Alabama Department of Public Health (ADPH) Alabama Emergency Response Technology (ALERT) Health Alert Network (HAN) January 2, 2020

NEW Zika and Dengue Testing Guidance

Based on the current global epidemiology of Zika and dengue viruses, the Centers for Disease Control and Prevention (CDC) has recommended that state health departments and laboratories review and update their Zika virus testing practices. Routine serological testing for Zika virus is no longer recommended. Further details and changes that will affect the testing practices that we at the Alabama Department of Public Health recommend and provide are detailed below.

Asymptomatic pregnant women:

- For asymptomatic pregnant persons living in or with recent travel to 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** routinely recommended, but NAAT testing may still be considered.
- Zika virus serologic testing is **NOT** recommended for asymptomatic pregnant women.
 - Zika IgM antibodies can persist for months to years following infection.
 Therefore, detecting Zika IgM antibodies might not indicate a recent infection.
 - o 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.

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 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 women.
 - Zika IgM antibodies can persist for months to years following infection.
 Therefore, detecting Zika IgM antibodies might not indicate 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.

- 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.

Non-pregnant patients

- Symptomatic non-pregnant patients should refer to testing guidance for dengue. Zika
 testing is NOT currently recommended for this group based on the current
 epidemiology of these viruses.
- As per previous guidance, asymptomatic non-pregnant patients should **NOT** be tested for dengue or Zika viruses

Zika virus testing should NOT be performed as part of preconception screening.

Zika Travel Recommendations

- Planning to become Pregnant and traveling alone to area with current or past Zika transmission
 - Wait 2 months after travel
- Planning to become Pregnant and traveling with partner to area with current or past
 Zika transmission
 - Wait 3 months after travel
- Pregnant partner and male traveled to area with current or past Zika transmission
 - o Use condoms or refrain from sex for the rest of the pregnancy

Consultation and Testing

Providers must complete the online consultation form to request approval for Zika virus testing through our state public health laboratory. You will receive an immediate testing decision based on your responses and CDC's Zika testing guidance. Any provider with a scenario that has not been specifically addressed or with additional questions or concerns, may call the Infectious Diseases & Outbreaks Division at 1-800-338-8374 for consultation and assistance. The online form can be accessed at

https://epiweb.adph.state.al.us/redcap/surveys/?s=X77X8RHJLJ

If your patient	Testing is Recommended
Has symptoms of Zika virus infection AND has EITHER traveled to an area with risk of Zika OR had sex without a condom with a partner who lived in or traveled to an area with risk of Zika	Should be tested for Zika and dengue as soon as possible. • Concurrent RNA nucleic acid amplification test (NAAT) testing and IgM testing for Zika and dengue viruses is recommended as soon as possible or through 12 weeks after symptom onset.
Was exposed to Zika AND had birth defects potentially associated with Zika detected on a prenatal ultrasound	Concurrent RNA NAAT testing and Zika virus IgM testing is recommended. If amniocentesis is being done for clinical care, healthcare providers should also test the amniotic fluid for Zika virus RNA NAAT. Testing of placental and fetal tissues may also be considered if results of maternal Zika virus testing are not definitive.
Is pregnant and has traveled to or had sex without a condom with a partner who lived in or traveled to an area with risk of Zika, but does not have symptoms of Zika virus infection	Testing is not routinely recommended. Testing should be considered using a shared decision-making model that includes pretest counseling, individualized risk assessment, clinical judgment, patient preferences, and the jurisdiction's <u>recommendations</u> . • Testing recommendations for this group of pregnant women may differ by jurisdiction. Please contact your state, tribal, local, or territorial health department for jurisdiction specific guidance.
If your patient	Testing is NOT Recommended
Has no symptoms of Zika virus infection regardless to travel history to an area with risk of Zika OR sexual activity without a condom with a partner who lived in or traveled to an area with risk of Zika	Testing is not recommended for asymptomatic pregnant or non-pregnant persons living in or with recent travel to an area with risk of Zika virus (within and outside the U.S.). NAAT testing may still be considered up to 12 weeks after travel for those persons that traveled to areas outside of the U.S. and its territories
Is pregnant and had possible exposure to Zika either through travel or sex but has no symptoms of Zika virus	Routine testing is not recommended for pregnant women with possible exposure to Zika, unless symptoms are present. Testing people when there is a lower occurrence of disease could lead to a higher proportion of false positive test results.
Is symptomatic and not pregnant	Symptomatic non-pregnant patients should refer to testing guidance for dengue. Zika testing is NOT currently recommended for this group based on the current epidemiology of these viruses.
As per previous guidance, asymptomatic non-pregnant patients should NOT be tested for dengue or Zika	

As per previous guidance, asymptomatic non-pregnant patients should NOT be tested for dengue or Zika viruses.