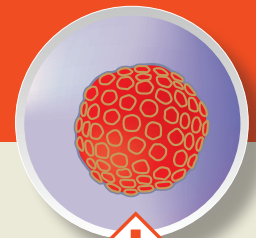
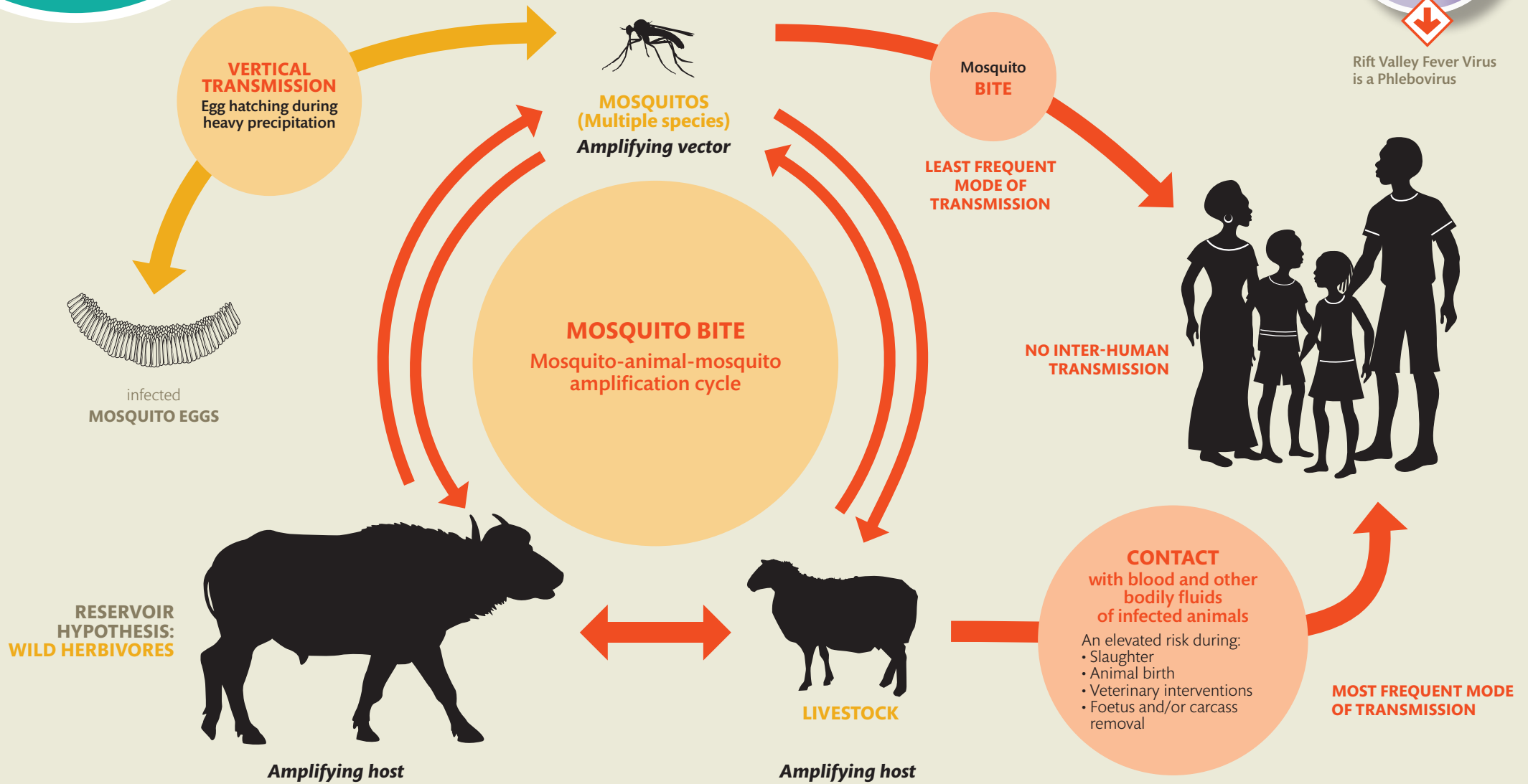


# CYCLE OF RIFT VALLEY FEVER VIRUS



Rift Valley Fever Virus is a Phlebovirus





**RIFT VALLEY FEVER (RVF) DISEASE** is a zoonosis caused by a phlebovirus that primarily affects animals but can also cause human infections. **SYMPTOMS IN BOTH ANIMALS AND HUMANS** can be severe. In areas at risk, livestock vaccination is an effective means of combating this illness.

## UNDERSTANDING THE VIRUS CYCLE OF RIFT VALLEY FEVER

### → CONCERNED SPECIES

High susceptibility	Susceptible	Moderate susceptibility	Low susceptibility (Inapparent infection)
Lambs, young goats, puppies, kittens, mice	Calves, sheep	Bovines, goats, buffalos, humans	Camels, horses, pigs, dogs, cats, rabbits

### → RESERVOIR

Hypothesis of **wild herbivores**.

### → VECTORS

**Multiple species of mosquito**, particularly the *Aedes*, *Culex* and *Anopheles* types can carry the virus.

### → MODES OF TRANSMISSION

- **Animal to animal transmission occurs through:**
  - Bites from infected mosquitos.
  - Direct animal-animal contact with bodily fluids, particularly contaminated blood (during abortions, licking, or simple contact).
- **Human transmission occurs through:**
  - Bites from infected mosquitos.
  - Direct contact with the blood or organs of infected animals.
  - Consumption of raw or undercooked meat and/or unpasteurized dairy products.
  - There is no evidence of human to human transmission.

### → ENVIRONMENTAL FACTORS

Close correlation between RVF and periods favouring mosquito population growth like **heavy rainfall** and **unseasonably warm temperatures** related to the El Niño phenomenon.

## CLINICAL SIGNS

**~100%**

abortion rate in pregnant sheep.

**~100%**

mortality rate of lambs and young goats less than 8 days old.

### → WARNING SIGNS in animals

- **High mortality** without other clear symptoms among **very young animals**.
- **Large-scale abortion**, which can reach up to 100%.
- **High fever** (>42°C) accompanied by other signs: anorexia, jaundice, foul and watery diarrhoea, bloody and mucus-filled nasal discharge in animals over two weeks old.

### ↔ PEOPLE AT RISK

People involved in raising animals, including agricultural workers, slaughterhouse staff, and veterinarians are often among the most at risk.

### → PRINCIPAL SYMPTOMS in humans

- **Incubation period:** 2 to 6 days.
- **Flu-like symptoms** with sudden on-set fever, headaches, muscle pain, and joint pain.
- **In certain severe forms of the disease** (<5% of cases), symptoms can also include bloody vomiting, a decrease in or loss of vision, and neurological complications.
- **Duration of symptoms:** 4 to 7 days.

## WHAT SHOULD YOU DO WHEN YOU SUSPECT A CASE IN LIVESTOCK?

- 1 **ENSURE GOOD COORDINATION** between Wildlife Services, Veterinary Services and Public Health Services.
- 2 **ADHERE TO GOOD PRACTICES** for personal protection (gloves, protective clothing), especially when visiting slaughterhouses and delivering veterinary services.
- 3 **COLLECT SAMPLES**, if possible, and send them to the national veterinary laboratory or a reference laboratory.
- 4 **BURY THE CARCASS** sufficiently deep between two layers of quicklime or burn it as described in *Article 4.12.6 of WOAH Terrestrial Code*.
- 5 **NOTIFY WOAH BY E-MAIL OR FAX OR THROUGH WAHIS** of every confirmed case of a WOAH-listed disease (like RVF) as per *Article 1.1.3 of WOAH Terrestrial Code*.

## WHAT MESSAGES SHOULD YOUR SHARE WITH AT-RISK COMMUNITIES?

- 1 **WEAR** light coloured, long clothing.
- 2 **APPLY INSECT REPELLENT**, if available, on all exposed skin, as well as on livestock.
- 3 **USE MOSQUITO NETS** treated with insecticide.
- 4 **PROTECT YOUR HANDS AND ANY EXPOSED SKIN** when handling sick or dead livestock.
- 5 **QUICKLY ALERT VETERINARY SERVICES** about unexplained animal abortions and/or deaths.
- 6 **AVOID** stagnant puddles of water in and around homes.