Zika Virus Update
Florida Department of Health (DOH)
Bureau of Epidemiology

May 19, 2016
Division of Disease Control and Health Protection

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

Zika Fever Distribution
As of May 12, 2016, courtesy of CDC.

General *Aedes aegypti* and *Aedes albopictus* Distribution
Courtesy of FDACS

Zika Fever Symptoms
- Incubation period: 2-14 days
- 1 in 5 people infected will become symptomatic
- Few hospitalizations
- Most common signs and symptoms:
  - Fever (often low-grade)
  - Rash
  - Joint pain
  - Red eyes
  - Muscle ache
  - Headache
  - Pain behind the eyes
  - Vomiting
- 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)
Zika Virus Link to Microcephaly?

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

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://emergency.cdc.gov/han/han00385.asp
  - EpiCom

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

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

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
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

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

Key partnership with local mosquito control districts

DOH notifies mosquito control upon suspicion of mosquito-borne illness

Successful partnership demonstrated previously

- Chikungunya 2014
  - 510 imported cases identified
  - 12 sporadic local cases
  - Coordinated DOH – Local mosquito control activities
  - No sustained local transmission

Suspected Zika Fever Case Investigation

- Sick person
- Health care provider
- Laboratory
- State Laboratory
- County Health Department
- Mosquito Control
- CDC
- Public

Subject Matter Experts
- Policy Guidance
- Case Consultation
- Weekly reports
- Publish statewide data
- Publish nationwide data

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

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)
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)

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

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-methane-diol, and IR3535 are effective. Use netting to protect children younger than 2 months.

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

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

Contact Information

- Contact your county health department for additional information.