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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 Zika Virus Testing Recommendation for Pregnant Women

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

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  $\leq 12$  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  $\geq 12$  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.

### **Evaluation and Care of Infants with Possible Congenital Zika Virus Exposure**

Pediatric healthcare providers should ask about possible maternal and congenital Zika virus exposure for every newborn. Routine pediatric care, including measurement of head circumference and newborn hearing screening, should be given to infants born to mothers who had possible exposure to Zika virus but were not tested. Head ultrasound and ophthalmologic assessment should also be considered based on the level of possible exposure such as length and type of exposure, use of prevention measures, and intensity of Zika virus transmission at travel location.

### **Testing for Non-Pregnant Women and Men**

Guidance on Zika virus testing for non-pregnant women and men remains unchanged from memo dated on June 6, 2017. ([http://epi.publichealth.nc.gov/zika/docs/ZikaTestingUpdateMemo\\_6June2017.pdf](http://epi.publichealth.nc.gov/zika/docs/ZikaTestingUpdateMemo_6June2017.pdf))

### **Reporting**

Per 10A NCAC 41A.0101, suspected or confirmed Zika virus infection is declared to be dangerous to public health in North Carolina and is made reportable within 24 hours. Please contact the Communicable Disease Branch at (919) 733-3419 or your local health department if Zika virus infection is suspected or confirmed in a pregnant woman or if fetal ultrasound shows abnormalities such as microcephaly or other patterns of birth defects that are consistent with congenital Zika syndrome and the pregnant patient has had potential exposure to Zika virus.