with a clear garbage bag and one yellow biohazard bag.

## Biohazardous waste channels

1. Biowaste should **NOT** be disposed into regular or hazardous waste and should be sorted according to the waste type: solid (plastic tubes, flasks, paper, serological pipettes); liquid; pipette tips; glass; and sharps.
2. Broken glass is considered a sharp but may be disposed of as either clean (uncontaminated) glass waste, hazardous glass waste or biohazardous glass waste. The disposal route depends on associated hazards. Consult BI staff for assistance, as needed.

## Biohazardous Waste Disposal – Solid

1. Solid biowaste should be placed into a designated solid biowaste container that is lined with a plastic bag. Plastic items that can puncture through a plastic bag should be disposed of as tip biowaste (see below).
2. Prior to working, line the designated solid biowaste container with a clear plastic bag. If working in a BSC, ensure the solid biowaste container is in the BSC.
3. While working, deposit solid biowaste into the lined designated solid biowaste container. If working in a BSC, do not continuously transfer items in and out; this will disrupt BSC air flow.
4. When finished working, or when biowaste bag is full, tie up the bag.
5. Disinfect the outside surface of the bag with the appropriate disinfectant (e.g. 70% ethanol). If working inside a BSC, disinfect the bag prior to its removal from the cabinet.
6. Place bag into a double-lined designated biohazard cardboard disposal box.

## Biohazardous Waste Disposal – Liquid

1. Biohazardous liquid waste should be placed into a designated liquid biowaste container or beaker.
2. Prior to working, prefill the designated liquid biowaste container with bleach. If working in a BSC, ensure the designated liquid biowaste container is located inside the BSC.
3. While working, transfer biological liquid waste into the liquid biowaste container. If working in a BSC, do not continuously transfer items in and out; this will disrupt BSC air flow.
4. When finished working, or when container is ¾ full, decontaminate the liquid biowaste with the appropriate disinfectant for the appropriate amount of exposure time (e.g. 10-20% bleach for 30 minutes; refer to biohazardous material SDS/PSDS). If working with BSL-2 biohazards, decontaminate the liquid biowaste **IN** the BSC.
5. Disinfect the outside of the liquid biowaste container with the appropriate disinfectant (e.g. 70% ethanol). If working inside a BSC, disinfect the container prior to its removal from the cabinet.
6. Place the designated liquid biowaste container in a nearby sink and ensure decontamination conditions have been met. Add more decontaminate or provide a longer decontamination time if needed.
7. If the decontaminated liquid waste contains agar or hazardous materials other than bleach, refer to the BI Laboratory Waste Disposal Policy - General and Hazardous Waste for disposal. Hazardous chemicals do not go down the drain.
8. If the decontaminated liquid waste only contains mild media and bleach, pour the solution down the sink with **plenty** of water. Dilute the solution so that a final bleach concentration of 1% goes down the drain.

## Biohazardous Waste Disposal – Pipette Tips

1. Items that can puncture through a plastic bag, like plastic pipette tips, are disposed of into designated leak-proof, puncture-resistant, sealable containers.
2. Prior to working, ensure a designated tips biowaste container is located nearby. If working inside the BSC, ensure the designated tips biowaste container is located inside the BSC. Remove the container lid.
3. While working, dispose of biohazardous tips into the tips biowaste container. If working in a BSC, do not continuously transfer items in and out; this will disrupt BSC air flow.
4. When finished working, seal the container.
5. If the designated tips biowaste container is ¾ full, disinfect the outside of the container with the appropriate disinfectant (e.g. 70% ethanol) and place inside a double-lined designated biohazard cardboard disposal box. Replace the designated tips biowaste container. Biohazardous BSL-2 culture laboratories have designated tips biowaste containers provided; consult BI staff for assistance as needed.

## Biohazardous Waste Disposal – Sharps

1. Sharps including needles, syringes with needles, razor blades and scalpels are disposed into designated biohazardous sharps containers, which are puncture resistant, leak-proof and sealable.
2. Each BI laboratory should have, at minimum, one designated sharps container. Consult BI staff for plastic sharps container locations as needed. BI staff will stock BI laboratories with sharps containers as needed or requested.
3. Dispose of sharps into a designated sharps container. If working in a BSC, ensure a sharps container is located inside the BSC. Disinfect the outside surface of the container with the appropriate disinfectant prior to its removal from the BSC (e.g. 70% ethanol) prior to removal from BSC.
4. When the biohazard sharps container is ¾ full, close and/or seal, and give to BI staff for disposal. Sharps containers can be disposed of via EOHSS hazardous waste, or via double-lined designated biohazard cardboard disposal boxes.

## Biohazardous Waste Disposal – Glass

1. Glass waste contaminated with biological materials is considered a Sharps and disposed of into designated sharps containers. Glass that is too large for designated sharps containers can alternative be disposed of into an appropriately labeled glass biowaste leak-proof, puncture-resistant, sealable container. Sharps or glass biowaste containers can be disposed of via EOHSS hazardous waste, or via double-lined designated biohazard cardboard disposal boxes.

### Biohazardous Reusable Glassware

1. Reusable glassware contaminated with biological materials must be decontaminated with the appropriate disinfectant for the appropriate amount of time (e.g. 10-20% bleach for 30 minutes) prior to reusing.

## Biohazard Waste Disposal – Holding Room

1. When full, or heavy (< 25 lbs), the inner bags lining the double-lined designated biohazard cardboard disposal box will be tied, and the box sealed. Boxes will be labeled with the generator information and date.
2. Sealed designated biohazard cardboard boxes will be transferred from BSL-2 culture laboratories to the BI biohazard waste holding room, ETB 430, biweekly by authorized BI staff.
3. Biweekly, the waste holding room will be emptied by qualified, authorized McMaster biomedical waste pickup personnel for off-site disposal. For assistance with biowaste pickup, contact Facility Services (ext. 24740).
4. Biohazard waste disposal is documented in the BI Biohazard Waste Storage & Disposal Log.

## Biohazard Waste Documents

1. BI Biohazard Waste Storage & Disposal Log.