



Oswego Town Volunteer Fire Department

Best Practice for Ebola Virus Disease (EVD)

Purpose: This document will serve as the reference material for all Emergency Medical Services (EMS) providers of the Oswego Town Fire Department for the Ebola Virus Disease (EVD). From here on out EVD will be referred to as Ebola.

Definitions: The follow definitions apply to this document.

“Confirmed Case” means:

Consistent with current guidance from the Centers for Disease Control and Prevention (CDC), means a case with laboratory confirmed diagnostic evidence of Ebola Virus Disease.

“Covered Entity” means:

Ambulance and Advanced Life Support First Response (ALSFR) services, licensed to Article 30 of Public Health Law.

“Covered Personnel” means:

All employees, contractors, students and other personnel who may:

- A. Come into contact with a patient, or a laboratory specimen from a patient; or
- B. Be involved in the cleaning or disinfection of equipment or patient care areas, including vehicles used to transport patients.

“Patient” means:

A person under investigation; a confirmed case; or the body of a person who has expired from Ebola

“Person under investigation” means:

Consistent with current guidance from the CDC, means a person who has both consistent symptoms and risk factors as follows:

- A. Clinical criteria, which includes fever of greater than 38.6 degrees Celsius or 101.5 degrees Fahrenheit, and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage; AND

- B. Epidemiologic risk factors within the past 21 days before onset of symptoms, such as contact with blood or other body fluids or human remains of a patient known to have had or suspected to have Ebola; residence in or travel to an area where Ebola transmission is active; or direct handling of bats or non-human primates from disease endemic areas.

“Personal Protective Equipment (PPE)” means:

Protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or exposure to biological materials.

Identification of a possible Ebola patient:

The Ebola Virus Disease (EVD) is a dangerous disease that all personnel need to be aware of. The identification of a possible patient needs to be made as soon as possible. If a person under investigation or confirmed case is identified quickly then proper precautions can be put into place early on therefore lessening the exposure to other personnel.

EMS Providers need to be watchful for the following:

- A. Fever of greater than 38.6 degrees Celsius or 101.5 degrees Fahrenheit, severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage;
- AND**
- B. Contact with blood or other body fluids or human remains of a patient known to have had or suspected to have Ebola; residence in or travel to an area where Ebola transmission is active; or direct handling of bats or non-human primates from disease endemic area within last 21 days prior to onset of symptoms.

If any personnel encounter a patient that met the preceding criteria then they shall:

- A. Immediately exit the area they are in. Exit to the exterior if possible.
- B. Notify all incoming units of the person under investigation of Ebola via radio.
- C. Cancel all non-essential personnel as soon as possible
 - a. If personnel/resources are not needed at the scene have them return to quarters and DO NOT arrive on scene.
 - b. If a normal response is necessary limit the number of personnel in the patient's area.
- D. If personnel must enter into the patient's area full PPE shall be worn. PPE shall be in place prior to entering the scene and shall be worn until no longer in contact with the patient or patient's area. See PPE section for more detail.
- E. Limit treatment given to potential Ebola patients
 - a. Limit activities that can increase exposure to infectious material such as airway management, cardiopulmonary resuscitation, use of needles. Use of needles and other sharps shall be limited as much as possible. All needles or other sharps used shall be handled with extreme care and disposed of in puncture proof, sealed containers.
 - b. Keep care as simple as possible. Avoid contact with the patient. Obtain medical history from a distance. Vitals and other care are not as important as your safety.
- F. Cocoon patient as best as possible
 - a. Wrap patient in blankets and sheets. Limit amount of patient exposed
- G. 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 shall:
 - a. Immediately stop working. They should wash the affected skin surfaces with soap and water
 - b. Report exposure to an occupational health provider or supervisor for follow-up.
- H. Immediately notify Upstate University Hospital in Syracuse of the incoming Ebola patient at: 315-464-5611
- I. Immediately notify the following agencies:
 - a. Oswego County Health Department at: 315-349-3545
 - b. NYS DOH at: 1-866-881-2809
 - c. CDC at: 770-488-7100

Personal Protective Equipment (PPE)

Covered Personnel of the Oswego Town Volunteer Fire Department will be provided with all the necessary personal protective equipment needed to treat an Ebola patient. All PPE will be available to the provider on 3462 and shall be donned as soon as possible. If a response is to a person under investigation or a confirmed case of Ebola, PPE shall be donned prior to arriving on scene. If the case is discovered during assessment then the provider shall retreat from the patient's area and don their PPE.

- A. PPE will include but is not limited to:
 - a. Disposable gloves, double gloving is recommended by the CDC
 - b. Fluid resistant and impermeable coverings
 - i. Microchem 2300 Suits will be provided
 - c. Eye protection and face protection
 - i. SCBA face piece will be provided
 - d. N95 or higher mask
 - i. P100 filter with SCBA face piece will be provided
 - e. Leg covers
 - i. Built into Microchem suit
 - f. Shoe covers
 - i. Built into suit
- B. PPE should be carefully removed without contaminating one's eyes, mucous membranes, or clothing with potentially infectious materials.
 - a. Buddy system will be used to doff PPE
- C. Only essential EMS providers will be allowed to enter the patient's area. Non-EMS personnel are not essential and will be not exposed to the risks associated with entering into a potential Ebola patient's area.
- D. Any EMS personnel who cannot or will not show proper PPE donning/doffing skills will not be allowed to dress in full PPE in case of an Ebola patient
 - a. If an EMS provider cannot/will not wear full PPE they will be withheld from providing patient care in a suspected or confirmed Ebola case.

Disinfection of equipment:

If possible limit the amount of equipment that is used to treat the patient or brought into the patient's area. If possible use only equipment that is disposable.

- A. All disposable equipment will be disposed of properly
- B. All non-disposable equipment will be evaluated for disinfection
 - a. All PPE will be considered disposable
 - i. NO PPE will be disinfected for any reason
- C. All major equipment (LifePak 15) will be disinfected using a U.S Environmental Protection Agency (EPA) registered hospital disinfectant with a label claim for a non-enveloped virus. This disinfectant will be provided and available to the EMS providers on the scene.

- a. All attachments to major equipment will be considered disposable and will be disposed of and replaced.
- D. Follow the manufacturer instructions that are found on the disinfecting agent provided. All instructions shall be followed as written.
- E. All personnel shall wear full PPE as listed above while disinfecting equipment

Disposal of contaminated equipment:

Medical waste contaminated with Ebola virus is a Category A infectious substance regulated as a hazardous material under the U.S. Department of Transportation's (DOT's) Hazardous Materials Regulations (HMR; 49 CFR, Parts 171-180). The HMR apply to any material DOT determines is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Ebola contaminated material cannot be transported or disposed of by the Oswego Town Volunteer Fire Department. The Oswego County Health Department or New York State Department of Health will advise the EMS crew on scene as to the necessary steps to take with contaminated material. Until a higher authority can take control of the scene the following procedure will be followed:

- A. All items to be disposed of will be placed into a Bio-Hazard "Red bag" and then placed into another Bio-Hazard "Red bag". Avoid touching the outside of the bag with any items you are placing into the bag.
- B. All Bio-Hazard "Red bags" will then be placed into a plastic container such as a "Rubbermaid" container for safer storage.
 - a. All personnel shall be wearing full PPE as listed above while disposing of equipment
 - b. All contaminated equipment will be left on the scene for clean-up crew to dispose of.
 - c. Maintain scene security until a higher authority takes control of the scene.
- C. All needles or other sharps used in the care of an Ebola patient shall be handled with extreme care and disposed of in puncture proof, sealed containers. These containers will be handled with extreme care and left for a clean-up crew to dispose of.

Tracking of personnel:

All personnel who come into contact with a patient, patient's area or equipment regardless of level of PPE worn will be tracked for 30 days. All personnel will be tracked using the "Oswego Town Volunteer Fire Department Personnel exposure log". All personnel who have been exposed to an Ebola patient will document their temperature twice daily along with any symptoms. At the end of the 30 day period the tracking log will be kept in their personnel file in the chief's office.

Training of personnel:

All personnel of the Oswego Town Volunteer Fire Department will undergo training on the signs and symptoms of Ebola. All personnel will obtain an "awareness" level of training. All EMS personnel will undergo training regarding the PPE that is available to them. Since only EMS personnel will be wearing PPE to treat a patient they are the only classification that is required to undergo this training. PPE training will consist of:

- A. An overview of the equipment that is available to the EMS provider
- B. Procedures for donning and removing the PPE available
 - a. EMS providers will be physically tested in the donning/doffing procedures. All EMS providers must satisfactorily show competence in donning/doffing PPE
 - b. Retraining all providers who cannot satisfactorily show competence.
 - c. Competence testing will be done monthly and logged on the "Oswego Town Volunteer Fire Department EMS provider PPE competence testing" log.
 - d. All personnel who cannot show satisfactory competence will not be allowed to provide patient care until competence is shown.
- C. A designated trainer with infection control expertise selected by the Oswego Town Fire Department will be present at the training to assess whether providers have achieved satisfactory competence.
- D. All EMS personnel will be fit tested to an SCBA face piece to be used as eye/respiratory protection when a P100 insert is attached to the SCBA face piece