



Kyasanur Forest Disease

Fact Sheet

What is Kyasanur forest disease?

Kyasanur forest disease (KFD) is caused by Kyasanur forest disease virus (KFDV), a member of the virus family Flaviviridae. KFDV was identified in 1957 when it was isolated from a sick monkey from the Kyasanur forest in the Karnataka (formerly Mysore) State, India.

Where does Kyasanur forest disease occur?

KFD is limited to Karnataka State, India. Recently, however, a virus very similar to KFD virus was discovered in Saudi Arabia.

How is Kyasanur forest disease spread to humans?

The main hosts of KFDV are small rodents, but shrews, bats, and monkeys may also carry the virus. KFD is transmitted from the bite of an infected tick (*Haemaphysalis spinigera* is the major vector). Humans can get these diseases from a tick bite or by contact with an infected animal, such as sick or recently dead monkey.

Larger animals such as goats, cows, and sheep may become infected with KFD, but they do not have a role in the transmission of the disease. Furthermore, there is no evidence of the disease being transmitted via the unpasteurized milk of any of these animals.

What are the symptoms of Kyasanur forest disease?

After an incubation period of 3-8 days, the symptoms of KFD begin suddenly with fever, headache, severe muscle pain, cough, dehydration, gastrointestinal symptoms and bleeding problems. Patients may experience abnormally low blood pressure, and low platelet, red blood cell, and white blood cell counts. After 1-2 weeks of symptoms, some patients recover without complication. However, in most patients, the illness is biphasic and the patient begins experiencing a second wave of symptoms at the beginning of the third week. These symptoms include fever and signs of encephalitis (inflammation of the brain).

How is Kyasanur forest disease diagnosed?

The diagnosis is made by virus isolation from blood or by serologic testing using enzyme-linked immunosorbent serologic assay (ELISA).

Is Kyasanur forest disease fatal?

There are approximately 400-500 cases of KFD per year with a case fatality rate of 3% to 5%.

How is Kyasanur forest disease treated?

There is no specific treatment for KFD, but supportive therapy is important. Supportive therapy includes the maintenance of hydration and the usual precautions for patients with bleeding disorders.

Who is at risk for the disease?

People with recreational or occupational exposure to rural or outdoor settings (e.g., hunters, campers, forest workers, farmers) are potentially at risk for infection by contact with infected ticks.

How is Kyasanur forest disease prevented?

Currently, there is no vaccine available for KFD. Utilizing insect repellents and wearing protective clothing in areas where ticks are endemic is recommended.

Related materials:

Kyasanur forest disease virus. Material Safety Data Sheet (MSDS), Public Health Agency of Canada.

<http://www.phac-aspc.gc.ca/msds-ftss/msds91e.html>