

West Nile Virus

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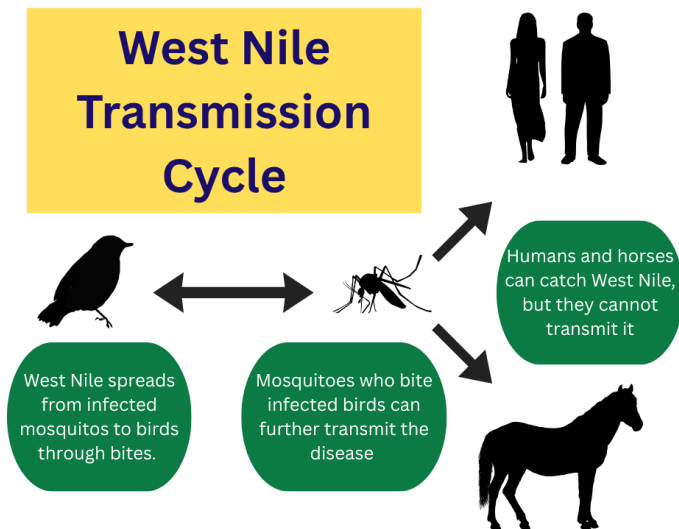
General Information

West Nile Virus (WNV) is a mosquito-borne virus that primarily spreads during the summer months. While most infections show no symptoms, the virus can lead to severe neurological health issues, including encephalitis, in both humans and horses.

Transmission Cycle

WNV does not spread directly from person to person, but by a specific biological cycle:

- **Reservoirs:** Birds act as the primary "reservoir" for the virus.
- **Vectors:** Mosquitoes become infected when they feed on infected birds, then transmit the virus to other animals through bites.
- **Dead-End Hosts:** Humans and horses can contract the virus, but they do not develop high enough viral levels to pass it to other humans, animals, or back to mosquitoes.
- **Rare Cases:** Transmission can occur through blood transfusions or organ transplants, though this is rare.



Symptoms and Severity

Impact Level	Frequency	Clinical Presentation
Asymptomatic	80%	No visible symptoms; most people are unaware that they are infected
Mild	19%	Presents as a mild cold or flu-like symptoms; rarely diagnosed
Severe	1%	Requires hospitalization and can lead to permanent neurological damage or even death

In Humans

- Headaches and fever.
- Inflammation of the brain and spinal cord.
- Vision problems or coma in severe cases.

Note: Most infected persons develop long-term immunity.

In Horses

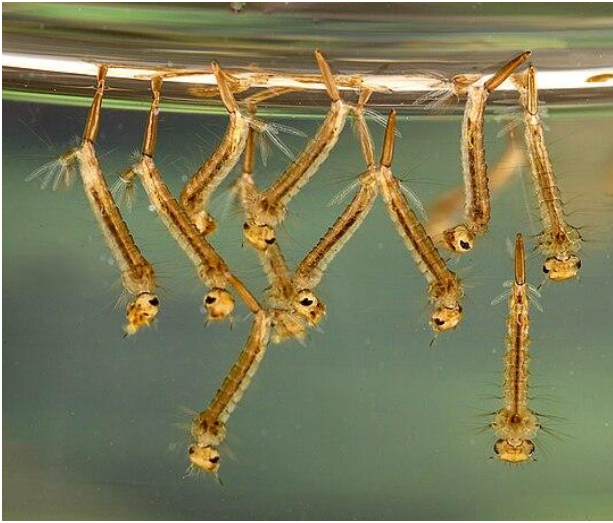
- **Encephalomyelitis:** Inflammation of the brain with loss of coordination (ataxia), teeth grinding, muscle spasms, or blindness.
- **Mortality:** Approximately 30% of horses that develop encephalomyelitis do not survive.

Prevention and Protection

Rainy and warm weather increases mosquito populations and infection risks. There is no vaccine or specific treatment for humans; prevention is the only defense.

Action Steps:

- **Eliminate Mosquito Habitat:** Empty troughs, puddles, and old tires that collect rain water.
- **Biological Control:** Introduce mosquito-eating fish into small, contained ponds.
- **Vaccination:** Ensure horses are vaccinated annually. Human vaccines are not available.

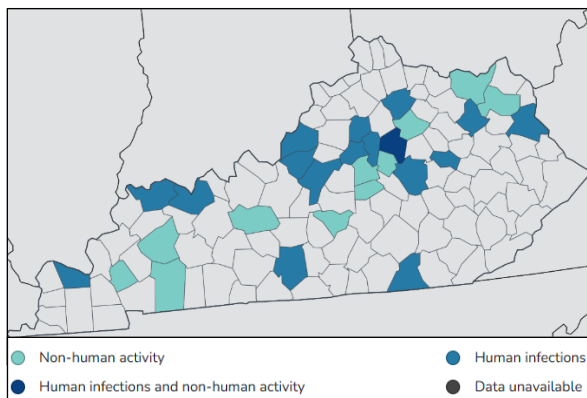


Scan QR code or visit [CDC.gov](https://www.cdc.gov) during the summer months to track current case numbers by location.

Tracking Outbreaks

Stay informed during the summer months to understand the risk level in your county:

- **ArboNET:** The CDC’s interactive map displays reported cases across the country.
- **Local Monitoring:** Check the local news, published reports, or the health department for information on virus activity, e.g., testing of WNV in birds and mosquitoes. Be alert when excessive dead birds are seen, and cases of horse WNV disease are reported.



Sample outbreak map of Kentucky via [CDC.gov](https://www.cdc.gov)

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