

What Farmers Should Know About West Nile Virus

For more information, visit www.westnile.state.pa.us

What is West Nile virus?

West Nile virus (WNV) is a mosquito-borne disease that can cause encephalitis, a brain inflammation. Infected mosquitoes pass the virus onto birds, animals and people. In 1999 WNV first appeared in New York and then spread into Pennsylvania in 2000. WNV can now be found in all 48 contiguous states. In Pennsylvania, cases of WNV usually occur in the mid-summer or early fall, although mosquito season is usually April through October.

The principle route of human infection with WNV is through the bite of an infected mosquito. Other methods of transmission, which represent a very small percentage of cases; include blood transfusion, organ transplantation and mother-to-child (ingestion of breast milk and transplacental).

Who is most at risk?

According to the Centers for Disease Control and Prevention (CDC), all residents of areas where virus activity has been identified are at risk of getting WNV; persons over 50 years of age have the highest risk of severe disease.

What are the symptoms?

People with mild infections may experience fever, headaches, body aches, skin rash and swollen lymph glands. People with more severe infections may experience high fever, headaches, neck stiffness, stupor disorientation, coma, tremors, occasional convulsions and paralysis. If an individual has any of these symptoms they should contact a family physician.

Is there treatment?

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

What is Pennsylvania doing to prevent mosquito production?

A multi-agency effort led by the state departments of Health, Environmental Protection (DEP) and Agriculture has created a comprehensive, statewide plan to try to limit the impact of virus outbreak in the state.

One of the main objectives of the program is to reduce potential mosquito production across the state. Eliminating places for mosquitoes to live is an important part of an integrated pest management program, and whenever possible is the preferred solution to mosquito control. When source reduction is not possible, larval and adult mosquito control is conducted.

Can a farm be a mosquito-production 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 production habitat. The close proximity of livestock, nuisance animals (such as birds) and other animals to mosquito production habitats increases the risk for the transmission of animal and human disease.

How can farmers prevent mosquito production?

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

Make sure to 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 the local Pennsylvania Fish and Boat Commission to determine which species of fish would be best).

In situations where eliminating mosquito production areas is not a practical alternative, larviciding is the most effective control technique. For treatment options, contact the county WNV coordinator. The coordinator can help to determine what control techniques would best suit the situation and what type of control activities should be conducted.

How can individuals protect themselves?

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

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

If WNV is found in the 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 devices, ultrasound devices and Vitamin B are not effective in preventing mosquito bites.

Where is there more information?

Visit the West Nile website at www.westnile.state.pa.us, or call 717-346-8238 or DEP at the appropriate regional office below.

DEP Regional Offices

Northwest Region

230 Chestnut St.
Meadville, PA 16335-3481

Waterways and Wetlands: 814-332-6945

Counties: *Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren*

North-central Region

208 W. Third St., Suite 101
Williamsport, PA 17701-6448

Waterways and Wetlands: 570-327-3636

Counties: *Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union*

Northeast Region

2 Public Square
Wilkes-Barre, PA 18701-1915

Waterways and Wetlands: 610-861-2070

Counties: *Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming*

Southwest Region

400 Waterfront Drive
Pittsburgh, PA 15222-4745

Waterways and Wetlands: 412-442-4000

Counties: *Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland*

South-central Region

909 Elmerton Ave.
Harrisburg, PA 17110-8200

Clean Water/Waterways and Wetlands: 717-705-4700

Counties: *Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York*

Southeast Region

2 East Main St.
Norristown, PA 19401-4915

Clean Water: 484-250-5900

Counties: *Bucks, Chester, Delaware and Montgomery*

For more information, visit www.dep.state.pa.us, keyword: West Nile.