

# Ebola Virus Disease (Ebola)

## 1. What is Ebola?

Ebola is a virus that has caused disease outbreaks in West Africa. Right now, there is a large Ebola outbreak in the countries of Guinea, Sierra Leone, and Liberia. The number of affected countries may increase. See a map of affected countries on the Centers for Disease Control and Prevention's (CDC) website: <http://tinyurl.com/CDCEbolaMap>

## 2. How does Ebola spread?

Ebola spreads from person-to-person by direct contact with a patient's body fluids, like sweat, saliva, mucus, blood, vomit, urine, feces, breast milk, and semen. Infected objects, like needles, can also spread it. Ebola can also spread after death, especially if handling an infected person's corpse, linens, mattresses, and other infected objects. Patients can spread the virus while they have a fever or other symptoms. The virus gets into the body through broken skin or mucous membranes. People who do not show any symptoms do not spread Ebola. Ebola does not spread through air, food, water, mosquitos, or other insects. Only mammals, like humans, bats, apes, or monkeys, have been infected with Ebola.

## 3. What are the symptoms of Ebola?

It takes 8-10 days for most people to show symptoms, but it can range from 2-21 days. Ebola can cause these signs of disease:

- Severe Headache
- Fever (101.5°F or higher)
- Weakness or muscle pain
- Diarrhea
- Vomiting
- Stomach or muscle pain
- Unexplained blood loss or bleeding

## 4. How is Ebola treated?

There is no specific medicine or vaccine for Ebola. Instead, treatment focuses on keeping the patient alive by giving fluids and managing the serious health problems that can happen.

## 5. What can you do to prevent Ebola?

Recognition of potential Ebola infection is essential for control of the disease. EMS providers must be particularly careful to adhere to good universal precautions. The risk of Ebola is very low unless a person has direct unprotected contact with an Ebola patient's body fluids which may be on the patient or objects the patient has contaminated.



### Key Points:

- The risk of getting sick with Ebola is very low in Orange County, unless a person has direct, unprotected contact with an Ebola patient's body fluids or handles bats, apes, or monkeys from Ebola outbreak areas.
- Asking about recent travel history and using PPE when needed keeps first responders safe.

### Where can the public go for more information?

**Orange County Health Care Agency**  
[www.ochealthinfo.com/ebola](http://www.ochealthinfo.com/ebola)

**California Department of Public Health (CDPH)**  
 (916) 558-1781 / [www.cdph.ca.gov](http://www.cdph.ca.gov)

**Centers for Disease Control and Prevention (CDC)**  
 (800)-CDC-INFO / [www.cdc.gov](http://www.cdc.gov)

## Ebola Reference for First Responders

### 6. What is recommended for Personal Protective Equipment (PPE)?

Standard, contact, and droplet precautions, such as:

- Gloves
- Facemask
- Eye protection (goggles and face shield)
- Gown (fluid resistant or impermeable)
- Other items including double gloving, disposable shoe covers, and leg coverings in certain situations (e.g., large amounts of blood and body fluids present)

### 7. What are the risk factors for Ebola infection?

Persons with the following symptoms and exposure risk factors should be considered at risk for having Ebola infection:

- A. Symptoms of fever along with severe headache, muscle aches, vomiting, diarrhea, abdominal pain, or unexplained bleeding.
- B. Travel exposure within 21 days or contact with someone who has recently traveled to the African countries of Liberia, Sierra Leon or Guinea.

### 8. How will persons at risk for Ebola infection be managed and transported in the prehospital setting?

- Orange County Dispatchers are beginning call screening of specified cases and will notify EMS responders of a possible Ebola case. If the dispatcher alerts you of a possible Ebola case, prepare by donning of PPE prior to patient contact.
- EMS provider must document the travel history of any patient with the above mentioned symptoms (#7A) on their prehospital care report (PCR) and submit via OC-MEDS. Revised PCR templates and technical guidance are in place to assist with implementing this change.
- First responders involved in initial contact and or air/ground transfer of Ebola patients should wear recommended PPE and manage patients at risk for Ebola infection taking special care to protect mucous membranes from splashes of blood, body fluids, or soiled gloves by limiting activities that increase the risk of exposure (e.g., airway management, CPR, use of needles).
- At the present time, patients being transported from the field should be routed to the most appropriate receiving facility with notification to the facility of the possibility of an infected patient made prior to arrival. After patient handoff at receiving facility, report suspected Ebola cases to Orange County Health Care Agency at (714) 834-8180.

### 9. What should first responders do if they're exposed to body fluids from a patient with suspected or confirmed Ebola?

- Stop working right away and wash the affected skin surfaces with soap and water. Mucous membranes should be irrigated with a large amount of water or eyewash solution.
- Contact your designated officer for direction on evaluation and treatment. Get medical evaluation and follow-up care, including fever monitoring twice daily for 21 days, after the exposure.
- Refer to OCEMS Policy #330.96 for reporting guidelines. You may need to be removed from work while Ebola tests are completed on the source patient.

### 10. Will first responders be contacted if a prehospital Ebola case is confirmed in Orange County?

Yes. The Orange County Health Care Agency will notify first responders who had contact with a confirmed Ebola case.

**Emergency Response Employee/1<sup>st</sup> Responders**  
**Report Prehospital Exposures to:**  
**Orange County Health Care Agency**  
**Employee Health Services**  
**at (714) 565-3780**