

VIRUS INFECTION (EBOLA AND MERS): PATIENT EVALUATION
[AEMT, EMT-I, RN, EMT-P]

Note: The purpose of this guideline is to enhance EMS provider safety in the setting of suspected Ebola or MERS virus patient evaluation.

CDC Case Definitions

Ebola Infection	MERS Infection (Middle East Respiratory Syndrome)
<p>EMS patient assessment criteria:</p> <ol style="list-style-type: none"> 1. Fever (101.5 F or 38.6 C) and additional symptoms such as headache, joint and muscle aches, weakness, fatigue, diarrhea, vomiting, abdominal pain, or unexplained hemorrhage (bleeding or bruising). <p style="margin-left: 20px;"><u>AND EITHER:</u></p> <ol style="list-style-type: none"> 2. Travel to or from West Africa (Guinea, Liberia, Sierra Leone, Senegal, Nigeria or other countries where Ebola transmission has been reported by WHO) within 21 days (3 weeks) of symptom onset <u>OR</u> 3. Close contact with a patient known to have Ebola 	<p>EMS patient assessment criteria:</p> <ol style="list-style-type: none"> 1. Fever, cough or shortness of breath, <u>AND EITHER:</u> <ol style="list-style-type: none"> a. History of travel from countries in or near the Arabian Peninsula within 14 days before symptom onset, <u>OR</u> b. Close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from countries in or near the Arabian Peninsula, <u>OR</u> c. A member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology in which MERS-CoV is being evaluated, in consultation with state and local health departments. <p style="margin-left: 20px;"><u>OR</u></p> 2. Fever AND symptoms of respiratory illness (not necessarily pneumonia; e.g. cough, shortness of breath) AND being in a healthcare facility (as a patient, worker, or visitor) within 14 days before symptom onset in a country or territory in or near the Arabian Peninsula in which recent healthcare-associated cases of MERS have been identified.

For both Ebola and MERS, adhere to the following guidelines:

- A. PPE (Personal Protective Equipment) - Recommended provider PPE includes:
 1. Gloves (double gloving);
 2. Full body protective outer garment (Tyvek suit or higher) with integral hood and booties
 3. PAPR (if available) or full face mask with P100 or higher respiratory protection.
- B. PPE should be donned and doffed according to published guidelines to prevent cross contamination.

Initial Assessment and Treatment

- A. EMS providers should minimize the number of crew members in close contact with the patient until the initial interview is completed.
- B. Perform initial interview of all patients from at least six (6) feet away, to determine if additional PPE precautions are necessary.
- C. Patient PPE Transport:
 - 1. If patient is ambulatory, place patient into protective Tyvek full body suit and a surgical or N95 mask (on all patients with suspected Ebola/MERS symptoms) before performing a detailed examination.
 - 2. If patient requires resuscitation where body fluid exposure risk is high, Fire/EMS providers should attempt to place the patient into the MCEMS “patient isolation bag” to decrease exposure risk during transport whenever possible.
- D. Avoid droplet-producing procedures whenever possible, including nasal or oral airways placement, use of nebulizers, bag-valve-mask (BVM) use, suctioning or endotracheal or King Airway intubation. If BVMs are needed, use with HEPA filters whenever possible.

Transport

- A. For patients in whom Ebola/MERS is suspected, only providers essential for patient care should be in the patient compartment of the ambulance.
- B. Turn on ambulance exhaust fans in the patient compartment to the highest possible setting. If feasible, open the outside air vents.
- C. Alert receiving hospital personnel of the possibility of an infectious patient as soon as possible, and hold suspected infectious patients in the ambulance until either the ED or hospital staff is ready to receive them.

Cleaning and Disinfection

- A. EMS personnel cleaning equipment and patient care areas should wear full PPE including face and airway protection prior to initiating cleaning.
- B. Upon completion of the call, use an approved U.S. Environmental Protection Agency (EPA) registered hospital disinfectant for any non-enveloped virus to thoroughly clean all equipment and all patient-care areas (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls, and work surfaces).
- C. After completing cleaning tasks, including cleaning and disinfection of reusable equipment, cleaning personnel should carefully remove and dispose of PPE.
- D. If possible remove the ambulance from any patient care service for a minimum of 24 hours post transport.

This procedure is effective as of 10/15/14 for EMT’s acting under Erin Burnham, MD