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News: Japanese Encephalitis

- Recently, the National Institute of Animal Biotechnology (NIAB), Hyderabad has developed an immunosensor to detect Non-Structural 1 (NS1) secretory protein which is a suitable biomarker for Japanese Encephalitis Virus (JEV) found circulating in the blood.

Japanese Encephalitis Virus (JEV)

- Japanese Encephalitis is a **disease caused by a flavivirus that affects the membranes around the brain.**
- Japanese encephalitis virus (JEV) is also a **major cause of Acute Encephalitis Syndrome (AES)** 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 vegetation.**

- 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 stabilise 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 Immunisation Program of the Government of India.**

News: Fundamental duties must be enforced: plea

- The Supreme Court on Monday asked the Union and the State governments to respond to a petition to **enforce the fundamental duties of citizens, including patriotism and unity of the nation, through “comprehensive, well defined laws”.**

Fundamental Duties

- Fundamental duties are the **duties and responsibilities of a citizen towards the constitution and Indian Republic.**
- The concept of Fundamental duties was **inspired from the Russian Constitution.**
- The **original constitution did not have the provision of Fundamental duties.** It was **added by the 42nd Constitutional Amendment Act, 1976** (also called Mini – Constitution) as **Part IV –A on the recommendations of Swaran Singh Committee.**
- Originally 10 in number, one more duty were added through the 86th Constitutional Amendment Act, 2002. **All the eleven duties are listed in Article 51-A of the Constitution** (the sole Article in Part-IV-A).

- However, like the Directive Principles, the **duties are also non-justiciable in nature**. However, the **parliament may legislate towards the implementation of these duties**.

List of Fundamental Duties

1. To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem.
2. To cherish and follow the noble ideals that inspired the national struggle for freedom.
3. To uphold and protect the sovereignty, unity and integrity of India.
4. To defend the country and render national service when called upon to do so.
5. To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities and to renounce practices derogatory to the dignity of women.
6. To value and preserve the rich heritage of the country's composite culture.
7. To protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.
8. To develop scientific temper, humanism and the spirit of inquiry and reform.
9. To safeguard public property and to abjure violence.

10.To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement; and

11.To provide opportunities for education to his child or ward between the age of six and fourteen years (added by the 86th Constitutional Amendment Act, 2002).