

Ebola Virus Disease

If VT e911 PSAP (9-1-1 Call Center) advises that the patient is suspected of having Ebola, put on appropriate PPE BEFORE entering the scene and follow instructions for Suspect Case for Ebola Virus Disease below. Personnel with First Responder agencies without appropriate PPE should NOT enter scene or have contact with patient.

Only one EMS provider should approach the patient and perform initial screening from at least 3 feet away as follows:

Identify travel and exposure history: Has the patient lived in or traveled to areas with widespread Ebola transmissions (Guinea, Liberia, or Sierra Leone), **OR** had contact with blood or body fluids (including but not limited to urine, saliva, vomit, sweat, and diarrhea) of a patient known to have or suspected to have Ebola within the previous 21 days?

NO – Proceed with normal EMS care

YES – Proceed with questions about signs and symptoms

Identify signs and symptoms: Does the patient have a fever (subjective or $> 100.4^{\circ}\text{F}$ or 38.0°C) or **ANY** of the following Ebola-compatible symptoms: severe headache, weakness, muscle pain, fatigue, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage (bleeding or bruising)?

NO – Proceed with normal EMS care and appropriate PPE and notify receiving facility of exposure history

YES – Consider the patient a **Suspect Case for Ebola Virus Disease**. Notify the receiving hospital before transport and the VT Department of Health at 802-863-7240, and implement the following **IMMEDIATELY**:

Personal Protective Equipment (PPE): Based on the clinical presentation of the patient, there are two PPE options:

- If the patient is not exhibiting obvious bleeding, vomiting, or diarrhea, and does not have a clinical condition that warrants invasive or aerosol-generating procedures (e.g., intubation, suctioning, active resuscitation), then EMS personnel should at a minimum wear the following PPE:
 - A. Face shield and surgical face mask
 - B. Impermeable gown, and
 - C. Two pairs of gloves.
- If the patient is exhibiting obvious bleeding, vomiting, or diarrhea, or has a clinical condition that warrants invasive or aerosol-generating procedures (e.g., intubation, suctioning, active resuscitation), then immediately don appropriate PPE that leaves no skin exposed and includes the following:
 - **PAPR** (powered air purifying respirator) or **N95 Respirator** with single-use disposable full-face shield **and either** surgical hood **or** coverall with integrated hood. Ensure complete coverage of the head and neck.
 - If using surgical hood option, may use single-use fluid-resistant or impermeable gown that extends to at least mid-calf **or** coverall without integrated hood. If not using surgical hood, use coverall with integrated hood.
 - Double gloves. Single-use nitrile examination gloves, outer with extended cuffs.
 - Boot covers that are waterproof and go to at least mid-calf or leg covers
 - Apron that is waterproof and covers the torso to the level of the mid-calf should be used if patient has vomiting or diarrhea.
 - PPE should be put on before entering the scene and continued to be worn until personnel are no longer in contact with the patient. PPE should be carefully put on as per CDC guidelines and under supervision by a trained observer who may be another member of the EMS crew.
 - PPE should be carefully removed in an area designated by the receiving hospital as per CDC guidelines and under supervision by a trained observer.

Protocol Continues

E/
A/
P

Ebola Virus Disease Protocol

Ebola Virus Disease

Protocol Continued

PPE Continued:

- If during initial patient contact and assessment and before an EMS provider has donned the appropriate PPE, it becomes apparent that the patient is a suspected case of Ebola, the EMS provider must immediately remove themselves from the area and assess whether an exposure occurred. The provider should implement their agency's exposure plan, if indicated by assessment.
- EMS personnel wearing PPE who have cared for the patient must remain in the back of the ambulance and not be the driver.

General Guidance:

- Keep the patient separated from other persons as much as possible.
- Minimize the number of EMS personnel that directly care for the patient as appropriate depending on the condition of the patient and scene.
- Consider obtaining additional resources or mutual aid to ensure adequate staffing and PPE. Recommended crew includes 2 patient care providers, and one driver.
- Use caution when approaching a patient with Ebola. Illness can cause delirium, with erratic behavior that can place EMS personnel at risk of infection, e.g., flailing or staggering.
- Initiate transport to the closest facility. Consider transport directly to UVMHC or DHMC if additional transport time < 15 minutes. Contact **Medical Control** for guidance.
- **Notify the receiving hospital before transport and notify the VT Department of Health at 802-863-7240.**
- Patients being monitored by VT Department of Health who develop symptoms and inter-facility transfers will be transported by designated ground units (UVMHC Critical Care Transport, DHART).
- Keep an accurate list of all EMS personnel involved in care of a suspect patient.
- If blood, body fluids, secretions, or excretions from a patient with suspected Ebola come into direct contact with the EMS provider's skin or mucous membranes, then the EMS provider should disengage when safe to do so. They should wash the affected skin surfaces with soap and water and mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution. Report exposure to an occupational health provider or supervisor for follow-up and receive medical evaluation.
- Follow CDC guidelines for cleaning EMS transport vehicles after transporting a patient with suspected or confirmed Ebola.
- EMS personnel involved in care of a suspect or known Ebola case must follow up with VDH to determine appropriate monitoring, follow-up and reporting requirements.
- Contact the **Vermont Department of Health 802-863-7240 and Medical Control** for guidance for patients that refuse transport or are deceased on scene.

Medical Care Guidance:

- If patient is cooperative and able to assist, request the patient put on a Tyvek coverall. If the patient cannot tolerate the Tyvek coverall, or the coverall is likely to interfere with patient care activities, or the patient cannot assist in putting it on, the patient may be wrapped in a sheet or similar barrier to prevent environmental contamination.
- Limit activities, especially during transport that can increase the risk of exposure to infectious material.
- Limit aerosol-generating procedures such as nebulized medications, CPAP, intubation or suctioning unless absolutely necessary for patient care.
- Limit the use of needles and other sharps as much as possible. IVs should not be started unless the patient is in emergent need of volume replacement or IV medications. No sharps are to be utilized in a moving vehicle. All needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers.
- Consider giving the patient oral medicine to reduce nausea. See [Nausea/Vomiting Protocol – Adult & Pediatric 2.10](#).
- If patient is vomiting, give them a large red biohazard bag to contain any emesis.
- See <http://www.cdc.gov/vhf/ebola/pdf/ems-911-patients-with-possible-ebola.pdf>