

## 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).
- 1<sup>st</sup> 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 1<sup>st</sup> 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)

