



Tarrant County Public Health

BULLETIN

West Nile Virus

What is West Nile Virus?

West Nile virus (WNV) is a flavivirus which likely originated in the African West Nile river basin. The virus can infect birds and occasionally horses, humans and some other mammals through the bite of an infected mosquito. WNV first appeared in the United States in 1999.

What are the symptoms?

Most people who are infected with WNV will not experience symptoms. If illness were to occur, it would occur within 3 - 15 days of being bitten by an infected mosquito. It is estimated that 20 percent of people who become infected develop West Nile fever: mild symptoms include fever, headache and body aches, occasionally with a skin rash on the trunk of the body and swollen lymph glands. In very few individuals, particularly the elderly, WNV can affect brain tissue, cause encephalitis (inflammation of the brain) or meningitis (inflammation of the lining of the brain and spinal cord), but more commonly presents as a febrile illness. Symptoms of encephalitis include rapid onset of severe headache, high fever, stiff neck (in meningitis), muscle weakness, confusion and loss of consciousness.

How is it spread?

Certain species of mosquitoes acquire the virus when they feed on infected birds. The virus may be transmitted to people through the bite of an infected mosquito. WNV is not spread by person-to-person contact or by caring for someone who is infected. Transmission through blood transfusions is rare, but screening tests are in place.

How is it treated?

There is no vaccine for WNV nor is there a specific therapy. In severe cases, hospitalization, intravenous (IV) fluids and nutrition, airway management, ventilatory support (ventilator), prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care may be required. At its most serious, it can cause death.

What should I do if I think I have West Nile Virus?

Consult a healthcare provider for evaluation and diagnosis.

What can I do to protect myself and my family?

Follow the "4 D's" for prevention and protection:

- **DUSK/DAWN** are the times of day when mosquitoes are most active, so you should try to stay indoors.
- **DRESS** in long sleeves and pants when you're outside.
- **DEET** is an ingredient to look for in your insect repellent. Always wear repellent when outdoors and choose products that contain up to 20 percent DEET (10 percent DEET for children).
- **DRAIN** standing water in your backyard and neighborhood--old tires, French drains, flowerpots and clogged rain gutters are just a few sites that mosquitoes use to breed.

Check screens on windows and doors for tears that may need to be repaired where mosquitoes can enter.

Other repellents such as Picaridin, IR3535, Lemon-Eucalyptus oil and other repellents may be available. For more information search for approved insect repellents on the Environmental Protection Agency's website.

What is Tarrant County doing about it?

Tarrant County Public Health (TCPH) is working with other city, state and federal agencies to reduce the risk of illness due to WNV. TCPH's goal is to decrease the number of adult mosquitoes by eliminating their breeding sites wherever possible, applying larvicides (agents that kill aquatic mosquito larvae, the immature form of the mosquito) to areas with standing water that cannot be drained. TCPH and collaborating municipalities conduct mosquito surveillance where they collect and test mosquito samples. We also encourage the public to take what steps they can to protect themselves. The presence of WNV may result in the application of pesticides to kill adult mosquitoes.

For more information, call 817-321-5350 or visit <http://health.tarrantcounty.com>