

**PENNSYLVANIA DEPARTMENT OF HEALTH**  
**2019 – PAHAN - 470 – 12-11-ADV**  
**Updated Guidance for Laboratory Testing of Persons**  
**Living in or with Recent Travel to Areas with Active**  
**Dengue Transmission and a Risk of Zika**



<b>DATE:</b>	12/11/2019
<b>TO:</b>	Health Alert Network
<b>FROM:</b>	Rachel Levine, MD, Secretary of Health
<b>SUBJECT:</b>	<b>Updated Guidance for Laboratory Testing of Persons Living in or with Recent Travel to Areas with Active Dengue Transmission and a Risk of Zika</b>
<b>DISTRIBUTION:</b>	Statewide
<b>LOCATION:</b>	n/a
<b>STREET ADDRESS:</b>	n/a
<b>COUNTY:</b>	n/a
<b>MUNICIPALITY:</b>	n/a
<b>ZIP CODE:</b>	n/a

**This transmission is a “Health Advisory”: provides important information for a specific incident or situation; may not require immediate action.**

**HOSPITALS:** PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

**Given the current global arboviral epidemiological situation, CDC has updated its Zika and dengue testing guidance (see below) for persons living in or with recent travel to areas with active dengue transmission and a risk of Zika.**

**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.
- **Dengue specimens submitted to the Pennsylvania Department of Health (PAHO) Bureau of Laboratories must be pre-approved** – Dengue specimens are forwarded to the Centers for Disease Control and Prevention (CDC) for testing. Please contact an epidemiologist at (717) 787-3350 for preapproval. For assistance with how to submit dengue specimens, contact the Division of Clinical Microbiology at (484) 870-6289.

**Asymptomatic non-pregnant patients**

- As per previous guidance, testing for dengue or Zika viruses is **NOT** recommended for this group.

**Asymptomatic pregnant women:**

- For asymptomatic pregnant persons living in or with recent travel *within* the U.S. and its territories, routine Zika virus testing is **NOT** currently recommended.
- For asymptomatic pregnant women living in or with recent travel to [an area with risk](#) of Zika (purple areas) *outside* the U.S. and its territories, Zika virus testing is **NOT** recommended.
- Zika virus serologic testing is **NOT** recommended for asymptomatic pregnant women based on:
  - Zika IgM antibodies can persist for months to years following infection. Therefore, detecting Zika IgM antibodies might not indicate a recent infection.

- Cross-reactivity between dengue IgM and Zika IgM antibodies in serologic tests often occurs. Antibodies generated by a recent dengue infection can cause the Zika IgM to be falsely positive.

### **Symptomatic pregnant patients:**

- 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](#).
- The following diagnostic testing should be performed at the same time:
  - Dengue and Zika virus Nucleic Acid Amplification Test (NAAT) on a serum specimen, Zika virus NAAT on a urine specimen, and serum IgM testing for **dengue only**.
- Zika virus IgM testing is **NOT** recommended for symptomatic pregnant women based on:
  - Zika IgM antibodies can persist for months to years following infection. Therefore, detecting Zika IgM antibodies might not indicate a recent infection.
  - Cross-reactivity between dengue IgM and Zika IgM antibodies in serologic tests often occurs. Antibodies generated by a recent dengue infection can cause the Zika IgM to be falsely positive.
- If the Zika NAAT is positive on a single specimen, the Zika NAAT should be repeated on newly extracted RNA from the same specimen to rule out false-positive Zika NAAT results. If the dengue NAAT is positive, this provides adequate evidence of a dengue infection and no further testing is indicated.
- If the IgM antibody test for dengue is positive, this is adequate evidence of a dengue infection and no further testing is indicated.

### **Pregnant women 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 her 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.
- If amniocentesis is being performed as part of clinical care, Zika virus NAAT testing of amniocentesis specimens should also be performed and results interpreted within the context of the limitations of amniotic fluid testing.
- Testing of placental and fetal tissues may also be considered (see guidance for [Collecting and Submitting Specimens at Time of Birth for Zika virus Testing](#)).

### **Health care providers should use commercial laboratories for all Zika virus testing. Testing is available at the PADOH Bureau of Laboratories, but only for special situations. You must get pre-approval before submitting any specimens. Approval may be granted in the following situations:**

- Infants who may have abnormalities suspected to be associated with congenital Zika virus infection and were born to an exposed mother, even if maternal Zika virus testing results were negative.
- Possible Guillain-Barré syndrome or any unusual neurologic manifestation.
- Possible unusual modes of transmission, such as by transfusion or organ transplantation.

Categories of Health Alert messages:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of December 11, 2019, but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.