
Office of Public Health

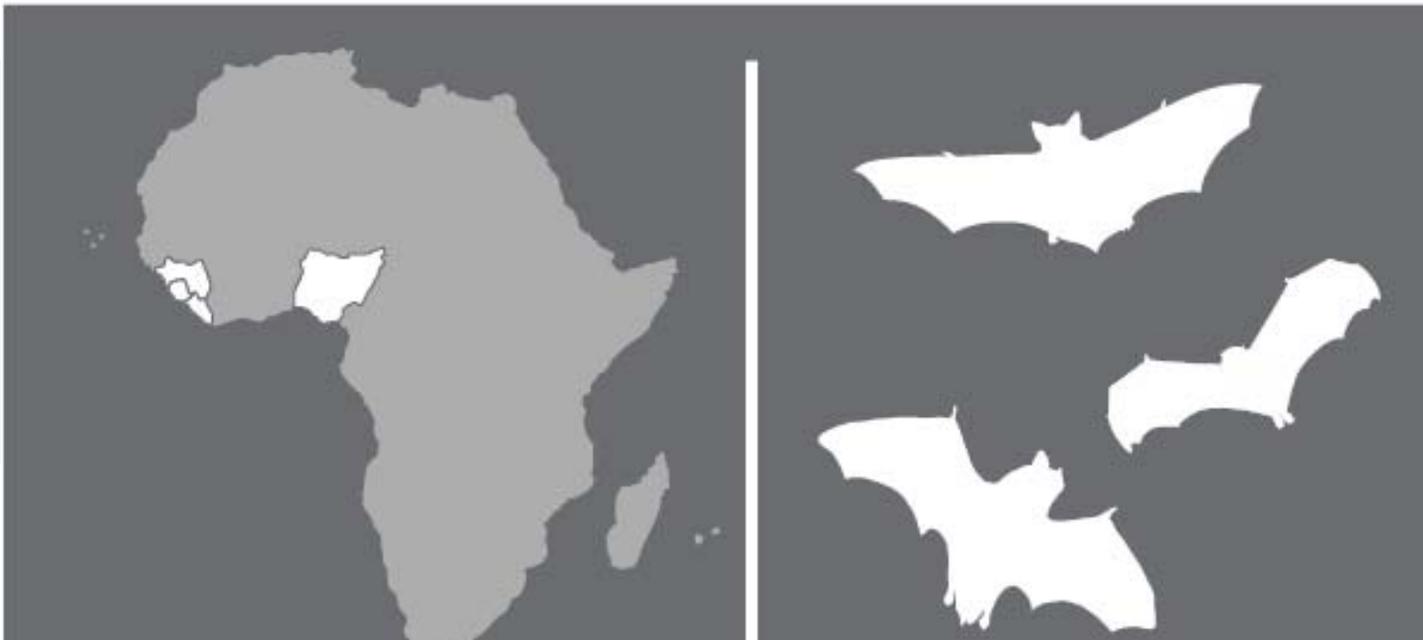
Ebola Virus Disease (EVD) Preparedness



November 7, 2014
LA Health Care Commission/LA Dept. of Insurance

Ebola Virus Disease

WEST AFRICA Ebola Outbreak

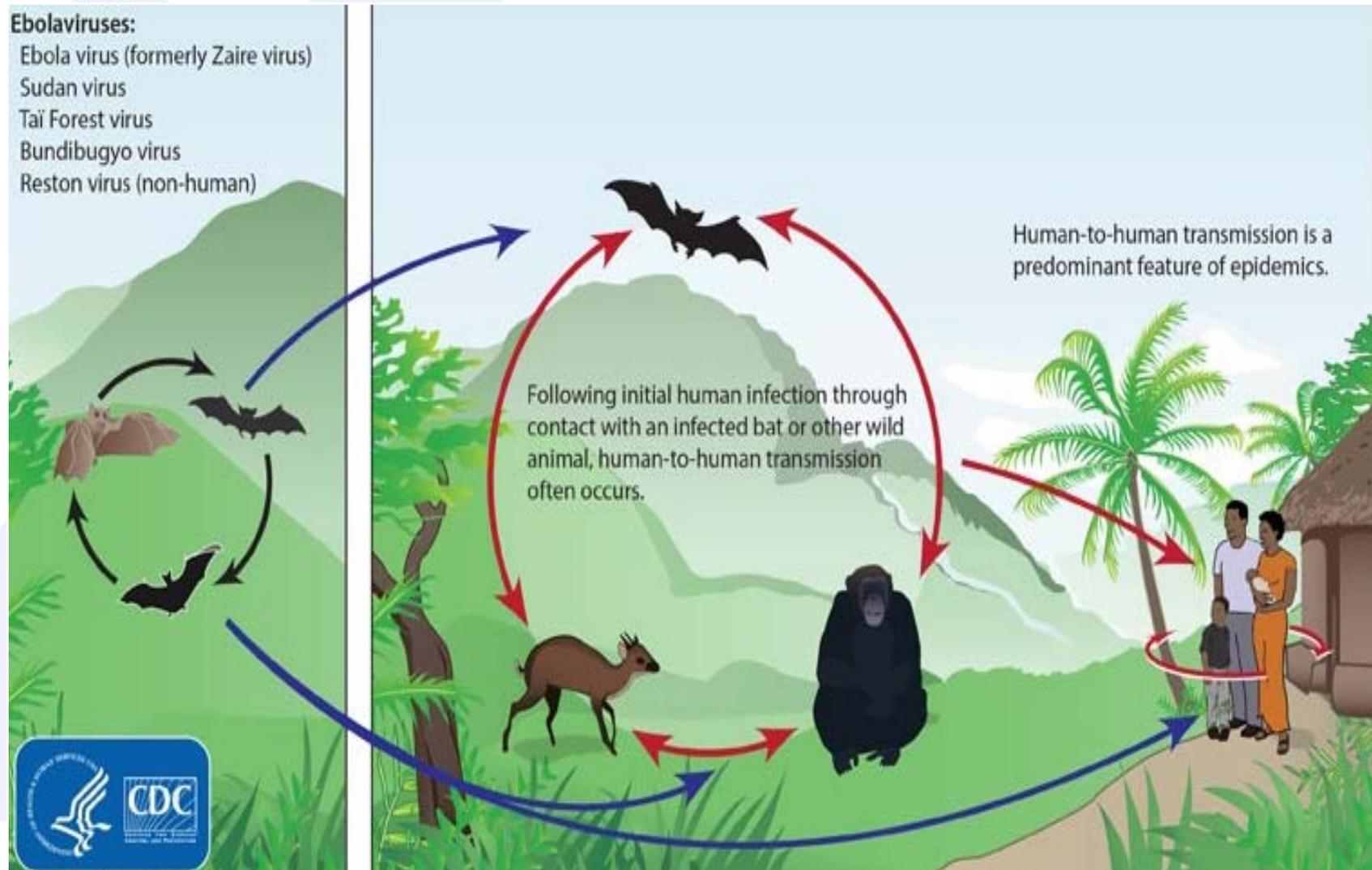


Source: CDC Ebola

Ebola Virus Disease (EVD)

- Ebola Virus Disease (EVD) is a severe viral disease, caused by an infection with one of the Ebola virus species.
- In 1976, the first Ebola virus species was discovered in what is now the Democratic Republic of the Congo, near the Ebola River.
- Since 1976, outbreaks have appeared sporadically.
- Researchers believe that EVD is animal-borne and that bats are the most likely reservoir.

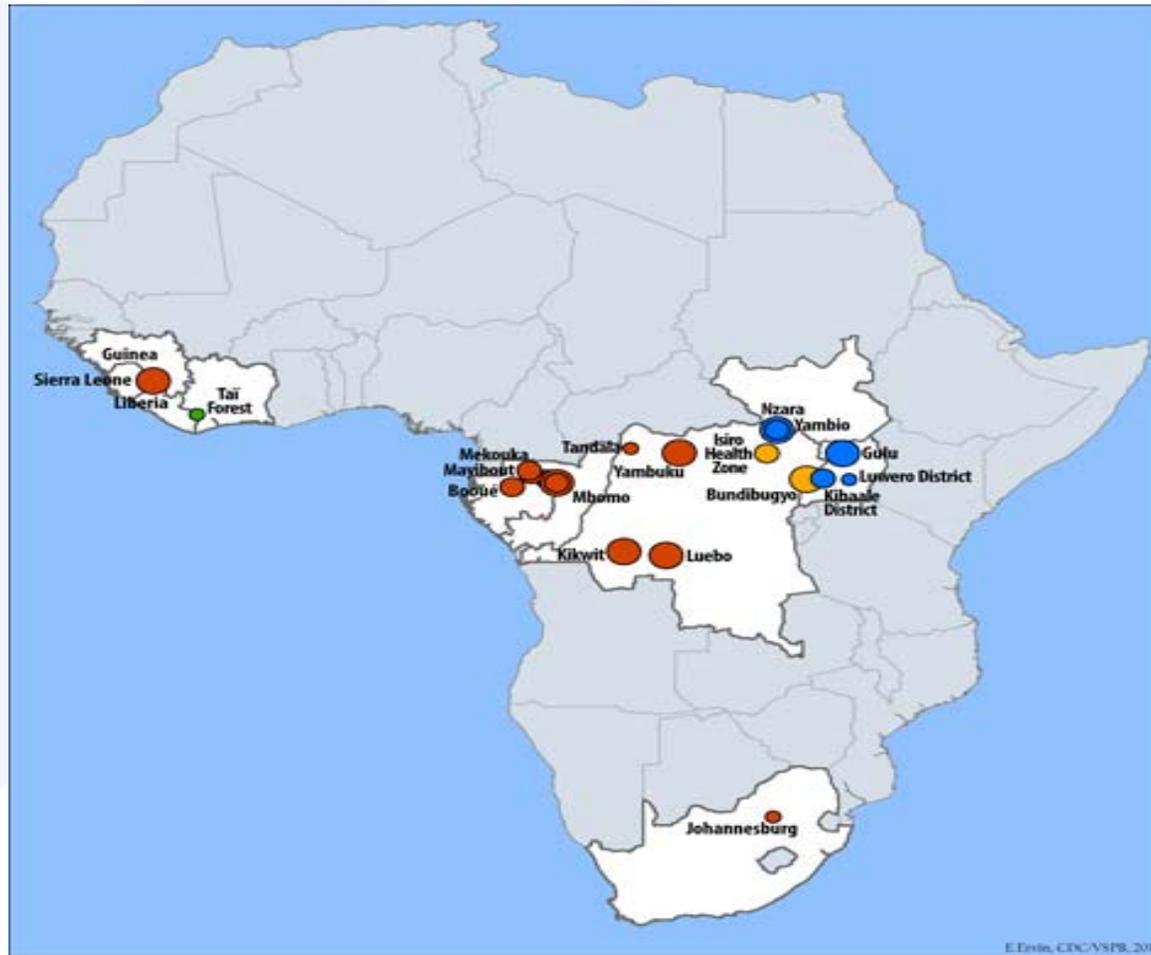
Ebola Virus Disease



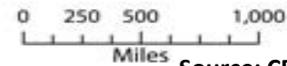
Source: <http://www.infectionlandscapes.org/2012/11/ebola-hemorrhagic-fever.html>

Source: CDC

Ebola Outbreaks 1976-2014



EBOLAVIRUS OUTBREAKS BY SPECIES AND SIZE, 1976 - 2014



Source: CDC Ebola

Current Ebola Situation

(Updated November 5, 2014)

Updated Case Counts available at

<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html>

Countries with Widespread Transmission

Totals for Guinea, Liberia, & Sierra Leone

Total Case Count: 13,015

Total Deaths: 4,808

Countries with Limited/Localized Transmission

Nigeria (now certified Ebola-free)

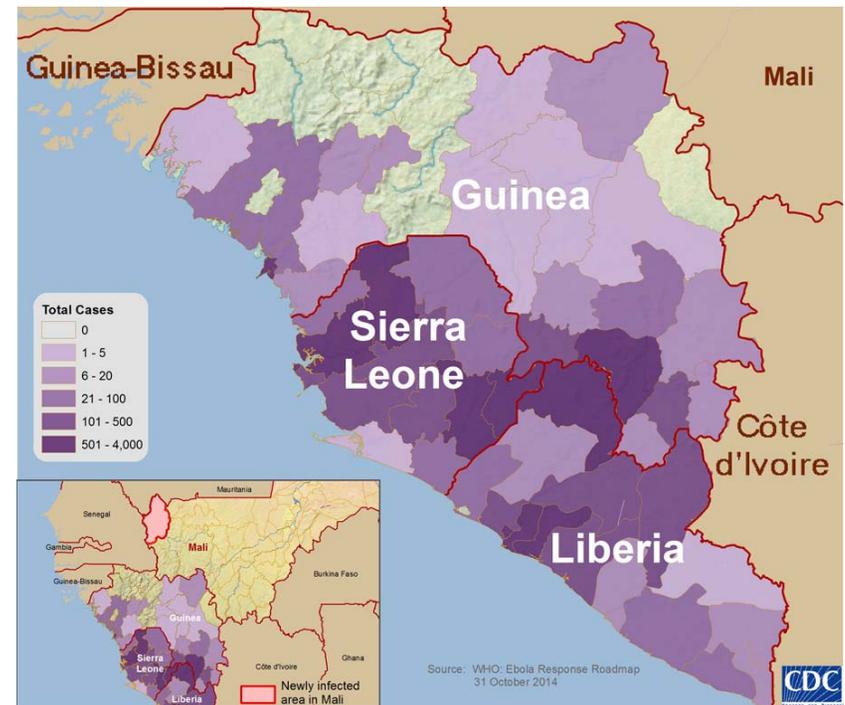
Total Case Count: 20

Total Case Deaths: 8

United States

Total Case Count: 4

Total Case Deaths: 1



Current Ebola Situation

(Updated November 5, 2014)

Updated Case Counts available at

<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html>

Countries with Travel-Associated Cases

Senegal

Total Case Count: 1

Total Case Deaths: 0

Mali

Total Case Count: 1

Total Case Death: 1

Spain

Total Case Count: 1

Total Case Death: 0

United States EVD Cases (diagnosed in U.S.)

As of November 5, 2014, 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, received care at Emory University Hospital in Atlanta and released from hospital October 28.
- **NY Medical Aid Worker, Case 4** – Worked with Ebola patients in Guinea having served with Doctors without Borders, was self-monitoring and reported fever, diagnosed with EVD on October 24, currently receiving care at Bellevue Hospital in New York City.

Transmission

Ebola is spread by direct contact with:

- Body fluids of a symptomatic person
 - Blood
 - Saliva
 - Sweat
 - Other body fluids
 - Semen
 - Stool
 - Urine
- Objects contaminated with the virus during care
- People with EVD get more contagious as they get sicker and sicker
- People with EVD are not contagious before they get sick

Ebola is Not Transmitted

- Ebola is **not** spread through the air, food, or by water
- There is no evidence that mosquitos or other insects can transmit Ebola
- Ebola virus can survive several hours on dried surfaces (doorknobs, countertops) to several days in body fluids at room temperature



Source: <http://www.fromquarkstoquasars.com/10-Interesting-and-Important-facts-about-ebola/>

Incubation Period

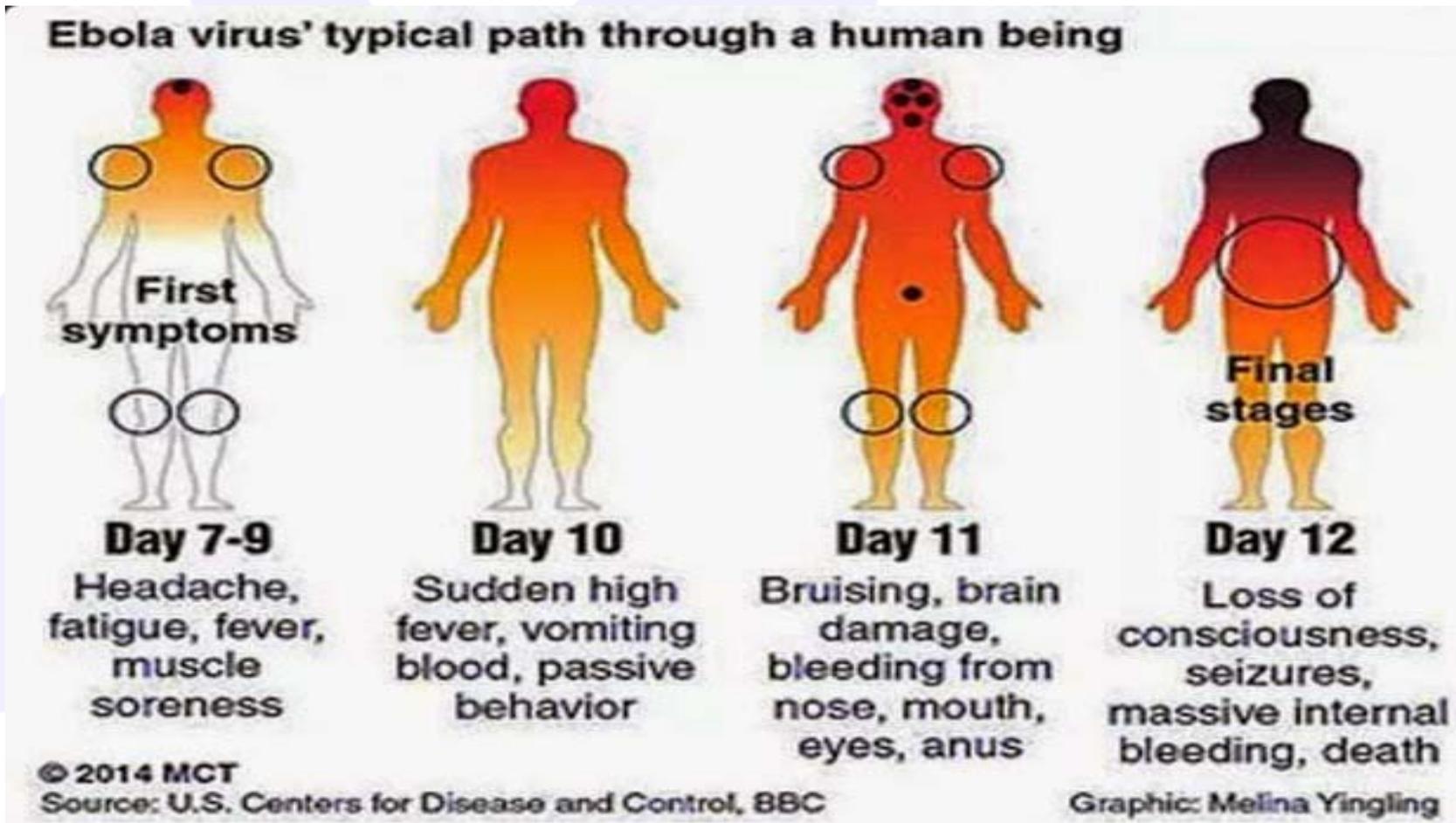
- The incubation period is the time between exposure to the virus until the appearance of the first symptom
- Incubation period for Ebola is from 2 to 21 days (average is 8-10 days)

Symptoms

- Early symptoms include:
 - Fever
 - Weakness
 - Muscle pain
 - Headache
 - Sore throat
 - Followed by vomiting and diarrhea
- Advanced symptoms include:
 - Mental confusion
 - Bleeding inside and outside the body
 - Shock
 - Multi-organ failure

Ebola Symptoms Timeline

Ebola patients become more contagious as disease progresses



Treatment

- No FDA approved vaccine or medication currently available
- Early interventions can significantly improve chances of survival:
 - Providing intravenous fluids and balancing electrolytes (body salts)
 - Maintaining oxygen status and blood pressure
 - Treating other infections if they occur
- Experimental vaccines and treatments for Ebola are under development, but they have not yet been fully tested for safety or effectiveness
- Experimental medications are being used to treat EVD patients in the U. S. in coordination with CDC and FDA

Recovery

- Recovery from Ebola depends on supportive clinical care and a patient's immune system.
- A person who recovers from Ebola infections will develop antibodies that last for at least 10 years.
- Some people who have recovered from Ebola have developed long-term complications, such as joint and muscle pain and vision problems.

Prevention

- Avoid contact with blood and body fluids of an infected person
- Do not handle items that have come in contact with an infected person's blood or body fluids(clothes, bedding, towels, and needles)
- Use appropriate protective clothing such as gloves, masks, gowns, goggles when caring for an infected person
- Wash your hands regularly with soap and water or an alcohol-based hand sanitizer

Prevention for Travelers to Affected Areas

- If you must travel to an area affected with Ebola, make sure to do the following:
 - Avoid handling items that may be contaminated with an infected person's blood or body fluids (clothes, bedding, needles, and medical supplies).
 - Wash your hands with soap and water or an alcohol-based sanitizer regularly.
 - Avoid facilities in West Africa where Ebola patients are treated.
 - Avoid funeral or burial rituals that require handling the body of a deceased Ebola patient.
 - Seek medical care immediately if you develop symptoms.

EVD Risk Exposure Categories

Exposure Category

High risk includes any of the following:

- Percutaneous (e.g., needle stick) or mucous membrane exposure to blood or body fluids of a person with Ebola while the person was symptomatic
- Exposure to the blood or body fluids (including but not limited to feces, saliva, sweat, urine, vomit, and semen) of a person with Ebola while the person was symptomatic without [appropriate personal protective equipment \(PPE\)](#)
- Processing blood or body fluids of a person with Ebola while the person was symptomatic without [appropriate PPE](#) or standard biosafety precautions
- Direct contact with a dead body without [appropriate PPE](#) in a [country with widespread Ebola virus transmission](#)
- Having lived in the immediate household and provided direct care to a person with Ebola while the person was symptomatic

Exposure Category

Some risk includes any of the following:

- In [countries with widespread Ebola virus transmission](#): direct contact while using [appropriate PPE](#) with a person with Ebola while the person was symptomatic
- Close contact in households, healthcare facilities, or community settings with a person with Ebola while the person was symptomatic
 - Close contact is defined as being for a prolonged period of time while not wearing [appropriate PPE](#) within approximately 3 feet (1 meter) of a person with Ebola while the person was symptomatic

EVD Risk Exposure Categories

Exposure Category

Low (but not zero) risk includes any of the following:

- Having been in a [country with widespread Ebola virus transmission](#) within the past 21 days and having had no known exposures
- Having brief direct contact (e.g., shaking hands), while not wearing [appropriate PPE](#), with a person with Ebola while the person was in the early stage of disease
- Brief proximity, such as being in the same room for a brief period of time, with a person with Ebola while the person was symptomatic
- In [countries without widespread Ebola virus transmission](#): direct contact while using [appropriate PPE](#) with a person with Ebola while the person was symptomatic
- Traveled on an aircraft with a person with Ebola while the person was symptomatic

No identifiable risk includes:

- Contact with an asymptomatic person who had contact with person with Ebola
- Contact with a person with Ebola before the person developed symptoms
- Having been more than 21 days previously in a [country with widespread Ebola virus transmission](#)
- Having been in a [country without widespread Ebola virus transmission](#) and not having any other exposures as defined above

Post-Arrival (to the U.S.) Monitoring

- Travelers arriving in the U.S. who's travel originated in Liberia, Sierra Leone, or Guinea
 - Will receive a CARE (Check and Report Ebola) Kit at arriving airport
 - Requires travelers to report:
 - Temperature
 - Presence or absence of Ebola symptoms
 - Intent to travel
 - Will be followed up daily by public health departments for 21 days from their departure from West Africa

Check and Report Ebola (CARE) Kit

Contains tools to help travelers do daily health checks for 21 days after arrival

- Welcome Letter
- Health Advisory
- Thermometer instructions
- Symptom Card



Welcome to the United States

**CARE Kit:
the Welcome Letter**

Whether you are returning home or just visiting, we hope you enjoy your time in the United States. We know that you just came from a country with an Ebola outbreak and that this can cause worry and fear. We want to make sure that you know what to do now. We also want to make sure you know what to do to protect your health and the health of those who are close to you.

This is the **Check and Report Ebola** (or, CARE) Kit. The kit has information about Ebola. It also contains tools to help you do daily health checks for the next 21 days. Your daily health check will include a temperature check and a symptom check.

You will find these 6 items in your CARE Kit:

1	<p>Digital thermometer <i>A thermometer is in your kit so that you can take your temperature every morning and every night for 21 days.</i></p>
2	<p>Directions for your digital thermometer (Title: Take your Temperature Two Times a day, Morning and Night) <i>Explains how to:</i></p> <ul style="list-style-type: none"> • <i>take your temperature using the thermometer in your kit, and</i> • <i>record your thermometer reading</i>
3	<p>Ebola CARE Kit Health Advisory <i>The health advisory is a quick tool to remind you to check your temperature and do health checks 2 times each day for 21 days. This tool also reminds you who to call if you have symptoms.</i></p>
4	<p>Symptom Card and Symptom Log <i>The Symptom Card shows the signs and symptoms of Ebola.</i></p> <p><i>The Symptom Log asks you to do a health check each day. Then, write down the date, your temperature, and any symptoms you may have. You should do this health check 2 times a day, for 21 days after your arrival into the United States.</i></p>
5	<p>A Check and Report Ebola (CARE) Card <i>The CARE Card is a simple reminder to do a health check each day and who to call if you have symptoms. If you call the state health department or a doctor, tell them you have a CARE card. Keep this card with you for 21 days after your arrival in the United States</i></p>
6	<p>List of State Health Department Telephone Numbers This is a list of telephone numbers for state health departments across the United States. The list is given so you may contact the state health department in the state you are in to report any symptoms.</p>

Once 21 days have passed, if you have no symptoms or fever, you are no longer at risk of Ebola.

We hope you find this kit useful. Please use it to keep yourself safe and help others around you to stay safe too. Together, we can protect everyone from Ebola.

CARE Kit:
the Health Advisory



HEALTH ADVISORY: EBOLA

Ebola spreads through direct contact with the blood or body fluids (such as spit or pee) of a person who is sick with Ebola symptoms.

Watch for fever, headaches, and body aches for the next 3 weeks.

3 WEEKS						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4



If you get sick, stay at home, then call the **State Health Department** or call **CDC: 1-800-232-4636.**

If you have a **medical emergency**, call **911.**



CARE Kit:
Thermometer Instructions

Take your temperature two times a day, morning and night.



• This thermometer is for **YOU ONLY**.

• Please **DO NOT SHARE** it.

• **KEEP IT** for yourself for
the next 21 days.



DO NOT take your temperature right after
eating or drinking.



1. Turn the thermometer on. It will show an "L" in the screen when it is ready.



2. Hold the tip
under your
tongue for
60 seconds
until it beeps



3. Read the
temperature



4. Write your
temperature on
the chart you got
at the airport.



If your temperature is **100.4°F / 38°C** or higher or you are sick,
call the **State Health Department** or call **CDC: 1-800-232-4636**.
If you have a medical emergency, call 911.

5. You can clean your thermometer with soap and water.



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

CARE Kit: Symptom Card

EBOLA
CARE Kit Symptom Card and Log

Track Your Symptoms on the following pages for 21 days.

If you have any of these symptoms during the next 21 days, call the State Health Department or call CDC: 1-800-232-4636. If you have a medical emergency, call 911.

Remember: Check symptoms and report early! Getting care early is your best chance to get better.



FEVER



STOMACH PAIN



DIARRHEA OR RUNNING STOMACH



VOMITING



BLEEDING: RED EYES



MUSCLE PAIN



HEADACHE



BLEEDING: BLOODY NOSE



FEELING WEAK OR TIRED



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Page 1 of 4

Daily Body Symptoms and Temperature Check
Week #1

Date you arrived in United States: / /

Use this form to record your temperature and symptoms every morning and every night. If your temperature is **100.4°F** or **38°C** or above OR if you have any of the symptoms listed on the symptom card, please call the **State Health Department** where you are or call **CDC INFO: 1-800-232 4636**

If you have a medical emergency, call 9-1-1.

DAY 1	SYMPTOMS	TEMP°	DAY 5	SYMPTOMS	TEMP°
MORNING	MORNING	MORNING	MORNING	MORNING	MORNING
EVENING	EVENING	EVENING	EVENING	EVENING	EVENING
DD / MM / YYYY	MOON	MOON	DD / MM / YYYY	MOON	MOON
DAY 2	SYMPTOMS	TEMP°	DAY 6	SYMPTOMS	TEMP°
MORNING	MORNING	MORNING	MORNING	MORNING	MORNING
EVENING	EVENING	EVENING	EVENING	EVENING	EVENING
DD / MM / YYYY	MOON	MOON	DD / MM / YYYY	MOON	MOON
DAY 3	SYMPTOMS	TEMP°	DAY 7	SYMPTOMS	TEMP°
MORNING	MORNING	MORNING	MORNING	MORNING	MORNING
EVENING	EVENING	EVENING	EVENING	EVENING	EVENING
DD / MM / YYYY	MOON	MOON	DD / MM / YYYY	MOON	MOON
DAY 4	SYMPTOMS	TEMP°			
MORNING	MORNING	MORNING			
EVENING	EVENING	EVENING			
DD / MM / YYYY	MOON	MOON			

CARE Kit: Symptom Card, cont'd

Daily Body Symptoms and Temperature Check Week #2

Use this form to record your temperature and symptoms every morning and every night. If your temperature is **100.4°F** or **38°C** or above OR if you have any of the symptoms listed on the symptom card, please call the **State Health Department** where you are or call **CDC INFO: 1-800-232 4636**

If you have a medical emergency, call 9-1-1.

DAY 8 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 9 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 10 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 11 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 12 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 13 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 14 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING

Daily Body Symptoms and Temperature Check Week #3

Use this form to record your temperature and symptoms every morning and every night. If your temperature is **100.4°F** or **38°C** or above OR if you have any of the symptoms listed on the symptom card, please call the **State Health Department** where you are or call **CDC INFO: 1-800-232 4636**

If you have a medical emergency, call 9-1-1.

DAY 15 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 16 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 17 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 18 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 19 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 20 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
DAY 21 DD / MM / YYYY	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING
	SYMPTOMS		TEMP°
	MORNING	MORNING	MORNING

Your monitoring period is over and you are clear for Ebola.

Active Monitoring and Follow Up

- Establishes contact between public health officials and travelers
- If symptomatic, public health will implement isolation and evaluation planning to limit exposure and begin care
- Active monitoring complements existing exit screening (from West Africa) and entry screening (into U.S.) protocols

Quarantine vs. Isolation

Quarantine (confinement): A non-symptomatic person who has potentially been exposed to the disease; confined for the duration of the incubation period which is 21 days for Ebola, with close monitoring.

Isolation: A person symptomatic with the disease kept isolated from others usually in a medical setting (hospital), and treated by persons wearing personal protective equipment.

Interim Guidance for Monitoring and Movement of Persons with EVD Exposure

- **CDC has created guidance for monitoring individuals exposed to Ebola virus**
 - Available at: www.cdc.gov/vhf/ebola/hcp/monitoring-and-movement-of-persons-with-exposure.html
- **Active Monitoring**
 - State or local public health authority regularly communicates with potentially exposed individuals, including checking daily to assess for the presence of symptoms and fever, rather than relying solely on individuals to self-monitor and report symptoms if they develop.
- **Direct Active Monitoring**
 - Public health authority conducts active monitoring through direct observation.
- **Active or direct active monitoring could be conducted on a voluntary basis or compelled by legal order.**
- **CDC has recommendations for the above based on asymptomatic individuals in high risk, some risk, low (but not zero) risk and no identifiable risk categories.**

Updated: November 3, 2014

Interim Guidance for Monitoring and Movement of Persons with EVD Exposure

- State and local public health officials
 - Primary authority for public health orders within their borders
- CDC recognizes that state and local public health departments
 - May make decisions about isolation, other public health orders, and active (or direct active) monitoring that may be more restrictive than what is recommended by federal guidance
 - These decisions may vary by location

Role of DHH/OPH

- Providing up-to-date Health Alerts
- Distributing guidance
- Providing technical assistance to key stakeholders
- Educating community
- Coordinating emergency operations
- Providing technical assistance for care of suspect cases
- Coordinating of Ebola preparedness and response

Contact Information

- **Discuss possible exposure, request laboratory testing, or report a suspected case**
 - Louisiana Office of Public Health – Infectious Disease Epidemiology Section
 - 504-568-8313 (Monday-Friday 8:00 a.m. to 4:30 p.m.)
 - 800-256-2748 (Weekdays after 4:30 p.m. & weekends)

Keeping Up With EVD

CDC

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

DHH

Website: <http://www.dhh.state.la.us/index.cfm/page/1974>

Email: Ebola@la.gov

Telephone for general information or questions:

Toll-free number: 855-LA-EBOLA (**855-523-2652**)

Monday-Friday 8:00 am to 4:30 pm