

What Is West Nile Virus?

West Nile Virus is a flavivirus (a genus of Japanese Encephalitis) commonly found in Africa, West Asia and the Middle East. It is closely related to St. Louis Encephalitis Virus found in the U.S.

Mosquitoes become infected when they feed on infected birds, such as ravens and crows. After an incubation period of 5 to 15 days the mosquito can then transmit the virus to humans and animals by biting them. Following this transmission, the virus multiplies in the blood. It can affect the brain and cause inflammation of the brain tissue. This inflammation interferes with the brain and spinal cord functions.



Questions and Answers About West Nile Virus

- Q. How long has West Nile Virus been in the U.S.?**
- A.** It is not known exactly how long it has been in the U.S., but CDC scientists believe the virus has probably been in the eastern U.S. since the early summer of 1999, possibly longer.
- Q. How many cases of West Nile Encephalitis in humans have occurred in the U.S.?**
- A.** In 1999, 62 cases of severe disease, including 7 deaths, occurred in the New York area. In 2000, 21 cases were reported, including 2 deaths in the New York City area. In 2001, there were 66 human cases of severe disease and 9 deaths. In 2002, there were >4000 human cases and 263 deaths. No reliable estimates are available for the number of cases of West Nile Encephalitis that occur worldwide.
- Q. How do people get West Nile Encephalitis?**
- A.** People become infected by the bite of a mosquito infected with West Nile Virus.
- Q. What is the basic transmission cycle?**
- A.** Mosquitoes become infected when they feed on infected birds, which may circulate the virus in their blood for a few days. Infected mosquitoes can then transmit West Nile Virus to humans and animals while biting to take blood. The virus is located in the mosquito's salivary glands. During blood feeding, the virus may be injected into the animal or human where it may multiply, possibly causing illness.
- Q. If I live in an area where birds or mosquitoes with West Nile Virus have been reported and a mosquito bites me, am I likely to get sick?**
- A.** No. Even in areas where mosquitoes do carry the virus, very few mosquitoes — much less than 1% — are infected. If the mosquito is infected, less than 1% of people who get bitten and become infected will get severely ill. The chances you will become severely ill from any one mosquito bite are extremely small.
- Q. Can you get West Nile Encephalitis from another person?**
- A.** No. West Nile Encephalitis is NOT transmitted from person-to-person. For example, you cannot get West Nile Virus from touching or kissing a person who has the disease, or from a health care worker who has treated someone with the disease. You can acquire WNV from blood transfusion, organ donations or breast milk.
- Q. Can you get West Nile Virus directly from birds?**
- A.** There is no evidence that a person can get the virus from handling live or dead infected birds. However, persons should avoid bare-handed contact when handling any dead animals and use gloves or double plastic bags to place the carcass in a garbage can.
- Q. What can be done to prevent outbreaks of West Nile Virus?**
- A.** Prevention and control of West Nile Virus and other arboviral diseases is most effectively accomplished through integrated vector management programs. These programs should include surveillance for West Nile Virus in mosquitoes, birds, horses, other animals and humans, and implementation of appropriate measures to reduce mosquito populations when necessary. When virus activity is detected in an area, residents should be alerted and advised to increase measures to reduce contact with mosquitoes.

Mosquitoes are small flying insects that feed on human and animal blood or plant juices. Only female mosquitoes bite to get a blood meal for their growing eggs. Mosquitoes are generally considered a nuisance pest, but occasionally can transmit disease.

There are about 70 different species of mosquitoes in the Pacific Northwest. Several mosquito species have been associated with West Nile Virus, an infection that can cause serious illness.

Some mosquitoes lay their eggs in standing water around the home. They can develop in any standing water that lasts more than 4 days. Weeds, tall grass and shrubbery provide an outdoor home for adult mosquitoes, which may also enter houses through unscreened windows or doors, or broken screens. Many kinds of mosquitoes will breed in discarded tires.

Some mosquitoes are most active between dusk and dawn when the air is calm, and that is when the females are most likely to bite. However, others will feed at any time of the day.



FACTS ABOUT WNV

- West Nile Virus is not transmitted from person to person.
- The first appearance of West Nile Virus in North America was in 1999.
- There is no evidence that a person can get the virus from handling live or dead infected birds.
- There is no human vaccine against West Nile Virus.

PROTECTING YOURSELF

- Inspect all window and door screens to make sure they are in good condition and free of holes.
- Empty all sources of standing water so that mosquitoes do not have a place to breed.
- When you are outdoors in areas that have mosquitoes, wear long sleeve shirts and long pants and socks.
- Use a mosquito repellent containing DEET. Repellents greatly reduce your exposure to mosquitoes when applied to exposed clothes and skin. **Read and follow label directions.**

For additional information visit our website at www.dhs.state.or.us/publichealth/acd/wnile/



If you need this information in an alternate format, please call
503-731-4025

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