

Mosquitoes and West Nile Virus - Fight the Bite

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In the fall of 1999, West Nile virus, a mosquito-borne infection that can cause serious illness, and in some cases, death, was first found in New York State. Although the chances of a person becoming ill are small, there are some simple steps you can take to reduce them even further. The New York State Health Department, along with other state agencies, local health departments, colleges and environmental groups, has prepared this brochure to give you the information you need to reduce the number of mosquitoes in your yard, neighborhood and community; and to help reduce the need for more aggressive mosquito control, such as the aerial spraying of insecticides.

Mosquito Facts

Mosquitoes are small flying insects that feed on human and animal blood or plant juices. Only female mosquitoes bite to get a blood meal for their growing eggs. Mosquitoes are generally considered a nuisance pest, but occasionally can transmit disease. There are about 70 different species of mosquitoes in New York State. While most do not transmit West Nile virus, several mosquito species have been associated with West Nile virus in New York State.

Where They Live and Breed

Many types of mosquitoes lay their eggs in standing water around the home. Weeds, tall grass and shrubbery provide an outdoor home for adult mosquitoes, which also may enter houses through unscreened windows or doors, or broken screens. Many mosquitoes will breed in containers that hold water, such as flower pots or discarded tires.

West Nile Virus and Your Health

Mild cases of West Nile infection may include a slight fever and head and body aches. Severe infections may also include muscle weakness and may progress to encephalitis or meningitis. Symptoms usually occur three to 14 days after exposure. There is no specific treatment for viral infections, other than to treat the symptoms and provide supportive care. Those who are at highest risk of becoming seriously ill from West Nile infection are

persons who are over the age of 50. Healthy children and adults are at low risk for serious illness from West Nile virus.

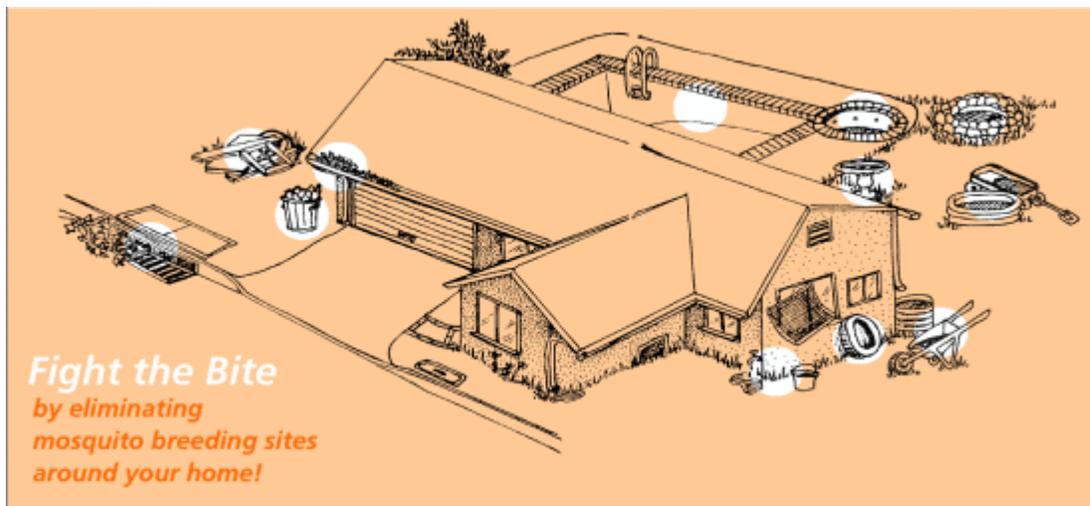
When Mosquitoes Are Most Active

Some mosquitoes are most active between dusk and dawn when the air is calm, and that is when the females are most likely to bite. However, others will feed at any time of day.

Protecting Your Home

Mosquitoes can develop in any standing water that lasts more than 4 days. To reduce the mosquito population around your home and property, reduce or eliminate all standing water and debris:

- Dispose of tin cans, plastic containers, ceramic pots or similar waterholding containers.
- Dispose of used tires -- call your local landfill or Department of Public Works to find out how to dispose of them properly.
- Drill holes in the bottoms of recycling containers that are kept outdoors.
- Make sure roof gutters drain properly, and clean clogged gutters in the spring and fall.
- Turn over plastic wading pools and wheelbarrows when not in use.
- Change the water in bird baths twice a week.
- Clean vegetation and debris from the edges of ponds.
- Clean and chlorinate swimming pools, outdoor saunas and hot tubs.
- Drain water from pool covers.
- Use landscaping to eliminate stagnant water that collects on your property.



Protecting Yourself

Most mosquitoes do not transmit disease. Unless you are at high risk, it is not necessary to limit any outdoor activities. Those who are at highest risk of becoming seriously ill from West Nile infection, are adults over 50. To help reduce the number of mosquitoes around your property, eliminate standing water in your yard, make sure all windows and doors have screens, and that all screens are in good repair. If West Nile virus is found in your area, persons who are at highest risk should avoid mosquito bites:

- Wear shoes and socks, long pants and a long-sleeved shirt when outdoors for long periods of time, or when mosquitoes are more active.
- Consider the use of mosquito repellent, according to directions, when it is necessary to be outdoors.

Proper Use of Repellents

Repellents can be effective at reducing bites from mosquitoes that can transmit disease. But their use is not without risk of health effects, especially if repellents are applied in large amounts or improperly. Repellents commonly available to consumers contain the active ingredients DEET (N, N-diethyl-m-toluamide), permethrin, or botanical oils. DEET products have been widely used for many years, but have occasionally been associated with health effects. Skin reactions (particularly at DEET concentrations of 50 percent and above) and eye irritation are the most frequently reported health problems. Products containing permethrin are for use on clothing only, not on skin. Permethrin repellents can cause eye irritation. Insect repellents containing botanical oils, such as oil of geranium, cedar, lemongrass, soy or citronella are also available, but there is limited information on their effectiveness and toxicity. If you decide to use a repellent, use only what and how much you need for your situation. In addition:

- Be sure to follow label directions.
- Use repellents only in small amounts, avoiding unnecessary repeat application. Try to reduce the use of repellents by dressing in long sleeves and pants tucked into socks or boots.
- Children may be at greater risk for reactions to repellents, in part, because their exposure may be greater. Do not apply repellents directly to children. Apply to your own hands and then put it on the child.
- Do not apply near eyes, nose or mouth and use sparingly around ears. Do not apply to the hands of small children.
- After returning indoors, wash treated skin with soap and water.