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To: Miami-Dade County Healthcare Providers and Infection Control Professionals  
From: Reynald Jean, MD, MPH  
Acting Director, Epidemiology, Disease Control and Immunization Services  
Miami-Dade County Health Department  
Date: September 27, 2012

### First Confirmed Case of Locally Acquired Dengue Fever in 2012, Miami-Dade County

On September 11, 2012, the Miami-Dade County Health Department was notified by a commercial laboratory of a suspected case of West Nile Virus. Upon further confirmatory testing, the Florida Department of Health (DOH) Laboratories confirmed an acute infection with dengue virus, serotype 2. This patient reported no travel history outside of Miami within the incubation period of 3 to 14 days before onset of symptoms and has fully recovered. While 25 other cases of dengue have been reported this year, this is the first infection acquired in Miami-Dade County for 2012.

Dengue fever can present with the following signs/symptoms

Febrile illness characterization

- high fever
- frontal headache
- retro-orbital pain
- muscle, joint, and bone pain
- rash
- myalgias and arthralgia

Severe manifestations

- nausea
- vomiting
- volume depletion
- hypovolemic shock
- bleeding from nose, mouth, rectum
- signs of internal hemorrhage

The most common vector is the *Aedes aegypti* mosquito which has been found throughout Miami-Dade County and may increase the likelihood of local dengue transmission within the county by infected travelers.

As part of our efforts to monitor and early identification of the presence of Dengue in Miami-Dade County, **we urge Health-care providers to consider Dengue in the differential diagnosis of febrile illness in any person with or without recent travel history to and from dengue endemic regions and to notify Epidemiology, Disease Control and Immunization Services(EDC-IS) at (305) 470-5660.** We can be reached 24 hours, 7 days, on weekends and holidays. While some commercial laboratories offer diagnostic services for dengue, these commercial labs are not always able to provide results that can distinguish recent from past dengue infection. We will coordinate with your laboratory staff and Infection Control Practitioner (ICP) to receive your patient’s specimens at the DOH laboratory. There is no charge for testing. Your timely reporting is critical in the monitoring and preventing of Dengue and other mosquito-borne illnesses in our community.

**For more information on Dengue, please go to**

- Florida Department of Health:  
<http://www.doh.state.fl.us/Environment/medicine/arboviral/Dengue.html>
- Centers for Disease Control and Prevention- Dengue Clinical Guidance:  
<http://www.cdc.gov/dengue/clinicalLab/clinical.html>



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## Dengue Clinical Sample Submission Guidelines

When Dengue is suspected in a patient, a sample should be promptly submitted to either the DOH Bureau of Laboratories in Tampa or a commercial laboratory such as Quest or LabCorp. A specimen is considered ACUTE if it is collected <6 days past onset of symptoms. A specimen is considered convalescent if it is collected at >6 days past onset of symptoms.

To submit a sample to the state laboratory, collect a red top or tiger top tube and follow packaging and shipping guidelines for diagnostic specimens at (<https://www.doh.state.fl.us/lab/laboratoryservices.htm>). If the sample is acute the sera should be shipped frozen on dry ice to the address below: Note: although this is best for detecting virus, viral RNA may still be detectable in freshly collected acute serum that is immediately sent overnight to the laboratory in a cooler with frozen gel ice.

DOH BOL Tampa –Virology  
3602 Spectrum Boulevard  
Tampa, FL 33612  
Phone: 813-974-5990  
Fax: 813-974-5776

A completed Florida Department of Health laboratory submission form should accompany all specimens ([http://www.doh.state.fl.us/lab/PDF\\_Files/doh\\_form.pdf](http://www.doh.state.fl.us/lab/PDF_Files/doh_form.pdf)). The name of the contact at the county health department who approved sample submission to BOL should be included on the submission form. For acute samples, indicate Arbovirus PCR and Arbovirus Antibody. For convalescent samples, indicate only Arbovirus Antibody. In both cases, the following steps should be completed:

- Write dengue in the comments section on the bottom of the form
- Fill in date of onset and travel in the mandatory arbovirus section
- Include date of specimen collection at the top of the form
- Fill in Health Care Provider Information box with the name, address, and contact phone of the person to whose attention the final laboratory report is to be sent

Unfortunately, the mosquito vector for Dengue is found throughout our county and as a result, all Miami-Dade County residents are at risk of contracting Dengue Fever. This risk can be reduced considerably however by following a few simple suggestions such as “Drain and Cover”, the new campaign adopted by the State of Florida Department of Health. Together, the residents of Miami-Dade County can play an instrumental role in reducing the chances of anyone contracting Dengue Fever. Visit the State of Florida web site for more information at <http://www.doh.state.fl.us/Environment/medicine/arboviral/Prevention.html>.