

Preface

Biomedical waste or hospital waste is any kind of waste containing infectious (or potentially infectious) materials generated during the treatment of humans or animals as well as during research involving biologics.^[1] It 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 mainly 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. 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, emergency medical services, medical research laboratories, offices of physicians, dentists, veterinarians, home health care and morgues or funeral homes. In healthcare facilities (i.e. hospitals, clinics, doctor's 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.ⁱ

In the present book, ten typical literatures about Disposal of Medical Waste published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on Disposal of Medical Waste. We hope this book can demonstrate advances in Disposal of Medical Waste as well as give references to the researchers, students and other related people.

ⁱ https://en.wikipedia.org/wiki/Biomedical_waste