

VIRAL HEMORRHAGIC FEVERS

ALL SUSPECT CASES OF VIRAL HEMORRHAGIC FEVERS MUST BE REPORTED IMMEDIATELY TO THE HUMBOLDT COUNTY PUBLIC HEALTH BRANCH:

During business hours: 707-445-6200

After hours Sheriff's Dispatch, (ask for the Health Officer), 707-445-7251

Etiologic Agents: Arenaviradae (Lassa, Junin, Machupo, Guanarito, and Sabia), Filoviradae (Marburg and Ebola), Bunyaviradae (Congo-Crimean hemorrhagic fever virus and hantaviruses) and Flaviradae (yellow fever and Dengue) can all cause viral hemorrhagic fever (VHF)

Epidemiology:

- Highly infectious after aerosolization
- Infectious dose can be as low as 1-10 organisms
- Risk of person-to-person transmission depends on virus

Clinical:

- Incubation period is 4 – 21 days, depending on virus
- Clinical presentation would vary by viral agent; however, dominant clinical features of all are a consequence of microvascular damage and changes in vascular permeability. Fever, myalgia, and prostration may evolve to shock, generalized mucous membrane hemorrhage, and neurologic, hematopoietic, or pulmonary involvement.

Laboratory Diagnosis:

- Viral isolation should be handled in a Biosafety Level 3 or 4 facility and may take 3 – 10 days
- ELISA or reverse transcriptase PCR available for most VHF viruses

Patient Isolation:

- Isolation room with contact precautions.

Treatment:

- Ribavirin (30 mg/kg IV x 1, then 15 mg/kg IV q 6 h x 4 days, 7.5 mg/kg IV q 8 x 6 days) may be helpful for Congo-Crimean hemorrhagic fever or arenaviruses

Prophylaxis:

- Licensed vaccine available only for yellow fever