# Standard Practices for Handling Sharps
## (Sharps Management Plan)

### Purpose and Definition
- This document describes the general guidelines for the safe use and disposal of sharps.
- The term “sharps” refers to any instrument that can puncture, cut or scrape body parts. Use of this term includes, but is not limited to, needles, syringes, sharp or broken glass, ampules, IV tubing with needles attached and suture needles, lancets, scalpel blades, glass Pasteur pipettes and glass capillary tubes, micrometre blades and dental scalers.
- Use of sharps should be restricted to trained personnel and to those cases in which no alternative is available.
- Some sharps comprise a regulatory waste classification and must not be disposed of in the regular waste stream.

### Hazards

#### Risks
- The potential safety risks for the sharps users are:
  - Puncturing, cutting or scraping
  - Exposure to contamination (chemicals/pharmaceuticals, infectious agents, rDNA, etc.) via puncture, cut or scrape
  - Exposure to contamination from creation of aerosols

### Hazard Controls

#### Work Practice Controls
- Use safer alternatives when possible. See Safer Alternatives for lab use (linked here). See Safety Devices for clinical use (linked here).
- Do not recap needles. If needles must be reused for multiple injections, store in a device (e.g. horizontal 50 ml conical tube).
- When injecting a hazardous substances in lab or research animals, follow requirements of lab-specific (e.g., toxin, biological, etc.) SOP and/or guideline.
- Establish a no pass zone where sharps that are still in use are placed. Do not pass sharps from one person to another.
- Dispose of sharps at the point of use immediately after use in a sharps container (e.g. needle box). In labs, this should be within arm’s reach, such as within the biosafety cabinet or chemical fume hood. You should not have to walk far to dispose of sharps.
- See Retrieval of Valuables from Sharps Containers Policy and Request Form (linked here).
- Lab coat (or gown/tyvek, etc.), gloves for lab work. Standard practices and PPE for patient care. Mucous membrane protection (e.g. safety glasses with mask or face shield) if there’s a potential for splash or spray (e.g., opening tube, cleaning up spills). Additional PPE (i.e. N95) according to risk. Remove PPE before leaving work area. Wash hands for 20 seconds.
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#### Selection & Purchase
- Use a sealed, puncture and leak-proof container to transport materials.

#### Transport
- Use a sealed, puncture and leak-proof container to transport materials.

#### Personal Protective Equipment (PPE)
- Activate safety device (if available) and place sharps immediately in puncture resistant sharps container (needle box); close when container is two-thirds filled or sooner. DO NOT attempt to jam used needles into a full container. Treat and dispose according to Waste Management for Chemical, Radiological, or Biological waste.

#### Waste
- Activate safety device (if available) and place sharps immediately in puncture resistant sharps container (needle box); close when container is two-thirds filled or sooner. DO NOT attempt to jam used needles into a full container. Treat and dispose according to Waste Management for Chemical, Radiological, or Biological waste.
- Wear full PPE, including a lab coat/gown, disposable gloves, and full face protection.
- Pick up sharp items with mechanical device (e.g., forceps, hemostat) and place into puncture resistant sharps container. If a biohazard, use biohazard sharps container.
- Cover and surround spill with paper towels or other absorbent materials.
- For biologicals (biohazard), decontaminate area with 1:10 dilution of bleach (see Bleach Guideline for chemicals that react with bleach): water (at least 0.5% sodium hypochlorite) or use an approved hospital disinfectant by carefully (slowly) pouring disinfectant on spill, first around the outer edges and working in. Let sit for 20 minutes. After 20 minutes, wipe up using absorbent materials.
- Place all disposable materials into a plastic leak-proof bag or medical waste container and dispose of appropriately according to your Waste Management Plan. Do not autoclave bleach.
- If chemical/drug or radiological, refer to the Emergency Response Guide posted in your work area for more information.

#### Spills
- Wear full PPE, including a lab coat/gown, disposable gloves, and full face protection.
- Pick up sharp items with mechanical device (e.g., forceps, hemostat) and place into puncture resistant sharps container. If a biohazard, use biohazard sharps container.
- Cover and surround spill with paper towels or other absorbent materials.
- For biologicals (biohazard), decontaminate area with 1:10 dilution of bleach (see Bleach Guideline for chemicals that react with bleach): water (at least 0.5% sodium hypochlorite) or use an approved hospital disinfectant by carefully (slowly) pouring disinfectant on spill, first around the outer edges and working in. Let sit for 20 minutes. After 20 minutes, wipe up using absorbent materials.
- Place all disposable materials into a plastic leak-proof bag or medical waste container and dispose of appropriately according to your Waste Management Plan. Do not autoclave bleach.
- If chemical/drug or radiological, refer to the Emergency Response Guide posted in your work area for more information.

#### Exposures
- Wash the affected area with soap and water. Do not scrub! If the area is bleeding because of a needlestick or cut, allow the wound to bleed freely while rinsing with running water. Do not squeeze or rub the wound site. Obtain medical attention, if necessary.
- Report all exposures to EOHW by dialing 115 from Duke Phone or 919-684-8115 and complete the “Report a Work-Related Accident, Injury, or Illness” form found at https://hr.duke.edu/wellness/workers-compensation
- Report exposures to viral vectors/recombinant DNA to OESO-Biosafety (biosafety@duke.edu or 919-684-8822)
- Complete minimum safety training requirements for your job.
- If working with human specimens or cell lines, complete Bloodborne Pathogens Training (or BSL-2/BBP if working in a designated BSL-2 laboratory).
- All personnel shall read and fully adhere to this SOP.

#### Questions
- Contact OESO - Biological Safety Division at 919-684-8822 or biosafety@duke.edu