Zika Testing Algorithm[§]

Revised 11/8/16
Algorithm will continue to be updated as new information becomes available

I. Non-pregnant individuals who traveled to a Zika-affected area[†] who:

→ Have uncomplicated clinical illness, potential travel-related exposure to Zika virus, **and** symptom onset within 2 weeks of that travel

II. Pregnant women[±] who:

→ Traveled to a Zika-affected area[†]

→ Had possible sexual exposure to Zika virus*

→ Had mosquito bite(s) in the 2 weeks before symptom[¶] onset

III. Infants who:

→ Have suspected or confirmed microcephaly or other neurologic abnormality (diagnosed prenatally or at birth) and mother was potentially exposed to Zika virus

→ Were born to mothers with laboratory evidence of Zika virus infection during pregnancy

IV. Non-pregnant individuals who did not travel to a Zika-affected area[†] who:

→ Had potential transfusion, transplant, or laboratory exposure

V. People who developed Guillain-Barré Syndrome or other neurological manifestation and had potential exposure to Zika virus

→ Had sexual* or local (Virginia) mosquito exposure and ≥2 Zika-compatible symptoms[¶] within 2 weeks of exposure

Private lab testing
Is available for Zika virus RNA or Zika IgM through private labs and is encouraged for these patients

Public health testing
Is available for individuals who meet these criteria and requires approval by local health departments

This testing is conducted by DCLS (Trioplex RT-PCR of serum and urine and IgM MAC ELISA of serum) and, if needed, CDC (Plaque-Reduction Neutralization Test).

[§] Serum and urine are the primary diagnostic specimens for Zika virus infection. The type of testing to be performed will depend on the time of evaluation relative to symptom onset or exposure. For testing urine at DCLS, urine must be paired with a matched serum specimen; further details about public health testing can be found in the DCLS testing instructions. Other scenarios can be discussed with the local health department on a case-by-case basis.

±Ideally, testing of symptomatic or asymptomatic pregnant women with possible Zika exposure should occur within 12 weeks of onset (if symptomatic) or exposure (if asymptomatic); a negative IgM antibody test or RT-PCR result >12 weeks after symptom onset or exposure does not rule out recent Zika virus infection because IgM antibody and viral RNA levels decline over time. Testing requests for pregnant women >12 weeks after onset (if symptomatic) or exposure (if asymptomatic) can be discussed on a case-by-case basis.

[¶]Symptoms of Zika are: fever, rash, arthralgia, or conjunctivitis; or complications of pregnancy (e.g., fetal loss, fetus or neonate with congenital microcephaly, intracranial calcifications, other structural brain or eye abnormality, or other congenital central nervous system related abnormality); or Guillain-Barré syndrome.

[†]An updated list of Zika-affected areas can be found here: http://www.cdc.gov/zika/geo/index.html.

*For this algorithm, possible sexual exposure is defined as having had unprotected sex with someone who has traveled to or lives in a Zika-affected area. Sexual exposure includes vaginal sex, anal sex, oral sex, or other activities that might expose a sex partner to genital secretions.