

## **Environmental Health and Safety**



# **BIOLOGICAL SAFETY MANUAL**

August 2023

## University of Northern Colorado Biological Safety Manual

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## Environmental Health and Safety Biological Safety Manual

## I. Introduction

This manual provides procedures and guidance for the safe handling and disposal of biological materials at the University of Northern Colorado (UNC).

The University of Northern Colorado is committed to preserving the health and safety of its students, faculty, and staff, and protecting the environment and the community. It is recognized that the use of potentially pathogenic microorganisms, infectious agents, human tissue, and blood borne pathogens is necessary in research and teaching laboratories. To ensure the safe handling of these organisms, the University requires compliance with the *NIH Guidelines for Research Involving Recombinant DNA Materials*; *CDC/NIH Biosafety in the Microbiological and Biomedical Laboratories; OSHA Occupational Exposure to Bloodborne Pathogen Standard Title 29, CFR Part 1910.1030;* and the recommendations in the University's Biosafety Manual. Compliance with other applicable federal, state, and local regulations is also required.

## II. Definitions

Biohazard material is any biological material capable of causing harm to humans, animals or plants, including both biohazard agents and non-replicating materials such as toxins. In addition, this term may also be used to refer to material that harbors a biohazard agent. A biohazard agent is a pathogen capable of replication and is a disease-causing microorganism (bacteria, chlamydia, fungi, parasites, prions, rickettsiae, viruses, etc.) capable of causing diseases in humans, animals, or plants.

Research involving experimentation and manipulation of various types of potentially infectious systems can be divided into four general categories. They are those that expose the worker or the environment to (1) blood, bodily fluids, and organs/tissues of human origin; (2) infectious agents and their potentially infectious products; (3) recombinant DNA molecules and their products; and (4) miscellaneous biohazard materials.

## Human Blood and Other Potentially Infectious Materials

Experimentation or manipulations of human blood or other materials of human origin, including, but not limited to, excreta, secreta, blood and its components, unfixed tissue, and tissue fluids, all of which may or may not contain an infectious agent, may place the worker at risk of exposure to blood borne pathogens.

Examples which could result in exposure would be research labs performing experiments and/or manipulations with human blood or unfixed tissues or organs, or a maintenance worker repairing a sewer line getting contaminated with human blood or other potentially infectious materials.

## Infectious Agents and Materials

Infectious agents, pathogens or substances are defined as those substances containing viable microorganisms or their toxins which are known or suspected to cause disease in animals, plants or humans. Pathogens are classified as bacteria, fungi, rickettsiae, viruses, parasites, oncogenic viruses, and prions.

Any materials which come in contact with infectious agents or their byproducts must be handled and disposed of in the same manner appropriate for disposing of the infectious agents themselves.

## Recombinant DNA Molecules and Products

Research involving experiments with recombinant DNA materials includes, but is not limited to: commonly used host-vector systems such as *E. coli*; recombinant DNA experiments using whole animals or plants; recombinant DNA or RNA experiments involving infectious animal or plant viruses; the production of transgenic animals; and the deliberate transfer of DNA or RNA into human subjects (requires human studies approval and approval from federal agencies, including NIH). Regardless of the cloning method utilized, precautions must be taken to assure that the systems neither cause disease in the operator nor release recombinant molecules into the environment.

## Miscellaneous Biohazard Materials

These include materials not directly covered by the above definitions, such as allergens, cultured animal cells and their potentially infectious agents, tissues from experimental animals (including animal dander), plant viruses, bacteria and fungi, toxins (bacterial, plant, etc.), and those as yet unnamed elements or agents which may produce disease. Personnel must be alerted upon initial safety briefing and exposure must be minimized by the use of appropriate safety devices.

## Select Agents

Select agents are pathogens or biological toxins which have been declared by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, or by the U.S. Department of Agriculture to have the "potential to pose a severe threat to public health and safety".

## III. Blood Borne Pathogens / Infectious Agents

Bloodborne Pathogens standard (29CFR 1910.1030) applies to all employees with reasonably anticipated skin, eye, mucous membrane, or parenteral contact with human blood, blood components, or other potentially infectious materials.

## Types of Biological Infectious Waste

The Environmental Protection Agency Medical Waste Tracking Act and Colorado Department of Public Health and Environment have developed regulations and a list of infectious waste categories. Included in these categories are:

## 1. Human Blood & Blood Components

Human blood, products of blood, items saturated, dripping or caked with blood, including body fluids consisting of saliva, semen, vaginal secretions, serum, plasma, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid and amniotic fluid. Intravenous bags and containers which were used or intended for patient care, testing and laboratory analysis or in the development of pharmaceuticals.

## 2. Isolation Waste

Waste generated from humans or animals infected with certain highly communicable diseases isolated to protect others from potential infectious risks.

## 3. Cultures and Stocks - Medical/Pathological

Cultures and stocks of infectious agents and associated biologicals from research, industrial, medical and pathological laboratories; waste from the production of biologicals; discarded live and attenuated vaccines; culture dishes and devices used to transfer, inoculate and mix cultures.

## 4. Pathological Wastes

Pathological / anatomical waste consisting of cell, tissues, organs, and body parts removed from surgical, autopsy, obstetrical, laboratory and other medical procedures; specimens of body fluids and their containers.

## 5. Sharps

Sharps used in animal or human patient care including: hypodermic needles, syringes, lancets, blades, scalpels, pipettes, glass microscope slides, cover slips, glass tubes, blood vials, broken capillary tubes, razor blades, exposed ends of dental wires and other discharged metallic items.

## 6. Animal Waste

Animal carcasses, body parts, bedding of animals exposed to infectious agents during research and analysis, veterinary care, production of biologicals or testing of pharmaceuticals.

## 7. Miscellaneous Waste

Waste generated from patient or animal care such as contaminated gloves, Petri-dishes, culture instruments, plastics, soiled dressings, sponges, drapes, drainage sets, lavage tubes, under pads and specimen containers.

Any wastes described in these categories must be properly handled, and disposed of in a proper manner.

## **Biohazard Bags and Containers**

Infectious waste must be placed in red biohazard bags. Biohazard bags that are full shall not be forced into a secondary container as this could cause breakage or leakage. Biohazard containers will have a red biohazard liner. Containers will not be overfilled so the container cannot be closed, secured or sealed for transportation and disposal. Each biohazard bag and container must have an International Biohazard Symbol (Figure 1).

## Waste Locations

There is a potential for biological infectious waste, as defined in the previous section, to be generated at any facility or location on the university's campus. Therefore, there are multiple sites where bio-hazardous waste containers may be located. Some permanent biohazard waste container locations can be found in Appendix A of this document.

## <u>Sharps</u>

Special precaution shall be taken to prevent injury or infection to individuals handling sharps. *Discarding sharps directly into red biohazard liners is prohibited*. These items shall be placed in a standard sharps container clearly labeled as infectious waste and have an International Biohazard Symbol (see Figure 1).

International Biohazard Symbol – Figure 1



## Do NOT place Non-Biohazard Waste (general trash) into Biohazard Containers

## IV. Responsibilities

Environmental Health & Safety

Environmental Health and Safety (EHS) is primarily responsible for the implementation of the Biological Safety Program. The Director of EHS is the University's Biological Safety Officer, and is responsible for the implementation and updates to this manual. Duties of the EHS department may include:

- 1. Monitor compliance practices and procedures regarding potentially infectious and biohazard materials.
- 2. Assist in the periodic updating of the Biological Safety Manual which is consistent with Federal, State and local regulatory guidelines.
- 3. Provide information on matters relating to laboratory safety, appropriate handling and containment of biohazard agents, decontamination, and disposal of biohazard wastes.
- 4. Aid in the development of appropriate emergency measures for handling accidental spills and contamination.
- 5. Conduct surveillance of laboratories in which biohazard agents are employed to ensure compliance with the approved protocol, safety guidelines, and training.
- 6. Investigate accidents or incidents involving biohazard agents to determine probable cause. Upon completing the investigation, EHS will provide an incident report.

- 7. Monitor intra-campus transport of infectious materials and biohazard waste to ensure compliance with rigorous containment procedures (see Section VII). Provide information for off-campus shipments of biohazard materials.
- 8. Serve as liaison between the University and outside regulatory agencies. This may involve concerns with the use of biohazard agents, inspections, etc.

In the event of a mechanical malfunction, systems breakdown or shutdown, or preventive maintenance of primary containment equipment or components, UNC Police Department and EHS must be notified immediately. Proper precautions may have to be taken immediately.

#### Principal Investigator

The Principal Investigator (PI), also known as the course instructor, is expected to understand all relevant safety guidelines, monitor day-to-day operation of the laboratory, and take all necessary steps for protecting faculty, staff, students, and the general public.

Ultimate responsibility for the safe conduct of research involving biohazard agents rests with the PI. The PI is aware of the complexities of the research and its associated hazard and must adequately inform all who are working in the research laboratory or otherwise involved in the research of the hazards involved. Duties of the PI include, but are not limited to:

- Thoroughly inform and train all persons directly involved in potentially hazardous experiments, e.g., infectious agents and harmful chemicals, of the potential health risk presented and the safety procedures necessary to minimize exposure. Each laboratory must maintain a current inventory book of biological agents, maintain a current record of personnel training, post safety standards for the required Biosafety level and maintain safety information for each human pathogen in inventory.
- 2. Establish emergency procedures to be followed in the event of an overt spill or contamination with potentially hazardous biological material. These procedures should be posted in a prominent place in the laboratory. It is recommended that a responsible member of the laboratory staff be designated to handle emergency situations whenever the PI is absent from the premises.
- Immediately report any unusual incident, such as a spill, break in containment, or overt contamination, to the UNC Police Department and Environmental Health and Safety Department.

- 4. Post working areas and facilities with biohazard warning signs. The PI should consult EHS if assistance is required in placement of signs.
- 5. Arrange for immunization and/or health surveillance of laboratory personnel if deemed appropriate for the research project.

## **Deans and Directors**

- 1. The Dean and Director are responsible for the general safety of faculty, staff, and students working with biohazard agents in his/her overall area of jurisdiction.
- 2. The Dean, Director and PI are mutually responsible for informing UNC Police Department and EHS of work involving biohazard agents and reporting accidents or incidents involving such agents.
- 3. The Dean and Director shall determine that appropriate facilities and safety equipment are available for proposed research or instruction involving biohazard agents.

## Laboratory Personnel

- 1. Laboratory personnel, including all staff, faculty and students, shall perform all tasks using established safety practices and shall comply with the safety guidelines for the work being performed.
- 2. Laboratory personnel are responsible for keeping themselves informed of the risks in the laboratory and to ask for and participate in training that increases their knowledge and ability to deal safely with the risks.
- 3. Laboratory personnel shall report all unsafe practices to the PI.
- 4. Laboratory personnel shall report all accidents and injuries to the PI.

## V. Principles of Biosafety

The fundamental objective of the Biosafety program is the containment of potentially harmful biological agents. The term "containment" is used in describing safe methods, facilities and equipment for managing infectious materials in the laboratory environment where they are being handled or maintained. The purpose of containment is to reduce or eliminate exposure of laboratory workers, other persons, and the outside environment to potentially hazardous agents. The use of vaccines may provide an increased level of personal protection. The risk assessment of the work to be done with a specific agent will determine the appropriate combination of these elements.

#### Laboratory Biosafety Levels

The recommended secondary barrier(s) will depend on the risk of transmission of specific agents. For example, the exposure risks for most laboratory work in Biosafety Level (BSL-1) and Biosafety Level 2 (BSL-2) facilities will be direct contact with the agents, or inadvertent contact exposures through contaminated work environments. Secondary barriers in these laboratories may include separation of the laboratory work area from public access, availability of a decontamination facility (e.g., autoclave), and hand washing facilities.

Biosafety levels consist of combinations of laboratory practices and techniques, safety equipment and laboratory facilities. UNC Departments shall follow the *CDC Biosafety in Microbiological and Biomedical Laboratories* to assist in determining biosafety level criteria.

## Vertebrate Animal Biosafety Level

When experimental animals are used at the University that are infected with agents that cause, or may cause human infection, the University must provide facilities, staff, and established practices that reasonably ensure appropriate levels of environmental quality. As a general principle, the biosafety level recommended when working with infectious agents in general laboratories and animal laboratories are comparable.

Animal rooms may present some unique issues, such as generating aerosols. In addition to the CDC standard regulations, the CDC recommends the *Guide for the Care and Use of Laboratory Animals and Laboratory Animals Welfare Regulations* be used to assist in meeting applicable standards and regulations.

## VI. Shipping, Packaging, and Transferring Biological Materials

This section will serve as a guide for shipping, packaging and transferring dangerous goods (such as infectious agents, biological materials, or diagnostic specimens). The U.S. Department of Transportation (DOT) requires those that ship or receive hazardous goods shall receive special training on the Shipment of Dangerous Goods. The materials must be packaged by Environmental Health and Safety (EHS) or personnel within the University who are trained specifically to package these materials.

## **Shipment Classifications**

The Department of Transportation (DOT) Hazardous Materials Shipping Regulations (49 CFR 173.134) apply to anyone packaging or shipping Hazardous Materials by ground transportation.

The International Air Transport Association (IATA) Dangerous Goods Regulations apply to anyone packaging or shipping Dangerous Goods by air transport (any package which is offered to a major commercial carrier should be packaged for air transport).

- 1. Diagnostic specimen: Any human or animal material being shipped not known or suspected of containing a pathogen. This includes blood, blood components, tissue, and bodily fluids. Diagnostic specimens must be shipped with triple packaging explained below.
- 2. Biological Product: A biological product is a material prepared and manufactured in accordance with certain regulations of the Department of Agriculture or the Department of Health and Human Services (for example, vaccine preparations).
- 3. Infectious Substance: In hazardous goods regulations, "infectious substance" includes any toxin (classified as 6.1) or infectious agents (classified as 6.2) which affect humans or animals. This includes infectious agents listed in 42 CFR 72.3 of the Department of Health and Human Services regulations and any other agent that causes or may cause severe, disabling, or fatal disease. IATA and the DOT require compliance with Packaging Instruction 602 for Infectious Substances, which includes UN certified packaging, the "declaration of hazardous goods" documentation, and a 24-hour response number to provide information on package contents. UN Identification Codes must be also used correctly on the package and the shipping documents shall include:

UN 2814 - Infectious substance, affecting humans. Specify (liquid) or (solid) UN 2900 - Infectious substance, affecting animals only. Specify: (liquid) or (solid)

UN 3245 - Genetically modified microorganisms

UN 1845 - Dry ice

## Shipment Responsibilities and Requirements

Below are requirements for shipments of all Dangerous Goods:

- The Shipper must receive training in shipping dangerous goods. Shippers are directly responsible for the correct and legal transport of dangerous goods by surface or air. Anyone who offers advice for transport or handles hazardous materials for transport must be trained. (49 CFR Part 172-Subpart H)
- 2. The Shipper must use UN approved labels and packages.
- 3. For International shipping, the Shipper must apply for Import or Export permits (see below).
- 4. The Shipper must complete shipping documentation (2 copies, typewritten or computer-generated).
- 5. The Shipper must attach information to the Shipper's Declaration for Dangerous Goods stating the hazards associated with the shipment (i.e., Material Safety Data Sheets).
- 6. The Shipper must have a 24-hour Emergency Phone Number with information available about the shipment.
- 7. It is the responsibility of EHS to assist in the packaging, shipping and receiving of hazardous materials and dangerous goods.

## Import Permit

Etiologic agents, infectious materials or vectors containing infectious agents that are imported from foreign locations outside the United States for domestic use (educational, scientific, commercial, etc.) are required to have an importation permit issued by the Health and Human Services Division (Center for Disease Control and Prevention – CDC). Importation permits are issued only to the importer, who must be located in the United States. Contact EHS if an importation permit is required.

## Packaging Requirements

Diagnostic Specimens or Biological Product shipments require triple packaging. This applies to both types of shipments, and is also recommended for all nonhazardous biological shipments. Primary container – Use screw-cap conical test tubes with adhesive tape around screw cap. Label tube with Biohazard label. Absorbent material must be placed between the primary and secondary container. The quantity of the absorbent material should be sufficient enough to absorb all liquid in the shipment.

- 1. <u>Secondary Container</u> Includes a watertight plastic bag that seals.
- 2. Outer Shipping Container Sturdy package (i.e., corrugated cardboard) (Styrofoam boxes, plastic bags, or paper envelopes are unacceptable outer containers for shipping biological materials.) Proper labeling must be provided on the exterior portion of the box.
- 3. Dry Ice Shipments To keep samples frozen, use dry ice. Styrofoam and cardboard both allow dry ice vapors to escape, so dry ice must be placed only OUTSIDE the secondary packaging. Packaging dry ice inside impermeable (secondary container) or a screw cap container may cause your shipment to explode. Shipping biological specimens on wet ice should not be attempted. Use frozen gel packs.
- 4. Labeling Packages A Biohazard symbol must be attached to the package when clinical specimens are enclosed. Check with the transportation carrier to determine its labeling requirements for dry BICHAZAB ice. International Air Transport Authority regulations require a "Class 9" miscellaneous diamond label during transport. When shipping infectious agents on dry ice, the dry ice must be listed on the declaration of hazardous goods as UN 1845.

## Transferring or Receiving Select Agents

Departments transferring or receiving select agents must be registered with the CDC and each transfer of a select agent must be documented (42 CFR 72.6).

## Contact Information

Questions pertaining to infectious agents or biological materials should be directed to EHS. EHS must be notified within five days when shipments of infectious materials are being shipped, transferred, or received at the University. A copy of completed shipping documents shall be sent to the EHS department.



## VII. Accidental Exposure / Emergency Response

If someone has been injured or is experiencing an emergency, contact:

UNC Police Communications:	911 (campus phone)
	351-2245 (off-campus phone)

In the event a spill or contamination with potentially hazardous biological material has occurred contact:

UNC Police Communications:	911 (campus phone)
	351-2245 (off-campus phone)

Describe any hazards and warnings to the Police Communication center. The UNC Police Communications Center will contact Environmental Health and Safety personnel.

#### Bloodborne Pathogen Cleanup Definitions

Below are a list of definitions for bloodborne pathogens cleanup.

- 1. <u>BBP Small Spill</u>: A volume that is easily managed with a minimal amount of decontamination equipment and materials.
- 2. <u>BBP Large Spill</u>: A volume that would require more than one person, large amounts of decontamination equipment and materials, and/or contamination of objects that would prove difficult to decontaminate, i.e., rugs, mattresses, furniture, electronic gear.
- 3. <u>BBP Major Spill:</u> Large amounts of blood and/or tissue (usually as a result of a homicide, suicide, knifing, etc.).
- 4. <u>Contamination:</u> presence or reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.
- 5. <u>Disinfect:</u> chemical agents to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.
- 6. <u>Personal Protective Equipment (PPE)</u>: specialized clothing or equipment worn for protection against a hazard; does not include general work clothes (e.g., uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard.

#### Responsibility for Cleanup

A bloodborne spill will be assessed by UNC personnel, Police Department, and/or EHS. A small spill can be cleaned up by trained UNC personnel. EHS shall be notified and will determine who will clean up large spills. Major spills will only be cleaned up by EHS or a certified outside contractor.

Personnel shall also follow their departmental clean-up guidelines for a bloodborne pathogen release.

## VIII. Biological/ Medical Waste Management

This section describes the proper waste management guidelines for biological / infectious waste at UNC. Medical waste (human infectious agent), Biological waste (non-human disease agent), and Solid waste (miscellaneous materials exposed to human infectious agents) are the categories of Biohazard waste at UNC.

## Waste Packaging and Containers (Sharps)

All biohazard / biological waste must be placed in Biohazard bags (red in color) or containers and display the International Biohazard Symbol (See Section V.) and have one of the following phrases on the container: Medical Waste Infectious, Infectious Waste, or Bio hazardous Waste.

The generator of waste must ensure that the bags / containers are properly sealed and labeled.

Sharps must be packaged in approved sharps containers meeting the same labeling requirements as bags. Sharps containers shall not be used for the disposal of chemicals or radioactive materials. Sharps containers should only be used for sharps. Once a sharps container is full, the sharps container should be capped or sealed and then placed in a biohazard container.

## Waste Generator Requirements

The generator (contact person) shall complete a UNC Hazardous Materials / Waste tracking tag and attach to the waste. The top copy of the tag is sent to Environmental Health and Safety (EHS). Contact the (EHS) to make arrangements for the Biohazard waste to be picked up and removed.

EHS will have waste properly picked up and transported for disposal. EHS is responsible for maintaining waste disposal manifests on file.

Under no circumstance shall biological/medical waste become a health or environmental hazard or be allowed to become a nuisance. Biological/medical

waste that causes a nuisance condition (foul odor) shall immediately be refrigerated, frozen and/or disposed of.

#### Autoclave Waste

Autoclaving is the only form of treatment for biological hazardous waste at UNC. Autoclaving must ensure complete treatment of the waste such that no portion of the container of bulk volume of waste remains untreated, and therefore will not present an endangerment to facility personnel or the public.

Regulations have specific prohibitions on the disposal of all items bearing either an international biohazard symbol or any wording indicating that the items contain infectious waste, bio hazardous waste or medical waste. In order to dispose of treated medical waste as trash, the autoclave bag must not be red nor contain any words or symbols indicating that it contains medical waste.

To provide for proper identification of Biohazard materials in the laboratory it's recommended that an outer secondary container, such as a trash receptacle/bag is used, and affix a biohazard symbol to the exterior surface. This allows the material to be clearly identified in the lab.

Once the material is autoclaved, the material shall be placed inside another bag (preferably black). This allows the material to be disposed of in the solid waste stream.

Sharps are prohibited from disposal in autoclave bags.

Departments that are autoclaving waste shall maintain a written log on all waste that is autoclaved. This log shall contain the name of operator, date, time, approximate weight or volume of waste autoclaved, and the temperature of material. Each department shall also maintain maintenance and calibration records of autoclave equipment used.

#### Untreated Medical Waste

Untreated infectious waste from non-household sources may not be disposed of in a solid waste disposal site or facility. Untreated waste shall be disposed of in the proper waste locations (see Appendix A) or autoclaved. For proper autoclave procedure, see the previous section "Autoclave Waste".

There shall be no compaction of infectious waste before treatment.

## IX. Training Requirements

Training is required for any UNC employee that handles biological or infectious materials / waste. This training program shall consist of:

## Laboratory Biological Safety

The Principal Investigator (PI) is responsible for the training of everyone working in his/her laboratory. Training is possibly the single most important action a PI can take to promote a safe and healthy laboratory. At a minimum, training will consist of the following:

- 1. Basic Laboratory Safety Training
- 2. Specific Laboratory Biosafety Training
- 3. Medical Waste Management Training
- 4. Blood Borne Pathogens Training (if necessary)

The Principal Investigator (PI) shall include generalized training for the biosafety level at which the laboratory operates and specialized training for specific hazards present in that laboratory.

#### BioSafety Level 1

Operators in laboratories operating at BioSafety Level 1 (BSL1): Training must be developed to document all standard and special practices, safety equipment and facilities related to work at BSL1 have been addressed. This training shall be reviewed annually and proper recordkeeping will be kept within the department.

## BioSafety Level 2

Operators in laboratories operating at BioSafety Level 2 (BSL2): Training must be developed to document all standard and special practices, safety equipment and facilities related to work at BSL2 have been addressed. A CDC Select Agent may be present and should be noted on training documentation. This training shall be reviewed annually and proper recordkeeping will be kept within the department.

## Biological Waste Management/Blood Borne Pathogens

Blood Borne Pathogens Training is necessary for any UNC employee or student who works with human blood, human blood components, and products made from human blood, human organs, human body fluids or other infectious materials / waste. This training program shall consist of:

1. Information regarding regulatory text of this standard and an explanation of its contents.

- 2. Appropriate methods for recognizing tasks and other activities that may involve exposure to blood or other potentially infectious materials.
- 3. Explanation of the use and limitations of methods that will prevent or reduce exposure including engineering controls, work practices, and personal protective equipment (PPE).
- 4. Information on types, basis for selection, proper use, location, removal, handling, decontamination and proper disposal of PPE.
- 5. Information on appropriate actions to take in case of an emergency, including contact information.
- 6. If an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be required.
- 7. Explanation of the signs, labels and color coding requirements.

Training shall be conducted within 2 weeks of initial assignment or task that may involve Biological Infectious materials. Refresher training shall be provided annually thereafter.

#### Recordkeeping

All biological records must be maintained for three years.

Training records must include the dates of training sessions, contents or a summary of the training session, name of person conducting the training, and names of persons attending the training sessions.

## Permanent Bio-Hazardous Waste Container Locations

Facility	Location
Butler Hancock	Athletic Training Room
Campus Recreation Center	Front Desk Area (Rm 120)
Gunter Hall	School of Nursing,
	Laboratory, Rm 1610
Gunter Hall	Speech Language and
	Audiology Clinic (Rm 1400)
Holmes Dining Hall	Basement 0210
Parsons Hall	Custodial Area
Ross Hall	Biology Department (Rm
	1537
South Hall	Custodial Area (Rm 089)
Tobey-Kendel Dining	Basement (M082)
Wilson Hall	Custodial Area (Rm053)
University Center Dining	Kitchen
Tobey-Kendel Dining	Kitchen
Ben Nighthorse Campbell	Behind the reception area
Center	
Holmes Dining	Kitchen