# Pathological Waste Management and Disposal



#### Overview

Pathological waste consists of recognizable human derived tissues, organs, and body parts, as well as vertebrate animal-derived tissues, organs, and body parts used in research at Weill Cornell Medicine. Pathological wastes must be disposed of by interment or incineration.

This Update provides guidelines for human and animal pathological waste collected as regulated medical waste, which must be disposed of via incineration. Pathological waste must be separated from standard regulated medical waste (RMW), also known as "Red Bag" waste, which is autoclaved then disposed of in a landfill. For all other biological wastes, please refer to the <a href="EHS Waste">EHS Waste</a> Disposal Procedures manual, or contact Environmental Health and Safety (EHS).

# **Applicability**

This Update applies to all WCM students, faculty, and staff who create human and animal pathological waste that includes recognizable tissue, organs, and/or body parts. Teeth and adjacent structures of bone and gum and body fluids removed during surgery, autopsy, or other medical procedures are not considered pathological waste.

The disposal procedures outlined in this Update are in conjunction with the red bag waste disposal services provided by WCM Research Animal Resource Center (RARC) and/or WCM Housekeeping. If red bag waste disposal services are not coordinated through RARC or WCM Housekeeping, contact EHS.

This Update does not apply to pathological wastes generated in New York-Presbyterian Hospital (NYP). NYP clinical areas must manage wastes as indicated by the policies of NYP Environmental Health and Safety which can be reached at 646-NYP-SAFE (646-697-7233).

#### **Definitions**

**Human Pathological Waste** includes recognizable human-derived tissue, organs, and body parts that must be disposed of via internment or incineration. This excludes teeth and adjacent bone and gum structures; body fluids removed during surgery, autopsy, or other medical procedures; specimens of body fluids and their containers; and discarded materials saturated with body fluids other than urine.

**Research Animal Pathological Waste** includes vertebrate animal-derived tissue, organs, carcasses, and body parts that must be disposed of via incineration.

Standard Regulated Medical Waste – "Red Bag" Waste includes solid, non-sharps waste contaminated with biological material, which must be autoclaved and disposed of in a landfill.

### Responsibilities

- Waste Generators including students, faculty, staff, and visitors who create animal and human-derived pathological waste must ensure that all associated wastes are handled, stored, managed, and disposed of as indicated in this Update. Personnel who package, ship, or sign Medical Waste Tracking Forms for pathological waste shipments must complete Regulated Medical Waste Shipper Training with EHS.
- Environmental Health and Safety (EHS) acts as a resource to WCM personnel, providing technical assistance and guidance on
  pathological waste management. EHS provides Regulated Medical Waste and Pathological Waste Shipper Training that includes the
  proper packaging, handling, and shipping of pathological waste. For all other biological waste disposal inquiries, please refer to the
  Waste Disposal Procedures.
- Housekeeping/Facilities coordinates the shipment and disposal of pathological wastes within areas serviced by WCM
  Housekeeping and supplies red regulated medical waste bags and fiberboard boxes.
- Research Animal Resource Center (RARC) coordinates the shipment of pathological waste with WCM Housekeeping.





# Managing Pathological Waste

Animal Pathological Waste - Animal pathological waste includes vertebrate animal-derived tissue, organs, carcasses, and body parts. This waste is managed by RARC using the approved RARC disposal procedures. Contact RARC at 212-746-1022.

Human Pathological Waste - Human pathological waste disposal is coordinated through WCM Housekeeping only in Housekeepingsupported areas. This service excludes whole cadavers, skulls, torsos, and fetuses. Contact EHS for assistance with these human remains, and/or locations not serviced by WCM Housekeeping.

## **Training**

Regulated Medical Waste Shipper Training must be completed by personnel responsible for packaging and labeling regulated medical waste containers and/or signing Medical Waste Tracking Forms. This training is required upon hire and every three years thereafter. Registration and training are administered via the Weill Learning Management System (LMS), inclusive of instructor-led and web-based training programs. Click here for additional information regarding the LMS registration process.

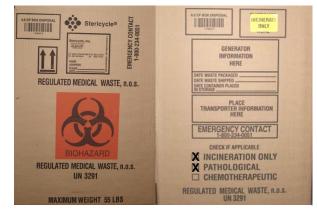
- WCM Students, Faculty and Staff Training Registration via MS
- Instructions for External User/Non-WCM Employee Training Registration

# Generators Responsible for the Packaging of Pathological Waste

- DRAIN "SATURATED" PATHOLOGICAL WASTE: Sufficiently drain all material before placement into a red bag. Certain organs can retain liquids after drainage and may need to be bagged into thicker, high-density polyethylene bags (HDPE) to prevent leakage. HDPE bags and absorbents must be purchased separately by each group.
- BAG THE WASTE INTO THE INITIAL RED BAG: Once sufficiently drained, place collected pathological waste into a red bag. If red-bag material is "saturated" with blood or other fluids, double or triple-bagging, or using absorbents is recommended. Properly close all red bags when full or at the end of each day. This includes twisting the red bag closed at the top and hand-tying it into a single knot to seal or using closure products such as zip ties. Pathological waste must be refrigerated to prevent decomposition and the development of pungent odors.
- PACKAGING AND BOX SETUP: Follow RARC procedures for animal pathological waste. Ensure that the following guidelines are followed when packaging the RMW fiberboard box:
  - Line the fiberboard box with a WCM-labeled red bag.
  - Place initial sealed red bags into a labeled red bag lining the RMW fiberboard box.
  - Do not exceed a weight of 50lbs.
  - Seal closed all box flaps with 2-inch wide pressure-sensitive tape or equivalent by taping all edges on the top and bottom flaps.
  - Close and seal each box according to the manufacturer's specifications.
  - Each box must be in good condition and must not be crushed, torn, saturated, or compromised.
- PACKAGE LABELING: Regulated medical waste fiberboard boxes must have the following:
  - Check the box "Incineration Only" on the side of the box,
  - Apply the yellow "Incineration Only" sticker provided by WCM Housekeeping,
  - Check the box indicating "Pathological" waste on the side of the
  - Write the name of the group where the box was created (e.g., Autopsy, Gross Anatomy, RARC).
  - Weigh each box separately and write this weight on the side of each box.



Example: Regulated Medical Waste Bag



Example: Fiberboard Regulated Medical Waste Box

**STORE:** Store the box in a secured regulated medical waste storage area equipped with refrigeration, and label the box with, at a minimum, the universal biohazard symbol or the word "biohazard". Coordinate RMW fiberboard box drop-off with WCM Housekeeping at least 2-3 days prior to shipment.



# Request for Disposal

 HOUSEKEEPING SUPPORTED AREAS: Contact Housekeeping at 646-962-9912 a minimum of 2-3 days before the intended drop-off date with the number of correctly labeled pathological waste boxes intended for shipment. The generator must notify Housekeeping and arrange for a specific drop-off time.

Pathological waste is created and shipped from 3 main locations:

- Belfer Research Building including 1300 York Avenue (Main Research Building)
- "S" Building (Hamad Bin Khalifa Biomedical Research Building)
- Gertrude & Louis Feil Family Research Building
- 2. Housekeeping Pathological Waste Acceptance Policy: Housekeeping personnel are responsible for reviewing RMW fiberboard boxes prior to acceptance into the RMW Storage Area. Housekeeping personnel will complete the Pathological Waste Acceptance Form, which lists packaging, labeling, and box integrity requirements. Housekeeping reserves the right to refuse any non-compliant pathological waste boxes.
- 3. AREA NOT SUPPORTED BY HOUSEKEEPING: Contact EHS to identify and establish pathological waste disposal services in these locations.

### Prior to Shipping

- TRAINING: Confirm only Regulated Medical Waste Shipper Training certified personnel finalize packaging and sign the Medical Waste Tracking Form.
- 2. SHIPPING LABELS: The regulated medical waste shipping label must be adhered to each fiberboard pathological waste box being shipped. The date of shipment must be written on the RMW fiberboard box. The disposal contractor provides the shipping labels either before or during the time of shipment. The shipping label will also list the shipment's Medical Waste Tracking form number.
- 3. **RECORD RETENTION:** Retain copies of the Medical Waste Tracking Forms for a minimum of three years. Obtain disposal facility-signed copies of Medical Waste Tracking Forms within 30 days of shipment and retain with original documents.

#### References

- OSHA 29 CFR, Part 1910 RMW Transport Labeling
- USDOT 49 CFR, Part 173, Subpart B Additional Requirements for non-bulk packagings and packages
- NYDEC Subpart 360-10: Regulated Medical Waste Storage, Transfer, and Disposal
- Stericycle Packaging Procedures for Medical Waste Disposal
- EHS Waste Disposal Procedures Manual