

Annex 18. Transmission risk reduction of filoviruses in home-care settings

1. Introduction

The strategy for transmission risk reduction of filoviruses in home-care settings was developed during the Ebola epidemic in Kellé, Republic of the Congo, in 2003 and has been used successfully in subsequent epidemics.

The strategy aims at reducing the risk of Ebola and Marburg transmission in home-care settings in families of suspected cases refusing hospitalization. The strategy does not guarantee full protection of family members and is certainly not the best treatment option, but it should always be offered to those families that might otherwise sever all communication with the medical teams, or hide or relocate the patient and thus secretly spread the epidemic.

The strategy for transmission risk reduction of filoviruses in the home-care settings should be used in two cases:

1. If the patient (or their family, if the patient is unable to do so) categorically refuses referral to a hospital isolation unit, or
2. If there is no hospital isolation unit.

The strategy should be seen as a tool for communicating with families in the hope that they will accept referral to an isolation ward at a later stage. The strategy involves providing personal protective equipment (PPE) (gloves, gowns, masks, buckets, chlorinated water) and training family caregivers. Home-care patients are monitored by a home nurse (chosen by the family) who has been trained in basic disinfection techniques and the use of PPE and has been given vital information about the virus.

2. Explaining the protocol to families or the community

Ebola and Marburg are transmitted:

- By touching infected animal carcasses or eating infected meat.
- By touching infected patients.
- Through contact with the blood, vomit, stool, or urine of the patient.
- Via droplets emitted by the patient while talking, coughing, or vomiting.
- Through contact with materials such as clothing and bedding that have been contaminated by the body fluids of the patient.

All direct contact with infected patients is dangerous and should be avoided. Hospital referral of the patient is preferable because:

- The patient has a better chance of survival when treated by specialized doctors trained in the clinical management of Ebola and Marburg.
- Infection of relatives and home caregivers is avoided.

If hospital referral is not an option, the information below helps reduce disease transmission to other members of the household or the community. While not precluding it entirely, the information below can help to significantly reduce the risk of transmission in the home.

To reduce the risk of transmission, the following general recommendations should be followed:

- Kill Ebola and Marburg viruses using chlorine bleach solutions prepared, as described below in item 3.

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- Wear gloves or use towels soaked in bleach to avoid direct contact with the patient's body fluids: blood, vomit, stool, or urine.
- Put on a mask or use a dry towel to protect the nose and mouth from droplets emitted by the patient.
- Avoid contact with body fluids by staying behind or to the side of the patient while giving care.

3. Protocol for transmission risk reduction in the home

To be used by caregivers only.

The bleach solution must be at a concentration of at least 2.5%.

Care and cleaning:

1. Select one person to look after the patient. This person should also prepare the bleach solution. To prepare the bleach solution, mix 1 part concentrated bleach with 5 parts water (fill a cup with the bleach, empty the cup into a bucket and refill the cup with water five times, adding the water to the bucket).
2. The bleach solution loses its effectiveness after 24 hours, so fresh solutions must be prepared every morning.
3. For cleaning blood stains, vomit, stool, or urine:
 - ❖ Pour the bleach solution on to the blood, etc.
 - ❖ Soak a large towel in the bleach solution.
 - ❖ Use that soaked towel to clean off the blood.
 - ❖ Place the soiled towel in a bucket and cover with bleach solution.
 - ❖ Soiled towels must be soaked in a bucket filled with bleach solution for at least one hour. After one hour, the towels may be washed with soap and reused once they are dry.
4. Never put bleach or bleach solution in the patient's mouth or eyes.
5. The community must build a separate latrine that is used only by the patient.
6. Used and soiled bleach must be emptied into the latrine used by the patient.
7. Always stay behind or to the side of the patient; if possible, never face the patient.
8. Use bleach-soaked towels for carrying or moving the patient.

In the event of the patient's death:

9. Use bleach-soaked towels for taking the dead body to the grave or coffin.
10. Clean the room used by the patient with bleach.
11. Burn or bury all objects that cannot be cleaned. In particular, destroy the mattress used by the patient.

Always wash hands with bleach solution after touching the patient or their vomit, blood, stool, urine, etc. If the bleach irritates your hands, stop handling bleach and hand over the care of the patient to someone else.

Everyone in the community must wash hands with clean water and soap before eating. The same water should not be used twice. Use clean water for each person.