Viral Hemorrhagic Fever

Merlin disease code: 06591 Crimean-Congo Hemorrhagic Fever 06592 Ebola Hemorrhagic Fever 06593 Guanarito Hemorrhagic fever 06594 Junin Hemorrhagic Fever 06595 Lassa Fever 06596 Lujo Virus 06597 Machupo Hemorrhagic Fever 06598 Marburg Fever 06599 Sabia-Associated Hemorrhagic Fever

Isolates or specimens for all cases must be sent to the Bureau of Public Health Laboratories

Viral hemorrhagic fevers (filoviruses [e.g., Ebola, Marburg] and arenaviruses [e.g., Lassa, Machupo]) have been identified as a potential bioterrorism agent by the CDC.

Background

Diagnosis of viral hemorrhagic fever (VHF) must be made by a physician. Common presenting complaints are fever, myalgia, and prostration, with headache, pharyngitis, conjunctival injection, flushing, and gastrointestinal symptoms. This may be complicated by spontaneous bleeding, petechiae, hypotension and perhaps shock, edema, and neurologic involvement.

VHF can be caused by:

- Ebola virus
- Marburg virus
- Crimean-Congo hemorrhagic fever viruses
- Lassa virus
- Lujo virus
- New world arenaviruses (Guanarito, Machupo, Junin, Sabia viruses)

Clinical criteria for case classification

Both of the following:

- Fever >40 °C
- And one or more of the following clinical findings: severe headache, muscle pain, erythematous maculopapular rash on the trunk with fine desquamation 3–4 days after rash onset, vomiting, diarrhea, pharyngitis (arenaviruses only), abdominal pain, bleeding not related to injury, retrosternal chest pain (arenaviruses only), proteinuria (arenaviruses only), or thrombocytopenia.

Laboratory criteria for case classification

One or more of the following laboratory findings:

- Detection of VHF viral antigens in blood by enzyme immunoassay (EIA) antigen detection,
- Or VHF viral isolation in cell culture for blood or tissues,
- **Or** detection of VHF viral genes using reverse transcriptase polymerase chain reaction (RT-PCR) from blood or tissues,
- **Or** detection of VHF viral antigens in tissues by immunohistochemistry (IHC).

Viral Hemorrhagic Fever (Continued)

Epidemiological criteria for case classification

One or more of the following exposures in the three weeks before onset of symptoms:

- Contact with blood or other body fluids of a patient with VHF,
- **Or** residence in or travel to a VHF endemic area,
- **Or** work in a laboratory that handles VHF specimens,
- **Or** work in a laboratory that handles bats, rodents, or primates from endemic areas,
- **Or** exposure within the past 3 weeks to semen from a confirmed acute or convalescent case of VHF within the 10 weeks of onset of symptoms.

Case classification

Confirmed:

A clinically compatible illness in a person with laboratory criteria.

Suspect:

A clinically compatible illness in a person with any of the epidemiologic linkage criteria.

Criteria to distinguish a new case from previous reports

Not applicable.