

# **BIOHAZARD WASTE GUIDELINES**

2010

# OSAFETY • UNIVERSITY OF IOWA • ENVIRONMENTAL HEALTH & SAFETY • BIOSAFETY

# Introduction

The University of Iowa's Biohazardous Waste Management Plan has been prepared in accordance with EPA, OSHA and State of Iowa regulations. At the University of Iowa, all biohazardous waste is transported off site in 28 or 40-gallon Rubbermaid containers for disposal.

This memo is intended to clarify segregation, packing and pickup of wastes, both biohazardous and uncontaminated.

# **Defining Biohazardous Waste**

Biohazardous waste typically includes waste containing pathogens with sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in an infectious disease. The UI also includes all sharps from medical areas, patient care, and research, in addition to the waste types described below.

# **Biohazardous Waste Types**

- 1. Cultures, stocks of infectious agents and associated biologicals including but not limited to:
  - Specimens from medical, pathology and research laboratories;
  - Disposable culture/petri dishes;
  - Devices used to transfer, inoculate, and mix cultures;
  - Wastes from the production of biologicals; and
  - Discarded live and attenuated vaccines.
- 2. Human blood, blood products, and body fluids.
- 3. All sharps (contaminated and uncontaminated) such as:
  - Needles and syringes;
  - Scalpels, razors, microtome blades;
  - Pasteur pipettes
  - Slides and cover plates; and
  - Broken glass.
- 4. Carcasses, body parts and bedding from animals exposed to pathogens in research.
- 5. Other laboratory wastes including but not limited to:
  - Specimen containers;
  - Disposable gloves, lab coats, masks and aprons;
  - Disposable pipettes;
  - All cell culture materials; and
  - All microorganisms constructed using rDNA;
  - Pipette tips; and
  - Solidified blood and body fluids.
  - All wastes that have been steam sterilized.

#### **Handling Biohazardous Waste**

Waste must be segregated at the point of origin by the generator. Culture plates and vials containing pathogenic organisms must be autoclaved prior to disposal using autoclavable bags (orange or red). Place in a red-bag lined biowaste container after autoclaving. *Do not use the biohazard box's red liner for autoclaving*.

Waste must be placed either directly into a red-bag lined biowaste tub *or* a red-bag lined white biowaste box.

**All sharps** must be placed in a red sharps container or a Winfield Sharps container.

Animal carcasses, body parts and bedding from animals exposed to pathogens should be dis-posed of in accordance with Animal Resources' procedures. Call 5-7985 for more information.

**Human tissues and body parts** are disposed of in Anatomy crematory. Call the Anatomy Donor Coordinator at 5-7762.

Human blood, blood products and body fluids greater than 500 ml must be *solidified* with a product such as Isolyzer and placed in a biowaste box or tub. Amounts less than 500 ml can be disinfected with a bleach solution (1:10 final dilution) and sewered.

# **Uncontaminated Waste**

**Uncontaminated sharps** must also be placed in a red sharps container.

Plastic bottles and jars, e.g., media, bleach, or alcohol containers - place in regular trash.

# Glass bottles or jars-empty, rinsed and

**unbroken** - place in **sturdy** cardboard box. If no box is available, place in a biowaste tub.

# **Preparing for Pickup**

Properly packaged, labeled waste will be removed from labs by Facilities Management (FM) custodial staff per schedule or as needed.

- 1. Do not overfill biowaste tubs. Keep weight below 50 lbs.
- Secure sharps container closure with tape. Secure biowaste box liner, then close and seal the box. Close cardboard box with glass containers and label as uncontaminated.
- Place sharps container or box into a red-bag lined biowaste tub. Use a gooseneck knot to close red bag. Secure lid on tub. Follow same procedures if red tubs are filled directly. All waste must be in a red-bag lined biowaste tub.
- 4. Attach a signed and dated Biohazardous Waste Certification label.
- 5. Place in designated area for pickup. Check with custodial staff for pickup information.
- 6. Obtain clean biowaste tubs and red liners from designated dock areas, or call EHS at 5-4625.

# **Ordering Containers:**

Containers available from Biochemistry Stores (BS) are listed below. Chemistry Stores (CS) also stocks two items, as listed below.

Item	<u>Capacity</u>	<u>BS#</u>	<u>CS#</u>
Winfield Sharps Container #187		159042	NA
Winfield Sharps Container #180		159044	NA
Winfield Sharps Container #182	6.2 qt	159046	NA
Winfield Sharps Container #184	3 qt	159048	NA
Winfield Sharps Container	1 qt	159049	NA
Red Sharps Container, w/lid	-		
Red Sharps Container, w/lid		159040	in stock (6 gal)
Biohazard Box, Red Liner			
Autoclave Bag, Red 2 mil			
Autoclave Bag, Orange 2 mil			
Autoclave Bags, Orange 2 mil			