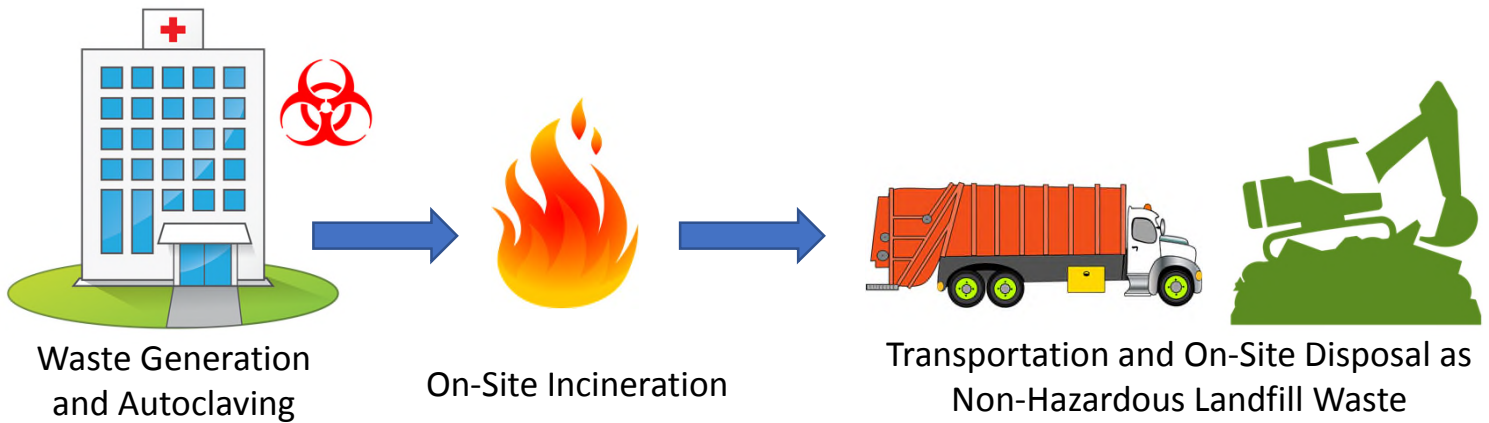


# Medical Waste Incineration and Disposal



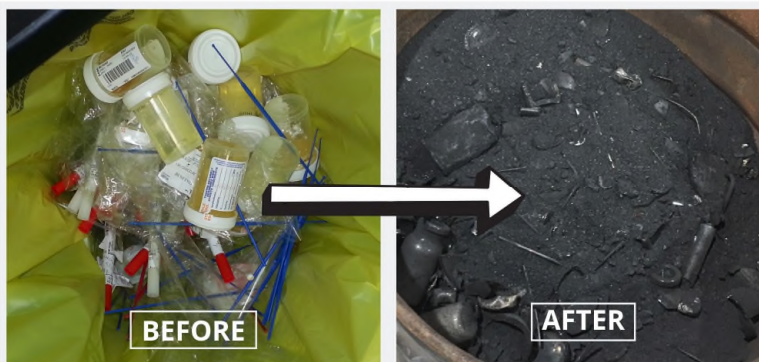
## Autoclaving

- Autoclaving is a time-tested process for the sterilization of medical waste using high-temperature and high-pressure steam.
- Regulated medical waste at Fort Detrick is autoclaved prior to being incinerated.
- Typical operating conditions for an autoclave are a minimum temperature of 250 degrees Fahrenheit and 15 pounds per square inch (PSI) for at least one hour.
- Effective sterilization for the destruction of bacteria, virus, spores, fungi, and other pathogenic microorganisms.

## Medical Waste Incineration

- Medical waste incineration involves the burning of wastes produced by hospitals, veterinary facilities, and medical research facilities. These wastes include previously sterilized regulated medical wastes as well as non-infectious, general housekeeping wastes.
- Army policy requires the incineration of regulated medical waste generated at Fort Detrick.
- Approximately 90% of medical waste is incinerated industry wide.
- Incineration systems use high-temperature combustion under controlled conditions to convert previously sterilized regulated medical wastes to inert mineral residues and gases.
- Waste is reduced to gaseous products, ash and incombustible debris.
- Typical incinerations temperatures are between 1,650 and 1,830 degrees Fahrenheit.
- Modern incinerators have sophisticated air pollution control and monitoring equipment.
- On-site incineration has the following benefits:
  - Reduced long-term waste management costs
  - All waste categories are accepted
  - Complete destruction of the regulated waste and substantial waste volume reduction (95%)
  - Reduces the transportation of waste and allows the Army to maintain control of the waste treatment and disposal process
  - Improved technology significantly reduces or eliminates pollutants

## Incineration Results



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