# Fact Sheet

# Viral Hemorrhagic Fever (VHF)







## What are Viral Hemorrhagic Fevers?

Viral hemorrhagic fevers (VHFs) refer to a group of illnesses that are caused by several distinct families of viruses. In general, the term "viral hemorrhagic fever" is used to describe a severe multisystem syndrome (multisystem in that multiple organ systems in the body are affected). Some viral hemorrhagic fevers include:

- Dengue
- Ebola
- Lassa

- Marburg
- Yellow fever

These diseases most commonly occur in tropical areas of the world. When viral hemorrhagic fevers occur in the United States, they are usually found in people who have traveled internationally.

## **How They are Spread**

Viruses causing hemorrhagic fever are initially transmitted to humans when the activities of infected reservoir hosts or vectors and humans overlap. 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 viruses associated with arthropod vectors are spread most often when the vector mosquito or tick bites a human, or when a human crushes a tick. However, some of these vectors may spread virus to animals. Humans then become infected when they care for or slaughter the animals.



# Signs and Symptoms

Specific signs and symptoms vary by the type of VHF, but initial signs and symptoms often include 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 body fluids. However, although bleeding may occur from many sites around the body, patients rarely die because of blood loss. Severely ill patient cases may also show shock, nervous system malfunction, coma, delirium, and seizures. Some types of VHF are associated with kidney failure.

## Diagnosis

Laboratory tests, usually a sample of blood, are needed to confirm a diagnosis. Because viral hemorrhagic fevers are particularly virulent and contagious, these tests are usually performed in specifically designated laboratories using strict precautions.

#### **Treatment**

Patients receive supportive therapy, but there is no other treatment or established cure for VHFs. Ribavirin, an anti-viral drug, has been effective in treating some individuals with Lassa fever.

#### **Prevention**

With the exception of yellow fever and Argentine hemorrhagic fever, for which vaccines have been developed, no vaccines exist that can protect against these diseases. Therefore, prevention efforts must concentrate on avoiding contact with host species. If prevention methods fail and a case of VHF does occur, efforts should focus on preventing further transmission from person to person, if the virus can be transmitted in this way. Because many of the hosts that carry hemorrhagic fever viruses are rodents, disease prevention efforts include:

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



#### For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT <a href="www.scchealth.co">www.scchealth.co</a>
MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES <a href="www.michigan.gov/mdhhs">www.michigan.gov/mdhhs</a>
CENTERS FOR DISEASE CONTROL AND PREVENTION <a href="www.sccc.gov">www.sccc.gov</a>

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