

POLICY TITLE: WASTE MANAGEMENT, DISPOSAL, AND RECYCLING**Former Policy Title:****POLICY PURPOSE:**

The purpose of this policy is to define the various types of wastes generated in the healthcare setting and to provide direction on safe, compliant guidelines for the handling, disposal, or recycling of this material.

POLICY STATEMENT:

It is the policy of Lancaster General Health (LG Health) that all information, equipment, or waste generated at any of its facilities will be disposed properly in accordance with all applicable federal, state, and other regulatory guidelines.

APPLICABILITY/SCOPE/EXCLUSION:

All LG Health entities and LG Health employees will follow this policy.

DEFINITIONS:

Confidential Information – Facility Contact: Director, Health Information Management and Director, Environmental Services. Is defined as Protected Health Information (PHI), corporate financial, human resource/payroll, and all other information noted as sensitive and/or secret.

Hazardous Chemical Waste – Facility Contact: Laboratory Operations Manager. Chemical substances whose disposal into the environment requires special disposal procedures.

Hazardous Drug Waste – Facility Contact: Director, Environmental Services; Pharmacy Director; Oncology Unit Manager. Waste resulting from the administration of anti-neoplastic agents to patients to combat the effects of cancer. These agents are known to have teratogenic, mutagenic and or carcinogenic effects when administered to humans. Refer to **Management of Environment of Care: Pharmaceutical Waste Management Program** for waste stream management. A drug is classified as hazardous when they exhibit one or more of the following characteristics in humans or animals:

- Genotoxicity – ability to cause a change or mutation in genetic material (mutagen).
- Carcinogenicity – ability to cause cancer in animals, humans or both (carcinogens).
- Teratogenicity – ability to cause defects in fetal development or fetal malformation.
- Fertility Impairment and adverse reproductive outcomes.
- Organ Toxicity at Low Doses.
- Structure and toxicity profiles of potential drugs that mimic existing drugs determined hazardous by the above criteria (monoclonal antibodies) and others with similar chemical structure.

Infectious (Bio-hazardous) Waste – See **Appendix A** – Facility Contact: Director, Environmental Services and the Nurse Epidemiologist. Waste which is or may be contaminated by a disease-producing microorganism or material, or may harm or threaten human health (PA municipal Waste Code Article VII, Chapter 271.1).

Information System Storage Media, Software and Hardware - Facility Contact: Director IS Operations and Technical Support. Refer to Information Services Policies for Disposal of Computer System's Storage Media, Software and Hardware). Contact Information Services when disposing or transferring to a third party any of information systems, media, software and hardware.

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Non-Regulated/Regular (Municipal) Waste – Facility Contact: Director, Environmental Services.
Municipal wastes are solid materials, which in their condition at the time of disposal do not pose a toxic, bio-hazardous or radioactive threat to life and health.

Radioactive Waste (Low Level) – Facility Contact: Radiation Safety Officer. Waste resulting from utilization of licensed radioactive materials for patient treatment that may enter the waste stream as a blood and body fluid or secretion, as solid waste or its original form. Refer to Radiation Safety and Diagnostic Imaging policies for waste stream management.

Waste Gases – Facility Contact: LG Health Safety Officer. Waste gases are a result of exhaled anesthetic gases from patient procedures where anesthesia was administered.

PROCEDURE:

- It shall be the responsibility of all hospital personnel to segregate waste into the proper containers at the point of generation. In circumstances where improper segregation has occurred, the waste generated shall be treated as the most restricted type involved.
- Designated recycling containers area available for disposing of non-medical metallic containers cans including food and beverage containers.
- Recyclable cardboard will be collected and transported by Environmental Services for removal from facility.
- Broken Glass Disposal
 - Wear appropriate Personal Protective Equipment to protect from hazard.
 - Do not pick up directly with the hands and must be cleaned up using mechanical means, such as a broom, brush and dustpan, tongs or forceps.
 - Place in a
 - Contaminated broken glassware:
 - Depending on the amount/type of blood or body fluid, an absorbent powder is used to congeal the liquid before clean up.
 - Broken glassware, which may be contaminated, shall be deposited in a sharps container.
 - After the broken glassware is removed, decontaminate the surface area using the hospital germicide which is tuberculocidal.
 - Glass or sharps contaminated with body or blood fluid will be disposed in an approved biohazard sharps container.
- Batteries
 - Used batteries are to be boxed or bagged in an orange battery collection bag (available through Environmental Services).
 - Batteries at LGH Duke St. will be transported to the Environmental Services department for collection.
 - Batteries at WBH and Suburban Pavilion will be discarded by Facilities Support.
- Hazardous Chemical Waste
 - All hazardous chemical waste shall be disposed of in accordance with EPA guidelines.
 - Hazardous chemicals are stored at the site of generation until a licensed firm can dispose of

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them.

- At Duke St. the storage of hazardous chemical spill material is coordinated with the Laboratory Histology Lead and transported to the incinerator/compactor area in the basement.
- Hazardous material waste is placed in plastic containers and sealed. The containers will be labeled with the contents, including the accumulation start date. The material will be disposed by a licensed firm specializing in hazardous waste removal. Contact Environmental Services, Safety Department, or Lab Operations Manager for specific removal instructions.
- All hazardous chemicals and materials which cannot be disposed of through the processes of incineration or municipal trash removal are collected internally and then picked up by a contracted chemical disposal company.
- All hazardous chemical waste shall be appropriately labeled prior to pick up by the authorized Disposal Company. The label shall show the following information: EPA identification number, EPA waste number, name of chemical, and start date of accumulation.
- Mercury Waste
 - Shall be collected in a puncture- proof container labeled “Mercury Waste Only.”
 - Mercury waste is transported to Biomedical Engineering for coordination of offsite removal by a certified waste hauler.
- Radioactive detection monitors are installed to monitor the unintentional release of waste materials that may contain patient radioactive waste used in the course of treatment. Environmental Services monitors municipal and biohazard waste for detectable materials at which time the materials or container is quarantined until the radioactive hazard is no longer detectable or a threat to disposal practices.
- Confidential Information
 - Areas containing Sensitive Information must follow the paper recycling guidelines to assure proper disposal. Appropriate depositories must be in place in each area to secure such confidential and patient sensitive information.
 - To simplify procedures while protecting confidential information (patient information, financial information, Human Resources documents, etc) all paper must be properly held until transported for shredding. Confidential and sensitive information must not be discarded in municipal bins or other publicly accessible locations. This information must be placed in a designated destruction container within Lancaster General locations and kept in a secured/staffed area until paper is removed for shredding. This will include recycle bins or *Shred-It Lock Box Consoles*.
 - Materials with visible PHI shall not be discarded in the municipal trash stream at any time. Documents containing patient health information, confidential employee information or sensitive financial information must be placed in a secured place or secured containers until it is picked up or taken to be shredded.
 - In some cases departments may be required to maintain a destruction/disposal log, depending on physical security requirements.
 - It is the responsibility of the department manager to instruct their staff on the proper disposal of information that is consistent with LG Health policies.
 - Departments shall inform its employees that they may not destroy LG Health records unless specifically authorized to do so by written policy.

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- Employees must not destroy LG Health records unless these records (1) appear on a list of records authorized for destruction by departmental operating procedures, or (2) can be destroyed according to instructions appearing in the **Retention of Hospital Records Policy**. Destruction is defined as any action, which prevents the recovery of information from the storage medium on which it is recorded (including encryption, erasure, and disposal of the hardware needed to recover the information).
- Employees involved in the unauthorized destruction or disposal of LG Health records or information will be subject to disciplinary action in accordance with the Corrective Action Policy.
- Records and information must be retained if: (1) they are likely to be needed in the future, (2) regulation or statute requires their retention, or (3) they are likely to be needed for the investigation or prosecution of unauthorized, illegal, or abusive acts.
- Regular Purging of Information which is No Longer Needed.
 - Information shall be destroyed or disposed of when no longer needed.
 - A purge / disposal date must be noted on all information sent to off-site storage.
 - Unless the type of information is specifically listed on the Retention of Hospital Records Policy, information must be retained for as long as necessary but for no longer. Other hard copy information must be destroyed when no longer needed--generally within two years.
- Non-Regulated/Regular Waste (Municipal)
 - **Municipal Waste streams must never contain Protected Health Information (PHI), confidential materials or information/materials covered by HIPAA. Staff have the responsibility to place PHI in the appropriate waste stream in order to protect that information.** Materials that contain Protected Health Information must be discarded by the biohazard, chemotherapeutic or paper recycling waste streams as appropriate. Materials with visible PHI shall not be discarded in the municipal trash stream at any time.
 - Examples of non-regulated waste include, but are not limited to:
 - General office waste excluding documents with confidential information or patient identifiable information.
 - Discarded food items from non-biohazardous patient trays and the hospital cafeteria
 - Waste construction and demolition materials
 - Packing materials
 - Unbroken glass items
 - Biohazardous materials inactivated by the Sanipak Autoclave.
 - Collection of Non-Regulated/Regular (Municipal) Waste
 - Designated personnel shall collect non-regulated waste on schedule determined by the activity in the area served, but not less than every 24 hours.
 - Non-Regulated (Municipal) waste shall be discarded in clear or black bags. Under no circumstances shall non-regulated waste be disposed of in red, yellow or white bags.
 - Upon removal, designated personnel shall tie the bags shut and transport to the point of disposal by means of an appropriate toter.
 - Handling of Non-Regulated/Regular (Municipal) Waste

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- All general wastes shall be disposed of in appropriate, fire-resistant Underwriters Laboratory (UL) or Factory Mutual (FM) approved containers.
 - Non-regulated waste containers shall be lined with a single clear or black bag.
 - The designated personnel shall remove general wastes to the compactor on a regular schedule for disposal.
 - Designated personnel shall wear gloves when handling general wastes.
 - The building owner or Environmental Services Department shall maintain agreements with a reputable removal contractor for scheduled removal and replacement of the compactor storage unit.
 - Municipal waste must never contain confidential materials or information as defined by HIPAA (protected health information). Such PHI must be discarded in accordance with HIPAA hospital policies.
- **Manifests** - There are numerous pieces of documentation associated with EPA regulations that must be completed and signed in triplicate with copies to be retained by LGH. The authorized individual who meets the chemical waste disposal parties will sign the appropriate paperwork and retain copies onsite. The hazardous waste hauler will send one copy of the Uniform Hazardous Waste Manifest to the disposal state's address. Refer to the **Hazardous and Non-Hazardous Manifest Retention Policy** for more information.
 - **Autoclave Shutdown** - In the event of an autoclave shut down, boxed biohazardous waste is kept on-site for a maximum of three days. If the shut down is greater than three days, an outside contractor will dispose of the biohazardous waste for off-site incineration. The Environmental Services Department shall maintain manifesting activities relative to waste shipped.

ROLES/RESPONSIBILITIES:

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- All Employees
 - Follow the procedures in this policy, as well as the department specific procedures concerning proper disposal.
 - Report any exposures to hazardous materials immediately.
 - Report improper disposals upon discovery.
 - Wear appropriate Personal Protective Equipment (PPE) when needed.
 - Properly segregate and dispose of wastes.
 - Assist with removal of filled receptacle liners, and replacement with appropriate liners. All receptacles are double bagged. When removed, the bags are tied.
 - Utilize appropriate spill kits for biohazard, chemical, chemotherapeutic and hazardous drug spills.
- Department Leaders
 - As needed, developing and implementing department-specific policies and written procedures for the scope of proper disposal practices for waste streams in the department.
 - When applicable, coordinating storage and removal of radioactive waste with the Radiation Safety Officer.
 - Ensure that employees follow the procedures outlined in this policy and department-specific policies and practices for safe handling of materials.
 - Ensure that tasks involving proper disposal are performed safely and with the correct Personal Protective Equipment (PPE) when needed.
 - Ensure that proper notifications are made to Employee Health when accidental and unprotected contact and exposures occur to employees or staff.
 - It is the responsibility of each department manager to orient and train their employees to the waste management requirements specific to that department.
 - Provide education for staff on proper waste handling, segregation, and removal procedures, when new products are introduced, and as well as required by departmental standards and regulatory agencies. This includes general waste, infectious waste, universal precaution, exposure control plan, radiological waste, chemicals (Hazard Communication and Safety Data Sheets), and confidential information handling and disposal.
 - Provide training to staff on cleaning up spills of hazardous waste as needed.
- Environmental Services:
 - Placement of all indoor waste collection receptacles that are UL listed at LGH Duke St., WBH, and Suburban Pavilion.
 - Removal of all filled receptacles, receptacle liners and replacement with fresh liners appropriate to the designation of the receptacle.
 - Transporting waste in appropriate containers to on-site disposal areas
 - Disposal of biohazardous waste in accordance with applicable regulations by autoclaving via the Sanipak Autoclave system.
 - Coordinate and arrange for pickup of biological waste streams marked for outside disposal.
 - Documenting and manifesting of all regulated waste shipped onto and from the premises if

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applicable.

- Removing, transporting and disposal of municipal waste.
- Cleaning of all waste receptacles and transportation carts at indicated intervals, Assisting in response for cleanup of spills
- Removal of special biohazardous waste and chemotherapeutic waste offsite by a certified waste hauler (includes pathology waste).
- Plant Engineering and Facilities Support Responsibilities
 - Placement and maintenance of all outdoor waste collection receptacles.
 - Maintaining municipal receptacles for removal
 - Baling and shipping of corrugated product waste for recycling
 - Comply with applicable waste disposal, including universal waste compliance with materials used in the department
- Pharmacy Responsibilities
 - Segregating Chemotherapeutic wastes and Hazardous Drug waste products for Pharmacy locations
 - Monitor and implement pharmaceutical waste disposal practices that comply with EPA, DOT and other regulatory agencies.
 - Coordinate and direct internal Pharmaceutical Waste Program with contracted hauler and provide education with clinical enduser as needed to maintain compliance.
 - Removing filled receptacle liners and replacement with new liners, and
 - Responding to emergency clean up of chemotherapeutic waste / hazardous drug spills within the department.
- Infection Control, Employee Health, Safety Department, and Environment of Care
 - Conducting periodic audits of waste disposal practices to ensure segregation as needed
 - Assisting with training or personnel in proper disposal and usage of PPE.
 - Assisting Employee Health in the follow up of employee exposure incidents.
 - Coordinate medical surveillance as appropriate.
- Laboratory
 - Coordinate offsite hauler for chemical hazardous waste.
 - Maintain chemical waste removal documentation.

APPENDICES:

Waste Management, Disposal and Recycling Policy – Appendix A – Biohazardous Waste

FORMS: N/A

REFERENCES:

Corrective Action Policy

Hazardous and Non Hazardous Waste Manifest Policy

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Review History: 1/1/2017, 1/1/2020, 1/1/2022

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Hazardous Substance and Spill Procedures Policy

Industrial Hygiene Services Policy

Management of Environment of Care: Pharmaceutical Waste Management Program

Radiation Accident Patient Care and Treatment Policy

Retention of Hospital Records Policy

Safeguarding Confidential Information Policy

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WASTE MANAGEMENT, DISPOSAL & RECYCLING
APPENDIX A – Guidelines for Infectious Biohazardous) Waste

A. Identification:

Biohazardous waste is discarded in red plastic trash bags comprising a strength of at least 1.8 mils.

Examples of "Red Bag" waste are:

- All human body parts and tissue (Not for Autoclave processing-for off-site removal only).
- Specimens of blood and body fluids and their containers-with or without visible blood
- Surgical and pathological specimens (Not for Autoclave processing; for off-site removal only).
- Gloves visibly contaminated with blood or body fluids.
- Transfusion bags
- Tubes or tubing with visible blood and/or body fluids.
- Metal (non-sharp) which is contaminated with blood or body fluids.
- Gauze or dressings saturated with blood or other body fluids.
- Disposable underpads or underpants, sanitary napkins or tampons used in the care of a patient with bloody drainage or excretions.
- Anything contaminated with body fluids or waste (unless item is reusable, i.e., mop)
- Blood or body fluid filled containers
- Culture dishes
- Implantable devices

Used and unused disposable needles and other sharps are to be disposed of in approved sharp disposal containers. Sharps include, but are not limited to:

- IV cannulas (catheters) and stylets
- Central line and arterial line catheters, introducers and guide wires disposable razors
- Venipuncture needles
- Lancets
- Scalpel blades
- Pasteur pipette
- All needles, including blunt and safety needles
- All syringes used in the treatment of patients
- Slides and cover slips
- Broken glass
- Medical Hardware devices*
- Disposable Instruments*

*Large and/or heavy gauge disposable instruments and medical hardware will be segregated into large (5 gallon) sharps containers. These heavy gauge metal objects cannot be processed through the Sani-Pak grinder. Other LG Sites will have the biohazardous sharps and red bag trash removed from the site by the certified waste hauler.

Any other waste generated in the diagnosis, treatment or immunization of patients and equipment and equipment parts contaminated with etiologic agents, is to be considered and treated as biohazardous waste, and disposed of in red bags.

B. Locations:

Biohazardous wastes are generated in any patient care area of the hospital or satellite locations, as well as the pathology area and laboratory. Pathological (tissue) waste is segregated and removed off-site by a biohazardous waste hauler.

C. Collection:

- Biohazardous wastes shall be separated into two categories at the point of generation.
 - Biohazardous waste shall be deposited in designated biohazardous waste receptacles.
 - Used and unused disposable sharps which shall be deposited in approved sharps disposal container.
- Biohazard waste shall be placed in containers which are closable, constructed to prevent leakage of fluid during handling, storage, or transport; and will be color-coded or labeled with the words "Biohazardous waste" and the international biohazard label fixed on the container. Large and/or heavy

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- gauge disposable instruments and medical hardware will be segregated into large (5 gallon) sharps containers. These heavy gauge metal objects cannot be processed through the Sani-Pak grinder. Other LG Sites will have the biohazardous sharps and red bag trash removed from the site by the certified waste hauler.
- Sharps containers shall be closed, puncture resistant, leak proof on sides and bottom, red in color labeled with a biohazard symbol label.
 - Only waste identified as biohazardous shall be deposited in these receptacles.
 - Receptacles shall be lined with two polyethylene liners which shall be red in color, containing the words Biohazard Waste and the international biohazard symbol. A minimal 1.8 mil total bag thickness is required (State of PA).
 - Red bags shall be removed by designated personnel on a regularly scheduled basis. The frequency of removal shall be dictated by activity in the area, but shall be no more than 24 hours from the date the waste was first placed into the receptacle.
 - All bags will be individually tied and placed in a toter cart for transport through the hospital or facilities.
 - Glassware contaminated with biohazardous materials and subject to breakage shall be containerized and transported in corrugated biohazardous waste boxes (designed and identified as such) or sharps disposal containers.
- D. Handling of Biohazardous Waste
- All biohazardous waste shall be segregated at the point of origin.
 - Sharps containers are not to be placed inside red bags. Sharps containers are to be sealed and secured and placed for removal separately. Sharps may be placed in designated red bags and boxes at the Lancaster General Health Campus and Women & Babies Hospital which is removed offsite by the certified waste hauler.
 - All biohazardous waste bags/containers shall be tied shut individually.
 - Transport toter shall be identified with the universal biohazard symbol and be constructed so as to be leak proof, rigid, puncture-resistant and tightly lidded. The transport toter shall be decontaminated per the established departmental procedure.
 - Personal Protective Equipment (PPE) shall be worn during handling of all biohazardous waste. Gloves shall be worn at all times.
- E. Transportation of Biohazardous
- Red bags and sharps containers that are closed and/or sealed are transported to the Sanipak Autoclave area in the basement via red toter containers. Sharps containers are carted to the basement.
- F. Disposal / Incineration
- Biohazard (red bag) trash shall be autoclaved and rendered as 'municipal trash' (LGH) or segregated and bagged as red bag trash for off-site removal (Campus, Women and Babies Hospital and other entities) by a certified waste hauler.
 - The autoclave shall be located in a secure area to prevent unauthorized entrance.
 - The autoclave area shall be clearly posted as a restricted area utilizing the universal biohazard symbol.
 - Operation of the Hospital's on-site autoclave shall be the responsibility of the Plant Engineering Department. Also refer to the Plant Engineering Department Policy Manual for additional information.
 - All biohazardous red bag waste shall be incinerated within 24 hours of receipt if the autoclave is operational.
- G. Waste Not Suitable for Autoclave Processing
- Pathology waste including tissue and limbs.
 - Any biological waste that contains hazardous chemicals (e.g., formalin).
 - Off-site removal via a certified hauler is required.

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The following is to be used as a guideline to determine whether waste is Infectious (Red Bag Waste) or Non-Infectious (Brown Bag Waste). If you are ever unsure of what type of waste you are handling, treat it as Infectious Waste and place in a red bag.

INFECTIOUS WASTE (RED BAG WASTE)	NON-INFECTIOUS WASTE (BROWN BAG WASTE)
<p>Pads, dressings and tapes saturated(dripping)with blood/dried blood , body fluids and other potentially infected materials</p> <p>IV tubing when blood is visibly present</p> <p>All blood transfusion bags and tubing</p> <p>All IV catheters</p> <p>Rectal tubes and drainage</p> <p>Wound suction and all drainage systems (hemovac, JP's, chest drainage, sump drainage, and other drainage systems contaminated with blood</p> <p>All uses, disposable suction canisters and tubing (unopened and capped-DO NOT EMPTY)</p> <p>Foley catheters & drainage bags visibly contaminated with blood</p> <p>Wastes that were in contact with the blood of patients undergoing dialysis</p> <p>Gloves visibly contaminated with Blood / body fluids</p> <p>Supplies necessary to clean up a spill of blood / body fluids</p> <p>Peritoneal Dialysis Fluid</p>	<p>Gloves not visibly contaminated with Blood / body fluids</p> <p>Facial tissues</p> <p>IV bags other than transfusion bags</p> <p>Paper / plastic outer wrappers from sterile trays</p> <p>Cardboard boxes, newspapers & computer paper</p> <p>Tracheal suction catheters and bulbs not visibly contaminated with blood</p> <p>Soda cans, boxes, cups, etc.</p> <p>Thermometer probe covers</p> <p>Materials soiled with urine and feces. Adult and baby diapers unless soiled & bloody</p> <p>Respiratory therapy-related items, e.g. ventilator tubing, water reservoirs, masks, cannula, etc.</p> <p>Foley catheters and drainage bags not visibly contaminated with blood</p> <p>Sitz bath</p> <p>Isolation waste unless it meets the criteria for Infectious Waste</p>