# **Ebola Hemorrhagic Fever**

Ebola, previously known as Ebola hemorrhagic fever, is a severe, often fatal disease in humans. Ebola is a rare disease caused by infection with a virus of the family *Filoviridae,* genus *Ebolavirus*. Ebola was discovered in 1976, with outbreaks appearing sporadically in several African countries. The natural reservoir host of Ebola remains unknown. Given available evidence and the nature of similar viruses, researchers believe that the virus is animal-borne with bats being the most likely reservoir.

While Ebola poses little risk to the U.S. general population, the situation could change rapidly. The CDC and partners are taking precautions to prevent this from happening.

## Transmission

The manner by which the virus first appears in a human at the start of an outbreak is unknown. Ebola is not spread through the air, by water, or in general, by food. There is no evidence that mosquitos or other insects can transmit the Ebola virus.

When an infection occurs in humans, there are several ways the virus can spread to others:

* Direct contact with the blood or body fluids (saliva, feces, urine, vomit, semen) of a person who is sick with Ebola.
* Contact with objects (like needles and syringes) that have been contaminated with the blood or body fluids of an infected person or animal.

The virus in the blood or body fluids can enter another person’s body through broken skin or unprotected mucous membranes, such as eyes, nose, or mouth. The viruses that cause Ebola are often spread among family and friends because they are in close contact with blood or body fluids when caring for ill persons. During outbreaks of Ebola, the disease can spread quickly within a healthcare settings, such as a clinic or hospital.

It is important to wear the appropriate protective clothing including masks, gowns, gloves, and eye protection when providing care for a potentially ill person with Ebola. Equipment, instruments, and vehicles used by first responders providing care for someone sick with Ebola requires adherence to proper sanitization and disposal procedures. Without adequate instrument sterilization and equipment cleanup, virus transmission can continue and amplify an outbreak.

Ebola is killed with hospital-grade disinfectants (such as household bleach). Ebola on dried on surfaces such as doorknobs and countertops can survive for several hours; however, virus in body fluids (such as blood) can survive up to several days at room temperature.

## Signs and Symptoms

A person infected with Ebola is not contagious until symptoms appears. Signs and symptoms of Ebola typically 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. 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. People who recover from Ebola are advised to abstain from sex or use condoms for 3 months. It is not known if people who recover are immune for life or if they can become infected with a different species of Ebola.

## Diagnosis

Diagnosing Ebola in a person who has been infected for only a few days is difficult. Diagnosis is difficult because the early symptoms, such as fever, are not specific to Ebola infection. The early symptoms of Ebola are seen often in patients with more commonly occurring diseases, such as malaria and typhoid fever.

If a person has symptoms of Ebola and had contact with blood or body fluids of a person sick with Ebola, contact with objects that have been contaminated with blood or body fluids of a person sick with Ebola or contact with an infected animal, the patient should be isolated and public health professionals notified. Samples from the patient can then be collected and tested to confirm infection.

**Prevention**

There is no FDA-approved vaccine available for Ebola. If you travel to or are in an area affected by an Ebola outbreak, make sure to do the following:

* Practice careful hygiene. 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(http://www.cdc.gov/vhf/ebola/symptoms/index.html)](http://www.cdc.gov/vhf/ebola/symptoms/index.html).

## When to Return to School/Work

Individuals who have potentially been exposed to or have had any form of Ebola and received treatment are to stay away from school and work as defined by the public health authority. This could be for an extended period of time. It is highly recommended that an individual notify their supervisor or instructor on what is needed to return to work or school. A release may be required from a public health authority before returning.

**For more information**

Anyone concerned about possible exposure may call the Centers for Disease Control and Prevention [CDC-Info](http://www.cdc.gov/cdc-info/) at 800-CDC-INFO (800-232-4630) for more information or your health care provider. CDC-INFO’s operating hours are 8:00 am to 8:00 pm Monday through Friday, Eastern Time (ET). For general information about Ebola, visit the website on Ebola provided by the Centers for Disease Control and Prevention (CDC) at http://www.cdc.gov/vhf/ebola/index.html.

