



MONTGOMERY COUNTY HEALTH DEPARTMENT

West Nile Disease – Facts for 2012

What is West Nile Disease?

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. The virus can infect humans, birds, mosquitoes, horses and some other mammals.

What are West Nile encephalitis, West Nile meningitis and “neuroinvasive disease” and West Nile fever?

The most severe type of disease due to a person being infected with West Nile virus is sometimes called “neuroinvasive disease” because it affects a person’s nervous system. Specific types of neuroinvasive disease include: West Nile encephalitis, West Nile meningitis or West Nile meningoencephalitis. Encephalitis refers to an inflammation of the brain, meningitis is an inflammation of the membrane around the brain and the spinal cord, and meningoencephalitis refers to inflammation of the brain and the membrane surrounding it. West Nile Fever is another type of illness that can occur in people who become infected with the virus. It is characterized by fever, headache, tiredness, aches and sometimes rash. Although the illness can be as short as a few days, even healthy people have been sick for several weeks.

Who is at risk for getting West Nile Disease (WND)?

All residents of areas where WND activity has been detected are at risk of getting WND:

- **People over 50 are at higher risk to get severe illness.** People over the age of 50 are more likely to develop serious symptoms of WND 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 WND before being used. The risk of getting WND 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.

What are the symptoms of West Nile Disease?

- **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 have symptoms such as 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 become 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.

What is the incubation period of West Nile Disease?

Usually 3 to 14 days.

What should I do if I think I have symptoms of West Nile Disease?

Contact your private physician if you have concerns about your health. Milder WND 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 WND illness, such as unusually severe headaches or confusion, seek medical attention immediately. Severe WND illness usually requires hospitalization. Pregnant women and nursing mothers are encouraged to talk to their doctor if they develop symptoms that could be WND.

How does your private physician test for West Nile Disease?

Your physician will first take a medical history to assess your risk for WND. If you are determined to be at high risk and have symptoms of West Nile infection, your private physician will draw a blood and/or a spinal fluid sample and send it to a laboratory for confirmation.

How is West Nile Disease 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, although illness may last weeks to months even in healthy persons. 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.

How long has West Nile Virus been in the U.S.?

It is not known how long it has been in the U.S., but CDC scientists believe the virus has probably been in the eastern U.S. since the early summer of 1999, possibly longer.

How many cases of West Nile Disease occur in the U.S.?

In 2011, **690** human cases of WND were reported in United States, **43** patients died. No reliable estimates are available for the number of cases that occur internationally. In 2011, Montgomery County had zero (0) human cases reported.

Can you get West Nile Disease from another person?

No. WND is NOT transmitted from person-to-person. For example, one cannot become infected with WND by touching, or kissing a person who has the disease, or from contact with a health care worker who has recently treated someone with the disease.

Is a woman's pregnancy at risk if she gets West Nile Disease?

Pregnant women should take precautions to reduce their risk for WND and other arboviral infections by avoiding mosquitoes, using protective clothing, and using repellents containing DEET. When WND transmission is occurring in an area, pregnant women who become ill should see their health care provider, and those whose illness is consistent with acute WND infection, should undergo appropriate diagnostic testing.

How do people get West Nile Disease?

By the bite of a mosquito that is infected with WNV. Mosquitoes become infected when they feed on infected birds. Infected mosquitoes can then spread WNV to humans and other animals when they bite.

What proportion of people with severe illness due to WNV die?

Less than 1% of those infected with West Nile virus will develop severe illness and of these persons 10% may die.

Is a person protected if they have had WNV infection?

It is assumed that immunity will be lifelong; however, it may decline in later years.

Can other animals become infected with West Nile Virus?

Yes. Although the vast majority of infections have been identified in birds, Center for Disease Control and Prevention reported WNV in horses, cats, bats, chipmunks, skunks, squirrels, domestic rabbits, and raccoons.

Can you get West Nile Disease directly from birds or from other animals?

There is no evidence that a person can get the virus from handling live or dead infected birds or other animals. However, persons should avoid barehanded contact when handling any dead animals and use gloves or double plastic bags to place the carcass in a garbage can. Always **wash your hands** after handling any specimens. Contact your veterinarian if you have questions about the health of an animal.

Is there a vaccine against West Nile Disease?

No, but several scientists are working towards developing a vaccine.

What can I do to reduce my risk of contracting West Nile Disease?

- Make sure your gutters and drainpipes are clean and running freely.
- Check and repair windows and screens to prevent mosquitoes from entering your home.
- Survey your property and remove containers that collect standing water such as: old tires, cans, bottles, buckets, toys, kiddie pools, pool covers, bird baths, flowerpots and empty plant containers.
- Avoid mosquito-breeding areas during peak periods of mosquito activity.
- Wear long-sleeved shirts and long pants, making sure to cover feet and ankles.
- Apply insect repellent sparingly to exposed skin. FOLLOW THE LABEL DIRECTIONS CAREFULLY. Do NOT apply to face.
- NEVER ALLOW CHILDREN TO APPLY REPELLENTS. Parents should avoid applying repellents to the hands of children
- Repellents should NOT be applied to very young children (less than 3 years old).
- Discuss any concerns with your private physician.

Where can I get more information on West Nile Virus, mosquito repellents and pesticides use?

To report human cases, contact:

Montgomery County Health Department:
Division of Communicable Disease Control [610] 278-5117

To report ill animals or discuss veterinary issues:

PA Department of Agriculture (717) 783-6897
Pennsylvania Veterinary Laboratory (717) 787-8808

To report a dead bird, please visit: <http://www.westnile.state.pa.us>

Since 2006 MCHD has not been collecting dead birds or taking dead bird reports. While dead bird surveillance has been a useful indicator in the past, the presence of the virus is now well-established in Montgomery County. Because West Nile virus is spread to humans through infected mosquitoes, not birds, our program is focused on preventing and controlling mosquitoes.

For mosquito control information:

Montgomery County Health Department -
Division of Environmental Health Services [610] 278-5117

PA Department of Environmental Protection (717) 705-7694

PA DEP – Southeast Regional Office (484) 250-5900

National Pesticide Telecommunication Network (800) 858-7378

For general WNV information, pamphlets and other public education materials:

Montgomery County Health Department www.health.montcopa.org or (610) 278-5117
Pennsylvania Department of Health www.westnile.state.pa.us/ or [877]-PA-HEALTH (1-877-724-3258)
Pennsylvania Department of Agriculture www.agriculture.state.pa.us or (717) 783-6897
Pennsylvania State University and Cooperative Extension www.pested.psu.edu/issues/wnv/
Environmental Protection Agency <http://www.epa.gov/pesticides/health/mosquitoes/>
United States Department of Agriculture <http://www.aphis.usda.gov/vs/nahss/equine/wnv/index.htm>
Centers for Disease Control and Prevention [CDC] www.cdc.gov/ncidod/dvbid/westnile/index.htm