

# Needles and Sharps

Safe Handling, Injury Response and Disposal

### What are Sharps?

A sharp is any device with 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®)
- Glass pasteur pipettes
- Broken glass, glass slides, and coverslips





### Safe Handling

Sharps may be contaminated with biohazardous materials, radiological materials, chemicals or recombinant DNA. Penetration of skin with a contaminated sharp may expose the body to infections or toxic materials. Follow these safety recommendations to avoid injuries from sharps handling.

#### **Control Measures**

Before you begin a task requiring the use of a needle or syringe, assess the risks and implement the following control measures:

- Take <u>appropriate training</u> in the correct handling and disposal of needles and sharps. Document that you have completed your training.
- Wear appropriate personal protective equipment (PPE).
- Make sure a sharps container is nearby for immediate sharps disposal.
- Make sure the sharps container is not full and there is sufficient space to accommodate additional needles.



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### **Correct Handling of Needles/Syringes**

- Dispose of the needle and syringe (still connected) into the sharps container immediately after use.
- Do not try to recap the needle.
- Do not try to separate the needle and syringe before disposal.
- 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.
- When applicable, use plasticware instead of glassware.
- Use safety engineered sharps (e.g. Luer lock syringes) or needleless systems.

### **Injury Response**

- 1. Immediately wash the exposed area and follow first aid procedures.
- 2. Report the incident as soon as possible.
  - Notify your supervisor
  - o Call EH&S at (510) 642-3073
  - Call University Health Services Occupational Health Department at (510) 642-6891
- 3. Seek immediate medical care.
- 4. If the needle and syringe contained human or animal blood, bodily fluids, or other biohazards, discuss with the doctor arrangements for blood tests, immunization where appropriate and a follow-up plan.
- 5. If there is blood, chemicals, or other hazards still in the syringe, or if the identity of the blood is known, advise your supervisor, biosafety officer, University Health Services Occupational Health, and your doctor.
- 6. Your supervisor must complete an incident follow-up.

### **Disposal**

### **Sharps Containers**

#### **Needles**

All needles, contaminated or un-contaminated, must be disposed of in a Food and Drug Administration (FDA)-cleared sharps container. For more information about FDA-cleared sharps containers, visit the <u>FDA website</u>.



FDA-cleared sharps container



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#### **Other Sharps**

Other sharps, contaminated or un-contaminated, must be disposed of in an FDA-cleared or other rigid, puncture resistant container such as a cardboard glass waste box or plastic bottle.

Note: biohazardous contaminated sharps need to go into an FDA-cleared sharps container.



Glass waste box

Note: Do not use for biohazardous sharps.



Plastic bottle

#### **Disposal of Sharps Based on Hazard**

Correct disposal depends on the type of contamination

### Biohazardous Sharps

#### Needles

- 1. Dispose needle and syringe (attached) into an FDA-cleared sharps container immediately after use.
  - Label container with a biohazard waste label generated from the <u>Hazardous Waste Program (HWP)</u> before use.
- 2. Seal closed when sharps container is 75% full or filled to the marked fill line.
- 3. Request a pickup through the <u>HWP</u> within 30 days of closure or place inside a medical waste tub. You can obtain a medical waste tub from your department safety coordinator or request one from EH&S.

#### **Broken Glass and Other Sharps**

- 1. Place glass or other sharps inside an FDA-cleared sharps container that is labeled with a biohazard label.
- 2. Seal the container closed with tape when full.
- 3. Request a pickup through the <u>Hazardous Waste Program (HWP)</u> within 30 days of closure or place inside a medical waste tub. You can obtain a medical waste tub from your department safety coordinator or request one from EH&S.

Note: radioactive or chemical contamination should **not** be present (trace ethidium bromide is okay).



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# Recombinant DNA/BSL 1 Sharps

#### **Needles**

- 1. Dispose needle and syringe (attached) into a sharps container of any color. (Trace ethidium bromide is okay.)
- Deface any "biohazard" symbols and wording on the container.
  "Non-contaminated sharps" stickers can also be obtained from EH&S upon request.
- 3. Seal and/or tape closed when the container is 75% full or filled to the marked fill line.
- 4. Request a pickup through the <u>Hazardous Waste Program (HWP)</u> within 30 days of closure or place inside a medical waste tub. You can obtain a medical waste tub from your department safety coordinator or request one from EH&S through the HWP.

#### **Broken Glass and Other Sharps**

- 1. If glass or 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.
- 3. Seal the box closed with tape, label as "non-hazardous sharps," and dispose of as regular trash.

#### Radiological Sharps

- 1. Dispose needle and syringe (attached) into an FDA-approved sharps container immediately after use.
  - Label container with the radiation trefoil symbol before use. Follow Radioactive Waste Requirements.
  - If sharps are contaminated with other hazardous chemicals, label container with appropriate hazard labels generated from the <u>Hazardous</u> Waste Program (HWP) before use.
- 2. Radioactive biological sharps must be sterilized with bleach or autoclaved to remove the biohazard classification. Contact EH&S Radiation Safety at <a href="mailto:radsafety@berkeley.edu">radsafety@berkeley.edu</a> if you will be generating a combination of radioactive and biohazardous or chemical waste (i.e., mixed waste).
- 3. Seal closed when sharps container is 75% full or filled to the marked fill line.
- Request pickup through the <u>Radiation Safety Information System (RSIS)</u>.
  Radiological sharps contaminated with chemicals must be picked up within 6 months.



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### Chemical Contaminated Sharps

#### **Needles**

- 1. Dispose needle and syringe (attached) into a sharps container of any color.
  - Label container with a hazard waste label generated from the Hazardous Waste Program (HWP) before use.
- 2. Deface any "biohazard" symbols and wording on the container.
- 3. Seal or tape closed when the container is 75% full or filled to the marked fill line.
- 4. Request a pickup through the <u>HWP</u> when full. Full containers must be picked up within 6 months from when the sharps start accumulating.

#### **Broken Glass and Other Sharps**

- 1. Place glass or other sharps inside a container that is rigid and puncture resistant, such as a glass waste box.
  - Label container with a hazardous waste label generated from the Hazardous Waste Program (HWP) before use.
- 2. Request a pickup through the <u>HWP</u> when full. Full containers must be picked up within 6 months from when the sharps start accumulating.

# Uncontaminated Sharps

#### **Needles**

- 1. Dispose needle and syringe (attached) into a sharps container of any color. (Trace ethidium bromide is okay.)
  - Mark container as "non-contaminated needles" before use.
    "Non-contaminated sharps" stickers can also be obtained from EH&S upon request.
- 2. Deface any "biohazard" symbols and wording on the container.
- 3. Seal or tape closed when container is 75% full or filled to the marked fill line.
- 4. Request a pickup through the <u>Hazardous Waste Program (HWP)</u> within 30 days of closure or dispose inside a medical waste tub. You can obtain a medical waste tub from your department safety coordinator or request one from EH&S.

#### **Broken Glass and Other Sharps**

- 1. Place glass or other sharps inside a container that is rigid and puncture resistant.
  - Mark container as "non-contaminated sharps" before use.
    "Non-contaminated sharps" stickers can also be obtained from EH&S upon request.
- 2. Seal the box closed with tape and dispose of as regular trash.



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### **Abandoned Sharps**

### If you find a needle or syringe left lying around in your work area:

- Inform your supervisor **before** taking any action.
- Do not pick it up until you have gloves and a sharps container for safe transport.
- Pick up and dispose into a sharps container using mechanical means such as a brush and dustpan, tongs, or forceps.
- Do not try to recap the needle.
- Do not carry it away from the area of the sharps container.

#### If you find a needle or syringe in a public area:

- Do not pick it up.
- Secure the area and contact EH&S and we will arrange for collection and disposal.

### References

- Monash University: Syringes and needles: use, disposal and incident follow-up
- Biosafety in Microbiological and Biomedical Laboratories
- California Bloodborne Pathogen Standard
- California Medical Waste Management Act

### Contact

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