



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Oxiris Barbot, MD  
*Commissioner*

## 2019 Health Advisory #30: Updates to Zika Testing Recommendations

**Please Share this Alert with Obstetrics/Gynecology, Family Medicine, Primary Care, Pediatrics, Emergency Medicine, Infectious Disease, and Internal Medicine Staff**

- Dengue virus currently is causing large outbreaks in many areas of the world, with low to no Zika virus transmission being reported globally.
- Because of the changing epidemiology of Zika and dengue, Zika testing guidance has been updated. The Centers for Disease Control and Prevention (CDC);
  - Does **not** recommend Zika IgM testing for symptomatic persons.
  - Does **not** recommend routine Zika virus testing (NAAT or IgM) for asymptomatic pregnant persons living or traveling in the U.S. and its territories. However, NAAT testing may still be considered following travel to an area with risk of Zika outside of the U.S. and its territories.
  - Guidance for testing of infants with possible congenital Zika virus infection is unchanged.

December 12, 2019

Dear Colleagues,

The Centers for Disease Control and Prevention (CDC) has updated the current Zika virus testing guidance to consider the current global epidemiology of dengue and Zika viruses. Healthcare providers can update their Zika virus testing practices after reviewing the [newly updated CDC guidance](#). A summary of the key changes can be found below.

### **BACKGROUND AND JUSTIFICATION**

Since the Zika virus outbreaks of 2016, reported Zika cases in the Americas have declined by 30-70 fold and are now [outnumbered by reported dengue cases](#) by a ratio of approximately 200:1. The last reverse transcription polymerase chain reaction (RT-PCR) confirmed cases of locally-acquired Zika in the continental United States were in 2017 (two in Florida, five in Texas). There have been no RT-PCR positive cases in any of the U.S. territories since May of 2018. Dengue virus is also causing large outbreaks in other areas of the world with low to no Zika virus transmission being reported globally.

Additionally, in June of this year, CDC issued diagnostic testing [guidelines](#) to address the challenges with interpreting serological results given both the cross-reactivity between Zika and dengue viruses, and the prolonged detectability of Zika virus IgM antibodies after infection.

Given the overlapping symptomatology for Zika and dengue viruses and the implications of Zika virus infection during pregnancy, the guidelines recommend nucleic acid amplification testing (NAAT) for both dengue and Zika virus be performed on samples from symptomatic individuals.

## **SUMMARY OF KEY CHANGES TO CDC TESTING GUIDANCE**

### **1. Asymptomatic pregnant persons:**

- If living in or with recent travel to the U.S. and its territories, routine Zika virus testing is **NOT** currently recommended.
- If living in or with recent travel to an area with risk of Zika (see purple areas on [map on CDC website](#)) outside the U.S. and its territories, Zika virus testing is **NOT** routinely recommended, but NAAT testing may still be considered.
- Zika virus serologic testing is **NOT** recommended for asymptomatic pregnant persons.
  - Zika IgM antibodies can persist for months to years following infection and detection may not be indicative of a recent infection.
  - There is notable cross-reactivity between dengue IgM and Zika IgM antibodies in serologic tests. Antibodies generated by a recent dengue virus infection can cause the Zika IgM to be falsely positive.

### **2. Symptomatic pregnant persons:**

- Specimens should be collected as soon as possible after symptom onset for symptomatic pregnant persons living or with recent travel to areas with [active dengue transmission](#) and [a risk of Zika](#).
- Order the following diagnostic tests at the same time:
  - Dengue and Zika virus NAAT testing on a serum specimen, and Zika virus NAAT on a urine specimen, and
  - IgM testing for dengue only.
- Zika virus IgM testing is **NOT** recommended for symptomatic pregnant persons for the same reasons noted for asymptomatic pregnant persons.
- If the IgM antibody test for dengue is positive, this is adequate evidence of a dengue infection and no further testing is indicated.

### **3. Pregnant persons who have a fetus with prenatal ultrasound findings consistent with congenital Zika virus infection who live in or traveled to areas with [a risk of Zika](#) during their pregnancy:**

- Zika virus NAAT and IgM testing should be performed on maternal serum and NAAT on maternal urine.
- If the Zika virus NAATs are negative and the IgM is positive, confirmatory PRNTs should be performed against Zika and dengue.
- Testing of placental and fetal tissues may also be considered.

### **4. Symptomatic non-pregnant patients**

- Refer to [testing guidance for dengue](#). Zika testing is **NOT** currently recommended for this group based on the current epidemiology of these viruses.

### **5. Asymptomatic non-pregnant patients**

- Should **NOT** be tested for dengue or Zika viruses

[Guidance for testing of infants](#) with possible congenital Zika virus infection is unchanged.

Guidelines are being revisited and will continue to be updated as needed. Please refer to CDC's [Zika virus](#) webpage for additional information on epidemiology, testing guidance, and prevention measures.

For questions about testing in New York City, or to discuss a case, please call the Provider Access Line at **1-866-692-3641**.

We appreciate your continued collaboration with our Zika virus surveillance efforts in NYC.

Sincerely,

A handwritten signature in black ink, appearing to read "Demetre C. Daskalakis". The signature is fluid and cursive, with a long horizontal stroke at the end.

Demetre C. Daskalakis, MD, MPH  
Deputy Commissioner