

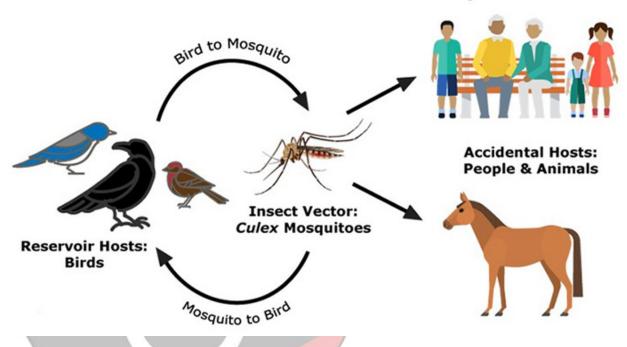
West Nile Virus Infections

Why in News

Recently, **Russia warned of a possible increase in West Nile Virus (WNV) Infections** this autumn as mild temperatures and heavy precipitation create favourable conditions for the mosquitos that carry it.

<u>//_</u>

West Nile Virus Transmission Cycle



Key Points

About:

- It is **a member of the flavivirus genus** and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae.
- WNV is **commonly found in** Africa, Europe, the Middle East, North America and West Asia.
- Older people, children and those with weakened immune systems are most at risk.

Origin:

- WNV was first isolated in a woman in the West Nile district of Uganda in 1937.
- It was **identified in birds** in the Nile delta region **in 1953.** Before 1997, WNV was not considered pathogenic for birds.
- Human infections attributable to WNV have been reported in many countries for over 50 years.

Transmission:

- WNV is an infectious disease spread by infected mosquitoes. It spreads from birds to humans with the bite of an infected Culex mosquito. It can lead to a fatal neurological disease in humans.
- The virus causes West Nile fever in around 20% of cases, according to the World Health Organization (WHO). It is related to the Zika, Dengue and Yellow Fever Viruses.

Symptoms:

- Those infected usually have no symptoms or mild symptoms.
- The symptoms include a fever, headache, body aches, skin rash, and swollen lymph glands. They can last a few days to several weeks, and usually go away on their own.
- If West Nile virus enters the brain, it can be life-threatening. It may cause inflammation
 of the brain, called encephalitis, or inflammation of the tissue that surrounds the
 brain and spinal cord, called meningitis.

Treatment:

- There are **no specific vaccines or treatments** for human WNV disease.
- The best way to avoid WNV is to prevent mosquito bites.
- Treatment is supportive for patients with neuro-invasive West Nile virus, often involving hospitalization, intravenous fluids, respiratory support, and prevention of secondary infections.



PDF Refernece URL: https://www.drishtiias.com/printpdf/west-nile-virus-infections