

# Ebola

## What is Ebola?

Ebola virus disease is a severe, often fatal disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees) that has appeared sporadically since its initial recognition in 1976. The disease is caused by infection with the Ebola virus, named after a river in the Democratic Republic of Congo (formerly Zaire), where it was first recognized. There are five subtypes of Ebola. Four of these have caused disease in humans: Ebola virus (*Zaire ebolavirus*); Sudan virus (*Sudan ebolavirus*); Taï Forest virus (*Taï Forest ebolavirus*, formerly Côte d'Ivoire ebolavirus); and Bundibugyo virus (*Bundibugyo ebolavirus*). The fifth (*Reston ebolavirus*) has caused disease in nonhuman primates, but not in humans.

## Where did Ebola virus come from?

On the basis of available evidence, researchers believe that the virus is zoonotic (animal-borne) with bats being the most likely reservoir. Four of the five subtypes occur in an animal host native to Africa. A similar host is probably associated with *Reston ebolavirus*, which was isolated from infected monkeys that were imported to the United States and Italy from the Philippines. The Ebola virus is not known to be native to other continents, such as North America.

## Where does Ebola virus disease occur in the world?

Most previous Ebola virus disease (EVD) outbreaks have been reported in the Democratic Republic of the Congo, Gabon, Sudan, the

Ivory Coast, Uganda, and the Republic of the Congo. Ebola typically appears in sporadic outbreaks, which can spread quickly within health care settings and among family and friends caring for ill persons. It is likely that sporadic, isolated cases occur as well but go unrecognized. The outbreak first identified in March 2014 has spread to countries outside of Africa for the first time in the disease's history.

## How is Ebola virus spread?

People are not contagious before they exhibit symptoms, so if they are not sick they cannot spread the virus to anyone else. Once a person is symptomatic, the virus can be transmitted through direct contact with blood or secretions of an infected person or through contact with contaminated objects, such as needles. Hospital spread of Ebola can occur if careful precautions, such as wearing a mask, gown, and gloves, are not taken. The virus is not transmitted through the air.

## What are the symptoms of Ebola virus disease?

The incubation period for Ebola ranges from 2 to 21 days, but is most commonly about 10 days. The onset of illness is abrupt and is characterized by fever, headache, joint and muscle pain, sore throat, and weakness, followed by diarrhea, vomiting, and stomach pain. A rash, red eyes, hiccups, and internal and external bleeding may be seen in some patients. Researchers are still working to understand why some people recover from Ebola and others do not.

**How is Ebola virus disease diagnosed?**

There are laboratory tests including ELISA available through a public health laboratory.

**How is Ebola virus disease treated?**

Patients receive supportive therapy such as fluids and electrolytes, maintaining oxygen status and blood pressure, and treatment for complicating infections. There is no specific treatment for Ebola virus disease, though this is a very active area of research.

**What precautions should I take if I am traveling?**

When traveling to a country where Ebola virus occurs, prevention efforts should concentrate on avoiding contact with ill persons. Travelers to foreign countries should check CDC travel health notices for additional information prior to making travel arrangements and again prior to departure. These notices are available online at <http://wwwnc.cdc.gov/travel/notices>.

For more information about Ebola virus disease, contact the New Hampshire Department of Health and Human Services, Bureau of Infectious Disease Control at 1-800-852-3345 x4496 or 603-271-4496. Information is also available from the Centers for Disease Control and Prevention at [www.cdc.gov](http://www.cdc.gov) or the World Health Organization at [www.who.int](http://www.who.int) or visit the NH DHHS website at [www.dhhs.nh.gov](http://www.dhhs.nh.gov).