



KENYATTA NATIONAL HOSPITAL

SOP/KNH/IPC-EBOLA/012

VERSION: 00

DEPARTMENT: INFECTION PREVENTION & CONTROL

HANDLING AND DISPOSAL OF WASTES CONTAMINATED WITH EBOLA VIRUS DISEASE (EVD) AND OTHER VIRAL HAEMORRHAGIC FEVERS (VHFS)



1.0 Scope

This procedure describes the process for handling solid and liquid wastes resulting from the handling/management of an EVD/VHF suspect or case

2.0 Purpose

To ensure that all wastes are handled and disposed in a hygienic manner and that the wastes do not become a source of infection to those handling it.

3.0 Terms

3.1 **Waste:** Waste for this purpose will include solid and liquid waste

3.2 **Solid wastes:** All wastes solid in nature and will include but not limited to dressings, packaging, gloves, body parts, sharps and food remains.

3.3 **Liquid waste:** This will include all body excretions (vomit, urine, blood, stool etc), waste water from wash hand basins, floor cleaning, storm water, used disinfectants and any other liquids as waste from the EVD/VHF facility

4.0 Responsibility

4.1 The Deputy Director Clinical Services has the overall responsibility for ensuring that the requirements for waste management are available to ensure appropriate execution of the process.

4.2 The Head of Department, Public Health and the Infection Prevention Co-ordinator have the responsibility of identification, development, supervision of implementation, review and maintenance of these standard operating procedures.

4.3 Waste generators e.g. clinicians have the responsibility of placing waste in the appropriate bins/containers.

4.4 Waste handlers e.g. cleaners have the responsibility of collecting and appropriately disposing of waste.

5.0 Methods

Requirements:

- Adequate decontamination buckets of 70lts capacity
- Adequate liner (red in color) within the facility
- Already prepared disinfectant in a 70lts bucket
- Accessible full protective gear for waste handlers
- Accessible waste storage space

5.1 All persons handling wastes must practice standard safety precautions.



- 5.2 For collection of waste in a low risk area, waste handlers should wear scrubs, waterproof shoes, mask, head cap and double gloves.
- 5.3 For collection of waste in a high risk area, waste handlers should wear full personal protective equipment. (Refer to SOP on gowning SOP/KNH/IPC-EBOLA/001).

5.4 Solid Wastes

- 5.4.1 All solid wastes (**not sharps or pathological waste**) shall be placed in a 70 litres decontamination bucket containing 0.5% Hypochlorite solution.
- 5.4.2 Solid waste must be allowed a minimum contact time of 15 minutes.
- 5.4.3 After contact time, waste is removed and placed in a liner bag which is tied at the top and disinfected with 0.5% Hypochlorite solution.
- 5.4.4 The tied bag is placed in another outer bag which is also tied and placed in a waste collection space provided.
- 5.4.5 The bags are collected from the storage area using a designated waste collection vehicle/wheelbarrow and transported to the incinerator.
- 5.4.6 Waste is immediately put into the incinerator on arrival.
- 5.4.7 The designated waste collection vehicle/wheelbarrow is disinfected immediately after discharge of the waste.

5.5 Pathological Waste

- 5.5.1 All pathological waste will be handled as the other solid wastes described above but be placed in different liner bags.

5.6 Sharps

- 5.6.1 All sharps will be placed in non-leak puncture proof containers containing 0.5% hypochlorite solution and handled as other solid wastes in 5.3 above.

5.7 Liquid Waste

- 5.7.1 All liquid waste from the EVD/VHF facility shall be connected to a holding tank.
- 5.7.2 All liquid waste shall be disinfected in the holding tank with 0.5% Hypochlorite disinfectant for a minimum of 15 minutes before discharge into the public sewer
- 5.7.3 Any vomits, stool or blood spills on the floor or other surfaces shall be disinfected with a 0.5% Hypochlorite for at least 30 minutes before washing into the holding tank.

5.8 Precautions

- 5.8.1 **DO NOT** handle waste if you have not been trained on the handling procedures.
- 5.8.2 **DO NOT** handle wastes if you are not properly gowned
- 5.8.3 All bags/sharp containers **MUST NOT** be filled above the $\frac{3}{4}$ mark



- 5.8.4 Any leaking package **SHOULD NOT** be removed from the collection point before they are properly packaged.
- 5.8.5 **NO** transportation vehicle should leave the disposal ground before disinfection
- 5.8.6 The waste collector **MUST DE-GOWN** at the incinerator immediately after incinerating the waste
- 5.8.7 If an incinerator is not available:
- Pathological, sharps and food remains should be buried in a designated burial site.
 - Fuel assisted burning for other solid wastes should be done under supervision.
 - All liquid waste should be directed into a designated properly constructed soakage pit.

6.0 References

- 6.1 Infection Control for VHF in the African health care settings – WHO/CDC 1998
- 6.2 Ebola, Marburg outbreak control guidance manual Version2.0 – By Peter Thomson - MSF 2007
- 6.2 Kenyatta National Hospital SOP/KNH/R&QA/01 – Guide for writing Standard Operating Procedure.