

BIOMEDICAL WASTE

Biomedical waste is potentially infectious. Biomedical waste may also include waste associated with the generation of biomedical waste that visually appears to be of medical or laboratory origin (e.g., packaging, unused bandages, infusion kits, etc.), as well research laboratory waste containing biomolecules or organisms that are restricted from environmental release. As detailed below, discarded sharps are considered biomedical waste whether they are contaminated or not, due to the possibility of being contaminated with blood and their propensity to cause injury when not properly contained and disposed of. Biomedical waste is a type of biowaste. Biomedical waste may be solid or liquid. Examples of infectious waste include discarded blood, sharps, unwanted microbiological cultures and stocks, identifiable body parts (including those as a result of amputation), other human or animal tissue, used bandages and dressings, discarded gloves, other medical supplies that may have been in contact with blood and body fluids, and laboratory waste that exhibits the characteristics described above. Waste sharps include potentially contaminated used (and unused discarded) needles, scalpels, lancets and other devices capable of penetrating skin.

Biomedical waste is generated from biological and medical sources and activities, such as the diagnosis, prevention, or treatment of diseases. Common generators (or producers) of biomedical waste include hospitals, health clinics, nursing homes, medical research laboratories, offices of physicians, dentists, and veterinarians, home health care, and funeral homes. In healthcare facilities (i.e., hospitals, clinics, doctors offices, veterinary hospitals and clinical laboratories), waste with these characteristics may alternatively be called medical or clinical waste. Biomedical waste is distinct from normal trash or general waste, and differs from other types of hazardous waste, such as chemical, radioactive, universal or industrial waste. Medical facilities generate waste hazardous chemicals and radioactive materials. While such wastes are normally not infectious, they require proper disposal. Some wastes are considered multihazardous, such as tissue samples preserved in formalin.

RISK TO HUMAN HEALTH

Disposal of this waste is an environmental concern, as many medical wastes are classified as *infectious* or *biohazardous* and could potentially lead to the spread of infectious disease. The most common danger for humans is the infection which also affects other living organisms in the region. Daily exposure to the waste (landfill) leads to accumulation of harmful substances or microbes in the person's body.

A 1990 report by the U.S. Agency for Toxic Substances and Disease Registry concluded that the general public is not likely to be adversely affected by biomedical waste generated in the traditional healthcare setting. They found, however, that biomedical waste from those settings may pose an injury and exposure risks via occupational contact with medical waste for doctors, nurses, and janitorial, laundry and refuse workers. Further, there are opportunities for the general public to come into contact medical waste, such as needles used illicitly outside healthcare settings, or biomedical waste generated via home health care.