



**Name:**  
*Ebola virus*

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**Family:**  
Filoviridae

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**Class:**  
Group V (-)ssRNA  
Enveloped

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**Genome:**  
18,960 bases, 8 proteins

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**Mode of transmission:**  
Exchange and contact with bodily fluids, Zoonosis



## Biology & Disease

The Ebola virus was first discovered in 1976 near the Ebola River in Zaire (now the Democratic Republic of Congo), since then, outbreaks of Ebola have been documented primarily in Central Africa.

The natural hosts of the virus are thought to be fruit bats who carry the virus without contracting the disease. The virus spreads to humans via contact with the blood, secretions, organs, or other bodily fluids of infected animals. Human to human transmission can then occur via direct contact of blood or bodily fluids of infected individuals.

The onset of the Ebola virus disease is a viral hemorrhagic fever, with symptoms appearing 2-21 days after contracting the virus. Flu-like symptoms which include fever, sore throat and muscular pain are followed by vomiting, diarrhea and a decreased function of the liver and kidneys. Some patients may experience internal and external bleeding.

With an average death rate of 50%, Ebola is considered one of the most lethal pathogens known to man. In 2014, the most severe Ebola outbreak occurred, with over 11,300 fatalities which are greater than all previous outbreak death-tolls combined. Notably, this 2014 outbreak was the first Ebola outbreak in West Africa.