

Mosquito Basics

What is the life cycle of mosquitoes?

Mosquitoes have four stages of development: egg, larva, pupa and adult. They spend their larval and pupal stages in water.

How long does it take a mosquito to emerge from an egg?

It takes a mosquito between 7-10 days to emerge as an adult from an egg.

Why do mosquitoes bite?

Mosquitoes require blood to develop eggs, and bite solely for reproductive reasons. This means that only female mosquitoes bite. They rely on sugar from plant nectars, fruit juices, and other liquids as their main source of energy to survive.

Preventing Mosquito Bites

Are repellents safe? Which work best?

Some insect repellents are extremely effective at preventing mosquito bites and, when used correctly, do not pose a health concern. Repellents containing DEET, Picaridin or IR3535 have been shown to be the most effective. Some examples of repellents commercially available are Off, Cutter, and Skin So Soft.

Wear protective clothing.

Cover exposed skin by wearing long sleeves, socks and pants. Repellents such as Permethrin are available to treat clothing, but be sure to follow all labeled directions for use.

Avoiding mosquitoes.

While some mosquitoes may bite during the day, most are active between dusk and dawn. Avoiding outdoor activities in the 2-3 hours around sunset and sunrise may help avoid mosquitoes. During the day, mosquitoes rest in shaded humid areas, and will feed if you are in their habitat.



Essex County has a comprehensive, 12-month Water Management Program to control the mosquito population. An important part of that program is working with the public to eliminate conditions where mosquitoes breed. With your help, we can enhance our quality of life by reducing this nuisance.

Joseph N. DiVincenzo, Jr.
Essex County Executive

Contact information

Who should I call with mosquito questions?

Call our service request line at 973 239 3366 x 2480 with any mosquito questions. Generally, messages are returned that day, and we make every effort to have an inspector respond to your request as soon as possible.

Where can I get more information about mosquito control?

The Essex County website <http://www.essexcountynj.org> contains a page with more detailed mosquito control information, or you can contact us directly at 973 239 3366 x 2480 with any questions. Or E-mail Eric Williges at ewilliges@essexcountynj.org

Essex County

Department Of Public Works

Office of Environmental Affairs

**Mosquito Control
Frequently Asked Questions**



Joseph N. DiVincenzo, Jr.
Essex County Executive
And the Board of Chosen Freeholders

Putting Essex County First



How does the County treat for mosquitoes

Who is a mosquito inspector?

Essex County's mosquito inspectors are full-time employees, certified by the NJ Department of Environmental Protection to apply pesticides to control mosquitoes. They are trained to recognize mosquito habitats and take the most appropriate action to reduce local populations, which may include removing sources or using other methods besides chemical control.

Do you work in my area?

Yes, we inspect and respond to requests for service in all 22 municipalities in Essex County.

What is a larvicide? Why do I see a helicopter "spraying"?

A larvicide, is a product that kills larval mosquitoes before they can become adults and bite. Essex County treats sections of the floodplains adjacent to the Passaic River from the air because they are too large to effectively control from the ground.

How does the County treat catch basins?

Catch basins are a large source of mosquito populations. Essex County Mosquito Control has a specific program to treat these sources, using inspectors to survey every basin along a street and treat as necessary.

Why didn't you spray my yard?

Larvicides target mosquito larvae that are already present, and are designed to break down in the environment quickly. We do not apply larvicides without mosquitoes present. Mosquito inspectors always inspect an area first, and will make the appropriate treatment as necessary.

What is an adulticide?

An adulticide is a product used to control adult mosquitoes. Like larvicides, these are only applied when mosquitoes are present.

How are adulticides applied?

Mosquito adulticides are "sprayed" using truck-mounted equipment during the early morning and dusk hours, when human activity outside is lowest and mosquito activity is near its peak. Spraying yard to yard is not an effective way to control for adult mosquitoes, so we focus on neighborhood level operations. Our sprays travel approximately 300 feet from the truck and cover large areas without driving specifically through a yard.

What is a ULV spray?

A ULV, or Ultra Low Volume, spray is the most current technology used to treat for adult mosquitoes. When we say we "sprayed" or "fogged" for adults mosquitoes, we are referring to a ULV spray.

Why didn't you spray my street?

Our spray operations target mosquitoes where they are most heavily concentrated. By treating the entire neighborhood and surrounding areas, we are controlling the mosquitoes affecting you. Sometimes this is most efficiently done by spraying wooded areas behind a street, or down a side street instead of house to house.

I found a dead bird, what should I do?

Contact your local health department. They are responsible for testing birds for West Nile Virus and other communicable diseases, and will have more information for you.



What Can Homeowners Do?

Dump all standing water from containers around the home. This includes children's pools, flower pots, tarps, garbage cans, and anything else that may hold water.

Clean bird baths once a week.

Eliminate standing water or low areas in your yard.

Clean the gutters on your house.

Use an aerator or fish in any ornamental ponds.

Drill holes in the bottom of recycling containers that are left outside. Drainage holes that are located on the sides collect enough water for mosquitoes to breed.

Remove any discarded tires from your property and recycle them.

Clean and chlorinate swimming pools, even if they are not being used. A swimming pool left unattended can cause a mosquito problem throughout the whole neighborhood.

Do commercial mosquito traps work?

Most commercial mosquito traps use an attractant to lure mosquitoes to them. This may actually attract more mosquitoes to your yard than the trap can catch. While traps are capable of collecting large numbers of mosquitoes, it may not reduce overall populations around your home.