



The purpose of the Infectious Waste Disposal procedure is to establish procedures for the safe handling and proper disposal of infectious waste generated at Ursinus College in accordance with regulation [25 PA Code Chapter 284](#). As a Generator of Infectious Waste, Ursinus College personnel handling such waste must follow the code requirements for storage and labeling of containers, manifests, and recordkeeping. A quick reference checklist follows the procedure in Appendix A. The Environmental Health Safety & Risk Management Office manages the infectious waste program.

I. Definition of Infectious Waste

According to regulation [25 PA Code 271.1](#), **Infectious Waste** is defined as a municipal and residual waste which is generated in the diagnosis, treatment, immunization or autopsy of human beings or animals, in research pertaining thereto, in the preparation of human or animal remains for interment or cremation, or in the production or testing of biologicals, and which falls under one or more of the following categories:

- A. **Cultures and stocks.** Cultures and stocks of infectious agents and associated biologicals, including the following: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines except for residue in emptied containers; and culture dishes, assemblies and devices used to conduct diagnostic tests or to transfer, inoculate and mix cultures.
- B. **Pathological wastes.** Human pathological wastes, including tissues, organs and body parts and body fluids that are removed during surgery, autopsy, other medical procedures or laboratory procedures. The term does not include hair, nails or extracted teeth.
- C. **Human blood and body fluid waste** and items contaminated with human blood and body fluid waste.
- D. **Animal wastes.** Contaminated animal carcasses, body parts, blood, blood products, secretions, excretions and bedding of animals that were known to have been exposed to zoonotic infectious agents or nonzoonotic human pathogens during research (including research in veterinary schools and hospitals), production of biologicals or testing of pharmaceuticals.
- E. **Isolation wastes.** Biological wastes and waste contaminated with blood, excretion, exudates or secretions from:
 - 1. Humans who are isolated to protect others from highly virulent diseases.
 - 2. Isolated animals known or suspected to be infected with highly virulent diseases.
- F. **Used sharps.** Sharps that have been in contact with infectious agents or that have been used in animal or human patient care or treatment, at medical, research or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, culture dishes, suture needles, slides, cover slips and other broken or unbroken glass or plasticware.



II. Storage Requirements

Infectious waste must be stored in a manner that:

- A. Maintains the integrity of the container, prevents the leakage or release of waste from the containers and provides protection from water, rain and wind.
- B. Prevents the spread of infectious agents.
- C. Affords protection from animals and does not provide a breeding place or a food source for rodents.
- D. Maintains the waste in a nonputrescent state, using refrigeration ($\leq 7^{\circ}\text{C}$) or freezing ($\leq -18^{\circ}\text{C}$) when necessary.
- E. Prevents odors from emanating from the container.
- F. Prevents unauthorized access to the waste.

III. Containers

A. In general, containers must be

1. Leak proof
2. Impervious to moisture.

B. **Sharps containers** must be

1. Rigid.
2. Tightly lidded.
3. Puncture resistant.

C. Re-use

1. Nonrigid containers may not be re-used.
2. Corrugated fiberboard containers may be re-used if the surface of the container has been protected from direct contact with the waste.
3. Rigid, fiberboard containers may be re-used if the container has been properly disinfected according to DEP guidelines or the surface of the container was protected from direct contact with the waste.

D. Bags

If **bags** are used as the only storage container,

1. Use double or multiple bags.
2. Securely tie the bag.
3. Ensure the bags are constructed of material that meets ASTM standard D1709-91 and D1922-89 by – should be stamped on the bag or the box of the packaged bags.
4. Ensure the bags have sufficient seam strength equal in resistance to tearing and equally as impermeable as the other parts of the bag.



5. The bags must be fluorescent orange, orange-red, or red in color and labeled per regulations.

IV. Labeling

- A. The outermost container for each infectious waste package for off-site transportation must be immediately labeled:
 1. Label must be securely attached and legible.
 2. Indelible ink used to complete the information on the label.
 3. If handwritten, 3" x 5" in size.
- B. Label information must contain the following:
 1. Name, address, and telephone number of generator.
 2. Date the waste was generated.
 3. Name of transporter.
- C. The outermost container or bag for each infectious waste package for either onsite or offsite movement must contain the following information:
 1. The words "infectious waste".
 2. Universal biohazard symbol
 3. Date waste was generated

V. Duration of storage

- A. Infectious waste, excluding sharps, may be stored at room temperature or in a refrigerator until the storage container is full, but **no longer than 30 days from the date waste was first placed in the container.**
- B. A filled infectious waste container may be stored in a **freezer for up to 90 days after the date waste was first placed in the container.**
- C. If waste becomes putrescent during the storage period, it must be removed off-site within 24 hours for processing or disposal.
- D. Used sharp containers may be used until full and no longer than 1 year providing the container meets the general storage requirements; however, the best practice is to remove sharps containers when the containers are 2/3-3/4 full.

VI. Waste Removal

Waste removal is on a "will call" basis. The Environmental Health Safety & Risk Management Office or designee communicates the upcoming scheduled pickup with affected departments. Contact the Environmental Health Safety & Risk Management Office at 610-409-3221 for assistance.

VII. Recordkeeping

Manifests: The signer of the manifest must have completed the Department of Transportation Hazardous Materials training and must ensure all information is correct



before signing. The signer will be the one contacted by the Department of Transportation or other authority in the event of an issue with the waste.

- A. The following information must be on the manifest:
1. Name, mailing address and telephone of the generator
 2. Total number of pages.
 3. Each transporter's company name, identification number, PA infectious and chemotherapeutic waste transporter license number and telephone number.
 4. Number of containers, types of containers, and the total quantity of the waste by weight or volume.
 5. Infectious waste code number for each waste indicated on manifest.
 6. United States Department of Transportation proper shipping name, hazard class and identification number for each waste, if applicable.
 7. Special instructions and information necessary for proper handling of the waste during transportation, shipping, storage, or disposal, if any.
 8. The printed or typed name of the handwritten signature of the generator's authorized representative, and the date of shipment.
 9. The printed or typed name and handwritten signature of the initial transporter's authorized representative, and the date of receipt.
 10. The designated facility's name, site address, Pennsylvania State permit or identification number and phone number.
 11. An authorized representative of the generator shall ensure that the manifest has been completed and shall read the certification statement on the manifest prior to signing the manifest.
 12. The generator shall ensure before the waste is transported offsite that the required information on all parts of the manifest are capable of being read.
- B. Copy 4 of the manifest is retained by the Generator upon shipment of the infectious waste. Please mail this copy to the Environmental Health Safety & Risk Management Office.
- C. Copy 1 is mailed to the Generator by the owner/operator of the processing or disposal facility. Currently, the College's vendor, Stericycle, provides this copy via the company's website, www.stericycle.com. The Environmental Health Safety & Risk Management Office ensures this copy is available within the required 20-day period.
- D. Copy 1 must be received by the Generator within 20 days of the date the generator's waste was accepted by the initial transporter. If the manifest is not received,
1. Generator must contact the transporter or owner or operator of the designated facility or both to determine the status of the infectious waste.
 2. Notify the regional PADEP office by telephone within 1 business day of the status of the shipment.
 3. If the manifest is not received within 35 days of the date, the generator must notify by telephone the regional PADEP office and submit an exception report to the PADEP's central office that includes
 - a. a legible copy of the unsigned manifest



- b. cover letter explaining the efforts undertaken to locate the waste shipment and the results
- E. All manifests must be maintained for 5 years from the date of shipment.



**Appendix A
Infectious Waste Checklist**

Requirement	Completed
Storage:	
- Containers maintained, not leaking, puncture proof.	
- Waste maintained in no putrescent state - no odors.	
- Sharps stored in appropriate containers.	
- Double bags employed when bags are the only storage container. Bags meet strength and certification requirements.	
- Infectious waste stored for no longer than 30 days at room temperature.	
- Infectious waste stored for no longer than 90 days in the freezer .	
- Infectious waste sharps stored for no longer than 1 year.	
Labeling:	
- Outermost container of infectious waste for offsite transport labeled immediately with proper label – name, address and telephone of generator, and date waste generated in indelible ink	
- Outermost container of infectious waste properly labeled with biohazard symbol and the words “infectious waste”.	
- Stationary containers lined with appropriately colored bag.	
Containers:	
- Nonrigid containers not re-used.	
- Corrugated fiberboard containers only re-used if container protected from direct contact of the waste.	
Manifests:	
- Name, address and telephone number of college printed on manifest.	
- Total number of pages used to complete manifest.	
- Transporter(s) company name, identification number, PA infectious and chemotherapeutic waste transporter license number and telephone number on manifest.	
- Number and type of containers and the total quantity of waste by weight of volume listed.	
- Infectious waste code for each waste.	
- Proper DOT shipping name, hazard class and identification number if applicable.	
- Special instructions for handling, storage and disposal if applicable.	
- Printed/typed name and handwritten signature of generator’s authorized signature.	
- Printed/typed name and handwritten signature of the initial transporter’s authorized representative and date of receipt.	