

Ebola Virus Disease in the Democratic Republic of Congo

OVERVIEW AND STATUS UPDATE | November 2018

What is Ebola infection?

Ebola is an acute and serious infection that can be fatal if left untreated (Source: World Health Organization). The virus is spread through direct person to person contact with an infected person or their body fluids (saliva, semen, blood). The virus was first identified in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. The Ebola virus is in the Filoviridae family and there are five identified Ebola virus species. Four of these species cause disease in humans and one causes disease in nonhuman primates, but not in humans.

Outbreaks of this disease have appeared sporadically in Africa. From March 2014 to December 2015, West Africa experienced the largest outbreak of Ebola in history and multiple countries were affected.

In 2018, the Democratic Republic of the Congo (DRC) has been experiencing its largest outbreak since the virus was first detected in 1976.

How is Ebola infection transmitted?

Health care providers caring for Ebola patients and family or friends in close contact with Ebola patients are at the highest risk of getting sick.

Ebola is spread through direct contact with infected blood or body fluids and through direct contact with objects that have been contaminated with infected body fluids such as clothing, bedding, needles or medical equipment. Ebola virus has been found in semen from men who survived Ebola infection. Additionally, contact with infected wildlife, bats, or bushmeat may cause Ebola infection.

What are the symptoms?

Symptoms of Ebola may appear 2 to 21 days after exposure but the average is 8-10 days. They include:

- Fever
- Fatigue
- Severe headache
- Muscle pain
- Sore throat



The symptoms are followed by:

- Diarrhea
- Vomiting
- Rash
- Symptoms of impaired kidney and liver functions
- In some cases, unexplained internal and external bleeding or bruising

Ebola virus is detected in blood only after onset of symptoms. It may take up to three days after symptoms start for the virus to reach detectable levels in the blood. There are blood tests that help in the diagnosis of this disease. The fatality rate is very high, approximately 50% according to the World Health Organization (WHO).

Patients are infectious only after they have developed symptoms and individuals who have completely recovered from Ebola can no longer spread the virus. However, in the case of men, the virus may remain active in the semen after recovery for up to 3 months. WHO recommends that male survivors of Ebola virus disease practice

safe sex and hygiene for 12 months from onset of symptoms or until their semen tests negative twice for Ebola virus. Therefore, people who have recovered from Ebola should abstain from sex for at least 3 months. Semen testing should be offered at 3 months after onset of disease, and then, for those who test positive, every month thereafter until their semen tests negative for virus twice by RT-PCR, with an interval of one week between tests. Until such time as their semen has twice tested negative for Ebola, survivors should practice good hand and personal hygiene and if, using condoms during this period, to handle them safely, and ensure they are safely disposed of, so as to prevent contact with seminal fluids.

According to the Center for Disease Control (CDC), "If abstinence is not possible, condoms may help prevent the spread of the disease." Additionally, according to WHO, relapse due to Ebola is considered very rare but has been reported. This is felt to be due to the virus residing in body sites that are harder for the immune system to reach such as the inside of the eye, the brain and spinal cord, and testicles. The virus may also persist in the fetus, amniotic fluid, or placenta of women who became infected with Ebola while pregnant and the virus can persist in breast milk. There is no evidence that women who become pregnant after they have recovered from Ebola run the risk of persistent infection in the developing pregnancy.

How can I protect myself?

- Avoid the risk of human-to-human transmission
- Avoid contact with blood or fluids of persons diagnosed with or suspected of having Ebola
- Practice careful hygiene
- Do not handle items that may have come in contact with an infected person’s blood or body fluids (urine, feces, saliva, sweat, urine, vomit, breast milk, semen, and vaginal fluids)
- Avoid funeral or burial rituals that require handling the body of someone who has died from Ebola
- Avoid facilities where Ebola patients are being treated

Avoid the risk of wildlife-to-human transmission: contact with bats and nonhuman primates or blood, fluids, and raw meat prepared from these animals.

Avoid possible sexual transmission: contact with semen from men who have had Ebola until you know Ebola is gone from his semen by two negative testings.

After returning from an Ebola area, monitor your health for 21 days and seek medical care immediately if you develop symptoms of Ebola.

If working with patients proven or suspected of having Ebola, personal protective equipment (hazmat suit style) should be imperative. This includes face shields, goggles, long sleeve gloves and water proof aprons or suits.



Democratic Republic of the Congo
 North Kivu and Ituri Provinces
 Surveillance of all travelers
 Surveillance of travelers from the DRC only

Is there a Vaccine?

A vaccine (known as rVSV-ZEBOV) has been developed to help provide immunity, however it is still in a development stage.

While the vaccine is not available commercially, it has been used during outbreaks of specifically the Ebola Zaire virus sub-type as a targeted effort to control spread in high risk populations during epidemics.

A “ring vaccination” strategy is being used, where physical contacts to persons with Ebola virus are selectively being immunized as a means to control spread, such as in the Democratic Republic of the Congo. A single dose of vaccine is administered.

Medical Intelligence Status Update

The latest Ebola Virus Disease (EVD) hemorrhagic fever outbreak declared on 1st August 2018 is the largest Ebola outbreak in the Democratic Republic of the Congo since it was first detected in 1976.

Up to 10 November 2018, a total of 329 cases have been reported with a total of 205 deaths, 170 of which are confirmed and 35 were deemed probable cases. While the previous outbreak in the Bas-Uélé province was declared over in July 2018, this newer outbreak affecting the area around Beni and Butembo - in the North East of the Democratic Republic of the Congo (DRC) provinces of Ituri and North Kivu, neighboring the Ugandan border. Over half the cases are in Beni, a city of 800,000 inhabitants. Other cases have been reported in Butembo, Mabalako, Kalunguta and Vuhoni.

While this outbreak is over 2,500 Km away from Kinshasa, DRC's capital city, it is close to Uganda, Rwanda and South Sudan - Kampala, in Uganda is under 500 km away. Kinshasa has not seen any Ebola cases since the beginning of the outbreak. The WHO assesses that, "The risk of the outbreak spreading to other provinces in the Democratic Republic of the Congo, as well as neighboring countries, remains very high".

The North Kivu and Ituri provinces are some of the most populated provinces in the country. In addition, they witness great insecurity as well as an important humanitarian crisis, with millions of displaced population and refugees going to neighboring countries.

The WHO is currently supporting the countries bordering Congo to augment their emergency preparedness and

response. Checkpoints have been established at the borders to prevent the spread via migrant populations. Uganda has announced a vaccination program for frontline health workers in high-risk districts bordering Congo.

Security Risk Update

Violent conflict as well as threats and physical assaults towards health care workers and their equipment in the area has hampered the efforts of the medical teams responding to the crisis, and has provoked repeated general strikes in protest against the factions behind the violence.

Community distrust of federal government, and of the United Nations, has also added to the challenges faced by those working to contain and control the outbreak; affecting the effectiveness of the response, including the vaccination and education programs. There are significant concerns that Presidential, regional and legislative elections planned for 23rd December will worsen the regional tensions further adding to what is already an extremely difficult and challenging situation. There is a continuing, slow, rise in case numbers despite the efforts of the response teams, as a result. It is now expected that it will take a year or more to bring this outbreak under control.

Are there any risks to me as I travel?

The WHO, "...continues to advise against any restriction to travel, and trade, with the DRC based on the currently available information."

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