Hillsborough County Florida

SUMMARY SHEET

Mosquito Control in Hillsborough County

Background

- The Hillsborough County Mosquito Control Unit of the Public Works Department was established more than 65 years ago to curb the spread of mosquito-borne illnesses such as yellow fever, dengue fever, malaria, and encephalitis throughout Hillsborough County, including Tampa, Temple Terrace, Plant City, and MacDill Air Force Base.

- Hillsborough County Mosquito Control is the only state-approved agency that operates a Mosquito Control Program for Hillsborough County, is regulated by the Florida Department of Agriculture and Consumer Services, and operates in accordance with federal and state laws.
- The Mosquito Control Unit helps protect residents by monitoring for mosquito-borne illnesses and controlling mosquito populations through biological methods, trapping, elimination of breeding sites, destruction of larvae, and spraying pesticides.
- The Unit uses a combination of all-terrain vehicles, specialized trucks, and a specialized helicopter to perform surveillance and response operations over nearly 1,300 square miles.
- The Unit operates 15 sites to monitor for mosquito-borne pathogens, maintains more than 65 mosquito surveillance trap sites, and conducts more than 20,000 larvae inspections per year.

Regulatory Environment

- Hillsborough County Mosquito Control conducts operations as required by an annual contractual services agreement with the Florida Department of Agriculture and Consumer Services that contains the terms and conditions under which they are licensed and funded for mosquito control activities.
- Mosquito control laws, the conditions of certification and license, and the approved contractual agreement all require that mosquitoes are identified prior to applying pesticides and mosquito control chemicals, so surveillance and identification are the most important primary components of mosquito control.
- The Mosquito Control Unit works closely with the Florida Department of Health to provide a targeted increase in surveillance and control measures in response to the presence of any suspected or identified mosquito-borne illness in the mosquito population or residents.

Pesticides

- The Mosquito Control Unit uses pesticides as a last resort and for the suspected or confirmed presence of mosquito-borne illnesses in the community (as identified by the Department of Health).
- Pesticide use is regulated and tracked to avoid creating pesticide-resistant mosquito populations.
- All chemicals that are utilized are EPA-approved and the mid-range application rates of pesticides are used.
- When necessary, targeted spraying at night is performed when beneficial insects, such as bees, are not active. Ultra Low Volume sprays are used that specifically target weak flying insects, such as mosquitoes.
- Spraying is a temporary solution.

Mosquitoes 101

- There are more than 40 species of mosquitoes inhabiting Hillsborough County.
- Several species have the ability to transmit pathogens known to cause diseases such as West Nile Virus, dengue, chikungunya, encephalitis, dog heartworm, and Zika.
- Female mosquitoes bite people, animals, and birds to acquire the blood essential for producing eggs. During feeding they can act to spread several diseases and parasites from host to host.

- All mosquitoes require water for eggs to hatch and to develop into adults.
- Some species of mosquitoes can complete their life cycle from egg to adult in less than a week.
- Different habitats support different mosquito species.
- Healthy aquatic ecosystems have checks and balances to regulate mosquito populations.
- Temporary stagnant water is attractive to mosquitoes.

Preventing the Spread of Zika and Other Mosquito-borne Illnesses

- Hillsborough County Mosquito Control continues to implement an aggressive and proactive approach to mosquito surveillance and control. The County remains vigilant in its monitoring of mosquito populations.
- The proper protocols and plans are in place – and have been for months – to address the Zika virus and take action should a locally-acquired case appear in Hillsborough County.
- The County has been engaged in a progressive, proactive plan that includes:
  - Deploying additional traps throughout the county
  - Nightly and weekend spraying in targeted areas throughout the county
  - Aerial spraying to cover larger areas
  - Distribution of mosquitofish
  - Cross-training of additional Public Works employees for spraying missions
  - Messaging and community outreach
  - Sending mosquito samples to the state lab in Kissimmee for testing
  - Using larvacide to target and eliminate mosquito larvae before they develop into adults
- Hillsborough County will continue to follow Centers for Disease Control and Prevention (CDC) and Department of Health (DOH) protocols and directives regarding Zika response.

- Regarding funding, Hillsborough County submitted an initial request for additional funding for projected and completed activities related to Zika – that initial request was about $700,000. The County will continue to evaluate, update and resubmit reimbursement requests as state and federal funding becomes available.
- Thus far, the County has received one state disbursement of about $75,000, which was used to reimburse the County for mosquito control already completed.
- Mosquito Control will continue to spray and conduct surveillance as required to control the mosquito population.
- Residents should contact their doctor or the local Health Department if they are worried that they might have been exposed to Zika or any mosquito-borne illness.

How Residents Can Help

Here are some ways that residents can help reduce potential breeding sites for mosquitoes:

- Get rid of mosquito-breeding containers. Destroy or dispose of tin cans, old tires, buckets, unused plastic swimming pools, or other containers that collect and hold water. Do not allow water to accumulate in the saucers of flowerpots, cemetery urns, or in pet dishes for more than two days.
- Keep your rain gutters cleaned out. Rain gutters can get clogged with leaves and debris, which impede the flow of water. Not only is that bad for your roof, it creates an ideal habitat for mosquito larvae, which need water to grow into adults.
- Prevent your swimming pool from becoming a breeding ground. Cover your swimming pool when not in use. Make sure the cover doesn't sag and hold pools of rainwater, which can also provide a breeding ground.
- Regularly rinse out any bromeliad plants in your yard with a garden hose. Mosquito larvae need water to grow and evolve, and bromeliads are an excellent habitat for two species of mosquitoes. The average bromeliad can be expected to produce around a hundred mosquitoes per year. That may not seem like much, but if you have ten or twenty plants in your yard, that's several thousand mosquitoes!

Mosquito Concerns

Mosquito concerns can be reported at HCFLGov.net/AtYourService or by calling (813) 635-5400.

More information about mosquito control and how residents can help reduce mosquitoes can be found at HCFLGov.net/Mosquito.

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