

## Purpose

Personnel who use and dispose of laboratory glassware are responsible for following the procedures described in this document. Appropriate disposal of laboratory glassware minimizes hazards to laboratory workers, housekeeping staff, and waste disposal employees.

## Responsible Persons

The **principal investigator or designee** is responsible for:

- The development and maintenance of the required laboratory safety documents
- Determining whether the material is hazardous
- Training research staff

The **waste generator** is responsible for the proper collection and disposal of laboratory glassware.

## Safety Precautions

Consult your laboratory's Lab Safety Manual or Chemical Hygiene Manual for guidance regarding the required Personal Protective Equipment (PPE) and associated Standard Operating Procedures (SOPs).

## Definitions

### 1. Non-Contaminated Glassware

Glassware that is not a "sharp" and/or has not been in contact with a hazardous chemical, a biohazard or radioactive material.

Examples include glass or plastic flasks/beakers, non-infectious slides, test tubes, Pasteur pipettes and swabs/sticks.

### 2. Contaminated Glassware

Glassware that has been exposed to a hazardous chemical, an infectious agent, or radiation contamination.

Examples include glassware contaminated with a hazardous chemical, a flask containing biological waste (i.e. E. coli), and vials contaminated with radioactive materials.

### 3. Sharps

Includes the following examples: hypodermic needles, syringes, all blades (razors, scalpels, X-acto, etc.), needles with attached tubing, suture needles, slides, coverslips, or any device/item having corners, edges, or projections capable of cutting or piercing the skin.

Broken glassware can be placed in the sharps container if it fits easily through the slot.

### Disposal of Non-Contaminated Glassware

1. Triple Rinse Procedure
  - A. Open the container, allowing the contents to drain. Once the flow has stopped, allow the container to drain for an additional 30 seconds.
  - B. Immediately begin the rinsing process with water by filling the container with 25 percent of the stated volume of the container (ex.: fill a 100 ml bottle with 25 ml of water).
  - C. Replace the cap on the container. With the container facing left, shake the container left to right over a distance of four to six inches. Shake the container about twice per second for 30 seconds.
  - D. Drain the rinse water.
  - E. Refill the container (25 percent volume) and replace the cap. With the container facing towards the ground, shake the container as above.
  - F. Drain the rinse water.
  - G. Refill the container (25 percent volume) and replace the cap. With the container in the upright position, shake the container as above.
  - H. Drain the rinse water. Once the flow has stopped, allow the container to drain for an additional 30 seconds.
  - I. Carefully rinse the container cap, the threads on the neck of the container, and the outside of the container.
2. Place the glassware in the double-lined container designated for glassware.
3. When the container is approximately two thirds full, secure the bag and place it in a cardboard box. Tape the cardboard box closed.
4. Label the box as glassware for disposal and place in the hall. Custodial staff will remove it.

### Disposal of Contaminated Glassware

1. Glassware contaminated with a hazardous chemical should be placed in the container designated for solid chemical waste.
2. Glassware contaminated with an infectious agent should be placed in the red biohazardous container.
3. Glassware contaminated by radiation must be placed in a yellow plastic lined cardboard box that is labeled for radiation hazards. Notify the Spokane lab services group ([spok.labservices@wsu.edu](mailto:spok.labservices@wsu.edu), 509-358-7621) and the Pullman Radiation Safety Office (509-335-8016) that the box is ready for pickup.

### Disposal of Sharps

Do not recap needles prior to placing in the container. Do not fill the container past the indicated full line. Notify the Spokane lab services group ([spok.labservices@wsu.edu](mailto:spok.labservices@wsu.edu), 509-358-7621) when sharps containers are full.