

WEST NILE VIRUS ENCEPHALITIS FACT SHEET

What is West Nile virus encephalitis?

West Nile virus (WNV) encephalitis is a mosquito-borne viral disease, which can cause an inflammation of the brain. WNV is commonly found in Africa, West Asia, the Middle East and Europe and is closely related to St. Louis encephalitis virus, which was found in New Jersey in 1964 and 1975. For the first time in North America, WNV was confirmed in the New York metropolitan area during the summer and fall of 1999. WNV successfully overwintered in the northeastern United States and was present in humans, horses, birds and mosquitoes in subsequent years. Monitoring for WNV activity continues in Warren County.

How do people get West Nile virus encephalitis?

WNV is transmitted to people by the bite of a mosquito that has become infectious after feeding on a bird infected with the virus. Birds serve as the reservoir hosts of WNV. The principal vector in the transmission from one bird to another is the northern house mosquito, *Culex pipiens* and other *Culex* mosquitoes. WNV has also been found in several other mosquito species which could serve as bridge vectors by transmitting the virus to humans or horses.

What is the basic transmission cycle for WNV?

Mosquitoes become infected by feeding on birds with the virus circulating in their blood. After an incubation period of 10 days to two weeks, the infected mosquitoes can then transmit the virus by biting other animals or humans when taking a second blood meal. WNV is NOT transmitted from person-to-person.

What are the symptoms of West Nile virus infection?

Most infections produce no symptoms in people, or symptoms are mild or moderate. Mild symptoms may include: fever, headache, nausea, vomiting and body aches, often with skin rash and swollen lymph glands. More severe infections may be marked by headache, high fever, neck stiffness, muscle weakness, stupor, disorientation, convulsions, tremors, vision loss, numbness, paralysis, and coma. Persons 50 years and older are at a higher risk for developing a severe infection.

Since the majority of infected persons are asymptomatic, the fatality rate is relatively low. However, case fatality rates for hospitalized patients are the highest in the elderly and those with weakened immune systems.

What is the incubation period in humans?

Symptoms usually appear 3 to 14 days from the time a mosquito infected with WNV bites a person.

How is West Nile encephalitis treated?

There is no specific therapy. In more severe cases, intensive supportive therapy is indicated, i.e., hospitalization, intravenous (IV) fluids, airway management, respiratory support (ventilator) and if needed, prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care.

Why are crows, but not most other dead birds, tested for WNV?

Since 1999 when West Nile virus was first found in the United States, there has been a large die-off of crows in New Jersey and other states from this virus. Although other birds can also become infected with the virus, the mortality rate is much lower in other birds. Because crows are extremely susceptible to WNV, they are very useful as sentinels to monitor viral activity. However, NJDHSS has been accepting all birds from the corvid family for WNV testing.

Following extensive testing on crow submissions the presence of WNV has now been confirmed in all counties in New Jersey. There is no evidence that a person can get the virus from handling live or dead infected birds. However, avoid barehanded contact when handling any dead animal. There is some evidence that crow-to-crow transmission of WNV is possible without mosquito vectors. Contact your local health department for specific instructions on dead bird testing.

Should outdoor activities in August and September be cancelled when there is evidence of West Nile virus activity?

There is no reason to change plans for outdoor activities, but common sense should be taken to avoid mosquito bites, particularly at dusk and early evening.

What can I do to reduce my risk of becoming infected with WNV?

- Limit outdoor activities at dawn, dusk and in the evening, when possible.
- Wear long-sleeved shirts and long pants whenever you are outdoors.
- When outside, use an effective skin or clothing mosquito repellent. Always use EPA approved repellent according to label directions.
- Make sure screen doors and windows are in good condition.
- Sprays can be obtained in stores to use outside of the home to help repel and/or kill mosquitoes. Directions must be followed carefully.
- Eliminate stagnant water around the home in discarded tires, blocked gutters, unclean birdbaths, flower pots, pet food dishes, poorly maintained pools and any type of receptacle with decaying organic matter to reduce mosquito habitat.
- Report mosquito concerns to the Warren County Mosquito Extermination Commission (908) 453-3585.

Contact and Reference Information - see next page

For More Information:

To inquire about symptoms of WNV Encephalitis

Call: Warren County Public Health Educator (908) 475-7963

To report a recently *dead crow* (16-18" large black bird)

Call: Warren County Health Department (908) 475-7960

Questions about WNV and livestock

Call: NJ Dept. of Agriculture, Div. of Animal Health (609) 292-3965

Information about mosquitoes and mosquito breeding habitat

Call: Warren County Mosquito Control Commission (908) 453-3585

*If not a resident of Warren County **contact 1-888-NO-NJ-WNV** for a complete listing of all NJ Mosquito Control Agencies phone numbers.*

Useful Internet Sites- for more information on West Nile Virus

New Jersey Department of Health & Senior Services

<http://www.state.nj.us/health/cd/westnile/enceph.htm>

New Jersey Department of Environmental Protection

www.state.nj.us/dep/mosquito

New Jersey Department of Agriculture

<http://www.state.nj.us/agriculture/westnile.htm>

Centers for Disease Control and Prevention

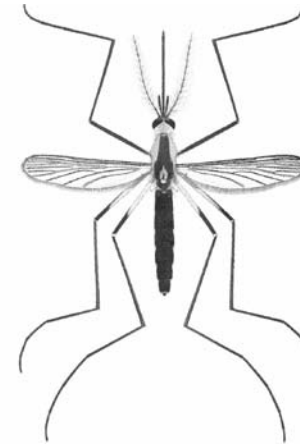
<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

New Jersey Mosquito Homepage

www.njmosquito.org

WEST NILE VIRUS

FACT SHEET



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