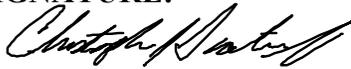


**UNION COUNTY
DIVISION OF EMERGENCY SERVICES**

STANDARD OPERATING GUIDELINE

	Subject: Ebola response and handling guidelines		O.G. # 14-03
			PAGES 1
	ORIGINATION DATE: 10/24/2014	REVISION DATE:	
	BY ORDER OF: Christopher J. Scaturo, Director	SIGNATURE: 	

PURPOSE

To provide a guideline for responding, assessing, and handling patients with suspected Ebola symptoms.

OVERVIEW

The purpose of this guideline is to ensure that all Union County Division of Emergency Services personnel adheres to the Basic Life support protocols set forth by the New Jersey Department of Health & Senior Services, Office of Emergency Medical Services and the Center for Disease Control and Prevention.

GUIDELINE

1) Procedure:

- Address scene safety:
 1. Keep the patient separated from other persons as much as possible.
 2. Use caution when approaching a patient with symptoms of Ebola. Illness can cause delirium, with erratic behavior that can place EMS personnel at risk of infection, e.g., flailing or staggering.
 3. During assessment and management of a possible Ebola patient, EMS personnel should remain at a safe distance and consider the following symptoms and risk factors of Ebola:

<ul style="list-style-type: none"> ➤ fever of greater than 38.6 Celsius or 101.5 Fahrenheit ➤ severe headache ➤ muscle pain 	<ul style="list-style-type: none"> ➤ vomiting ➤ diarrhea ➤ abdominal pain ➤ unexplained hemorrhage
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If the patient has the above symptoms ask the patient about risk factors within the past 3 weeks before the onset of symptoms, including:

- a. Contact with blood or body fluids of a patient known to have or suspected to have Ebola;
- b. Residence in—or travel to—a country where an Ebola outbreak is occurring
- c. Direct handling of bats or nonhuman primates from disease-endemic areas.

If the above symptoms and risk factors are met, immediately STOP, make supervisor notification and apply PPE in a safe area as outlined below to EMS crew then patient.

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

2) Hospital Notification/Patient transfer Procedure

- A. Union County EMS personnel should contact Union County Dispatch with the following information for any suspected Ebola patients so that proper hospital notification can be made:
 1. Destination Hospital and ETA
 2. Chief complaint
 3. Age & Sex
 4. Conscious (Yes or No)
 5. Breathing (Yes or No)
 6. Any other relevant signs/symptoms

Dispatch will provide the EMS crew with specific instruction from the hospital staff on how to proceed once arrived in the emergency room ambulance bay.

- B. Any hospital that Union County normally transports patients too and is following CDC infection control guidelines is capable of the initial isolation and treatment of a suspected Ebola patient.
- C. There are three hospitals in the state of New Jersey that have been designated by the Governor as recommended for Ebola patient treatment due to their direct support by the CDC. When possible and with supervisor approval one of the below should be used for confirmed suspected Ebola patients.
 1. University Hospital – Newark
 2. Robert Wood Johnson University Hospital – New Brunswick
 3. Hackensack University Medical Center – Hackensack

3) Transport to hospital

- a. Both Union County EMS crew members will ride in the patient compartment of the ambulance in full PPE as outlined below in order to limit contamination of the vehicle cab.
- b. Prior to departure and loading of the patient, a crew member will make every effort to secure the man way between the cab and patient compartment in the closed/locked position. Duct or chem tape can be applied to door seals if necessary.
- c. A Union County Haz-Mat member will drive the ambulance after donning a Tychem-F, N95 and nitrile gloves as a precaution. This member will not have any direct contact with the patient or any equipment used at any point in the transport or transfer due to limited donning of PPE.

4) Infection Control

- a. Limit activities, especially during transport, which can increase the risk of exposure to infectious material (e.g., airway management, cardiopulmonary resuscitation, use of needles).
- b. Limit the use of needles and other sharps as much as possible. All needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers.

5) Use of personal protective equipment (PPE)

Responder PPE

- a. Use of standard, contact, and droplet precautions is sufficient for most situations when treating a patient with a suspected case of Ebola as defined above. Union County EMS personnel should utilize the following equipment supplied in the “two responder” PPE kit inside each ambulance:
 1. Gloves – 6 sets of nitrile & 2 sets of Green chemical outer gloves
 2. 2 - Dupont Model TF169T-GY Tychem F suits
 3. 2 - sets of goggles
 4. 2 - 3M Model 1870 N-95Respirators
 5. 2 - Pairs of disposable over boots
 6. 1- Roll of chem or duct tape
 7. 2 – 3M Powered Air Purifying Respirators (PAPR)
 8. Additional PPE might be required in certain situations (e.g., large amounts of blood and body fluids present in the environment)
- b. Pre-hospital resuscitation procedures such as endotracheal intubation, open suctioning of airways, and cardiopulmonary resuscitation frequently result in a large amount of body fluids, such as saliva and vomit. Performing these procedures in a less controlled environment (e.g., moving vehicle) increases risk of exposure for EMS personnel. If conducted, perform these procedures under safer circumstances (e.g., stopped vehicle, hospital destination).
- c. 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 immediately stop working. They should wash the affected skin surfaces with soap and water and report exposure to an occupational health provider or supervisor for follow-up.
- d. Recommended PPE should be used by EMS personnel as follows:
 1. PPE should be donned upon confirmation of the symptoms and risk factors as outlined above and continued to be worn until personnel are no longer in contact with the patient.
 2. PPE should be carefully removed without contaminating one’s eyes, mucous membranes, or clothing with potentially infectious materials as shown during training.
 3. PPE should be placed into a medical waste container at the hospital or double bagged in a bio hazard bag and held in a secure location.

4. Union County EMS does not utilize re-usable PPE (All PPE should be discarded as outlined above)
5. Hand hygiene should be performed immediately after removal of PPE.

Patient PPE (Must meet the above outlined Ebola criteria)

a. Ambulatory

1. Provide patient with suit and mask (Substitute with Non-Rebreather mask if indicated after assessment)
2. Instruct patient on how to properly apply PPE
3. Re-Assess patients ABC's (Airway, Breathing and Circulation) every 5 minutes

b. Non-Ambulatory

1. Place yellow disposable blanket on carrying device, i.e. Reeves or stair chair, then wrap patient with blanket making sure to not compromise the patient's airway.
2. Apply mask (Substitute with Non-Rebreather mask if indicated after assessment)
3. Re-Assess patients ABC's (Airway, Breathing and Circulation) every 5 minutes

6) Environmental Infection Control

- a. Environmental cleaning and disinfection, and safe handling of potentially contaminated materials is essential to reduce the risk of contact with blood, saliva, feces, and other body fluids that can soil the patient care environment. EMS personnel should always practice standard environmental infection control procedures, including vehicle/equipment decontamination, hand hygiene, cough and respiratory hygiene, and proper use of U.S. Food and Drug Administration (FDA) cleared or authorized medical PPE
- b. Union County EMS personnel should not perform environmental cleaning and disinfecting without direction from a supervisor. When directed and in conjunction with Union County Haz-Mat personnel a 10% bleach solution should be used per CDC recommendation along with proper PPE.

7) Cleaning EMS transport vehicles after transporting a patient with suspected or confirmed Ebola

- a. EMS personnel performing cleaning and disinfection should wear recommended PPE (described above) and consider use of additional barriers if needed.
- b. Patient-care surfaces (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls and work surfaces) are likely to become contaminated and should be cleaned and disinfected after transport.

- c. A blood spill or spill of other body fluid or substance (e.g., feces or vomit) should be managed 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.
- d. Contaminated reusable patient care equipment 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.
- e. 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.

8) Documentation

- Any suspected or confirmed exposure to the Ebola virus must be initially reported via special report and direct supervisor notification.
- Additional Union County exposure paperwork will be provided by supervisor at a later time.

Additional Equipment

Union County is providing additional assessment tools to aid the EMS crew in making their initial assessment and observations which include:

- a. Tecnimed Thermofocus Thermometer
 1. Should be pointed at the patient's forehead approximately 4-5 inches from the skin for several seconds.
 2. Reading is in Fahrenheit and should be used as part of assessment.
- b. ADC Pulse Oximeter
 4. Apply to patient's finger and wait for readings of oxygen saturation and pulse rate.
 5. If the indicated oxygen saturation is 94% or below apply a Non-Rebreather mask with 15 lpm oxygen.