



ZIKA VIRUS

FACT SHEET

The Virus

- First discovered in 1947 in Africa, Zika is a virus that is transmitted by the *Aedes* ssp. mosquito.
- Zika is usually present in the blood of an infected person for a few days during which a mosquito may acquire the infection by bite and possibly transmit the virus by biting another person.
- Zika is a mild illness that resolves itself within a week.
- Only about 1 in 5 infected will develop symptoms - fever, rash, joint pain, and conjunctivitis.
- Reports of birth defects associated with Zika have been made in South America.
- There is currently no vaccine to prevent or medicine to treat Zika.

The Mosquito

- *Aedes* mosquitoes are commonly found throughout the world and are the same mosquitoes that spread dengue and chikungunya viruses.
- *Aedes* mosquitoes have adapted to live in close association with humans living and breeding in water holding containers as small as a bottle cap.
- *Aedes* mosquitoes are most active during the day and tend to stay close to their breeding site.
- Because *Aedes* mosquitoes do not live or reproduce in ditches, swales, lakes, marshes, or swamps, ground and aerial insecticide spraying has a limited effect for controlling populations.

Prevention

- Palm Beach County's Mosquito Control Division takes a proactive approach to reduce mosquito populations and to educate the public on a daily basis.
- As with all mosquito-transmitted diseases, the best way to prevent exposure is to limit your chances of being bitten by a mosquito.
- First and foremost, safeguard yourself by wearing protective clothing such as long pants and sleeves and applying an approved mosquito repellent, preferably one containing DEET.
- Second, remove potential mosquito breeding sites by emptying water from flower pots, garbage cans, recycling containers, wheelbarrows, aluminum cans, boat tarps, old tires, toys, and buckets - any item that can hold water.
- Prevent water containers from getting stagnant by flushing ornamental bromeliads, birdbaths and wading pools weekly, clean roof gutters, change the water in outdoor pet dishes regularly, keep pools and spas chlorinated and filtered, stock ornamental ponds with mosquito-eating fish, cover rain barrels with screening, and check for standing water under houses, near plumbing drains, under air conditioner drip areas, around septic tanks and heat pumps.

References and Additional Information

- [Palm Beach County Mosquito Control Division](#)
- [Florida Department of Health](#)
- [Centers for Disease Control](#)





Palm Beach County Mosquito Control Division



MOSQUITOES

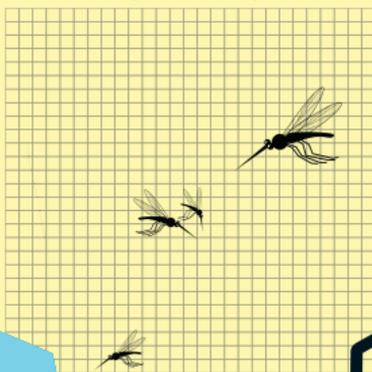
can live indoors and will bite
at any time, day or night.



Keep doors and
windows shut.



Keep mosquitoes **outside**.



Keep screens
on all
windows.

Repair holes
in screens.



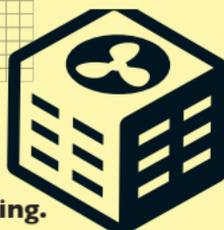
Cover

Skin with
long-sleeved shirts
and long pants.

The arms, legs and
heads of babies and
small children.

Cribs, strollers or
baby carriers with
mosquito netting.

Use air conditioning.



Use EPA-approved **insect repellents**

Follow package label instructions.

Do not use on babies younger than 2 months.

Do not put on a child's hands, mouth, cut or irritated skin.

Do not spray onto a child's face—spray repellent onto your hands and then smooth onto the child's face.

Spray clothes and gear with an EPA-approved insect repellent like permethrin for extra protection.



Palm Beach County
Board of County Commissioners

FIGHT *the* BITE PREVENT *the* SPREAD



Preventing the spread of mosquito-borne illnesses is a two-step approach:

- 1. Protect yourself from getting a mosquito bite** using methods outlined on the front of this insert.
- 2. Prevent mosquitoes from breeding** around your house by eliminating sources of water they can live in. Spraying with insecticide does not eliminate “container mosquitoes,” the type of mosquito that could carry Zika Virus, Dengue Fever, and Chikungunya.

Check around your home and yard to remove any standing water that is accumulating in containers.

Fact: Only the female mosquito bites.

Inspector's Comments



Palm Beach County Board of County Commissioners
Department of Environmental Resources Management

Mosquitoes must have water to complete their life cycle.

It takes only 7 days, during warm weather, for eggs to mature into adults.

Tall grass or shrubs provide resting sites for adult mosquitoes but are not breeding sites.

Female mosquitoes may live several weeks in the summer and many months in the winter

Fish, frogs, and dragonflies will control mosquito larvae in canals and lakes.

For more information on Palm Beach County's Mosquito Control program, visit www.pbcgov.com/erm/mosquito.



YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	Adult mosquitoes were found.
<input type="checkbox"/>	<input type="checkbox"/>	ULV spraying was ordered.
<input type="checkbox"/>	<input type="checkbox"/>	Breeding area was found:
<hr/>		
<input type="checkbox"/>	Property owner was not home and inspector could not properly evaluate the problem. Please call the office at 561-967-6480 between 7 a.m. and 3 p.m. for more information.	



Are you raising
MOSQUITOES
in your yard?

A Little History ...

Palm Beach County, with its subtropical climate and heavy rainfall, is a fertile breeding ground for mosquitoes. Mosquito Control is one of the longest established services provided to County residents.

The Health Department targeted mosquitoes in the early 1900s to combat malaria and yellow fever. A separate Mosquito Control Department was created in 1941 to control salt-marsh mosquitoes. These mosquitoes were brought under control by the mid-1970s with the construction of drainage ditches in the mangrove swamps.

By the 1980s, the settlement of the western areas exploded, bringing people in contact with a large variety of fresh-water mosquitoes which had never before been the target of control efforts. Mosquito Control continues to change with the times, utilizing technology (aerial spraying, biological control agents) to control the County's mosquito population.



Palm Beach County
Board of County Commissioners

Dept. of Environmental Resources Management
Mosquito Control Division
9011 W. Lantana Road
Lake Worth, FL 33467
Phone: 561-967-6480

Air Spray HOTLINE: 561-642-8775
To report mosquito activity online, or for more information, go to www.pbcgov.com/erm

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Palm Beach County
**MOSQUITO
CONTROL**

FIGHT the BITE!



Mosquito Control: Our mission

Life Cycle: Egg to adult in a week.

Fight The Bite!

The goal of Palm Beach County Mosquito Control is to enhance the health and quality of life of residents and visitors through the reduction of mosquito populations.

A Quick Overview

Florida has the greatest variety of mosquitoes of any state. More than 80 species live and breed in the Sunshine State. The breeding places and characteristics of all these mosquitoes vary widely. To successfully keep mosquito populations low, control measures are tailored to the species occurring in each area at each time.

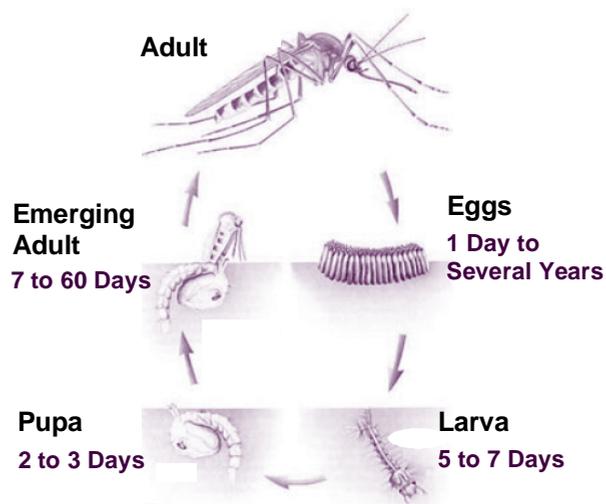
Fighting Mosquitoes

Mosquito Control focuses much of its efforts on killing mosquitoes before they become adults. Breeding sources created by standing water in public right of ways such as grassy swales, subdivision drains, roadside drains and flood channels are sprayed with *Bacillus thuringiensis israelensis*, a natural pathogen of mosquito larvae.



Adult mosquitoes are controlled using ultra-low volume spraying machines at night. The spraying machines are mounted on trucks or attached to aircraft. They are dispatched when adult mosquitoes are observed in high

numbers - detected in monitoring traps or by inspectors - or when an outbreak of mosquito-borne disease occurs.



Eggs: Some mosquitoes lay eggs in a raft containing 100 to 400 eggs. Others lay a single egg on the water or damp ground where water will later cover them. Within a day or two, the eggs hatch into larvae.

Larva: The larva or "wiggler" comes to the surface to breathe. It sheds its skin (molts) four times during the next several days. It grows rapidly between each molt.

Pupa: The pupa cannot eat. It breathes through tubes on its back. The mosquito grows inside the pupa. It becomes fully developed within two days.

Adult: The newly emerged adult rests on the surface of the water until it is strong enough to fly away. The female mosquito may live several weeks in the summer and many months in the winter. If a female survives a long time, she may go through several cycles of blood feeding and egg laying.

Property owners must be involved in controlling the County's mosquito population.

Property owners who have a mosquito breeding source on their land are responsible for abating the nuisance and preventing its recurrence. Mosquito Control educates property owners on how to eliminate mosquito breeding and assists with correcting the problem.

It is important for the general public to help with mosquito control efforts as instances of mosquito-borne diseases, such as Dengue Fever and St. Louis Encephalitis, have been reported in South Florida.

Check these areas around your home:

- **Ornamental pond:** Stock with fish. Avoid spraying with garden insect sprays. Keep water level up.
- **Swimming pool:** Operate filter and skimmer continuously. If a pool cover is used, keep it tightly sealed.
- **Boat:** Store small boats upside down or cover to keep out the rain. Bail out standing water and check bilge for larvae.
- **Animal watering trough:** Stock large troughs with mosquito fish. Clean small troughs twice weekly.
- **Rain gutter:** Keep cleaned and cleared of leaves.
- **Bromeliads and tree holes:** Flush out bromeliads every 3 to 4 days. Fill tree holes with sand where possible.
- **Containers:** Discard unwanted containers that might collect rain water or water from sprinklers. This includes: barrels, tires, buckets, wading pools and watering pans under potted plants. Store remainder upside-down.



Mosquito Fish