

# Ebola Virus Disease (EVD) Fact Sheet

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*This document has been updated as of August 29, 2014, based on the best available evidence at that time. Version changes are summarized at the end of this document. Please refer to the Public Health Ontario website at [www.publichealthontario.ca/ebola](http://www.publichealthontario.ca/ebola) for the most recent version. For updated information on EVD affected countries/areas visit:*

[http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/Pages/EVD\\_Geographic\\_Areas\\_Affected.aspx](http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/Pages/EVD_Geographic_Areas_Affected.aspx)

## What is Ebola Virus Disease?

Ebola virus disease (EVD) is a severe and often fatal illness that occurs in humans and non-human primates such as chimpanzees, and gorillas as well as forest antelopes. It is thought that bats may be the natural reservoir of EVD but this is not confirmed. EVD outbreaks have occurred sporadically in sub-Saharan Africa since 1976, with the largest outbreak currently occurring in West Africa in 2014.

## What are the signs and symptoms associated with Ebola virus disease?

Symptoms of EVD begin within two to 21 days after exposure. EVD cases present with the sudden onset of fever, usually with headache, malaise and myalgia. Gastrointestinal symptoms (i.e., diarrhea, abdominal pain, vomiting) are common. Additional symptoms and signs may occur (e.g., sore throat, chest pain, cough, rash, conjunctivitis). Hemorrhagic findings (e.g., petechiae, ecchymosis, hematemesis, hematuria and epistaxis) occur in only 50% of cases. Leukopenia, thrombocytopenia and elevated liver enzymes are common laboratory findings. The case fatality rate ranges from 50% to 90%.

## How is Ebola virus transmitted?

Ebola virus can only be transmitted through contact with infected bodily fluids from humans or animals. Person to person transmission occurs primarily through direct contact with the bodily fluids of someone who is sick or deceased, or contact with contaminated materials. The virus has been isolated in blood, saliva, semen, urine, stool, vomit, nasal secretions, and tears. A person with Ebola Virus Disease is communicable as long as the virus remains in the bodily fluids. It has been found in semen up to seven

weeks after infection. Persons are not infectious prior to the onset of symptoms. Transmission of Ebola virus from an asymptomatic person during the incubation period has not been reported.

Household transmission is associated with direct care of an ill individual through contact with their bodily fluids, including after death. Transmission to health care providers results due to inadequate or improper use and/or removal of Personal Protected Equipment (PPE). In developing countries, the re-use of non-sterilized needles and syringes can result in infection.

EVD cannot be transmitted through the air; therefore brief interactions such as walking by a person pose no risk.

### **How is Ebola virus disease diagnosed?**

Cases are confirmed through laboratory testing of blood. Due to the high biohazard risk, specimens are only tested for EVD at designated laboratories.

### **How is Ebola virus disease treated?**

Currently there are no approved vaccinations or treatments for EVD. Individuals infected with EVD may be provided with intensive supportive therapy including intravenous fluids to maintain hydration and blood and platelet transfusions to treat hemorrhage. Some experimental drug treatments and a vaccine are now being considered.

### **Where can I get more information?**

Public Health Ontario has set up an Ebola virus disease (EVD) webpage with several resources specific to public health, clinicians and hospitals. The EVD webpage also includes links to resources developed by the Public Health Agency of Canada, the US Centers for Disease Control and Prevention and the World Health Organization.

The Public Health Ontario EVD webpage can be found at:

[www.publichealthontario.ca/ebola](http://www.publichealthontario.ca/ebola)