

UT Health Science Center: HM5201 - Regulated Medical Waste Policy	
Version 2	Publication Date: 10/13/2023

Objective

This procedure is intended to prevent harmful exposure to bloodborne pathogens and comply with federal and state regulations for the management of bloodborne pathogens and regulated medical waste (RMW). Regulated Medical Waste is material that may be contaminated with blood, bodily fluids, or other infectious materials, as well as sharps. RMW must be properly handled, collected, segregated, packaged, stored, labeled, transported, and disposed to minimize the risk of transmitting infection or endangering human health.

Scope

This procedure covers the Memphis campus of the University Tennessee Health Science Center and applicable to all students, faculty, and staff within labs, clinics, patient care units, colleges and their departments, and any entity that generates a waste stream that may be contaminated by human blood, body fluids or other potentially infectious materials, thus posing a significant risk of transmitting infection.

This procedure is also applicable to all tenant units of the University of Tennessee Health Science Center. Specific guidance will be provided in this document.

Definitions

Regulated Medical Waste: Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and microbiological wastes containing blood or other potentially infectious materials. Tennessee Department of Environment and Conservation provides guidance and can be found in Rule 0400-11-01-.01(2).

BSL-1 materials: Agents and organisms not typically associated with disease in healthy adults that are handled at biosafety level-1 (examples include E. coli K12, Bacillus subtilis, S. cerevisiae, adeno-associated virus, and laboratory animals).

BSL-2 materials: Infectious agents having the potential for causing disease or adverse health effects in healthy adult humans that are handled at biosafety level-2 (examples include Salmonella spp., Staphylococcus aureus, Hepatitis B virus, lentiviral vectors). Infection is typically the result of direct contact, such as a needle stick, splash to mucous membrane or nonintact skin, or ingestion.

UT Health Science Center: HM5201 - Regulated Medical Waste Policy	
Version 2	Publication Date: 10/13/2023

BSL-3 materials: Infectious agents having the potential for causing disease in healthy adult humans through the respiratory route, that are handled at biosafety level-3 (examples include *Mycobacterium tuberculosis*, SARS coronavirus).

Biomedical material: Includes human or animal blood, serum, tissue, cultured cells or cell lines and cultures of infectious or microbial agents that are handled in a laboratory or patient care area. Refers to the products themselves or common lab supplies that become contaminated with these materials.

Pathological waste: tissues, organs, body parts, and body fluids) that are removed during surgery and autopsy.

Human blood and blood products: Waste blood, serum, plasma, and blood products.

Cultures and stocks of infectious agents (microbiological waste): Cultures and stocks of infectious agents, including specimen cultures from medical and pathological labs, cultures and stocks of infectious agents from research and industrial labs, wastes from the production of biological, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate and mix cultures.

Contaminated sharps: Contaminated hypodermic needles, syringes, scalpel blades, Pasteur pipettes, and broken glass.

Isolation waste: Generated by hospitalized patients isolated to protect others from communicable disease.

Contaminated animal carcasses, body parts and bedding: Contaminated carcasses, body parts, and bedding of animals that were intentionally exposed to pathogens in research in the production of biologicals, or in the *in vivo* testing of pharmaceuticals.

Other Potentially Infectious Materials (OPIM): Any unfixed tissue or organ (other than intact skin) from a human (living or dead); human body fluids excluding sweat (e.g., blood, saliva, pleural fluid, etc.).

Generator: Any person, by site, whose act or process produces RMW or whose act first causes a RMW to become subject to regulation.

Point of origin: The point at which RMW is generated and used in conjunction with GENERATOR. The point of origin is used for regulatory tracking mechanisms concerning RMW.

Sharps: All discarded sharps (i.e., hypodermic needles, syringes, Pasteur pipettes, broken glass, scalpel blades) used in patient care or which have come into contact with infectious agents during use in medical, research or industrial labs.

UT Health Science Center: HM5201 - Regulated Medical Waste Policy	
Version 2	Publication Date: 10/13/2023

Bloodborne Pathogens (BBP): Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Contaminated: The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Decontamination: The use of physical or chemical means 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.

Disposal: The final disposition of the RMW following decontamination. This is typically accomplished via landfilling and is performed following decontamination by the University’s contracted provider of RMW disposal services. In some cases (animal carcasses) incineration is utilized as a disposal method by the contractor or the University.

Exposure Control Plan: This instruction provides for uniform policy for protection of OSHA personnel who, as part of their job, face reasonably anticipated exposure to bloodborne pathogens.

Procedures

The following minimum framework shall be met by the University of Tennessee Health Science Center and its associated units. More detailed procedures and guidelines shall also apply through local guidance with the Institutional Biosafety Officer (IBO).

It must be stated that each Generator is also considered a point of origin. Generators must have their own sub accounts to the main UTHSC contract and are responsible for the regulations as prescribed by this document, college and departmental procedures, and other regulatory requirements.

Generators are often co-located on the University of Tennessee Health Science Center campus with other departments. In the case that a generator shares a location with other generators, and they are disparate of department, college, or otherwise, then that generator must independently follow this policy as prescribed regardless of any local agreements between departments.

At no time shall RMW be generated and mixed with other generator RMW.

I. Exposure Control Plan

Work areas generating RMW are covered by the UTHSC Exposure Control Plan and must adhere to the handling requirements described in that plan.

UT Health Science Center: HM5201 - Regulated Medical Waste Policy	
Version 2	Publication Date: 10/13/2023

II. Regulated Medical Waste

- RMW must be carefully containerized to eliminate the chances of exposure during transport to its ultimate disposal site. RMW red bags and boxes are imprinted with the universal biohazard symbol, or the word “biohazard”, and the generator name and address. Red RMW bags must always be housed in a rigid container. Red bags are for items that are not expected to poke or tear the bag when it is lifted.
- Open rigid containers lined with a red bag are acceptable in laboratories, since these are restricted environments, but not in public areas such hallways. Open rigid containers lined with a red bag are not permitted in patient care areas. These containers must have a lid that is closed when the container is not being used; pedal bins are preferable. Red bags that are ready for collection must be taped or tightly tied closed.
- RMW cannot be maintained in laboratories in a putrescent state and must therefore be collected on a regular basis.
- At no time shall RMW be disposed of in containers or bags other than prescribed by this document, OSHA, CDC, or other regulatory guidelines.
- RMW shall NOT be handled by other than the point of origin generator trained staff who are familiar with the RMW and its exposure hazards. At no time will Campus Facilities staff, or other personnel who are not directly part of the generator waste stream handle RMW.
- RMW containers awaiting pickup and disposal by contracted waste vendors shall be secured in a location where it is not directly accessible to the public.
- PPE shall be worn at all times while handling RMW.

III. Contract Management

- UTHSC will maintain a contract vendor for RMW pickup and disposal for all campus generators. This account is centrally billed and controlled by the UTHSC Office of Research. The authorization process for establishing sub-accounts, or changes in site pickup location are processed by the Campus Safety, Research Safety Affairs, or IBO. Contact the IBO to request any changes or new accounts.
- Direct contact with the vendor will not be honored. Generators will not be allowed to contact Stericycle directly to make changes to the account, pickup sites, or any administrative change.
- Generators will be allowed to contact Stericycle for emergency pickups, request supplies, or other operational matters pertaining to their location and the disposal of RMW.

IV. UTHSC Tenants

UT Health Science Center: HM5201 - Regulated Medical Waste Policy	
Version 2	Publication Date: 10/13/2023

- The University of Tennessee Health Science Center will conduct a review of the regulated medical waste (RMW) generator locations on the campus annually. For a medical provider that generates RMW, when a review of the leasing agreement with the UTHSC contracts office determines disposal of the RMW is not covered under the lease, it is imperative that the practice contract with a licensed provider for these services.
- Per regulation, RMW waste must be packaged and disposed in an approved manner. Several qualified vendors in the area are available if a contract is not currently in place. Per Tennessee, EPA, and OSHA regulations, UTHSC cannot accept or remove RMW from a medical practice.
- Willful and knowing violations can potentially lead to criminal prosecution, loss of tenancy, etc.

V. Recordkeeping

The Exposure Control Plans is to be kept onsite and available to all faculty, staff, and students that request it for familiarization and review. Plans are to be reviewed and updated at least annually.

Training certificates shall be kept locally with the generator. These certificates shall be available for review by Campus Safety or Research Safety.

VI. Training and Information Requirements

All generators must annually complete Bloodborne Pathogens training that includes the information about the segregation, handling, and management of RMW. All employees that package RMW for transport or sign shipping papers must complete Hazardous Materials training compliant with US DOT requirements. It is the responsibility of each supervisor to ensure that personnel training is documented and up to date. Training is provided by the IBO. Training may also be available from the RMW disposal vendor.

Responsible Official & Additional Contacts

Subject Matter	Office Name/ Contact	Telephone Number	Email/Web Address
Policy Clarification and Interpretation	Research Safety/ Tim Barton	(901) 448-7374	tbarton4@uthsc.edu
Policy Training	Research Safety/ Tim Barton	(901) 448-7374	tbarton4@uthsc.edu

UT Health Science Center: HM5201 - Regulated Medical Waste Policy	
Version 2	Publication Date: 10/13/2023

Related Policies/Guidance Documents

[UT System Safety Policy SA0400](#) Hazardous Material Safety

[UT System Safety Policy SA0100](#) Safety and Environmental Health Program

[UT System Safety Policy SA0700](#) Safety and Environmental Health Responsibilities

OSHA CPL 02-02-060 - Exposure Control Plan for OSHA Personnel with Occupational Exposure to Bloodborne Pathogens

29 CFR 1910.1030, Bloodborne Pathogen Standard

OSHA, <https://www.osha.gov/Publications/osha3186.pdf>, Bloodborne Pathogens and Hazard Communications Standards

Centers for Disease Control, <https://www.cdc.gov/niosh/docs/2009-111/pdfs/2009-111.pdf>, Complying with OSHA Bloodborne Pathogens Standard

State of Tennessee, Rule 0400-11-01-.04(2)(k)(4), Tennessee Department of Environment and Conservation