



Maricopa County

Department of Public Health

Patient Information: West Nile Virus

Compiled from CDC Fact Sheet and Frequently Asked Questions, April 2004

What is West Nile Virus?

West Nile Virus (WNV) is a flavivirus commonly found in Africa, West Asia, and the Middle East. It is closely related to St. Louis encephalitis virus found in the United States. The WNV can infect humans, birds, mosquitoes, horses and some other mammals.

West Nile Fever is a mild disease in most people, characterized by flu-like symptoms. West Nile Fever typically lasts only a few days and does not appear to cause any long-term health effects.

More severe disease due to a person being infected with West Nile virus can be West Nile encephalitis, West Nile meningitis or West Nile meningoencephalitis. Encephalitis refers to an inflammation of the brain, meningitis is an inflammation of the membrane around the brain and the spinal cord, and meningoencephalitis refers to inflammation of the brain and the membrane surrounding it.

History of West Nile Virus

WNV has been commonly found in humans and birds and other vertebrates in Africa, Eastern Europe, West Asia, and the Middle East, but until 1999 had not previously been documented in the Western Hemisphere. It is not known from where the U.S. virus originated, but it is most closely related genetically to strains found in the Middle East.

What are the Symptoms of West Nile Virus?

No Symptoms in Most People.

Approximately 80 percent of people who are infected with WNV will not show any symptoms at all.

Mild Symptoms in Some People.

Up to 20 percent of the people who become infected will display mild symptoms including fever, headache, and body aches, nausea, vomiting, and sometimes swollen lymph glands or a skin rash on the chest, stomach and back. Symptoms typically last a few days.

Serious Symptoms in a Few People.

About one in 150 people infected with WNV will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness or paralysis, vision loss and numbness. These symptoms may last several weeks, and neurological effects may be permanent.

People typically develop symptoms between 3 and 14 days after they are bitten by an infected mosquito.



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How can you become infected with West Nile Virus?

Generally, WNV is spread by the bite of an infected mosquito. Mosquitoes are WNV carriers that become infected when they feed on infected birds or other animals. Infected mosquitoes can then spread WNV to humans when they bite.

In a very small number of cases, WNV also has spread through blood transfusions, organ transplants, breastfeeding and even during pregnancy from mother to baby.

WNV is NOT spread through casual contact such as touching or kissing a person with the virus.

How can you prevent West Nile Virus?

The easiest and best way to avoid WNV is to prevent mosquito bites.

- When you are outdoors, use insect repellents containing DEET (N, N-diethyl-metoluamide). Follow the directions on the package.
- Many mosquitoes are most active at dusk and dawn. Consider staying indoors during these times or use insect repellent and wear long sleeves and pants.
- Make sure you have good screens on your windows and doors to keep mosquitoes out.
- Get rid of mosquito breeding sites by emptying standing water from areas around your home.

How can you be treated for West Nile Virus?

There is no specific treatment for WNV infection. Mild WNV illness improves on its own, and people do not necessarily need to seek medical attention for this infection. If you develop symptoms of severe WNV illness, such as unusually severe headaches or confusion, seek medical attention immediately. Severe WNV illness usually requires hospitalization. Pregnant women and nursing mothers are encouraged to talk to their doctor if they develop symptoms that could be WNV.