

Kent County Health Department

Viral Hemorrhagic Fevers Fact Sheet (Ebola, Lassa, etc.)



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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 disease affecting several organ systems. While some of the hemorrhagic fever viruses can cause relatively mild illnesses, many of these viruses cause severe, life-threatening disease. Despite their name, bleeding is not usually a serious problem with VHFs.

What carries viruses that cause viral hemorrhagic fevers?

Viruses linked with most VHFs are zoonotic. This means that these viruses naturally live in an animal host or insect vector. The viruses are totally dependent on their hosts for replication and survival. Examples of hosts include deer mice, house mice and other field rodents. Ticks and mosquitoes serve as vectors for some of the illnesses.

Where are cases of viral hemorrhagic fevers found?

The viruses that cause VHFs are found all over the world. However, because each virus is linked with one or more particular host species, the virus and the disease it causes is rarely seen outside of the place where the host species lives.

While people usually become infected only in areas where the host lives, they may become infected by a host that has been exported from its native habitat. Once in a

while a person becomes infected in an area where the virus occurs naturally and then travels elsewhere. If the virus is a type that can be spread through person to person contact, the traveler could infect other people.

How do people get infected with viral hemorrhagic fevers?
People can get a virus causing hemorrhagic fever if they come in contact with urine, waste products or saliva from infected rodents. The viruses linked with mosquitoes and ticks are spread most often when a person is bitten by an infected mosquito or tick, or crushes a tick. Mosquitoes and ticks can also spread disease to livestock. Humans then become infected when they care for or slaughter the animal.

What are the symptoms of viral hemorrhagic fevers?

Specific signs and symptoms vary by the type of VHF. The first symptoms often include:

- Fever
- Dizziness
- Muscle aches
- Loss of strength
- Exhaustion

Patients with severe cases of VHF often show signs of bleeding under the skin, in internal organs or from body openings like the mouth, eyes or ears. People rarely die from the blood loss. Severely ill people may show signs of shock, nervous system malfunction, delirium, seizures, and coma.

Viral Hemorrhagic Fevers Fact Sheet – page 2

Kidney failure can also take place in some forms of VHF.

How soon do infected people get sick?

Symptoms can start as soon as two days after being exposed to the virus or may take as long as 21 days to appear.

Can viral hemorrhagic fevers be spread from person to person?

Some viruses that cause hemorrhagic fever can spread from person to person after a first person has been infected. This type of transmission of the virus can occur through close contact with infected people or their body fluids. It can also occur through contact with objects (needles) contaminated with infected body fluids.

How are viral hemorrhagic fevers treated?

People receive supportive care but generally there is no other treatment or standard cure for VHFs.

Are there vaccines for viral hemorrhagic fevers?

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.

How can cases of viral hemorrhagic fever be prevented and controlled?

Prevention must concentrate on avoiding contact with rodents, mosquitoes and ticks. If prevention methods fail and a case of VHF does occur, efforts should focus on preventing further spread from person to person if the virus can be spread this way. Since many of the hemorrhagic fever

viruses are carried by rodents, disease prevention efforts include:

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

For the viruses spread by mosquitoes and ticks, prevention efforts often focus on community-wide insect control. In addition, people are encouraged to use insect repellent, proper clothing, bed nets, window screens, and other insect barriers to avoid being bitten.

For the viruses that can be spread from person to person, avoiding close contact with infected people and their body fluids is the most important way of controlling the spread of the disease. Infected people should be isolated and caregivers should wear protective clothing. Instruments such as needles or thermometers used to treat a person with VHF should be properly used and then disinfected or thrown away.