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Camden County Ebola Response Recommendation for Hospital Agencies

Background: The current outbreak of Ebola virus disease (EVD) in West Africa continues to expand (See the CDC website at cdc.gov/Ebola for most up-to-date information). Introduction of EVD into the U.S. has occurred. All healthcare providers should be prepared to evaluate febrile traveler from one of the affected areas. Healthcare providers should expect and plan for a surge.

EVD Symptoms and Risk Factors: EVD should be suspected in patients presenting with fever greater than 38.6 °C (101.5°F) and compatible symptoms (e.g., severe headache, myalgia's, vomiting, diarrhea, abdominal pain or unexplained hemorrhage) who report travel from an EVD outbreak-affected area in the 21 days before illness onset or in a person with same signs/symptoms who had direct contact with someone in the last 21 days from said areas. The greatest risk of imported EVD is among healthcare personnel who cared for EVD patients or anyone returning from an affected area with recent **unprotected, direct contact** (through broken skin or mucous membranes) with the blood or body fluids from a suspected or confirmed EVD patient, including contact with human remains during funeral rites.

Patient Triage: Establish processes to routinely and immediately ask any patient presenting with fever about recent travel. Asking about travel is particularly important in acute care settings to rapidly recognize any potential communicable disease associated with an overseas outbreak. Posters are available from your Incident Management Team that asks patients to immediately inform staff if they are ill and recently traveled internationally.

Upon arrival to clinical setting/triage

- Does patient have fever (subjective or $\geq 101.5^{\circ}\text{F}$)?
- Does patient have compatible EVD symptoms such as headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain or hemorrhage?
- Has the patient traveled to an Ebola-affected area in the 21 days before illness onset?

Upon initial assessment

For any febrile patient reporting compatible symptoms and recent travel in the 21 days before onset of symptoms to an area with ongoing EVD transmission:

- Isolate patient in single room with a private bathroom and with the door to hallway closed
- Provide the patient with surgical mask and demonstrate proper use.
- Minimize number of staff interacting with the patient and do not perform phlebotomy.
- Staff interacting with the patient should follow standard, droplet, and contact precautions including PPE (cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html).
- Call your Incident Management Team for ID/IP consultation to determine if further evaluation is needed.

- When you call the Incident Management Team you can expect: Doctor on call will discuss the case and possible recommendations for testing. Will provide consultation on need to transport the individual to a hospital for further workup and testing. Will assist to arrange transport to another medical facility if needed.
- Notify your hospital Infection Control Program
- Report to the County health department at 856-374-6037 or 1800-999-9045
- Do NOT refer patients to Emergency Department, hospital, or other facility without consulting the ID/IP personnel on-duty/on-call by calling the Incident Management Team.

Conduct a risk assessment for: High-risk exposures

- Percutaneous (e.g., needle stick) or mucous membrane exposure to blood or body fluids from an EVD patient
- Direct skin contact with skin, blood or body fluids from an EVD patient
- Processing blood or body fluids from an EVD patient without appropriate PPE
- Direct contact with a dead body in an Ebola-affected area without appropriate PPE

Low-risk exposures

- Household members of an EVD patient or others who had brief direct contact (e.g., shaking hands) with an EVD patient without appropriate PPE
- Healthcare personnel in facilities with EVD patients who have been in care areas of EVD patients without recommended PPE

Before entering patient room, wear:

- Gown (fluid resistant or impermeable)
- Facemask
- Eye protection (goggles or face shield)
- Gloves

If likely to be exposed to blood or body fluids, additional PPE may include but isn't limited to:

- Double gloving
- Disposable shoe covers
- Leg coverings

Upon exiting patient room

- 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). Please visit CDC website for updates.
- PPE should be carefully removed without contaminating one's eyes, mucous membranes, or clothing with potentially infectious materials
- **Discard disposable PPE first by washing all PPE exterior with chlorine solution.**
- Re-useable PPE should be cleaned and disinfected per the manufacturer's reprocessing instructions
- Hand hygiene should be performed immediately after removal of PPE

During aerosol-generating procedures

- Limit number of personnel present
- Conduct in an airborne infection isolation room
- Don PPE as described above except use a NIOSH certified fit-tested N95 filtering face piece respirator for respiratory protection or alternative (e.g., PAPR) instead of a facemask

Principles of PPE

Healthcare workers must understand the following basic principles to ensure safe and effective PPE use, which include that no skin may be exposed while working in PPE:

- Donning
 - PPE must be donned correctly in proper order before entry into the patient care area and not be later modified while in the patient care area. The donning activities must be directly observed by a trained observer.
- During Patient Care
 - PPE must remain in place and be worn correctly for the duration of exposure to potentially contaminated areas. PPE should not be adjusted during patient care.
 - Healthcare workers should perform frequent disinfection of gloved hands using an ABHR, particularly after handling body fluids.
 - If during patient care a partial or total breach in PPE (e.g., gloves separate from sleeves leaving exposed skin, a tear develops in an outer glove, a needle stick) occurs, the healthcare worker must move immediately to the doffing area to assess the exposure. Implement the facility exposure plan, if indicated by assessment.
- Doffing
 - The removal of used PPE is a high-risk process that requires a structured procedure, a trained observer, and a designated area for removal to ensure protection
 - PPE must be removed slowly and deliberately in the correct sequence to reduce the possibility of self-contamination or other exposure to Ebola virus
 - A stepwise process should be developed and used during training and daily practice

Use of Personal protective equipment (PPE)

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. EMS personnel should wear:

- Gloves
- Gown (fluid resistant or impermeable)
- Eye protection (goggles or face shield that fully covers the front and sides of the face)

- Facemask
- Additional PPE might be required in certain situations (e.g., large amounts of blood and body fluids present in the environment), including but not limited to double gloving, disposable shoe covers, and leg coverings.

Training on Correct Use of PPE

Healthcare workers should be required to demonstrate competency in the use of PPE, including donning and doffing while being observed by a trained observer, before working with Ebola patients. In addition, during practice, healthcare workers and their trainers should assess their proficiency and comfort with performing required duties while wearing PPE. Training should be available in formats accessible to individuals with disabilities or limited English proficiency. Target training to the educational level of the intended audience.

Use of a Trained Observer

Because the sequence and actions involved in each donning and doffing step are critical to avoiding exposure, a trained observer will read aloud to the healthcare worker each step in the procedure checklist and visually confirm and document that the step has been completed correctly. The trained observer is a dedicated individual with the sole responsibility of ensuring adherence to the entire donning and doffing process. The trained observer will be knowledgeable about all PPE recommended in the facility's protocol and the correct donning and doffing procedures, including disposal of used PPE, and will be qualified to provide guidance and technique recommendations to the healthcare worker. The trained observer will monitor and document successful donning and doffing procedures, providing immediate corrective instruction if the healthcare worker is not following the recommended steps. The trained observer should know the exposure management plan in the event of an unintentional break in procedure.

Camden County HAZMAT Personnel can be used as the designated qualified individual for doing and doffing of PPE's. HAZMAT TEAM can be reached at 856-374-6049 or at 856-783-4808

Patient placement and care considerations

- Maintain log of all persons entering patient's room
- Use dedicated disposable medical equipment (if possible)
- Limit the use of needles and other sharps
- Limit phlebotomy and laboratory testing to those procedures essential for diagnostics and medical care
- Carefully dispose of all needles and sharps in puncture-proof sealed containers
- Avoid aerosol-generating procedures if possible
- Wear PPE (detailed in center box) during environmental cleaning and use an EPA-registered hospital disinfectant with a label claim for non-enveloped viruses*

Initial patient management

- Consult with health department about diagnostic EVD RT-PCR testing**

- Consider, test for, and treat (when appropriate) other possible infectious causes of symptoms (e.g., malaria, bacterial infections).
- Provide aggressive supportive care including aggressive IV fluid resuscitation if warranted
- Assess for electrolyte abnormalities and replete
- Evaluate for evidence of bleeding and assess hematologic and coagulation parameters
- Symptomatic management of fever, nausea, vomiting, diarrhea, and abdominal pain
- Consult health department regarding other treatment options

NJDOH and CDC Ebola Information Web Links

New Jersey Department of Health (NJDOH)

NJDOH - Communicable Disease Service - Viral Hemorrhagic Fevers

<http://www.nj.gov/health/cd/vhf/index.shtml>

NJDOH Ebola Frequently Asked Questions (FAQs)

http://www.nj.gov/health/cd/vhf/documents/ebola_faq.pdf

NJDOH Ebola Information for Friends and Family Returning to NJ from West Africa

http://www.nj.gov/health/cd/vhf/documents/West_Afr.pdf

NJDOH Questions and Answers on Ebola

<http://www.nj.gov/health/cd/vhf/qa.shtml>



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CDC Ebola Information Web Links

Interim Guidance for Monitoring and Movement of Persons with Ebola Virus Disease Exposure
<http://www.cdc.gov/vhf/ebola/hcp/monitoring-and-movement-of-persons-with-exposure.html>

CDC Case Definition for Ebola Virus Disease (EVD)
<http://www.cdc.gov/vhf/ebola/hcp/case-definition.html>

CDC Ebola Fact Sheet
<http://www.cdc.gov/vhf/ebola/pdf/ebola-factsheet.pdf>

CDC Ebola Virus Disease
<http://www.cdc.gov/vhf/ebola/>

CDC Questions and Answers on Ebola
<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/ga.html>

CDC About Ebola Virus Disease
<http://www.cdc.gov/vhf/ebola/about.html>

CDC Ebola Signs and Symptoms
<http://www.cdc.gov/vhf/ebola/symptoms/index.html>

CDC Ebola Transmission
<http://www.cdc.gov/vhf/ebola/transmission/index.html>

CDC Risk of Ebola Exposure
<http://www.cdc.gov/vhf/ebola/exposure/index.html>

CDC Prevention of Ebola
<http://www.cdc.gov/vhf/ebola/prevention/index.html>

CDC Ebola Diagnosis
<http://www.cdc.gov/vhf/ebola/diagnosis/index.html>

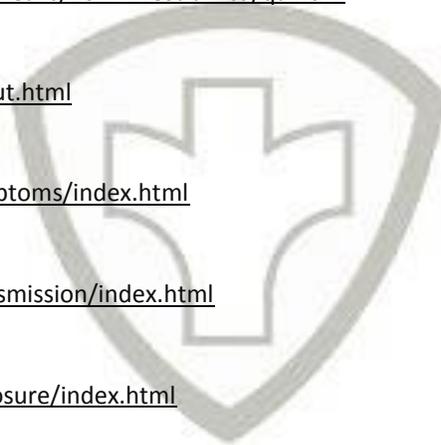
CDC Treatment of Ebola
<http://www.cdc.gov/vhf/ebola/treatment/index.html>

CDC Information for Healthcare Workers and Settings
<http://www.cdc.gov/vhf/ebola/hcp/index.html>

CDC Ebola Communication Resources
<http://www.cdc.gov/vhf/ebola/resources/index.html>

Infection Prevention and Control Recommendations for Hospitalized Patients with Known or Suspected Ebola Virus Disease
<http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html>

Questions and Answers about Ebola and Pets
<http://www.cdc.gov/vhf/ebola/transmission/gas-pets.html>



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For More Information contact www.camdencounty.com
Camden County Department of Health & Human Services
512 Lakeland Road
Blackwood NJ 08012
856-374-6037
1800-999-9045



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