

Infection Prevention and You



Mosquitoes and West Nile Virus

Did you know that there are about 160 different species of mosquito in the United States? West Nile Virus (WNV) has been identified in 65 of those species. WNV was first discovered in Uganda in 1937, but the first cases in the United States weren't detected until 1999. Within four years WNV had been detected in every state in the contiguous U.S. The summer of 2012 experienced one of the largest national outbreaks of WNV.

Important facts about WNV

- WNV is spread to humans by the bite of an infected mosquito. The mosquitoes become infected when they bite birds already infected with WNV.
- Horses and other mammals can also be infected by the bite of an infected mosquito but these animals cannot pass the disease to humans.
- You cannot get infected with WNV from contact (includes touching and kissing) with an infected person.
- Even if you get bitten by an infected mosquito, there is only a 20 percent chance that you will have symptoms. This means that four out of five people who have WNV disease have no symptoms. There's an even smaller chance of becoming seriously ill after infection.
- Once you have had the disease, regardless of whether or not you had symptoms, you probably won't get it again.

Symptoms of WNV

- If symptoms develop, they usually include a headache, fever, tiredness, and body aches. Sometimes a skin rash develops as well as swollen lymph glands. These symptoms usually describe what is known as WNV Fever.
- With severe disease, nervous system symptoms appear and usually include a high fever and a severe headache. Neck stiffness, sleepiness, shakiness, muscle weakness, paralysis and coma can also be experienced. These particular symptoms occur because the brain and/or the spinal cord are affected by the infection are named "WNV encephalitis, meningitis, or poliomyelitis".
- When someone is infected with West Nile virus (WNV) they will typically experience one of three outcomes:
 1. No symptoms, which is most likely – remember that four out of five infected people have no symptoms, or;
 2. West Nile Fever with milder symptoms, which occurs in about one out of five infected people, or;
 3. Severe West Nile Disease in which the nervous system is affected, which occurs in less than 1 out of 100 of those who get infected.
- Call your doctor if you have high fever with a severe headache, even if you can't remember getting bit by a mosquito.
- Persons over 50 years of age and those with a weakened immune system are at highest risk for getting the symptoms of severe illness.
- Symptoms usually occur 2-15 days after the mosquito bite.

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- There is no way to tell which mosquitoes are infected, but the local health departments do track and report when WNV is circulating in a specific city or area.

How to prevent WNV

The best way to prevent WNV and other mosquito-associated diseases is to prevent mosquito bites. According to the CDC, these should be your top six strategies to prevent mosquito bites:

1. Apply insect repellent containing DEET to your exposed skin before going outdoors
2. Be aware that the early morning and evening hours are peak mosquito hours; try to avoid outside activities during these times.
3. If possible, wear long sleeves, long pants and socks when spending time outdoors, especially during peak mosquito hours. Because mosquitoes can bite through thin clothing, spray clothes with repellent containing permethrin or DEET. However, don't spray permethrin on your skin and don't spray DEET on skin covered by clothing.
4. Reduce the number of mosquitoes on your property by eliminating or reducing standing pools of water, where mosquitoes lay their eggs.
5. Reduce the number of mosquitoes inside your home by patching, repairing or replacing screens with holes or screens that don't fit tightly to the door or window frame. If your outside doors are ever propped open, make sure there is a screen door and that it remains closed.
6. Report dead birds to your local health department or whoever in your community requests this information. Research how best to share this information by accessing the links to your State and Local Government sites. Testing dead birds for WNV is one method used by the public health to determine if WNV is circulating in your community.

Remember

During the summer months, most of us spend time outside for long walks, picnics, golf, fishing and volleyball. Some basic mosquito bite prevention strategies can mean the difference between a summer remembered as full of fun or a summer during which the fun was cut short by something as small as the bite of a mosquito.

Additional Resources

CDC – West Nile Virus Information www.cdc.gov/westnile/

CDC – Mosquito Repellent Safety Q&A www.cdc.gov/westnile/faq/repellent.html

Updated: 4/23/2014