

## Keeping Safe From West Nile Virus

### ***What is West Nile Virus?***

West Nile virus is a disease spread primarily by mosquitoes. Typically, infections occur in the summer and continue into the fall. Only about 20% of infected people develop mild symptoms such as fever, headache, swollen lymph nodes, and body aches. Less than 1% of infected people experience more severe symptoms such as brain inflammation (encephalitis), muscle weakness, altered mental status, seizures, coma, and rarely, death. Symptoms often develop within about three to 14 days of becoming infected. There's no specific treatment for West Nile virus except to relieve symptoms.

### ***How is West Nile virus spread?***

Mosquitoes pick up the virus by feeding on the blood of infected birds. The virus is spread to humans when infected mosquitoes bite them.

### ***Can I catch West Nile virus from other people or animals?***

West Nile virus is not contagious. Coming in contact with infected people or animals is not harmful. But it's possible the virus can be spread through blood transfusions, organ transplants, breastfeeding, and even during pregnancy from mother to baby.

### ***Am I at risk for catching West Nile virus?***

Anybody can catch the virus if they're bitten by mosquitoes that carry it. But very few people will actually develop symptoms. People over 50 or with low immunity have the greatest risk for developing severe symptoms.

### ***How can I protect myself from infection?***

Avoid getting bitten by mosquitoes. Limit the time spent outdoors when mosquitoes are most active (dusk and dawn).

When going outside, wear long sleeves and pants. Avoid wearing tight clothes since mosquitoes may bite through them.

Use insect repellent while outdoors.

### ***Which is the best insect repellent?***

Products that contain DEET (*OFF!*, *Cutter*, *Ultrathon*, etc.) are some of the best. These products contain different concentrations of DEET. Higher concentrations don't work better, they just last longer. For example, 7% DEET lasts about two hours and 24% DEET lasts about five hours. Products containing more than 50% DEET don't last for much longer. Keep in mind that most products won't say DEET. Instead, look under the ingredients section of the product labeling and search for the chemical name of DEET (N,N-diethyl-m-toluamide or N,N-diethyl-3-methylbenzamide).

A good alternative to DEET is the insect repellent picaridin (*Cutter Advanced*, etc). Picaridin works as well as similar concentrations of DEET. It also doesn't irritate the skin or damage plastic or clothing. As with DEET, products with higher concentrations of picaridin will last longer than those with lower concentrations.

Oil of lemon eucalyptus (*Repel Lemon Eucalyptus*, etc.) is a good choice if you want a "natural" or plant-based repellent. Oil of lemon eucalyptus (about 30%), also known as p-menthane-3,8-diol or PMD, is an alternative to repellents with a low concentration of DEET. Other plant-based products that contain citronella oil (*Buzz Away*) or soybean oil (*Bite Blocker*) can repel mosquitos, but only for a very short time. Products that contain permethrin (*Repel Permanone*, *Fite Bite*, etc.) also work well. You can use permethrin along with DEET to enhance protection. You should spray permethrin onto clothes, **but not on the skin**. Allow clothes to dry completely before wearing. Before using any insect repellent, always read and closely follow the directions on the label of the product you choose.

### ***How do I keep mosquitoes from my home?***

You can reduce the number of mosquitoes by removing water sources that could serve as mosquito breeding habitats. Mosquitoes breed in water that stands for more than four days. Store away buckets, barrels, old tires, or other items that collect water. Routinely clean and chlorinate your pool. If you own a home, clean rain gutters around your house regularly.

For additional information on this and other health issues, visit: [MedlinePlus.gov](http://MedlinePlus.gov)