

Tidewater Emergency Medical Services Council, Inc.
Ebola Virus Disease EMS Guidelines
Adopted, OMD Committee, December 12, 2014

The guidance provided in this document is based on current knowledge of Ebola Virus Disease (EVD). Updates to this document will be made as needed and based on the guidance provided by the Centers for Disease Control and Prevention (CDC) and the Virginia Department of Health. Current national guidelines can be viewed on the on the CDC Ebola webpage located at: <http://www.cdc.gov/vhf/ebola/index.html> The information contained in this document is intended to complement existing guidance for healthcare and Emergency Medical Services (EMS) personnel and is current as of the date shown.

Public Safety Answering Point (PSAP) Call Screening

When risk of Ebola is elevated in a community, it is important for Public Safety Answering Point (PSAP)/911 Dispatch Centers to question callers about:

- Residence in, or travel to, a country where an Ebola outbreak is occurring (currently Guinea, Liberia, Sierra Leone and Mali)
- Signs and symptoms of Ebola (such as fever, vomiting, diarrhea) and other risk factors, such as direct contact with someone who is sick with Ebola.

PSAPs should immediately provide EMS personnel with the call screening information so that EMS Personnel can don personal protective equipment (PPE) before their arrival on scene.

Patient Assessment

When risk of Ebola is elevated in a community, EMS personnel should screen all patients complaining of illness for Ebola.

1. Address scene safety:
 - If PSAP call takers advise that the patient is suspected of having Ebola, EMS personnel should put on the PPE appropriate for suspected cases of Ebola (<http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>) **before** entering the scene.
 - Keep the patient separated from other persons as much as possible.
 - Use caution when approaching a patient with Ebola. (In the advanced stages of the illness it may cause delirium, with erratic behavior that can place EMS personnel at risk of infection, e.g., flailing or staggering.)
2. Obtain exposure history while minimizing exposure:
 - Perform the initial screening from at least 3 feet away from the patient. In addition, EMS crews, with scene safety in mind – may consider separating so that all crew members do not immediately enter the patient area.

- Screen the patient for:
 - Residence in or travel to a country with widespread Ebola transmission within the previous 21 days. (Currently Guinea, Liberia, or Sierra Leone or Mali)
 - Contact with blood or body fluids of a patient known to have, or suspected to have Ebola, within the previous 21 days.
3. Patients who meet these criteria should be questioned further regarding the presence of signs or symptoms of Ebola, including:
- Fever (subjective or $\geq 100.4^{\circ}\text{F}$ or 38.0°C), and
 - Headache, fatigue, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or bleeding.

If no EVD risk factors are identified, proceed with normal EMS care.

4. Based on the presence of risk factors and symptoms, don or continue to wear the appropriate PPE and follow the scene safety guidelines for a suspected case of Ebola. If the EMS provider is NOT wearing PPE, and it is apparent that the patient may have Ebola, then the EMS provider must immediately remove themselves from the area and assess whether an exposure occurred.

Patient Care and Treatment

- Place a surgical mask on the patient.
- If possible, avoid performing invasive procedures such as IV therapy, intubation, suctioning, nebulizer, or any other procedure that may increase the risk of contamination. However, *do not withhold lifesaving interventions* that must be performed.
- Limit the number of crew members involved in patient care to the minimum necessary.

Patient Refusal and Local Health Department Follow-Up

If a patient meets the criteria for suspected or confirmed Ebola and refuses transportation to a hospital the ambulance crew should contact their local health department. Ask for the Epidemiology Investigator and provide the patient's information.

After regular working hours and on weekends, call (866) 531-3068. Ask for the on-call Epidemiology Investigator.

Personal Protective Equipment

- Training and Demonstrated Donning and Doffing Skills: EMS workers who may be involved in the care of Ebola patients should receive training and have demonstrated competency in performing all Ebola-related infection control practices and procedures, and specifically in donning/doffing proper PPE.

- Recommended PPE: The CDC describes the required minimum PPE in “*Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing)*” located at: <http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>.
- Donning & Doffing PPE: When treating a suspected Ebola patient, EMS personnel should wear PPE and follow proper procedures for putting on and taking off (donning and doffing). PPE should be donned (put on) before entering the scene and continue to be worn until personnel are no longer in contact with the patient. The donning of PPE should be carefully observed by another trained individual. PPE must be carefully removed (doffed) under the direct observation by a trained individual, in an area designated by the receiving hospital, and following proper procedures outlined in the CDC Guidelines listed above. Follow the CDC Guidelines for the management of contaminated PPE.

EMS Transport to the Receiving Hospital

- Patient destination: Agencies transporting suspected Ebola patients should follow established local/regional protocols for transporting patients based on patient’s chief complaint. All emergency departments in the Tidewater EMS Council region are prepared to initially receive, screen and confirm suspected Ebola patients. Once confirmed, and Ebola patient may be transported to a CDC designated treatment facility.
- Immediate hospital notification: EMS staff should immediately notify the receiving hospital that they are transporting a “High Risk Isolation Patient”. Immediate notification provides the hospital time to take proper infection control precautions before the ambulance arrives with the patient.
- Arrival at the Hospital/Patient Turnover: Upon arrival contact the hospital via phone or radio to tell them that you have arrived. Wait in the ambulance for hospital staff to arrive and supervise the patient transfer. Crew members should follow the direction of Emergency Department staff regarding location for patient turnover.
- When patient turnover is complete: Crew members should doff PPE and decontaminate themselves in a supervised and controlled manner in the location directed by Emergency Department staff, following posted CDC guidelines.

Infection Control Precautions

- Please note that the likelihood of contracting Ebola in the United States is extremely low unless a person has direct, unprotected contact with the blood or body fluids (like urine, saliva, feces, vomit, sweat, and semen) of a person who is sick with Ebola virus disease (EVD).
- Personal Protective Equipment: EMS personnel should adhere to the procedures described in “*Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing)*” located at <http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html> .

- Notifications: Crew members must notify emergency department personnel, their EMS agency supervisor and the EMS Designated Infection Control Officer (DICO) in accordance with their agency's exposure control plan, as soon as practical to do so.
- Possible Exposures: If any provider is exposed to blood, bodily fluids, secretions or excretions from a patient with suspected or confirmed Ebola the provider should:
 - Stop working immediately and wash the affected skin surfaces with soap and water. Mucous membranes should be irrigated with a large amount of water or eyewash solution.
 - Contact Designated Infection Control Officer and supervisor for assessment and access to post-exposure management services, and implement their EMS agency's exposure plan.
 - Receive medical evaluation and follow-up care, including fever monitoring twice daily for 21 days. Follow agency and local health department direction regarding working status and quarantine laws, policies and procedures.

Remember, suspected Ebola patients are NOT contagious if they do not have any signs or symptoms.

Contact Follow-up Procedures

EMS personnel who develop sudden onset of fever, intense weakness or muscle pains, vomiting, diarrhea, or any signs of hemorrhage after an unprotected exposure (i.e., not wearing recommended PPE at the time of patient contact or through direct contact to blood or body fluids) to a patient with suspected or confirmed Ebola should:

- Not report to work or immediately stop working and isolate themselves,
- Notify their supervisor who should notify local and state health departments,
- Contact occupational health/supervisor for assessment and access to post-exposure management services, and
- Comply with work exclusions until they are deemed no longer infectious to others.

Ambulance Decontamination

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a patient with suspected or confirmed Ebola:

- An EPA-registered hospital disinfectant with label claims for viruses that share some technical similarities to Ebola (such as, norovirus, rotavirus, adenovirus, poliovirus)⁴ and instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions. After the bulk waste is wiped up, the surface should be disinfected as described below.
- EMS personnel performing cleaning and disinfection should follow CDC's "*Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing)*" located at:

<http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>. Careful attention must be paid to the safety of personnel involved in the cleaning and disinfection of the transport vehicle as during the care of the patient.

- Patient-care surfaces (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls and work surfaces), as well as stretcher wheels, brackets, and other areas likely are to become contaminated and should be cleaned and disinfected after each transport.
- A blood spill or spill of other body fluid or substance (e.g., feces or vomit) should be managed by trained personnel wearing correct PPE, through removal of bulk spill matter, cleaning the site, and then disinfecting the site. For large spills, a chemical disinfectant with sufficient potency is needed to overcome the tendency of proteins in blood and other body substances to neutralize the disinfectant's active ingredient. Contaminated reusable patient care equipment (e.g., glucometer, blood pressure cuff) should be placed in biohazard bags and labeled for cleaning and disinfection according to agency policies. Reusable equipment should be cleaned and disinfected according to manufacturer's instructions by trained personnel wearing correct PPE. Avoid contamination of reusable porous surfaces that cannot be made single use.
- Use only a mattress and pillow with plastic or other covering that fluids cannot get through. To reduce exposure among staff to potentially contaminated textiles (cloth products) while laundering, discard all linens, non-fluid-impermeable pillows or mattresses as appropriate.

Category A Medical Waste

Ebola virus is a Category A infectious substance regulated by the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). Any item transported for disposal that is contaminated or suspected of being contaminated with a Category A infectious substance must be packaged and transported in accordance with the HMR. This includes medical equipment, sharps, linens and used healthcare products (such as soiled absorbent pads or dressings, kidney-shaped emesis pans, portable toilets, used PPE [e.g., gowns, masks, gloves, goggles, face shields, respirators, booties] or byproducts of cleaning) contaminated or suspected of being contaminated with a Category A infectious substance.

NOTICE

These guidelines are based on current CDC and Virginia Department of Health recommendations as of the date published. Please monitor the CDC and the OEMS website frequently for new or revised information. Join the CDC and OEMS Facebook and Twitter feeds for immediate notification of changes to published guidance and recommendations.