

## Japanese Encephalitis (JE)

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The Central government has sent a team to Assam to review the situation after Japanese Encephalitis (JE) cases were reported from the state.

- Japanese encephalitis is a disease caused by a flavi virus that affects the membranes around the brain. Japanese encephalitis virus (JEV) is also a major cause of <u>Acute</u> <u>Encephalitis Syndrome (AES)</u> in India.
- **Transmission:** The disease is transmitted to humans through bites from infected **mosquitoes of the Culex species**. These mosquitoes breed mainly in rice fields and large water bodies rich in aquatic vegetations. Migratory birds along with pigs in the community also play an important role in the transmission of JE from one area to other areas.
- **Symptoms:** Most people infected with JE do not have symptoms or have only mild symptoms. However, a small percentage of infected people develop inflammation of the brain (encephalitis), with symptoms including sudden onset of headache, high fever, disorientation, coma, tremors and convulsions.
- **Treatment:** There is **no antiviral treatment** for patients with JE. Treatment, available, is supportive to relieve symptoms and stabilize the patient.
- **Prevention:** Safe and effective **JE vaccines** are available to prevent the disease.
  - **In India,** mass vaccination with JE vaccine was started in a phased manner subsequent to the major outbreak in 2005.
  - JE vaccination is also **included under the Universal Immunization Program** of the Government of India.

## **Universal Immunization Program**

• **Immunization** is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines are substances that stimulate the body's own immune system to protect the person against subsequent infection or disease.

- Immunization Programme in India was **introduced in the year 1978** as 'Expanded Programme of Immunization (EPI)' by the Ministry of Health and Family Welfare, Government of India.
- In the year **1985**, the programme was modified as **'Universal Immunization Programme (UIP)'**.
- Ministry of Health and Family Welfare, Government of India provides several vaccines to infants, children and pregnant women through the Universal Immunisation Programme.
- Through this programme, the government provides several vaccines to infants, children and pregnant women.
- Vaccines included in the programme are for diseases including Tuberculosis,
  Diphtheria, Pertussis, Tetanus, Polio, Hepatitis B, Pneumonia and Meningitis due to Haemophilus Influenzae type b (Hib), Measles, Rubella, Japanese Encephalitis (JE) and Rotavirus diarrhoea.