EBOLA AT-A-GLANCE

ABOUT THE DISEASE

Ebola virus disease (sometimes referred to as Ebola hemorrhagic fever) is one of the world’s deadliest illnesses in humans and nonhuman primates, with a fatality rate of 60-90 percent. Ebola virus outbreaks occur primarily in remote, tropical areas of Central and West Africa, and are initiated when Ebola is introduced into the human population by close contact with animal carriers of the virus. Fruit bats of the *Pteropodidae* family are widely believed to be the natural hosts of the Ebola virus, although humans have been known to contract the virus by handling other tropical fauna, including monkeys, gorillas, and antelope.

The disease was first documented in humans in 1976 during two simultaneous outbreaks – one in Sudan and the other in the Democratic Republic of Congo, near the Ebola River (giving the virus its name).

Symptoms of Ebola include sudden fever, headache, sore throat, muscle pain and weakness, followed by vomiting, diarrhea, stomach pain and, in some cases, internal and external bleeding. Onset of symptoms typically occurs between 2 and 21 days after exposure to the virus.

In March 2014, the Zaire ebolavirus (EBOV) outbreak began in the country of Guinea. The 2014 outbreak has manifested in the more densely populated West Africa and 2,240 cases have been reported with 1,229 deaths (as of August 19).

CAUSES

The deadly Ebola virus disease is caused by infection from one of four *Ebolavirus* species (Bundibugyo, Zaire, Sudan, or Taï Forest). A fifth species, Reston, has not resulted in illness or death in infected humans. Ebola viruses are members of the *Filoviridae* (filovirus) family, so-called for their distinct, filament-like shape.

TRANSMISSION

Ebola virus is introduced to humans through close contact with the blood or tissue of infected animals. Once it makes its way into the human population, the virus spreads through direct contact with the blood, secretions, or other bodily fluids of those infected. This often happens before the disease is diagnosed, as early symptoms of the disease can resemble those of other, more common illnesses. Hospital workers, family members, and other in close contact with the sick and deceased are most at risk for contracting the virus. Ebola virus is not an airborne pathogen; merely coughing, sneezing, or breathing cannot transmit the virus.

TREATMENT

There is currently no approved vaccine or cure for Ebola virus disease, though several vaccines are being tested. Care for patients infected with Ebola virus is currently limited to supportive therapy. Treatment typically includes rehydration and maintenance of electrolyte levels through intravenous fluids.

The material above is collected from the following sources:

- Centers for Disease Control (website)
- World Health Organization (website)
- NIH – National Institute of Allergy and Infectious Disease (website)