

Ebola Virus Disease: What New Jersey School Nurses Need to Know

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****Note:** This Webinar contains protocols and guidance in effect as of November 3, 2014. Please continue to check the Department of Education's Communicable Disease Prevention & Reporting website regularly for updates, <http://www.state.nj.us/education/students/safety/health/cdpr/> (accessed November 3, 2014)*

Welcome

Purpose:

- Address the delivery of school health services in New Jersey's public and non-public schools in the face of the current Ebola Virus Disease (EVD); and
- To provide information regarding coordination with local and state officials regarding symptomatic individuals.

Objectives for Today's Webinar

Following this session, attendees should be able to:

- Identify individuals considered to be at-risk of contracting EVD;
- Recognize the signs and symptoms of EVD;
- Provide a safe and compassionate environment for an individual suspected of possible EVD;
- Implement measures to prevent exposure to bodily fluids;
- Recognize how to access local health departments and other State resources; and
- Initiate appropriate decontamination of the school health office and other affected areas in the school.

Epidemiology of EVD

- First Ebola outbreak in humans was in 1976, in Africa.
- Named after the Ebola River.
- Virus lives in bodily fluids of an infected person.
- Symptoms may appear anywhere from two (2) to twenty-one (21) days after exposure to Ebola, but the average is eight (8) to ten (10) days.
- Epidemiologic risk factors include:
 - contact with blood or other body fluids or human remains of a patient known to have or suspected to have EVD within the past twenty-one (21) days before the onset of symptoms, and
 - residence in—or travel to—an area where EVD transmission is active (or direct handling of bats or non-human primates from disease-endemic areas). Currently, these include the West African countries of Sierra Leone, Guinea and Liberia.

CDC Risk Levels for EVD

The CDC defines four (4) risk levels for EVD based on degree of exposure:

1. No Risk

- Contact with a **healthy person** who had contact with a person sick with EVD;
- Having contact with a person sick with EVD **before** he or she had any symptoms;
- Having left a country with a large EVD outbreak **more** than twenty-one (21) days ago, and has not been sick with EVD since leaving that country;
- Having been in a country where there have been cases of EVD, but no large Ebola outbreak (for example, Spain).

2. Low Risk (but not zero risk)

- Having been in a country with a large EVD outbreak within the past twenty-one (21) days, with no known exposure (such as **no** direct contact with bodily fluids from a person sick with EVD);
- Being in the same room for a brief period of time with a person sick with EVD;
- Brief direct contact, like shaking hands, with someone sick with EVD;
- Direct contact with a person sick with EVD in the U.S. while wearing personal protective equipment (PPE) correctly;
- Travel on an airplane with a person sick with EVD.

Source: <http://www.cdc.gov/media/releases/2014/fs1027-monitoring-symptoms-controlling-movement.html> (accessed November 3, 2014)

CDC Risk Levels for EVD

3. Some Risk

- Close contact with a person sick with EVD, such as in a household, health care facility, or the community (with no PPE worn). *Close contact means being within three (3) feet of the person sick with EVD for a long time.*
- Direct contact with a person sick with EVD in a country with a large EVD outbreak while wearing PPE correctly.

4. High Risk

- Direct contact with bodily fluids, from a person sick with EVD, who is showing symptoms, through:
 - A needle stick,
 - Splashes to eyes, nose, or mouth;
 - Getting bodily fluids directly on skin;
- Touching a dead body while in a country with a large EVD outbreak without wearing recommended PPE or not wearing PPE correctly;
- Both living with and caring for a person sick with EVD.

Source: <http://www.cdc.gov/media/releases/2014/fs1027-monitoring-symptoms-controlling-movement.html>
(accessed November 3, 2014)

Signs and Symptoms

- Fever (100.4° or higher, or subjective)
- Severe headache
- Muscle pain
- Weakness
- Fatigue
- Diarrhea
- Vomiting
- Abdominal (stomach) pain
- Unexplained hemorrhage (bleeding or bruising)

Source: <http://www.cdc.gov/vhf/ebola/symptoms/index.html>
(accessed November 3, 2014)

Diagnosis of EVD

- Until an individual is symptomatic of EVD, he/she is not considered to be contagious.
- According to the CDC, diagnosing EVD in a person who has been infected for only a few days is difficult, because the early symptoms, such as fever, are nonspecific to Ebola infection and are seen often in patients with more commonly occurring diseases.
- However, if a person has the early symptoms, previously described, of EVD and has had contact with the blood or body fluids of a person sick with EVD, contact with objects that have been contaminated with the blood or body fluids of a person sick with EVD, or contact with infected animals, they should be isolated and local public health professionals notified.

Source: <http://www.cdc.gov/vhf/ebola/diagnosis/index.html>

(accessed November 3, 2014)

Daily School Nursing Practices

- Be Prepared – know your student and staff population.
- Students with a fever or who are ill should not be sent to school, and should not ride the bus with other students.
- Take inventory of health office supplies, for example:
 - ❖ What kind of thermometer is used? Are there disposable sheaths or probe covers?
 - ❖ What kind of gloves are available?
 - ❖ Are red hazardous material disposable bags available?
- Develop a plan in collaboration with custodial staff to ensure availability of appropriate cleaning and disinfecting supplies as well as disposal of contaminated material.

Daily School Nursing Practices

- Remain calm – the school nurse can set the tone for the school's response to the fear of Ebola.
- Reassure students when they present to the health office with complaints of fever and vomiting.
- Follow school district policies and procedures for students who become ill during school (*N.J.A.C. 6A:16-2.1*):
 - ❖ Take oral temperature,
 - ❖ Obtain the history of present illness,
 - ❖ Assess for other symptoms,
 - ❖ Follow universal precautions, and
 - ❖ Document findings on student's health record.
- Maintain frequent communication with the school administrator and the custodial staff.

The School Nurse's Role in Managing Possible EVD

When the student is febrile (T >100.4° or higher, or subjective) **or** has one or more of the other symptoms indicative of EVD **and** is under active monitoring by the local health department or has a positive history of having either been to an affected country in West Africa or exposure to an infected person:

- The student should be taken to the school nurse or designated staff member.
- The student should be isolated in a private room, and should be made comfortable.
- School nurses should follow universal precautions.
- The student's contact with other staff members and students should be restricted.
- The principal or designee should call the parents immediately.
- Parents should be told to go to the school and that an immediate medical evaluation of the student at a nearby hospital is needed.
- The principal or designee shall call 911 to arrange transportation of the student, and shall inform the emergency medical services (EMS) and hospital personnel about the student's reported symptoms, and travel history to an Ebola-affected area before arrival.

Source: New Jersey Department of Health, Ebola Virus Disease (EVD) Interim Guidance for K-12 Schools for Students Arriving from Ebola-Affected Areas, http://nj.gov/health/cd/vhf/documents/ebola_school_guidance.pdf (accessed November 3, 2014).

The School Nurse's Role in Managing Possible EVD

- If school staff determines that **immediate** medical care is needed, and that waiting for the student's parent to arrive is not appropriate, the principal or designee shall call 911 to arrange transportation of the student.
 - The principal or designee should inform EMS dispatch of the student's reported symptoms, and travel history to an Ebola-affected area before EMS arrives.
 - If permitted by EMS, designated school staff shall remain with the student until his/her parent arrives at the hospital.

Source: New Jersey Department of Health, Ebola Virus Disease (EVD) Interim Guidance for K-12 Schools for Students Arriving from Ebola-Affected Areas, http://nj.gov/health/cd/vhf/documents/ebola_school_guidance.pdf (accessed November 3, 2014)

Management of Possible EVD

- Additional considerations for the school nurse:
 - The school nurse or principal must notify the local health department, and the school physician regarding the incident. To find your local health department, please refer to: <http://www.nj.gov/health/lh/directory/lhdselectcounty.shtml> (accessed November 3, 2014).
 - Custodial staff should consult with the principal who, in turn should consult with the local health department, regarding decontaminating any area(s) within the school building that may have been contaminated.
 - Local health department will contact the school nurse or principal regarding any need for future monitoring of staff or students.
 - The school nurse, and all other staff, must remember to maintain the privacy and confidentiality of the student's suspected condition.

Communication with the School Community

- School administrators, in consultation with local health officials and legal counsel, may consider how to appropriately notify parents, teachers, and others in the school community about the incident, especially in light of student privacy laws.

How to Speak to Children about Ebola

- For information on how to speak to students about Ebola, please refer to <http://www.state.nj.us/education/students/safety/health/cdpr/ebola/talk.shtml> (accessed November 3, 2014).

Additional New Jersey Department of Education Website Resources

- Dealing with Students' Reactions to the Ebola Virus, <http://www.state.nj.us/education/students/safety/health/cdpr/ebola/dealing.shtml> (accessed November 3, 2014);
- Facts about Ebola in the United States, <http://www.cdc.gov/vhf/ebola/pdf/infographic.pdf> (accessed November 3, 2014);
- Frequently asked questions on Ebola developed by the New Jersey Department of Health, http://nj.gov/health/cd/vhf/documents/ebola_faq.pdf (accessed November 3, 2014);
- Understanding Ebola, <http://www.state.nj.us/education/students/safety/health/cdpr/ebola/understanding.shtml> (accessed November 3, 2014).

Collaboration with other New Jersey State Agencies

- Department of Environmental Protection (NJDEP), <http://www.nj.gov/dep/> (accessed November 3, 2014);
- Department of Transportation (NJDOT), <http://www.state.nj.us/transportation/> (accessed November 3, 2014);
- Department of Health (NJDOH), <http://www.state.nj.us/health/> (accessed November 3, 2014);
- Department of Children and Families (NJDCF), <http://www.state.nj.us/dcf/> (accessed November 3, 2014);
- Department of Human Services (NJDHS), <http://www.state.nj.us/humanservices/> (accessed November 3, 2014).

Additional Resources

- Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/vhf/ebola/index.html> (accessed November 3, 2014);
- National Institutes of Health, National Institute of Allergy and Infectious Disease, <http://www.niaid.nih.gov/Pages/default.aspx> (accessed November 3, 2014).

Questions and Answers

- Questions may be submitted via email to:
healthyschools@doe.state.nj.us