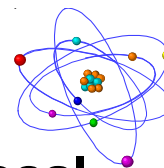




## LABORATORY SAFETY FACT SHEET #20



# Guidelines for Biological Waste Disposal

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 deactivated by autoclaving or chemically treated before disposal.

### 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. Sharps are deactivated by autoclaving. Place sharps in a container that is red, rigid, puncture resistant, leak-proof and labeled with the biohazard symbol.

1. Autoclave your sharps container for a minimum of 30 minutes at 121°C and 15psi
2. Log the autoclave run duration, quantity of processed waste, date, and operator
3. Label the sharps container with the words "autoclaved"
4. Deface any biohazard symbols
5. Dispose of the container:
  - a. Submit an EH&S online *Waste Pickup Request*. Note on the request that the container has been autoclaved.
  - b. Leave your autoclaved container at Bio II 4106, LSB 2204, or LSB 4218, where it will be picked up without a request.



### LIQUID WASTE

Liquid wastes, e.g., cell culture media and serum, are deactivated either by autoclaving or chemical disinfection. Most liquid wastes can be deactivated with bleach.

1. Chemically disinfect 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
- Alternatively, liquid waste may be autoclaved for 30 minutes at 121°C and 15psi

### SOLID WASTE

Solid biological waste, e.g., pipettes, tissue culture flasks, and multiple well plates, is typically deactivated by autoclaving.

1. Collect solid biological waste directly into autoclavable bags
2. Tie a knot using the upper third of the bag and affix heat sensitive indicator tape near the knot
3. Use a secondary container for all autoclave bags until disposal
4. Ensure the autoclave operates for 30 minutes at 121°C and 15psi
5. Log the autoclave run duration, quantity of processed waste, date, and operator
6. Deposit the bag in the red-lidded totes designated for laboratory waste