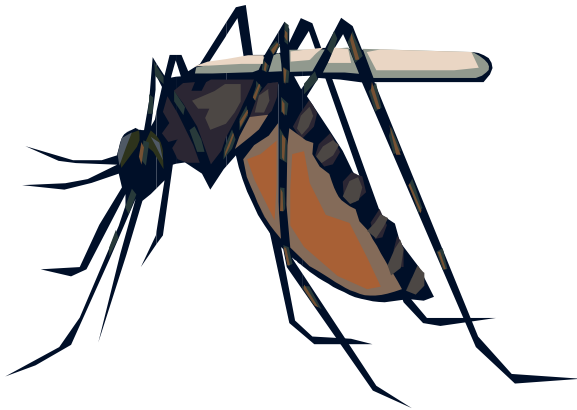




West Nile Virus



About West Nile Virus

For the past few summers, mosquito season has been more than an annoyance in some areas of the United States. The threat of West Nile virus has made getting a mosquito bite a cause for concern throughout the country.

West Nile is a virus that is spread by the *Culex* species of mosquito. Mosquitoes become infected by feeding on infected birds, and then transmit the virus to humans and animals through bites. Once in the bloodstream, the virus multiplies and spreads. If the virus reaches the brain, the result is encephalitis — an inflammation of the brain that can affect the entire nervous system. Although rare, encephalitis is the most serious complication associated with the virus.

West Nile virus has been around a long time. It is commonly found in Africa, Eastern Europe, West Asia, and the Middle East, but until 1999 had not been found in the Western Hemisphere.

Since that time, the Centers for Disease Control and Prevention (CDC) has verified reports of West Nile virus infection in birds, mosquitoes, or humans throughout most of the country. In 2008, the West Nile virus infected about 1,300 Americans, with 44 fatalities reported. It's unknown how the West Nile virus entered the United States, but experts say it's most similar to the strains found in the Middle East.

The chances that anyone in your family will become ill with West Nile virus are extremely small. Here are some

facts about the West Nile virus:

- Less than 1% of mosquitoes in any area where carrier mosquitoes have been found are actually infected with West Nile virus.
- Fewer than 1% of people who are bitten and infected with West Nile virus will become seriously ill.
- West Nile virus is not transmitted from person to person.

Although anyone living in an area identified as having infected mosquitoes is at some risk for getting West Nile encephalitis, those at greatest risk are people older than 50.

There is no evidence to suggest that West Nile virus is transmitted by ticks, birds, or any other insect besides mosquitoes. It is possible for your pet to become infected, but your pet cannot transmit the virus to you. Although the risk of infection is very low due to routine screening of donated blood, the infection has been transmitted through blood transfusion in a few cases. There have also been a few reports of fetuses of pregnant women becoming infected when the mother developed West Nile virus infection.

Signs and Symptoms

Most of the time, infection with West Nile virus makes people mildly ill. A person may experience flu-like symptoms such as fever, headache, body aches, and sometimes skin rash and swollen glands.

More severe infection can result in encephalitis, which includes symptoms of severe headache, high fever, neck stiffness, disorientation, and sometimes convulsions. Although very rare, severe West Nile infection in healthy, younger people can be fatal, but the elderly are at greatest risk for severe complications.

The incubation period for West Nile virus is usually 5 to 15 days. In the northern United States, infections occur mainly in the summer and early fall, but in the warmer southern regions, the virus can be transmitted all year.

Diagnosis

If anyone in your family has any symptoms of West Nile virus, contact your doctor right away. The doctor will

determine your risk based on where you live or whether you've traveled to an area where infected mosquitoes have been found. If the doctor suspects West Nile virus, a blood sample will be drawn and sent to a lab to be tested for infection.



Prevention

What can you do to protect yourself from West Nile virus?

The CDC recommends these precautions:

- Try to stay indoors at dusk and dawn, when mosquitoes are most active.
- Use screens on doors and windows to keep mosquitoes from entering your home. You should also repair broken or damaged screens.
- Wear long-sleeved shirts and long pants whenever you are outdoors.
- Because mosquitoes can bite through thin clothing, spray your clothes with insect repellents containing permethrin or DEET (look for N,N-diethyl-metoluamide). For children, choose a repellent that contains no more than a 10–30% concentration of DEET; in higher concentrations, the chemical, which is absorbed through the skin, can be toxic. Be sure to read and follow the directions on the label. Repellents with picaridin and oil of lemon eucalyptus also offer long-term protection.
- If you apply insect repellent to exposed skin, do so sparingly. Do not apply repellent to your child's hands, as it can cause irritation if transmitted to the eyes or mouth.
- Don't rely on vitamin B or ultrasonic devices to prevent mosquito bites — neither has been proven effective. Be sure to eliminate mosquito-breeding areas around your home by removing standing water from gutters, old tires, wading pools, tarps, potted plants, and other outside buckets and pails. Also, be sure the water in pet dishes and birdbaths is changed regularly.

Treating West Nile

There is no specific treatment for West Nile encephalitis other than supportive therapy (such as hospitalization, intravenous fluids, and respiratory support) for severe cases. Antibiotics will not work because a virus, not bacteria, causes West Nile disease. No vaccine for the virus is currently available. The public has played a large role in helping track West Nile infection patterns by reporting the

appearance of dead, infected birds to the authorities. Continued surveillance is essential to keep the virus in check. If you see a dead bird in your area, do not handle the body with your bare hands. Instead, contact your state or local health department immediately.

Once virus activity is discovered in an area — even before the first case of human disease is reported — mosquito control measures can go into effect, including the widespread spraying of pesticides against adult mosquitoes and larvae.

Taken in part from:

Dowshen Steven. (2009) *West Nile Virus*. Retrieved March 2010 at http://kidshealth.org/parent/firstaid_safe/outdoor/west_nile.html



CALENDAR OF EVENTS

- **Ready to Learn—“Media Literacy”**— August 18th at the Utah County Health Dept (UChD), Rm. 1600 from 12-1 p.m. This is a basic workshop that helps parents and childcare providers with awareness concerning media and how to use quality television, literacy and activities to support learning. Receive a complimentary book.
- **Provo City Library—**
 - ☞ **“Book Babies”** every Friday from 10-10:30 a.m. for infants 0-12 mos.
 - ☞ **“Mother Goose Time”** every Friday from 11-12pm for 1 year olds. Age appropriate songs, stories, and activities for baby and their parents/ caregivers.
- **Orem City Library—**
 - ☞ **“Laptime”** every Tuesday, Wednesday, & Thursday at 10am in Hogwarts’ Corner. A 20 min. program for babies, toddlers & their caregivers with songs, finger plays & short stories to introduce our youngest patrons to the world of words.
 - ☞ **“Story time”** every Tuesday, Wednesday, & Thursday at 10:30am in the Storytelling Wing. A 30 min. program for preschoolers & young school age children with stories, puppets & activities to engage youngsters & highlight the joys of books & storytelling.