

What is West Nile Virus?

West Nile Virus is one of several mosquito-borne viruses in the United States that can infect people. The virus exists in nature primarily through a transmission cycle involving mosquitoes and birds. Mosquitoes become infected with West Nile Virus (WNV) when they feed on infected birds.

What are the symptoms of West Nile Virus infection?

The vast majorities of people that become infected with the West Nile Virus have no illness or experience only a mild flu-like illness that includes fever, headache and body aches lasting only a few days. Some persons may also have mild rash or swollen lymph glands.

Less than 1% of those infected may develop meningitis or encephalitis, the most severe forms of the disease, which occurs primarily in persons over 50 years of age. Symptoms of encephalitis or meningitis may include severe headache, high fever, neck stiffness, stupor, disorientation, tremors, convulsions, paralysis, coma and sometimes, death.

How soon after exposure do symptoms appear?

The symptoms generally appear about 3 to 6 days after exposure, but may appear as early as 1 day after exposure or as late as 15 days.

What is the treatment for West Nile Virus infection?

There is no specific treatment for West Nile Virus infection. Doctors can treat the symptoms of encephalitis in a hospitalized patient. Most people recover from the illness. The mild flu-like symptoms generally do not require medical treatment.

Is there a vaccine for West Nile Virus?

There is no human vaccine for West Nile Virus.

What should a person do if he/she thinks they have West Nile encephalitis?

If a person has signs of encephalitis that include high fever, severe headache, possible muscle weakness and confusion, he or she should seek medical care as soon as possible.

How is the West Nile Virus spread?

West Nile virus is spread to humans by the bite of an adult infected mosquito. A mosquito is infected by biting a bird that carries the virus. In areas where WNV is actively circulating, much less than 1 in 100 mosquitoes will be found to be infected. **The virus is not spread by person-to-person contact such as touching or caring for someone who is infected.**

Can you get West Nile Virus directly from birds?

No. WNV cannot spread directly from birds to people. However, dead birds still should not be handled with bare hands. Use gloves to carefully place dead birds in a double plastic bag and then place the birds in the outdoor trash.

Does a dead bird in my yard mean WNV is in the area?

Most birds do not become ill when infected with WNV. However, the virus is highly fatal in crows, blue jays, and sometimes hawks. Thus, an increase in deaths of these three bird species can be an indication of WNV circulating in an area. The Tennessee Department of Health is testing fresh samples of crows, blue jays and hawks as part of their surveillance for WNV. Deaths of other kinds of birds are usually **not** associated with WNV.

What if I notice a dead crow, blue jay or hawk?

If you notice a freshly dead crow, blue jay or hawk, you should contact your local health department environmentalist or Tennessee Wildlife Resources Agency officer to see about testing. To keep it from deteriorating in the heat, you should place it in a plastic bag (hand in bag, grasp bird, pull bag over hand), double bag and refrigerate, freeze or keep on ice until delivered or picked up. Not every bird reported would be submitted for testing, especially after WNV is already known to be in the area.

What can you do to protect yourself?

The best way to protect yourself is to keep mosquitoes from biting you. During mosquito season (generally April through October), take the following precautions:

- Limit outdoor activities between dusk and dawn, if possible, since this is the time of greatest mosquito activity.
- If you are outside when mosquitoes are prevalent, wear protective clothing such as long pants, long-sleeved shirts and socks.
- Use a mosquito repellent that contains DEET (the chemical N-N-diethyl-meta-toluamide) and **follow the directions on the label.**

What can I do around my home to help reduce exposure to mosquitoes?

To reduce mosquito populations around your home and neighborhood, get rid of standing water where mosquitoes can breed. Weeds, tall grass and bushes also provide an outdoor home for mosquitoes. Any container with over ½ inch of standing water for 5 – 7 days can hatch out mosquitoes. You can take the following simple steps to reduce breeding sites for mosquitoes:

- Dispose of, regularly empty, or turn over any water holding containers on your property such as tires, cans, flowerpots, or trashcans.
- Drill holes in the bottom of recycling containers that are left outdoors.
- Make sure roof gutters drain properly and water doesn't stand in them.
- Change the water in birdbaths at least once a week.
- Turn over plastic wading pools and wheelbarrows when not in use.
- Keep swimming pools, outdoor saunas and hot tubs clean and properly chlorinated; remove standing water from pool covers.
- Eliminate any standing water that collects on your property.
- Remind or help neighbors to eliminate mosquito-breeding sites.
- Fix any holes in your screens and make sure they are tightly attached.

Can WNV affect my pets?

Dogs, cats and other small mammals do not generally become ill if infected with WNV. However, horses can become ill and even die. Check with your veterinarian about availability of a newly licensed equine vaccine for areas where WNV is prevalent.

For more information:

The following websites contain excellent educational material about West Nile Virus and other arboviruses, mosquito control activities, steps individuals can take to protect themselves, and West Nile Virus surveillance results throughout the United States:

- www.cdc.gov/ncidod/dvbid/westnile/index.htm The Centers for Disease Control and Prevention (CDC) West Nile Virus Homepage with a wealth of information plus many links to other WNV sites.
- http://cindi.usgs.gov/hazard/event/west_nile/west_nile.html The site for 2001 updated West Nile Virus surveillance maps of positive bird, mosquito, equine and human cases.
- www.epa.gov/pesticides/factsheets/skeeters.htm The EPA site with mosquito control guidelines, factsheets on mosquito sprays, etc.
- <http://nptn.orst.edu> and click on "West Nile Virus Resource Guide". This is the National Pesticide Telecommunications Network (NPTN) with insect repellent information and links to a multitude of other West Nile Virus sites.