

IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

VIRAL HEMORRHAGIC FEVER (VHF)

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 viral illness in which multiple organ systems in the body are affected. These viruses damage blood vessels, and the body's ability to regulate itself is impaired. These symptoms are often accompanied by hemorrhage (bleeding); however, the bleeding on its own is rarely life-threatening. While some types of hemorrhagic fever viruses can cause relatively mild illnesses, many of these viruses cause severe, life-threatening disease. Some examples of VHFs are Ebola, Marburg, Seoul, Lassa, Crimean-Congo, Argentine, hantavirus, and yellow fever.

Symptoms

Specific signs and symptoms vary by the type of VHF, but initial signs and symptoms often include:

- High fever, fatigue, dizziness, muscle aches, loss of strength, and exhaustion.
- Bruising and bleeding under the skin, or from body orifices like the mouth, eyes, or ears.
- Making less urine than usual.
- Severe cases may show signs of shock (dizziness, confusion) and brain malfunction (unconsciousness, seizures).

Transmission

- Viruses associated with most VHFs naturally reside in an animal or insect host. They are totally dependent on their hosts for replication and survival. Rats, mice, and other field rodents are examples of some host animals. Ticks and mosquitos serve to spread the viruses of some other illnesses. The hosts for some viruses, like Ebola and Marburg viruses, remain unknown.
- Some VHF causing viruses can be spread from human-to-human once an initial person has been infected through contact with an animal host. This can happen from direct contact with the infected human or their body fluids, or by touching an object contaminated with their body fluids.
- Human cases or outbreaks of hemorrhagic fevers caused by these viruses occur sporadically and irregularly. The occurrence of outbreaks cannot be easily predicted.
- Taken together, the viruses that cause VHFs occur all over the world. However, because each virus is associated with one or more particular host species, the virus and the disease it causes are usually seen only where the host species live(s). Therefore, the risk of getting VHF caused by a certain virus is restricted to those areas.
- People could also be infected outside of the usual area by people or animals that travel away from their usual environment. Because more and more people travel each year, outbreaks of these diseases are becoming an increasing threat in places where they rarely, if ever, have been seen before.

Treatment

- Patients receive supportive therapy, but generally speaking, 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 or HFRS. Treatment with convalescent-phase plasma has been used with success in some patients with Argentine hemorrhagic 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 and preventing further transmission from person to person if a case does occur.
- Prevent rodents from living in homes or workplaces. Use traps, seal holes, and clean up rodent nests and droppings.
- For hemorrhagic fever viruses spread by insects, use insect repellent, long sleeves and pants, bednets, window screens, and other insect barriers to avoid being bitten.
- Avoid close physical contact with infected people and their body fluids. Health care providers should wear protective clothing and properly disinfect or dispose of equipment used in treating or caring for patients with VHF, such as needles and thermometers.

All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.



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