

**ATTENTION – WASHOE COUNTY HEALTHCARE PROVIDERS !**

As you may know, Florida identified Zika cases who likely acquired the infections locally. The length of this issue of the Epi-News exceeds our usual length; however, this issue contains extremely important recommendations issued by CDC today and some useful tools issued last week by CDC. The Washoe County Health District (WCHD) highly recommends that local healthcare providers print the attached Updated Interim Pregnancy Guidance (Algorithm and Table) from CDC as your desktop reference.

Investigation for Local Mosquito-borne Zika Virus Transmission  
in Miami-Dade and Broward Counties, Florida  
**CDC Guidance for Travel and Testing of Pregnant Women and  
Women of Reproductive Age for Zika Virus Infection**

**Summary**



The Florida Department of Health (FL DOH) has identified an area with local mosquito-borne Zika virus transmission (active Zika virus transmission) in Miami (<http://www.cdc.gov/zika/intheus/florida-update.html>). Based on the earliest time of symptom onset and a maximal two-week incubation period for Zika virus, **this guidance applies to women of reproductive age and their partners who live in or traveled to this area after June 15, 2016.**

This is an ongoing investigation, and CDC is rapidly learning more about the extent of active Zika virus transmission in the area identified by the FL DOH. With the recommendations below, CDC is applying existing guidance to the occurrence of Zika virus transmission in this area of Florida. As more information becomes available, we will update these recommendations.

**Recommendations**

1. Pregnant women should avoid non-essential travel to the area with active Zika virus transmission identified by the FL DOH.

2. Pregnant women and their partners living in or traveling to the area with active Zika virus transmission identified by the FL DOH should follow steps to prevent mosquito bites (<http://www.cdc.gov/zika/prevention/prevent-mosquito-bites.html>).
3. Women and men who live in or who have traveled to the area with active Zika virus transmission identified by the FL DOH and who have a pregnant sex partner should consistently and correctly use condoms or other barriers to prevent infection during sex or not have sex for the duration of the pregnancy.
4. All pregnant women in the United States should be assessed for possible Zika virus exposure during each prenatal care visit. Women with ongoing risk of possible exposure include those who live in or frequently travel to the area with active Zika virus transmission identified by the FL DOH. Women with limited risk include those who traveled to the area with active Zika virus transmission identified by the FL DOH or had sex with a partner who lives in or traveled to the area with active Zika virus transmission without using condoms or other barrier methods to prevent infection. Each evaluation should include an assessment of signs and symptoms of Zika virus disease (acute onset of fever, rash, arthralgia, conjunctivitis), their travel history as well as their sexual partner's potential exposure to Zika virus and history of any illness consistent with Zika virus disease to determine whether Zika virus testing is indicated.
5. Pregnant women with possible exposure to Zika virus and signs or symptoms consistent with Zika virus disease should be tested for Zika virus infection based on time of evaluation relative to symptom onset in accordance with CDC guidance ([http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s\\_cid=mm6529e1\\_e](http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e)).
6. Pregnant women with ongoing risk of possible Zika virus exposure and who do not report symptoms of Zika virus disease should be tested in the first and second

trimester of pregnancy in accordance with CDC guidance ([http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s\\_cid=mm6529e1\\_e](http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e)).

7. Pregnant women with limited risk and who do not report symptoms should consult with their healthcare providers to obtain testing for Zika virus infection based on the elapsed interval since their last possible exposure in accordance with CDC guidance ([http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s\\_cid=mm6529e1\\_e](http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e)).
8. Women with Zika virus disease should wait at least eight weeks and men with Zika virus disease should wait at least six months after symptom onset to attempt conception.
9. Women and men with ongoing risk of possible Zika virus exposure who do not have signs or symptoms consistent with Zika virus disease and are considering pregnancy should consult their healthcare provider. Due to the ongoing risk of possible Zika virus exposure, healthcare providers should discuss the risks of Zika, emphasize ways to prevent Zika virus infection, and provide information about safe and effective contraceptive methods. As part of their pregnancy planning and counseling with their health care providers, some women and their partners living in the area with active Zika virus transmission identified by the FL DOH might decide to delay pregnancy.
10. Women and men with limited risk and who do not report signs or symptoms consistent with Zika virus disease should wait at least eight weeks after last possible exposure to attempt conception.

## Background

Zika is spread to people primarily through the bite of an infected *Aedes* species mosquito (*Ae. aegypti* and *Ae. albopictus*). Zika virus can also be sexually transmitted. Zika virus infection during pregnancy can cause microcephaly and severe fetal brain defects, and has been associated with other adverse pregnancy outcomes. Most persons infected with Zika virus will not have symptoms; infants with microcephaly and other birth defects have been born to women with Zika virus infection who do not report symptoms.

CDC's testing recommendations for pregnant women with ongoing or limited risk for possible Zika virus exposure who report clinical illness consistent with Zika virus disease (symptomatic pregnant women) are the same. Symptomatic pregnant women who are evaluated less than two weeks after symptom onset should receive serum and urine Zika virus rRT-PCR testing. Symptomatic pregnant women who are evaluated two to 12 weeks after symptom onset should first receive a Zika virus immunoglobulin (IgM) antibody test; if the IgM antibody test result is positive or equivocal (unclear), serum and urine rRT-PCR testing should be performed.

Testing recommendations for pregnant women with possible Zika virus exposure who do not report clinical illness consistent with Zika virus disease (asymptomatic pregnant women) differ based on the circumstances of possible exposure. **For asymptomatic pregnant women with ongoing risk for possible exposure and who are**

**evaluated less than two weeks after last possible exposure, rRT-PCR testing should be performed. If the rRT-PCR result is negative, a Zika virus IgM antibody test should be performed two to 12 weeks after the exposure.** Asymptomatic pregnant with limited risk for possible exposure who are first evaluated 2–12 weeks after their last possible exposure should first receive a Zika virus IgM antibody test; if the IgM antibody test result is positive or equivocal, serum and urine rRT-PCR should be performed. Asymptomatic pregnant women with ongoing risk for possible exposure to Zika virus should receive Zika virus IgM antibody testing as part of routine obstetric care during the first and second trimesters; immediate rRT-PCR testing should be performed when IgM antibody test results are positive or equivocal.

Further information on the interpretation of testing results and clinical management of pregnant women with laboratory evidence of possible Zika virus infection are available below.

## For more information:

- Interim Guidance for Health Care Providers Caring for Pregnant Women: MMWR: [http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s\\_cid=mm6529e1\\_w](http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_w) Summary: <http://www.cdc.gov/zika/hc-providers/pregnant-woman.html>
- Fact Sheet with Testing Algorithms: [http://www.cdc.gov/zika/pdfs/testing\\_algorithm.pdf](http://www.cdc.gov/zika/pdfs/testing_algorithm.pdf)
- Interim Guidance for Prevention of Sexual Transmission of Zika Virus: [http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm?s\\_cid=mm6529e2\\_w](http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm?s_cid=mm6529e2_w)
- Updated information on active transmission of Zika virus from the Florida Department of Health: <http://www.flgov.com/2016/08/01/gov-scott-florida-calls-on-cdc-to-activate-emergency-response-team-following-confirmed-mosquito-borne-transmissions/>

*The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.*

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Categories of Health Alert Network messages:

**Health Alert** Requires immediate action or attention; highest level of importance

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

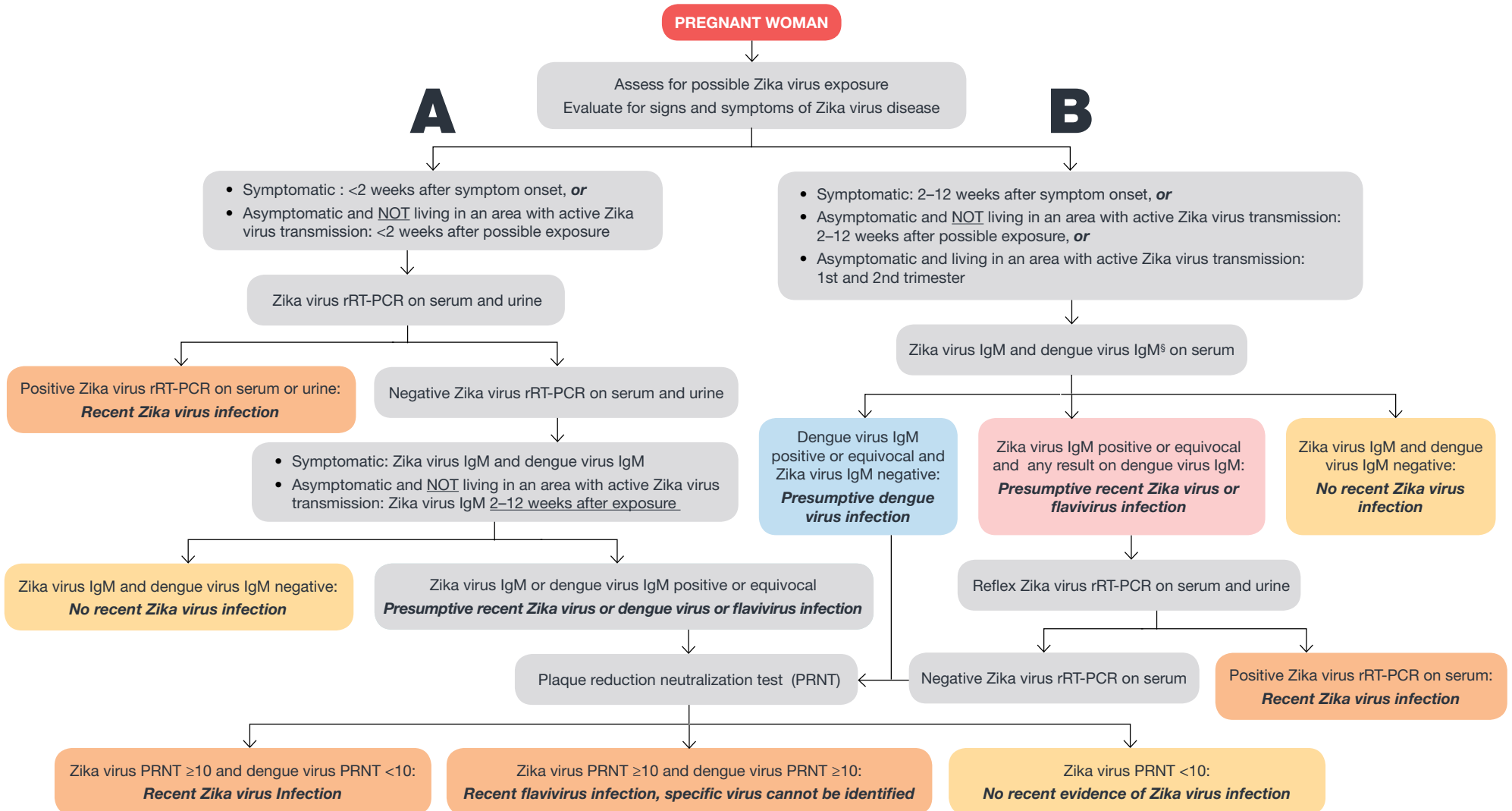
**Health Update** Unlikely to require immediate action; provides updated information regarding an incident or situation

**HAN Info Service** Does not require immediate action; provides general public health information.

# UPDATED INTERIM PREGNANCY GUIDANCE:



Testing and interpretation recommendations<sup>†, §, ¶</sup> for a pregnant woman with possible exposure to Zika virus<sup>\*\*</sup> — United States (including U.S. territories)



**Abbreviations:** IgM = immunoglobulin M; PRNT = plaque reduction neutralization test; rRT-PCR = real-time reverse transcription–polymerase chain reaction.

\* A pregnant woman is considered symptomatic if one or more signs or symptoms (fever, rash, arthralgia, or conjunctivitis) consistent with Zika virus disease is reported whereas a pregnant woman is considered asymptomatic if symptoms are NOT reported.

† Testing includes Zika virus rRT-PCR on serum and urine samples, Zika virus and dengue virus Immunoglobulin M (IgM), and plaque reduction neutralization test (PRNT) on serum samples. PRNT results that indicate recent flavivirus infection should be interpreted in the context of the currently circulating flaviviruses. Refer to the laboratory guidance for updated testing recommendations (<http://www.cdc.gov/zika/laboratories/lab-guidance.html>). Because of the overlap of symptoms in areas where other viral illness are endemic, evaluate for possible dengue or chikungunya virus infection.

§ Dengue IgM antibody testing is recommended only for symptomatic pregnant women.

¶ If Zika virus rRT-PCR testing is requested from laboratories without IgM antibody testing capacity or a process to forward specimens to another testing laboratory, storing of additional serum samples is recommended for IgM antibody testing in the event of a rRT-PCR negative result.

\*\* Possible exposure to Zika virus includes travel to or residence in an area with active Zika virus transmission (<http://wwwnc.cdc.gov/travel/notices/>), or sex (vaginal sex (penis-to-vagina sex), anal sex (penis-to-anus sex), oral sex (mouth-to-penis sex or mouth-to-vagina sex), and the sharing of sex toys) without a barrier method to prevent infection (male or female condoms for vaginal or anal sex, male condoms for oral sex (mouth-to-penis), and male condoms cut to create a flat barrier or dental dams for oral sex (mouth-to-vagina) with a partner who traveled to, or lives in an area with active Zika virus transmission.

# Clinical management of a pregnant woman with suspected Zika virus infection

Interpretation of Laboratory Results*	Prenatal Management	Postnatal Management
<b><u>Recent Zika virus infection</u></b>	<ul style="list-style-type: none"> <li>Consider serial ultrasounds every 3–4 weeks to assess fetal anatomy and growth<sup>†</sup></li> <li>Decisions regarding amniocentesis should be individualized for each clinical circumstance<sup>§</sup></li> </ul>	<p><b>LIVE BIRTHS:</b></p> <ul style="list-style-type: none"> <li>Cord blood and infant serum should be tested for Zika virus rRT-PCR, Zika IgM, and dengue virus IgM antibodies. If CSF is obtained for other reasons, it can also be tested.</li> <li>Zika virus rRT-PCR and IHC staining of umbilical cord and placenta is recommended.<sup>¶</sup></li> </ul> <p><b>FETAL LOSSES:</b></p> <ul style="list-style-type: none"> <li>Zika virus rRT-PCR and IHC staining of fetal tissues is recommended.<sup>¶</sup></li> </ul>
<b><u>Recent flavivirus infection; specific virus cannot be identified</u></b>		
<b><u>Presumptive recent Zika virus infection**</u></b>	<ul style="list-style-type: none"> <li>Consider serial ultrasounds every 3–4 weeks to assess fetal anatomy and growth<sup>†</sup></li> <li>Amniocentesis might be considered; decision should be individualized for each clinical circumstance<sup>§</sup></li> </ul>	<p><b>LIVE BIRTHS:</b></p> <ul style="list-style-type: none"> <li>Cord blood and infant serum should be tested for Zika virus rRT-PCR, Zika IgM, and dengue virus IgM antibodies. If CSF is obtained for other reasons, it can also be tested.</li> <li>Zika virus rRT-PCR and IHC staining of umbilical cord and placenta should be considered.<sup>¶</sup></li> </ul> <p><b>FETAL LOSSES:</b></p> <ul style="list-style-type: none"> <li>Zika virus rRT-PCR and IHC staining of fetal tissues should be considered.<sup>¶</sup></li> </ul>
<b><u>Presumptive recent flavivirus infection**</u></b>		
<b><u>Recent dengue virus infection</u></b>	<ul style="list-style-type: none"> <li>Clinical management in accordance with existing guidelines (<a href="http://apps.who.int/iris/bitstream/10665/44188/1/9789241547871_eng.pdf">http://apps.who.int/iris/bitstream/10665/44188/1/9789241547871_eng.pdf</a>).</li> </ul>	
<b><u>No evidence of Zika virus or dengue virus infection</u></b>	<ul style="list-style-type: none"> <li>Prenatal ultrasound to evaluate for fetal abnormalities consistent with congenital Zika virus syndrome.<sup>†</sup> <ul style="list-style-type: none"> <li>Fetal abnormalities present: repeat Zika virus rRT-PCR and IgM test; base clinical management on corresponding laboratory results.</li> <li>Fetal abnormalities absent: base obstetric care on the ongoing risk of Zika virus exposure to the pregnant woman.</li> </ul> </li> </ul>	

**Abbreviations:** CSF = cerebrospinal fluid; IgM = immunoglobulin M; IHC = immunohistochemical; PRNT = plaque reduction neutralization test; rRT-PCR = real-time reverse transcription–polymerase chain reaction.

\* Refer to the previously published guidance for testing interpretation (<http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm>).

<sup>†</sup> Fetal abnormalities consistent with congenital Zika virus syndrome include microcephaly, intracranial calcifications, ventriculomegaly, arthrogryposis, and abnormalities of the corpus callosum, cerebrum, cerebellum, and eyes.

<sup>§</sup> Health care providers should discuss risks and benefits of amniocentesis with their patients. It is not known how sensitive or specific rRT-PCR testing of amniotic fluid is for congenital Zika virus infection, whether a positive result is predictive of a subsequent fetal abnormality, and if it is predictive, what proportion of infants born after infection will have abnormalities.

<sup>¶</sup> Refer to pathology guidance for collection and submission of fetal tissues for Zika virus testing for detailed information on recommended specimen types (<http://www.cdc.gov/zika/laboratories/test-specimens-tissues.html>).

\*\* rRT-PCR or PRNT should be performed for positive or equivocal IgM results as indicated. PRNT results that indicate recent flavivirus infection should be interpreted in the context of the currently circulating flaviviruses. Refer to the laboratory guidance for updated testing recommendations (<http://www.cdc.gov/zika/laboratories/lab-guidance.html>). Because of the overlap of symptoms and areas where other viral illnesses are endemic, evaluate for possible dengue or chikungunya virus infection.

