State of Montana
DPHHS HAN ADVISORY

Thursday, July 30, 2009

Forwarding Instructions:
FORWARD **to your local HAN contacts**

DPHHS Information / Recommendations:

Health Alert Message MT-DPHHS
First Human Case of WNV 2009

The Department of Public Health and Human Services (DPHHS) confirmed today the first human case of West Nile virus in Montana for 2009. The case was identified in a Lake County adult. According to health officials, the individual most likely acquired the infection in Lake County after receiving numerous mosquito bites.

RECOMMENDATIONS

1. Remind clinicians that serological testing for WNV can be done by the Montana Public Health Laboratory. WNV IgM should be ordered.

2. Remind the public to avoid mosquito bites by following the 4 Ds:

   - DUSK/DAWN: Mosquitoes are most active during this time. If possible, stay indoors during the early morning and evening hours.
   - DRESS: If you must be outdoors when mosquitoes are most active, dress in long sleeves and pants.
   - DEET: Before going outdoors, remember to apply an insect repellent containing DEET (N, N-diethyl-m-toluamide). DEET is recommended by the Centers for Disease Control and Prevention (CDC) and is the most effective and best studied insect repellent available. Use a repellent containing 25 percent to 35 percent DEET when it is necessary to be outdoors. Children ages 2-12 should use repellent with 10 percent DEET or less. Products containing picaridin and permethrin have also been found to be effective in repelling mosquitoes, as has oil of lemon eucalyptus.
   - DRAIN: To keep the mosquito population at bay around your home, drain standing water in old tires, barrels, buckets, cans, clogged rain gutters, and other items that collect water. Change water in pet bowls, flowerpots, and birdbaths at least twice a week.

BACKGROUND

Many people who become infected with West Nile virus experience no symptoms. Some individuals may develop a mild illness, called West Nile fever, which may last for three to six days. Generally, no treatment is needed. Other individuals, fewer than 1 out of 150, may be come severely infected and develop symptoms of encephalitis or meningitis. Symptoms of this disease may include headache, rash, high fever, stiff neck, mental confusion, muscle weakness, tremors, convulsions, coma and paralysis. Individuals who develop any of these symptoms should see their health-care provider.

Human cases of West Nile are typically preceded by reports of positive tests in mosquito pools and horses. According to DPHHS, the first positive test of West Nile virus in horses and mosquito pools was recorded last week.

In Montana in 2008 there were a total of five West Nile virus cases reported with no deaths. In 2007 there were 202 West Nile virus cases and 5 deaths.

For more information on WNV: http://cdepi.hhs.mt.gov.

DPHHS Subject Matter Expert (SME) Contact:

MT Communicable Disease Epidemiology Program | 406.444.0273

Distributed by the Department of Public Health and Human Services
Health Alert Network (HAN) System

DPHHS Health Alert Hotline: 1-800-701-5769
DPHHS HAN Website: www.han.mt.gov

You have received this message based upon the information contained within our emergency notification data base. If you have a different or additional e-mail or fax address that you would like us to use please notify us as soon as possible by e-mail at hhshan@mt.gov.

The goal of Montana's Health Alert Network is to transmit information to local public health authorities as quickly as possible, and assign a suitable priority to the message. For questions or comments about to Montana's HAN system you may contact the DPHHS HAN Coordinator, Gerry Wheat at gwheat@mt.gov.

Categories of Health Alert messages:
Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

Fact Sheet

WEST NILE VIRUS (WNV): What You Need To Know

What Is West Nile Virus?

West Nile virus (WNV) is a potentially serious illness. Experts believe WNV is established as a seasonal epidemic in North America that flares up in the summer and continues into the fall. This fact sheet contains important information that can help you recognize and prevent West Nile virus.

What Can I Do to Prevent WNV?

The easiest and best way to avoid WNV is to prevent mosquito bites.

- When you are outdoors, use insect repellents containing DEET (N, N-diethyl-meta-toluamide). Follow the directions on the package.
- Many mosquitoes are most active at dusk and dawn. Be sure to use insect repellent and wear long sleeves and pants at these times or consider staying indoors during these hours. Light-colored clothing can help you see mosquitoes that land on you.
- Make sure you have good screens on your windows and doors to keep mosquitoes out.
- Get rid of mosquito breeding sites by emptying standing water from flower pots, buckets and barrels. Change the water in pet dishes and replace the water in bird baths weekly. Drill holes in tire swings so water drains out. Keep children's wading pools empty and on their sides when they aren't being used.

What Are the Symptoms of WNV?

WNV affects the central nervous system. Symptoms vary.

- **Serious Symptoms in a Few People**. About one in 150 people infected with WNV will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. These symptoms may last several weeks, and neurological effects may be permanent.

- **Milder Symptoms in Some People.** Up to 20 percent of the people who become infected will display symptoms which can include fever, headache, and body aches, nausea, vomiting, and sometimes swollen lymph glands or a skin rash on the chest, stomach and back. Symptoms can last for as short as a few days, though even healthy people have been sick for several weeks.

- **No Symptoms in Most People**. Approximately 80 percent of people (about 4 out of 5) who are infected with WNV will not show any symptoms at all.

How Does West Nile Virus Spread?

- **Infected Mosquitoes.** Most often, WNV is spread by the bite of an infected mosquito. Mosquitoes are WNV carriers that become infected when they feed on infected birds. Infected mosquitoes can then spread WNV to humans and other animals when they bite.
- **Transfusions, Transplants, and Mother-to-Child.** In a very small number of cases, WNV also has been spread through blood transfusions, organ transplants, breastfeeding and even during pregnancy from mother to baby.
- **Not through touching.** WNV is not spread through casual contact such as touching or kissing a person with the virus.

How Soon Do Infected People Get Sick?

People typically develop symptoms between 3 and 14 days after they are bitten by the infected mosquito.

How Is WNV Infection Treated?

There is no specific treatment for WNV infection. In cases with milder symptoms, people experience symptoms such as fever and aches that pass on their own. In more severe cases, people usually need to go to the hospital where they can receive supportive treatment including intravenous fluids, help with breathing and nursing care.

What Should I Do if I Think I Have WNV?

Milder WNV illness improves on its own, and people do not necessarily need to seek medical attention for this infection though they may choose to do so. If you develop symptoms of severe WNV illness, such as unusually severe headaches or confusion, seek medical attention immediately. Severe WNV illness usually requires hospitalization. Pregnant women and nursing mothers are encouraged to talk to their doctor if they develop symptoms that could be WNV.

What Is the Risk of Getting Sick from WNV?

People over 50 at higher risk to get sick. People over the age of 50 are more likely to develop serious symptoms of WNV if they do get sick and should take special care to avoid mosquito bites.

Being outside means you're at risk. The more time you're outdoors, the more time you could be bitten by an infected mosquito. Pay attention to avoiding mosquito bites if you spend a lot of time outside, either working or playing.

Risk through medical procedures is very low. All donated blood is checked for WNV before being used. The risk of getting WNV through blood transfusions and organ transplants is very small, and should not prevent people who need surgery from having it. If you have concerns, talk to your doctor.

Pregnancy and nursing do not increase risk of becoming *infected with* WNV. The risk that WNV may present to a fetus or an infant infected through breastmilk is still being evaluated. Talk with your care provider is you have concerns.

What Else Should I Know?

If you find a dead bird: Don't handle the body with your bare hands. Contact your local health department for instructions on reporting and disposing of the body.