

Mosquitoes and West Nile Virus In Delaware



Protecting you and your family from WNV

Introduction: What is West Nile Virus?

The Delaware Emergency Management Agency, Delaware Division of Public Health, Delaware Department of Natural Resources and Environmental Control, and the Delaware Department of Agriculture have prepared this site to inform you about West Nile Virus in an effort to reduce the number of mosquitoes in your yard, neighborhood and community, for the purpose of reducing the need for more aggressive mosquito control measures.

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

What are the symptoms of WNV?

People become infected with WNV from the bite of an infected mosquito. After 3 to 15 days, most people develop mild symptoms including fever, headache and body aches, occasionally with skin rash and swollen lymph glands. More severe infections are marked by high fever, neck stiffness, tremors, muscle weakness, disorientation, and other signs of increasing illness. Symptoms should be evaluated by your 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. If the mosquito is infected, less than 1% of people who get bitten and become infected will become severely ill.

Prevention and Protection

Although the chances of an individual contracting encephalitis are small, there are some simple measures that you and your family can take to reduce those chances even further. Here is what you can do and what you need to know.

Where do mosquitoes live and breed ?

Mosquitoes live in tall grass, weeds, and brush near inhabited locations such as homes and other buildings.

- Mosquitoes breed in stagnant, standing fresh water oftentimes found around the home.
- In tin cans, buckets, discarded tires and other artificial containers that hold stagnant water.
- In untended pools, birdbaths, clogged rain gutters, and plastic wading pools that hold stagnant water.
- In storm drains and catch basins in urban areas.
- In septic seepage and other foul water sources above or below ground level.

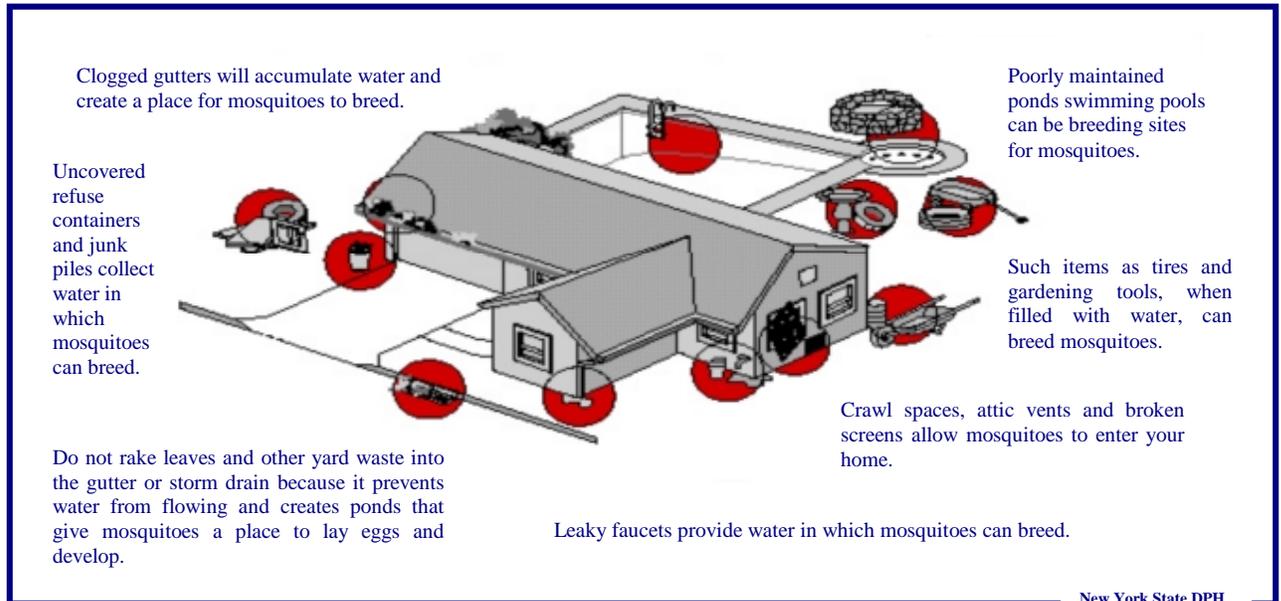
What can I do to reduce mosquito breeding near my house?

Whenever water stands for four to seven days, mosquitoes can multiply. **Eliminating even small amounts of standing water eliminates mosquitoes.**

- **Dispose** of empty cans, buckets, flowerpots, old tires, trashcans, etc.
- **Clear** clogged roof gutters.
- **Change** water in bird baths and fountains at least once a week.
- **Flush** sump pump pits weekly.
- **Empty** plastic swimming pools when not in use.
- **Drain** swimming pool covers.
- **Clean** and chlorinate swimming pools, outdoor saunas and hot tubs.
- **Drill** holes in the bottoms of recycling containers that are kept outdoors.
- **Use** landscaping to eliminate stagnant water that collects on your property.
- **Clip** tall grass or weeds standing near the house or where people use the yard. Clean vegetation and debris from the edges of ponds.

How many mosquito breeding sites can you find?

Mosquitoes will breed in any untreated water.



What Can I do to avoid being bitten?

- Check and repair all screens and screen doors.
- Minimize outdoor activities between sunset and sunrise when mosquitoes are most active.
- Avoid mosquito habitats such as areas with heavy underbrush or standing water.
- When outdoors, wear 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. Follow the DEET guidelines included on this site.

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. Be aware of the possible adverse health effects when making decisions about DEET. Products containing DEET have been occasionally associated with some health problems. Use as little as you need 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 hands or face.
- **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 using a product containing DEET, use products with **less than 25% DEET** for adults and **less than 10% DEET** for children.
- **If you suspect DEET induced toxic reaction, wash off DEET and call your health care provider or local poison control center immediately.**

Other important West Nile Virus facts:

- It is not important to limit outdoor activity unless local officials advise otherwise.
- WNV is NOT transmitted from person to person.
- There is no evidence of animal-to-person transmission of WNV.
- There is no evidence that a person can get WNV directly from birds. However, individuals should avoid bare-handed contact with any dead animal.



