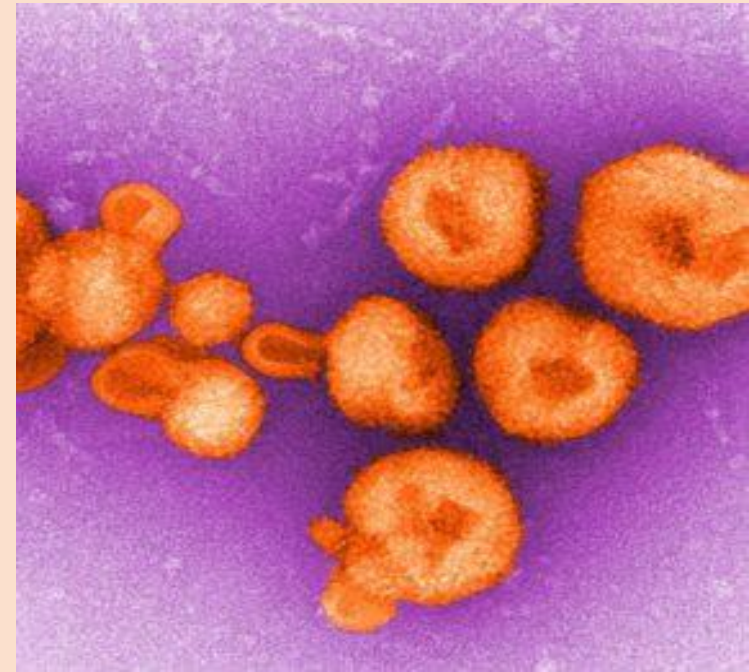


VIRAL HEMORRHAGIC FEVER

Viral hemorrhagic fevers (VHFs) are illnesses caused by several types of viruses. Some of these viruses cause mild illness. Many others lead to life-threatening diseases with no known cures. One of the best known of this group is the Ebola virus.

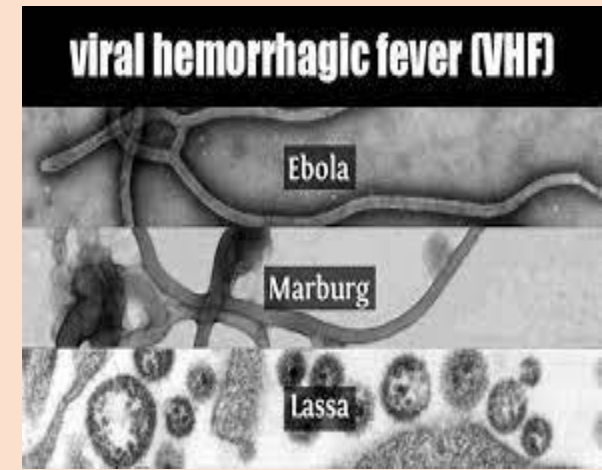


Some viral hemorrhagic fevers include:

- Dengue
- Ebola
- Lassa
- Marburg
- Yellow fever

These diseases most commonly occur in tropical areas. In the United States, people who get them usually have recently traveled to one of those areas.

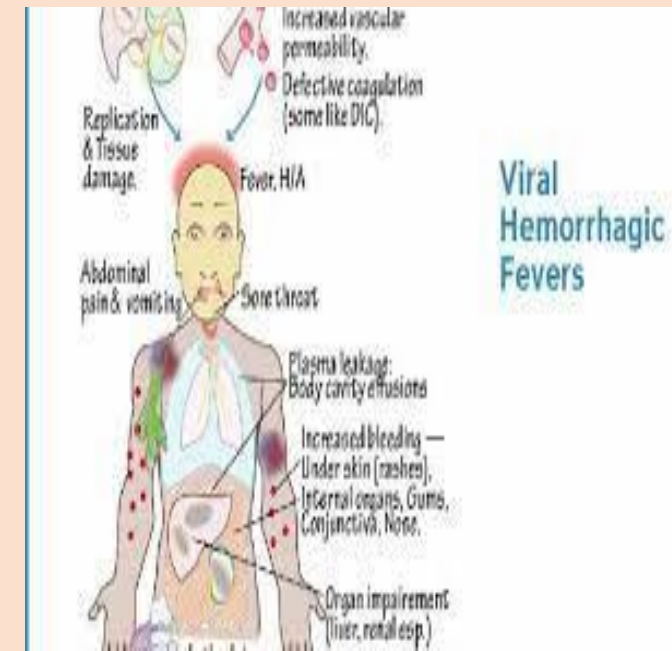
There's no cure for viral hemorrhagic fevers. There are vaccines for only a few types. Until additional vaccines are developed, the best approach is prevention.



Symptoms

Signs and symptoms of viral hemorrhagic fevers vary by disease. In general, early signs and symptoms can include:

- Fever
- Fatigue, weakness or general feeling of being unwell
- Dizziness
- Muscle, bone or joint aches
- Nausea and vomiting
- Diarrhea



Symptoms that can become life-threatening

More-severe symptoms include:

- Bleeding under the skin, in internal organs, or from the mouth, eyes or ears
- Nervous system malfunctions
- Coma
- Delirium
- Kidney failure
- Respiratory failure
- Liver failure



Causes

Viral hemorrhagic fevers are spread by contact with infected animals or insects. The viruses that cause viral hemorrhagic fevers live in a variety of animal and insect hosts. Most commonly the hosts include mosquitoes, ticks, rodents or bats.

Some viral hemorrhagic fevers can also be spread from person to person.

How is it transmitted?

Some viral hemorrhagic fevers are spread by mosquito or tick bites. Others are spread by contact with infected body fluids, such as blood, saliva or semen. A few varieties can be inhaled from infected rat feces or urine.

If you travel to an area where a particular hemorrhagic fever is common, you can be infected there but not develop symptoms until after you return home. Depending on the type of virus, it can take from two to 21 days for symptoms to develop.

How are viral hemorrhagic fevers (VHFs) diagnosed?

Doctors diagnose VHFs with blood and urine tests.

These tests allow a doctor to examine a sample of blood or urine to see if it contains proteins and antibodies associated with VHFs. Because these diseases can spread through contact with infected blood and urine, your doctor will take many precautions during these tests.

Diagnosis

Laboratory tests in a specialist PHE laboratory, the Rare and Imported Pathogens Laboratory (RIPL), including antigen and antibody detection, can diagnose VHFs definitively. Antigen detection is particularly useful in the early acute stage of illness.

What complications are associated with viral hemorrhagic fevers (VHFs)?

Severe cases of VHFs can cause life-threatening complications including:

- **Edema** (too much fluid in the body)
- **Failure of organs including lungs, kidneys and brain**
- **Internal bleeding**
- **Trouble breathing**

