Case definition recommendations for Ebola or Marburg Virus Diseases

As of 09 August 2014

1. Routine surveillance: standard case definition recommended by WHO-AFRO for the notification of Ebola or Marburg cases


Suspected Ebola or Marburg cases for routine surveillance:
Illness with onset of fever and no response to treatment for usual causes of fever in the area, and at least one of the following signs: bloody diarrhoea, bleeding from gums, bleeding into skin (purpura), bleeding into eyes and urine.

Confirmed Ebola or Marburg cases for routine surveillance:
A suspected case with laboratory confirmation (positive IgM antibody, positive PCR or viral isolation)

Note: During an Ebola or Marburg outbreak, surveillance should use the case definitions described in section 2, 3 and 4.

2. Community-based surveillance: standard case definition

This definition of “alert cases” for Ebola or Marburg virus disease has been developed for use by the community or community-based volunteers. It may be used for community-based surveillance during the pre-epidemic phase and during the outbreak.

Alert case:
Illness with onset of fever and no response to treatment of usual causes of fever in the area, OR at least one of the following signs: bleeding, bloody diarrhoea, bleeding into urine OR any sudden death

Instructions:
If an alert case (living or dead) is identified:
Report the case to a surveillance team or to the closest health centre
3. During an Ebola or Marburg outbreak: case definitions used by the surveillance

**Important:** during an outbreak, the case definitions are likely to be modified to be adapted to new clinical presentation(s) or different modes of transmission related to the local event.

3a. Case definition to be used by mobile teams or health stations and health centres

**SUSPECTED CASE:**
Any person, alive or dead, suffering or having suffered from a sudden onset of high fever and having had contact with:
- a suspected, probable or confirmed Ebola or Marburg case;
- a dead or sick animal (for Ebola)
- a mine (for Marburg)

**OR:** any person with sudden onset of high fever and at least three of the following symptoms:
- headaches
- anorexia / loss of appetite
- lethargy
- aching muscles or joints
- breathing difficulties

**OR:** any person with inexplicable bleeding

**OR:** any sudden, inexplicable death.

**Instructions when a suspected case has been identified:**
- Report the case to the surveillance team
- After obtaining express consent, collect a sample
- Fill in a case notification form
- Draw up a list of contacts of the suspected case

If the subject is alive, explain to the patient and his/her family the need to go to hospital to receive adequate medical care. After having obtained the consent of the patient or his/her family arrange for transfer. If the subject has passed away, explain to the family the need for conducting a safe burial. After obtaining consent, coordinate funeral arrangements with the burial team.

3b. Case definition for exclusive use by hospitals and surveillance teams

**PROBABLE CASE:**
Any suspected case evaluated by a clinician

**OR:** Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link with a confirmed case

**Note:** if laboratory specimens are collected in due time during the illness, the preceding categories are reclassified as “laboratory confirmed” cases and “non-case”.

**LABORATORY CONFIRMED CASE:** Any suspected or probably cases with a positive laboratory result. Laboratory confirmed cases must test positive for the virus antigen, either by detection of virus RNA by reverse transcriptase-polymerase chain reaction (RT-PCR), or by detection of IgM antibodies directed against Marburg or Ebola.

**NON-CASE:** Any suspected or probable case with a negative laboratory result. “Non-case” showed no specific antibodies, RNA or specific detectable antigens.
4. Standard definition for contacts persons of Ebola or Marburg cases

Important: during an outbreak, the contact definitions are likely to be modified to be adapted to newly reported infection risk factors related to the local event.

Ebola or Marburg case contacts:
Any person having been exposed to a suspect, probable or confirmed case of Ebola or Marburg in at least one of the following ways:
- has slept in the same household with a case
- has had direct physical contact with the case (alive or dead) during the illness
- has had direct physical contact with the (dead) case at the funeral
- has touched his/her blood or body fluids during the illness
- has touched his/her clothes or linens
- has been breastfed by the patient (baby)
Provided that this exposure has taken place less than 21 days before the identification as a contact by surveillance teams.

Contacts of dead or sick animals:
Any person having been exposure to a sick or dead animal in at least one of the following ways:
- has had direct physical contact with the animal
- has had direct contact with the animal’s blood or body fluids
- has carved up the animal
- has eaten raw bush-meat
Provided that this exposure has taken place less than 21 days before the identification as a contact by surveillance teams.

Laboratory contacts:
Any person having been exposed to biological material in a laboratory in at least one of the following ways:
- has had direct contact with specimens collected from suspected Ebola or Marburg patients
- has had direct contact with specimens collected from suspected Ebola or Marburg animal cases
Provided that this exposure has taken place less than 21 days before the identification as a contact by surveillance teams.

Other infection risk factors include: contact with a hospital where Ebola or Marburg cases are being treated; infection; or vaccination in the 21 days preceding the onset of symptoms.

The contact person should be followed for 21 days after exposure.
If the contact person is asymptomatic for 21 days after exposure, he released the follow-up.