



Safe Operating Procedure

(Revised 9/23)

SHARPS – HANDLING AND DISPOSING

Introduction

Sharps are items that can easily puncture the skin. Examples include needles, razor blades, and broken glass. All sharps must be handled and disposed of properly to protect you and others from exposure and possible injury.

General Precautions

- Substitute plastic ware for glassware whenever possible. Routinely inspect glassware and remove from service items that are damaged, cracked, or chipped. See EHS SOP, **Ground Glass and Glassware Safety** for additional information on avoiding broken glassware.
- Make sure lighting is adequate and the workspace is not crowded with unneeded items.
- Be alert at all times when handling sharps. Don't look away or become otherwise distracted while handling a sharp object.
- Select rounded or blunt end devices when practicable.
- Keep sharp tools sharp.
- Use the right tool for the task.
- Do not handle sharp objects (i.e., broken glass) with bare hands. Use mechanical devices.
- Use cut-resistant gloves if practicable. In some cases, heavy rubber gloves (i.e., glassware washing) or double gloving (when manual dexterity is important) may be appropriate.
- Use physical restraining devices or anesthesia when using sharps on animals. When the hands must be placed in a potential danger zone. Cut and puncture-resistant gloves can also be worn under nitrile/latex gloves if engineering and procedural controls are not possible or effective.
- Do not leave unprotected sharps (i.e., razor blades, scalpel tips, etc.) on bench tops or loose in drawers. Use protective shields, cases, Styrofoam blocks, tube holders, etc.
- Protect the sharp when passing from one person to another. If not feasible, use verbal communication when passing.
- On equipment with blades or other sharp surfaces, observe proper lockout/tagout techniques when servicing or performing maintenance.

- Use needle syringes only when necessary. If a needle syringe is absolutely necessary to the procedure, use a syringe that automatically re-sheathes the needle if possible (Figure 1).

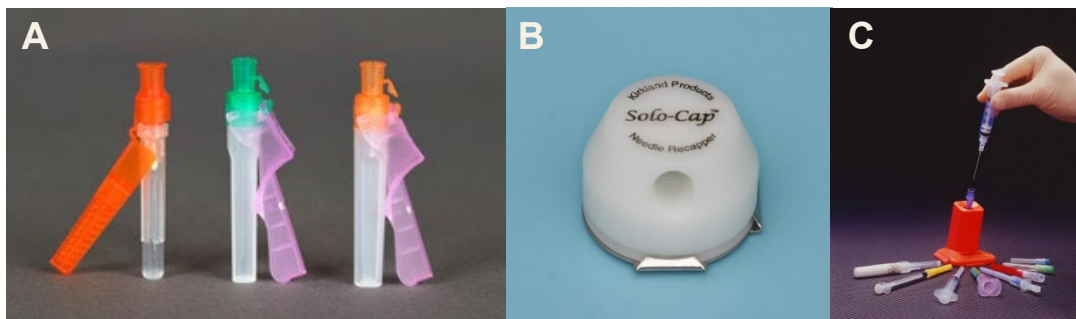


Figure 1 Safety Needles and Safe Recapping Devices. A) Needles with safety sheaths; B) Solo-cap recapping device; C) NeedleSafe II™ recapping device;

- Recapping needles should be avoided if possible. An accidental puncture or needle stick might occur. When absolutely necessary, use a needle re-capping device to perform the re-capping (Figure 1) or use the one-handed scoop technique (Figure 2).

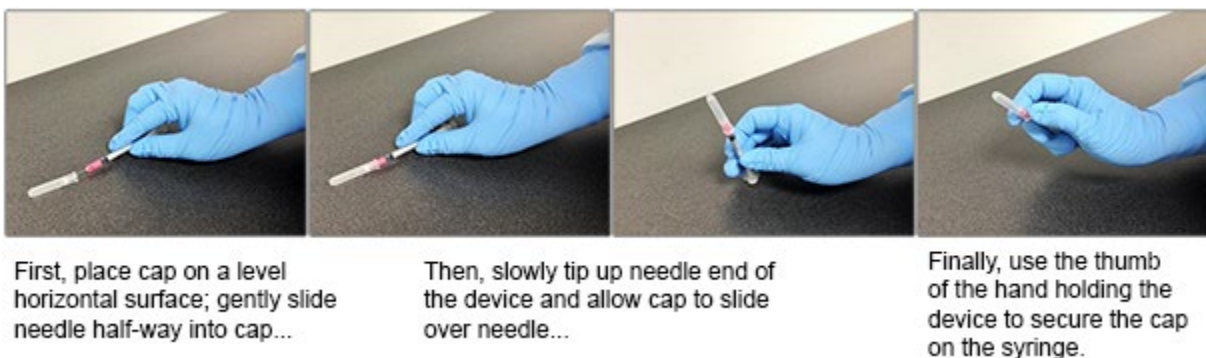


Figure 2 One-handed scoop technique for needle recapping

- Used needles must not be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal.
- Keep a sharps disposal container immediately accessible. Do not allow it to get overfilled (i.e., no more than 3/4ths full). Do not try to retrieve items from sharps disposal containers.
- See EHS SOP, ***On-the-Job and Student Injuries*** for actions to take in response to a sharps injury.

Disposal of Sharps

- Proper disposal of broken and intact glass and other sharps is paramount. Considerations include whether the glass or sharps are contaminated with radioactive materials, chemicals, or biological agents. Review the EHS SOP, **Glass Disposal – Intact or Broken**.
- Use only rigid, puncture-proof containers for the collection and disposal of sharps. Label the container as “**Sharps**” or equivalent. Containers for sharps contaminated with radioactive materials must be labeled with the trefoil symbol and radionuclide.
- Sharps contaminated with radioactive material must be packaged and disposed of via EHS following EHS SOP, **Hazardous/Radioactive Material Collection Procedures**.
- Dispose of sharps contaminated with chemicals in accordance with the EHS SOP, **Glass Disposal – Intact or Broken**. **Note:** Green plastic containers are commercially available for disposal of non-biohazard sharps (Figure 3).



Figure 3 Non-infectious and non-biohazard sharps disposal containers

- Sharps contaminated with biological agents must be collected in a rigid, puncture-proof, sealable container labeled with the biohazard symbol. These sharps must be decontaminated prior to disposal or disposed via EHS.
 - If treated by autoclaving, the container must first be labeled with lead-free autoclave tape to demonstrate proper treatment prior to disposal. Sharps contaminated with biological agents may only be mixed with “clean” sharps if the entire contents of the container are decontaminated before disposal. Deface the biohazard symbol after treatment and prior to disposal. Decontaminated sharps containers should be placed in a black bag or box prior to disposal in a dumpster. Refer to the EHS SOP, **Disposing of Biohazardous Materials Including Recombinant or Synthetic Nucleic Acids** and **Autoclave Operation and Use** for guidance on sharps decontamination and disposal.
- Sharps that are potentially contaminated with bloodborne pathogens must be collected in a commercially available rigid, leak and puncture-proof plastic container that cannot

be easily opened after sealing. The container must be red in color, labeled with a biohazard symbol and manufactured for this purpose. See the EHS SOP, ***Disposing of Biohazardous Materials, Including Recombinant or Synthetic Nucleic Acids*** for additional guidance.

- If a red biohazard plastic container will be used for non-infectious sharps waste (i.e., no potentially infectious material), the container must have the biohazard symbol thoroughly defaced and be clearly marked as “**Non-infectious.**” (Figure 3)
- All sharps containers must be *securely sealed prior to disposal*. Close and tape lids.
- Packaged sharps shall be placed directly in the dumpster by the person(s) responsible for generating the sharps; UNL custodial staff do not handle and dispose of sharps containers in research and lab spaces.