



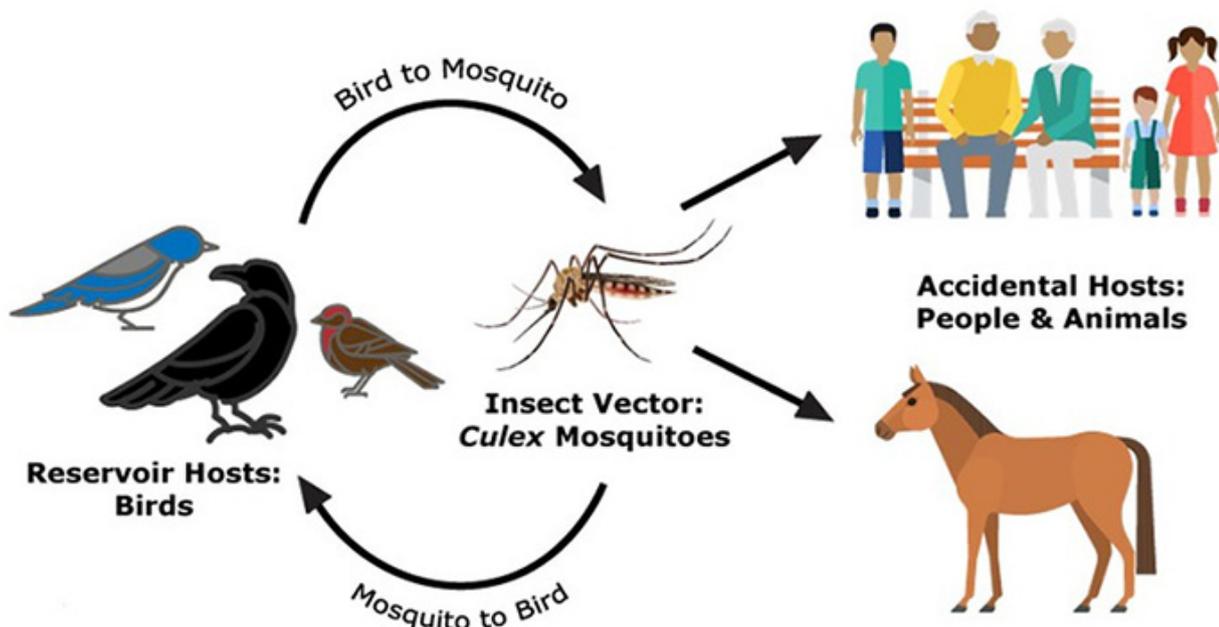
# West Nile Virus Infections

## 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.

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## 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.

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