



EXPOSURE DETERMINATION & POST EXPOSURE MANAGEMENT OF EVD

Ebola Viral Disease (EVD) is a potentially fatal bloodborne viral disease that is spread through direct contact through broken skin or mucous membranes with:

- Blood or body fluids (including, but not limited to urine, saliva, feces, vomit and semen) of a person who is symptomatic with EVD
- Objects (like needles and syringes) that have been contaminated with the virus

Exposure can occur through these routes while treating the patient or during decontamination of equipment or the ambulance.

Medical science shows that a person who is asymptomatic cannot spread the disease.

Ebola virus is very fragile. It cannot easily survive outside of body fluids. Therefore, disinfection is relatively simple. Soap and water with standard disinfecting/cleaning solutions readily kill the virus.

Symptoms:

Symptoms may appear anywhere from 2 to 21 days after exposure to EVD, but the average is 8 to 10 days.

- Fever (greater than 38.6°C or 101.5°F)
- Severe headache
- Muscle pain
- Weakness
- Diarrhea
- Vomiting
- Abdominal (stomach) pain
- Unexplained hemorrhage (bleeding or bruising)
- Red rash by day 5-7 (usually involving the face, neck, trunk and arms) that can peel off and in the form of scales.

Additional information about EVD and modes of transmission is available at www.amr.net/Ebola

Patients can progress from the initial non-specific symptoms after about 5 days to develop gastrointestinal symptoms such as severe watery diarrhea, nausea, vomiting and abdominal pain. Other symptoms such as chest pain, shortness of breath, headache or confusion, may also develop. Patients often have conjunctival injection. Hiccups have been reported. Seizures may occur, and cerebral edema has been reported. Bleeding is not universally present but can manifest later in the course as petechiae, bruising, or oozing from venipuncture sites and mucosal hemorrhage. Frank hemorrhage is less common. Pregnant women may experience spontaneous miscarriages.

Recovery from EVD depends on the patient's immune response. The survival rates in the United States are higher than the affected West African nations due to the advanced supportive therapies available. People who recover from EVD infection develop antibodies that last for at least 10 years.

At Risk Countries:

People who have traveled to countries that have had incidents of EVD outbreaks are most at risk for developing infection. The following countries are currently known to be at risk.

- Democratic Republic of the Congo (DRC) has had an outbreak in the Equateur Province.
- The West African countries of Guinea, Liberia, Nigeria, and Sierra Leone have also seen outbreaks.

Caregiver Report of Possible EVD Exposure:

As a Manager or Supervisor, you may be contacted by a crew member who has concerns that they may have been exposed to EVD. This may be exacerbated by publicity and media coverage. Should you receive a report of possible exposure, begin by collecting initial facts surrounding the exposure and confirming current contact information while being sympathetic to his or her concerns.

The term “Designated Officer” shall refer to Infection Control Officers, Infection Control Nurse, etc.

- Begin by explaining the routes of exposure explained above and the risks of transmission by symptomatic vs. asymptomatic patients.
- Immediately contact the Designated Officer and introduce the Caregiver.
 - The Designated Officer should explain his or her role in the post-exposure process.
 - The Designated Officer is the individual who is legally able to get information from the receiving hospital and coordinate follow up between the receiving facility’s Designated Infection Control Officer and the County/State Health Department’s Designated Official.
- The Designated Officer will follow the exposure identification and determination procedures outlined below and take the necessary actions based upon the level of exposure determined.
- Call the **EVHC Clinician Hotline at 855-448-1742** for 24-hour support to AMR leaders and medical directors. The hotline is staffed by Evolution Health Nurse Navigators in the Medical Command Center in Dallas and is supported by Logis technology. The Nurse Navigators have access to Ebola-related information, protocols and resources.

Exposure Identification by Designated Officer:

The focus of the Designated Officer’s investigation of the potential exposure will include identification of risk factors, determination of exposure through defined routes of entry, and use of PPE. The Designated Officer or Supervisor should be prepared to don any necessary PPE.

- Has the Caregiver transported a patient who is known to have EVD or been in contact with any person who is known to have EVD and is symptomatic?
- Has the Caregiver transported a symptomatic patient who has traveled to any of the at risk countries identified above?
- What types of PPE was the Caregiver using during the transport (gloves, goggles, Tyvek suit/gown, respirator/mask, shoe covers)?
- Did the Caregiver perform any aerosolized procedures (airway placement, administration of nebulized medications, tracheal suction, CPAP, etc.), exhibiting signs and symptoms of EVD, without the use of PPE eye protection, gloves and N95/P100 respirators?
- Did the Caregiver come in unprotected contact with any body fluids of a patient to their mucous membranes (eyes, nose, mouth etc.) or non-intact skin?
- Did the Caregiver suffer a Needlestick with a sharp used on a confirmed or suspected EVD patient?

Based upon the answers to these questions determine whether there has been a confirmed exposure to body fluids from a confirmed or suspected EVD patient.

Non-Exposure Determination:

Non-Exposure Determination:

- Explain the routes of entry, signs and symptoms to look for, and the fact that there are no prophylactic treatments to be administered.
- Explain that if they develop signs or symptoms at work then contact the Designated Officer or Supervisor immediately.
- Explain that if they develop signs or symptoms off duty to seek appropriate care and notify the Designated Officer, Supervisor or Regional Safety & Risk Manager.
- The Designated Officer should follow up with employee at 1 week, 2 weeks and 3 weeks to assess any possible EVD signs or symptoms.

Confirmed Exposure Determination Procedure:

Should an EVD exposure be determined, the AMR Designated Officer should follow the post-exposure guidelines listed below.

Asymptomatic Caregiver Exposure:

- Reassure the Caregiver that while asymptomatic they are not contagious nor does it mean infection is imminent.
- Contact the Designated Officer at the receiving facility of the source patient to report the exposure and provide information regarding the exposure, patient information and request source patient testing.
- Arrange for rapid evaluation at the receiving facility if possible. Otherwise, arrange follow up at an appropriate medical facility.
- Contact the Regional Safety & Risk Manager.
- Complete any required County/Government Exposure reporting protocols.

Symptomatic Caregiver Exposure (Remember to don Personal Protective Equipment as appropriate):

- Assure the Caregiver that AMR will ensure they get the treatment and follow up required.
- Remind the Caregiver of the need to prevent exposure of their body fluids to family and others.
- Collect information of the people whom the Caregiver has been in contact with while symptomatic.
- Contact the Designated Officer at the receiving facility of the source patient to report the exposure and provide information regarding the exposure, patient information and request source patient testing.
- Arrange for rapid evaluation (or transport if needed) to the receiving facility of the source patient if possible. Otherwise, arrange follow up at the closest most appropriate hospital facility and provide necessary information.
- Contact Regional Safety & Risk Manager.
- Complete any required County/Government Exposure reporting protocols.
- If necessary, clean and disinfect area.

AMR Post-Exposure Management Policy #1245 provides additional information related to bloodborne pathogen exposure.

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