


Zika Virus Update

Florida Department of Health (DOH)
Bureau of Epidemiology

May 19, 2016


Division of Disease Control and Health Protection



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Zika Virus

- Virus spread through mosquito bites; related to dengue and West Nile viruses
- Originally identified in Africa and Southeast Asia
 - First identified in Uganda's Zika Forest in 1947
- Transmission
 - Mosquito – *Aedes aegypti*, possibly *Aedes albopictus*
 - Transmission in the womb and at the time of birth
 - Sexual
 - Transfusion cases (2 recently documented)
 - Lab exposures
 - Detected in breast milk, saliva, and urine but no documented transmission
- Outbreaks since 2007




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Zika Fever Distribution

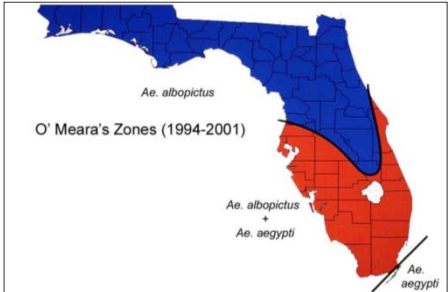


As of May 12, 2016, courtesy of CDC.




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General *Aedes aegypti* and *Aedes albopictus* Distribution



Courtesy of FDACS




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Zika Fever Symptoms

- Incubation period: 2-14 days
- 1 in 5 people infected will become symptomatic
- Few hospitalizations

Most common signs and symptoms


<ul style="list-style-type: none"> • Fever (often low-grade) • Rash • Joint pain • Red eyes 	<ul style="list-style-type: none"> • Muscle ache • Headache • Pain behind the eyes • Vomiting
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Zika Fever (continued)

- Presentation similar (but milder) to other illnesses like dengue and chikungunya
- Symptomatic treatment
- Avoid aspirin and similar drugs (Non-Steroidal Anti-Inflammatory Drugs)
- No vaccine but research underway
- Poor pregnancy outcomes
- Linked to Guillain-Barré Syndrome (GBS)



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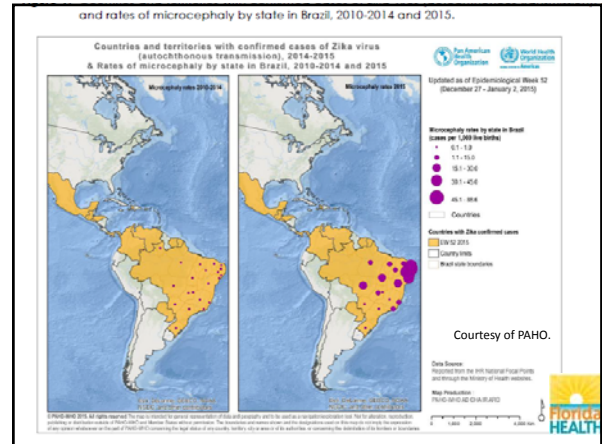
Zika Virus Link to Microcephaly?

Baby with Microcephaly Baby with Typical Head Size

Typical head size

<http://www.cdc.gov/ncbddd/birthdefects/microcephaly.html>

CDC Florida HEALTH



CDC Travel Alert/HAN

- Travel Alert Level 2-Practice Enhanced Precautions
- Pregnant women in any trimester should postpone travel
- Women trying to become pregnant should consult healthcare provider before travel
- Avoid mosquito bites
- <http://www.cdc.gov/media/releases/2016/s0315-zika-virus-travel.html>
- <http://wwwnc.cdc.gov/travel/notices>
- <http://emergency.cdc.gov/han/han00385.asp>
- EpiCom

CDC Florida HEALTH

Executive Order Number 16-29

- Directs State Health Officer (SHO) and Surgeon General to declare Public Health Emergency in 4 counties (duration and geographic boundaries can change)
- Authorizes Commissioner of Agriculture to issue mosquito declaration in same 4 counties.
- Designates DOH as lead state agency to coordinate emergency response activities among various state agencies and local governments
- Directs Department of Environmental Protection and Fish and Wildlife Conservation Commission to support Department of Agriculture and Consumer Services in developing extensive mosquito control plans

CDC Florida HEALTH

Declaration of Public Health Emergency

- Notifies Commissioner of Agriculture of threat to public health from Zika virus transmission to humans from bite of infected *Aedes* mosquito.
- Directs meetings be convened in the impacted counties to discuss mosquito control best practices and outreach to communities with high risk or vulnerable populations
- County Health Officers for affected counties develop outreach program for local medical professionals to increase awareness and access to diagnostic tools

CDC Florida HEALTH

Emergency Rules Noticed

- Noticed February 5, 2016
- 64DER16-1 (64D-3.029) Diseases or Conditions to be Reported
 - Requires immediate reporting to DOH of suspected or confirmed cases of the Zika virus by physicians, hospitals, and laboratories
- 64DER16-2 (64D-3.040) Procedures for Control of Specific Communicable Diseases
 - Hospitals with suspected or confirmed cases of the Zika virus shall provide case status reports every 24 hours
 - Physicians with suspected or confirmed cases of the Zika virus shall provide case status reports every 72 hours

CDC Florida HEALTH

Other DOH Response Activities



- Targeting health care providers
 - Hospitals
 - American Congress of Obstetricians and Gynecologists
 - Midwives/nurses
- Working with internal partners
 - Birth Defects Registry
 - Maternal and Child Health
- Syndromic surveillance
 - Guillain-Barré Syndrome
 - Microcephaly




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Other DOH Response Activities



- Response similar to dengue/chikungunya
- During interview
 - Complete travel history
 - Avoid mosquito bites while ill
 - Highlight prevention methods
- Inform local mosquito control officials of suspect cases
- Inform state Arbovirus Surveillance Coordinator on suspicion of locally acquired cases
- Provide public information on disease, transmission, prevention, protective actions

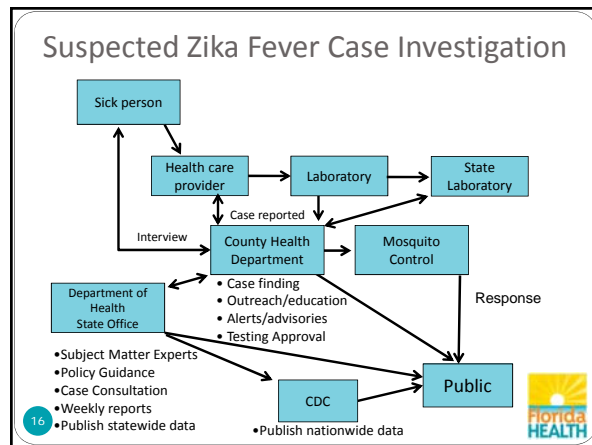
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Other DOH Response Activities

- Key partnership with local mosquito control districts
- DOH notifies mosquito control upon suspicion of mosquito-borne illness
- Appropriate mosquito control measures are implemented
- Successful partnership demonstrated previously
 - Chikungunya 2014
 - 510 imported cases identified
 - 12 sporadic local cases
 - Coordinated DOH – Local mosquito control activities
 - No sustained local transmission






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Status


- To date no cases of local mosquito transmitted Zika illnesses have been reported
- Current status:
 - 122 Zika fever cases associated with travel outside the continental US reported in 19 counties in Florida. (5/19/16 DOH)
 - 544 Zika fever cases (travel-associated) acquired outside continental US (5/18/16 CDC)
 - 832 locally acquired cases US Territories (5/18/16 CDC)

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FAQ's: Pregnant Women

- Pregnant and nursing women can use EPA-approved mosquito repellent according to label instructions
- Information to collect for suspect Zika cases:
 - Symptoms and onset date
 - Travel history (throughout pregnancy)
 - How far along in pregnancy?
- Refer to obstetrician for follow up
- Consider Zika virus testing




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Requirements for Testing



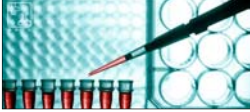

- Guidance is subject to change
- At least two symptoms (fever, rash, joint pain, red eyes) during/within two weeks of travel to areas with ongoing Zika virus transmission
- Pregnant women with/without symptoms tested if travel to or residence in endemic areas
- Suspect local cases
 - Common differential diagnoses have been ruled out
 - Two of the four major symptoms
 - Epi-linked to a confirmed or probable case (household)



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Laboratory Testing

- Commercial testing available in near future
- PCR (detects virus)
 - Bureau of Public Health Laboratories (BPHL) (Tampa/Jacksonville)
 - Serum, urine and saliva sample within 21 days of illness onset
- Testing for IgM antibodies against Zika virus at BPHL
- Virus neutralization testing (PRNT) at CDC





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Mosquito Bite Prevention

- **DRAIN** water from any containers where water has collected.
- **CLOTHING:** If you must be outside when mosquitoes are active, cover up. Wear shoes, socks, long pants, and long sleeves.
- **REPELLENT:** Apply mosquito repellent to bare skin and clothing. Always use repellents according to the label. Repellents with DEET, picaridin, oil of lemon eucalyptus, para-menthane-diol, and IR3535 are effective. Use netting to protect children younger than 2 months.


See: Mosquito Bite Protection in Florida
www.floridahealth.gov/zika



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Available Resources

- Zika fever guidance document
- Clinician one-pager
- Information for obstetricians
- Mosquito bite prevention in travelers handouts
- FAQs document
- DOH Zika virus webpage: www.floridahealth.gov/zika
- CDC Zika virus webpage: <http://www.cdc.gov/zika/>
- CDC Zika virus preparedness: <http://www.cdc.gov/zika/public-health-partners/tips.html>



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Contact Information

- Contact your county health department for additional information.




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