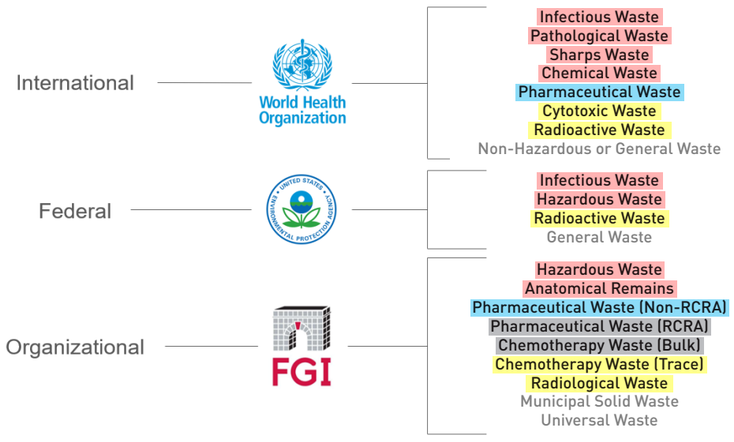
TRASH TALK Medical Waste Reference Sheet

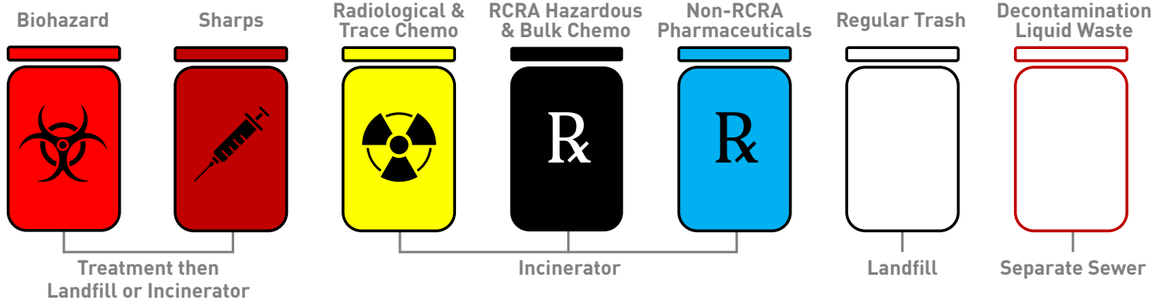
WASTE REGULATIONS

The basis for current regulations stem from a pilot study created by the Medical Waste Tracking Act (1988) which found that medical waste is most infectious immediately as it is generated. Healthcare workers, not the general public, are at the highest risk of infection.

For a healthcare design project, there are a large number of organizations involved in medical waste regulations, including the WHO, CDC, EPA, FDA, OSHA, FGI, and NFPA. The terminology for how wastes are categorized is not consistent, which can lead to confusion. For this reason, it is our recommendation to leaverage the "bucket color" system to simplify conversations between the project designers and their healthcare clients.



WASTE TYPES



BIOHAZARD & SHARPS

- Generated in any room where "exam" level or higher level care is performed
- Facility (biohazard) or sterilized by Sterile Processing Department (sharps)
- Red color of the bins is legally prescribed, while other bin colors are most common standards.

RCRA HAZARDOUS & BULK CHEMO

- Generated where chemo drugs are handled (bulk chem and pharmacy areas, especially compounding rooms
- Goes to Soiled Hold / Soiled Workroom then incinerator
- Resource Conservation & Recovery Act (1976) determines which pharmaceuticals are considered for Black or Blue bins

RADIOLOGICAL & TRACE CHEMO

- Generated where chemo drugs are handled & Nuclear Imaging
- Goes to Soiled Hold/Soiled Workroom then incinerator
- "Hot" waste must be isolated in lead containers for decaying
- Waste is considered "trace" chemo when there is less than 3% of the drug in the container; greater than 3% is bulk

NON-RCRA PHARMACEUTICALS

- Generated in areas where pharmaceuticals are used
- Goes to Soiled Hold / Soiled Workroom then incinerator
- RCRA Hazardous = controlled substances
- Non-RCRA = over-the-counter medications
- May also have a bin with a nullifying fluid to destroy the medication in pharmacies or near drug dispensing units

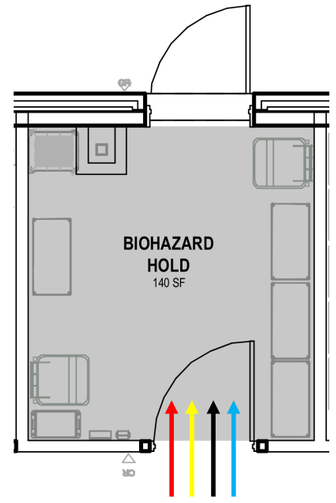
WASTE HOLDING

FGI 2022 does not provide an explicit square footage requirement or ratio for medical waste holding rooms. Instead, sizing is determined by these factors:

- Categories of waste
- Projected volumes
- Methods for handling & disposal
- Length of anticipated storage

In order to appropriately size these rooms, a conversation between the design team and their healthcare client's waste coordinator must be had—the earlier, the better.

At minimum, separate rooms for biohazard waste and trash must be provided, but a facility that is pursuing LEED certification may benefit from a separate Recycling room, due to the related LEED requirements.

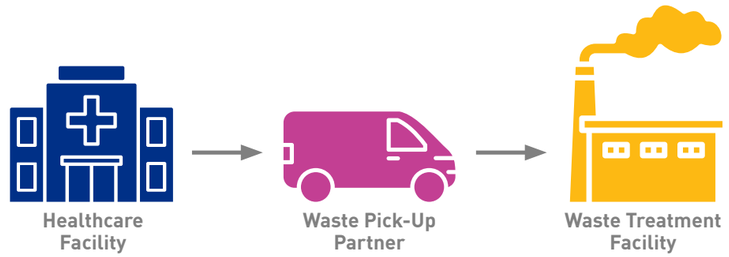


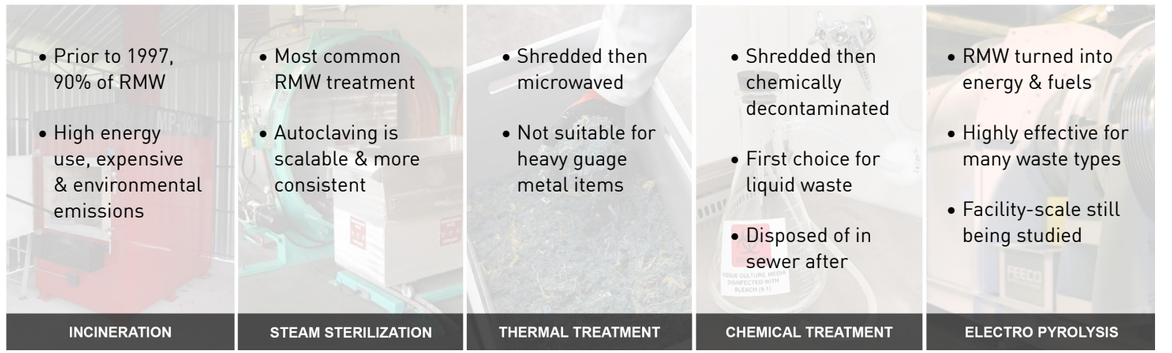
Another type of waste holding room that may be considered is a Hot Soiled room. In addition to facilities that have a larger than average Nuclear Imaging volume, this may benefit institutions such as teaching hospitals that utilize radiological materials with longer halflives. Otherwise, a decay-in-storage process may be utilized in the Soiled Holding or Workroom within the Imaging Department.

Location of the Biohazard Hold room within proximity of high-waste areas is critical for mitigating the spread of infection. Designers should limit public or patient interface when considering the travel path for regulated medical waste. Based on a facility's waste treatment process, the Biohazard Hold room may also require exterior access.

WASTE TREATMENT

On-site waste treatment is costly and technical, so many health systems opt to contract with a waste pick-up partner for off-site sterilization and disposal. There are many methods, with some better than others for each type of waste. Notably, FGI 2022 requires that lab specimens must be terminally sterilized before leaving the facility, identifying only three of the five methods. Discuss with the health system and AHJ, as a variance may be required for the client to proceed.





Methods approved for terminal sterilization of laboratory waste per FGI 2022

Methods not yet approved per FGI, but may still be used by a health system

This material is provided as a general reference. Always verify current federal, state, and local requirements applicable to your facility.

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