

## Biohazardous Waste Management in Biosafety Level 2 Laboratories

Biohazardous wastes are laboratory wastes that are considered infectious or potentially infectious to humans and are produced as a result of Biosafety Level 2 work. If you are unsure of which biosafety level work you are doing, read your BUA or contact an EH&S biosafety officer at [bsa@berkeley.edu](mailto:bsa@berkeley.edu). Biohazardous wastes include:

- human or animal specimen cultures and stock (including human and non-human primate cell lines);
- cultures and wastes from the production of bacteria, viruses, spores, and discarded live and attenuated vaccines;
- recognizable human anatomical parts (must be labeled "Pathology Waste – For Incineration Only"); and
- animal parts, tissues, fluids or carcasses (animal carcasses and parts, regardless of the biosafety level, are managed as biohazardous waste).

Sharps (e.g., needles, scalpels, razors, X-acto® blades, Pasteur pipettes and broken glass) require special handling whether or not they are biohazardous (see the Sharps Fact Sheet). Email [hwp@berkeley.edu](mailto:hwp@berkeley.edu) for more information.

Stericycle charges the campus for biohazardous and sharps waste disposal. Before disposing of biohazardous or sharps waste you must have a recharge account on file with EH&S. If you don't have a recharge account on file, ask your financial administrator to enter a chart string at <http://ehs.berkeley.edu/recharge>. Email your chart string to [hwp@berkeley.edu](mailto:hwp@berkeley.edu) to obtain bar code labels which are used for billing purposes.

### Prepare the container

Pick up an empty Stericycle container (20 or 44-gallon), a lid and a biohazard bag from the biohazardous waste storage room in your building.

If your building isn't listed, send an email to [hwp@berkeley.edu](mailto:hwp@berkeley.edu) and ask that a Stericycle container be delivered to your lab. All containers of biohazardous waste should be rigid and leak-resistant with a securely-fitting lid. Ensure they have a biohazard symbol or sticker on the top and all four sides and keep them clean.



## Collect waste

Line the biohazardous waste container with a red biohazard bag of appropriate size (if pipette tips are falling between the bag and the waste container, then your bags are too small for the container). Keep the container lid closed unless someone is working nearby and regularly adding waste to the container.

Manage pipettes in a way that prevents them from piercing the bag. Collecting them in a plastic tub that is slightly larger than the pipettes and lined with a red biohazard bag will keep them neatly aligned (the red bag should be lining the bottom and sides of the plastic tub so that, using the red bag, you are able to wrap/fold the pipettes into a "cylinder" shape before putting them in the biohazard waste container). It is a violation to store solid biohazardous waste for longer than seven days at room temperature (90 days if it is stored at a temperature of  $\leq 32$  F°).

## Dispose of properly

When the red bag is full (or the seven day limit is approaching) tie or tape the bag closed. Secure the lid on the waste container and transport it to the biohazardous waste storage room. Biohazardous waste must be transported inside a rigid, leak-resistant, labeled container with the lid closed. If your building doesn't have a biohazardous waste storage room, use the [Hazardous Waste Program \(HWP\)](#) to request a pickup from your lab.

Dispose of sharps containers when they are 3/4 full. Close the opening (seal it with tape if necessary) and place it in your biohazardous waste container or request a pickup through the [HWP](#). For labs generating a high volume of biohazardous sharps waste it's more economical to place your sharps containers in a biohazardous waste container.

Every Tuesday EH&S staff attends to the biohazardous waste rooms in preparation for the waste pickup by the vendor on each Wednesday. Please do not place waste inside your building's storage room on Tuesdays and Wednesdays.

**Liquid biohazardous waste** such as human-derived blood, tissue culture media, etc., must be disinfected before drain disposal. To disinfect, add a sufficient amount of household bleach to create a 10% concentration of bleach (9 parts culture fluid, 1 part bleach). Allow the mixture to stand for at least 20 minutes before pouring it down the drain. If the container will be unattended (outside of your immediate control) then label it with the date, time and the words "Biohazardous liquid and bleach" and keep it in a secondary container (for example a plastic tub) while it is disinfecting.

**Mixed liquid and solid biohazardous waste** should be separated in a biosafety cabinet (decant the liquid from the solid). Manage the liquids and solids separately as detailed in this fact sheet.

**Biohazardous wastes contaminated with radioactive materials and/or chemicals** (for example, **I-125** labeled thyroid tissues and blood; body parts preserved in formalin) require special handling. Call EH&S at 643-2073 or e-mail [ehs@berkeley.edu](mailto:ehs@berkeley.edu) for assistance.

