2014 Ebola Outbreak

Outbreak Distribution, Total Cases Reported as of 04/22/2015

Days Since Last Case Reported as of 04/22/2015


Slide Credit: CDC
## EVD Cases and Deaths*

<table>
<thead>
<tr>
<th></th>
<th>Reporting Date</th>
<th>Total Cases (Suspected, Probable, and Confirmed)</th>
<th>Confirmed Cases</th>
<th>Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea</td>
<td>21 Apr 15</td>
<td>3,568</td>
<td>3,144</td>
<td>2,362</td>
</tr>
<tr>
<td>Liberia</td>
<td>19 Apr 15</td>
<td>10,212</td>
<td>3,151</td>
<td>4,573</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>21 Apr 15</td>
<td>12,294</td>
<td>8,581</td>
<td>3,885</td>
</tr>
<tr>
<td>United Kingdom**</td>
<td>29 Dec 14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Nigeria**</td>
<td>15 Oct 14</td>
<td>20</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Spain**</td>
<td>27 Oct 14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Senegal**</td>
<td>15 Oct 14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>United States**</td>
<td>24 Oct 14</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Mali**</td>
<td>23 Nov 14</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>26,109</td>
<td>14,909</td>
<td>10,835</td>
</tr>
</tbody>
</table>

* Total cases include probable, suspected, and confirmed cases. Reported by WHO using data from ministries of health.

** There is currently no Ebola virus transmission in Senegal, Nigeria, Spain, the United States, the United Kingdom, and Mali.


Slide Credit: CDC
EVD Cases (United States)

- EVD has been diagnosed in the United States in four people, one (the index patient) who traveled to Dallas, Texas from Liberia, two healthcare workers who cared for the index patient, and one medical aid worker who traveled to New York City from Guinea
  
  - **Index patient** – Symptoms developed on September 24, 2014 approximately four days after arrival, sought medical care at Texas Health Presbyterian Hospital of Dallas on September 26, was admitted to hospital on September 28, testing confirmed EVD on September 30, patient died October 8.
  
  - **TX Healthcare Worker, Case 2** – Cared for index patient, was self-monitoring and presented to hospital reporting low-grade fever, diagnosed with EVD on October 10, recovered and released from NIH Clinical Center October 24.
  
  - **TX Healthcare Worker, Case 3** – Cared for index patient, was self-monitoring and reported low-grade fever, diagnosed with EVD on October 15, currently receiving treatment at Emory University Hospital in Atlanta October 28.
  
  - **NY Medical Aid Worker, Case 4** – Worked with Ebola patients in Guinea, was self-monitoring and reported fever, diagnosed with EVD on October 24, recovered and released from Bellevue Hospital in New York City November 11.


Slide Credit: CDC
EVD Cases (United States)

- During this outbreak, six health workers and one journalist have been infected with Ebola virus while in West Africa and transported to hospitals in the United States.
  - One of the health workers died on November 17 after being transported from Sierra Leone to Nebraska Medical Center.
- On March 13, an American health worker volunteering in Sierra Leone was evacuated to the United States for treatment after testing positive for Ebola.
  - The patient recovered and was discharged from NIH Clinical Center on April 9, 2015.
What is ADPH Doing?

- Established an Ebola Planning and Response Team
  - Epidemiology
  - Emergency Preparedness and Response
  - Healthcare: Medical, Nursing, Emergency Medical Services, Pharmacy, Laboratory, Dental
  - Communications
  - Legal

- Actively monitoring individuals that have arrived from West Africa
- Developing, updating and disseminating guidance and information
- Working with partners
- Responding to inquiries from healthcare providers, the public and media
- Toolkits: Hospital, EMS, Nursing, Urgent Care, Pharmacy, Laboratory and other facilities
Ebola Resources

ALABAMA PUBLIC HEALTH

The 2014 Ebola outbreak is the largest Ebola outbreak in history, and is of great concern to many people. At this time, there are no confirmed cases of patients with Ebola in Alabama. Ebola is not spread through the air, by water, or in general, by food. The Alabama Department of Public Health is taking several steps to ensure that if a case occurs in our state, we will be able to respond effectively.

About Ebola

Ebola is also known as Ebola Virus Disease (EVD) or Ebola Hemorrhagic Fever (EHF). There are five Ebola subspecies, four of which are known to cause the disease. To learn more, visit About Ebola. Also view What You Need To Know About Ebola and Top 10 Things You Really need to Know about Ebola.

To determine if it is The Flu or Ebola, read the common symptoms of each to tell the difference.

What's New?
- Viewpoint Alabama Radio Segment with Dr. Williamson [MP3] New!
- Ebola Response Guidelines for Alabama’s First Responders (ALPHTN Webcast, 12/15/14)
- “Ebola: What You Need To Know” Script
- Message from the State Health Officer “Ebola: What You Need to Know”
- Latest CDC Information on the 2014 Ebola Outbreak in West Africa
- ALPHTN issues response concerning Ebola patient (10/30/14)
- Governor, State Health Officer and Alabama Hospital Association discuss state’s Ebola preparedness activities (10/08/14 News Release)
- Ebola Workgroup Webcast #1
- Program faculty discuss what we know about Ebola, and provide important information for health care providers caring for patients with Ebola

Contact Us
- Consumers with questions should call our Center for Emergency Preparedness (CEP) at 1-866-264-4073.
- Healthcare providers with questions should call our Epidemiology Division at 1-800-239-4274.
- Local media may contact their area risk communicator for more information about Ebola.

Preserving and Protecting the Public’s Health
Screening of Suspected Cases

Ebola Virus Disease (EVD) Screening

Emergency Department screening criteria for patient isolation/testing are likely to be:

1. Travel to countries with widespread EVD transmission per [www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html](http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html) or contact with a suspected or confirmed EVD patient within 21 days (3 weeks) of symptom onset AND

2. Fever, headache, joint and muscle aches, weakness, fatigue, diarrhea, vomiting, stomach pain, lack of appetite, and in some cases bleeding.

If both criteria are met, then the patient should be moved to a private room with a bathroom, and STANDARD, CONTACT, and DROPLET precautions followed during further assessment.

**IMMEDIATELY Report Person Under Investigation for Ebola:**

1. Hospital Leadership: Name:_________ Email:_________ Phone:_________

2. Complete EVD Consultation Record [www.ADPH.org/Ebola/Default.asp?id=6785](http://www.ADPH.org/Ebola/Default.asp?id=6785) and fax to 334-206-3734 or email to CDFax@ADPH.state.AL.US

3. Notify Alabama Department of Public Health: **1-800-338-8374** to report an Immediate Extremely Urgent 4-hour Notifiable Disease

4. Compile a list of all healthcare workers, patients, and visitors that may have come in contact with the patient at the facility, along with their personal contacts.

Source: [www.ADPH.org/Ebola](http://www.ADPH.org/Ebola) 10/31/14

[http://www.adph.org/ebola/assets/ADPH_EVD_Hospital_Screening.pdf](http://www.adph.org/ebola/assets/ADPH_EVD_Hospital_Screening.pdf) Accessed 11/03/14
Reporting of Suspected Cases

- All suspected viral hemorrhagic fever cases are required to be reported to ADPH immediately.
- If a patient with a travel history to an affected country presents with EVD symptoms:
  - Complete the ADPH EVD Consultation Record
  - Contact the ADPH Epidemiology Division immediately at 1-800-338-8374
- ADPH will use the CDC algorithm to determine if a patient should be tested for Ebola.
- All Ebola testing requests must be submitted to the CDC by ADPH.
  - If a patient is determined to require testing, instructions on sample collection, packaging and shipping will be communicated to the provider.
Ebola Virus Disease Case Definition

- **Person Under Investigation**
  - Elevated body temperature or subjective fever or Ebola compatible symptoms
  - AND
  - epidemiologic risk factors within the 21 days before the onset of symptoms

- **Confirmed Case**
  - Laboratory-confirmed diagnostic evidence of Ebola virus infection

**Symptoms**
- Severe headache
- Fatigue
- Muscle pain
- Vomiting
- Diarrhea
- Abdominal pain
- Unexplained hemorrhage

Slide Credit: CDC
Evaluating Patients and Returned Travelers in the United States

**FEVER** (subjective or ≥100.4°F or 38.0°C) or compatible Ebola symptoms* in a patient who has resided in or traveled to a country with wide-spread Ebola transmission** in the 21 days before illness onset
* headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage

**YES**
1. Isolate patient in single room with a private bathroom and with the door to hallway closed
2. Implement standard, contact, and droplet precautions (gown, facemask, eye protection, and gloves)
3. Notify the hospital Infection Control Program and other appropriate staff
4. Evaluate for any risk exposures for Ebola
5. IMMEDIATELY report to the health department

**Report** asymptomatic patients with high- or low-risk exposures (see below) in the past 21 days to the health department

**NO**

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**CDC Website to check current affected areas**: [www.cdc.gov/vhf/ebola](http://www.cdc.gov/vhf/ebola)


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Slide Credit: CDC
Identify, Isolate, Inform

Emergency Department

1. **Identify exposure history:**
   - Identify travel or close exposure to an area of possible exposure to an infected patient or health care worker who has been diagnosed with or suspected to have been infected with Ebola.
   - YES: Continue with usual care and routine assessment.
   - NO: Continue with usual care and routine assessment.

2. **Identify signs and symptoms:**
   - Fever or rigors, malaise, myalgias, headache, arthralgias, vomiting, diarrhea, leukopenia, coagulopathy.
   - YES: Continue with usual care and routine assessment.
   - NO: Continue with usual care and routine assessment.

3. **Isolate the patient immediately:**
   - Avoid direct contact with the patient (e.g., no physical contact, no shared equipment).
   - NO: Continue with usual care and routine assessment.

4. **Inform:**
   - Inform the person in charge of the health department.
   - YES: Contact the person in charge of the health department.
   - NO: Contact the person in charge of the health department.

5. **If the patient is in need of an investigation:**
   - Contact the person in charge of the health department.
   - YES: Contact the person in charge of the health department.
   - NO: Contact the person in charge of the health department.

Ambulatory Care

1. **Identify travel and close exposure history:**
   - Identify travel or close exposure to an area of possible exposure to an infected patient or health care worker who has been diagnosed with or suspected to have been infected with Ebola.
   - YES: Continue with usual care and routine assessment.
   - NO: Continue with usual care and routine assessment.

2. **Identify signs and symptoms:**
   - Fever or rigors, malaise, myalgias, headache, arthralgias, vomiting, diarrhea, leukopenia, coagulopathy.
   - YES: Continue with usual care and routine assessment.
   - NO: Continue with usual care and routine assessment.

3. **Isolate the patient immediately:**
   - Avoid direct contact with the patient (e.g., no physical contact, no shared equipment).
   - NO: Continue with usual care and routine assessment.

4. **Inform:**
   - Inform the person in charge of the health department.
   - YES: Contact the person in charge of the health department.
   - NO: Contact the person in charge of the health department.

5. **If the patient is in need of an investigation:**
   - Contact the person in charge of the health department.
   - YES: Contact the person in charge of the health department.
   - NO: Contact the person in charge of the health department.

**U.S. Department of Health and Human Services**

**Centers for Disease Control and Prevention**

Accessed 12/01/14


Laboratories

- CDC has developed interim guidance for U.S. laboratory workers and other healthcare personnel who collect or handle specimens
- This guidance includes information about the appropriate steps for collecting, transporting, and testing specimens from patients who are suspected to be infected with Ebola
- Specimens should NOT be shipped to CDC without consultation with CDC and local/state health departments

Important information about RT-PCR testing for Ebola virus

- A negative RT-PCR test result for Ebola virus from a blood specimen collected less than 72 hours after onset of symptoms does not necessarily rule out Ebola virus infection.
  - If the patient is still symptomatic after 72 hours, the test should be repeated.
  - If the patient has recovered from the illness that brought them to medical attention, a repeat test is not required.

- A negative RT-PCR test result for Ebola virus from a blood specimen collected more than 72 hours after symptom onset rules out Ebola virus infection.

- Positive Ebola virus RT-PCR results are considered presumptive until confirmed by CDC.

ADPH Final Documents - FOR INTERNAL USE ONLY

Monitoring
- ADPH EVD Monitoring and Contact Tracing Protocols
- Direct Active Monitor (DAM) Log (fillable form)
- Direct Active Monitoring (DAM) PDF
- BCD LCD Staff Map
- BCD LCD Staff Contact List
- Out-of-State Travel Form
- List of Community Contacts
- Community Contact Tracing Form
- List of Occupational Contacts
- Healthcare Contact Tracing Form

Evaluation and Testing
- ADPH Decision Tree for Ebola Virus Testing
- ADPH Procedure for Testing when Patient Meets Criteria
- ADPH Ebola Specimen Transportation Logistics Protocol
- Checklist for the OEMS Physician Evaluating Suspect Calls

Environmental
- Vendor List for Ebola-related Cleaning and Waste Removal

Communications
- Area Risk Communicators
- Area Clinical Referral List
- Area Communications Flow Chart
- Area Communications Message Log
- County Communications Flow Chart
- County Communications Message Log
- MD December Schedule for Ebola Consult
Monitoring and Movement of People with Ebola

- CDC created interim guidance to provide public health authorities and other partners with a framework for evaluating people’s level of exposure to Ebola and initiating appropriate public health actions on the basis of exposure level and clinical assessment.

- These recommendations were issued to:
  - Reduce the risk of Ebola spreading to other passengers or crew.
  - Ensure that people infected with Ebola are able to quickly access appropriate medical care.

- This interim guidance has been updated by:
  - Establishing a “low (but not zero) risk” category.
  - Adding a “no identifiable risk” category.
  - Modifying the recommended public health actions in the high, some, and low (but not zero) risk categories.
  - Adding recommendations for specific groups and settings.

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**CDC EBOLA GUIDANCE EVALUATING INTERNATIONAL TRAVELERS FOR LEVEL OF RISK**

- **HIGH RISK**
  - Direct contact with body fluids of a person with Ebola while not wearing personal protective equipment (PPE).
  - Living with and caring for a person with Ebola.
  - Touching a dead body while in Guinea, Liberia, and Sierra Leone without wearing PPE.

- **SOME RISK**
  - Close contact (within 3 feet) with a person sick with Ebola for a long time while not wearing PPE.
  - Direct contact with a person sick with Ebola in Guinea, Liberia, and Sierra Leone while wearing PPE.

- **LOW RISK**
  - Having been in Guinea, Liberia, or Sierra Leone less than 21 days ago with no known exposure.
  - Brief contact, such as shaking hands, with a person who has Ebola, while not wearing PPE.
  - Being in the same room for a short amount of time with a person who has Ebola.
  - Direct contact with a person sick with Ebola in the U.S. while wearing PPE.
  - Travel on an airplane with a person showing symptoms of Ebola.

- **NO RISK**
  - Contact with a person with Ebola before symptoms began.
  - Having been in Guinea, Liberia, or Sierra Leone more than 21 days ago.
  - Having been in a country with Ebola cases, but no large Ebola outbreak.
  - Contact with a healthy person who had contact with someone sick with Ebola.

[cdc.gov/ebola](https://www.cdc.gov/ebola)
**Interim Guidance for Monitoring and Movement of Persons with EVD Exposure**

- CDC has created guidance for monitoring people exposed to Ebola virus but without symptoms

<table>
<thead>
<tr>
<th>RISK LEVEL</th>
<th>PUBLIC HEALTH ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monitoring</td>
</tr>
<tr>
<td>HIGH risk</td>
<td>Direct Active Monitoring</td>
</tr>
<tr>
<td>SOME risk</td>
<td>Direct Active Monitoring</td>
</tr>
<tr>
<td>LOW risk</td>
<td>Active Monitoring for some; Direct Active Monitoring for others</td>
</tr>
<tr>
<td>NO risk</td>
<td>No</td>
</tr>
</tbody>
</table>

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EBOLA CARE Kit Introduction

Whether you are returning home or just visiting, welcome to the United States! Since you are coming from a country with an Ebola outbreak, you may be worried and have questions. We want you to know that we CARE!

This Check and Report Ebola (CARE) Kit was created to help you get care if you get sick and to protect the health of those who are close to you. This kit provides a way for you to look for Ebola symptoms and to communicate with your health department each day for 21 days. A public health worker will contact you to help you.

Items in your CARE Kit include:

<table>
<thead>
<tr>
<th></th>
<th>How to Check and Report Your Health for Ebola</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Digital Thermometer</td>
</tr>
<tr>
<td>3</td>
<td>How to Use Your Thermometer to Check Your Temperature</td>
</tr>
<tr>
<td>4</td>
<td>Symptom Card and Log</td>
</tr>
<tr>
<td>5</td>
<td>CDC CARE Card</td>
</tr>
<tr>
<td>6</td>
<td>Phone Numbers of State and Local Health Departments</td>
</tr>
</tbody>
</table>

For more information on how to use the items in your CARE Kit, visit: [www.cdc.gov/vhf/ebola/travelers/care-kit.html](http://www.cdc.gov/vhf/ebola/travelers/care-kit.html)
Monitoring by ADPH

**High Risk** monitoring includes:
- Direct-Active Monitoring performed by Local Disease Control (LDC)-Immunization Staff (IMM)
- Contact Tracing performed by Local Disease Control (LDC)-Sexually-Transmitted Disease (STD)

**Some Risk** monitoring includes:
- Direct-Active Monitoring performed by LDC-IMM
- Contact Tracing performed by LDC-STD

**Low Risk** monitoring includes:
- Active Monitoring performed by Epidemiology Field Surveillance Staff (FSS) for PBM who did not treat an EVD patient or sit within 3 feet of an EVD patient on an aircraft
- Direct Active Monitoring performed by LDC-IMM who treated EVD patients while wearing PPE or sat within 3 feet of an EVD patient on an aircraft
Active Monitoring

Active monitoring means that public health workers check at least once a day to see if the traveler has a fever or other Ebola symptoms.

This check will occur by phone.

Public health workers also will tell the person what to do if he or she develops a fever or Ebola symptoms.

Direct active monitoring means that a public health worker will observe the traveler for fever and other Ebola symptoms every day for 21 days.

- This direct observation must happen during an in-person visit.

Contact Tracing

- If the individual has a temperature of 100.4 or greater or signs and symptoms of Ebola notify the EPI immediately
- PBM will be assessed for EVD and State Epi will review the EVD Consultation Form
- IMM staff will collect list of contacts and send to EPI
Attention

If you recently traveled internationally or had close contact with someone who recently traveled internationally and was ill, and you have:

- fever, cough, trouble breathing, rash, vomiting or diarrhea,

Please tell staff immediately!

Office of Emergency Medical Services
Update #3: Interim Guidelines for Emergency Medical Service Personnel Regarding Care and Transport of Patients with Suspected Ebola Virus Disease (EVD)

www.adph.org/ebola
ADPH Ebola Website

Public

Healthcare Providers

http://www.adph.org/ebola  Accessed 01/12/15
Contact

For more information,
Visit www.adph.org/ebola.
References

- http://www.cdc.gov/vhf/ebola/
- http://www.epa.gov/waste/nonhaz/industrial/medical/programs.htm
- http://www.adph.org/ebola