



**West Nile virus** is a member of the *flavivirus* genus and belongs to the Japanese encephalitis antigenic complex of the family *Flaviviridae*. It is transmitted by infected mosquitoes between and among humans and animals, including birds, which are the virus's reservoir host. First isolated in the West Nile district of Uganda in 1937, WNV is today found commonly in Africa, Europe, the Middle East, North America, and West Asia. In 1999 a WNV circulating in Israel and Tunisia was imported into New York producing a large outbreak that spread across the United States and eventually across the Americas, from Canada to Venezuela. WNV outbreak sites are found along major bird migratory routes.

### Key facts

- Eight in 10 people who become infected with WNV show no symptoms.
- About 20% of infected people develop moderate symptoms, including fever, headache, fatigue, and body aches, nausea, rash, and swollen glands.
- In about 1 in 150 cases, WNV causes severe disease that can lead to encephalitis, meningitis, paralysis, and even death.
- In 2012, 286 people in the United States died of WNV, according to the U.S. Centers for Disease Control and Prevention (CDC). Preliminary data for 2013 indicate over 1,200 cases of neuroinvasive disease and 114 deaths due to WNV.
- People over the age of 50, those with underlying medical conditions, and some immunocompromised persons (such as transplant patients) are at highest risk for severe illness from WNV.
- A very small proportion of human infections have occurred through organ transplant, blood transfusions, and breast milk.
- In addition to mosquito bites, WNV may be transmitted through contact with infected animals, their blood, or other tissues.
- Mosquitoes of the genus *Culex* are generally considered the principal vectors of WNV, in particular *Cx. pipiens*.
- In Europe, Africa, Middle East, and Asia, mortality in birds associated with WNV is rare. In contrast, in the Americas the virus has proven highly pathogenic for birds.
- Vaccines are available for use in horses but not yet for people.

### PAHO/WHO response

- PAHO/WHO is providing technical cooperation for comprehensive, integrated vector surveillance and control in its member countries throughout the Americas, in cooperation with international partners.
- PAHO/WHO is helping to raise awareness of vector-borne diseases, including WNV, and the need for people and communities to protect themselves against mosquito bites through the use of window screens, protective clothing, and insect repellent and by destroying mosquito breeding sites in residential areas.

For more information, visit: [www.who.int/mediacentre/factsheets/fs354/en/](http://www.who.int/mediacentre/factsheets/fs354/en/)



[www.paho.org/WorldHealthDay2014](http://www.paho.org/WorldHealthDay2014)

