

Marburg Hemorrhagic Fever Fact Sheet

1. **What is Marburg hemorrhagic fever (MHF)?** MHF is a rare, severe type of hemorrhagic fever which affects both humans and non-human primates. It was first recognized in 1967, when outbreaks of a then unknown hemorrhagic fever occurred in laboratories in Marburg and Frankfurt, Germany and in Belgrade, Yugoslavia (now Serbia). A total of 31 people became ill with seven deaths; they included laboratory workers as well as medical personnel and family members who had cared for them. The new virus, named after Marburg Germany, was the first recognized Filovirus. The second known member was the Ebola virus which produces a similar illness.

2. **Where is Marburg virus (MV) found in nature?** Recent scientific studies implicate the African fruit bat (*Rousettus aegyptiacus*) as the reservoir host of the MV. The African fruit bat is a sighted, cave-dwelling bat which is widely distributed across Africa. MV is believed to be native only to Africa.

3. **Where do cases of MHF occur?** Confirmed cases of MHF have been reported in Uganda, Zimbabwe, the Democratic Republic of the Congo, Kenya, and Angola. Cases of MHF have occurred outside Africa, though infrequently. For example, in 2008, an American traveler developed MHF after returning to the United States from Uganda.

4. **How do humans get MHF?** Just how the fruit bat host transmits MV to humans is unknown. However, as with some other viruses which cause viral hemorrhagic fever, humans who become ill with MHF can spread the virus to other people. This can happen in several ways, including exposures to infected blood and body fluids.

5. **What are the symptoms of MHF?** After an incubation period of 5 to 10 days, the onset of the disease is sudden and is marked by fever, chills, headache, and muscle aches. Around the fifth day a maculopapular rash (discolored flat and raised areas) most prominent on the chest, back, and stomach can occur. Nausea and vomiting; abdominal and chest pain; a sore throat, and diarrhea can then appear. Symptoms become increasingly severe and can include jaundice, inflammation of the pancreas, severe weight loss, delirium, shock, liver failure, massive hemorrhaging.

6. **Is the disease fatal?** Between 23 and 90% of people with MHF die from the disease. Among those who recover, complications from the virus can include inflammation of the testes, spinal cord, eye, parotid gland, and/or by a prolonged hepatitis.

7. How is MHF treated? There is no specific drug treatment or vaccination for MHF. Generally, patients receive supportive therapy which consists of balancing the patient's fluids and electrolytes, maintaining oxygen status and blood pressure, and treatment for any complicating infections. 2

8. What prevention and control measures are available? MHF is a very rare human disease. Due to our limited knowledge of the disease, preventive measures against transmission from the original animal host have not yet been established. If a patient is either suspected or confirmed to have MHF, barrier nursing techniques, including glove, mask and gown use, isolation and proper product disposal, should be used to prevent direct physical contact with the patient. Increasing awareness among health care providers of clinical symptoms in patients which suggest MHF is critical to prevent the spread of virus infection to family members or health care providers.

9. For more information:

<http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/marburg.htm>

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.

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