

Kyasanur Forest Disease (KFD) Vaccine

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Why in News?

The Indian Council of Medical Research (ICMR) is developing an improved indigenous vaccine against Kyasanur Forest Disease (KFD).

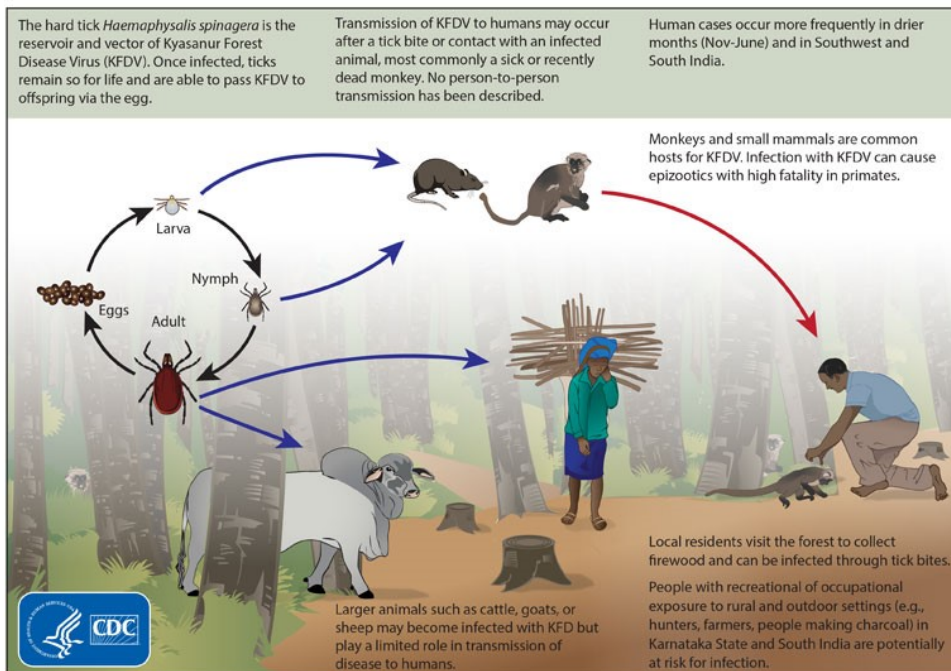
- **KFD Vaccine** - It is a fully indigenous, two-dose, adjuvanted inactivated vaccine.
- **Developed by** - Indian Immunologicals Limited (IIL) in collaboration with ICMR-National Institute of Virology (NIV).
- **Under the** - Ministry of Health and Family Welfare.
- **Schedule** - Two doses given 28 days apart.
- As the vaccine-induced immunity is short-lived, the first booster dose is recommended in about 6-9 months.
- **Current Status** - Animal and toxicity studies completed.
- Phase I human clinical trial initiated after Central Drugs Standard Control Organisation (CDSCO) approval.

Kyasanur Forest Disease (KFD)

- It is a tick-borne viral haemorrhagic fever endemic to the Western Ghats region.
- The states include Karnataka, Tamil Nadu, Kerala, Goa, and Maharashtra.
- **Causes** - The KFD flavivirus virus (single-stranded RNA virus).
- **Transmitted by** -
 - Tick bites of *Haemaphysalis spinigera* or exposure to an infected animal.
 - Virus is maintained in ticks, rodents, birds, shrews, and monkeys.
 - KFD does not spread from person to person.
- **Vulnerable populations** - Hunters, herders, forest workers, and farmers in Karnataka, Tamil Nadu, Kerala, Goa, and Maharashtra.
- Monkeys and small mammals are also susceptible.
 - **Duration** - People are more likely to get KFD during the dry season from November to June.
- **Symptoms** -
 - Fever, chills, headache.
 - Severe muscle pain.

- Vomiting and gastrointestinal symptoms.
- Bleeding manifestations.
- In some cases, neurological complications.
- **Progression Stages** - Symptoms appear 3-8 days after infection.
- Initial fever and headache.
- Followed by muscle pain, vomiting, and bleeding after 3-4 days.
- **Treatment** - There is no cure for KFD.
- Prevention through vaccination and tick control is key.

Kyasanur Forest Disease (KFD) Virus Ecology



References

1. [PIB | Kyasanur Forest Disease Vaccine](#)
2. [About KFD | CDC](#)