

## **Ebola Fact Sheet**

Ebola, previously known as Ebola hemorrhagic fever, is a deadly disease caused by infection with one of the Ebola virus strains. Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees). There are five identified Ebola virus species, four of which are known to cause disease in humans: Ebola virus (*Zaire ebolavirus*); Sudan virus (*Sudan ebolavirus*); Tai Forest virus (*Tai Forest ebolavirus*, formerly *Côte d'Ivoire ebolavirus*); and Bundibugyo virus (*Bundibugyo ebolavirus*). The fifth, Reston virus (*Reston ebolavirus*), has caused disease in nonhuman primates, but not in humans.

### **Symptoms of Ebola include**

Fever (greater than 38.6°C or 101.5°F)

Severe headache

Muscle pain

Weakness

Diarrhea

Vomiting

Abdominal (stomach) pain

Unexplained hemorrhage (bleeding or bruising)

Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola, but the average is 8 to 10 days.

Recovery from Ebola depends on good supportive clinical care and the patient's immune response. People who recover from Ebola infection develop antibodies that last for at least 10 years.

### **Transmission**

Because the natural reservoir host of Ebola viruses has not yet been identified, the manner in which the virus first appears in a human at the start of an outbreak is unknown. However, researchers believe that the first patient becomes infected through contact with an infected animal.

When an infection does occur in humans, the virus can be spread in several ways to others. Ebola is spread through direct contact (through broken skin or mucous membranes in, for example, the eyes, nose, or mouth) with blood or body fluids (including but not limited to urine, saliva, sweat, feces, vomit, breast milk, and semen) of a person who is sick with Ebola. Objects (such as needles and syringes) that have been contaminated with the virus may also spread the disease. Ebola is not thought to be spread through the air or by water or food. However, in Africa, Ebola may be spread as a result of handling bushmeat (wild animals hunted for food) and contact with infected bats. There is no evidence that mosquitos or other insects can transmit Ebola virus. Only mammals (for example, humans, bats, monkeys, and apes) have shown the ability to become infected with and spread Ebola virus.

Healthcare providers caring for Ebola patients and the family and friends in close contact with Ebola patients are at the highest risk of getting sick because they may come in contact with infected blood or body fluids of sick patients. Standard, contact, and droplet precautions are recommended for management of hospitalized patients with known or suspected Ebola virus disease (EVD)

During outbreaks of Ebola, the disease can spread quickly within healthcare settings (such as a clinic or hospital). Exposure to Ebola can occur in healthcare settings where hospital staff are not wearing appropriate protective equipment, including masks, gowns, and gloves and eye protection.

Dedicated medical equipment (preferable disposable, when possible) should be used by healthcare personnel providing patient care. Proper cleaning and disposal of instruments, such as needles and syringes, is also important. If instruments are not disposable, they must be sterilized before being used again. Without adequate sterilization of the instruments, virus transmission can continue and amplify an outbreak.

Once someone recovers from Ebola, they can no longer spread the virus. However, Ebola virus has been found in semen for up to 3 months. Abstinence from sex (including oral sex) is recommended for at least 3 months. If abstinence is not possible, condoms may help prevent the spread of disease.

### **Prevention**

There is no FDA-approved vaccine available for Ebola at this time.

If you travel to or are in an area affected by an Ebola outbreak, make sure to do the following: Practice careful hygiene. For example, wash your hands with soap and water or an alcohol-based hand sanitizer and avoid contact with blood and body fluids.

Do not handle items that may have come in contact with an infected person's blood or body fluids (such as clothes, bedding, needles, and medical equipment).

Avoid funeral or burial rituals that require handling the body of someone who has died from Ebola.

Avoid contact with bats and nonhuman primates or blood, fluids, and raw meat prepared from these animals.

Avoid hospitals in West Africa where Ebola patients are being treated. The U.S. embassy or consulate is often able to provide advice on facilities.

After you return, monitor your health for 21 days and seek medical care immediately if you develop symptoms of Ebola.

Healthcare workers who may be exposed to people with Ebola should follow these steps:

Wear protective clothing, including masks, gloves, gowns, and eye protection.

Practice proper infection control and sterilization measures.

Isolate patients with Ebola from other patients.

Avoid direct contact with the bodies of people who have died from Ebola.

Notify health officials if you have had direct contact with the blood or body fluids, such as but not limited to, feces, saliva, urine, vomit, and semen of a person who is sick with Ebola. The virus can enter the body through broken skin or unprotected mucous membranes in, for example, the eyes, nose, or mouth

### **Diagnosis**

Diagnosing Ebola in a person who has been infected for only a few days is difficult, because the early symptoms, such as fever, are nonspecific to Ebola infection and are seen often in patients with more commonly occurring diseases, such as malaria and typhoid fever.

However, if a person has the early symptoms of Ebola, and has had contact with the blood or body fluids of a person sick with Ebola, contact with objects that have been contaminated with the blood or body fluids of a person sick with Ebola, or contact with infected animals, they

should be isolated and public health professionals notified. Samples from the patient can then be collected and tested to confirm infection.

## **Treatment**

No FDA-approved vaccine or medicine (e.g., antiviral drug) is available for Ebola.

Symptoms of Ebola are treated as they appear. The following basic interventions, when used early, can significantly improve the chances of survival:

Providing intravenous fluids (IV) 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.

Recovery from Ebola depends on good supportive care and the patient's immune response.

People who recover from Ebola infection develop antibodies that last for at least 10 years, possibly longer. It isn't known if people who recover are immune for life or if they can become infected with a different species of Ebola. Some people who have recovered from Ebola have developed long-term complications, such as joint and vision problems.

For further information visit:

## **Web Resources**

What's New

<http://www.cdc.gov/vhf/ebola/outbreaks/guinea/whats-new.html>

Ebola Hemorrhagic Fever

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

Spanish Version of Ebola Hemorrhagic Fever Website (NEW)

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

Questions and Answers on Ebola

<http://www.cdc.gov/vhf/ebola/outbreaks/guinea/qa.html>

World Health Organization's Epidemic and Pandemic Alert and Response (EPR)

<http://www.afro.who.int/en/clusters-a-programmes/dpc/epidemic-a-pandemic-alert-and-response/outbreak-news.html>

Sequence for Putting On and Removing Personal Protective Equipment (PPE) (NEW)

<http://www.cdc.gov/vhf/ebola/pdf/ppe-poster.pdf>

Guidance on Air Medical Transport for Patients with Ebola Virus Disease (NEW)

<http://www.cdc.gov/vhf/ebola/hcp/guidance-air-medical-transport-patients.html>

Ebola Radio Health Messages in Local Languages

<http://www.cdc.gov/vhf/ebola/outbreaks/guinea/radio-spots.html>

Infographics & Illustrations (English and Spanish)

<http://www.cdc.gov/vhf/ebola/outbreaks/guinea/print-resources-illustrations.html>

Outbreak Map

<http://www.cdc.gov/vhf/ebola/resources/distribution-map-guinea-outbreak.html>