



Kyasanur Forest Disease

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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:**

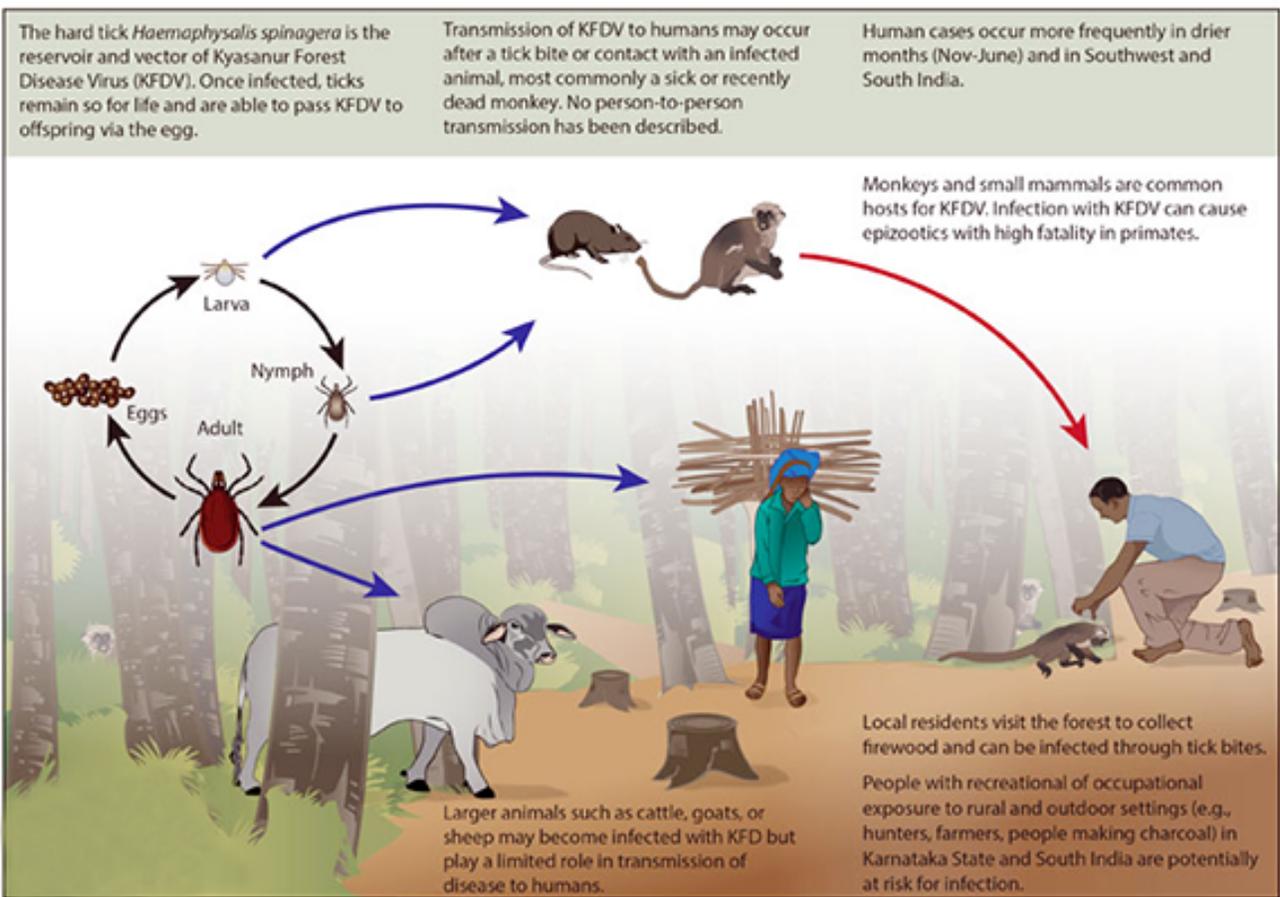
- Diagnosis can be made in the early stage of illness by molecular detection by PCR or virus isolation from blood.
- Later, serologic testing using **Enzyme-linked Immunosorbent Serologic Assay (ELISA)** can be performed.

- **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