

Sharps: Disposal and Safe Handling

What are sharps?

A sharp is any device having corners, edges, or projections capable of cutting or piercing. Sharps include, but are not limited to, the following

- Needles
- Needles with syringes and attached tubing
- Blades (razors, scalpels and X-acto®)
- Pasteur pipettes
- Broken glass, glass slides, and cover slips



Use an Food and Drug Administration (FDA)-cleared sharps container like the one in Figure 1 if you generate sharps waste. For a description of FDA-Cleared Sharps containers, and where to purchase, visit the webpage [here](#).

Correct disposal depends on the type of contamination

Sharps might come into contact with:

- Radiological materials
- Chemicals
- Biohazardous materials
- Recombinant DNA/non-hazardous materials



Figure 1

Sharps contaminated with Radioactive Materials

1. Label the sharps container with the trefoil symbol for radiation.
2. If contaminated with other hazardous chemicals, take the [Hazardous Waste Program \(HWP\) training](#) and print out and attach the hazardous waste label. Radioactive biological sharps must be sterilized with bleach or autoclaved to remove the biohazard classification. Contact Radiation Safety at radsafety@berkeley.edu if you will be generating both hazardous and radioactive waste (i.e. mixed waste).
3. Request pick up through the [Radiation Safety Information System](#) (must be picked up within 6 months if the sharps are contaminated with chemicals).

Sharps contaminated with Chemicals

1. Log in to the [Hazardous Waste Program \(HWP\)](#), print a Hazardous Waste label and attach it to a sharps container.
2. Deface "biohazard" symbols and wording on a container similar to Figure 1.
3. Request pick up through HWP when container is filled to the marked fill line OR request a pickup within 6 months from the date on the hazardous waste label, whichever comes first.
4. Any biohazardous component must be deactivated prior to pick up.

Sharps contaminated with Biohazardous Materials

1. Seal and tape closed when sharps container is filled to the marked fill line.
2. Dispose within 30 days of closure, by placing inside a medical waste tub or by requesting a pickup through [Hazardous Waste Program \(HWP\)](#).
3. Disposal through HWP requires a brief training so you can print a label and attach it to the container. You can obtain a medical waste tub from your Department Safety Coordinator or [request one from EH&S](#).
4. No radioactive or chemical contamination may be present (trace ethidium bromide is okay).

Recombinant DNA and Non-Hazardous Materials

Needles and Blades

1. Place items inside a sharps container of any color. (Trace ethidium bromide is okay.)
2. Deface any "biohazard" symbols and wording on container.
3. Seal and/or tape closed when container is filled to the marked fill line.
4. Dispose by placing inside a medical waste tub or by requesting a pickup through the [Hazardous Waste Program \(HWP\)](#). *Note:* Disposal through HWP requires a brief training and printout of label.

Broken Glass and Other Sharps

1. If sharps are contaminated with recombinant DNA, use autoclave or bleach to deactivate.
2. Place glass or other sharps inside a container that is rigid and puncture resistant, such as a glass waste box as seen in Figure 2.
3. Seal the box closed with tape, label as non-hazardous sharps, and dispose of as regular trash.



Figure 2

Safety precautions

Follow these safety recommendations to prevent injuries from sharps handling:

- Use plastic ware instead of glassware.
- Use safety engineered sharps (e.g. Luer lock syringes) or needle-less systems.
- Place sharps into appropriate sharps containers immediately after use
- Use mechanical means such as a brush and dustpan, tongs, or forceps to pick up contaminated sharps.
- Do not shear or break contaminated needles or other contaminated sharps.
- Do not bend, recap, or remove contaminated sharps from devices.
- Do not reuse disposable sharps.

References

[Biosafety in Microbiological and Biomedical Laboratories](#)
[California Bloodborne Pathogen Standard](#)
[California Medical Waste Management Act](#)

Contact EH&S

hwp@berkeley.edu or (510) 642-3073