Nipah Virus Outbreak

Prelims: *Current events of national and international importance | Health*

Why in News?

Recently, The Health department is exercising maximum vigil and taking all possible preventive measures to ensure that the current outbreak of Nipah in Kozhikode is contained.

Nipah Virus

- **Nature –** Zoonotic virus.
- **Natural host –** Fruit bats (Family - Pteropodidae).
- **Genus –** Henipavirus (closely related to the Hendra virus).
- **Symptoms –** Fever, headache, confusion, respiratory distress, encephalitis and asymptomatic in some individuals.
- **Transmission – *Bat-to-human*** (contaminated fruits/date palm sap), animal-to-human (pigs, horses), and human-to-human (close contact, healthcare settings).
- **Incubation –** 3–14 days (rarely up to 45).
- **Severe Outcomes –** Brain swelling, pneumonia, multi-organ involvement; 20% survivors develop long-term neurological sequelae.
- **Fatality –** Estimated **40–75%** (higher than many other viral diseases).
- **Diagnosis**
  - **RT-PCR (Reverse Transcription Polymerase Chain Reaction) –** Detects viral RNA in blood, respiratory samples, cerebrospinal fluid.
  - **ELISA (Enzyme-Linked Immunosorbent Assay) –** Detects antibodies (IgM/IgG).
- **Containment –** Samples handled under maximum biosafety (BSL-4) conditions.
- **Prevention**
  - Avoid raw date palm sap/fruits contaminated by bats.
  - Protective gear when handling pigs/horses.
  - Strict infection control in hospitals (isolation, PPE, hand hygiene).
  - WHO advises airborne precautions during aerosol-generating

procedures.

- **Treatment**
  - ***No licensed drug/vaccine.***
  - Supportive Care – Oxygen therapy, ventilation, renal dialysis, rehydration.
- **Global Spread –** First identified in **Malaysia (1998),** later in Singapore, Bangladesh (annual outbreaks), India (periodic), and Philippines.

References

1. The Hindu | Nipah
2. WHO | Nipah

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