Kyasanur Forest Disease (KFD) Vaccine

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Why in News?

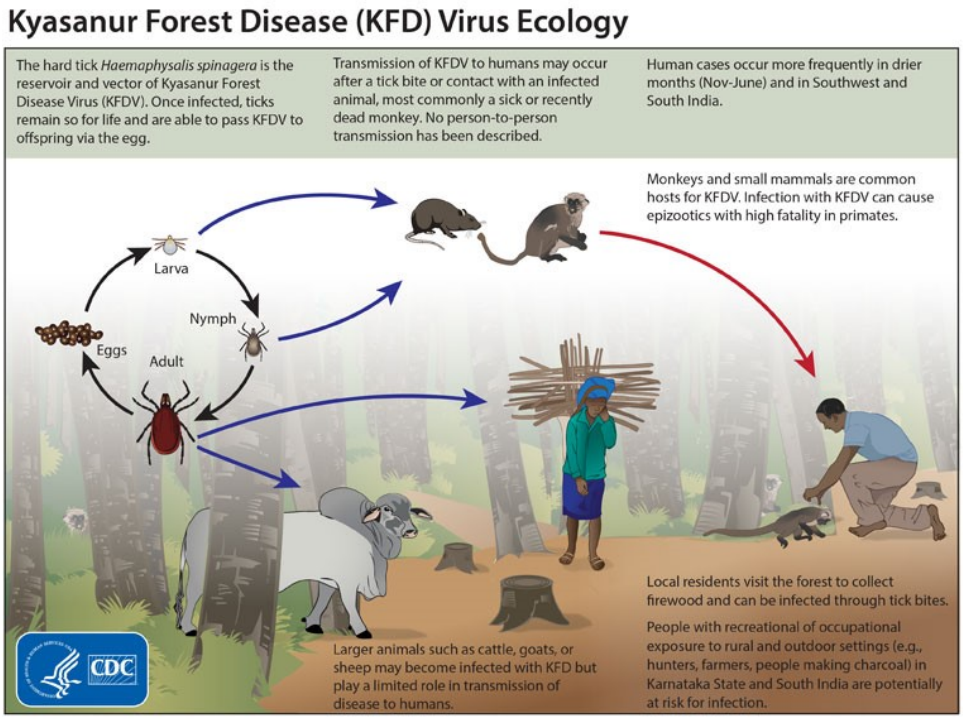
The Indian Council of Medical Research (ICMR) is developing an improved indigenous vaccine against Kyasanur Forest Disease (KFD).

- **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.



References

1. PIB | Kyasanur Forest Disease Vaccine
2. About KFD | CDC

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