Sarasota County
scgov.net | 941.861.5000 |

Mosquito Bites

Spraying for Mosquitoes

Questions and answers about Sarasota County Mosquito Management's nighttime spraying program for adult mosquitoes:

Q **When will my area be sprayed?**

A Florida statute forbids spraying for adult mosquitoes on a set schedule. The need to spray an area must first be documented according to the state's criteria.

These criteria call for a measured rise in mosquito numbers or a certain number of mosquitoes found in mosquito traps. Service requests from residents are also considered in determining which areas will be sprayed.

The purpose of these regulations is to ensure that mosquito populations are reduced to tolerable levels. Another reason for the regulations is to preserve our environmental quality and slow down mosquito resistance to pesticides.

Q **How fast can the trucks/aircraft fly and travel?**

A While spraying, the trucks travel at a speed of up to 20mph. The aircraft flies at 110 mph from an altitude of about 250 feet. Computers inside the trucks and aircraft record their speed and chemical dispersal rate. Each has a switch to turn the spray on and off. Trucks may travel at higher speeds when the spray is turned off.

Q **What insecticides are used?**

A The active ingredient sprayed by our trucks is permethrin, a synthetic form of the natural insecticide from the chrysanthemum flower. This insecticide is also used in household insect sprays and pet dips.

The aircraft sprays naled, a pesticide in the organo-phosphate family. The aircraft disperses ½ ounce of liquid per acre in a mist finer than is sprayed from a perfume atomizer. The helicopter spreads a variety of larvicides during the day. One commonly deployed larvicide is *Bti* (*Bacillus thuringiensis israelensis*).

Both permethrin and naled target only mosquito-sized insects that are out flying. Both insecticides are non-residual. Air and truck spraying for adult mosquitoes is done at night when beneficial insects are not active and exposed. Occasionally, spot treatments may be done during the day to control day biting mosquitoes.

What You Can Do

- **Dump, dispose of, or flush water filled containers every 3 days to eliminate mosquito larvae.**
- **Keep ditches clear of yard waste and trash.**

Sarasota County
Mosquito Management Services
☎ **861-5000**
www.scgov.net

Sarasota County
scgov.net | 941.861.5000 |

Mosquito Bites

Criteria for Mosquito Control

Sarasota County Mosquito Management Services applies larval control to water where mosquito larvae are present. Decisions for spraying for adult mosquitoes are made using a variety of measurements.

Daytime Larval Control

The most effective way to control mosquitoes is by reducing their larval populations. Larval surveillance in the county identifies mosquito larval habitats. A larval habitat is a (usually stagnant) water body such as clogged ditches, flooded fields and marshes where larvae develop. Water bodies are only treated when mosquito larvae are present. Mosquito larvae usually are not found in healthy lakes, ponds, rivers, or flowing drainage canals.

Daytime Adult Control

Daytime spraying is confined to areas of limited size called "spot treatments." The decision to spray is made if overnight trap counts or human landing rates of female mosquitoes are sufficient in number. These spray thresholds are mandated by Florida Administrative Code 5E-13. These criterion are used to help ensure that chemicals are applied when they would be most effective and reduce environmental concerns. Unfavorable environmental conditions may prevent or delay applications. These conditions can reduce the adulticides' effectiveness and cause drift conditions.

Nighttime Adult Control

Sarasota County Mosquito Management Services uses truck ULV (ultra low volume) and fixed wing aircraft to spray for adult mosquitoes. Spraying is done at night to limit the effects on beneficial insects that are active during the day.

ULV Trucks

Adult mosquito problems in residential neighborhoods in Sarasota County are treated primarily by ULV trucks. The truck speed is generally between 10 - 20 mph. Faster speeds occur when a driver is finished with a site or moving to a new area.

Aircraft

The fixed winged aircraft missions are generally in areas east of I-75 for safety and operational concerns. Spray missions are planned using GIS (Global Imaging Satellite) tracking techniques to ensure an effective area of coverage. The plane flies fairly low (ca. 150-250ft.) and fast (ca.110-200 mph).

All nighttime adulticide applications can be postponed or delayed by adverse environmental conditions.

What You Can Do

- Dump, flush or discard all rain-filled containers in your yard every three days.
- Saving rainwater? Fit screen wire over the opening.
- Keep ditches and swales clear of yard debris.

Sarasota County
Mosquito Management Services
☎ **861-5000**
www.scgov.net