



MEDICAL WASTE DISPOSAL GUIDE

**HEALTHCARE WASTE MANAGEMENT
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Medical waste disposal requirements differ from state to state as well as complying with some federal laws. There are also different rules depending upon whether a facility that generates the medical waste is large or small. The many variations can make following guidelines a bit confusing. States have their own EPA (Environmental Protection Agency) and OSHA (Occupational Safety and Health Administration) requirements along with other state agencies that work in conjunction with federal agencies such as DOT (Department of Transportation).

“There are over 6 million tons of medical waste generated in the U.S. each year from hospitals, clinics, dental offices, veterinarians, funeral homes, research labs, doctor’s offices, pharmacies, long term care, tattoo parlors and even body piercing companies.





To compound the situation, any facility that generates medical waste is responsible for the waste in a concept called “cradle-to-grave.” The translation means that a generator is held accountable to ensure that all medical waste that they generate is properly handled, stored, transported, and ultimately treated and disposed of to render it harmless. Lack of compliance can result in fines and fees that can often be exorbitant.

To eliminate the stress of compliance, most medical facilities make use of a licensed and professional medical waste disposal company. However, knowing and understanding the rules and guidelines will protect people, the community, and the environment. Here is some of the information that can assist every facility towards that goal.





Medical Waste Types

There are over 6 million tons of medical waste generated in the U.S. each year from hospitals, clinics, dental offices, veterinarians, funeral homes, research labs, doctor's offices, pharmacies, long term care, tattoo parlors and even body piercing companies. However, not all medical waste is alike. Medical waste is any item that is derived from the care of a patient, contains blood or bodily fluids, is either human or animal tissue, or is a biological exposed to viruses or bacteria that could potentially contain contaminants that could be transmitted to humans.





Understanding the types of medical waste helps in compliance with the various laws:

- Infectious waste can be produced in any environment, including research labs, that can contain infectious diseases.
- Pharmaceutical waste includes any medication or vaccines that have expired, are unused or tainted.
- Radioactive waste is anything that has come into contact with radiation treatment in liquid or other forms.
- Pathological waste is any body part of a human or animal and includes organs, tissues, and body fluids.
- Sharps waste is any object that has been used in human or animal treatment that can pierce the skin and can include but is not limited to hypodermic needles, scalpels, broken glass or plastic, and knives.
- Isolation waste is anything that came into contact with a patient with a communicable disease that was placed in isolation to protect others.
- Blood products can include but is not limited to blood, plasma, and wasted serum.

Understanding Medical Waste Types



A Note about Pharmaceutical Waste:

States have varying guidelines regarding pharmaceutical waste as some forms of this waste are within the hazardous waste category.

In the past, much of the pharmaceutical waste was simply dumped into the water system. The problem with this is that none of the waste management agencies that clean, and filter water were set up to filter out medications.

This means that the medications entered the water system for the consumer. To address these issues there are mail-in programs for pharmaceutical waste as well as national pharmaceutical drop off programs. The better medical waste management companies now also offer mail-in options for pharmaceutical waste.

Pharmaceutical





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Pharmaceutical waste is divided into four categories:

- Regulated hazardous pharmaceutical waste
- Non-regulated hazardous pharmaceutical waste
- Non-regulated "non-hazardous" pharmaceutical waste
- Minimization of pharmaceutical waste

Categories



Pharmaceutical Waste

Any location that generates pharmaceutical waste must be familiar with the state and federal organizations involved in regulating medical waste.

Compliance with all the laws is a requirement. Some states have guidelines that are more stringent than the federal rules. Agencies and organizations that govern the rules for pharmaceutical waste include:

- The Environmental Protection Agency (EPA)
- Department of Transportation (DOT)
- Drug enforcement administration (DEA)
- Occupational Safety and Health Administration (OSHA)
- State environmental protection agencies,
- State pharmacy boards, and
- Local publicly owned treatment works (PO TW)

Laws



Medical Waste Generator

If Your Organization is a Medical Waste Generator?

A first key step is to become familiar with your state's requirements as a **"generator."**

This typically involves registering your facility with both the state and federal agencies. In some states there are fees that must be paid.

The next steps should include:

- Be familiar with the laws that must be followed including those required by the EPA, DEA, OSHA, and DOT.
- Knowing the medical waste types, you are dealing with and categorizing them appropriately.
- Having the proper bags, containers, and labels for each type of medical waste.
- Putting each medical waste in the appropriate container, which can also include sealable, leak-proof, puncture proof bags that are placed in sturdy, sealable containers.



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- Segregating the medical waste by type means separating each as to chemical, sharps, non-hazardous, pharmaceutical, and pathological. Extra care is taken with sharps so that they are in puncture-proof containers.
- Storage of containers must be in a dry temperature neutral location, away from public access or access by insects or animals. Containers need to be labeled and ready for pickup and include the weight. (DOT regulations).
- Know medical waste color coding: This is pretty much standard around the country.
 - Biohazardous waste is in red bags/containers
 - Sharps are in red biohazard containers
 - Pharmaceutical waste is held in black containers
 - Chemotherapy waste is in yellow containers
 - Radioactive waste is in shielded containers with the universal radioactive symbol
 - All other medical waste is in blue containers.

Coordinate with licensed, professional companies that are knowledgeable on all state and federal laws and will supply completed and accurate documentation.



Staff / Employee Training

Most states have their own OSHA (Occupational Safety and Health Administration) guidelines for training any individual that will be exposed to or work with medical waste.

In states that do not have their own OSHA guidelines, the state defaults to the federal guidelines. These training sessions are a requirement.

Compliance Training



Compliance Training

Many of the better medical waste disposal companies also offer training programs that are done at the convenience of the individual and offers accreditation when completed. Part of the “best practices” for the training should include:

- Definitions of the medical waste and regulatory requirements for each type.
- Biosafety levels
- Required use of PPE (personal protective equipment)
- Signs, labels, containers for each type of waste.
- Procedures for disposal of medical waste of each type.
- Good personal hygiene.
- Techniques for sterilization and disinfection.
- Proper container storage and locations.
- Safe work practices.
- Knowledge of emergency procedures in case of exposure.
- Contact names/organizations for a medical waste exposure or leak.
- Sharps injury log.



Guidelines for Medical Waste Storage and Transport:

Storage

Storage of all medical waste containers need to be:

- In a location away from public access, pathways, or stairs.
- In a stable location so that the containers cannot fall.
- In a neutral temperature location.
- Easily accessed by disposal company personnel.
- In containers that are shatterproof and sealed.
- In containers marked with the universal biohazard label.
- In containers that are sturdy, durable, leak-proof, and sealed so that the content will not escape.





Guidelines for Medical Waste Storage and Transport:

Transport

Transport of all medical waste (except those designated as home generated):

- Must be done by a licensed and professional disposal company.
- Must be in a vehicle designed for medical waste transport.
- Needs to have personnel knowledgeable of the types of medical waste for facility delivery.
- Vehicles need to comply with state and federal laws for cleaning and sterilization.
- Must comply with state and federal laws regarding protocols for emergency situations.





Disposing of Medical Waste

Each state has its own rules and guidelines regarding small and large generators and their limitations. On-site facilities for medical waste treatment and disposal are both costly and time consuming so most generators make use of off-site treatment facilities for disposal.

The right medical waste disposal company will have trained and licensed professionals, supply a generator with the proper containers, bags and labels, assist by offering training for staff, schedule convenient pickup dates and times, take the medical waste to the appropriate treatment facilities and supply all of the confirmation documentation that the medical waste was rendered harmless. The medical waste disposal company maintains knowledge of all state and federal laws so a facility can have peace of mind.

Disposal





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There are four methods of disposal and each must comply with state laws:

Disposal

- **Autoclaving:** a method using high temperatures and steam to change hazardous waste into non-infectious. Once completed, the residue can be safely incinerated or placed in landfills.
- **Chemical:** a method using specific chemicals to neutralize the medical waste rendering it harmless. However, the chemical process cannot be used with some medical waste due to the creation of potentially toxic materials with the addition of the chemicals.
- **Incineration:** a method using high temperature heat. This has fallen from popularity due to the resulting materials that have caused pollution. However, it remains the one disposal method used for pathological waste.
- **Microwaving:** a method that makes use of powerful microwaves to render the waste harmless.





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Discharging Blood, Fluids to Sanitary Sewers or Septic Tanks

One of the exceptions to the requirement of standard disposal methods for medical waste relates to containers that hold less than a few milliliters of blood.

Each state has specific regulations on their state-approved amount and treatment and these smaller quantities of blood can be poured down a toilet or utility sink so that it's discharged into sanitary sewers or septic tanks.

Discharging



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Discharging Blood, Fluids to Sanitary Sewers or Septic Tanks

Discharging

There has been no evidence that bloodborne diseases that have been in the blood poured into sewers or septic tanks have caused any transmission in contact with raw or treated sewage. Many of the pathogens that are bloodborne, specifically the bloodborne viruses, are not stable in the environment for long periods of time.

The CDC (Center for Disease Control) has added these factors as extra steps for disposal to increase the likelihood of inactivity for bloodborne pathogens:

- Dilution of the discharged materials with water
- Inactivation of pathogens resulting from exposure to cleaning chemicals, disinfectants, and other chemicals in raw sewage; and
- Effectiveness of sewage treatment in inactivating any residual bloodborne pathogens that reach the treatment facility.



Considerations for Treatment

There are some medical waste situations that are required to have special considerations.

Such medical waste could interact with standard treatment types, cause excessive problems, or create alternate waste that is also hazardous.

These considerations include waste that is:

- Corrosive
- Reactive
- Toxic
- Ignitable

Considerations for Treatment



Coordinating with a Reputable Medical Waste Management Company

Part of the best practices of medical waste management is partnering with a licensed, professional medical waste management company.

Their participation in the daily process of proper medical waste management will reduce the stress, anxiety, and potential for accidents. Some of the things that you look for in a reputable medical waste management company should include:

- They are a company that takes care of the medical waste from start to finish.
- They are a company responsible for pickup, transport, treatment, and disposal.
- They are a company that owns all the facilities and plants for treatment.
- They are a company that owns all the vehicles.

Medical Waste Management Company



Coordinating with a Reputable Medical Waste Management Company

- They are a company that has drivers and staff employed by them that will show up to service the account.
- They are a company that has a focus on environmental issues as part of their mission statement.
- They are a company that offers training for your staff/employees.
- They are a company that maintains updated facilities.
- They are a company that works with you and your organization as changes occur.
- They are a company that has invested in their own company and has a longevity of success.

Medical Waste Management Company

**Call Healthcare Waste
Management Today and See
How We Can Help.**