

Rift Valley Fever (RVF)

Prelims: Current events of national and international relations | Health

Why in news?

In early November 2025, the World Health Organization (WHO) confirmed an outbreak of Rift Valley Fever (RVF) affecting Mauritania and Senegal in Western Africa.

- **RVF** - It is a **mosquito-borne** viral zoonotic disease that primarily affects livestock but can also infect humans.
- **Caused by** - Phlebovirus (Phenuiviridae family).
- **1st Identified** - In early 1930's in **Kenya's Rift Valley** during investigations into unexplained livestock deaths.
- **Geographic Distribution - Endemic** to sub-Saharan Africa, especially East and West Africa.
- In 2000, it crossed the Red Sea into Saudi Arabia and Yemen, marking its 1st confirmed outbreak outside Africa.
- **Affected population -**
 - **Primarily affect** - Animals such as sheep, goats, cattle, and camels.
 - **Humans** - Infected through close contact with infected animals or by the bite of infected mosquitoes (No evidence of human-to-human transmission).
- **Incubation period** - Ranges from 2 to 6 days after exposure to the virus.
- **Transmission -**
 - **For animals**, transmitted mainly through mosquito bites.
 - **Humans** - Via contact with blood, fluids, or tissues of infected animals, or through mosquito bites.
 - **No human-to-human transmission** has been documented.
- **Symptoms -**
 - **In Animals** - High mortality in young livestock (sheep, goats, cattle, camels) and abortions in pregnant animals.
 - **In Humans** - Most cases are mild having fever, muscle pain, and headache, the severe cases (~1-2%) have hemorrhagic fever, encephalitis, or vision loss.
- **Diagnosis** - Requires laboratory testing — molecular (RT-PCR) or serological (ELISA) methods, under high biosafety precautions.
- **Treatment** - No specific antiviral treatment exists; management relies only on **supportive care**, including maintaining hydration, monitoring for organ failure, and preventing complications related to bleeding
- **Vaccination** - Available for animals and are effective between outbreaks, whereas, it is **no licensed vaccine** is available for humans.

- **Prevention & Control** - Adopt a ***One Health framework*** that links human, animal, and environmental health - animal surveillance, movement restrictions, vector control, animal vaccination & public health measures.
- **Global Health Concern** -
 - Listed by WHO as a ***priority pathogen*** with epidemic potential.
 - Recognized by the World Health Organization for Animal Health (WOAH) as a ***notifiable disease*** due to its cross-border spread risk.

*India has **not recorded any RVF cases** in humans or animals to date, classified as an exotic zoonosis of concern under India's One Health framework.*

Reference

[The Hindu | Rift Valley fever \(RVF\)](#)

