

## Contact Information

For additional specific information, contact the respective agencies below.

Mosquito Control Requests:  
DNREC Mosquito Control Section

Northern Delaware  
302-836-2555

Southern Delaware  
302-422-1512

DE Mosquito Spraying Schedule  
1-800-338-8181

DE Mosquito Control Headquarters  
302-739-9917

DE Mosquito Control Information  
[www.de.gov/mosquito](http://www.de.gov/mosquito)

Human West Nile Virus Questions:  
DE Division of Public Health  
302-744-4700  
[www.dhss.delaware.gov](http://www.dhss.delaware.gov)

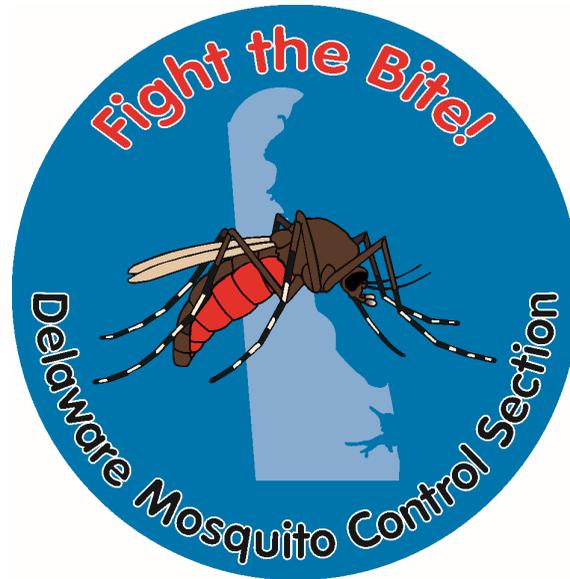
Equine West Nile Questions:  
DE Department of Agriculture  
[agriculture.delaware.gov](http://agriculture.delaware.gov)  
302-698-4500

Center for Disease Control (CDC):  
West Nile Virus Facts  
[www.cdc.gov/westnile](http://www.cdc.gov/westnile)



# West Nile Virus *in Delaware*

*Featuring mosquito control advice  
for homeowners.*



*Important information for you and  
your family regarding WNV.*

## What is West Nile Virus?

The Delaware Department of Natural Resources and Environmental Control's Mosquito Control Section has prepared this brochure to inform Delaware residents about West Nile Virus. The public is encouraged to take personal precaution measures and to reduce mosquito breeding habitat around their yards, neighborhoods, and communities. This proactive approach will protect public health and minimize the need for more aggressive mosquito control measures. Delaware Mosquito Control uses surveillance tools including sentinel chicken flocks located throughout the state that are sampled on a regular basis for West Nile during the mosquito season.

**West Nile Virus (WNV)** is a mosquito-borne virus commonly found in humans, birds, and other vertebrates in Africa (first discovery of virus), Eastern Europe, West Asia, and the Middle East. The virus, which can lead to an infection in the brain called encephalitis, was first identified in the United States in New York City in 1999. The virus was first detected in Delaware in 2000.

### What are the symptoms of WNV?

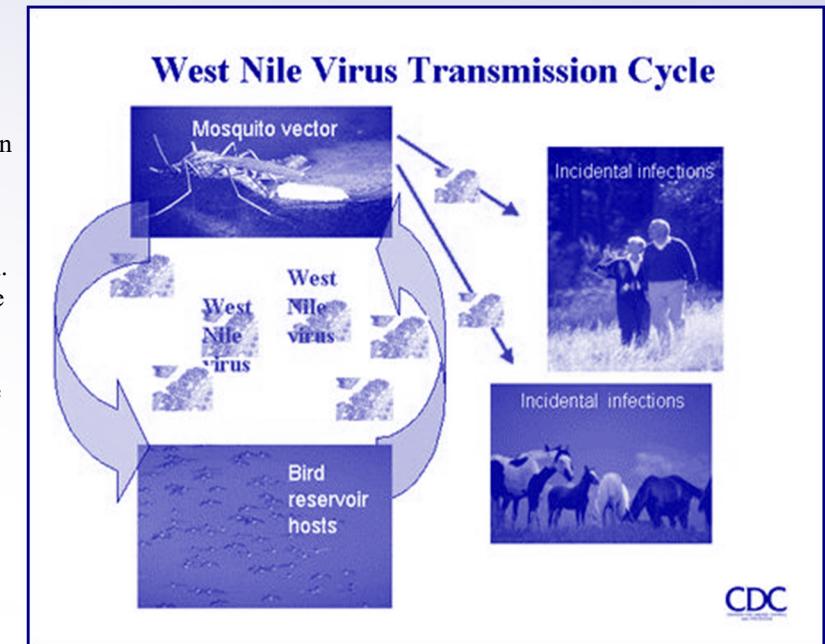
People contract WNV from the bite of an infected mosquito. While most people do not display symptoms, those that do usually only develop mild symptoms including fever, headache and body aches, occasionally with a skin rash and swollen lymph glands 3 to 14 days after being bitten by an infected mosquito. More severe infections are marked by high fever, neck stiffness, tremors, muscle weakness, disorientation, and in extreme cases, death. Symptoms should be evaluated by a health care provider.

### How likely am I to get sick?

The chances of becoming severely ill from any one mosquito bite are ***extremely small***. Even in areas where mosquitoes carry the virus, very few mosquitoes—much less than 1%—are infected. Less than 1% of people who get bitten and become infected will become severely ill.

### The Transmission Cycle

West Nile virus mostly cycles between birds and mosquitoes. The virus reaches humans and other mammals when a mosquito that has fed on an infected bird later feeds on a mammal. Horses are much more sensitive to the virus than other animals. The virus levels that develop in humans and horses are too low to, in turn, pass the virus to another mosquito.



## Preventing Mosquito Breeding

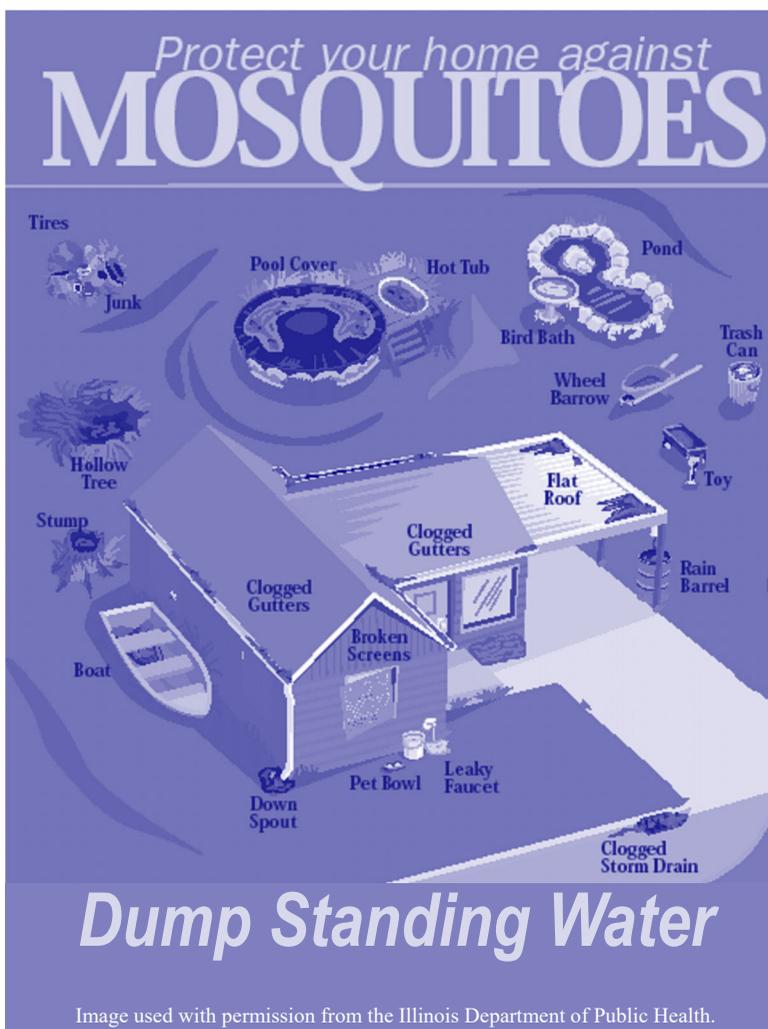
Although the chances of an individual contracting encephalitis are small, there are some simple precautions that you and your family can take to reduce those chances even further.

### Where can mosquitoes be found around the home?

**Adult mosquitoes** rest in tall grass, weeds, and brush near homes and other buildings.

**Mosquito Larvae** can develop in standing water found around the home in items such as:

- cans, buckets, discarded tires, and other containers that hold stagnant water
- untended swimming pools, birdbaths, clogged rain gutters, plastic wading pools, boats, and plastic tarps
- storm drains and some types of catch basins



### What can I do to reduce mosquito development near my home?

Mosquitoes can multiply whenever water stands for more than five days.

### Eliminating even small amounts of standing water will reduce mosquito populations.

**Dispose** of empty cans, buckets, flowerpots, old tires, trash cans, etc.

**Clear** clogged rain gutters.

**Change** water in birdbaths once a week.

**Stock** ornamental ponds with fish.

**Empty** children's wading pools when not in use.

**Drain** swimming pool covers.

**Clean** and chlorinate swimming pools and hot tubs.

**Drill** holes in the bottoms of recycling containers that are kept outdoors.

**Use** landscaping to eliminate stagnant water that collects on properties.

**Cut** tall grass or weeds near the home or around the yard.

**Clean** excess vegetation and debris from ditches and the edges of ponds.

### What can I do to avoid being bitten?

## DEET Guidelines

**DEET** — the chemical N,N—diethyl-meta-toluamide— is an insect repellent that can reduce the risk of mosquito bites, but must be used with caution. Products containing DEET have been occasionally associated with some health problems. Be aware of the possible adverse health effects when making decisions concerning DEET. Use as little as needed for your situation, and remember that frequent application and saturation may not be necessary. The Delaware Division of Public Health recommends the following precautions when using insect repellents containing DEET:

- *Read all instructions on label before applying.*
- *Store out of reach of children.*
- *Apply repellent sparingly.*
- *Do NOT allow young children to apply DEET themselves. Special caution should be used when applying DEET products to children.*
- *Do NOT apply DEET directly to the face. Spray hands and then rub on face avoiding eyes and mouth.*
- *Do NOT apply DEET to cuts, wounds, or irritated skin.*
- *Do NOT apply DEET products in enclosed areas.*
- *Wash all treated areas of skin with soap and warm water after returning indoors. DEET can be applied to clothing, but may damage some synthetic fabrics and plastics. Wash treated clothing before wearing again.*
- *If applying DEET, use products with less than 25% DEET for adults and less than 10% DEET for children.*
- *If you suspect a DEET induced toxic reaction, wash DEET off and call your health care provider or local poison control center immediately.*



Protect yourself from mosquitoes.

## Personal Protection

- Check and repair all screens and screen doors.
- Minimize outdoor activities between dusk and dawn, when mosquitoes are most active.
- Avoid common mosquito habitats, such as areas with heavy underbrush or standing water.
- When outdoors, wear light-colored clothing that covers the skin, such as long-sleeved shirts and pants.
- Consider spraying clothing with repellents containing permethrin or DEET since mosquitoes may bite through thin clothing. Always follow the label directions regarding use of specific products.

### Other important WNV facts:

- WNV is NOT transmitted from person to person via direct contact. Though uncommon, WNV has been transmitted through blood transfusion, organ donation, transplacentally, breast feeding, as well as occupationally (mainly laboratory workers). Blood donations are now screened for WNV.
- There has been no evidence of animal-to-human transmission of WNV. However, individuals should avoid handling any dead animal with bare hands.
- People over the age of fifty are at greater risk to develop severe symptoms if they become infected with WNV.

