



## RIFT Valley Fever

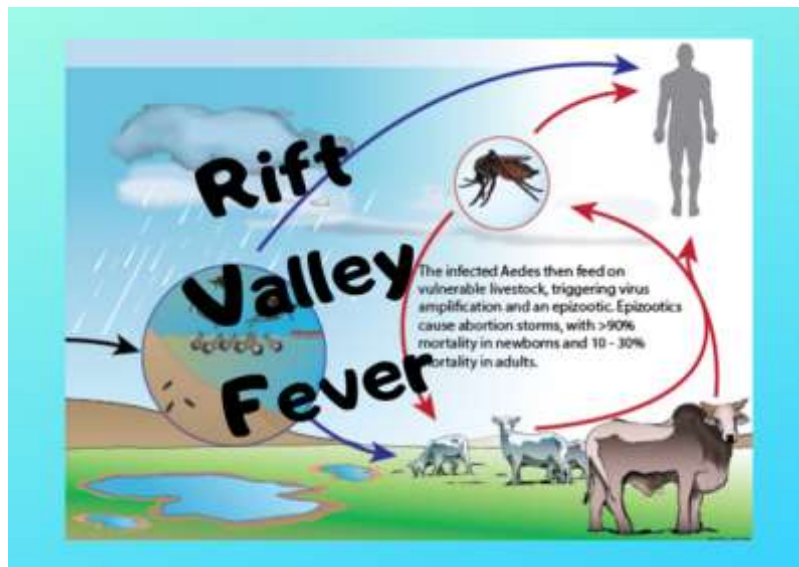
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“A zoonosis is an infectious disease that has jumped from a non-human animal to humans”. -WHO

### INTRODUCTION

**Rift Valley Fever (RVF)** was initially identified on the Arabian Peninsula in 2000, marking its first occurrence outside of Africa. This acute viral disease, transmitted by arthropods, poses a significant threat to domestic animals, including buffalo, camels, cattle, goats, and sheep. Outbreaks have been documented in Sub-Saharan Africa and Egypt. The severity of the disease in vulnerable animals can differ, typically presenting symptoms such as fever, loss of appetite, reluctance to move, abortions, and elevated morbidity and mortality rates among neonatal animals.

### DEFINITION

Rift valley fever is an acute febrile arthropod-born zoonotic disease. It is a viral disease affecting animals and humans characterized by high morbidity, mortality and economic loss.

### RISK FACTORS

- ❖ **HUMAN RISK FACTOR**
- Occupation (veterinarians, slaughter house workers)
- Residence (living in area with high mosquito density)
- Age (All ages, more common in older adults)
- Pregnancy (women may be more susceptible)
- Weekend immune system (HIV/AIDS, cancer)

**❖ ANIMAL RISK FACTORS**

- Livestock (sheep, goats, camels)
- Age (young animals or more susceptible)
- Pregnancy (pregnant animals)
- Poor veterinary care (lack of vaccination, poor hygiene)

**❖ ENVIRONMENTAL RISK FACTORS**

- Climate (heavy rain falls, flooding)
- Geography (proximity to mosquito breeding sites)

**CAUSES**

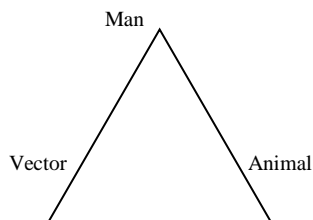
RVF is a disease by a fungus that grows in the soil and dirt in some areas. People and animals can get sick when they breathe in dust that contains the Valley fever fungus.

- Primary cause ( Phlebovirus)
- Mosquito bites ( Aedes, culex )
- Contact with infected animals (wildlife)
- Consumption of contaminated animal products (meat, milk)

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**EPIDEMIOLOGICAL TRIAD****AGENT**

Virus is phlebovirus genus

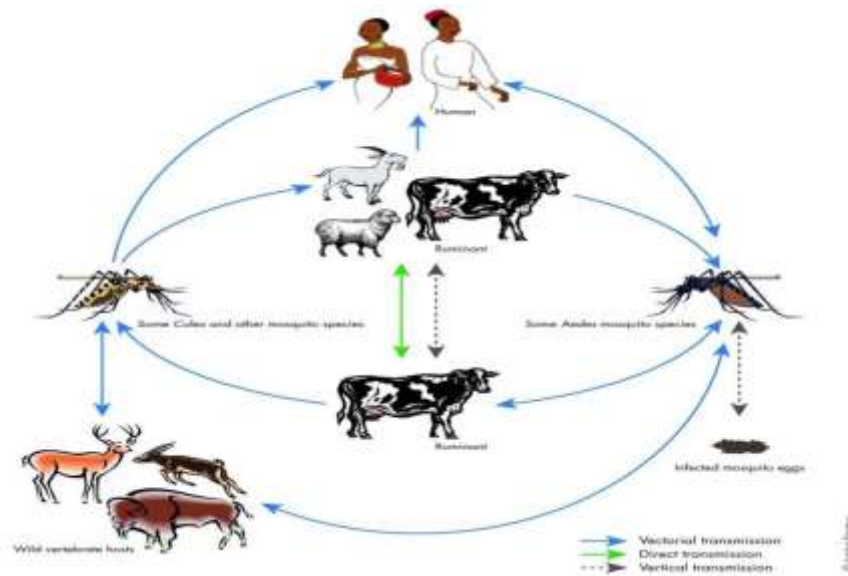
**HOST****ENVIRONMENT**

Most commonly in rainy reason

**INCUBATION PERIOD**

3 to 12 days

**MODE OF TRANSMISSION**



## SIGNS AND SYMPTOMS

### MILD SYMPTOMS

- Fever
- Headache
- Muscle pain
- Joint pain
- Fatigue
- Nausea and vomiting
- Diarrhea

### SEVERE SYMPTOMS

- Hemorrhagic fever
- Encephalitis
- Meningitis
- Retinitis
- Vision loss
- Severe abdominal pain
- Jaundice

### DIAGNOSIS

The virus is detected by blood investigations like ELISA, PCR, viral isolation, serology tests (IgM, IgG) antibodies to find the virus.

### TREATMENT

For the RVF virus, there is no specific treatment for the patients. For the more severe cases, the predominant treatment is general supportive therapy i.e rest, hydration, pain management, and symptomatic treatment.

### COMPLICATION

The complications are septic shock, multi organ failure, respiratory distress and pregnant complications (abortion, fetal death).

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**PREVENTION**

The main thing to prevent the diseases is

- Personal protective measures (wear protective clothing)
- Vector control measures (install mosquito control screens)
- Live stock protection (use insecticides)
- Public health measures (implement quarantine and movement restrictions)
- Occupational safety (wear PPE)
- Travel precautions (insect repellents)
- Veterinary measures (monitor animal health)
- Environmental measures (eliminate mosquito breeding sites)

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- <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2014.00169/full>