

**IOWA**

# Biohazardous Waste Disposal Guide

Environmental Health and Safety  
Phone: 319-335-8501  
[ehs.research.uiowa.edu](https://ehs.research.uiowa.edu)  
Date Revised: 05/2022

# Contents

|   |   |
|---|---|
| 1.0 Training.....   | 2 |
| 2.0 Biohazardous Waste Defined .....                              | 2 |
| 3.0 Biohazardous Waste Types.....                                 | 2 |
| 4.0 Handling Biohazardous Waste.....                              | 3 |
| 5.0 Uncontaminated Waste.....                                     | 4 |
| 6.0 Preparing for Pickup .....                                    | 4 |
| 7.0 Frequently Asked Questions: .....                             | 4 |
| 7.1 Where Do I Obtain Biohazard Waste Certification Labels? ..... | 4 |
| 7.2 Where Do I Obtain Red or Grey Plastic Biowaste Tubs?.....     | 5 |
| 7.3 Where Do Filled Biowaste Tubs Go? Who Handles Them?.....      | 5 |
| 7.4 What Are the Container Labeling Requirements?.....            | 5 |
| 8.0 Labeling Instructions .....                                   | 5 |
| 9.0 Ordering Sharps Containers .....                              | 5 |

The University of Iowa's Biohazardous Waste Management Plan has been prepared in accordance with DOT, EPA, OSHA and State of Iowa regulations. At The University of Iowa, most biohazardous waste is transported off-site for disposal in red polyethylene Rubbermaid containers. Grey containers may be occasionally supplied for use.

## **1.0 Training**

The objective of training is to familiarize staff and comply with federal and state regulations, and proper management practices for biohazardous waste required at the University of Iowa. Biohazardous waste generated by UI is transported for disposal by a licensed vendor on public roads. The U.S. Department of Transportation regulates transportation of hazardous materials on public roads. Biohazardous waste is a hazardous material, and therefore training is required for all laboratory staff, and other non-laboratory staff that generate and/or handle biohazardous waste tubs.

The following course addresses transportation and disposal of biohazardous waste:

Biohazardous Waste Management - W524HZ

- Training is required initially then every three years thereafter. In order to finish your training requirement, you must also know specific information unique to your own work area. Use the Record of Employee Training and Certification for Shipping Biohazardous Waste Tub found within the training to review site-specific training items with your supervisor or designated work area trainer.
- Audience: All laboratory staff, including undergraduates, and other non-laboratory staff that generate and/or handle biohazardous waste tubs.

## **2.0 Biohazardous Waste Defined**

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 University of Iowa also includes other types of waste from medical areas, patient care, and research as described below.

## **3.0 Biohazardous Waste Types**

Cultures, stocks of infections agents and associated biologicals, including but not limited to:

- Specimens from medical, pathology and research laboratories
- Disposable culture dishes
- Devices used to transfer, inoculate, and mix cultures
- Wastes from the production of biologicals
- Discarded live and attenuated vaccines

Human blood, blood products, and body fluids.

All sharps (contaminated and uncontaminated) such as:

- Needles and syringes
- Scalpels, razors and microtome blades
- Pasteur pipettes
- Slides and cover slips
- Shards of contaminated broken glass

Refer to the [Sharps Management Chart](#) for more information on sharps disposal. Animal carcasses, body parts, and bedding from animals exposed to pathogens in research.

Other laboratory waste including but not limited to:

- Specimen containers
- Disposable gloves, lab coats, masks and aprons
- Disposable pipettes
- All cell culture materials
- All microorganisms constructed using recombinant DNA

All materials that have been steam sterilized.

Biohazardous waste contaminated with radioactive materials must be managed as radioactive waste through EHS. Refer to the Radioactive Waste Disposal Guide for more information. Biohazardous waste contaminated with chemicals that are EPA hazardous wastes must be disposed of as chemical waste. Refer to the Chemical Waste Disposal Guide for more information.

## 4.0 Handling Biohazardous Waste

Waste must be segregated at the point of origin by the generator. Items that meet the definition of a Category A infectious substance\* must be autoclaved prior to disposal, using autoclavable bags (orange or red). Place in a redbag-lined biohazard container after autoclaving. Do not use the biohazard box's red liner for autoclaving.

\* Category A Infectious substance is defined as an infectious substance in a form capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs. A list of examples can be found at the [EHS Frequently Shipped Biological Material and Proper Classification](#) web page.

Prior to disposal waste must be placed directly into the redbag-lined Rubbermaid transport containers.

Contaminated sharps must be placed in a red sharps container or a Winfield Sharps-tainer. Animal carcasses, body parts, and bedding from animals exposed to pathogens should be disposed of in accordance with the Office of Animal Resources (OAR) procedures. Call OAR for information at 319-335-7985.

Human tissues and body parts are disposed of in the Anatomy crematory. Call the Deeded Body Program of Anatomy Coordinator at 319-335-7762.

Human blood, blood products and body fluids greater than 500 ml must be solidified with a product such as Isolyzer and placed in a biohazard box (white with a red plastic liner). Amounts less than 500 ml may be disinfected with a bleach solution (1:10 final dilution) and sewerred.

## **5.0 Uncontaminated Waste**

- Uncontaminated sharps must be placed in a red sharps container or a Winfield Sharps-tainer.
- Uncontaminated plastics are discarded in the regular trash or recycled where that option is available.
- Unbroken glass containers may be disposed of in the regular trash containers located throughout the buildings on campus.
- Broken glassware must be managed as sharps.

## **6.0 Preparing for Pickup**

Properly packaged and labeled waste will be removed by Custodians. Place containers in the locally designated area for removal.

In order to comply with Dept. of Transportation shipping regulations the laboratory or staff that generates the biohazardous waste must prepare their waste for disposal as follows:

- All biohazardous waste, including white biohazard boxes and sharps containers, must be placed in a red or grey plastic biowaste tub lined with red bag.
- To avoid puncturing the red bag tub liner, do not overfill tub.
- It is highly recommended that tubs be double-lined as single liners are prone to tears.
- Tie the red bag liner closed using a single "gooseneck" knot (do not use tape or zip ties).
- Attach a fully completed Biohazardous Waste Certification label sticker to the side of the biowaste tub.
- Custodians will not remove biowaste tubs unless a completed Biohazardous Waste Certification label is attached to the tub.

## **7.0 Frequently Asked Questions:**

### **7.1 Where Do I Obtain Biohazard Waste Certification Labels?**

- Select departmental offices.
- Biochem Stores.
- Locations on dock areas where red or grey tubs are stored.

- Submit a Waste Label Request Form from the EHS Web page.

## **7.2 Where Do I Obtain Red or Grey Plastic Biowaste Tubs?**

- Red or grey plastic biowaste tubs are kept in the dock areas of BSB, MEB, BB, Pharmacy, DSB and Chemistry. Large red bags to line the tubs are also available at those locations and must be used for that purpose. For other locations, contact EHS.
- Laboratory staff are responsible for obtaining the above containers, as needed.

## **7.3 Where Do Filled Biowaste Tubs Go? Who Handles Them?**

- Laboratory staff should place properly filled/tied/labeled biowaste tubs in the same location as in the past.
- Custodians will transfer the filled tubs displaying a completed Biohazardous Waste Certification label to an area for removal.

## **7.4 What Are the Container Labeling Requirements?**

- Laboratory staff must place all biohazardous waste materials in red or grey plastic biowaste tubs, i.e., red bag, biowaste box, sharps container.
- Laboratory staff must complete and attach the Biohazardous Waste Certification label to the side of the biowaste tub, near the handle.
- Custodians will place a bar code on the tubs to identify the building.

## **8.0 Labeling Instructions**

- Complete the Biohazardous Waste Certification label (requires printed name, signature, room, building, and date).
- Remove one-half of the label-backing only.
- Stick the signed and dated label on the side of the tub next to a handle. Custodians will not remove containers without the completed Biohazardous Waste Certification label.

## **9.0 Ordering Sharps Containers**

Containers are available from Biochem Stores, General Stores and Chemistry Stores.