



Prevention & Control of Mosquitos

The mosquito could be considered one of the most dangerous creatures on earth. Mosquitos and the diseases they spread have been responsible for killing more people than all the wars in history. One of the diseases that has affected the United States recently is the West Nile virus, and now there is great concern about the Zika virus showing up in our country.

The first step in controlling mosquitos is source reduction or eliminating places for them to develop, don't give them a place to lay eggs. This can be done by eliminating places where water gathers or stands including poorly maintained swimming pools, abandoned tires, bird baths, buckets or other debris in which water accumulates. Each of us have an obligation to make sure our properties are free of mosquito-breeding sites. I would like to encourage the public to notify the street department of problem areas.

As temperatures warm and citizens start spring cleanup to prepare for mowing and gardening season and enjoy other outdoor activities please take time to inspect properties and eliminate prime habitat that mosquitos need to breed reproduce. If citizens are aware of areas of concern in public right-of-ways they should report them to the Lincoln Street Department. This is the most effective way to control mosquito populations. Most people associate spraying, fogging, or adulticiding for mosquitos as the most effective way to control these insects but actually it is the least effective and the most expensive operation. Eliminating habitat and treating breeding areas such as standing water is the most effective.

The Lincoln Street Department is responsible for mosquito control in the city, they use three different methods to do so.

- Source reduction: Elimination of environmental conditions that promote mosquito reproduction.
- Larviciding: Applying pesticides to water where mosquito's larvae develop.
- Adulticiding: The application of pesticide droplets by fogging to control adult mosquitos.

One thing to note, larviciding is a treatment that selectively targets mosquito larvae. Adulticiding is a broad spectrum application that can kill beneficial insects as well.

Street department staff are licensed through the Illinois Department of Agriculture to conduct operations and attend annual training seminars.

The Following are recommendations from the Illinois Department of Public Health

What is the best way to reduce populations of mosquitoes?

The first and best defense against these pests and the illnesses they may carry is to eliminate the places where they breed. Here are a few suggestions:

- Remove or empty water in old tires, tin cans, buckets, drums, bottles or other places where mosquitoes might breed. Be sure to check clogged gutters and flat roofs that may have poor drainage. Make sure

cisterns, cesspools, septic tanks, fire barrels, rain barrels and trash containers are covered tightly with a lid or with 16-mesh screen.

- Empty plastic wading pools at least once a week and store indoors when not in use. Unused swimming pools should be covered or drained during the mosquito season. (Note: If you choose to drain your pool, be sure the hydrostatic relief valve is open in order to keep it from floating out of the ground if the water table rises.)
- Change the water in bird baths and plant pots or drip trays at least once each week.
- Store boats covered or upside down, or remove rainwater weekly.
- Empty your pet's water bowl daily.
- Level the ground around your home so water can run off and not collect in low spots. Fill in holes or depressions near your home that accumulate water.
- Fill in tree rot holes and hollow stumps that hold water.
- If you have an ornamental water garden, stock it with mosquito-eating fish (e.g., minnows, "mosquito fish," or goldfish). They eat mosquito larvae.
- Keep weeds and tall grass cut short; adult mosquitoes look for these shady places to rest during the hot daylight hours.
- Use a flyswatter or household spray to kill mosquitoes, flies or other insects that get into buildings. Spray shrubbery and high weeds to kill adult insects. (Check the insecticide label to make the sure the spray will not damage flowers or ornamental plants.)
- Small impoundments of water can be treated for mosquito larvae with "Bti," a bacterial insecticide. Many hardware stores carry doughnut-shaped Bti briquets (Mosquito Dunks R) for this purpose. Be sure to follow the insecticide label directions exactly.
- Some mosquito control methods are not very effective. Bug zappers are not effective in controlling biting mosquitoes. Various birds and bats will eat mosquitoes, but there is little scientific evidence that this reduces mosquitoes around homes.
- Community-wide mosquito abatement efforts can be quite effective if they are conducted as part of an integrated pest management program. This includes monitoring and draining or treating areas where mosquitoes breed — such as street catch basins, occasionally flooded marshes, river backwater areas, swamps and other low-lying areas.

How can people protect themselves from mosquito bites?

- Avoid places and times when mosquitoes bite. Generally, the peak biting periods occur just before and after sunset and again just before dawn. Each species, however, has its own peak period of biting. Tree-hole and Asian tiger mosquitoes, for example, feed during daylight hours in or near shaded or wooded areas.
- Be sure door and window screens are tight-fitting and in good repair.
- Wear appropriate clothing. Long-sleeved tops and long pants made of tightly woven materials keep mosquitoes away from the skin. Be sure, too, that your clothing is light colored. Keep trouser legs tucked into boots or socks.
- Use mosquito netting when sleeping outdoors or in an unscreened structure and to protect small babies any time.
- When it is necessary to be outdoors, apply insect repellent as indicated on the repellent label. The more DEET a product contains, the longer the repellent can protect against mosquito bites. However, concentrations higher than 50 percent do not increase the length of protection. For most situations, 10 percent to 25 percent DEET is adequate. Apply repellents to clothes whenever possible; apply sparingly to exposed skin if label permits. Consult a physician before using repellents on young children.