Suspected Ebola

Immediate Concern:
Travelers from an area with an Ebola outbreak can arrive in North Carolina prior to exhibiting symptoms and become ill here.

Evolving Protocol:
This protocol should be considered an evolving protocol that can change as outbreak locations change. All EMS personnel should carefully monitor this protocol for updates.

A Suspected Ebola Patient Defined
1) Within the past 21 Days before the onset of symptoms, residence in, or travel within, an area where Ebola transmission is active West Africa (Sierra Leone, Guinea, or Liberia)
AND
2) Presents with a Fever, headache, Joint & Muscle aches, Weakness, Fatigue, Vomiting & Diarrhea, Stomach pain, Lack of appetite, or Bleeding.

EMD DISPATCH CENTER STAFF

• Use Emerging Infectious Disease [EID] Surveillance Tool With The Following Chief Complaints•
**TYPICAL FLU-LIKE SYMPTOMS** and/or **UNEXPECTED BLEEDING**
• THE EMERGING INFECTIOUS DISEASE TOOL SHOULD BE USED WITH THE FOLLOWING PROTOCOLS•
  • EMD Protocol 26 Sick Person
  • EMD Protocol 6 Breathing Problem
  • EMD Protocol 18 Headache
  • EMD Protocol 10 Chest Pain
  • EMD Protocol 21 Hemorrhage (Medical)

Ask the Following Questions
1) “In the past 21 days have you been to Africa?”
• If Yes,
2) “Do you have a fever?”

If “yes” answer to the above questions, First Responders should NOT be dispatched. Dispatch EMS unit and alert the EMS supervisor on duty. Confidentially, notify both that there is a potential Ebola case.

• DO NOT RELY SOLELY ON EMD PERSONNEL TO DIAGNOSE AN EBOLA PATIENT DUE TO DISPATCH TIME CONSTRAINTS
• EMS PERSONNEL MUST OBTAIN A TRAVEL HISTORY AND CHECK CLINICAL SIGNS AND SYMPTOMS ONCE ON SCENE.

EMS Personnel Required Personal Protective Equipment (PPE) must be donned prior to entry (please see next page for PPE requirement and Donning and Doffing guidelines)

No Routine Aerosol Generating Procedures
• Pre-hospital providers should avoid aerosol generating procedures unless absolutely medically necessary.
• These include; CPAP, BiPAP, nebulizer treatments, intubation and suctioning.
• If these airway procedures are absolutely medically necessary, control conditions (e.g. briefly stop vehicle).

No Routine Intravenous (IV) Lines
• Unless absolutely medically necessary do not initiate IV’s on suspected Ebola patients in the pre-hospital environment.
• If an IV is necessary, it must be performed under controlled conditions (e.g. briefly stop vehicle) to lessen the chance exposure from a contaminated needle.

Links
  • CDC Ebola info Link
  • NC Department of Health Link
  • CDC PPE Standards Link

Pearls
- A patient is only infectious when symptomatic
- Personnel should only use PPE if they have been well trained in its use and know how to put it on and take it off safely and properly.
- Once ill, a person can spread virus to others through direct contact with body fluids: blood, urine, sweat, semen, feces, tears.
- 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. Safety devices must be employed immediately after use.
- Personnel caring for possible Ebola cases should contact their local health department or the state Communicable Disease Branch (919-733-3419; available 24/7)
- Always have a monitor for the doffing procedure to insure there is no provider self contamination during doffing
- There should be a standardized procedure for donning and doffing that is monitored by a safety officer
- There should be no exposed skin once full PPE has been put on

Protocol 100 Suspected Ebola Precautions
Originally created by Wilkes County EMS and reviewed by NCOEMS and Division of Public Health
Current as of: 10/23/2014
### EMS Contact of Suspected Ebola Patient

**Remember, particular attention must be paid to protecting mucous membranes of the eyes, nose, & mouth from splashes of infectious material or self inoculation from soiled PPE / gloves. There should be no exposed skin.**

1. **Don** personal protective equipment (PPE) **before** you enter the patient area.

   **Recommended PPE**
   - **PAPR**: A PAPR with a full face shield, helmet, or headpiece. Any reusable helmet or headpiece must be covered with a single-use (disposable) hood that extends to the shoulders and fully covers the neck and is compatible with the selected PAPR.
   - **N95 Respirator**: Single-use (disposable) N95 respirator in combination with single-use (disposable) surgical hood extending to shoulders and single-use (disposable) full face shield. If N95 respirators are used instead of PAPRs, careful observation is required to ensure healthcare workers are not inadvertently touching their faces under the face shield during patient care.
   - **Single-use (disposable) fluid-resistant or impermeable gown** that extends to at least mid-calf or coverall without integrated hood. Coveralls with or without integrated socks are acceptable.
   - **Single-use (disposable) nitrile examination gloves with extended cuffs**. Two pairs of gloves should be worn. At a minimum, outer gloves should have extended cuffs.
   - **Single-use (disposable), fluid-resistant or impermeable boot covers** that extend to at least mid-calf or single-use (disposable) shoe covers. Boot and shoe covers should allow for ease of movement and not present a slip hazard to the worker.
   - **Single-use (disposable) fluid-resistant or impermeable shoe covers** are acceptable only if they will be used in combination with a coverall with integrated socks.
   - **Single-use (disposable), fluid-resistant or impermeable apron** that covers the torso to the level of the mid-calf should be used if Ebola patients have vomiting or diarrhea. An apron provides additional protection against exposure of the front of the body to body fluids or excrement. If a PAPR will be worn, consider selecting an apron that ties behind the neck to facilitate easier removal during the doffing procedure.

2. **Obtain a Travel History and Clinical Signs and Symptoms.**

3. If there are no Ebola risk factors, proceed to the appropriate EMS treatment protocols based on clinical status.

4. If **Travel history** and **Clinical signs and symptoms** is positive and Ebola is suspected, a surgical mask (Non-N-95) should be placed on the patient. **(Use Non-Rebreathing Mask if oxygen is clinically indicated).**

   **If the patient is being transported via stretcher then a disposable sheet can be placed over them.**

**Doffing PPE: Outside of PPE is contaminated! Do not touch**

1. **If PPE must be carefully removed without contaminating one’s eyes, mucous membranes, or clothing with potentially infectious materials.**

   - Use great care while doffing your PPE so as not to contaminate yourself (e.g. Do not remove your N-95 facemask or eye protection **before** you remove your gown). There should be a trained and dedicated monitor to observe donning and doffing of PPE. It is very easy for personnel to contaminate themselves when doffing. A dedicated monitor should observe doffing to insure it is done correctly. Follow CDC guidance on donning.

2. **PPE should not be worn unless personnel have been well trained in its use.**

   **Protocol 100 Suspected Ebola**

   **Alert the Receiving Medical Facility**

   - **Patient Disposition**
   - **DO NOT TAKE THE PATIENT INTO THE MEDICAL FACILITY UNTIL YOU ARE INSTRUCTED TO DO SO.**
   - **MEDICAL FACILITY PERSONNEL WILL DIRECT YOU TO THE PROPER ROOM THROUGH A SAFE ENTRANCE.**

   **Diligent Decontamination / disinfection** along with safe handling of potentially contaminated materials (Objects such as contaminated EMS Equipment-supplies, sharps) is paramount, as blood, sweat, urine, saliva, feces, vomit, and semen represent potentially infectious materials.

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**EMS Personnel Exposure-Immediate Actions**

- If EMS personnel are exposed to blood, bodily fluids, secretions, or excretions from a patient with suspected or confirmed Ebola should immediately:
  1. Stop working and wash the affected skin surfaces with soap and water.
  2. **Mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution.**