

Guiding Principles for Managing Medical Waste

In determining waste disposal options, national policies are to be given first priority.

At each district and each health care facility—Identify sustainable resources for safe and practical medical waste collection, handling, and transport. Prepare medical waste management plans that include:

1. **Minimization of waste:** Reduce unnecessary injection to protect health care providers and the public from unnecessary health risks.
2. **Segregation of waste:** Separate waste at its source into 1) sharps waste; 2) infectious waste; 3) non-infectious waste.
3. **Safe handling of sharps:** Use puncture-proof safety boxes or needle removal for disposal of all needles and plastic syringes. Dispose of all medical sharps safely.
4. **Safe collection of medical waste:** Apply waste segregation and handling procedures to all health care delivery areas. Waste handlers must use personal protection equipment and maintain a routine collection and transport schedule.
5. **Safe final disposal:** Use best available destruction option for final disposal.
 - a. **Non-incineration destruction**—Wherever practical, first consider nonincineration alternatives:
 - i. Disinfect (autoclave/microwave/chemical), compact (shred/melt), then landfill or recycle.
 - ii. Bury in protected pit (if the water table permits).
 - b. **Incineration**—Where incineration is the best locally-available option, maximize safety and acceptability:
 - i. Incinerate only sharps and infectious waste.
 - ii. Optimize incinerator performance through repair, maintenance, and proper operation.
 - iii. Do not incinerate materials that produce toxic emissions (PVC, batteries, thermometers, etc.).
 - iv. Install only medium- or high-temperature incinerators (small or large scale).
 - v. Ensure funds for proper training, operation, and maintenance.
 - vi. Build local support. Locate incinerators away from people and crops.

At the national level—Develop medical waste management plans that include:

1. **Stakeholder involvement:** Create a national health care waste management committee of stakeholders.
2. **Policy support:** Implement a national health care waste management policy that balances acceptable, practical, and environmentally sound principles.
3. **Sustainability:** Identify funds and partnerships necessary for sustainable medical waste management. Support must include supplies, maintenance, and operational funds.
4. **Occupational safety:** Support medical waste personnel with training, supervision, hepatitis B vaccination, and protective gear.