



# **Handling and Disposing of Sharps**

Sharps require special handling, storage and disposal procedures. These procedures are critical to protect laboratory users and waste handlers from illness and injury and to comply with local, state, and federal regulations. Improper management of sharps can result in both civil and criminal penalties for the individuals directly responsible and for the campus.

# 1. What Are Sharps?

Sharps are devices or objects with corners, edges, or projections capable of cutting or piercing. Sharps include the following:



- Hypodermic needles
- Scalpels
- Razor blades
- X-acto® blades
- Broken glass items such as Pasteur and other pipettes and microscope slides

Some of the above items are covered by regulations for sharps; some are handled as sharps on the Berkeley campus for safety reasons. For disposal purposes, there are four kinds of sharps: non-contaminated, biohazardous, chemically contaminated, and radioactive. Keeping used sharps segregated by their type of contamination is required by law and will make disposal less expensive and less complicated.

Contact EH&S if you are not sure if a material is a sharp.

# **Sharps Containers**

All sharps except broken thermometers (see "Chemically Contaminated Sharps" below) must be disposed of in a sharps container, which must be rigid, puncture-resistant, and properly labeled. (See following sections for instructions on proper labeling for each type of sharps.)

# 2. Disposing of Sharps

### Non-Contaminated Sharps

These are sharps that are free of biohazardous, chemical and radioactive contamination. While no regulations specifically cover the disposal of uncontaminated sharps, for the protection of custodial workers and to reduce public concern, these sharps must be disposed of in the manner outlined in this section.



Place uncontaminated broken glass (including glass Pasteur pipettes, Vacutainer® tubes and unused blood vials) in a sturdy container or heavy, corrugated-cardboard box that can be sealed. When the container or box is full, seal it with strong tape and label it "Broken Glass." Mark the box "For Removal," and the custodial staff will pick it up.

Put non-contaminated sharps other than broken glass in a sharps container, and label it "Non-Contaminated Sharps." Deface or remove any existing biohazard labels. Bring full sharps containers to one of the approved medical waste pick-up locations (below) and deposit them in a secondary medical waste container. Make sure the secondary containers are lined with a red biohazard bag even if only sharps containers are deposited inside.

## **Biohazardous Sharps**

These sharps are contaminated with biohazardous waste. They are not radioactive or chemically contaminated. Put the sharps in a sharps container, and make sure it is labeled with the words "Sharps Waste" and with either the international biohazard symbol (seen at right) or the word "Biohazard." Bring



full sharps containers to one of the approved medical waste pick-up locations (below) and deposit them in a secondary medical waste container. Make sure the secondary containers are lined with a red biohazard bag even if only sharps containers are deposited inside.

#### **Medical Waste Pick-Up Locations**

- Barker Hall, Room 16
- LSA, Rooms 161, 638
- Minor Hall, Rooms 586, 688
- Morgan Hall, Room 314
- Mulford Hall, Room 330

- NAF, Room 205E
- Stanley Hall, Room 123A
- Tang Center, West Shed
- Warren Hall, Room 155
- Wellman Hall, Room 413

Use the pick-up location closest to the point of generation. For more information on medical waste, see the EH&S help sheet, "Guidelines for Managing and Disposing of Medical Waste."

## **Chemically Contaminated Sharps**

These are sharps that are contaminated with hazardous chemicals but are not radioactive. Deactivate any biohazardous agents. Call EH&S if you are unsure how to deactivate the biohazardous agent safely. Put the sharps in a sharps container, and label it with the hazardous chemical contaminants (using proper chemical names) and their physical and health hazards.

It is not necessary to put broken thermometers in a sharps container. After their sharp edges are taped over, they may be placed in either a Ziploc<sup>®</sup> plastic bag or double-bagged in clear plastic bags to prevent the mercury from being released. Deface or remove any existing biohazard labels.

Do not put the sharps container in a medical waste pick-up container. Instead, fill out a Materials Packing List (MPL) and submit it to EH&S. Refer to the EH&S Help Sheet, *Unwanted Hazardous Chemicals*, for more information.



## **Radioactive Sharps**

These are sharps contaminated with radioactive materials. Deactivate any biohazardous agents. Put the sharps in a sharps container, and label it with the isotope(s), activity, date, laboratory location, Radiation Use Authorization (RUA) number, and Principal Investigator. Also label it with the radiation symbol (as shown). Deface or remove any existing biohazard labels. As with all radioactive materials, ensure that all isotopes are segregated from one another.

Place the container in a clear plastic bag. If there is a central pick-up unit (CPU) in your building, deposit the sharps container in a dry waste drum. Be sure to log your material on the drum's log sheet. If your building does not have a CPU, combine the sharps container with your radioactive dry waste and call EH&S for a pick-up at 643-9432 or 642-5982.

For more information on disposing of radioactive sharps, refer to the Radioactive Waste Guidelines in the *Radiation Safety Logbook*, Section K.

#### **Mixed Contamination**

If during use, sharps become contaminated with a mixture of hazardous components, treat them as follows:

- Biohazardous and hazardous chemicals—decontaminate the biohazardous agent and manage as chemically contaminated sharps.
- Radioactive and hazardous chemical—manage as radioactive sharps.
- Biohazardous and radioactive—decontaminate the biohazardous agent and manage as radioactive sharps.
- Biohazardous, radioactive, and hazardous chemical—decontaminate the biohazardous agent and manage as radioactive sharps.

Disposal is less expensive and complicated if sharps waste has only one kind of contamination. The law requires that sharps always be segregated by their type of contamination after use.

# 3. Handling Sharps Safely

- ullet Do segregate sharps by type of contamination. (See Section 2 above.)
- *Do not* dispose of loose sharps or sharps containers in the common trash. Doing so may injure the trash collector.
- *Do not* recap hypodermic needles. Place syringe and attached hypodermic needle unit in a sharps container. If a special procedure requires recapping, contact EH&S.
- *Do not* shear, clip or bend needles. Do not use needle clipping devices such as the Destruclip<sup>®</sup>.
- *Do not* overfill sharps containers.
- *Do not* reopen closed sharps containers.

#### 4. For More Information

If you have any questions about whether your material is a sharp or how to handle or dispose of it, contact EH&S at 642-3073. Contact EH&S for copies of any of the publications mentioned here or for a complete listing of information resources. EH&S also has videos available for check-out. All of this information, including an on-line checkout service for videos, is available on the EH&S web site at www.ehs.berkeley.edu/.