



## VIRAL HEMORRHAGIC FEVERS (VHFs)

<b>Agent Information:</b>	Viral Hemorrhagic Fevers (VHFs) refer to a group of illnesses caused by several distinct families of RNA viruses. The term "Viral Hemorrhagic Fever" describes a severe multi-system syndrome. There are several VHFs with similar effects and varying severity. They include Ebola, Lassa, Marburg, Crimean-Congo, Rift Valley and others. Overall incubation period is 2-35 days.
<b>Signs and Symptoms:</b>	Specific symptoms vary by the type of VHF, but initial signs and symptoms include marked fever, fatigue, vertigo and myalgias. Patients with severe cases show signs of bleeding subcutaneously, internally and from body orifices. Severely ill cases show signs of hemodynamic instability, CNS malfunction, coma, delirium and seizures. Some VHFs are associated with renal failure.
<b>Transmission:</b>	VHFs are initially transmitted to humans by direct contact with infected vectors or reservoir hosts, such as from contact with urine, fecal matter, saliva, other body excretions, or a bite from the infected host. Aerosol spread is also possible. Ebola, Marburg, Lassa and Crimean-Congo hemorrhagic fever viruses are transmitted person-to-person once an initial person becomes infected. This type of secondary transmission can occur directly, through close contact with infected people or their body fluids, or indirectly, through contact with contaminated objects.
<b>Decontamination:</b>	No.
<b>Isolation:</b>	Negative Pressure.
<b>Protective Measures:</b>	Contact and droplet precautions with use of an N-95 mask as a minimum. Other protective measures include double-gloving, impermeable gowns, leg and shoe coverings, face shields or goggles, dedicated medical equipment, proper disinfection measures and restricted access of non-essential staff. Maintain patients in negative pressure isolation rooms. Needle sticks pose the greatest risk to healthcare workers.
<b>Lab Samples Requested for Evaluation:</b>	Serum (10-12 cc in red / black top tube). All samples are sent to the Delaware Public Health Laboratory (DPHL), then to the CDC for analysis.
<b>Prophylaxis:</b>	No available prophylaxis exists. <i>Persons considered potentially exposed and all known high-risk and close contacts should be placed under medical surveillance.</i> (Vaccines only available for Yellow and Argentine fevers)
<b>Treatment:</b>	Possible use of Ribavirin under Investigational New Drug (IND) protocol. No established treatment or cure. Supportive care is the mainstay of treatment with intense hemodynamic support.
<b>Reporting:</b>	Immediately report suspect cases to Delaware's Division of Public Health, Epidemiology Branch: 1-888-295-5156 (24/7 coverage).
<b>Contact Information:</b>	Delaware's Division of Public Health, Epidemiology Branch: 1-888-295-5156. For additional information, view the CDC website: <a href="http://www.bt.cdc.gov">www.bt.cdc.gov</a> .

**24/7 Emergency Contact Number: 1-888-295-5156**

Revised: 5/2008

Doc. No. 35-05-20/08/05/48