



*Georgia Department of Public Health*

# Understanding Ebola (Updated Oct. 28, 2014)

Presentation to: Department of Education

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*We Protect Lives.*

# OUTBREAK SUMMARY

- The World Health Organization (WHO) declared the current Ebola outbreak is a Public Health Emergency of International Concern (PHEIC).
- The 2014 Ebola outbreak is the largest in history and the first Ebola outbreak in West Africa.
- The CDC confirmed the first travel-associated diagnosis of Ebola in the United States.
- In 2014, four U.S. health workers who were infected with Ebola virus in West Africa were transported to hospitals in the U.S.
- For more, see CDC's Ebola outbreak webpage: <http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html>.

# BACKGROUND

- Ebola virus disease, previously known as Ebola hemorrhagic fever, is a rare and deadly disease caused by infection with one of the Ebola virus species (Zaire, Sudan, Bundibugyo, or Tai Forest virus).
- Ebola viruses are found in several African countries. The first Ebola virus was discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, outbreaks have appeared sporadically in Africa.
- Current affected countries are Guinea, Liberia and Sierra Leone. For the most current list of countries, visit: <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas>

# TRANSMISSION & RISK

- 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 in, for example, the eyes, nose, or mouth.
- The virus also can be spread through contact with objects (like needles and syringes) that have been contaminated with the virus, or with infected animals.
- Ebola is **NOT** spread through the air or by water or, in general, by food; however, in Africa, Ebola may be spread as a result of handling bush meat (wild animals hunted for food) and contact with infected bats.
- Health workers caring for Ebola patients and family and friends in close contact with Ebola patients are at the highest risk.

# TRANSMISSION & RISK

(continued)

- The Texas case reinforces that Ebola is not easily acquired.
  - To date, only two individuals were infected in the U.S. – both critical care nurses caring for this travel-related case in its most contagious stage.
  - No one else has become infected from this travel-related case – this includes family members who shared close quarters with the infected individual and emergency room staff who treated him on two separate visits.
  - The 21-day incubation period has expired.

# SYMPTOMS

- Symptoms of Ebola include: *fever (including low-grade) headache, weakness, muscle pain, vomiting, loss of appetite, fatigue, diarrhea, abdominal pain or hemorrhage.*
- Symptoms appear 2 to 21 days after exposure but the average is 8 to 10 days.
- Ebola should be considered in patients who have traveled to affected countries or have been exposed to someone with Ebola and have compatible symptoms.

# CLINICAL DIAGNOSIS/SCREENING

- DPH is making revised guidance available at [www.dph.ga.gov/ebola](http://www.dph.ga.gov/ebola)
  - Health care providers should be alert for, and evaluate any patient who has had travel during the 21 days before symptom onset from an Ebola-affected area **OR** had contact with an individual who has Ebola.
- **AND**
- Ebola symptoms *fever (including low-grade) headache, weakness, muscle pain, vomiting, loss of appetite, fatigue, diarrhea, abdominal pain or hemorrhage.*
- **Patients suspected of Ebola infection should immediately be reported to DPH at 1-866-PUB-HLTH (866-782-4584), while implementing standard, contact, and droplet precautions.**
- DPH will provide information about appropriate samples and sample handling, if needed.

# CLINICAL DIAGNOSIS/SCREENING

(continued)

- Since Ebola is transmitted through direct contact with the blood or bodily fluids of an infected symptomatic person and/or contaminated objects, the following are also recommended:
  - **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):** *(see next slide)*
  - **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:** 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 and should be handled using [Ebola infection control protocols](#).

# GUIDANCE FOR HEALTHCARE WORKERS USING PERSONAL PROTECTIVE EQUIPMENT (PPE)

- CDC is recommending specific PPE for health care workers treating patients with Ebola and providing guidance on how to put the equipment on and take it off safely.
- The enhanced guidance is centered on three principles:
  - All health care workers undergo rigorous training and are practiced and competent with PPE, including putting it on and taking it off in a systematic manner
  - No skin exposure when PPE is worn
  - All workers are supervised by a trained monitor who watches each worker taking PPE on and off
- All patients treated at Emory University Hospital, Nebraska Medical Center and the NIH Clinical Center were treated by health care workers using these principles. None of the workers at these facilities have contracted Ebola virus disease.
- For the CDC's complete PPE Guidance, visit:  
<http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>

# FOR TRAVELERS

- CDC has issued warnings involving travel to Guinea, Liberia and Sierra Leone.
- All travelers returning to the U.S. from any affected country must return to one of five domestic airports, Atlanta's Hartsfield-Jackson Atlanta International Airport is one of them.
- DPH will begin post-arrival monitoring of all travelers from affected areas whose destination is Georgia. (Some passengers will have already been screened in one of the other four airports.)
- Wash hands frequently – especially before touching eyes, mouth or face

# FOR TRAVELERS

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- Upon returning to the U.S., those who traveled to affected regions will be required to monitor their health and body temperature for 21 days.
- Call in advance to tell the doctor about recent travel and symptoms before going to the office or emergency room. Advanced notice will help the doctor provide care and protect other people who may be in the office.
- If you get symptoms of Ebola, it is important to stay away from other people and to call your doctor right away.

# GENERAL DPH ROLE

- Gov. Nathan Deal named Commissioner Fitzgerald Chair of the Georgia Ebola Response Team. The team was created by executive order to assess current state health and emergency management procedures and produce necessary recommendations to minimize any potential impact of the disease in Georgia.
- DPH has been in communication with CDC to assure appropriate protocols are in place and are being disseminated to stakeholders and the public.
- To ensure communications of Ebola guidance protocols and best practices, DPH has been in close contact with other states and national associations such as the Association of State and Territorial Health Officers (ASTHO).

# GENERAL DPH ROLE

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- DPH has participated in several media briefings providing information and protocols on Ebola.
- Cadence calls between DPH leadership and District Public Health Directors have been scheduled on a weekly basis.
- DPH is currently monitoring for, and coordinating testing for suspected Ebola. Georgia state law permits DPH to isolate or quarantine individuals if necessary.
- Commissioner Fitzgerald remains in close communication with experts at the CDC.
- Public Health officials recognize Georgia's preparation efforts must extend well beyond the medical community, major institutions and government.

# DPH IS PROMOTING MEDICAL AWARENESS

- DPH has distributed communications to the medical community – including physicians, physician assistants, nurses, hospitals and Emergency Medical Technicians (EMT) and Emergency Medical Services (EMS) providers – that contain the key facts and best practice protocols that should be known and followed in order to properly respond to this situation.
- DPH has contacted all 911 centers across the state to add travel history screening questions to appropriate calls.
- DPH is hosting weekly cadence calls with the Georgia Hospital Association to ensure successful coordination of efforts with hospitals across the state regarding hospital readiness/capacity.
- Commissioner Brenda Fitzgerald has visited with the medical staff in the Emory University Hospital Isolation Unit to discuss current personal protective equipment (PPE) protocols and treatment standards.
- DPH Office of Emergency Medical Services is sponsoring training for 500 law enforcement, EMS, nurses and hospital personnel on proper use and removal of personal protective equipment.

# DPH IS PROMOTING SITUATIONAL AWARENESS

- DPH has toured the quarantine station at Hartsfield-Jackson Atlanta International Airport and are in active communication with federal officials.
- DPH has worked closely with federal officials to develop a protocol for identifying and quarantining any persons traveling from West Africa who may pose a health risk.
- Atlanta's Hartsfield-Jackson Atlanta International Airport is one five domestic airports screening all travelers returning to the U.S. from any affected country. DPH will begin post-arrival monitoring of all travelers from affected areas whose destination is Georgia. (Some passengers will have already been screened in one of the other four airports.)
- DPH has revised and prepared, with legal review, voluntary and involuntary state quarantine orders and protocols.
- The Atlanta Police Department has confirmed they will enforce quarantine orders for high-risk patients at Hartsfield International Airport.

# DPH IS PROMOTING PUBLIC AWARENESS

- DPH and the Georgia Emergency Management Agency launched a Virtual Joint Information Center (JIC) with more than 80 public affairs and public information officers in a variety of potentially affected disciplines to ensure accurate and timely public messaging.
- DPH has collaborated with the Georgia Department of Education and University System of Georgia to disseminate guidance to schools and universities (medical center) in the state, providing the key facts and best practice protocols to ensure that our students, faculty, staff and school nurses are well equipped to prevent the spread of Ebola and other infectious diseases.
- DPH has set up a page on the DPH website that is the agency's central repository for guidance and information regarding Ebola: <http://dph.ga.gov/ebola>
- DPH is currently working with the Department of Administrative Services to refine and distribute state employee Ebola guidance to state agency heads.