

Memorandum



Date: April 25, 2016

To: Honorable Chairman Jean Monestime
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor 

Subject: Update on Mosquito Control Program In Response to Zika

May 10, 2016
UMSA
Agenda Item No. 7A

This memo serves as an update on the actions being taken to address concerns about the Zika virus. The Department of Solid Waste Management's Mosquito Control Section continues to be aggressive in its efforts to control the *Aedes aegypti* mosquito, which transmits Zika and other mosquito-borne illnesses, by eliminating its breeding habitat. While there are no locally-acquired cases of the virus, the mosquito control program is working proactively through surveillance and monitoring to control mosquito larvae and eliminate adult mosquito populations.

Mosquito Control inspectors have responded to 1766 service requests from October 1 through April 19, 2016. The department began responding to referrals of suspected and confirmed Zika cases, and has provided inspections and insecticide treatment for 231 suspected (39 confirmed) Zika cases referred by the Florida Department of Health since December 23, 2015. The department's staff of 17 is currently managing an average of 30 service requests per day. During their residential property inspections, staff looks for mosquito breeding activity at the home and neighboring properties. When mosquito breeding is confirmed, the inspectors drain any standing water and eliminate adult mosquitoes by applying insecticide using hand-held spray equipment. Inspectors are also using larvicide in storm drains and stagnant pools of water that cannot be emptied and *Gambusia* (mosquito-eating) fish that consume larvae in stagnant swimming pools identified during inspections.

In advance of mosquito season, which runs from late May to October, the department has contract personnel to augment its existing inspection staff. This will give the department additional "boots on the ground" to perform inspections and manual spraying, which are the appropriate and most effective methods of controlling container breeding mosquitoes. The department and my administration have received inquiries about the use of aerial and truck-mounted spraying techniques to control adult *Aedes aegypti* mosquitoes. These types of spray activities do little to control container mosquitoes, which live their entire life span within approximately 200 yards of where they spawn and remain close to the ground. Hand spraying is the most appropriate control technique due to the specific behavior and ecology of this mosquito. Aerial spraying is the preferred and appropriate control technique for other types of mosquitos, such as the adult salt marsh mosquitoes, which remain airborne for relatively long periods of time and migrate long distances from the Everglades National Park or Biscayne National Park into the populated areas. The department is prepared with enhanced contract capacity through a private contractor and through an agreement with the United States Air Force Reserve to conduct aerial spray missions, as necessary. It is important to note that salt marsh mosquitoes are a nuisance that must be controlled; however, it is not the vector species that transmits illnesses such as Dengue, Chikungunya, and Zika.

In addition to the work being done in the field by operations staff, Deputy Mayor and Solid Waste Management Department Director Alina T. Hudak and Mosquito Control Section administrative staff have coordinated and participated in several activities that are integral to our mosquito control efforts:

- January 29, 2016 – The Solid Waste Department’s Mosquito Control Division began implementation of a \$150,000 multi-media “Drain and Cover” public education campaign to increase public awareness of simple steps that can be taken by residents to prevent mosquito breeding and mosquito bites. The ongoing program includes radio, newspaper, outdoor, and transit advertising; social media messaging through Facebook and Twitter, online display ads, and search engine marketing; and production and distribution of “Drain and Cover” door hangers and information cards at departmental outreach events and Park, Recreation and Open Spaces facilities, as well as through PortMiami, Miami International Airport, Animal Services, and Department of Regulatory and Economic Resources and other organizations and cities that have expressed interest in participating in the outreach effort on an ad hoc basis (e.g. Miami Lakes, Natural Areas Management, and Homestead Air Reserve Base).
- January 29, 2016 through April 20, 2016 – The County’s Mosquito Control Operations Manager and Department of Solid Waste Public Information Division staff participated in 38 media interviews and mosquito control inspection ride-alongs with local, regional, national, and international media seeking subject-matter expertise and coverage of the County’s efforts in response to the Zika virus.
- March 2, 2016 – An interdepartmental meeting took place, coordinated by Deputy Mayor/Solid Waste Director Alina Hudak with all County departments with enforcement/inspection personnel. Officers have been trained to identify mosquito breeding and drain standing water during their routine work activities. These officers are also provided with “Drain and Cover” door hangers to leave behind.
- March 23, 2016 – The University of Miami’s Zika Forum was attended by Deputy Mayor Alina Hudak and Mosquito Control management staff, as well as representatives from the Florida Department of Health, medical professionals, entomologists, epidemiologists, and research professionals.
- March 29, 2016 – Mosquito Control staff attended the meeting of municipal representatives hosted by the County’s Emergency Operations Center to discuss municipal efforts and coordination on Zika response activities.
- April 8, 2016 – A briefing and press conference sponsored by Senator Marco Rubio was held. Deputy Mayor Alina Hudak, Mosquito Control Section Management staff, and I attended this press briefing, at which Senator Rubio pledged his support for federal funding to address Zika research, virus testing, vaccine development, mosquito control operations and public education.

Through coordinated efforts with the County’s Intergovernmental Affairs staff, my administration is aggressively seeking state and/or federal funding that may become available to local governments for mosquito control activities. However, I would like to make it clear that I am committed to making additional County funds available to further enhance mosquito control services.

I am proud to say that the County's Mosquito Control Section operation has a very successful history of fighting the spread of mosquito-transmitted diseases. Our community has faced West Nile Virus, Dengue Fever, and Chikungunya, with only a handful of locally-transmitted cases. I am confident that we will be equally successful in our efforts to prevent the spread of Zika locally.

c: Honorable Harvey Ruvlin, Clerk of the Board
Abigail Price-Williams, County Attorney
Alina T. Hudak, Deputy Mayor and Director, Department of Solid Waste Management
Paul Mauriello, Deputy Director, Waste Operations, Department of Solid Waste Management