

West Nile Virus In Alabama

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Last year, very few counties in Alabama escaped confirmed cases of the West Nile Virus (WNV) in humans or animals. According to health officials, the chances of a person contracting and becoming seriously ill from the disease is very slim.

According to the Center for Disease Control (CDC) in Atlanta, West Nile Virus is a flavivirus commonly found in Africa, West Asia, and the Middle East. It is not known from where the U.S. virus originated but CDC scientists believe the virus has probably been in the eastern U.S. since the early summer of 1999, or longer. The virus we have in the United States is most closely related genetically to strains found in the Middle East.

West Nile Virus has several degrees of severity. West Nile fever is a case of mild disease in people, characterized by flu-like symptoms. It typically lasts only a few days and does not appear to cause any long-term health effects.

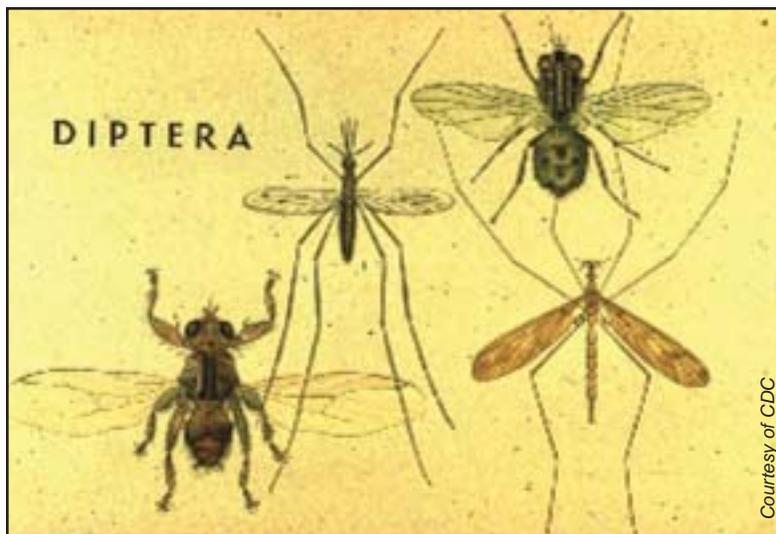
More severe cases of the disease can be West Nile encephalitis which refers to an inflammation of the brain, West Nile meningitis which affects the membrane around the brain and spinal cord, and West Nile meningoencephalitis which refers to inflammation of the brain and the membrane surrounding it.

How is It Spread?

West Nile Virus is principally spread through the bite of an infected mosquito. Around 30 different species of mosquitoes are suspected of carrying the disease. Mosquitoes become infected when they feed on infected birds. The virus finds its way into the mosquito's salivary glands, and during blood meals the virus may be injected into humans

*Mosquitoes . . .
"Two could whip a dog
and four could hold
down a man."*

- Mark Twain



and animals, where it can multiply and possibly cause illness.

You cannot contract WNV from other humans, for instance by touching or kissing. There is confirmation that the virus can be transmitted through transplanted organs and an investigation is still being conducted to determine whether it can be transmitted through blood or blood products. One confirmed case involved a transplacental (mother to child) infection. All of these cases are very small in proportion to transmission by mosquitoes.

The Symptoms in Humans

Only one out of five people bitten and infected by mosquitoes carrying the virus will develop West Nile fever. These symptoms include fever, headache and body aches, and occasionally a skin rash on the trunk of the body and swollen lymph glands.

One out of 150 people bitten and infected with the virus will experience the

more severe symptoms associated with West Nile encephalitis or meningitis. These symptoms are headache, high fever, neck stiffness, muscle weakness, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis.

The incubation for WNV is usually 3-14 days. The symptoms of mild disease will last a few days. With the more severe disease they may last several weeks and neurological effects can be permanent.

Can You Die from WNV?

Death can occur from West Nile infection, but it is rare. Death rates from severe infections are highest among the elderly and those with weak immune systems. Death occurs in 3 to 15% of the cases of severe infection from encephalitis. In 2002, Alabama had 49 reported human infections, with only three deaths occurring.

Does West Nile Affect Animals?

West Nile virus has been found in horses, cats, bats, chipmunks, skunks, squirrels, domestic rabbits, and wild and domestic birds. It has not been found in dogs. In 2001 approximately 33% of horses that contracted the disease died from it or had to be euthanized because of it.

Last year, 577 dead birds across Alabama tested positive for the disease. Every county in Alabama except Lawrence, Greene, Bibb, Lowndes, and Crenshaw had positive birds. There were 88 positive cases for WNV in horses.

Animals with West Nile are not contagious to each other or to humans, and do not need to be destroyed. No food produced by an animal – milk, eggs, meat, etc., - has been shown to cause West Nile. There is no evidence that consuming infected birds or animals can transmit the disease.

How Do You Treat West Nile Virus?

For persons with West Nile fever, the symptoms are treated while their body fights off the infection, usually for three to six days. More severe cases require hospitalization and intensive treatment.

How Can WNV be Prevented?

You can reduce your chances of contracting West Nile by protecting yourself from mosquito bites. Below are a few tips:

- ✳️ When going outside, apply insect repellent containing DEET (N, N-diethyl-meta-toluamide) to exposed skin.
- ✳️ Wear long-sleeves, long pants, and socks when going outdoors. Treating clothes with repellents containing permethrin or DEET will give additional protection. Do not apply repellents containing permethrin directly to skin. Do not spray repellent containing DEET on the skin under your clothing, only on exposed skin.

- ✳️ Place mosquito netting over infant carriers when you are outdoors with infants.
- ✳️ Install or repair window and door screens so that mosquitoes cannot get inside your home.
- ✳️ The hours from dusk to dawn are peak mosquito biting times. You should consider avoiding being outdoors at these times, or take extra care to use repellent and protective clothing during evening and early morning.
- ✳️ You can reduce the risk of being bitten by a mosquito by eliminating any standing water around your home. Mosquitoes lay their eggs in standing water. Flowerpots, bird-baths, pet food and water dishes, buckets, barrels, and cans should be emptied and cleaned at least once a week. You should also check for clogged rain gutters.
- ✳️ Insecticide pellets can be purchased to kill mosquito eggs in standing ponds or watering holes utilized by

livestock. This will help eliminate the threat not only to you, but to your livestock as well.

- ✳️ Check to see if there is an organized mosquito control program in your area. The American Mosquito Control Assoc. (www.mosquito.org) offers a book that may be useful, *Organization for Mosquito Control*. The National Pesticide Information Center (www.npic.orst.edu) also has tips about pesticides and repellents. The toll-free number for their information line is 1-800-858-7378.
- ✳️ A vaccination is available to prevent the WNV disease in horses. Contact your veterinarian for more information on boosters. There is no vaccination for other animals or for humans. 🦟

Sources

Center for Disease Control:
www.cdc.gov/ncidod/dvbid/westnile/
Alabama Department of Public Health:
www.adph.org/westnilevirus



Standing ponds such as this one are prime mosquito breeding areas. Although West Nile Virus is not usually fatal with humans, it is very dangerous for horses. Around 33 percent of horses that contract the disease either die or must be euthanized because of it. You can check with your veterinarian or local Farmers Co-op for livestock-safe insecticides.