

# PURDUE UNIVERSITY

## Sharps and Infectious Waste Handling and Disposal Guidelines

### Definitions

#### **Sharps:**

Items capable of puncturing, cutting, or abrading the skin such as glass or plastic pipettes, broken glass, test tubes, petri dishes, razor blades, needles, and syringes with needles.

#### **Category 1:**

Waste known, assumed, or suspected of being infectious to humans, plants, or animals and could cause harm if released to the environment. Infectious waste includes contaminated materials and/or sharps that have been exposed to human fluids, human cell lines, or with biohazardous organisms (e.g. petri dishes, surgical wraps, culture tubes, syringes, blood vials).

#### **Category 2:**

Waste with the general appearance of infectious or medical waste, but actually is not biohazardous. Also known as “look-alike” waste (e.g. non-infected animal tissue, fluids, cell cultures, non-biohazardous used petri plates, syringes, animal blood stained surgical items).

### Risk Assessment

Employees that routinely work with sharps and those who handle sharps waste should be aware of the risk of being punctured or lacerated during their workday. It is important for these employees to take precautions and properly handle waste materials in order to prevent injury and potential disease transmission. These employees should use appropriate personal protective equipment (PPE), tools, barrier protection, and engineering controls to protect themselves.

### Handling Guidelines

#### **Sharps and Category 1 Infectious Waste:**

- Use appropriate PPE as determined by a task risk assessment.
- Properly decontaminated Category 1 waste prior to removal by Radiological and Environmental Management (REM).
- Decontaminate by either chemical means (bleach) or autoclave.
- Store in a secure areas that restricts access to the general public and is protected from the environment and vermin.
- Do not place any sharps into the regular office or lab trash receptacles.
- Place sharps in specifically designed plastic puncture proof and biohazard labeled sharps containers.
- Do not re-cap the needle on used hypodermic syringes.
- Place non-sharp waste in leak proof covered containers that are lined with autoclavable biohazard bags.
- Label with the biohazard symbol:



### Category 2 Look-Alike waste:

- Place Category 2 sharps in leak proof, rigid, puncture-resistant containers that are tightly sealed to prevent spillage, see specifics below.
- Place all other Category 2 look-alike waste in opaque plastic bags.
- Store in a secure area that restricts the general public's access and is protected from the environment and vermin.

## Disposal Guidelines

REM must remove Category 1 biohazardous waste and Category 2 look-alike waste. Complete the [Biomaterials Pickup Request](#) form, attach it to the container, and call 40121 for pick-up.

### Category 1 Biohazardous Sharps:

- Biohazard labeled containers purpose-built for sharps must be used for biohazard or human fluid/tissue contaminated items (e.g. needles, syringe with needle, razors, and scalpel tips). *These standardized containers are especially important for the safety of staff that handle and remove this waste.*
- Do not use domestic household or food containers to hold sharps.

### Category 2 Non-Contaminated Sharps and Clean Sharps:

- Sharps (e.g. needles, syringe with needle, razors, scalpel tips) that have not been in contact with human fluids or biohazard application can be placed into properly labeled stout plastic puncture resistant containers with either snap top lids or screw top such as Nalgene<sup>®</sup> plastic ware or triple rinsed chemical containers.
- Do not use domestic household or food containers to hold sharps.
- Prominently label containers with the word "**SHARPS**".

### Chemically Contaminated Sharps:

- Chemically contaminated sharps can be placed into properly labeled, stout, plastic, and puncture resistant containers with either a snap on lid or screw on cap. Research application containers such as Nalgene<sup>®</sup> plastic ware or triple rinsed chemical containers.
- Do not use domestic household or food containers to hold sharps.
- Containers specifically designed for biohazard sharps can be used for chemical contaminated sharps if the biohazard label is replaced with a hazardous waste disposal label.
- **EXCEPTION:** sharps used in research projects involving chemotherapy, nanoparticles, or other high hazard applications must be disposed of in purpose-built sharps containers.

### Clean Broken Glass:

- Clean uncontaminated broken glass and plastic sharps should be placed in a corrugated cardboard box or other strong disposable container. Do not exceed 20 pounds. When ready for disposal the box should be taped shut and prominently labeled "**SHARP OBJECTS/GLASS - DISCARD**" or similar wording. Contact your Building Services employee for specific disposal instructions.
- Building Services employees should visually check the box for protruding sharps before handling. The box should be transported and carefully placed into a trash dumpster.

## Contacts

**Biological Safety Questions:** Biosafety Officer at (765) 494-1496 or [rwgolden@purdue.edu](mailto:rwgolden@purdue.edu)

**Waste Pick-Up Requests and Handling Information:** (765) 494-0121.