

# BIOLOGICAL WASTE

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## Definition:

Waste contaminated with biological agents, and all sharps, whether contaminated or not.

## Examples:

- Microbiological cultures
- Human Cell Cultures
- Human blood, blood products and other potentially infectious materials
- All contaminated disposable labware (culture dishes, pipet tips, tubes)
- All needles and syringes

Biological waste (except "sharps") that has been autoclaved can be disposed as General Waste in the building's dumpster. However, autoclaved waste in bags with biohazardous markings or labels placed in the building's dumpster for disposal can create disposal problems or concerns.

Before disposing of autoclaved waste into the building's dumpster, ensure no biohazardous markings or labels are visible. Autoclave material should be placed in an opaque plastic bag for General Waste disposal.

Do not autoclave chemical or radioactive wastes, nor place chemical or radioactive wastes in the biohazardous "burn boxes."

Non-radioactive **decontaminated liquids** should be flushed down the drain with copious amounts of water.

Avoid contaminating the outside of the "biowaste box" to protect personnel handling boxes from being exposed to infectious agents.

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## Packaging Guidelines

**If Disposing:**

**Then:**

"Sharps" (needles, syringes, scalpel blades, etc.)

1. Place intact "sharps," whether contaminated or not in a puncture resistant "sharps" container.



2. Do not recap, bend, remove, or clip needles.



3. **Do NOT Overfill container.** Fill 3/4 full, snap the lid closed. Overfilling or forced filling may result in puncture wounds.

4. Environmental Health, Safety & Risk Management (EHS&RM) sends weekly notifications for Biowaste Removal. You may also request a Biowaste Pickup via the following link:

<http://www.fss.txstate.edu/ehsrn/forms.html>

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#### Non-Sharp Solid Waste for Autoclave



1. Collect non-sharp solid biological waste in autoclavable bags. It is preferable that autoclave bags be **white or clear (not red or orange)** and without the word "biohazardous" or the universal symbol for biohazardous material.
2. Place filled bags into the autoclave pan for transport from the laboratory to the autoclave.
3. Add 250 mL of water to the bag and close loosely to allow the steam to escape and air to enter.
4. Attach a strip of autoclave tape on the bag.
5. The pan and bag must be autoclaved at a temperature of at least 121°C for at least 30 minutes and at a pressure of at least 15 psi.
6. Allow the pan and autoclaved material to cool; the autoclaved material can be placed in the building dumpster.
7. Alternatively, autoclaved bags of waste may be collected into trash cans lined with heavyweight, opaque plastic bags, that are then transported to the building dumpster.
8. If however, a red bag is used to autoclave the waste, a label indicating that the waste has been treated in accordance to 25 Texas Administrative Code (TAC) 1.136 shall be attached to the bag. The bag is then placed in a black trash bag and sealed. The black bag can be in the building dumpster.

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#### Non-Sharp Solid Waste for Incineration



1. Place the waste material in a plastic liner inside a biohazardous waste box ("burn box") supplied by EHS&RM. Double bag wet material with absorbent material in the inner bag or use a 3 mil gauge bag.
  2. Twist the plastic bag(s) at the top; bend the twisted portion to form a loop and seal with tape. Seal bags individually when double bagging.
  3. Secure the burn box with tape.
  4. Environmental Health, Safety & Risk Management (EHS&RM) sends weekly notifications for Biowaste Removal. You may also request a Biowaste Pickup via the following link:  
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## Contaminated Glass and Pasteur Pipets



Contaminated glass may be treated by one of the following two methods:

1. Decontaminate the glass by autoclaving, or by soaking in 10% bleach for 30 minutes, then place in sturdy cardboard box, tape closed, and put the box in the building dumpster; or,
2. Contaminated glass may be discarded into a sharps container and handled according to the instructions for "Sharps."

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## Liquid Wastes

1. As a general rule, add household bleach to a final concentration of 10%, wait 30 minutes, then rinse down the sink with copious amounts of water.
2. Alternatively, a disinfectant that is known to be effective against the organism may be added to an appropriate concentration, wait 30 minutes, then rinse down the sink with copious amounts of water.

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## Animal Carcasses

1. Place animal carcasses/tissues into a thick plastic bag.
  - a. Doublebag all carcasses when zoonotic agents are present.
  - b. If the carcass is preserved in a chemical preservative, DO NOT place in a red biohazardous bag.

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If you have any questions or need further assistance, contact EHS&RM at 245-3616

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