



Dengue Fever – Information for Clinicians

Version 2.1 5/10/2019

Please contact your county health department (CHD) immediately during business hours if you suspect a patient has dengue to ensure prompt mosquito control efforts.

Dengue infection is caused by any of four distinct but closely related dengue virus (DENV) serotypes (called DENV-1, -2, -3, and -4). Dengue is currently the most frequent cause of acute febrile illness among returning U.S. travelers from the Caribbean, Central and South America, and Asia.

Transmission occurs through the bite of an infected mosquito. Dengue may also be transmitted from mother to fetus in utero or to neonate at parturition. **An infected person should avoid mosquito bites while ill to prevent infection of local mosquitoes.**

Incubation period is 3 to 14 days.

Clinical Presentation: Dengue fever can range from a mild non-specific febrile syndrome to classic dengue fever or “break-bone fever,” or in the most severe forms of the disease (2–4% of cases), dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS). More than 20% of cases may be asymptomatic. Dengue should be considered when locally acquired infection is suspected or in persons who live in or have traveled to a dengue endemic area in the two weeks prior to symptom onset and have **fever**.

Dengue fever signs and symptoms may include:

- Headache or retro-orbital pain
- Anorexia and nausea
- Thrombocytopenia
- Myalgia, bone pain, or arthralgia
- Rash
- Leukopenia

Hemorrhagic fever or shock symptoms may appear after the febrile phase and include abdominal pain or tenderness, persistent vomiting, mucosal bleeding, liver enlargement, clinical fluid accumulation, or laboratory results indicating an increase in hematocrit concurrent with a rapid decrease in platelets.

Patients at risk for severe disease:

- Previously infected with another dengue virus
- Infants
- Chronic renal failure
- Elderly
- Sickle cell anemia
- Diabetes mellitus

Patients with suspected dengue fever also should be evaluated, tested and managed for possible Zika or chikungunya virus infection if travel was to areas where these viruses are present, as co-infection is possible.

Laboratory Testing: Polymerase chain reaction (PCR) can be used to detect viral RNA in serum samples collected during the first seven days post-symptom onset. Testing for DENV-specific IgM antibodies should be requested for serum specimens taken six or more days after onset. Approximately 20% of dengue patients who have been previously exposed to another dengue serotype may show elevated IgG titers and have transient or no elevated dengue IgM titers, making identification of such cases difficult without PCR testing on the acute sample. PCR testing is available commercially and is the only way to definitively diagnose acute cases. In 2018 alone, over 75 individuals tested PCR-positive for dengue virus after travel to affected areas. More than one third of these would not have been identified without complete dengue testing, including PCR. Your CHD can provide guidance on how and when to submit samples to the Florida Department of Health (FDOH) Bureau of Public Health Laboratories.

Resources:

FDOH: www.floridahealth.gov/diseases-and-conditions/dengue/index.html

CDC: www.cdc.gov/dengue/clinicallab/clinical.html