



# West Nile Virus Control Program



Since 2000, the mission of the Pennsylvania West Nile Virus (WNV) Control Program has been to reduce human exposure, health care costs and the financial impact that a WNV outbreak would have upon Pennsylvanians and industries, such as agriculture, fishing, hunting, tourism, etc. The Pennsylvania departments of Health, Environmental Protection (DEP), and Agriculture have implemented a comprehensive strategy to prevent and control the seasonal impact of WNV. The WNV strategy emphasizes mosquito control efforts, which rely on human, animal, and mosquito surveillance; a streamlined system for testing collected samples; and a public education program. The mosquito control efforts are focused on aggressive early season larviciding and appropriate adulticiding to prevent the seasonal amplification and spread of the virus.

## WNV Facts:

- ◆ WNV is a mosquito-borne disease that can, in rare instances, cause encephalitis which is inflammation of the brain.
- ◆ Female mosquitoes acquire the disease from feeding on infected birds and transmit the virus in subsequent feedings.
- ◆ One in five people infected will develop a mild infection called West Nile fever with symptoms including fever, headache, body aches, skin rash, and swollen lymph glands.
- ◆ One in 150 people infected will develop a mild infection called West Nile encephalitis with symptoms including fever, headache, neck stiffness, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis.
- ◆ Those infected with a mild infection often fully recover in a few days; however, symptoms of a severe infection can last several weeks.
- ◆ Neurological effects may be permanent and the infection can be fatal.
- ◆ There is no specific treatment for West Nile virus. The best way to prevent the disease is to avoid mosquito bites.
- ◆ The risk of acquiring WNV is greatest from July through September.

### Mosquito Concerns or Complaints

Infestations of mosquitoes, standing water causing mosquito breeding or to report a dead bird (crows, blue jays, owls, hawks, and eagles) please visit our website or contact 717-346-8243.

[www.dep.pa.gov/westnile](http://www.dep.pa.gov/westnile)

### PA History of WNV (since 2000)

- ◆ 697 people infected and 43 deaths
  - ◆ 772 equine cases
- ◆ Over 2,750 infected birds
- ◆ Over 23,000 infected mosquito samples

Mosquitoes need as little as a tablespoon of water to reproduce and prefer stagnant, organic sources of water. Mosquitoes can complete their life cycle and become adults in as little as a week. Residents should be mindful and eliminate standing water around their homes to reduce their risk of disease.

### Get rid of items that collect water

- ◆ Old tires, tin cans, and buckets.

### Keep puddles from forming

- ◆ Eliminate low spots that may collect water on pool covers, grill covers, and tarps.

### Stop stagnant water

- ◆ Clean corrugated downspouts, drains and gutters.
- ◆ Change or empty the water in birdbaths and kiddie pools.
- ◆ Cover trash containers and recycle bins.
- ◆ Empty planters' dip trays weekly.

### Don't forget

- ◆ Keep grass cut short and bushes trimmed, reducing daytime resting areas.
- ◆ Store wheelbarrows upside down.
- ◆ When dumping or draining water sources is not possible, a safe way to kill mosquito larvae is to use *Bacillus thuringiensis israelensis* (BTI).
- ◆ BTI is a naturally occurring soil bacterium used to kill mosquito larvae. It is widely available at home improvement stores and can be safely used around the home.
- ◆ BTI can be purchased in small donut-shaped form, often called "mosquito dunks," which are useful in small areas of standing water, such as a birdbath or small puddle of water that may gather in a low spot on the property.

### Avoid Bites

- ◆ Avoid mosquito-breeding areas during peak periods of mosquito activity: dusk, dawn, and after rainfall.
- ◆ Don't forget to:
  - ◆ Wear long sleeves and pants and closed shoes.
- ◆ For children two months and older, apply an insect repellent according to label directions.

