# Brenda Fitzgerald, MD, Commissioner | Nathan Deal, Governor



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Dear Georgia Licensed Nurse,

The 2014 Ebola epidemic is the largest in history, affecting multiple countries in West Africa. Although the risk of an Ebola outbreak in the United States is very low, it is understandable that fear and stress may be increased among Georgia nurses, who are on the front lines and may come in contact with suspect cases. Georgia Department of Public Health (DPH) is working closely with the Centers for Disease Control and Prevention (CDC) and the entire healthcare community across Georgia to provide education, situational awareness, and assurance that healthcare workers remain vigilant in recognizing early symptoms of Ebola Virus Disease (EVD). As nurses, this is the type of situation we have been trained for. We are qualified and know how to identify and treat infectious diseases – it's an essential part of our job and we're ready. Knowing accurate information about Ebola is an important step to ensure optimal care for patients and manage the stress and anxiety that you or your colleagues may be experiencing.

## **TRANSMISSION & RISK**

- Ebola is not a foodborne, waterborne, or airborne illness. Ebola virus is spread through direct contact with the blood or body fluids (including but not limited to feces, saliva, urine, vomit, breast milk, and semen) of a person who is sick with Ebola. The virus in blood and body fluids can enter another person's body through broken skin or unprotected mucous membranes such as the eyes, nose, or mouth. It can also be spread through unprotected sexual contact for up to 3 months after a person has recovered from EVD.
- The virus also can be spread through contact with objects (ex. needles and syringes) that have been contaminated with the virus.
- Researchers believe that Ebola survives in water for only a matter of minutes. Ebola virus can only replicate within an animal or human host cell and becomes very fragile when separated from environments similar to body fluids, which have higher salt concentrations. This means that bodily fluids flushed by an infected person would not contaminate the water supply. Once in water, the virus will take in water in an attempt to equalize the osmotic pressure, causing the cells to swell and burst, and ultimately killing the virus.

# **SYMPTOMS**

- Signs of Ebola include fever (greater than 101.5°F or 38.6°C) and additional symptoms, such as severe headache, muscle pain, vomiting, diarrhea, abdominal (stomach) pain, or unexplained hemorrhage (bleeding or bruising).
- Symptoms appear in 2 to 21 days, but the average is 8 to 10 days.

# **CLINICAL GUIDANCE**

<sup>1</sup> World Health Organization (WHO) Website: http://www.who.int/csr/disease/ebola/en/

<sup>&</sup>lt;sup>5</sup> NPR interview: http://www.npr.org/blogs/goatsandsoda/2014/09/12/346114454/how-do-you-catch-ebola-by-air-sweat-or-water



<sup>&</sup>lt;sup>2</sup> Centers for Disease Control and Prevention Website: http://www.cdc.gov/vhf/ebola/about.html

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention Website: http://www.cdc.gov/vhf/ebola/transmission/

<sup>&</sup>lt;sup>4</sup> CNN interview: http://www.cnn.com/2014/10/01/health/ebola-us-reader-questions/index.html

Nurses should be alert for, and evaluate, any patient who:

- Has traveled within 3 weeks of presenting to an area where Ebola transmission is active, including travel to, or residence in, Liberia, Guinea, or Sierra Leone; AND
  - Has a fever of greater than 101.5 degrees Fahrenheit, with additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, rash, or unexplained hemorrhage; OR
  - Had contact with blood or other body fluids of a patient known to have, or suspected to have, Ebola within 3 weeks of presenting.<sup>6</sup>

Patients meeting these criteria should immediately be reported to DPH at 1-866-PUB-HLTH (866-782-4584), while implementing **Standard, Contact, and Droplet Precautions**.<sup>7</sup>

- **Isolate the patient**: Patients should be isolated in a single patient room (containing a private bathroom) with the door closed.
- Wear appropriate personal protective equipment (PPE): Nurses entering the patient's room should wear gloves, gown (fluid resistant or impermeable), eye protection (goggles or face shield), and a facemask.
- **Restrict visitors**: Avoid all entry of visitors into the patient's room.
- Avoid aerosol-generating procedures: If performing these procedures, PPE should include respiratory protection (N95 or higher filtering face piece respirator) and the procedure should be performed in an airborne infection isolation room.
- Implement environmental infection control measures: Ebola infection control protocols should be observed. Diligent environmental cleaning and disinfection and safe handling of potentially contaminated materials is of paramount importance. Blood, sweat, vomit, feces, urine and other body secretions represent potentially infectious materials.

#### **EBOLA TESTING**

- In Georgia, Ebola testing is currently performed only at CDC and is indicated for **High-Risk Exposures** who meet the case definition criteria for a **Person Under Investigation**, as outlined above. If warranted, contact tracing and follow-up will be performed by state and local public health. Contact DPH (1-866-PUB-HLTH [24/7] or 770-578-4104 [After Hours Med Epi Answering Service]) to facilitate CDC testing.
- If a person does not meet the clinical criteria, but had a high-risk or low-risk exposure, report the information to DPH using the contact information listed above. Patients with low-risk or no exposure will be evaluated on a case-by-case basis to determine if testing is needed. This decision will be based on severity of illness, laboratory findings, and alternative diagnoses.

## **HIGH RISK EXPOSURES**

<sup>&</sup>lt;sup>6</sup> Centers for Disease Control and Prevention Website: <a href="http://www.cdc.gov/vhf/ebola/hcp/clinician-information-us-healthcare-settings.html">http://www.cdc.gov/vhf/ebola/hcp/clinician-information-us-healthcare-settings.html</a>

<sup>&</sup>lt;sup>7</sup> Further information for health care professionals from the CDC can be found at <a href="http://www.cdc.gov/vhf/ebola/hcp/index.html">http://www.cdc.gov/vhf/ebola/hcp/index.html</a>

<sup>&</sup>lt;sup>8</sup> Centers for Disease Control and Prevention Website: <a href="http://www.cdc.gov/vhf/ebola/hcp/case-definition.html">http://www.cdc.gov/vhf/ebola/hcp/case-definition.html</a>

A high risk exposure includes any of the following:

- Needle stick injury or exposure to blood or body fluids of EVD patient;
- Direct skin contact with, or exposure to blood or body fluids of, an EVD patient without appropriate personal protective equipment (PPE);
- Processing blood or body fluids of a confirmed EVD patient without appropriate PPE or standard biosafety precautions;
- Direct contact with a dead body without appropriate PPE in a country where an EVD outbreak is occurring.

#### **LOW RISK EXPOSURES**

A low risk exposure includes any of the following:

- Household contact with an EVD patient;
- Other close contact with EVD patients in health care facilities or community settings. Close contact is defined as:
  - being within approximately 3 feet (1 meter) of an EVD patient or within the patient's room or care area for a prolonged period of time (e.g., health care personnel, household members) while not wearing recommended personal protective equipment (i.e., standard, droplet, and contact precautions, see <u>Infection Prevention and Control Recommendations</u>); **OR**
  - having direct brief contact (e.g., shaking hands) with an EVD patient while not wearing recommended personal protective equipment.
- Brief interactions, such as walking by a person or moving through a hospital, do not constitute close contact.

As healthcare professionals, we have a responsibility to ensure that policies and procedures are in place to protect our patients and ourselves. DPH encourages all nurses to take this opportunity to review the preparedness arrangements in your clinical setting. This includes assessing equipment and inventory needs not only at your own facility, but also in environments that may be contact points for exposed patients outside of the healthcare setting.

For questions, you may contact Cherie Drenzek at <a href="mailto:Cherie.Drenzek@dph.ga.gov">Cherie.Drenzek@dph.ga.gov</a> or Jennifer Burkholder at Jennifer.Burkholder@dph.ga.gov or call DPH at 1-866-PUB-HLTH.

Sincerely,

Brenda Fitzgerald, MD

Commissioner and State Health Officer

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Carole C. Jakeway, RN, MPH

Chief Nurse and

**Director of District and County Operations** 

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