



Kyasanur Forest Disease

Why in News

A **new point-of-care test** has been found to be highly sensitive in the rapid diagnosis of **Kyasanur Forest Disease (KFD)**.

- This disease is also known as **monkey fever**.

Key Points

▪ Point-of-care Test:

◦ About:

- It is developed by **Indian Council of Medical Research (ICMR)-National Institute of Virology**.
- It includes a **battery-operated Polymerase Chain Reaction (PCR) analyser**, which is a portable, lightweight and universal cartridge-based sample pre-treatment kit and nucleic acid extraction device that aid in sample processing at the point of care.

◦ Benefits:

- It would be beneficial for the **diagnosis of KFD** as the outbreaks mainly happen in remote areas, where there is lack of well-equipped sample handling and laboratory testing facilities.
- It would be useful in **quick patient management and controlling further spread of the virus**.

▪ Kyasanur Forest Disease:

◦ About:

- It is caused by **Kyasanur Forest disease Virus (KFDV)**, which primarily affects **humans and monkeys**.
- It was **first identified in 1957** in a sick monkey from the **Kyasanur Forest in Karnataka**. Since then, between 400-500 human cases per year have been reported.
- Eventually, KFD emerged as a grave public health problem spreading through the **entire Western Ghats**.

◦ Transmission:

- In nature, the virus is maintained mainly in **hard ticks (Haemaphysalis spinigera), monkeys, rodents and birds**.
- To **humans**, it may occur after a **tick bite or contact with an infected animal (a sick or recently dead monkey)**.

◦ Symptoms:

- Characterised by **chills, frontal headache, body ache, and high fever** for five

to 12 days with a case fatality rate of 3 to 5%.

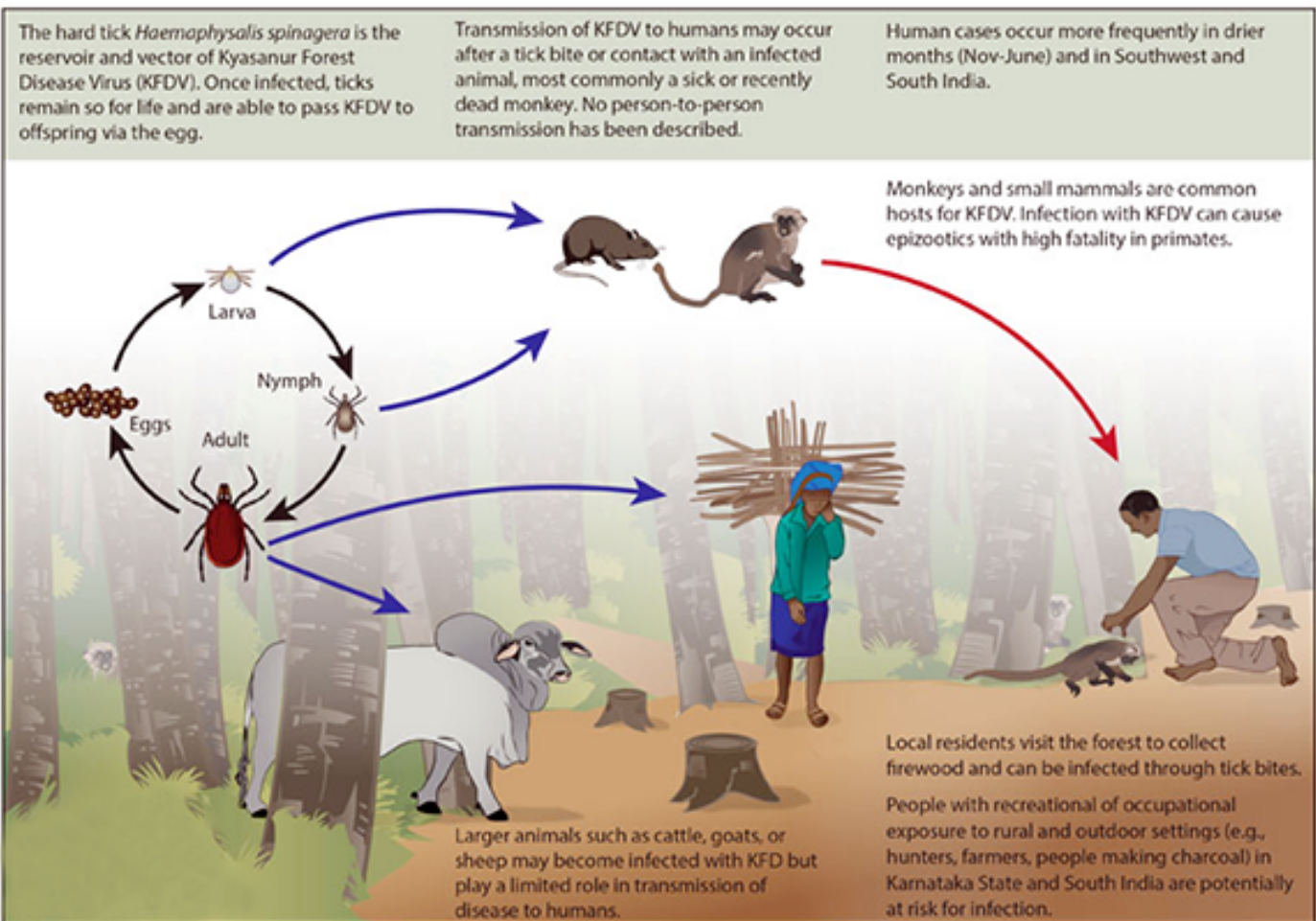
◦ **Diagnosis:**

- Diagnosis can be made in the early stage of illness by molecular detection by PCR or virus isolation from blood.
- Later, serologic testing using **Enzyme-linked Immunosorbent Serologic Assay (ELISA)** can be performed.

◦ **Treatment and Prevention:**

- There is **no specific treatment** for monkey fever.
- A **vaccine (Formalin inactivated KFDV vaccine)** does exist for KFD and is used in endemic areas of India.
 - However, it is found that vaccines are not effective once the person is infected with fever.

Kyasanur Forest Disease (KFD) Virus Ecology



Source: IE