



Rick Scott  
Governor

H. Frank Farmer, Jr., M.D., Ph.D.  
State Surgeon General

To: Miami-Dade County Healthcare providers and Infection Control Professionals

From: Vincent Conte, MD,  
Senior Physician  
Deputy Director Epidemiology and Disease Control  
Miami-Dade County Health Department

Date: September 30, 2011

### **Second Confirmed Case of Locally Acquired Dengue Fever for 2011 in Miami-Dade County**

A second Miami-Dade County resident was recently confirmed with a diagnosis of Dengue Fever for the year 2011. This patient did not have a history of travel outside the United States within the incubation period of this disease (3 to 14 days); therefore we are reporting this as a locally acquired case of Dengue Fever. As you may be aware, imported dengue cases may increase the likelihood of local dengue transmission in Florida. Additionally, imported dengue infections occur at a higher rate than reflected by passive surveillance. As part of our efforts to monitor and early identification of the presence of Dengue in Miami-Dade, we would like to assist you in testing your patients for Dengue fever and related illnesses.

The Florida Department of Health (DOH) laboratories provide testing for Dengue fever (DF) and other mosquito-borne illnesses such as West Nile Virus (WNV), St. Louis Encephalitis (SLE), and Eastern and Western Equine Encephalitis (EEE, WEE). A serum specimen is required to test For Dengue fever. However, all arboviruses can be tested in the CSF and sera when specimens are available.

Case definition: Dengue Fever is an acute febrile illness characterized by high fever, frontal headache, retro-orbital pain, muscle, joint and bone pain, and rash. The most common vector is the *Aedes aegypti* mosquito which has been found throughout Miami-Dade County. Transmission usually occurs in tropical or subtropical areas. Severe manifestations (Dengue Hemorrhagic Fever and Dengue shock syndrome) are rare but may be fatal. These symptoms include nausea and vomiting, signs of volume depletion and possibly hypovolemic shock and occasionally obvious bleeding from the nose, mouth and rectum. Signs of internal hemorrhage may also exist

We urge you to consider Dengue as a differential diagnosis in clients with or without recent travel history (within the last 2 weeks) to and from dengue endemic regions, presenting with complaints of high fever, myalgias and arthralgias, severe headache, retro-orbital pain, rash, nausea and/or vomiting. If you suspect acute dengue or any other arboviral illness in a patient, please notify the office of Epidemiology and Disease Control at (305) 470-5660. We can be reached 24 hours, 7 days, on weekends and holidays. 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.



Vincent Conte, MD, Senior Physician  
Deputy Director, Epidemiology, Disease Control and Immunization Services  
Miami-Dade County Health Department  
8600 N.W. 17<sup>th</sup> Street, Suite 200, Miami, Florida 33126  
Tel (305) 470 5660 • Fax (305) 470 5533



Your reporting is critical in the monitoring and prevention of Dengue and other mosquito-borne illnesses in our community.

## 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

DOH BOL Jacksonville-Virology  
1217 Pearl Street  
Jacksonville, FL 32202  
Phone: 904-791-1540  
Fax: 904-791-1542

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>.