



KENYATTA NATIONAL HOSPITAL

SOP/KNH/IPC-EBOLA/013

REVISION: 00

DEPARTMENT: INFECTION PREVENTION & CONTROL

# SAFE BURIAL PRACTICES FOR PATIENTS DYING OF EBOLA VIRUS DISEASE



## 1. Scope

This procedure describes the process of safe burial practices for patients dying of Ebola virus disease (EVD). At the time of death, EVD patients are highly infectious due to a high viral load and remain infectious for some time. The virus is found on the skin and body fluids (tears, saliva, vomitus, stool, blood, secretions). The body will contaminate any surface it comes into contact with. Religious and cultural practices/ rites performed as part of tradition in honour of the dead may endanger the living unless performed safely by well trained personnel while wearing full personal protective equipment after the body has been disinfected.

## 2. Purpose

To define requirements and procedures for performing safe burial practices for deceased Ebola patients who have died in the Ebola isolation Unit in order to control transmission of infection in compliance with local and international health and environmental guidelines that are culturally and religiously acceptable.

The purpose of this procedure is to safety to the community and the nation through safe burial practices.

## 3. Terms and Definitions

3.1 Body - Corpse

3.2 Body bag - Special waterproof plastic bag for keeping deceased bodies

3.3 Body holding zone/room- Dedicated space for temporary storage of bodies while awaiting collection by the burial team

3.4 Burial team - Dedicated team of 4 people with the sole purpose of interring the bodies

3.5 Court order - A direction issued by a court or judge requiring a person to carry out an action

3.6 Cremation - The process where the remains of a person and the container encasing are exposed to extreme heat and flame

3.7 DDCS - Deputy Director Clinical Services

3.8 Ebola Isolation Unit (EIU) - A special ward where confirmed Ebola patients will be nursed

3.9 EVD - Ebola virus disease

3.10 Farewell home team - Staff from KNH farewell home who are trained and part of the Ebola response team

3.11 KNH - Kenyatta National Hospital

3.12 PPE - Personal protective equipment

3.13 Nurse in charge - The nurse overseeing the EIU

3.14 Safe burial practices - Burial practices associated with minimal risks to the burial team and the community in which the burial is undertaken

## 4. Responsibilities

4.1 The DDCS shall provide oversight for implementation of these procedures



## 5. Method

### 5.1 Persons required

- Nurse-in-charge
- Nurses
- Farewell home team 3 people
- Burial team 4 people
- Driver 1

### 5.2 Precautions

- 5.2.1 Corpses are highly infectious with virus and remain infectious for a long time. They can contaminate the isolation unit and any surfaces they come into contact with.
- 5.2.2 Do not handle the body unnecessarily.
- 5.2.3 Full PPE must be worn at all times by all the teams when handling the body prior to placement in the second body bag.
- 5.2.4 Only trained personnel should handle the body.
- 5.2.5 Family members should not handle the body at any time.
- 5.2.6 Do not perform any post-mortem examination.
- 5.2.7 Do not wash or embalm the body.
- 5.2.8 Body should be placed in 2 airtight body bags.
- 5.2.9 Body should be buried/cremated promptly.

### 5.3 Preparation of the body

- 5.3.1 Following death of a patient in the Ebola Isolation Unit, the nurse in charge covers the body with a blanket.
- 5.3.2 The nurses put a screen around the bed of the deceased patient and callS the farewell home team to enter the high-risk area.
- 5.3.3 3 people from the farewell home team enter in full protective clothing/PPE.
- 5.3.4 Spray the body, blanket and clothes of the deceased are sprayed with 0.5% chlorine solution.
- 5.3.5 Write the name of the deceased person on the outside of the body bag with a waterproof marker.
- 5.3.6 Spray/wipe the body bag inside with 0.5% chlorine solution.
- 5.3.7 The body, wrapped in the blanket is placed with personal clothing in the body bag.
- 5.3.8 Spray again inside the body bag, close the body bag securely (zip closed to the face of the patient) and spray outside the body bag. Once closed, the body bag will not be opened at any time as this may lead to leakage of body fluids.
- 5.3.9 Place body bag on stretcher and transport thebody to the body holding zone/room in the Ebola Isolation Unit.
- 5.3.10 When leaving the farewell home team members thoroughly disinfect aprons, boots, and gloved hands with 0.5% chlorine solution.
- 5.3.11 Once the body has been moved, the isolation ward will be cleaned by the cleaners as per SOP on cleaning the isolation Unit (SOP/KNH/IPC-EBOLA/009)



#### **5.4 Transport of the body out of the body holding zone/room**

- 5.4.1 Staff dressed up in PPE from the Ebola Isolation Unit and farewell home team should walk to the body holding zone/room and put the prepared body (already in the first body bag) on a stretcher.
- 5.4.2 Carry the stretcher outside the body holding zone of the Ebola Isolation Unit via the special exit for corpses. The burial car/pick up should be parked close to this exit.
- 5.4.3 Write the name of the deceased person on the outside of the second body bag with a waterproof marker.
- 5.4.4 Spray inside the second body bag with 0.5% chlorine, then place the first body bag with the body inside the second body bag.
- 5.4.5 Close the second body bag and spray the outside of the body bag.
- 5.4.6 After the body is put in the second body bag, spray the stretcher thoroughly.
- 5.4.7 The Ebola Isolation Unit/ farewell home team will return dressed to the Ebola Isolation Unit while the burial team continues to the burial vehicle.
- 5.4.8 The burial team (dressed in scrubs, boots, waterproof gown, thick gloves (industrial) and apron) will receive the body covered in 2 body bags and placed on a stretcher for transport to the graveside/crematorium.
- 5.4.9 The place where the Ebola Isolation Unit team walked outside the Ebola Isolation unit should be sprayed with 0.5% chlorine solution.

#### **5.5 Procedure for burial**

- 5.5.1 Place the body in the 2 body bags at the back of the pick up on top of a stretcher and transport to graveside.
- 5.5.2 Place ropes on ground at two or three intervals (knee, lower back, upper back) to use to lower body bag into grave, and place body bag on top of the ropes. Heavy industrial gloves need to be used when lowering the body bag.
- 5.5.3 4-6 persons lower the body into the grave using ropes.
- 5.5.4 Spray the stretcher thoroughly with 0.5% chlorine solution
- 5.5.5 Spray inside of vehicle with 0.5% chlorine and let stand for at least 15 minutes. Rinse vehicle with clean water. Upon return to the Ebola Isolation Unit, the vehicle should be disinfected as per the SOP on disinfecting transport vehicles (KNH/SOP/IPC-EBOLA/011)
- 5.5.6 Undressing of the burial team is done as per protocol upon return to the Ebola isolation unit. Refer to SOP on degowning SOP/KNH/IPC-EBOLA/001.

#### **5.6 Procedure for cremation**

- 5.6.1 The burial team will carry the body from the car to the crematorium (Lang'ata Crematorium)
- 5.6.2 The body will be cremated at a temperature of 800-1000°C for 90 to 120 minutes.
- 5.6.3 Once cremated, the ashes will be removed and placed in an urn labelled appropriately.
- 5.6.4 Relatives may be presented with the ashes.



## 6. References

- 6.1. MSF 2008 Filovirus Haemorrhagic Fever Guidelines, Esther Sterk, MD
- 6.2. WHO August 2014 Interim Infection Prevention and Control Guidance for Care of Patients with Suspected and Confirmed Filovirus Hemorrhagic Fever in Healthcare Settings, with Focus On Ebola
- 6.3. Public Health Act (Kenya)
- 6.4. NEMA Act (Kenya)

## 7. Appendix

- 7.1 Selection of an ideal burial ground
- 7.2 Burial team resources

**7.1. Selection of an ideal burial ground**

In consultation with the County Government of Nairobi a burial site that is considered safe to the environment will be selected. The graves will be 2 metres (6 feet deep) to avoid contamination of the underground water table.

**7.2. Burial team resources**

The following items must be carried in the vehicle. Verify the presence of all items listed in the following checklist before starting work.

All these items must be replaced immediately after use. The equipment must always be ready to use.

Item	Quantity per person (take spare items for 1 person with you)
<b>Protective Equipment</b>	
Plastic aprons	1
Goggles	1
Overall	1
Head Covers	1
Masks	1
Examination gloves (box at least half full)	1 pair
Latex protection gloves	1 pair
<b>Other Equipment</b>	
	<b>Total quantity for the team</b>
10-litre spraying machine filled with 0.5% chlorine solution	1
1-litre hand-sprayer filled with 0.05% chlorine solution	1
Vinyl stretcher	1
Rope cut to 5-meter lengths	3 pieces
Rope cut to 15-meter lengths	1 piece
Plastic rubbish bags	4
HTH granules and 1 measuring spoon	1 kg
Plastic cup	1
10-litre jerry can filled with 10 liters of water for making additional 0.5% chlorine solution	1
Bucket with lid to hold re-usable protective items after use	1
Plastic sheeting 3m –3m	1
Burial guideline	1
Guideline for preparing chlorine solutions	1
KNH tape (For cordoning off the area)	1 Roll