



FACT SHEET Viral Hemorrhagic Fevers

What are Viral Hemorrhagic Fevers?

Viral hemorrhagic fevers (VHFs) refer to a group of illnesses that are caused by several distinct families of viruses. The term “viral hemorrhagic fevers” is used to describe a severe multi-system syndrome (multi-system in that multiple organ systems in the body are affected). The overall vascular system is damaged, and the body’s ability to regulate itself is impaired. These symptoms are often accompanied by hemorrhage (bleeding), however, the bleeding itself is rarely life-threatening. While some types of VHFs can cause relatively mild illnesses, many of the viruses cause severe, life-threatening disease. VHFs include Ebola hemorrhagic fever, Lassa fever, Marburg, Crimean-Congo and others.

What are the symptoms of viral hemorrhagic fever illnesses?

Specific signs and symptoms vary by the type of VHF but initial signs and symptoms often include marked fever, fatigue, dizziness, muscle aches, loss of strength, and exhaustion. Patients with severe cases of VHF often show signs of bleeding under the skin, in internal organs or from body orifices like the mouth, eyes, or ears. Severely ill patient cases may also show shock, nervous system malfunction, coma, delirium, and seizures. Some types of VHF are associated with renal (kidney failure).

How are VHFs spread?

Viruses associated with most VHFs are zoonotic, meaning that they naturally reside in an animal host or insect vector. For the most part, rodents, ticks and mosquitoes serve as common vectors for some of the VHFs. However, the hosts of some viruses remain unknown – Ebola and Marburg viruses being well-known examples. The viruses carried in rodent reservoirs are transmitted when humans have contact with urine, fecal matter, saliva, or other body excretions from infected rodents. The VHFs, spread by insects, most often occur when a mosquito or tick bites a human, or when a human crushes a tick. Some of the insect vectors may spread virus to animals or livestock, and humans become infected when they care for, or slaughter, the animals.

Some VHFs can spread from one person to another, once an initial person has become infected. Ebola, Marburg, Lassa and Crimean-Congo VHFs are examples. This can happen through close contact with infected people or their body fluids. It can also occur indirectly, through contact with objects contaminated with infected body fluids, like syringes and needles.

How are patients with VHFs treated?

Patients receive supportive care but generally there is no other treatment or established cure. Antibiotics are not effective in treating viral infections.

How can cases of VHFs be prevented?

There is no vaccine that can protect against these diseases, with the exception of Yellow Fever and Argentine hemorrhagic fever. Prevention efforts must concentrate on avoiding contact with host species. Disease prevention efforts include:

- Controlling rodents
- Discouraging rodents from entering or living in homes or workplaces
- Encouraging safe cleanup of rodent nests and droppings.

For those hemorrhagic fever viruses that can be transmitted from one person to another, avoiding close physical contact with infected people and their body fluids is the most important way of controlling the spread of disease. Barrier nursing or infection control techniques include isolating infected individuals and wearing protective clothing. Other infection control recommendations include proper use, disinfection, and disposal of instruments and equipment used in treating or caring for patients with VHF, such as needles and thermometers.