



Ebola

MU Patient Education Series

Definition:

Ebola is a rare and deadly disease caused by infection with one of the Ebola virus strains. It was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Based on evidence and the nature of the virus, researchers believe that the virus is animal-borne and that bats are the most likely reservoir. Ebola can cause disease in humans and nonhuman primates (monkey, gorillas and chimpanzees).

Outbreaks of the Ebola virus in Africa have been sporadic. The current outbreak is the largest one recorded in history and is currently present in multiple countries in Africa. The first travel-associated case of Ebola to be diagnosed in the United States was confirmed by the CDC on September 30, 2014. The patient traveled from West Africa to Dallas, Texas, but was not exhibiting symptoms during his journey to the US.

The CDC understands that this case of Ebola in the US has caused public concern. The CDC and its partners are working diligently and taking precautions to prevent the spread of Ebola within the US. The CDC has issued general reminders to travelers and healthcare providers regarding best practices that should be taken to prevent the spread of the disease.

TRANSMISSION:

Ebola is spread through direct contact (through broken skin or mucous membranes) with

- Blood or body fluids (including but not limited to urine, saliva, feces, vomit, and semen) of a person who is sick with Ebola
- Objects (like needles and syringes) that have been contaminated with the virus
- Infected animals
- Ebola is not spread through the air or by water, or in general, food. However, in Africa, Ebola may be spread as a result of handling bushmeat (wild animals hunted for food) and contact with infected bats



- Coughing and sneezing are not common symptoms of Ebola. If a symptomatic patient does cough or sneeze and saliva or mucous come into contact with that person's eyes, nose or mouth, these fluids may transmit the disease

Ebola can spread quickly within a healthcare setting during outbreaks if hospital staff do not follow strict infection prevention procedures such as hand hygiene, wearing appropriate protective equipment, including masks, gowns, and gloves and eye protection. The Director of the CDC, Tom Frieden, M.D., M.P.H., indicated that Ebola will be stopped in this country because of 2 things: strong infection control practiced in our healthcare systems and strong public health fundamentals to trace and track contacts, isolate them if they are symptomatic, and stop the chain of transmission.

SYMPTOMS OF EBOLA:

- 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. People who have traveled to the outbreak areas and develop any of the above symptoms should call their physician immediately. This can help the physician's office or hospital prepare for their arrival.

PREVENTION:

The CDC has been anticipating and preparing for a case of Ebola in the United States. They have been:

- Enhancing surveillance and laboratory testing capacity in states to detect cases
- Developing guidance and tools for health departments to conduct public health investigations
- Providing recommendations for healthcare infection control and other measures to prevent disease spread
- Providing guidance for flight crews, Emergency Medical Services units at airports, and Customs and Border Protection officers about reporting ill travelers to CDC
- Disseminating up-to-date information to the general public, international travelers, and public health partners



There is no FDA-approved vaccine available for Ebola. Researchers are working on one, but development takes time.

If you travel to or are in an area affected by an Ebola outbreak, make sure to do the following:

- Practice careful hygiene. 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
- 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 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 any of the symptoms mentioned above

Healthcare workers who may be exposed to people with Ebola should take these precautions:

- Wear protective clothing, including masks, gloves, gowns, and eye protection
- Practice proper infection control and sterilization measures. For more information, see ["Infection Control for Viral Hemorrhagic Fevers in the African Health Care Setting"](#)
- 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



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