



## **A Primer on Ebola Virus**

Jhpiego is a global health nonprofit working in more than 30 countries to prevent the needless deaths of women and their families. We have been working in Africa for more than three decades in maternal and child health, HIV/AIDS, family planning, and malaria and leading the global health community in establishing infection prevention and control guidelines and practices.

### **What is Ebola viral disease?**

Ebola hemorrhagic fever is a severe, often fatal disease caused by Ebola virus. Ebola virus got its name because the disease was first found among communities near the Ebola River in the Democratic Republic of the Congo in 1976.

### **What countries in the world are most affected by Ebola?**

The recent outbreak of Ebola hemorrhagic fever has affected Guinea, Liberia, Nigeria and Sierra Leone. More than 1,000 people have contracted the virus; more than half of these individuals have died because of the disease.

## **How is the virus transmitted?**

It is believed that fruit bats are the natural host of the Ebola virus. Close contact with blood, secretions, organs or bodily fluids of infected animals results in transmission of the virus. This virus is spread through human-to-human contact during outbreaks. The disease is generally identified when health care workers who come into close contact with infected patients while treating them develop the disease.

## **What are the signs and symptoms of the disease?**

Symptoms can occur between two and 21 days after exposure to the virus. They typically include fever, weakness, muscle pains, headache, diarrhea and loss of appetite, which are symptoms of many illnesses caused by viruses (such as the common cold, “the flu,” bronchitis, and gastroenteritis or the “stomach flu”).

Because symptoms of Ebola are nonspecific and are seen among patients with more common illnesses, it is difficult to know when to suspect that someone has the disease. This is why a person’s travel and contact history is extremely important. Once suspected, the disease is diagnosed by different laboratory tests depending on time since exposure and infection with the virus.

## **How is Ebola treated?**

Supportive care is the only treatment currently available for people with Ebola and focuses on maintaining hydration and reducing fever. There are treatments and vaccines under development, but they are still in the experimental stage.

## **What are the measures to prevent Ebola in the community?**

Ebola is preventable provided that individuals, communities and health care facilities are aware and able to take timely actions in case the outbreak appears.

The following steps can be taken at the individual and community levels:

- Within communities, create awareness about Ebola, how people get infected and how to prevent it. For example:
  - Educate the public on reducing the risk of animal-to-human transmission by avoiding contact with infected bats or monkeys, not handling these animals and not eating raw meat.
  - Alert health authorities immediately upon seeing a suspected case.
  - Avoid direct contact with the blood and body fluids of animals or people infected with Ebola.
  - Use standard precautions with all individuals suspected of having the disease. Handwashing is the most important precaution to prevent infection. Individuals can use alcohol-based hand rub immediately after patient contact, and it is the only handwashing option if water and soap are not available.

## **What are the measures to prevent Ebola in health care settings?**

If health care providers adhere to standard precautions all the time, they carry a very low risk of being infected by Ebola patients. Key components of infection prevention and control for viral hemorrhagic fevers in health care facilities include the following:

- Use standard precautions with all patients including establishment of routine handwashing for all health care workers working with patients or patient fluids, safe handling and disposal of sharps, and safe disinfection of reusable needs and syringes (use of disposable needles and syringes is preferred).
- Identify suspected patients, implement isolation precautions, alert health facility staff about risks of transmission, report the case and identify patient contacts and travel history.
- Isolate the patient with a plan for disinfection, changing rooms, and continuous availability of supplies.
- Wear protective clothing. Establish what is to be worn by whom, where and when.

It is not always possible to identify patients with Ebola infection early. Health providers in countries and areas where Ebola outbreaks have occurred must consistently and correctly implement standard precautions and isolation precautions to prevent human-to-human transmission.

## **What role is Jhpiego playing in supporting countries to take appropriate measures to prevent and control Ebola?**

In Liberia, where we have helped strengthen maternal and child health services, family planning and nursing education, today Jhpiego is working with government health officials and the [World Health Organization](#)(WHO) to reinforce infection prevention and control measures and update health workers' skills in response to the Ebola crisis.

### **In addition, we are**

- incorporating WHO guidelines on responding to an Ebola virus outbreak into materials that we use to train health workers;
- sharing our infection prevention materials and video clips on proper handwashing and how to prepare hand sanitizers for the community;
- participating in training teams that are updating health workers, including janitors and security staff, in health facilities in Montserrado and Bong Counties; and conducting public awareness sessions for the general population in Monrovia.