September 15, 2017 (Amends version dated June 6, 2017)

To: North Carolina Clinicians

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Subject: Updated CDC guidelines for healthcare providers caring for pregnant women with possible Zika virus exposure and implications for infant care (3 pages)

This memo is intended to provide updated guidance on Zika virus testing and caring for pregnant women with possible Zika virus exposure.

Caring for Pregnant Women with Possible Zika Virus Exposure: CDC Updated Interim Guidance

Zika virus infection during pregnancy can cause microcephaly and other major brain and neurologic abnormalities, and it has been linked to other adverse pregnancy outcomes such as miscarriage and intrauterine growth restriction.

On July 24, 2017, the CDC published updated guidance for healthcare providers on Zika virus testing and caring for pregnant women with possible Zika virus exposure. These changes were made in response to the declining number of Zika virus infections and new data that indicate the prolonged detection of Zika virus IgM (immunoglobulin M) antibodies. This guidance also modifies recommendations for testing placental and fetal tissues and implications for infant outpatient care and management.

(https://www.cdc.gov/mmwr/volumes/66/wr/mm6629e1.htm)

Testing of Pregnant Women

CDC currently recommends Zika virus testing for the following groups of pregnant women:

- Symptomatic pregnant women with recent possible Zika virus exposure, and
- Asymptomatic pregnant women with recent possible Zika virus exposure and with ongoing possible exposure to Zika (e.g. frequently travel to an area with risk of Zika transmission).
In addition to the aforementioned groups, the Communicable Disease Branch also recommends Zika virus testing for the following pregnant women:

- Asymptomatic pregnant women with recent possible Zika virus exposure (i.e. through travel or sexual exposure) but without ongoing possible exposure.

Table 1. Updated Zikavirus Testing Recommendation for Pregnant Women

<table>
<thead>
<tr>
<th>Symptomology and Exposure</th>
<th>When to Test?</th>
<th>Which Test(s)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptomatic pregnant women with possible Zikavirus exposure</td>
<td>Up to 12 weeks after symptom onset</td>
<td>Concurrent serum and urine nucleic acid tests (NAT) and serum IgM</td>
</tr>
<tr>
<td></td>
<td>&gt;12 weeks after symptom onset</td>
<td>Zika IgM; Zika NAT if non-Negative</td>
</tr>
<tr>
<td>Asymptomatic pregnant women with ongoing possible exposure</td>
<td>Up to three times during pregnancy with first test at start of prenatal care</td>
<td>Serum and urine NAT</td>
</tr>
<tr>
<td>Asymptomatic pregnant women with recent possible exposure but without ongoing possible exposure</td>
<td>Up to 12 weeks after last possible Zika virus exposure</td>
<td>Concurrent serum and urine nucleic acid tests (NAT) and serum IgM</td>
</tr>
<tr>
<td></td>
<td>&gt;12 weeks after last possible Zika virus exposure</td>
<td>Zika IgM</td>
</tr>
</tbody>
</table>

Table 1 shows the updated testing guidance for pregnant women based on symptomology and exposure level. Zika IgM tests are no longer recommended for asymptomatic pregnant women with ongoing possible exposure because of the limitations of IgM tests and the difficulty in interpreting the timing of infection. For asymptomatic women with recent possible Zika virus exposure but without ongoing possible exposure, providers should follow the same testing algorithm for symptomatic women with possible Zika virus exposure and apply the same time frames from the last possible Zika virus exposure.

CDC continues to recommend that pregnant women not travel to areas with risk for Zika virus transmission. Clinicians should ask all pregnant women about their risk for possible Zika virus exposure before and during pregnancy. This includes questions regarding presence of Zika virus-related symptoms, place and duration of travel, frequency of travel, and any control measures.

**Testing of Placental Tissue Specimens for Live Births**

Placental testing is not indicated for women who have a diagnosis of acute Zika virus infection (i.e. NAT positive) or have negative Zika IgM and NAT testing ≤12 weeks after symptom onset or possible exposure. Testing is recommended for infants born to women (1) with maternal serologic evidence of Zika or flavivirus infection, or (2) without maternal serologic evidence or no maternal testing if ≥12 weeks after symptom onset or exposure and:

- Live births with possible Zika virus-associated birth defects, or
- Live births born to symptomatic women, or
- Live births born to asymptomatic women with ongoing possible exposure.

Testing of placental tissue will be evaluated on a case-by-case basis for asymptomatic women with recent possible exposure but without ongoing possible exposure. Please contact the Communicable Disease Branch for additional guidance. Testing of placental and fetal tissues can be considered in the event of a pregnancy loss, with or without possible Zika virus-associated birth defects, and should be considered in infant death following live birth. This will aid in fetal or infant and maternal diagnosis of Zika virus infection.