



# NORAD-USNORTHCOM/SG

## West Nile Virus

West Nile Virus (WNV), first identified in 1937 in the West Nile region of Uganda, spread to the United States in 1999. 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.

Most people (80%) who are infected with mosquito-borne viruses do not become ill and have no symptoms. For persons who do become ill, the time between the mosquito bite and the onset of symptoms, known as the incubation period, ranges from 3-14 days. Two clinically different types of disease occur in humans. Symptoms of the viral fever syndrome include fever, headache, and malaise. These symptoms persist for about 2-7 days and affect approximately 1 in 5 infected people. In rare cases, the virus can cause a more serious brain infection such as aseptic meningitis or encephalitis, affecting approximately 1 in 150 infected individuals. These infections begin with a sudden onset of high fever and a headache, and then may progress to stiff neck, disorientation, tremors, and coma. Severe infections can result in permanent brain damage or death. Most deaths occur in persons over 50 years of age.

### **Transmission**

The virus is transmitted to people and animals by bites from infected mosquitoes. Mosquitoes are infected by feeding on a bird with virus in its blood. The virus is transmitted to a new host in the mosquito's saliva when the insect bites another person or animal. Humans and horses are dead-end hosts because they cannot infect other mosquitoes. In a very small number of cases, WNV has spread through blood transfusions, organ transplants, breastfeeding and during pregnancy from mother to child. WNV is not spread through casual contact such as touching or kissing a person with the virus.

WNV is prevalent in the warm months when mosquitoes are most abundant.

### **Treatment**

There is no specific treatment for WNV infection. In cases with mild symptoms, people experience symptoms such as fever and aches that pass on their own. In more severe cases, people may need supportive treatment from a medical facility.

### **What to do if you think you have WNV**

Mild WNV illness improves on its own, and people do not necessarily need to seek medical attention for this infection. 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.

### **Prevention**

Prevention is key. Being aware of prevention activities will reduce the disease in the population.

- Avoid Mosquito Bites
  - Wear long sleeve shirts, long pants and socks sprayed with repellent while outdoors.
  - Stay indoors at dawn and dusk, when mosquitoes are most active.
  - Spray insect repellent containing DEET on exposed skin and clothing when you go outdoors. Adults and children more than 2 months of age can use preparations containing up to 35% DEET. Don't put repellent on kid's hands because it may get in their mouth or eyes.
- Mosquito-proof your home

- Keep mosquitoes outside by fixing or installing window and door screens
- Drain standing water. A small amount of standing water can be enough for a mosquito to lay her eggs. Look around every week for possible mosquito breeding places.
- Empty water from buckets, cans, pool covers, flower pots and other items. Throw away or cover up stored tires and other items that aren't being used. Clean pet water bowls weekly. Check if rain gutters are clogged. If you store water outside or have a well, make sure it's covered up. Encourage your neighbors to do the same.
- Dead Birds
  - 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.

Additional information is available at the Center for Disease Control and Prevention web site at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>