CDC Updates Guidance for Pregnant Women and Women and Men of Reproductive Age for Zika Virus Infection Related to the Ongoing Investigation of Local Mosquito-borne Zika Virus Transmission in Miami-Dade County, Florida

Summary

The U.S. Centers for Disease Control and Prevention (CDC) previously issued travel, testing, and other guidance related to areas of active Zika virus transmission in Florida. Because local transmission of Zika virus continues to be reported in Miami-Dade County, CDC is strengthening travel recommendations for pregnant women to Miami-Dade County and also reinforcing recommendations for use of protective measures to prevent exposure to Zika. CDC is updating recommendations to emphasize testing for pregnant women with an epidemiologic link to Miami-Dade County. An epidemiologic link means that they lived in, traveled to, or had unprotected sex with someone who lived in or traveled to, the designated area. In addition, CDC has made specific recommendations for areas of identified active transmission.

The Florida Department of Health (FL DOH) has identified a new area where local, state, and CDC officials have determined that the intensity of Zika virus transmission presents a significant risk to pregnant women in a designated one-square-mile area located in Miami-Dade County (NW 79th St. to the north, NW 63rd St. to the south, NW 10th Ave. to the west and N. Miami Ave. to the east).

- Pregnant women should consider postponing travel to all areas of Miami-Dade County. Pregnant women should specifically avoid travel to the previously identified 4.5-square-mile area of Miami Beach and one-square-mile area in Little River located in Miami-Dade County (http://www.cdc.gov/zika/intheus/florida-update.html).

- Pregnant women who have an epidemiologic link to any area of Miami-Dade County after August 1, 2016 should be tested for Zika virus in accordance with CDC guidance (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e).
  - Pregnant women with an epidemiologic link to the 4.5-square-mile area of Miami Beach with active Zika virus transmission, after July 14, 2016, should be tested for Zika virus.

Because the incubation period for Zika virus infection is up to two weeks and many people infected with Zika virus will not have symptoms or will only have mild symptoms, investigating cases may take several weeks. Data collected during the ongoing investigation indicate the period of time since August 1 represents the timeframe with the highest transmission in Miami-Dade County.

FL DOH and CDC continue to work together on this ongoing investigation to learn more about active Zika virus transmission in Miami-Dade County. CDC will update these recommendations as more information becomes available. Healthcare providers should visit CDC’s Zika website (http://www.cdc.gov/zika/) frequently for the most up-to-date recommendations.

Recommendations

Red and Yellow Area Designation

CDC has defined two types of geographic areas within the continental United States and Hawaii to implement measures to prevent Zika virus transmission: Zika active transmission areas (designated as red) and Zika cautionary areas (designated as yellow).
A red area is a geographic area where local, state, and CDC officials have determined that the intensity of Zika virus transmission presents a significant risk to pregnant women. The intensity of Zika virus transmission is determined by several factors including geographic distribution of cases, number of cases identified, known or suspected links between cases and population density.

A yellow area is a geographic area where local transmission has been identified, but evidence is lacking on whether the intensity of transmission is comparable to that in a red area. Although the level of risk in yellow areas is unknown, pregnant women are still at risk. Additionally, areas adjacent to or in proximity to red areas may have a greater likelihood of local transmission and, therefore, risk to pregnant women.

Currently, a 4.5-square-mile area of Miami Beach and one-square-mile area in Little River located in Miami-Dade County (http://www.cdc.gov/zika/intheus/florida-update.html) are red areas and the rest of Miami-Dade County is a yellow area. Because this investigation is ongoing and the designation of areas is likely to change over time, please frequently check the website (http://www.cdc.gov/zika/intheus/florida-update.html) for the most up-to-date designation of red and yellow areas.

Recommendations for Miami-Dade County

Travel Recommendations for Pregnant Women
1. Pregnant women should consider postponing travel to yellow areas of Miami-Dade County.
2. Pregnant women should specifically avoid travel to red areas (http://www.cdc.gov/zika/intheus/florida-update.html) because the intensity of Zika virus transmission confirmed in these areas presents a significant risk to pregnant women.

Testing Recommendations for Pregnant Women
1. Pregnant women with an epidemiologic link to Miami-Dade County after August 1, 2016, should be tested for Zika virus infection in accordance with CDC guidance. Pregnant women with an epidemiologic link to the 4.5-square-mile area of Miami Beach with active Zika virus transmission after July 14, 2016, should be tested for Zika virus (http://www.cdc.gov/mmwr/volumes/65/ww/mm6529e1.htm?s_cid=mm6529e1_e).
   a. Pregnant women with symptoms of Zika virus disease should be tested according to CDC guidance, which is based on the time of evaluation relative to symptom onset.
   b. Pregnant women with ongoing exposure (who live in or frequently travel [e.g., daily, weekly]) to Miami-Dade County and who are without symptoms of Zika virus disease should consult with their healthcare provider to obtain testing for Zika virus infection in the first and second trimesters of pregnancy.
   c. Pregnant women who have had limited travel to or had sex without using a condom with a partner who lives in or has traveled to Miami-Dade County should be tested for Zika virus infection. This testing should be performed based on the time of evaluation relative to last possible exposure in accordance with CDC guidance.
2. Healthcare providers should contact their state, local, or territorial health department to coordinate testing and interpret results. Healthcare providers should discuss the limitations of laboratory tests used to diagnose Zika virus infection with pregnant women and their partners.

Protective Measures Recommendations for Pregnant Women
1. Pregnant women and their partners living in or traveling to Miami-Dade County should be aware of active Zika virus transmission and should strictly follow steps to prevent mosquito bites. (http://www.cdc.gov/zika/prevention/prevent-mosquito-bites.html).
2. Women and men who live in or travel to Miami-Dade County should be aware of active Zika virus transmission, and those who are pregnant or have a pregnant sex partner should consistently and correctly use condoms to prevent Zika virus infection during sex or should not have sex during the pregnancy.

Women and Men Who are Planning to Conceive
1. Women and men who are planning to conceive in the near future should consider avoiding nonessential travel to red areas.
2. Women with an epidemiologic link to the red areas and who do not have ongoing risks for exposure should wait at least eight weeks after symptom onset (if symptomatic) or after last possible exposure (if asymptomatic) to attempt conception.

3. Men with an epidemiologic link to the red areas who do not have ongoing risks for exposure should wait at least six months after symptom onset (if symptomatic) or last possible exposure (if asymptomatic) to attempt conception.

4. Women with an epidemiologic link to the yellow areas who do not have ongoing risks for exposure may consider waiting at least eight weeks after last possible exposure from symptom onset (if symptomatic) or last possible exposure (if asymptomatic) to attempt conception. Although the level of risk in yellow areas is unknown, pregnant women are still at risk. Additionally, areas adjacent to or in proximity to red areas may have a greater likelihood of local transmission, so there may be a greater risk to pregnant women.

5. Men with an epidemiologic link to the yellow areas who do not have ongoing risks for exposure may consider waiting at least six months from symptom onset (if symptomatic) or last possible exposure (if asymptomatic) to attempt conception. Although the level of risk in yellow areas is unknown, pregnant women are still at risk. Additionally, areas adjacent to or in proximity to red areas may have a greater likelihood of local transmission, so there may be a greater risk to pregnant women.

6. People living in an area with possible Zika virus transmission should be counseled on the possible risk for Zika virus infection during the periconception period. Women and men should discuss their reproductive life plans with their healthcare provider in the context of potential and ongoing Zika virus exposure. Women and men with ongoing risks for exposure who are diagnosed with Zika virus disease should wait at least eight weeks and at least six months respectively, after symptom onset before attempting conception.

7. There are limited data about the persistence of Zika virus RNA in body fluids, and the risk for adverse pregnancy outcomes associated with maternal Zika virus infection around the time of conception is currently not known. Given this information, some couples in which one or both partners have had a possible Zika virus exposure might choose to wait longer or shorter than the recommended period to conceive, depending on individual circumstances (e.g., age, fertility, details of possible exposure) and risk tolerance.

8. Women and men attempting conception living in or traveling to the Miami-Dade County should be aware of active Zika virus transmission and should strictly follow steps to prevent mosquito bites. (http://www.cdc.gov/zika/prevention/prevent-mosquito-bites.html).

Additional Recommendations
For the yellow area, additional Zika-related interventions (e.g., testing of symptomatic non-pregnant persons) may be implemented depending on local circumstances.

Background
Zika virus 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 is a cause of microcephaly and severe fetal brain defects and has been associated with other adverse pregnancy outcomes. Most people 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 did not report symptoms.

For pregnant women who report clinical illness consistent with Zika virus disease (symptomatic pregnant women), CDC's testing recommendations are the same for those with ongoing risk and those with limited risk for possible Zika virus exposure. Symptomatic pregnant women who are evaluated less than two weeks after symptom onset should receive serum and urine Zika virus RNA nucleic acid test (NAT) testing. Symptomatic pregnant women who are evaluated 2 to 12 weeks after symptom onset should first receive a Zika virus immunoglobulin (Ig) M antibody test; if the IgM antibody test result is positive or equivocal (unclear), serum and urine RNA NAT testing should be performed. If the RNA NAT result is negative, a positive or equivocal (unclear) Zika virus IgM antibody test result should be followed by plaque reduction neutralization testing (PRNT). Interpretation of serologic results has been described (http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm).
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 who are evaluated less than two weeks after last possible exposure, RNA NAT testing should be performed. If the RNA NAT result is negative, a Zika virus IgM antibody test should be performed 2 to 12 weeks after the exposure. Asymptomatic pregnant women with limited risk for possible exposure who are first evaluated 2 to 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 (unclear), serum and urine RNA NAT 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 RNA NAT testing should be performed when IgM antibody test results are positive or equivocal (unclear).

Further information on the interpretation of laboratory test 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)
  Update: Interim Guidance for Preconception Counseling and Prevention of Sexual Transmission of Zika Virus for Persons with Possible Zika Virus Exposure — United States, September 2016 | MMWR

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