

HOW TO CONTROL MOSQUITOES AROUND THE HOME

Reduce the number of mosquitoes around the home by using the following suggestions to limit the amount of standing water available for mosquito breeding.

1. Use landscaping to eliminate water that stands on your property more than five days.
2. Keep ditches and streams adjoining your property free of grass clippings, garbage or other debris which obstructs the natural flow of water.
3. Dispose or routinely empty containers that hold water. Special emphasis should be put on discarded tires where water can easily accumulate, making them ideal for mosquito breeding.
4. Clean roof gutters that are prone to collect leaf litter or use gutter guards to prevent accumulation of debris.
5. Store boats upside down or cover them to prevent accumulation of water.
6. Make sure swimming pools are properly chlorinated and pool covers are tight and well drained. Drain children's wading pools when not in use or change the water frequently.
7. Aerate ornamental ponds or stock them with fish, such as goldfish, that feed on mosquito larvae.
8. Change water in bird baths and flush sump pits weekly.
9. Fill in tree holes with cement or sand.

FOR MORE INFORMATION

Visit the Atlantic County Web site at: www.aclink.org/publicworks/mosquito for information on mosquitoes and their control, as well as updated adult mosquito spraying information and schedules. You can also call the county "Mosquito Control and West Nile Virus Information Line" at **1-877-64-facts** for adult mosquito spraying information and West Nile Virus health information. For health related inquiries, call the Division of Public Health at 645-5971.

For Additional Information on the Web:
www.aclink.org/publichealth
www.state.nj.us/dep/mosquito
www.state.nj.us/health
www.state.nj.us/agriculture
www.rci.rutgers.edu/~insects/njmos.htm

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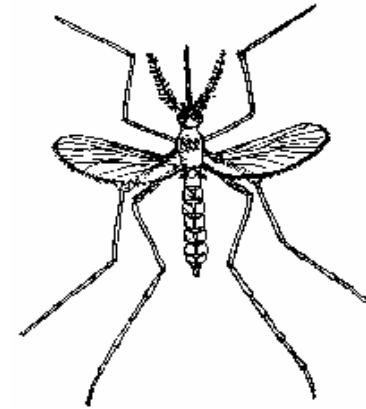
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MOSQUITO CONTROL IN AND AROUND THE HOUSE



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Atlantic County's mosquito control program, first organized in 1912, utilizes Integrated Pest Management (IPM), based on a comprehensive surveillance program.

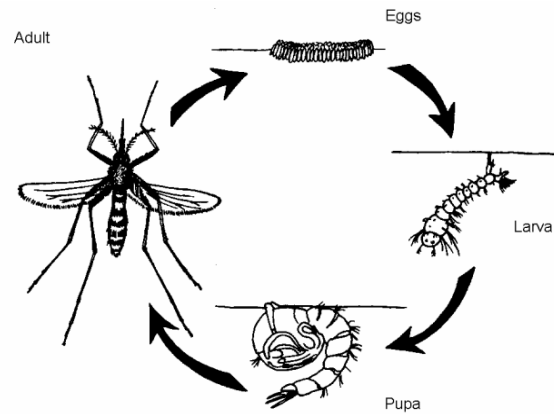
The focus of mosquito control is mosquito larva. During this aquatic stage of the mosquito life cycle, it is more concentrated and accessible than as an adult. Larval control involves applying pesticides to target mosquito larvae at their source (in water) based upon regular inspections of known breeding areas. Citizen reports of large concentrations of mosquitoes are also an important surveillance tool that often help us identify previously unknown breeding areas.

Water management targets mosquito larvae by physically altering breeding sites with the removal of standing water, thereby preventing the larvae from completing their life cycle. Cleaning ditches to promote flow, eliminating surface water or removing a scrap tire for recycling are also effective water management tools for mosquito control.

Biological mosquito control is accomplished by stocking "Mosquito Fish" (*Gambusia affinis*) and other mosquito predacious fish in appropriate mosquito breeding areas.

Mosquito populations and mosquito virus activity are closely monitored throughout the county. Occasionally, adult mosquito control becomes necessary due to excessively high populations or the presence of disease. Adult mosquito control is accomplished by applying pesticides at ultra low volumes (very fine droplets) using truck mounted power equipment or aircraft for widespread populations.

THE MOSQUITO LIFE CYCLE



Eggs: Mosquitoes lay eggs on the surface of standing water or on soil that periodically floods. The eggs hatch in water in just a few days, but can lie dormant in dry conditions for long periods.

Larva: Frequently called wigglers, this is a feeding and growing stage that involves four molts over 3-14 days, when the pre-adult mosquito enters the pupal stage.

Pupa: Called tumblers, the pupal stage is a resting non-feeding stage after which the newly formed adult emerges.

Adult: During this stage, the mosquito is non-aquatic and now able to fly. The adult emerges and after a brief period of rest, so it's exoskeleton can harden, alights as an active flyer, looking for a meal. Only the female mosquitoes are able to bite. They bite to get blood needed to make eggs.

HOW TO OUTSMART MOSQUITOES

1. Wear long-sleeved shirts, long pants and socks when you are outdoors, to limit contact with mosquitoes.
2. Use of repellants can also give some relief, but be sure to read the product label carefully. Some may present a health hazard if misapplied.
3. Check and repair screens in windows and doors to prevent entry by adult mosquitoes

DON'T GET MAD. GET EVEN!

Mosquitoes are responsible for causing more human suffering than any other insect. Through their blood feeding behavior, mosquitoes can act as a vector or transmitter of disease to humans and animals. Only female mosquitoes bite, however, because they require a blood meal to develop their eggs for future generations. Depending on the species, mosquitoes can transmit diseases like malaria, yellow fever, dog heartworm, and encephalitis (such as Eastern Equine Encephalitis and West Nile Virus).

Mosquitoes are relatively fragile insects with an adult life span of approximately two weeks. The vast majority meet a violent end by serving as food for birds, dragonflies and spiders, or are killed by the effects of wind, rain, or drought. Mosquitoes, like most insects, are cold blooded creatures. As a result, mosquitoes function best at 80°F, become lethargic at 60°F and cannot function below 50°F. Adult mosquitoes become inactive with the onset of cool weather and enter hibernation to survive through the winter. Some types of mosquitoes have winter hardy eggs and hibernate as embryos in eggs laid by the last generation of females in late summer. Few survive over winter in the larval stage.

Although outbreaks of mosquito-borne disease are relatively rare in New Jersey, there have been incidents of Eastern Equine Encephalitis, St. Louis Encephalitis, and more recently, West Nile Virus. West Nile Virus was first recognized in 1999 in New York City. Since then, cases have continually been reported throughout the country.