

Diagnosis

Definitive diagnosis for RVF requires laboratory testing. The clinical signs and increased rainfall should be a pointer for reporting to health authorities.

Treatment

There is no specific treatment. Any animal suspected of having RVF should be reported to a veterinary authority in the locality.

Prevention and Control

- Vaccinate animals during high risk periods.
- Avoid contact with blood, body fluids, or tissues of infected animals.
- Avoid unsafe animal products. All animal products (including meat, milk, and blood) should be thoroughly cooked before eating or drinking.
- Protect yourself against mosquitoes and other bloodsucking insects.

Note: There are no vaccines currently available for vaccination in people.

How to Identify and Control Rift Valley Fever (RVF) Disease in Livestock

KCSAP Brochure No.



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The disease

Rift valley fever (RVF) is a disease of domestic animals that include cattle, camels, sheep, goats and wild ruminants like buffalo but also affect people (zoonotic).

Cause and transmission Rift valley fever disease is caused by a virus that is primarily transmitted by mosquitoes, from animal to animal and from animals to humans. Therefore, occurrences such as heavy rains that allow mosquitoes to multiply are important in the disease cycle and spread. Transmission also occurs when there is contact with materials from infected animals such as blood, body fluids and tissues of infected animals. Human to human transmission is not known to occur.

Where is the disease found? This disease is mainly found in sub-Saharan Africa and Madagascar. Outbreaks occur at 5–15 year intervals in areas that are typically dry but experience a period of heavy rainfall and/or flooding e.g., the 1998/99 outbreak which coincided with heavy El Nino rains.



Source: WHO

Symptoms of the disease

1. Livestock

- The disease occurs in epidemics which are characterised by increased number of abortions, high mortalities among young animals and disease syndrome in humans.
- Young animals are the most vulnerable with mortality rates of 70-100%. Signs of the disease tend to be non-specific, rendering it difficult to recognise individual cases during outbreaks but fever accompanied with loss of appetite is common.
- Abortion (loss of pregnancy) of 80-100%.
- Adult sheep and cattle may have nasal discharge, excess salivation, and loss of appetite, weakness and diarrhoea.



Abortions



Haemorrhage in small intestine

(Source: www.fao.org)

2. Humans

Rift valley fever virus (RVFs) has an incubation period of 2-6 days. Most commonly, people with RVF have either no symptoms or have a mild illness that includes fever, weakness, back pain, and dizziness at the onset of illness. Typically, patients recover within two days to one week after symptoms start. However, a small percentage (8-10%) of people infected with RVFV develop much more severe symptoms, including:

- Ocular disease (disease of the eye) accompanied by the mild symptoms described above with patients reporting blurred and decreased vision. There can be permanent vision loss.
- Encephalitis or inflammation of the brain, which can lead to headaches, coma, or seizures. This occurs in less than 1% of patients and presents 1-4 weeks after first symptoms appear. Death from encephalitis in RVF patients is rare, but neurological deficits may be severe and long-lasting.
- Hemorrhagic fever, which occurs in less than 1% of all RVF patients. Symptoms of hemorrhaging may begin with jaundice and other signs of liver impairment, followed by vomiting blood, bloody stool or bleeding from gums, skin, nose, and injection sites. These symptoms appear 2-4 days after onset of illness. Fatality for those who do develop symptoms of hemorrhagic fever is around 50% and death usually occurs 3-6 days after symptoms start.