

WASTE DISPOSAL



Waste Disposal for Clinical Procedures at Resource-Limited Health Care Facilities

It is essential for the health care facility to have protocols for dealing with biological waste and contaminated materials.

All staff must be familiar with them and follow them.

All **biological waste** must be carefully stored and disposed of safely

Contaminated materials such as blood bags, dirty dressings and disposable needles are potentially hazardous and must be treated accordingly

If biological waste and contaminated materials are not disposed of properly, staff and members of the community could be exposed to infectious material and become infected

The disposal of bio-hazardous materials is time-consuming and expensive, so it is *important to separate non-contaminated material such as waste paper, packaging and non-sterile (yet not biologically contaminated) materials.*

**Only 15% to 20% of
medical waste is
considered infectious**

WASTE DISPOSAL



Make **separate disposal containers** available where waste is created, so that staff can sort the waste as it is being discarded.

A three colour coding system is recommended, with:

- **black** for non-infectious waste
- **red or yellow** for infectious
- **yellow** for sharps

Organize things in a way to discourage the need for people to be in contact with contaminated waste.

All infected waste should then be treated by **steam sterilization (autoclave)** or **high temperature incineration** equipped with emission control devices. Whenever feasible, plastic material such as syringes or blood bags should not be incinerated.

Burying waste is the only option in some areas where no controlled landfill exists. If this is the case, you should do as much as possible to protect the burying site to prevent access and to avoid environmental pollution, especially for underground water sources.

Prior to burying, for safety, **infected waste can be disinfected** by soaking in a 0.5% hypochlorite solution for at least 30 minutes.

Do not mix waste **chemicals**, unless you are certain that a chemical reaction will not take place.

Always follow local guidelines on the disposal of waste chemicals to ensure that chemical contamination of the surrounding land or water supply does not occur.

WASTE DISPOSAL



Provide a **safe system for getting rid of disposable items** such as scalpel blades or needles. The risk of injury with sharp objects increases with the distance they are carried and the amount they are manipulated.

A container for the safe disposal of sharp object should be...

- Well-labeled
- Puncture-proof
- Watertight
- Break-resistant (a glass container could break and cause a serious hazard to the person cleaning the mess)
- Equipped with an opening large enough to pass needles and scalpel blades, but never large enough for someone to reach into it
- Secured to a surface, such as a wall or counter, to ensure stability during use
- Removable for disposal

These sharps containers must then be disposed of safely:

They can be steam sterilized, shredded and then disposed of in a controlled landfill with municipal waste, encapsulated in a pit or any other options.

The protocol should be approved by the Public Health authority.

Health care workers and waste handlers should wear protective equipment such as gloves, apron, mask and be **immunized against HBV**.

A budget line for a safe waste management should be systematically included when planning a medical activity.