



Division of Public and Behavioral Health Technical Bulletin



Topic: West Nile Virus (WNV)

Section/Program/Contact: Office of Public Health Informatics and Epidemiology

Date: September 10, 2013

TO: General Public

Recommendations for Preventing and Controlling West Nile Virus Infection

West Nile Virus (WNV) is a potentially serious illness. Most often, WNV is spread by the bite of an infected mosquito. Mosquitoes carry the WNV when they feed on infected birds and mammals. Infected mosquitoes can then spread WNV to humans and other animals when they bite. WNV is not spread through casual contact such as touching or kissing a person with the virus. In the United States, WNV cases are most prevalent in late summer and early autumn; in Nevada, mosquito season is typically April through October. While there is no vaccine to prevent WNV in humans, there are preventive measures an individual can do to minimize their risk of infection.

Preventive Measures

- Many mosquitoes are most active (i.e. most likely to bite) at dusk and dawn. Be sure to use insect repellent (with DEET) and wear long sleeves and pants at these times or consider staying indoors during these hours.
- Make sure you have properly fitting 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.
- Ensure that swimming pools are cleaned and chlorinated regularly.
- Use mosquito eating fish in ponds and fountains.
- Although there is no vaccine for humans, there is a vaccine for horses. If you are a horse owner, ensure that your horse has been adequately immunized. Please see your veterinarian for more information and proper vaccination schedules.

Symptoms of West Nile Virus

- WNV affects the central nervous system and the symptoms may vary.
- Most people who are infected with WNV will not have any type of illness and/or symptoms.
- Approximately 20% of people who become infected will develop West Nile fever. The symptoms of West Nile fever include fever, headache, tiredness and body aches. Occasionally, a skin rash on the trunk of the body or swollen lymph nodes may occur.
- Severe symptoms of WNV (also known as West Nile encephalitis or meningitis) include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis. It is estimated that approximately 1 in 150 persons (less than 1%) infected with WNV will develop a more severe form of the disease.
- Symptoms typically develop between 2 and 14 days after being bitten by an infected mosquito.


Treatment

- There is no specific treatment for WNV infection. In cases with milder symptoms such as fever and aches, the symptoms generally go away on their own.
- In more severe cases, people usually need to go to the hospital where they can receive supportive treatment including intravenous fluids and nursing care.
- Pregnant women and nursing mothers are encouraged to talk to their doctor if they develop symptoms that could be WNV.
- People over the age of 50 are more likely to develop serious symptoms of WNV and should take special care to avoid mosquito bites.


For More Information:

Nevada Division of Public and Behavioral Health: 775-684-5911

Centers for Disease Control and Prevention: <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

Signed: 
Tracey Green, MD, Chief Medical Officer
Division of Public and Behavioral Health

Date: 9/12/13

Signed: 
Richard Whitley, MS, Administrator
Division of Public and Behavioral Health

Date: 9/12/13