

UTAH PESTICIDE and TOXIC NEWS



Utah State University Extension

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WEST NILE VIRUS IN UTAH AND THE UNITED STATES

As of September 6, 2006, Utah has had 78 human cases of West Nile Virus and has had positive detections in 406 mosquito pools, 73 sentinel chickens, 53 wild birds, and 33 horses as reported to the Utah Department of Health, <http://health.utah.gov/epi/diseases/wnv/DiseaseStatus/Track.htm>. As of September 5, 2006, Idaho has reported to CDC 292 human cases, California 138, Texas 101, Nevada 85, North Dakota 77, Colorado 75, South Dakota 68, Nebraska 55, Louisiana 43, and Minnesota 42. All other states have reported less than 40 human cases. For more information:

http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount06_detailed.htm.

(UDH, 9/6/06 & CDC 9/5/06)

WEST NILE VIRUS-REDUCE YOUR RISK DURING OUTDOOR ACTIVITY

Protect from dusk to dawn. That is when mosquitoes that carry the virus are most active, so take precautions to prevent mosquito bites.

Use repellent with DEET. Use mosquito repellents that contain DEET (N, N-diethyl-m-toluamide) when doing any outdoor activity. Follow the label instructions carefully. For adults, use repellents containing DEET up to 35% concentration. For children 2 months-12 years, use repellents containing up to 10% DEET. Do not use DEET on children under the age of 2 months.

Cover up. Wear protective clothing like long-sleeved shirts and long pants while outdoors. Use mosquito netting when sleeping outdoors or in an unscreened structure and to protect small babies any time.

Remove standing water. Drain standing water, since that's where mosquitoes lay eggs. This includes tires, cans, puddles, barrels, etc.

West Nile Virus is rare, but if you have symptoms including high fever, severe headache, and stiff neck, contact your health care provider immediately. Though anyone can be infected and become ill, severe illness or death is more common in people over age 50.

For further questions, contact your local health department or go to www.health.utah.gov/wnv.

(UDH, 3/4/04)

AVOID MOSQUITO BITES TO AVOID INFECTION

The following information was found on the Centers for Disease Control (CDC) website for West Nile virus at http://www.cdc.gov/ncidod/dvbid/westnile/prevention_info.htm

When dealing with West Nile virus, prevention is your best bet. Fighting mosquito bites reduces your risk of getting this disease, along with others that mosquitoes can carry. Take common-sense steps to reduce your risk, and you'll avoid bites and illness; clean out the mosquitoes from the places where you work and play; and help your community control the disease. The chance that any one person is going to become ill from a mosquito bite remains low. Most people who are infected with the virus will not develop any symptoms at all. The risk of severe illness and death is highest for people over 50 years old.

Apply insect repellent containing DEET (look for: N,N-diethyl-meta-toluamide on the label under the active ingredients section) to exposed skin when you go outdoors. Even a short time being outdoors can be long enough to get a mosquito bite. When possible, wear long-sleeves, long pants, socks, and shoes when outdoors. Mosquitoes may bite through thin clothing, so spraying clothes with repellent containing permethrin or DEET will give extra protection. Don't apply repellents containing permethrin directly to skin. Do not spray repellent

containing DEET on the skin under your clothing. The hours around dusk and dawn are peak mosquito biting times for many species of mosquitoes. Take extra care to use repellent and protective clothing during the evening and early morning or consider avoiding outdoor activities during these times.

Mosquitoes lay their eggs in standing water. Limit the number of places around your home for mosquitoes to breed by getting rid of items that hold water. Some mosquitoes like to come indoors. Keep them outside by having well-fitting screens on both windows and doors. Offer to help neighbors whose screens might be in bad shape.

Dead birds may be a sign that West Nile virus is circulating between birds and the mosquitoes in an area. Over 120 species of birds are known to have been infected with West Nile virus, though not all infected birds will die. It's important to remember that birds die from many other causes besides West Nile virus. By reporting dead birds to state and local health departments, you can play an important role in monitoring West Nile virus. State and local agencies have different policies for collecting and testing birds so check with them.

Mosquito breeding sites can be everywhere. Neighborhood clean up days can be organized by civic or youth organizations to pick up containers from vacant lots and parks, and to encourage people to keep their yards free of standing water. Mosquitoes don't care about fences, so it's important to control breeding sites anywhere in the neighborhood.

More questions about mosquito control? A source for information about pesticides and repellents is the National Pesticide Information Center, <http://npic.orst.edu/> which also operates a toll-free information line: 1-800-858-7378. (CDC, 8/4/05)

NEW REPELLENTS FOR WEST NILE VIRUS

Two new mosquito repellents have been added to the arsenal of chemicals recommended for US consumers to protect against West Nile virus infection, which can cause death or neurological disease in vulnerable individuals. With the West Nile virus now established in every contiguous state except Washington, officials from the Centers for Disease Control and Prevention (CDC) are hoping to boost repellent use by recommending picaridin and oil of lemon eucalyptus (in addition to previously recommended DEET) as effective active ingredients in repellents. "It's hard to think that something as small as a mosquito can alter your life, but really, West Nile virus can [cause] a terrible disease," said Emily Zielinski-Gutierrez, PhD of the CDC's division of vector-borne infectious diseases in Fort Collins, Colo. "It's worthwhile to take those few seconds to do something to avoid becoming infected."

An estimated 80% of infected individuals do not develop symptoms. Most of those who do develop symptoms have West Nile fever, which includes mild symptoms such as fever, headache, and fatigue. But some symptomatic individuals develop encephalitis, meningitis, or acute flaccid paralysis (West Nile poliomyelitis). Older adults appear to be most susceptible, and individuals who have had an organ transplant have a high risk of developing severe neurological disease.

Despite the risks, only about 40% of individuals in the United States report using mosquito repellents regularly, according to a survey conducted by the CDC last fall. In California, Oregon, and Washington state – where officials expect the virus to arrive soon – only 23% reported regular repellent use among Latino populations, Zielinski-Gutierrez said. But the CDC hopes that having more options available will increase repellent use. All three chemicals are registered as safe and effective by the EPA. DEET-containing products continue to be highly effective and have been shown to be safe. Picaridin, also known as KBR 3023, has been available for many years in repellent products in Europe, Australia, Latin America, and Asia. One picaridin product is currently available in the United States, although more are expected soon. Oil of lemon eucalyptus, also called p-methane-3,8-diol or PMD, is a plant-based repellent available in a variety of formulations. Both picaridin and oil of lemon eucalyptus have similar efficacy to DEET; however, DEET products are available in higher concentrations, Zielinski-Gutierrez said. She noted that the differences between the products are largely cosmetic, and that it will be up to consumers to decide which product they prefer.

(JAMA, 6/1/05)