

## SHARPS SAFETY GUIDELINES

Last Revised: 7/27/17

### A. Summary

Sharps have the potential to cause puncture, cut, or scrape wounds. Personnel may be exposed to infectious, chemical, or radiologic materials from contaminated sharps. Before using sharps or potential sharps (e.g. glassware) in your experiments, perform a risk assessment that includes careful consideration of alternatives. With some thought and modifications of engineering controls and work practices, you may be able to eliminate this hazard completely from your research. If sharps use is still necessary, you can avoid injuries and exposure to contaminants from sharps if you handle and dispose of them correctly.

### B. Safe Handling of Sharps

The following practices can be utilized to prevent potential needle stick injury or illness from needles and other sharps:

- Always be aware of where the sharp object is.
- When working with sharps, avoid placing your hand or part of your body in the “line-of-fire.”
  - For example, do not inject the needle into an item that is against your hand. The needle may go through the item and poke your hand behind it.
- Dispose of needles and syringes in puncture-resistant (hard-walled) containers.
  - For medical waste sharps, the sharps waste container needs to have the biohazard symbol and the word “Biohazard.” There is no requirement for the sharps container to be red.
  - For non-medical waste sharps (i.e. no human pathogenic potential), the container should NOT have the biohazard symbol or the word “Biohazard.”
- A sharps waste container should be placed as close as possible to the area where sharps are being used in order to facilitate safe disposal of sharps.
- Do not walk around the room with an uncapped needle.
- Place the needle and syringe, without cap, directly into a disposable sharps container.
- Do not break or shear the needle shaft from the hub. This may aerosolize the material.

- Do not bend the needle.
- Do not remove the needle from the disposable syringe.
- Do not re-cap a needle.
  - If you absolutely must re-cap a needle, do not hold the cap while attempting to reinsert the needle.

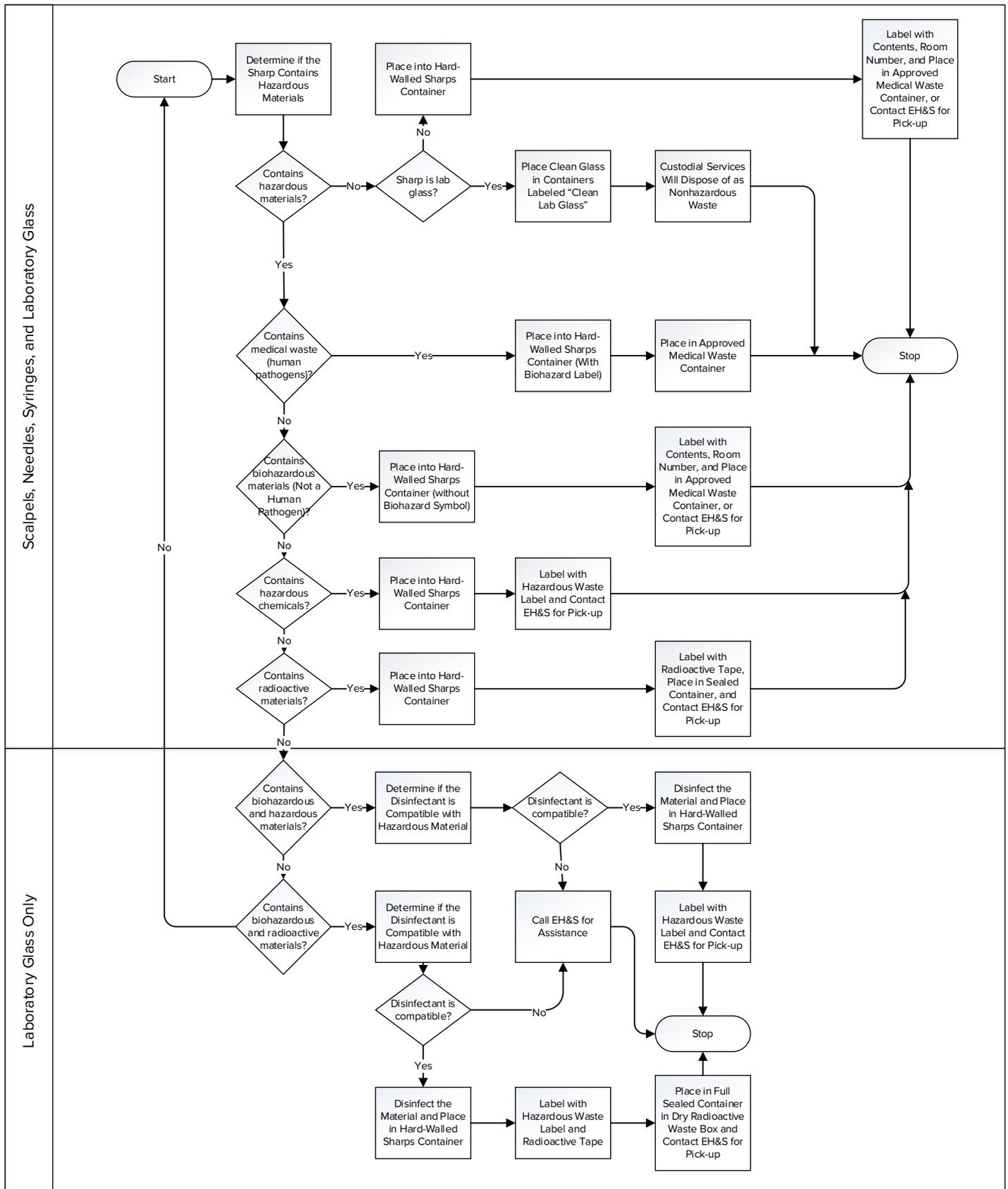
Use the one-handed “scoop” needle recapping technique.

- Place the cap on a surface (e.g. counter top) and carefully insert needle into cap (do not hold the cap).
  - Gently elevate the needle and cap, then push the cap against a hard surface (again, do not hold the cap) to ensure a tight fit onto the device.
- Do not manipulate the blade on a scalpel with your hands. Only perform this task if you have received training on how to do it safely. Use of disposable scalpels and blades reduces the need for further manipulation of the sharps after use. **See:** [SafetyNet #146: Microtome Use Hazards and Precautions](#).
  - Consider using safety-engineered sharps. Safety-engineered sharps have a built-in feature that effectively reduces the device user’s risk of a sharps injury.
  - Do not handle broken glassware directly. Instead, use a brush and dustpan, tongs, or forceps to remove broken glassware. Substitute plasticware for glassware whenever possible.

## C. Safe Disposal of Sharps

Never throw treated or untreated sharps containers or sharps directly into garbage cans or dumpsters. Sharps can puncture regular waste bags and endanger waste handlers. Do not pick up broken sharps with your hands. Use tongs or a disposable broom and dustpan to pick up broken glass. A variety of medical waste and non-medical waste sharps containers are available through the campus central storehouse. Contact EH&S via [email](#) or phone (530-752-1493) if sharps will be contaminated with mixed waste (i.e. any combination of biological, chemical, or radiological materials).

# 1. Scalpels, Needles, Syringes, and Laboratory Glass



- Does not contain hazardous materials:
  1. Place into a hard-walled sharps container (without biohazard label).
  2. Label the container with contents, room number and building, and contact EH&S for pick-up, or place inside a red biohazard bag in an approved medical waste accumulation container, if you have access to a medical waste accumulation site.

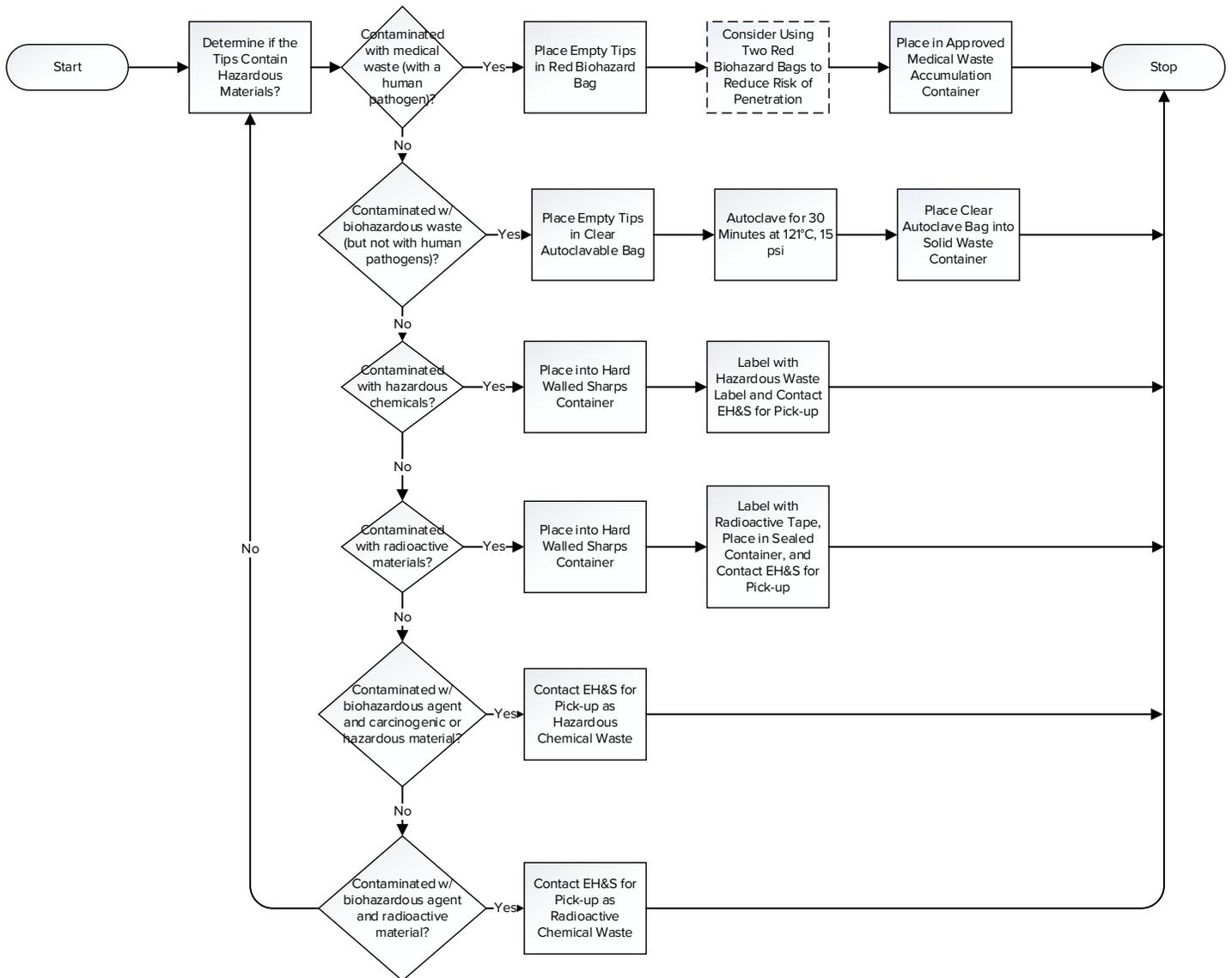
**For non-contaminated laboratory glass:**

1. Place clean glass into a sturdy container marked “Clean Lab Glass.”
  2. Custodial Services will dispose as nonhazardous waste. **See:** [SafetyNet #12: Why Didn't the Custodian Pick Up my Trash](#) for more information.
- Containing medical waste (human pathogens):
    1. **Broken Glass Only:** Spray with appropriate disinfectant and let it sit for the manufacturer-recommended contact time.
      - Refer to [SafetyNet #127: Biological and Biohazardous Spill Response](#)
    2. Place into a hard-walled sharps container (with biohazard label).
    3. Label with room number and building, and place in approved medical waste accumulation container.
  - Containing biohazardous materials (not a human pathogen):
    1. **Broken Glass Only:** Spray with appropriate disinfectant and let it sit for the manufacturer-recommended contact time.
      - Refer to [SafetyNet #127: Biological and Biohazardous Spill Response](#)
    2. Place into a hard-walled sharps container (without biohazard label).
    3. Label with room number and building, and contact EH&S for pick-up, or place inside a red biohazard bag in an approved medical waste accumulation container, if you have access to a medical waste accumulation site.
  - Containing chemical carcinogens or hazardous chemicals:
    1. Place into a hard-walled sharps container (without biohazard label).
    2. Label with a hazardous [waste label](#), and contact EH&S for pick-up as a hazardous chemical waste.
  - Containing radioactive materials:
    1. Place into a hard-walled sharps container (without biohazard label).
    2. Label with radioactive tape, and place full sealed container in a dry radioactive waste box, and contact EH&S for pick-up as radioactive waste.

**For intact laboratory glass only** (For broken glass e.g. spill conditions, see relevant section above):

- Contaminated with toxic or hazardous chemicals:
  1. Place into a hard-walled sharps container (without biohazard label).
  2. Label with a hazardous [waste label](#), and contact EH&S for pick-up as a hazardous chemical waste.
- Contaminated with radioactive material:
  1. Place into a hard-walled sharps container (without biohazard label).
  2. Label with radioactive tape, and place full sealed container in a dry radioactive waste box, and contact EH&S for pick-up as radioactive waste.
- Contaminated with biohazardous agent and carcinogenic or hazardous material:
  1. If the chemical disinfectant for the biohazardous agent is compatible with the hazardous material, disinfect the material and place into a hard-walled sharps container (without biohazard label).
  2. Label with a hazardous [waste label](#), and contact EH&S for pick-up as a hazardous chemical waste.
  3. If the disinfectant is not compatible with the hazardous material, call EH&S for assistance.
- Contaminated with biohazardous agent and radioactive material:
  1. If the chemical disinfectant for the biohazardous agent is compatible with the radioactive material, disinfect the material and place into a hard-walled sharps container (without biohazard label).
  2. If the disinfectant is not compatible with the hazardous material, call EH&S for assistance.
  3. Label with a hazardous [waste label](#) and radioactive tape, and place full sealed container in a dry radioactive waste box. Contact EH&S for pick-up as a hazardous chemical waste and radioactive waste.

## 2. Pipette Tips



Pipette tips are used to transfer liquids, and are generally disposable; however, they have the ability to cause puncture wounds because of the sharp tip.

- Contaminated with medical waste (with a human pathogen):
  1. Place the empty tips in red biohazard bag.
  2. Consider using two red biohazard bags to address risk of the tip penetrating a red biohazard bag.
  3. Place in an approved medical waste accumulation container.
- Contaminated with biohazardous agent (not a human pathogen):
  1. Place the empty tips in clear autoclavable bag with autoclave tape, then autoclave (121°C, 15 psi, 30 minutes).
  2. After a successful cycle of the autoclave, place clear autoclave bag into solid waste container (or dumpster).

**Note:** Look at the autoclave cycle history, and ensure that the run went to completion to determine if the cycle was successful.
- Contaminated with toxic or hazardous chemicals:
  1. Place into a hard-walled sharps container (without biohazard label).
  2. Label with a hazardous [waste label](#), and contact EH&S for pick-up as a hazardous chemical waste.
- Contaminated with radioactive material:
  1. Place into a hard-walled sharps container (without biohazard label).
  2. Label with radioactive tape, and place full sealed container in a dry radioactive waste box, and contact EH&S for pick-up as radioactive waste.
- Contaminated with biohazardous agent and carcinogenic or hazardous material:
  1. Contact EH&S for pick-up as a hazardous chemical waste.
- Contaminated with biohazardous agent and radioactive material:
  1. Contact EH&S for pick-up as a hazardous radioactive waste.