



Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

What Farmers Should Know About West Nile Virus

For more information, visit www.WestNile.state.pa.us or call 1-877-PA-HEALTH

What is West Nile virus?

West Nile virus is a mosquito-borne disease that can cause encephalitis, or a brain infection. Infected mosquitoes pass the virus onto birds, animals and people.

West Nile virus was first detected in Pennsylvania in 2000. In 1999, it was detected in New York, and prior to that it had only found in Africa, Eastern Europe, and West Asia.

West Nile virus cases occur primarily in the late summer or early fall, although mosquito season is usually April-October. The virus can only be spread by mosquitoes after they feed on infected birds and then bites people or animals, not by person-to-person contact.

Who is most at risk?

People over 50 years of age have the highest risk of developing severe illness because as we age, our bodies have a harder time fighting off disease. People with compromised immune systems are also at risk. However, anyone can get the virus.

What are the symptoms?

People with mild infections may experience fever, headache, body aches, skin rash and swollen lymph glands. People with more severe infections may experience high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, occasional convulsions and paralysis. If you have any of these symptoms, contact your doctor.

Is there treatment?

There is no specific treatment for West Nile virus infection. While most people fully recover from the virus, in some severe cases hospitalization may be needed.

What is Pennsylvania doing to prevent mosquitoes from breeding?

The state departments of Health; Environmental Protection; Aging; Agriculture; Conservation and

Natural Resources; and the Fish and Boat and Game commissions have created a comprehensive, statewide plan to try to prevent a virus outbreak in Pennsylvania.

One of the main objectives of the program is to reduce potential mosquito breeding sites across the Commonwealth. Eliminating places for mosquitoes to breed is an important part of an integrated pest management program, and, whenever possible, is the preferred solution to mosquito control.

Is my farm a mosquito-breeding site?

Several habitats found on farms can support the production of mosquitoes. Larvae can develop in watering troughs, small ponds, irrigation ditches, rain barrels, manure lagoons, ruts where farm equipment frequently travels and other areas where water is allowed to accumulate. Even hoof prints can accumulate water and provide a breeding habitat. The close proximity of livestock, nuisance animals (such as birds) and other animals to mosquito breeding habitats increases the risk for the transmission of animal and human disease.

How can I prevent mosquitoes from breeding?

There are many ways to eliminate mosquito-breeding areas on farms. This might include improving drainage in areas that are irrigated, or filling in ruts where farming equipment frequently travel with stones.

Make sure you thoroughly clean watering troughs regularly. Remove or frequently empty any containers that accumulate water, including discarded tires. Aerate small ponds and stock them with fish (check with your local Fish Commission to determine which species of fish would be best.)

In situations where eliminating mosquito breeding areas is not a practical alternative, larviciding is the most effective control technique. Several larvicides are well suited for farms, including: *Bacillus sphaericus*, *B. thuringiensis israelensis* (*B.t.i.*), Temephos, growth regulators, oils and mono-molecular films. These larvicides can only be

applied by certified pesticide applicators. An applicator can help you to determine which product would best suit your situation, and what type of control activities should be conducted.

How can I protect myself?

It is not necessary to limit any outdoor activities, unless local officials advise you otherwise.

However, you can and should try to reduce your risk of being bitten by mosquitoes. In addition to reducing stagnant water in your yard, make sure all windows and doors have screens, and that all screens are in good repair.

Where can I get more information?

Visit the West Nile website at www.WestNile.state.pa.us or call 1-877-PA-HEALTH, or DEP at the appropriate regional office below.

Southeast Regional Office –
Water Supply Management – 610 832-6131
Counties: Bucks, Chester, Delaware, Montgomery, Philadelphia.

Northeast Regional Office
Water Supply Management – 570 826-2017
Counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming.

Southcentral Regional Office
Water Supply Management – 717 705-4708
Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York.

If West Nile virus is found in your area:

- Take normal steps to prevent insect bites.
- Wear shoes, socks, long pants and a long-sleeved shirt when outdoors for long periods of time, or when mosquitoes are most active.
- Consider the use of mosquito repellent, according to directions, when it is necessary to be outdoors. Wash all treated skin and clothing when returning indoors.

Remember, electromagnetic and ultrasound devices and Vitamin B are not effective in preventing mosquito bites.

Northcentral Regional Office –
Water Management – 570 327-3743
Counties: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union.

Southwest Regional Office
Water Supply Management – 412 442-4218
Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland.

Northwest Regional Office
Water Management – 814 332-6942
Counties: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren.

This fact sheet and related environmental information are available electronically via Internet. For more information, visit us through PA PowerPort at <http://www.state.pa.us> or visit DEP directly at <http://www.dep.state.pa.us> (choose directLINK “West Nile logo”).



www.GreenWorks.tv - A web space dedicated to helping you learn how to protect and improve the environment. The site features the largest collection of environmental videos available on the Internet and is produced by the nonprofit Environmental Fund for Pennsylvania, with financial support from the Pennsylvania Department of Environmental Protection, 877-PA-GREEN.