Florida HEALTH

Zika Incident Response Playbook

2017

Zika Incident Response Playbook
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HAZARD OVERVIEW

Zika fever is a febrile illness caused by a mosquito-borne virus similar to those that cause dengue and West Nile virus infection. Since May 2015, local Zika virus transmission has been identified in throughout the Americas, including Puerto Rico, Texas and Florida. Outbreaks have previously been reported in Africa, Southeast Asia, and the Pacific Islands. Cases of Zika fever continue to be reported in travelers returning to the continental United States.

Zika has been associated with fetal abnormalities, specifically microcephaly. Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies of the same sex and age. Babies with microcephaly often have smaller brains that might not have developed properly. Adverse pregnancy and infant outcomes associated with Zika virus infection during pregnancy are being studied.

Zika has also been associated with neurological complications, including Guillain-Barré syndrome (GBS). GBS is a rare disorder in which a person's immune system damages their nerve cells, causing muscle weakness and sometimes paralysis. Further research on the linkage between GBS and Zika is underway.

Transmission

Zika virus is primarily spread through the bite of infected mosquitoes but may be spread in multiple ways.

- **Through mosquito bites**
  - People are primarily infected through the bite of infected *Aedes (Ae.) aegypti* and *Ae. albopictus*.
  - Mosquitoes become infected when they feed on a person already infected with the virus. Several days after feeding, the mosquitoes become infectious and can then spread the virus to other people through bites.
- **From mother to child**
  - A mother already infected with Zika virus near the time of delivery can pass the virus to her newborn around the time of birth (perinatal period).
  - A pregnant woman can pass Zika virus to her fetus during pregnancy (in utero infection).
- **Through sexual contact**
  - While identified sexual transmission of Zika virus has been primarily from males to female or male sex partners, female to male sexual transmission has also been documented.
  - Infected persons with or without symptoms can sexually transmit Zika virus. For those who are symptomatic, it is possible for the virus to be transmitted before, during, and after symptoms develop.
- **Through blood transfusion**
  - Zika virus can be spread through transfusion of blood from an infected person.
  - Testing for Zika virus is now required for all blood products collected in the U.S., limiting risk for transfusion acquired infections in blood products.

- **Through organ/tissue donation**
    - Transmission through organ donation is theoretically possible. There is currently no approved screening test for organ donors. Transplant facilities are advised to assess donor's travel history and other Zika risk factors as well as reports of any recent compatible illness. Recipients should be fully informed of risk, particularly recipients who are pregnant or who are attempting to become pregnant.

Symptoms

- The most common symptoms of Zika fever are rash, fever, joint pain, or reddening of the eyes (conjunctivitis). Other common symptoms include muscle pain and headache. The time from bite by an infected mosquito to having symptoms for Zika is 2-14 days. This time period can be somewhat longer for transmission through sexual contact.
- Approximately 80% of people infected with Zika virus won't even know they have the disease because they won't have symptoms.
- The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito. People usually don't get sick enough to go to the hospital, and deaths are rare.
- Zika virus usually remains in the blood of an infected person for about a week but it can be found longer in some people. The infected person is considered infectious to biting mosquitoes at this time and could also spread virus in donated blood.
- Zika virus RNA has been detected in semen up to 188 days after symptoms first appeared.
- Once a person has been infected, he or she is likely to be protected from future infections.

Florida Risk Assessment

Millions of travelers from areas now impacted by Zika virus arrive in the state annually. Florida also has mosquitos that may transmit Zika virus if infected (*Ae. aegypti* and *Ae. albopictus*). Additionally, Florida has experienced local transmission of other exotic mosquito-borne viruses transmitted by these same vectors in the past (dengue and chikungunya fever).

In 2016 Florida had locally acquired cases of Zika which were primarily confined to the Southeastern part of the state. Florida remains a high-risk for local transmission of Zika.

The following are specific risk factors for Florida.

1. Mosquitoes are present year-round throughout most parts of the state and mosquito-borne illnesses have occurred during every month of the year. In general, mosquito populations are highest during the summer rainy season. *Ae. aegypti* are most predominant in the central and south parts of the state, while *Ae. albopictus* predominates in the north and north-central regions based on mosquito surveillance data updated in 2016. *Ae. aegypti* mosquitoes prefer to fly short distances (less than 150 yards) from their breeding sites and tend to live in close proximity to people, their primary vertebrate host. *Ae. albopictus* breed both in natural (tree holes) and artificial containers and feed on a broad range of vertebrate hosts. It is unknown if other mosquito species such as *Culex* sp. could be competent vectors of Zika virus, however since *Culex* mosquitoes tend to feed on multiple vertebrate hosts, they are not likely to be effective vectors of Zika. Ideal mosquito surveillance and control strategies depend

on which mosquito vectors are involved and can vary tremendously between different types of mosquitoes. One of the most effective control measures for *Ae. aegypti* and *Ae. albopictus* is draining standing water from containers at least weekly and requires active public engagement to work.

2. Florida has 61 local mosquito control districts with varying levels of capability across the state. Historical experience and resources have been focused on controlling *Culex* and nuisance mosquito species. Mosquito control methods used for *Ae. aegypti* and *Ae. albopictus* in urban and suburban environments differ, and are more labor intensive than other types of mosquito control strategies and most districts are not organized nor equipped to implement effective integrated pest management programs to combat these species.

3. New Sterile Insect Technology for mosquito control including *Wolbachia* infected mosquitoes and genetically modified mosquitoes are currently being explored for Zika virus vector control.

4. Active transmission of Zika virus was identified in three areas in Miami-Dade County in 2016 and the county remains under cautionary status. Sporadic local cases continue to be identified in the county during the winter months. In addition, local introductions without ongoing transmission were identified in Palm Beach, Broward and Pinellas Counties. Transmission patterns following introductions of similar mosquito borne viruses (dengue and chikungunya) in Florida's recent history have primarily resulted in limited sporadic local spread. See figure 1. However, in one event, despite intense control efforts, local transmission was sustained through the winter months and case numbers increased again during the following summer months (dengue in Key West 2009-2010).

5. Modeling of the seasonal occurrence and abundance of the Zika virus vector mosquito *Ae. aegypti* in the contiguous United States simulated the potential abundance of adult *Ae. aegypti* mosquitoes across fifty cities using meteorologically-driven life cycle models, and identified proxies of travel-related introduction and of human exposure to vectors to provide context for the model results. Results demonstrated Florida's increased risk for local transmission of Zika virus. See Figures 1 – 3. The complete article is available online at http://currents.plos.org/outbreaks/article/on-the-seasonal-occurrence-and-abundance-of-the-zika-virus-vector-mosquito-aedes-aegypti-in-the-contiguous-united-states/

6. Florida has a large number of travelers coming from Zika impacted areas; for example, in 2012, 4.7 million travelers arrived at the Miami International Airport from the Caribbean Basin. Infected travelers could serve as a source of local Zika virus transmission if they are bitten by mosquito vectors in Florida (Figure 3). Diligent use of mosquito bite precautions following return from travel, and reduction of local mosquito vectors can help prevent local introductions.

Figure 1. Florida counties reporting *Aedes* vectored local arbovirus transmission events (dengue and chikungunya)

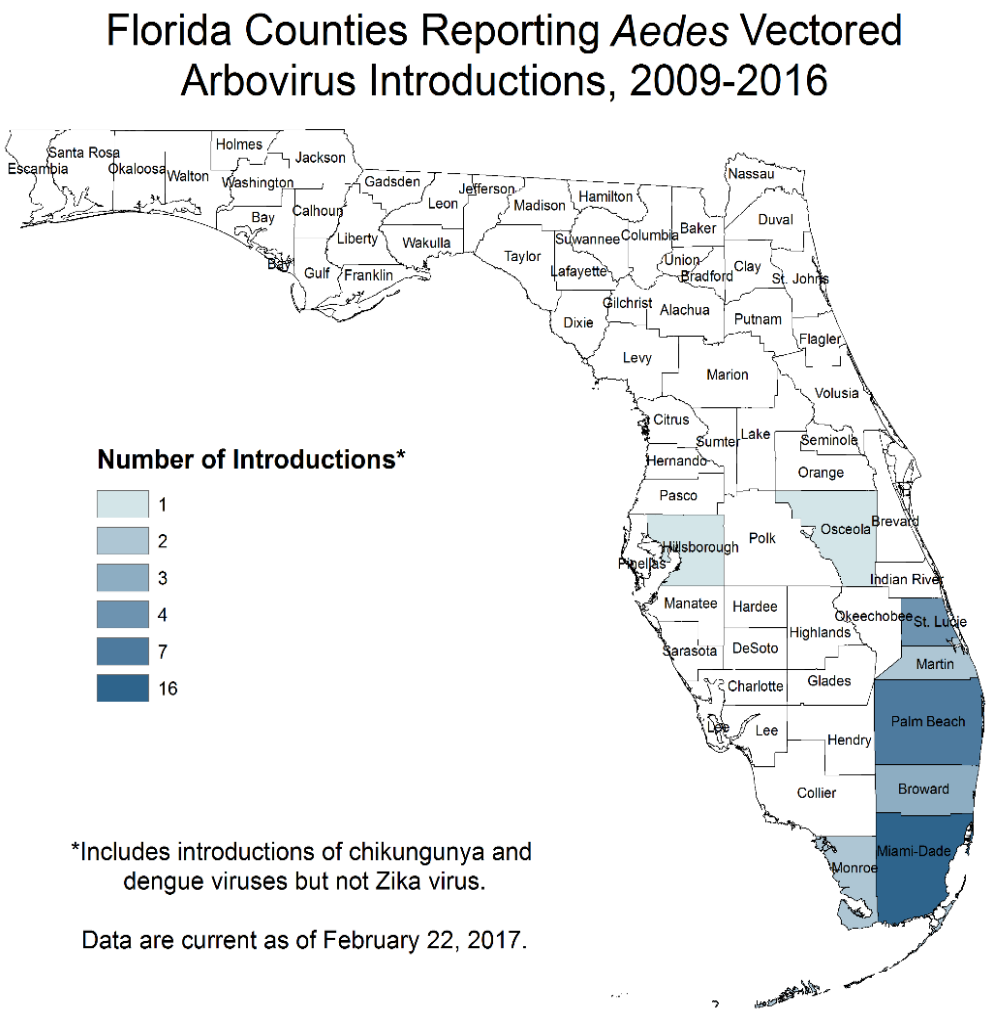

Figure 2. Zika infections in Florida residents or visitors acquired while traveling outside of Florida, 2016-2017

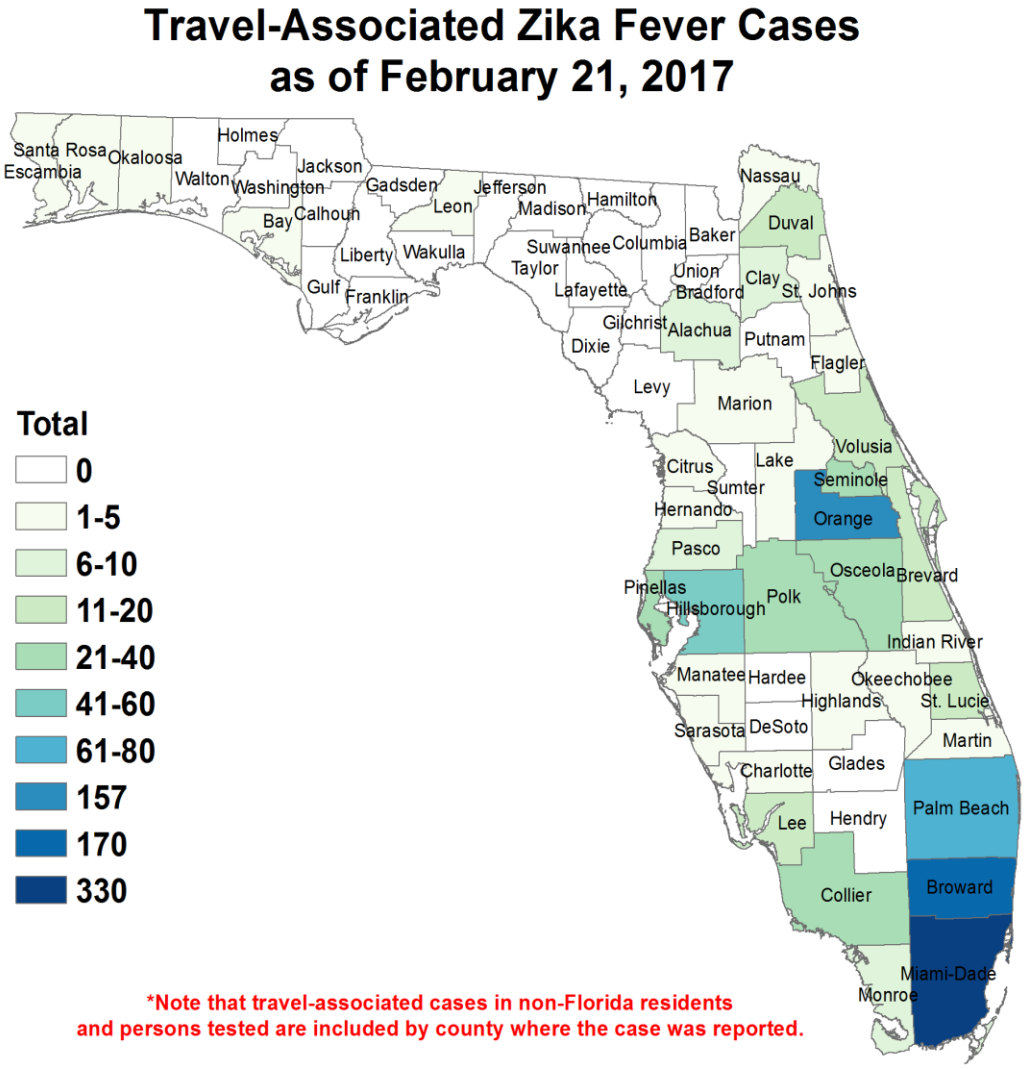

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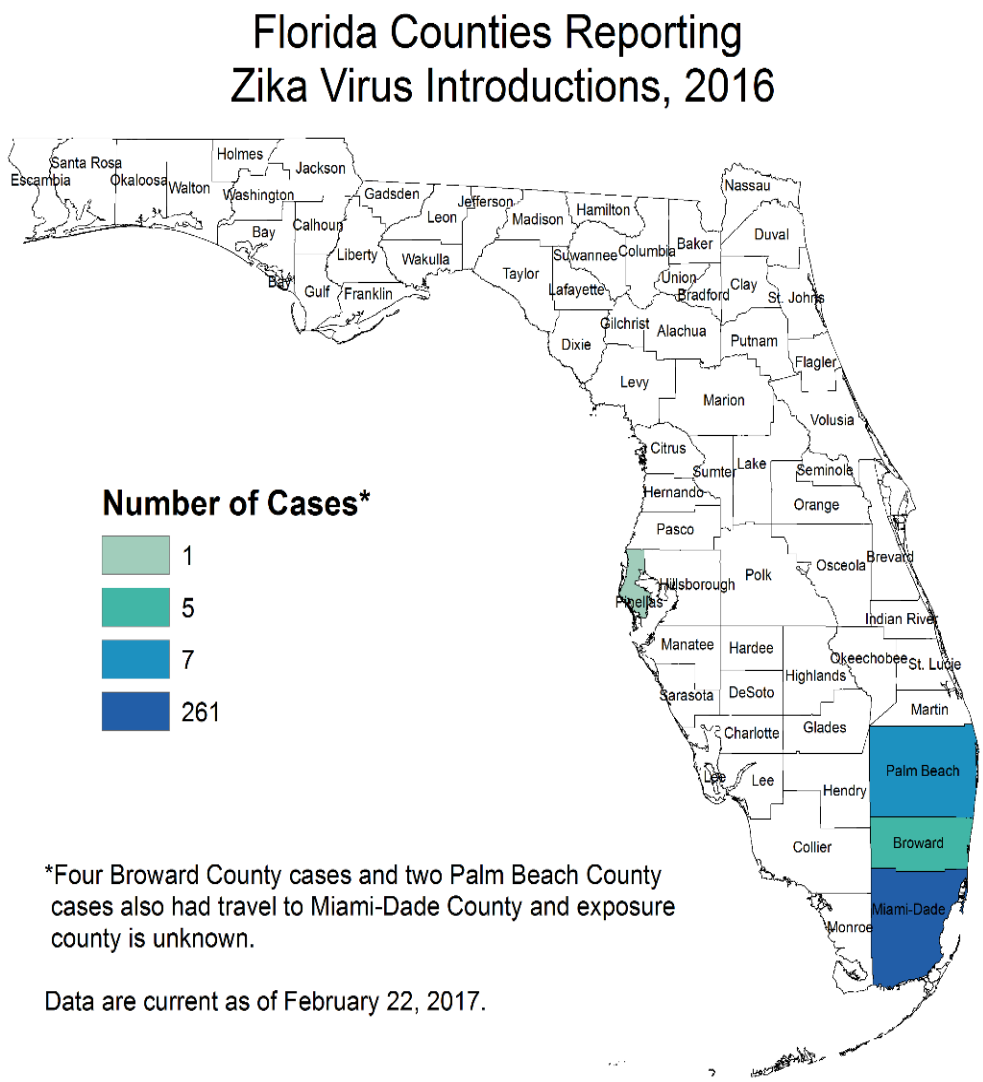
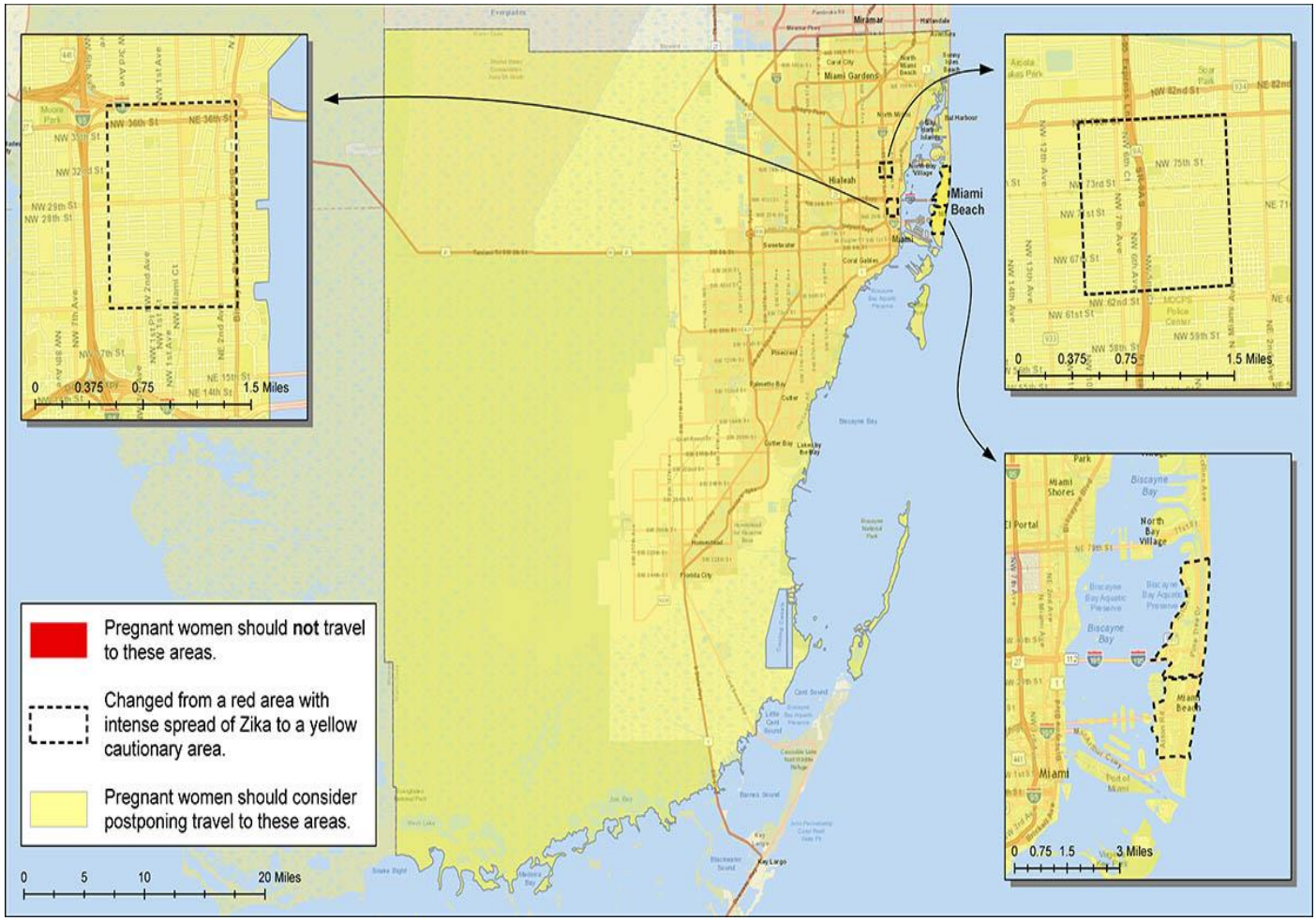
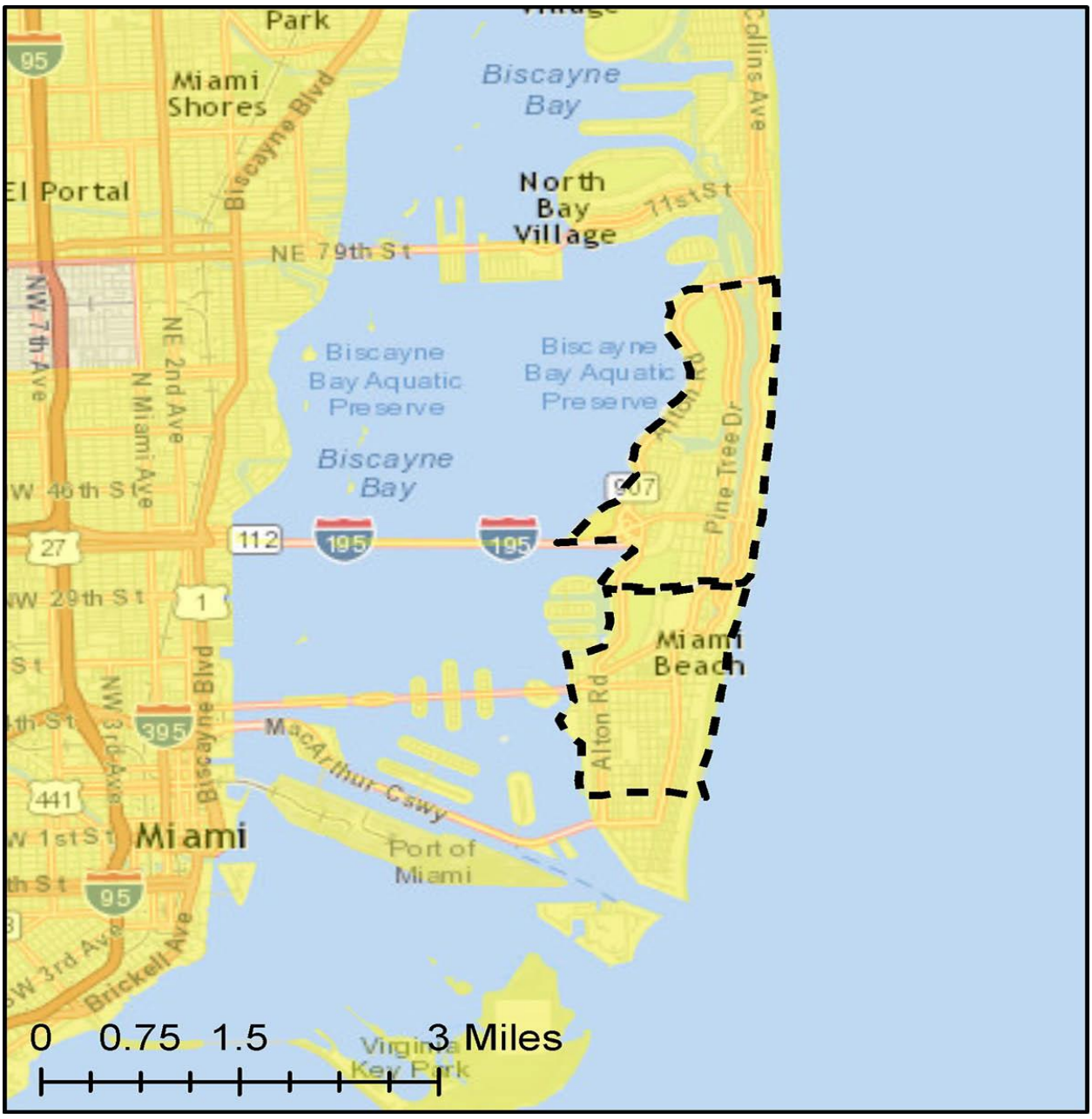
Figure 3. Counties with local Zika virus cases





Local transmission zones in Miami-Dade County, 2016.

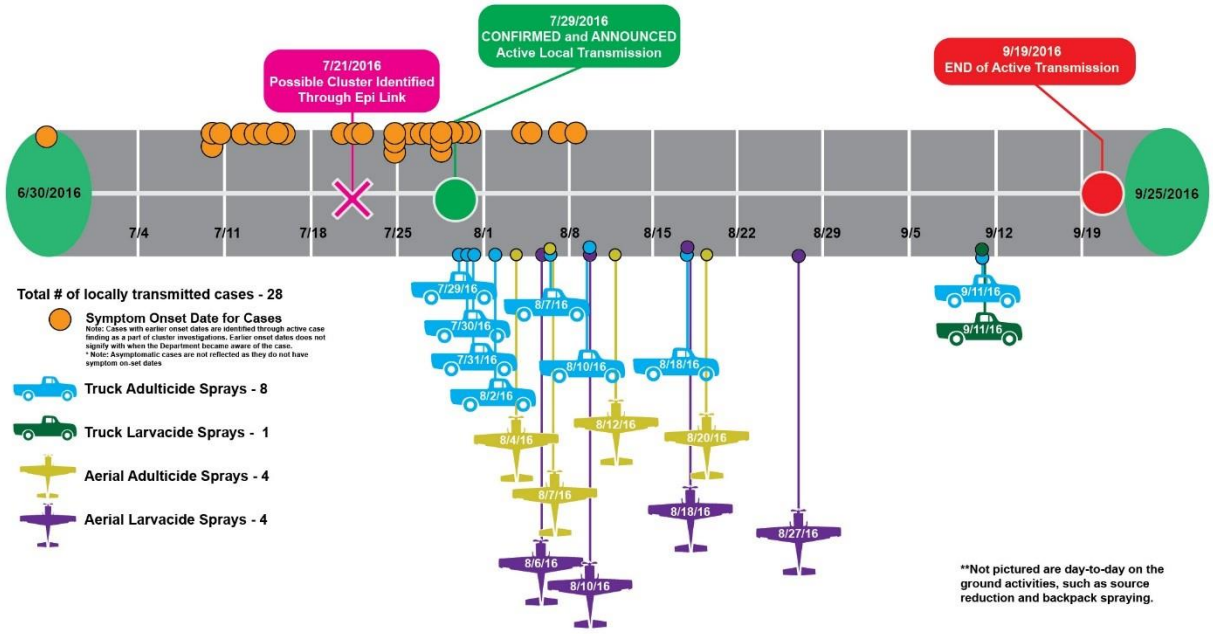
Detail of Wynwood Neighborhood local transmission zone, 2016.



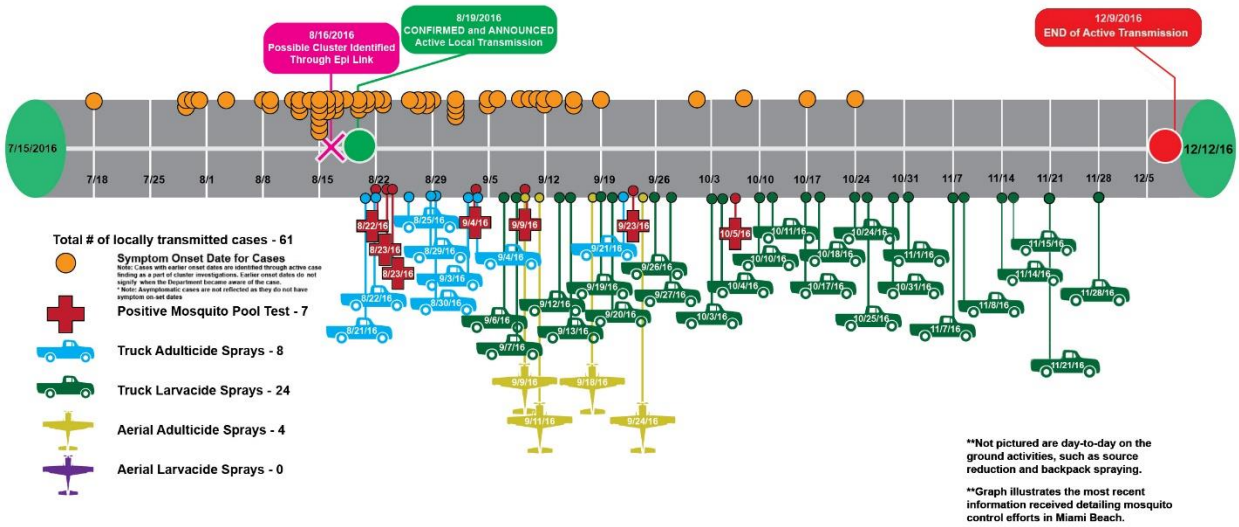
Detail of North and South Miami Beach local transmission zones, 2016.

Detail of Little River local transmission zone, 2016.

Wynwood Zika Activities Timeline



South Miami Beach Zika Activities Timeline



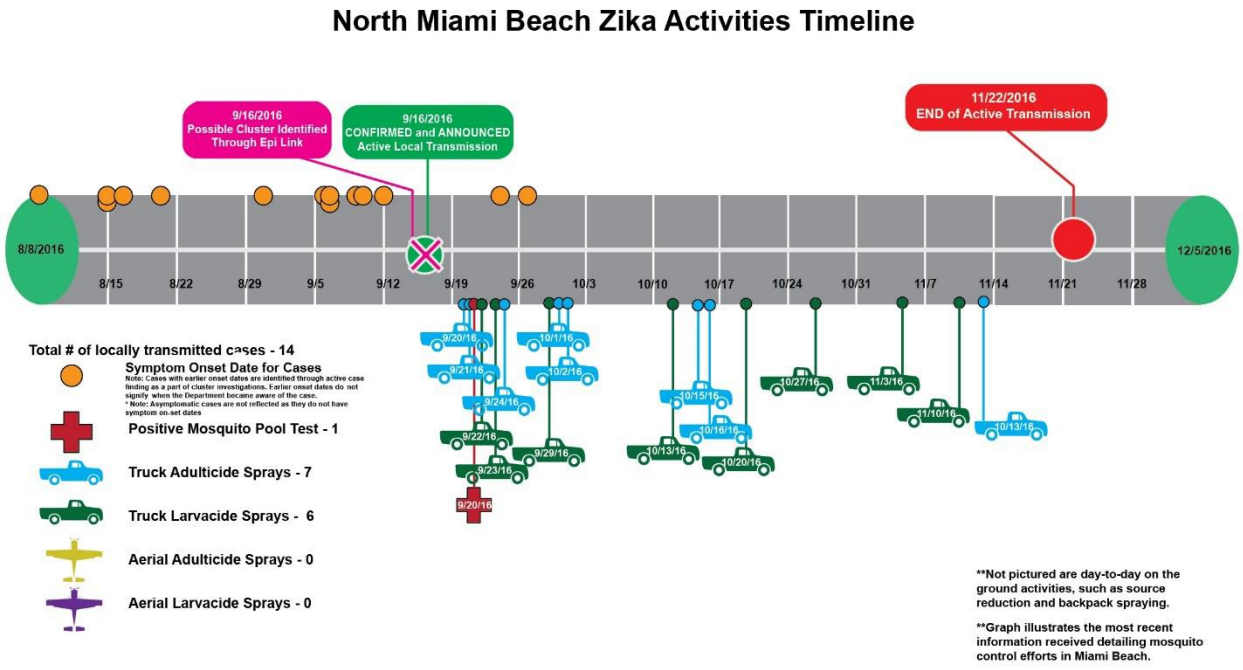


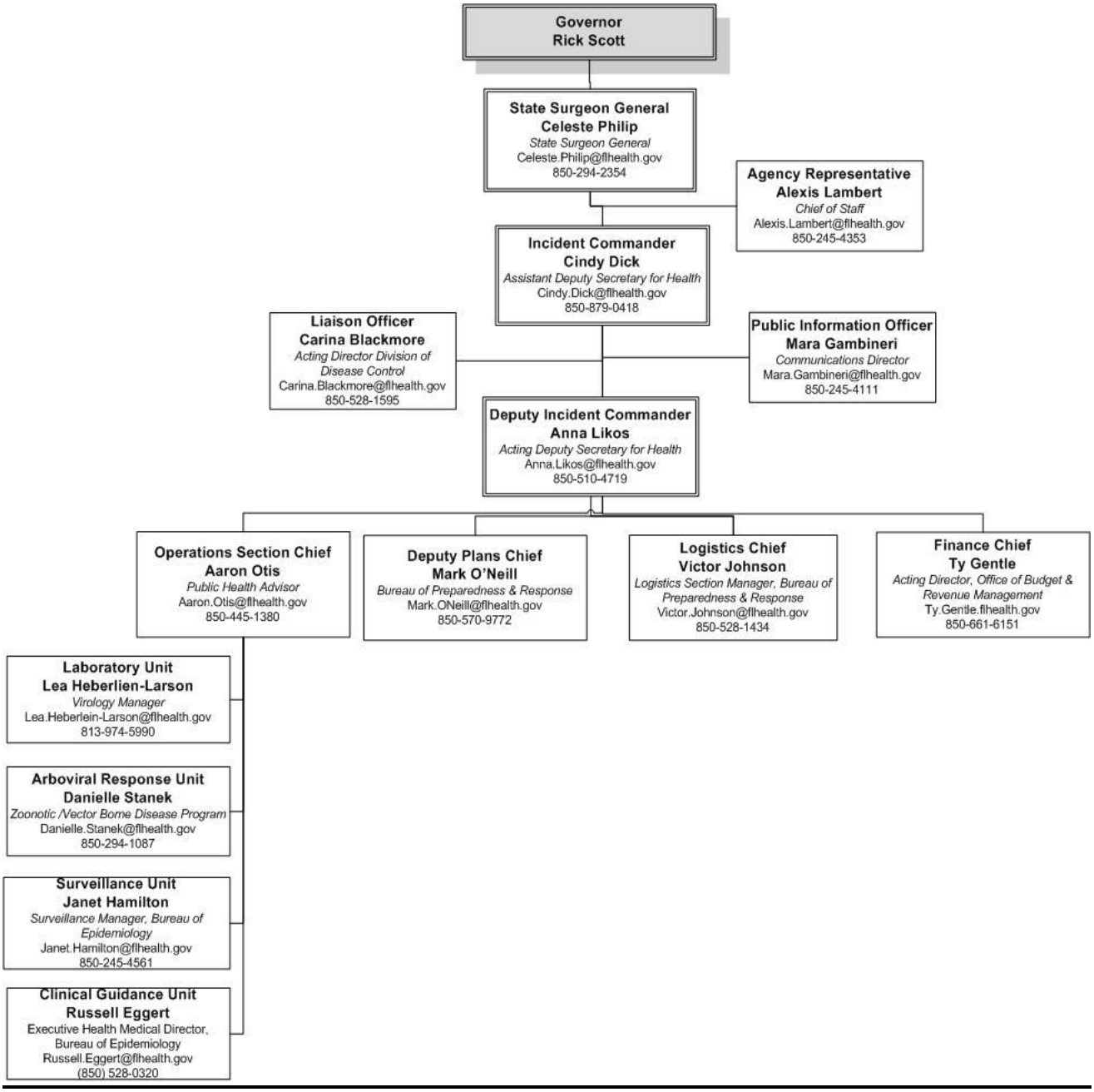
Figure 1: Wynwood Neighborhood locally-acquired Zika infections.

Figure 2: South Miami Beach locally-acquired Zika infections.

Figure 3: North Miami Beach locally-acquired Zika infections.

The Florida Zika Incident Management Team (IMT) was demobilized as of January 1, 2017 and daily Zika operations reverted to the Division of Disease Control and other state and local response partners. If the Governor of Florida or the Florida State Surgeon General determine that Zika response requires greater resource support, they can reactive the Zika IMT.

INCIDENT MANAGEMENT TEAM (IMT) ORGANIZATIONAL STRUCTURE



INCIDENT OBJECTIVES

Overarching Incident Priorities

1. Prevent (or stop) local transmission of Zika.
2. Rapidly detect local transmission of the virus.
3. Implement effective crisis and risk communications.
4. Provide health care professionals with information to ensure rapid identification, reporting and appropriate care of pregnant women and other potentially infected persons.
5. Empower Floridians to take proactive steps to minimize their risk of Zika infection.
6. Support vector control activities as recommended ("A Comprehensive Toolbox for the Control of *Aedes aegypti* and *Aedes albopictus* in Florida")
7. Support pregnant women with evidence of Zika infection and children with Congenital Zika Syndrome (CZS)

Phase 1: 2017 Zika Response to Primarily Travel-Related Infections

These activities represent a baseline for Zika response prior to the detection of locally-acquired cases in 2017. The activities were initiated during 2016 and will be continued at appropriate levels based on volume of cases and severity of any impacts on newborns.

Operational Objective	Procedure and/or IMT Point of Contact
1. Continue to renew public health emergency (PHE) to direct newly identified local jurisdictions to take precautionary actions to prevent local transmission of Zika virus.	Celeste Philip State Surgeon General Celeste.Philip@flhealth.gov 850-294-2354 Agency Representative Alexis Lambert Chief of Staff Alexis.Lambert@flhealth.gov 850-245-4353 (See Legal Remedies: Public Health Emergency)
2. Reactivate the Zika IMT to manage incident activities at the direction of the State Surgeon General or if ongoing Zika virus transmission is suspected in any county, or if two or more local Zika cases are identified in a county within a six-week period.	Celeste Philip State Surgeon General Celeste.Philip@flhealth.gov 850-294-2354 Incident Commander Cindy Dick Interim Director, Emergency Preparedness & Community Support Cindy.Dick@flhealth.gov 850-879-0418 (See Public Health and Medical Emergency Operations Plan, Page 35)
3. Direct local health officers to take action required under the PHE. Counties that completed PHE activities in 2016, should continue collaboration with local stakeholders in 2017. a. Convene a meeting with community partners outlined in the Public Health Emergency within 7 days of the confirmed case to address mosquito control best	Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772

practices and public outreach strategies for those communities with high risk or vulnerable populations. b. Develop a community action plan for execution of prevention programs within 7 days of the meeting. c. Develop an outreach program for local medical professionals to increase awareness and access to diagnostic tools within 7 days of a confirmed case.	
4. Continue contact and coordination with agency partners to include Department of Agriculture and Consumer Services, Division of Emergency Management, Florida Mosquito Control Association (FMCA), Department of Environmental Protection (DEP), Department of Transportation (DOT), Agency for Health Care Administration (AHCA), Office of Insurance Regulation (OIR), Department of Business and Professional Regulation (DPBR) and the Fish and Wildlife Conservation Commission (FWC) to support Zika response operations. a. Conduct monthly meetings with pertinent partners to update on status/progress b. Continue to work with DEP, DOT and other stakeholders to ensure implementation of guidance and protocols for handling and cleanup of waste tires that may serve as potential sites of mosquito breeding c. Coordinate Zika messaging with DBPR to ensure better business awareness and participation with groups such as hotels, restaurants, attractions, and construction sites. d. Working with AHCA, OIR, and Florida Association of Health Plans and Florida Hospital Association continue to ensure access to appropriate levels of care for infected Floridians. i. Frequency of ultrasounds for pregnant women ii. Availability of programs for children with microcephaly and other birth defects associated with Zika infections (e.g. Early Steps, Healthy Start)	Incident Commander Cindy Dick Interim Director, Emergency Preparedness & Community Support Cindy.Dick@flhealth.gov 850-879-0418 Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772 Liaison Officer Carina Blackmore Acting Director Division of Disease Control Carina.Blackmore@flhealth.gov 850-528-1595
5. Continue Zika risk communications strategies in coordination with the Executive Office of the Governor. (See Crisis and Risk Communications Plan) a. Launch "one-stop" Zika website for the public. b. Distribute public announcements regarding personal protection and draining standing water. c. Distribute public message about mosquito control messaging; target airports. d. Distribute messaging to medical professionals to "Think Zika", provide clinician and obstetrician-gynecologist one-pagers with reporting requirements and contact information, prevention, risk factors, clinical signs, testing availability, when to test and what tests to order, and patient management information.	Public Information Officer Mara Gambineri Communications Director Mara.Gambineri@flhealth.gov 850-245-4111

e. Distribute messaging to pregnant women on increased precautions and seeking medical consultation before travel or if potentially exposed to Zika virus working through partners such as American Congress of Obstetricians and Gynecologists (ACOG), Health Start, Migrant Health and others. f. Distribute messaging to pregnant women with potential travel or local exposure to Zika about the need for Zika testing by provider or if no provider testing is available, at the CHD. g. Distribute messaging to travelers regarding precautions and signs/symptoms upon return; consider more direct messaging in international airports and ports of call for cruise lines. h. Conduct informational briefings for health care professionals on signs / symptoms, transmission, patient care and laboratory testing requirements for Zika virus. i. Plan meetings with local tourism boards/councils to educate about Zika virus and prevention. j. Implement social media messaging	
6. Support Florida Poison Information Center Network (FPICN) surge activities if Zika call volume during the public health incident exceeds 25% of the average daily call rate, additional funds will be provided to support the increased workload.	Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772
7. Continue surveillance activities and other information sharing with state blood banks a. Convene a conference call with blood bank partners to review reporting protocols and discuss current Zika status	Arboviral Response Branch Danielle Stanek Zoonotic /Vector Borne Disease Program Danielle.Stanek@flhealth.gov 850-294-1087
8. Continue enhanced prevention and surveillance activities as per the Surveillance and Control of Selected Mosquito-borne Diseases in Florida Guidebook (2014). a. Provide trainings for county epidemiologists on use of various surveillance tools and lessons learned from 2016 b. Send letter, provide outreach and training for clinicians related to current reporting requirements, prevention, risk and testing recommendations and information to share with patients with an emphasis on the important of providing timely results. c. Increase dissemination of mosquito bite prevention information to the public as mosquito populations increase (state and local) d. Monitor positive electronic laboratory reports and reports from clinicians related to possible Zika cases e. Utilize Zika fever specific syndromic surveillance queries including travel query, acute illness, GBS and	Operations Chief Aaron Otis Public Health Advisor Aaron.Otis@flhealth.gov 850-445-1380

microcephaly queries for utilization in ESSENCE-FL to identify possible cases f. Monitor FPICN hotline reports for possible cases daily g. Utilize GIS capacity to map possible exposure locations of suspect and confirmed Zika cases h. Capture case investigation data in Merlin Reportable Disease Database i. Continue to collect, compile and disseminate arbovirus surveillance information to mosquito control programs and other stakeholders from the state (weekly report) and county (suspect cases real-time reporting) j. Utilize birth defects registry for retrospective enhanced surveillance and follow-up on potential CZS case follow-up k. Collect and submit data to CDC to populate ArboNet and the Zika Pregnancy Registry l. Continue to incorporate sexual transmission prevention recommendations from DOH Bureau of Communicable Diseases into prevention guidance and promote condom availability through the HIV programs at county health departments m. Continue partnering with mosquito control districts to inspect and treat which includes source (container) control, and applying larvicide and adulticide pesticides around the homes of suspected cases and report surveillance information into MosquitoNet; assess long-term feasibility of this approach n. Continue to engage and provide training opportunities for volunteer organizations statewide to promote weekly draining of standing water, cleaning debris and other mosquito breeding site reduction activities.	
9. Provide impacted counties with maps developed by the DOH Public Health Tracking Program that highlight populations that may have gaps in communication access or are targeted groups for Zika prevention information (low income, non-English speaking, non-white, women of reproductive age) (See internal DOH ArcGIS Map Service)	Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772
10. Continue to build laboratory surge capability in State Public Health Labs for Zika virus and antibody testing. a. Validate testing. b. Develop laboratory testing protocols. c. Acquire testing materials and supplies for both PCR and antibody testing. d. Maintain a capacity of 700 antibody tests.	Laboratory Unit Lea Heberlein-Larson Virology Manager Lea.Heberlein-Larson@flhealth.gov 813-974-5990
11. Continue routine information sharing and dissemination process for Zika incident management information. a. Establish and implement a daily reporting schedule for executive leadership. b. Establish a routine reporting schedule for epidemiology, labs, communications, vector control, birth defects	Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772

registry and local jurisdictions with the Incident Management Team. c. Implement distribution of guidance and messaging documents to health care professionals.	
12. Promptly provide updates to Zika virus guidelines related to pregnant women and their families as they become available to Maternal and Child Health, Children Medical Services and Refugee Health internal partners as well as the American Congress of Obstetricians and Gynecologists (ACOG), District XII	Clinical Guidance Unit Russell Eggert, MD Executive Health Medial Director Bureau of Epidemiology Russell.Eggert@flhealth.gov 850-528-0320
13. Continue coordination with FDACS subject matter experts to include information sharing, collaborative operational planning and vetting of resource requests from local mosquito control districts. Recommend "A Comprehensive Toolbox for the Control of *Aedes aegypti* and *Aedes albopictus* in Florida" guidelines be used to support vector control activities.	Incident Commander Cindy Dick Interim Director, Emergency Preparedness & Community Support Cindy.Dick@flhealth.gov 850-879-0418
14. Support FDACS and the Florida Medical Entomology Lab (FMEL) capability to conduct statewide mosquito sampling/surveillance of *Aedes* species.	Liaison Officer Carina Blackmore Acting Director Division of Disease Control Carina.Blackmore@flhealth.gov 850-528-1595
15. Continue statewide or regional trainings to include local DOH, mosquito control districts, hospitals, ACOG, Healthy Start, blood banks and local medical societies, etc. to focus on latest planning efforts, disease surveillance mosquito surveillance and spraying, appropriate risk communication.	Operations Chief Aaron Otis Public Health Advisor Aaron.Otis@flhealth.gov 850-445-1380
16. Engage with tourism stakeholders to determine messaging to travelers from the industry to ensure Zika messages and activities are appropriate.	Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772
17. Engage with the CDC to determine triggers and responsibilities for issuance of travel advisories in advance of potential local transmission.	Incident Commander Cindy Dick Interim Director, Emergency Preparedness & Community Support Cindy.Dick@flhealth.gov 850-879-0418
18. Coordinate with CDC to publish and disseminate findings regarding testing of urine, serum and saliva to inform testing guideline from CDC. Provide updated guidance promptly to stakeholders.	Arboviral Response Branch Danielle Stanek Zoonotic /Vector Borne Disease Program Danielle.Stanek@flhealth.gov 850-294-1087
19. Continue supporting the integration of commercial laboratory testing for Zika into the healthcare community. a. Ensure on-going reporting of suspect cases b. Establish process for confirmatory testing.	Operations Chief Aaron Otis Public Health Advisor Aaron.Otis@flheahlt.gov 850-445-1380
20. Ensure on-going linkage with mosquito control for suspect cases.	Deputy Plans Chief Mark O'Neill ESF8 Planning Section Coordinator, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov

a. Develop contingency plans to support counties with no local mosquito control districts in advance of cases in those counties as needed.	850-570-9772 Liaison Officer Carina Blackmore Acting Director Division of Disease Control Carina.Blackmore@flhealth.gov 850-528-1595
21. Continue to provide free Zika testing for pregnant women at county health departments.	Finance Chief Ty Gentle Interim Director, Office of Budget & Revenue Management Ty.Gentle.flhealth.gov 850-245-4453
22. Continue to assess resource needs and secure funding for Zika through new funding opportunity announcements and re-direct of existing funds when able.	Finance Chief Interim Director, Office of Budget & Revenue Management Ty.Gentle.flhealth.gov 850-245-4453

Phase 2: Return of Locally-Acquired Infections in 2017. These activities represent lessons learned from 2016 Zika response.	
Operational Objective	**Procedure and/or IMT Point of Contact**
1. Continue activities from Phase 1.	
2. Consider active case finding (among others potentially exposed including family members, neighbors and business associates). For case clusters, consider doing active surveillance (including testing) using dengue cluster investigation protocols. a. Conduct field sampling (e.g., urosurvey) to establish areas of local transmission b. Implement surveillance to identify potential health effects post mosquito control efforts (for example, aerial spraying) utilizing ESSENCE-FL ED and FPICN data	Operations Chief Aaron Otis Public Health Advisor Aaron.Otis@flhealth.gov 850-445-1380
3. In coordination with local health offices, local mosquito control and FDACS request that enhanced mosquito surveillance and integrated mosquito control measures be implemented within 12 hours according to CDC guidance. http://www.cdc.gov/chikungunya/resources/vector-control.html a. Focus mosquito control efforts to high risk mosquito populations and areas, commensurate with arbovirus indicators for risk (i.e. larviciding, adulticiding hot spots); door to door outreach with possible use of Zika Kits as appropriate (from CDC or local resources) b. Consider novel mosquito control efforts-including new technology options. c. Consider mosquito pool virus testing as appropriate to determine the vector responsible. (FDACS Bronson Animal Disease Diagnostic Laboratory has expanded capacity to conduct these assays.)	Lead: Local Mosquito Control and Department of Agriculture Lisa Conti Deputy Commissioner and Chief Science Officer Lisa.Conti@freshfromflorida.com 850-617-7700 DOH Point of Contact: Liaison Officer Carina Blackmore Acting Director Division of Disease Control Carina.Blackmore@flhealth.gov 850-528-1595
4. Shift public messaging strategies based on local transmission. a. Focus messaging on personal protection from mosquito bites and routinely draining standing water from property after each rain or at least weekly. b. Secure advertisements to educate the public on bite prevention and mosquito control in impacted community; consider distribution of Zika kits prioritizing pregnant women. c. Disseminate messaging on how to prevent spread of Zika from infected persons d. Disseminate messaging for women who are pregnant or trying to become pregnant within the impacted county. e. Disseminate messaging regarding Florida travel safety for visitors	Public Information Officer Mara Gambineri Communications Director Mara.Gambineri@flhealth.gov 850-245-4111

f. Disseminate OSHA guidance for preventing Zika infection in outdoor workers	
5. Request resources to support delivery of mosquito repellent for personal protection within the community (funding or supplies).	Logistics Chief Victor Johnson Logistics Section Lead, Bureau of Preparedness & Response Victor.Johnson@flhealth.gov 850-528-1434
6. Provide resources to schools to educate and protect students against Zika	Logistics Chief Victor Johnson Logistics Section Lead, Bureau of Preparedness & Response Victor.Johnson@flhealth.gov 850-528-1434
7. Facilitate community meetings within impacted community led by the local health officer and State Surgeon General to share information with the public.	Deputy Plans Chief Mark O'Neill Bureau of Preparedness & Response Mark.O'Neill@flhealth.gov 850-570-9772
8. Support local jurisdiction in developing and implementing community initiatives to drain standing water and remove debris that could collect water.	Deputy Plans Chief Mark O'Neill Bureau of Preparedness & Response Mark.O'Neill@flhealth.gov 850-570-9772
9. Monitor laboratory surge issues to ensure appropriate testing capacity is maintained a. Coordinate with CDC to replenish supply as needed to maintain capacity. b. Utilize alternate staffing strategies to support Zika surge while ensuring continuity of other lab testing c. Continue to streamline reporting processes in coordination with the Bureau of Epidemiology and other stakeholders	Laboratory Unit Lea Heberlein-Larson Virology Manager Lea.Heberlein-Larson@flhealth.gov 813-974-5990

Phase 3: Wide-Spread Locally-Acquired Infections in a Single County.

Some of these actions were taken during Phase 2 response in 2016, but are primarily intended as a response to wide-spread locally-acquired Zika infections in a single county.

Operational Objective	Procedure and/or IMT Point of Contact
1. Continue activities from Phase 2.	
2. Implement elevated disease prevention efforts such as working with local governments to ensure compliance by home or business owners with draining standing water regularly, closing areas with high populations of vector mosquitoes as dictated by the situation in the impacted county.	Arboviral Response Branch Danielle Stanek Zoonotic /Vector Borne Disease Program Danielle.Stanek@flhealth.gov 850-294-1087 (See Legal Remedies: Sanitary Nuisances and Nuisances Injurious to Health)
3. Implement laboratory surge plans.	Laboratory Unit Lea Heberlein-Larson Virology Manager Lea.Heberlein-Larson@flhealth.gov 813-974-5990
4. Provide insect repellent and Zika Prevention Kits to impacted community, and permethrin treated clothing for homeless.	Logistics Chief Victor Johnson Logistics Section Lead, Bureau of Preparedness & Response Victor.Johnson@flhealth.gov 850-528-1434
5. Determine need for changes in lab testing and case reporting protocol.	Laboratory Unit Lea Heberlein-Larson Virology Manager Lea.Heberlein-Larson@flhealth.gov 813-974-5990
6. Provide behavioral health resources to pregnant women in the impacted county. (Support groups, call centers).	Clinical Guidance Unit Russell Eggert, MD Executive Health Medial Director Bureau of Epidemiology Russell.Eggert@flhealth.gov 850-528-0320
7. Provide guidance to local jurisdictions regarding cancelling outdoor public events	Arboviral Response Branch Danielle Stanek Zoonotic /Vector Borne Disease Program Danielle.Stanek@flhealth.gov 850-294-1087
8. Emphasize and increase messaging targeted at pregnant women regarding precautions, public health recommendations and personal protection working through ACOG, local Healthy Start and targeted messaging to OBGYNs in the area.	Public Information Officer Mara Gambineri Communications Director Mara.Gambineri@flhealth.gov 850-245-4111
9. Conduct additional community meetings with Surgeon General, local health officer, CDC and DOACS.	Plans Chief Mark O'Neill ESF8 Planning & Ops Manager, Bureau of Preparedness & Response Mark.ONeill@flhealth.gov 850-570-9772

Phase 4: Widespread Local Transmission in Multiple Counties

During this phase, Zika is spreading through mosquitos across the state. At this stage the response is managed through established emergency management processes to ensure a coordinated statewide response. While the primary objectives of stopping the spread of the disease and protecting people in Florida from becoming infected remain primary objectives, activities are centered on expanding resources with assets from other states and the federal government. Additionally, implementing plans to support an increased number of infants born with poor health outcomes associated with Zika may be necessary.

Operational Objective	Procedure and/or IMT Point of Contact
1. Continue activities from Phase 3.	
2. In coordination with the State Request a declaration of a State of Emergency in order to authorize FEMA and EMAC assistance.	Incident Commander Cindy Dick Interim Director, Emergency Preparedness & Community Support Cindy.Dick@flhealth.gov 850-879-0418 (See Page 27 Emergency Declaration Process, State Comprehensive Emergency Management Plan)
3. Implement elevated disease prevention efforts such as working with local governments to ensure compliance by home or business owners with draining standing water regularly, closing areas with high populations of vector mosquitoes as dictated by the situation in the impacted statewide.	Health Officer in local county health department
4. Integrate STD and DIS capabilities into response efforts to reduce the sexual transmission of Zika virus including distribution of condoms.	Operations Chief Aaron Otis Public Health Advisor Aaron.Otis@flheahlt.gov 850-445-1380
5. Ensure physicians and families have information regarding services available through the Early Steps Program for children born with evidence of Zika infection.	Clinical Guidance Unit Russell Eggert, MD Executive Health Medial Director Bureau of Epidemiology Russell.Eggert@flhealth.gov 850-528-0320 (See Early Steps Policy Handbook and Operations Guide)

ESSENTIAL ELEMENTS OF INFORMATION

The following elements of information are critical during a Zika incident. The information is gathered, analyzed and reported per existing situational awareness procedures established in the standard operating procedures. (See Page 19: Situation Monitoring and Reporting of the State ESF8 Standard Operating Procedure)

Epidemiological Information

- Status of patient.
- Patient demographics and locating information
- Patient risk factor and exposure information including modes of transmission and travel history
- Patient mosquito exposure from arrival in Florida through first week of illness (potentially infectious period)
- Patient clinical information including symptoms, pregnancy status and laboratory diagnostics
- Number of confirmed, probable, suspect Zika infections
- Number of epi investigation
- Number of Zika fever cases involving pregnant women (no county)
- Number of infants with CZS
- Number of patients tested

Note: No patient identifiers should be included in situation reports. Weekly reports providing a synopsis of all mosquito-borne disease activity in the state will also continue to be provided.

Laboratory Information

- Results of any Zika testing by test type and specimen type.
- In-state Zika PCR testing capacity.
- Number of PCR and antibody tests performed by State Public Health Labs

Mosquito Control Information

- Mosquito surveillance reports
- Updated statewide survey of mosquito species (FMEL)
- Local mosquito control activities
- Confirmation of targeted larval control and spraying tactics around cases residences.
- Increased integrated pesticide management activities in local jurisdictions
- Mosquito pool testing results (FDACS)

Community Outreach Information

- Summary of local community outreach activities including volunteer training
- List of messaging products distributed
- Confirmation of engagement medical community specifically OB/GYNS
- Number of public inquiries regarding Zika

Incident Management Activities

- Number and list of counties with confirmed Zika cases

- Any counties with local transmission
- Any new or updated guidance documents from CDC
- Incident related expenditures
- Zika Inventory Resource

ADVANCED PLANNING CONSIDERATIONS

Advanced planning considerations are used to inform contingency planning during an incident to plan for issues beyond 72 hours in advance of the current operational period and potential changes in the incident over time. These considerations should be considered as a part of the advanced planning processes outlines in standard operating procedures. (See Page 22 Advanced Planning of the State ESF8 Standard Operating Procedure)

- Pregnant women and their unborn children are the most vulnerable population for Zika virus.

- Tropical and severe weather in Florida lead to increased mosquito populations, Florida should be prepared to address mosquito control activities and messaging aggressively as a part of any incident producing standing water or flooding in the State while the Zika threat remains. While *Ae. aegypti* populations are unlikely to be significantly impacted by such incidence, the need for control of nuisance mosquitoes can redirect limited but essential resources away from disease control efforts.

- The Early Steps program, within the Florida Department of Health, serves families with infants and toddlers, birth to 36 months of age, who have developmental delays or an established condition likely to result in a developmental delay. Each child receives an Individualized Family Support Plan (IFSP) that meets his or her needs. Families and caregivers also receive support to develop the skills and confidence they need to help their children learn and develop. Microcephaly is a condition supported through the Healthy Start and Early Steps programs.

- CDC has announced plans to deploy teams to states where local transmission occurs to engage in response efforts. Advanced plans for integration and coordination with these teams should be established.

- Mosquitoes may test positive for Zika in areas that cases in humans have not been identified. In this circumstance the following actions will be taken:
    1. Action steps for confirmed Zika virus detection in mosquitoes
    2. Conduct surveillance for mosquito breeding in a 300m diameter area of the collection point.
    3. Perform source reduction activities including larvicide and adulticide applications by hand or truck. Best practice is an application with a presumptive positive and again when the results have been confirmed.
    4. Perform outreach to residents and workers about appropriate Zika risk reduction activities.
    5. Distribute Zika prevention kits and repellents to pregnant women.
    6. Provide education to residents and visitors of impacted area.
    7. Recommend Zika testing for all who exhibit one or more Zika-like symptoms (fever, rash, conjunctivitis and/ or arthralgia)

8. Recommend Zika testing for asymptomatic pregnant women and their partners.
9. Deploy Active Case Support Packs to impacted CHD as a resource for testing homebound people who wish to be tested.
10. Conduct outreach with OB/GYN Healthcare Providers.
11. Identify a local clinic(s) that can help provide easy access to Zika testing for local residents and workers.
12. Facilitate shipment of specimens to the public health laboratory and other contracted laboratories for testing as appropriate.

FUNDING FOR MOSQUITO CONTROL ACTIVITIES

- Mosquito control districts submit requests for funding to the StateESF8.Planning@flhealth.gov mailbox.
- Requests are reviewed by subject matter experts from the Department of Health and the Florida Department of Agriculture and Consumer Services (FDACS) to ensure they are appropriate for control *Ae. aegypti* mosquitoes. FDACS line item removes any items that are not appropriate.
- A recommended amount to approve is submitted back to DOH.
- Districts are then prioritized using a formula that was adopted by DOH and FDACS to determine a risk-based score for each county. The formula calculates:
    - total number of Zika case/suspect case to date in the county
    - geographic risk for *Aedes* mosquitoes in that area of the state
    - population of the county and
    - previous historical introductions of locally transmitted *Aedes*-borne virus has been adopted
- Counties scoring as **"high risk"** and with limited existing resources will be provided the total amount of funds recommended by FDACS based on the request from the county. These funds will be distributed in monthly installments.
- The risks will be re-calculated on a monthly basis to determine counties who may be at a greater risk than the previous month due to increased number of cases. If this occurs, their allocation would be adjusted to the higher allocation methodology.
- Counties who fail to meet the requirements of the purchase order or do not provide the required documentation each month may have future funds withheld.

SUPPORTING PLANS AND PROCEDURES

- CDC and FMCA guidance for the control of *Ae. aegypti* and *Ae. albopictus*
- State of Florida Comprehensive Emergency Management Plan (CEMP)
- CEMP Appendix VIII - Emergency Support Function 8 – Public Health and Medical
- CEMP Appendix XVII - Emergency Support Function 17 – Animal and Agriculture Issues
- State of Florida Biological Incident Annex to the State Comprehensive Emergency Management Plan
- Public Health and Medical Emergency Operations Plan
- ESF-8 Standard Operating Guidelines
- DOH Crisis and Emergency Risk Communications Annex to the Emergency Operations Plan
- Surveillance and Control of Selected Mosquito-borne Diseases in Florida Guidebook
- Early Steps Policy Handbook and Operations Guide
- Florida Confidential Vector-Borne Disease Infection Case Report
    - http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/crf-vectorborne.pdf

- Zika Virus Infection Case Definition
    - http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/crf-vectorborne.pdf

- Zika Fever: Reporting Guidance for County Health Departments (CHDs)
    - http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/zika-reporting-guidelines-chd.pdf

- Zika Fever: Guidance for Physicians and Health Care Providers
    - http://www.floridahealth.gov/diseases-and-conditions/zika-virus/_documents/zika-reporting-guidelines-providers.pdf

- County Health Department (CHD) Guidance on Testing Pregnant Women for Zika Virus Infection
    - http://www.floridahealth.gov/diseases-and-conditions/zika-virus/_documents/chd-guidance-on-zika-testing-of-pregnant-women-v6.pdf

- Zika Fever: Sample Submission Guidance for County Health Departments
    - http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/zika-fever-sample-submission-guidance-for-chds.pdf

- Florida Zika Fever Case Report Form for Pregnant Women
    - http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/crf-zika-pregnant-women.pdf

- HMC Guidance for County Health Departments for Ordering Zika Testing for Pregnant Women
    - http://www.floridahealth.gov/diseases-and-conditions/zika-virus/_documents/hms-zika-guidance-instructions.pdf

- Legal Remedies Guide for Mosquito Borne Diseases

PRE-SCRIPTED MESSAGES

Press Releases
- SSG Daily Update: Zika Situation in Florida
- Confirmation of Locally Acquired Case in Florida

Online Information
- Florida Department of Health: Zika
- The Centers for Disease Control and Prevention: Zika
- The World Health Organization: Zika

FAQs and Fact Sheets
- Think Zika
- Mosquito Bite Protection in Florida
- Mosquito Bite Protection for Overseas Travelers
- Zika Prevention for Pregnant Women

Other Materials
- Mosquito Bite Prevention Advertisement
- Mosquito Bite Prevention Door Hangers (Statewide and Local)
- Mosquito Bite Prevention Posters
- Community PowerPoint
- Health Care Professionals PowerPoint
- Zika Volunteer Campaign Products
- Zika Children's Campaign Products
- Broadcast Quality Videos of Zika Laboratory Activities
- Video Public Service Announcement on Zika (30 and 60 second) (English, Spanish, Creole)
- Articles for Publication for the General Public and Health Care Professionals

Directions to County Health Departments with Newly Confirmed Zika Cases

Distribute the following template email to health officers in counties with newly confirmed cases upon notification of new county from the Bureau of Epidemiology.

Good afternoon. Now that your county has a confirmed case of Zika Virus you fall under the Public Health Emergency (PHE) Declaration and part of the Department's Incident Management Team.

1. Complete the activities required by the Public Health Emergency Declaration. The original declaration can be accessed online at http://www.floridahealth.gov/newsroom/2016/02/020416-zika-declaration-public-health-emergency.html . It will be amended to include new counties as necessary.
    - Convene a meeting with community partners outlined in the PHE within 7 days of the confirmed case. The meeting should address mosquito control best practices and public outreach strategies for those communities with high risk or vulnerable populations.
    - Develop a post meeting summary within 7 days of the meeting.
    - Develop an action plan for execution of prevention programs within 7 days of the meeting.
    - Submit meeting summary and action plan to StateESF8.Planning@flhealth.gov by day 8 after the meeting.
    - Develop an outreach program for local medical professionals to increase awareness and access to diagnostic tools

2. Update case information in Merlin each day by 2:30 EST per guidance provided by the Bureau of Epidemiology

3. Access Zika specific map resources available on internal map service at http://arcg.is/23EyE3k