

# Ebolavirus

*Ebola is spread through direct contact with blood, bodily fluid, organs and secretions via broken skin or mucous membrane with an infected person.*

## Virology

---

Ebolavirus is part of the Filoviridae family of viruses. Four out of the five known ebolaviruses cause disease in humans. The Zaire ebolavirus is the most severe as it has the highest mortality rate and is responsible for the most outbreaks and fatalities.

## Clinical Manifestations

---

Symptoms of ebolavirus include sudden onset of fever, muscle pain, head ache, intense weakness and sore throat. These symptoms are followed by vomiting, diarrhea, internal and /or external bleeding with rash and impaired liver and kidney function.

## Epidemiology of Transmission

---

Ebola is spread through direct contact (human to human transmission) . The virus enters the body through contact with blood or bodily fluids (urine, saliva, vomit, feces and semen) of an infected person or when the corpse of a deceased person comes in contact with open wounds or mucus membranes of another person. It can also be spread via contaminated medical devices. Ebola is highly contagious; however it cannot be spread via the air, water or food.

## Basic Prevention

---

Avoid travel to areas of known outbreaks. In North America there is a significantly lower risk of being infected with ebolavirus. Those most at risk are healthcare workers and family members caring for those infected with ebolavirus. If you encounter an infected person, avoid direct contact with the blood or bodily fluids or the bodies of people who have died of ebola or an unknown illness. Avoid contact with contaminated medical equipment and/or disinfect disposable medical equipment before throwing out. If you have any symptoms of ebolavirus seek medical attention immediately.

## Prevention Measures

---

In addition to Standard Precautions, Droplet and Contact Precautions and must be applied for all persons under investigation or infected with ebolavirus.

- Patients with ebolavirus cannot spread the virus to humans through indirect contact
- Follow hand-hygiene guidelines by either carefully washing hands with soap and water or using Alcohol-Based Hand Sanitizers (ABHS) after contact
- Use gowns, gloves, face mask and eye protection when in contact with or caring for patients and for all interactions that may involve contact with the patient or potentially contaminated areas in the patients environment

## Environmental Control Measures

---

Products used for disinfection must have an appropriate general virucidal claim, that is the product must demonstrate efficacy against enveloped and nonenveloped viruses. Routine cleaning and disinfection should be performed on frequently touched environmental surfaces. There should be prompt removal of blood and body fluids followed by routine disinfection. All patient care equipment should be cleaned and disinfected as per Routine / Standard Practices before reuse with another patient or a single use device should be used, disinfected and discarded in a waste receptacle after use.

## References:

---

1. Ebolavirus disease.  
<http://www.who.int/mediacentre/factsheets/fs103/en/>
2. Ebola Hemorrhagic Fever.  
<http://www.cdc.gov/vhf/ebola/index.html>
3. Ebola Virus Disease.  
<http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/ebola-professionals-professionnels-eng.php>
4. Manitoba Health, Healthy Living and Seniors Ebola Virus Disease (EVD) Infection Prevention and Control Interim Guidelines.  
<http://www.gov.mb.ca/health/publichealth/cdc/protocol/ebolaguidelines.pdf>