

**The primary goal of the City of Naperville mosquito abatement program is to control populations of nuisance and disease carrying mosquitoes by using environmentally friendly methods.**

To accomplish this goal the city employs several strategies, which involve source reduction, larviciding, monitoring, and spraying.

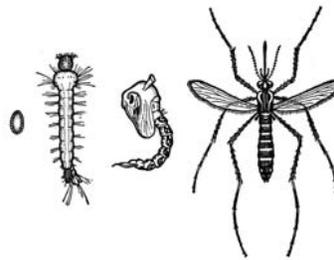


**The Mosquitoes**

There are 10 different species of mosquito in Naperville which generally fall into two main categories; nuisance and disease carrying mosquitoes. The most abundant are nuisance mosquitoes that breed in clean floodwater. They are fierce biters and are usually present in large numbers. Disease carrying mosquitoes breed in polluted water and artificial containers. They can carry West Nile Virus, St. Louis encephalitis, dog heartworm and other diseases.

All mosquitoes go through four stages of development, which usually takes five to 14 days. These stages include egg, larvae, pupae, and adult. Mosquito eggs may lie dormant for up to seven years if conditions are not favorable to their development. Once favorable conditions exist, the eggs will hatch

into larvae. Larvae live for a few days in many different aquatic environments and feed on organic matter. The larvae develop into a comma-shaped pupae then metamorphosis into adults. Adult mosquitoes feed on plant nectar and help pollinate plants. Only the female mosquitoes take blood meals to provide protein for the development of their eggs.



**City Control Methods**

Source reduction is the practice of reducing mosquito populations by permanently eliminating breeding sites. City crews inspect for and remove old tires, water filled containers, and fill in tire ruts when found on city property.

Larviciding targets the mosquito in the larval stage and is the most ecologically sound and effective means of control. Two main chemicals used are methoprene, and Bacillus thuringiensis israelensis (Bti). Methoprene is an insect growth inhibitor, which prevents mosquitoes from becoming adults.

Methoprene briquettes are used by city crews to treat all catch basins twice a season. Bti is used to treat ponds and marsh areas. Bti is a biological larvicide formulated from an extract of bacterial cultures that produce a toxin specific to mosquitoes.

Monitoring is done with Center for Disease Control (CDC) light traps and gravid traps. The traps are used to monitor the effectiveness of our larval control, and to provide an early warning when adult populations are rising. The number of mosquitoes caught in the traps indicate when spraying is needed in a particular area.

Spraying is the method most familiar to the public. Although the majority of our program consists of larviciding, control of adult mosquitoes is sometimes necessary. The city uses the safest chemicals available and sprays only on an as-needed basis. The chemicals used at ultra low volumes are effective in killing mosquitoes but not harmful to humans or the environment.

**Protection from Mosquito Bites**

Even the most proactive mosquito control programs cannot totally eliminate all mosquitoes. Protect yourself from mosquito bites by wearing appropriate clothing and use insect repellent products containing 25% to 35% concentration of DEET for adults; use lower concentrations on children. Avoid going into mosquito-infested areas during dawn and dusk and keep window screens repaired.

## What You Can Do To Help

Reducing the amount of standing water around your home will drastically reduce the number of mosquitoes. Any container holding water for more than four days is a potential breeding site that can produce thousands of mosquitoes. Here are several things residents can do:

- Remove old tires, tin cans, buckets, drums, bottles or any other water holding container.
- Change water in birdbaths once a week.
- Aerate ornamental ponds or stock with larvae eating fish.
- Keep roof gutters clear of debris.
- Eliminate ruts and puddles in your yard.
- Keep grass cut short and shrubbery well trimmed around your home to eliminate mosquito hiding places.



**Remember, stagnant water is the enemy!**

## Dead Birds

Birds can be carriers of disease. Dispose of dead birds by using rubber gloves or a shovel to pick up, then double bag and dispose in your normal trash. If you find a dead bird in the street please contact the Department of Public Works at (630) 420-6095.

**Please report any possible breeding sites such as discarded tires, buckets, and stagnant water to the city.**

**With your help, Naperville can keep the mosquito population under control.**



## For More Information

Contact the City of Naperville  
Department of Public Works at:  
(630) 420-6095

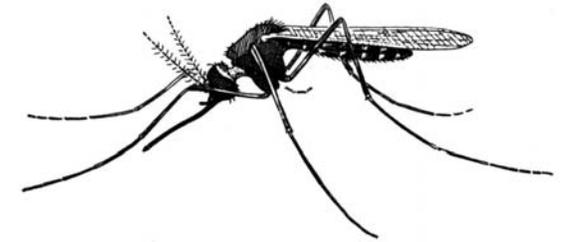
<http://www.naperville.il.us>

<http://www.idph.state.il.us/home.htm>

<http://www.cdc.gov/ncidod/dvbid/westnile/>



# Naperville



## Mosquito Abatement Program

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