



Biomedical Waste Disposal

GECAP of the Georgia Tech Research Institute is a voluntary, non-regulatory environmental compliance program funded by the Georgia Legislature through the University System of Georgia.

Disposal of *biomedical waste* is regulated at the state level. This Tech Guide addresses the Georgia's Environmental Protection Division (EPD) Rules found in chapter [391-3-4-.15](#).

What is biomedical waste?

Biomedical waste, also known as *medical waste* or *infectious waste*, is generally defined as any solid waste that is generated in the diagnosis, treatment, research, production or testing of biologicals for humans or animals. Examples of biomedical waste include:

- soiled or blood-soaked bandages
- culture dishes and other glassware
- discarded surgical gloves – after surgery
- discarded surgical instruments – scalpels
- sharps and needles – used to give shots or draw blood
- cultures, stocks, swabs used to inoculate cultures
- removed body organs – tonsils, appendices, limbs, etc. (except teeth)
- lancets – the little blades the doctor pricks your finger with to get a drop of blood

This Tech Guide does not address medical waste that is considered *hazardous waste* under the federal Resource Conservation and Recovery Act (RCRA). More information on hazardous waste is found in the GECAP Tech Guide [Hazardous Waste Generator Requirements](#) and the EPD document [Hazardous Waste Management Guide for Georgia Hospitals](#) (both available at <http://www.gecap.org>). Examples of hazardous waste generated by hospitals include mercury and other metals, chemotherapy

and antineoplastic chemicals, laboratory waste, acids, solvents, formaldehyde, photographic chemicals, radionuclides, expired pharmaceuticals, and waste anesthetic gases.

Who is covered by this rule?

All persons handling biomedical waste disposal, including but not limited to: ambulatory service centers, blood banks, clinics, county health departments, dental offices, funeral homes, health maintenance organizations (HMOs), hospitals, laboratories, medical buildings, physicians offices, veterinary offices, research and manufacturing facilities, nursing homes, and biomedical waste transportation, storage, treatment, and disposal facilities.

Storage and containment of biomedical waste

For all generators, biomedical wastes should be:

- stored in a manner and location that is protected from weather and animals and does not provide a breeding place or food source for insects or rodents. Exposure to the public should be minimized;
- placed in a container separate from other wastes;
- stored in containers so as to prevent leakage, punctures, and ripping during storage, handling and transportation;
- containers shall be red or orange in color OR clearly marked with the universal biohazard symbol (seen to the right) OR clearly marked with the word "biohazard."



Treatment and disposal of biomedical waste

Biomedical waste may only be transferred, stored, and treated by EPD-approved facilities with valid operating permits.

When properly treated, biomedical waste is considered a regular solid waste and can be disposed of at a permitted solid waste disposal facility. Proper treatment includes

- incineration,
- decontamination by heating with steam under pressure (autoclave), or
- other methods specifically approved by the Director of the EPD.

The Georgia Rules provide more details on each of these types of biomedical waste treatment.

Fluid or semisolid waste, which means blood and blood products, exudates, secretions, suctionings, and other body fluids which contains free liquids, *may* be discharged to a municipal sewer treatment system if that system provides secondary treatment of waste. You need to check with your local municipal sewer treatment facility to determine if they can accept these wastes.

Are there any exemptions?

- Generators of biomedical waste from single family residential premises are totally exempt from these rules.
- There is a partial exemption for facilities that generate less than 100 pounds of biomedical waste per month. Biomedical waste from generators of less than 100 pounds per month shall be properly disposed of at a municipal solid waste landfill or permitted treatment facility provided the generator verifies that the receiving landfill accepts this waste. Generators must still comply with the biomedical waste storage and containment rules.

What other agencies regulate different aspects of medical waste management?

- [Occupational Safety & Health Administration \(OSHA\)](#) regulates medical waste exposure to personnel in the workplace
- [Department of Transportation](#) regulates medical waste transportation
- [Food and Drug Administration \(FDA\)](#) regulates medical devices such as sharps containers which are designed to safely contain used needles, scalpels or other sharps
- [Nuclear Regulatory Commission](#) regulates some types of radioactive medical waste
- [US Postal Service \(USPS\)](#) regulates medical waste in the postal system

The federal Environmental Protection Agency (EPA) has regulations governing emissions from [Hospital/Medical/Infectious Waste Incinerators](#) as well as requirements under the [Federal Insecticide, Fungicide and Rodenticide Act \(FIFRA\)](#) for medical waste treatment technologies that use chemicals for treating the waste.

Where can I go for more information?

- EPA website <http://www.epa.gov/wastes/nonhaz/industrial/medical/>
- Healthcare compliance assistance center <http://www.hercenter.org/>
- Hospitals for a Healthy Environment Practice Green Health website <https://practicegreenhealth.org/>
- Contact the Georgia EPD at 404-362-2692
- <http://www.gecap.org> or call GECAP personnel at 404-407-8082

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