



General

- Infectious waste must be disposed of in a carefully controlled manner in accordance with regulations administered jointly by
 - Oregon DEQ and
 - Oregon State Health Department (OSHD).
- Laboratories and other generators of infectious waste are responsible for proper segregation and treatment prior to disposal according to the guidance below.

Segregation and Collection of Regulated Biological Wastes

- Potentially infectious solid wastes (other than sharps) must be segregated at the point of generation (i.e., in the lab or other location) and collected into one or more layers of biohazard bags inside hard-sided, leak-proof secondary containers of the appropriate size with a fitted lid. A universal biohazard symbol must be clearly visible on the outside of the container. Containers must remain closed except when waste is being added.
- Culture fluids and other liquid infectious waste must be collected into autoclavable containers and treated by autoclaving prior to discard. Containers should not be greater than half full when autoclaved to avoid spill-over.
- Used sharps must be collected into commercially-available hard-sided, leak-proof sharps containers that are red in color and have the universal biohazard symbol visible on the outside. When containers reach the fill mark, they should be closed and replaced with a new container. EH&S collects and disposes of full sharps containers. Various sizes and styles of approved sharps containers are available from Chem Stores in Gilbert Hall as well as from commercial vendors. Request sharps disposal from EH&S by completing a [Hazardous Waste Pickup Request](#).

Waste Categories and Proper Treatment

- Infectious waste includes biological waste, cultures and stocks and associated wastes, pathological waste, and sharps.
- Each of these categories has a proper **disposal method**
- Infectious wastes must either be **incinerated or treated** prior to disposal
 - **BIOLOGICAL WASTE** includes blood and blood products, excretions, exudates, secretions, suctionings and other body fluids that cannot be directly discarded into the municipal sewer system, but **EXCLUDES** articles contaminated with fully absorbed or dried blood
 - Biological waste must either be incinerated, sterilized with steam in an autoclave as described below, or treated by some other method which has been approved and formally adopted by the OSHD
 - After treatment, biological waste may be treated as normal refuse, but if waste is in red or orange biohazard bags, it should be placed inside black plastic bags prior to discard in campus dumpsters. The custodial contractors will not pick up autoclaved waste so generators are generally responsible for transporting the autoclaved wastes to the dumpsters.
 - **CULTURES AND STOCKS** includes microorganisms cultivated in the laboratory and associated biologicals, including specimen cultures and dishes and devices used to transfer, inoculate and mix cultures and used gloves, etc. The definition also includes wastes from the production of biologicals, serums, and discarded live or attenuated vaccines
 - Cultures and stocks must be treated in the same way as biological waste.
 - **PATHOLOGICAL WASTE** includes biopsy materials, all human tissues, and human anatomical parts from surgery and other procedures. It also includes carcasses and bedding from animals exposed to pathogens for research purposes, but does **NOT** include teeth or preservative agents such as formaldehyde.
 - Pathological waste must be incinerated
 - **SHARPS** includes needles, scalpel blades, lancets, glass tubes that could be broken during handling and syringes that have been removed from their original sterile containers (even if no needle is attached).
 - Sharps must be collected for disposal as described above; EH&S arranges for terminal destruction of sharps by an approved method.
 - The definition **DOES NOT** exempt needles, syringes or other sharps used for non-infectious materials.

Storage of Wastes

- Once collected, storage of infectious wastes is not recommended and only allowed under the conditions described below; collected wastes should be promptly treated and disposed of.
- Allowable storage of infectious waste is dependent on type:
 - **Pathological, biological and culture/stock wastes** should be treated or disposed within 7 days of *generation*, or within 30 days if refrigerated or frozen.
 - *Generation* in the above statement means when the bag is full and secured. Avoid over-filling biohazard bags.
 - **Sharps** must be collected into containers as described above; there is no limit on the length of storage for sharps but it is recommended that full sharps containers be collected for disposal promptly.

Transport of Infectious Wastes

- Infectious waste bags or other containers must be secured (closed) in the lab or other point of generation prior to transport to the autoclave or other destination and must remain closed at all times during transport.
- Bags or other containers of infectious wastes being transported to an autoclave or other destination must be in leak-proof secondary containment at all times during transport.
- If transport is by vehicle, the secondary container must have a tight sealing lid that remains closed during transport, and appropriate spill remediation materials must accompany the waste.

Autoclaving Procedures

- Bags or other containers of wastes must remain in pans, tubs, trays or other secondary containment during autoclaving, in case of leaks.
- When autoclaving bags of infectious wastes, leave bags **closed** to avoid possible exposures. Do not open or add water to bags prior to autoclaving.
- Do not put more than one or two bags into the autoclave at a time. This will be dependent on the size of the autoclave chamber and the bags; even large autoclaves should not be loaded with more than two bags at a time. For effective sterilization, all surfaces of the bag must be in contact with the steam. If available, a short rack to place the bags on during autoclaving ensures that the steam can access the bottom surfaces of the bags.
- For solid wastes, use a cycle setting that rapidly exhausts pressure. For liquid culture wastes, use a liquid cycle setting.

Autoclave Posting and Validation Requirements

- Autoclaves used for infectious waste treatment must have written standard operating procedures (SOP) posted in an obvious place near the autoclave. The SOP should detail:
 - the parameters for loading and treatment
 - methods for monitoring
 - methods for indicating adequate sterilization conditions during each treatment
 - **monthly** challenge tests of sterilization conditions using a biological indicator. Spores of the thermophile *Geobacillus stearothermophilus* must be used to validate autoclave function. Autoclave testing kits compliant with this requirement are available by request from EH&S via a "Quick Link" on the [EH&S website](#).
- Sharps containers that are full will be collected EH&S and should **not** be autoclaved prior to collection.

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