

*August 2, 2005*

*SOURCE:* Minnesota Department of Health

West Nile virus mosquito population grows rapidly in warm weather. State health officials urge prevention measures as *Culex tarsalis* mosquito numbers rise across western and central Minnesota. Residents of western and central Minnesota could face a higher risk for West Nile virus (WNV) this year than in previous years because of unusually high numbers of the mosquito that carries the disease, the Minnesota Department of Health (MDH) warned today. Early summer rains and recent warm weather have created conditions that produce large numbers of *Culex tarsalis* mosquitoes, the primary carrier of WNV in Minnesota.

"In several counties, we've recently been collecting several hundred to more than 1,000 *Culex tarsalis* a night in carbon dioxide-baited traps," said David Neitzel, an MDH epidemiologist specializing in diseases carried by ticks and mosquitoes. "These mosquitoes and their offspring will pose the biggest health risk for the rest of the summer."

Neitzel added that in some parts of the state, numbers of other pest mosquito species are going down with the warm and dry weather, so people are not being bitten as often, and may believe that disease risk is declining. "However, *Culex tarsalis* thrives in this type of weather," he said.

"The *Culex tarsalis* mosquito prefers open, agricultural areas of Minnesota, and we've seen a higher proportion of disease in people coming from these areas in past years," Neitzel said. "It's extremely important, therefore, that residents of western and central Minnesota take every measure they can to prevent the mosquito bites that can give them West Nile virus."

To reduce your risk of being bitten: While outside among mosquitoes, use a good mosquito repellent, such as those containing no more than 30 percent of the active ingredient DEET. Products containing the active ingredient picaridin are also now commercially available. Minimize outdoor activities at dusk or dawn, when mosquitoes are most actively feeding. Wear long-sleeve shirts and long pants if you have to spend time in an area where mosquitoes are biting. Eliminate mosquito breeding sites on and around your property \* including items such as old tires, buckets, clogged rain gutters, cans, other containers, and anything else that can hold a small amount of water. Change the water in birdbaths and horse troughs at least weekly. As part of the ongoing monitoring for West Nile virus, the department is routinely collecting mosquitoes from several locations around the state. The mosquitoes are identified and tested for WNV. "No mosquito samples have been positive for WNV yet this year, but we are just entering the late summer period where we would expect to find the virus in mosquitoes," Neitzel said. The department has paid particular attention to areas in southwestern, west central and northwestern Minnesota because these areas have historically had greater numbers of human WNV cases.

Many *Culex tarsalis* mosquitoes feed on blood from WNV-infected birds, then later in life, feed on a human, thus transmitting the virus. Meanwhile, the eggs they have laid will hatch into larvae and develop into additional mosquitoes that could spread disease.

August is usually the peak month for West Nile virus cases in Minnesota, but people are at risk for the disease until the first hard frost kills the mosquito population or causes them to find a protected location for the winter, Neitzel said. "So it's important to maintain prevention habits, like using insect repellent, from mid-summer and into early fall \* as long as the mosquitoes are flying," he noted.

Of those who become infected with West Nile virus, most people will have no symptoms at all or display only mild symptoms. Approximately one out of 150 people who become infected will develop encephalitis or other severe forms of the disease. Symptoms usually show up three to 15 days after being bitten. They can include headache,

high fever, muscle weakness, stiff neck, disorientation, tremors, convulsions, paralysis and coma. Severe cases tend to occur more often in the elderly.

So far in 2005, West Nile virus has been found in three people, two birds, and four horses in Minnesota. A map showing updated West Nile findings in Minnesota can be found on the MDH Web site. A map showing high risk areas for West Nile virus also can be found on this page.

More information on West Nile and other forms of mosquito-borne encephalitis, and a form to report dead birds to help with West Nile virus monitoring, are available on the MDH Web site. Information is also available at the Centers for Disease Control and Prevention site. People who have questions about West Nile virus can call MDH at 612-676-5414 or 1-877-676-5414 (outstate) between 8 a.m. and 4:30 p.m. Monday through Friday.

*NOTE TO EDITORS:* For a demonstration of mosquito sampling in the metro area, contact Jim Stark or Mike McLean at the Metropolitan Mosquito Control District, 651-645-9149.

*FOR MORE INFORMATION, PLEASE CONTACT:*

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