

West Virginia Department of Health and Human Resources Information for the Public Regarding Viral Hemorrhagic Fevers

What is viral hemorrhagic fever (Ebola, Marburg, Lassa, New World Arenavirus, Crimean-Congo, Rift Valley Fever, Dengue Fever, Yellow Fever, Omsk Hemorrhagic Fever, or Kyasanur Forest Disease)?

Viral hemorrhagic fevers are rare diseases in the United States but more prevalent in Africa. They are caused by four classes of viruses (Filoviruses, Arenaviruses, Bunyaviruses, and Flaviviruses). Humans are incidentally infected by a bite of an infected tick or mosquito, via aerosol generated from an infected rodent excreta, or by direct contact with infected animal carcasses. With the exception of Rift Valley fever and the diseases caused by Flaviviruses (Yellow fever, Omsk HF, and Kyasanur Forest Disease) which are not transmissible person-to-person, infected humans can spread the disease to close contacts by touching bodily fluids, which may result in community outbreaks and nosocomial infections. Person-to-person transmission by respiratory droplets through the air appears to be rare but cannot be ruled out. With intentional exposure, as in a bioterrorist release, breathing in airborne virus, or touching a substance with the virus and transferring it to the mucous membranes in the eyes or mouth are the most likely routes of entry into the body.

What are the symptoms of VHFs?

Clinical symptoms and signs of VHFs may include early onset of symptoms lasting for less than 1 week including fever, nausea and vomiting, joint and muscle pain, headache, extreme weakness, lack of strength, fatigue, sore throat, cough, chest and abdominal pain, and nonbloody diarrhea. Early signs also include slowing of pulse rate, rapid respiration, conjunctivitis, pharyngitis, weight loss, difficulty swallowing, shortness of breath, and for some VHFs, a rash. Later patients may show signs of bleeding of gums, vomiting blood, bloody stool, blood in urine, excessive bleeding at puncture sites, nose bleed, or blood in sputum.

How soon after exposure would symptoms begin?

Symptoms generally develop between 2 and 21 days after exposure.

Can VHFs be spread person-to-person?

Yes. Hemorrhagic fever viruses are highly contagious by touching bodily fluids of infected patients and then touching your mouth or eyes. Strict barrier precautions for infection control should be taken to prevent direct contact with infected patients.

How likely is it that I will be exposed to VHFs, or other biological or chemical agents?

There has never been a case of VHF in WV. Historically, in the United States, the individual risk of disease from a bioterrorist event has been very, very low.

What will be done to evaluate an incident?

State and local public health, emergency, and laws enforcement agencies will work together to evaluate all incidents. Examining the circumstances of the incident, the suspect material, and the type of exposure is required to determine if the incident represents a public health risk.