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**Communicable Disease Control & Prevention** 

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# **HEALTH UPDATE: ZIKA VIRUS**

**SEPTEMBER 20, 2016 (UPDATED FROM JULY 28, 2016)** 

### WHAT HAS CHANGED

Several commercial laboratories now offer the convenience of Zika RT-PCR testing and/or Zika IgM antibody testing, and so clinicians may opt to order Zika testing through a commercial lab.

Due to the complexity of CDC Zika testing guidance, providers ordering testing through commercial labs should contact their lab to ensure the appropriate test is available and should order testing according to the recommended testing algorithm (see next page).

## ACTIONS REQUESTED OF ALL CLINICIANS

- 1. Counsel pregnant women in any trimester to postpone travel to Zika transmission areas (<a href="www.cdc.gov/zika/geo/">www.cdc.gov/zika/geo/</a>) and counsel patients regarding prevention of sexual transmission of Zika virus, especially pregnant women, women planning pregnancy, or their partners. See SFDPH Zika Health Advisory dated July 28, 2016 for details (<a href="www.sfcdcp.org/healthalerts.html">www.sfcdcp.org/healthalerts.html</a>).
- 2. Counsel all travelers to Zika transmission areas to adhere strictly to recommended mosquito bite precautions.
- 3. **Test for Zika per CDC guidance.** Zika testing is recommended for: (A) individuals who develop illness consistent with Zika disease within 2 weeks after potential exposure, and (B) asymptomatic pregnant women with potential Zika exposure. <sup>1</sup> Testing is <u>not</u> recommended for asymptomatic, non-pregnant patients, even those with potential Zika exposure. **Initially test with serum and urine RT-PCR** if symptom onset or last potential exposure date (if pregnant) was less than 14 days before specimen collection. **Initially test with serum IgM** if symptom onset or last potential exposure date (if pregnant) was 2-12 weeks before specimen collection. Depending on results, additional testing may be required to confirm or rule out Zika infection.
- 4. **Providers ordering testing through commercial labs should contact their commercial laboratory** to ensure the appropriate test is available, and the current testing algorithm (see next page) is being followed. Please note that when necessary, commercial labs can route specimens to a public health laboratory to perform the plaque reduction neutralization testing (PRNT) needed to confirm Zika reactive IgM results.
- 5. **Providers who plan to send testing directly through Public Health should follow SFDPH-specific instructions** for test submission. See <a href="https://www.sfcdcp.org/zika\_providers">www.sfcdcp.org/zika\_providers</a> to download the updated instructions.
- 6. Coordinate between prenatal care and labor/delivery settings: Prenatal providers should have a systematic way of communicating Zika testing so that Labor/Delivery personnel are aware of any pending Zika tests. Neonatal providers should consider holding a newborn serum specimen pending the maternal test result.
- 7. Contact SFDPH Communicable Disease Control Unit (CDCU) for questions at (415) 554-2830.
- 8. Check for updates regularly as knowledge and guidance are evolving rapidly.

#### Recommended Resources:

www.cdc.gov/zika || www.cdph.ca.gov/HealthInfo/discond/Pages/Zika.aspx || www.sfcdcp.org/zika providers

<sup>&</sup>lt;sup>1</sup> Zika exposure is defined as travel to an area of active Zika transmission or unprotected sex with a person who has recently traveled to a Zika area.

#### General Zika Virus Testing Algorithm – Information for Clinicians Is symptom onset date (or last potential exposure date - for asymptomatic pregnant females only) <14 days from specimen collection date? Yes No Zika RT-PCR Is symptom onset or last potential Serum: At least 2 ml serum (5-10 ml blood) in red top or serum separator tube. exposure between 2 and 12 weeks Urine: At least 2 ml fluid in leak-proof container. (Urine specimen collection cup NOT from specimen collection date? recommended! Transfer to sterile screw-cap tube and use parafilm to seal.) Positive Negative Yes No Does not rule out current or recent infection. Zika IgM and Dengue IgM Consider value of testing. Due to expected drop off Indicative of current Zika Order IgM testing during in IgM after 12 weeks, a result of "not detected is Serum: At least 2 ml serum (5-10 ml blood) in red top virus infection. the 2-12 week window. intererpreted as inconclusive/indeterminate. or serum separator tube. Either is Positive, equivocal, Both are Negative or nonspecific Algorithm based on Is patient pregnant? CDC guidance; flow Indicative of no recent Zika chart developed by virus infection. Kern County Department of Public Health; updated Yes No 9/20/2016 by SFDPH Zika RT-PCR Testing (if not previously performed) See specimen collection information above. **PRNT Testing by Public Health Lab** Non-Zika flavivirus Zika antibodies only Antibody for Zika and other Positive Negative antibodies only detected No antibodies detected detected flavivirus detected (dengue, WNV, etc) Does not rule out current of No evidence of recent Indicative of recent recent infection. Indicative of recent or prior lavivirus infection. Consider Indicative of recent Zika Indicative of recent Zika flavivirus infection, exact infection with another repeat testing if Zika virus virus infection. PRNT testing to be done by virus infection. etiology cannot be flavivirus. infection is strongly public health lab. determined. suspected.