



**HEALTH ADVISORY UPDATE**  
**October 6, 2016**  
**ZIKA VIRUS**

**SUMMARY:**

Zika virus is transmitted by the bite of infected *Aedes aegypti* and *Aedes albopictus* mosquitoes, which are aggressive day biters and also vectors of Dengue, Chikungunya, and Yellow Fever viruses. Transmission of the virus has been reported in Mexico, the Caribbean, Central America, South America, and some South Pacific Islands and US territories. Zika is most commonly transmitted through mosquito bites, but it can also be transmitted sexually and from a pregnant woman to her infant. To date, the only mosquito-borne transmission in the continental United States has been documented in Miami-Dade and Broward Counties (Florida); however, cases of Zika virus have been reported among travelers returning back to the United States.

**PLEASE NOTE: Although commercial labs are now offering Zika testing, commercial testing does not include the confirmatory PRNT (plaque reduction neutralization test) and therefore is unlikely to be diagnostic.** PRNT confirmatory testing can only be performed at the Public Health Lab. A negative rRT-PCR does not rule out Zika virus infection and follow up serology testing, including PRNT, is often necessary. For this reason it is strongly recommended that all testing be coordinated through Contra Costa Public Health.

**Actions Requested of Healthcare Professionals:**

1. **Assess all pregnant women for possible Zika virus exposure** at each prenatal care visit. The following topics should be reviewed: 1) recent travel or residence in an area with active Zika transmission, and 2) unprotected sex (vaginal, anal or oral sex, or sharing of sex toys without using a barrier method) with a partner who has traveled to or lived in an area with active Zika transmission.
2. **Suspect Zika** (also consider Dengue and Chikungunya) in travelers with acute onset of fever, rash, arthralgia, myalgia or conjunctivitis within 2 weeks after: 1) return from an area with local Zika transmission or 2) unprotected sex with a partner who has traveled to or lives in an area with known Zika transmission.
3. **Report** suspected cases of Zika virus infection and possible congenital exposure to Contra Costa Public Health by faxing the 'Zika Case History Form' (<http://cchealth.org/cd/pdf/Zika-Case-History-Form.pdf>) to 925-313-6465.
4. **Test** patients by arranging testing through Contra Costa Public Health. The 'Laboratory Requisition Form' can be found here: [http://cchealth.org/laboratory/pdf/lab\\_test\\_form.pdf](http://cchealth.org/laboratory/pdf/lab_test_form.pdf)
5. **Advise** pregnant patients **not** to travel to areas with Zika virus transmission. For non-pregnant patients and pregnant patients who cannot avoid travel, educate on how to avoid mosquito bites and potential sexual transmission. Refer travelers to CDC Travel Advisories for current information about Zika virus and prevention: <http://wwwnc.cdc.gov/travel/notices>



## TESTING

- **NO TESTING** will be provided for asymptomatic non-pregnant persons (male or female) regardless of travel history to Zika affected country.
- Testing is recommended for the following exposure groups:
  - **Symptomatic travelers** with acute onset of fever, rash, arthralgia, or conjunctivitis within 2 weeks after return from a place with local Zika transmission.
  - **Asymptomatic pregnant women:** 1) with history of travel to a place with local Zika transmission while pregnant, within 8 weeks of conception, OR in the 6 weeks prior to last menstrual period 2) reporting recent unprotected sex with a man who traveled to or resides in an area with known Zika transmission.
  - **Infants/Neonates:**
    - 1) born to a mother with a positive or inconclusive laboratory result
    - 2) with possible congenital Zika virus infection:
      - a. diagnosed with microcephaly at birth, intracranial calcifications detected prenatally or at birth, or other brain or eye abnormalities consistent with Zika virus infection, OR
      - b. mother with Zika exposure within 2 weeks of delivery and infant develops fever, rash, conjunctivitis, or arthralgia
  - **Symptomatic sexual partners of travelers:** Persons reporting recent sex with a person who has traveled to or resides in an area with known Zika transmission.
- Due to the complexity and evolving nature of the testing algorithm, it is recommended that **blood and urine be collected from all patients** with suspected Zika virus infection. Whether rRT-PCR or serology testing or both is done on a particular sample will depend on the timing of testing relative to the patient's exposure, and whether or not the patient is pregnant or has symptoms, information which should be provided on the 'Zika Case History Form'. See references to CDC guidelines in the "Resources" section for more details on the testing algorithm.
- **Specimens required:**
  - Blood (5-10mL) collected in a red top or serum separator tube (≥2mL serum), **AND**
  - Urine (≥2mL) collected in a sterile urine cup
- **Processing, storage & shipment**
  - Serum and CSF samples should be stored and shipped cold at 4-8°C;
  - Urine samples should be transferred into a 15mL conical tube with parafilm to seal to prevent leakage in transport
  - Submit specimens to Contra Costa Public Health with the 'Laboratory Requisition Form': [http://cchealth.org/laboratory/pdf/lab\\_test\\_form.pdf](http://cchealth.org/laboratory/pdf/lab_test_form.pdf)  
**2500 Alhambra Ave., Room 209, Martinez, CA 94553**  
**Phone: 925-370-5775**  
**Fax: 925-370-5252**



## TREATMENT

- There is no specific treatment for Zika infection; clinical guidance is to provide supportive care including rest, fluids, and use of analgesics and antipyretics (after Dengue has been ruled out).

## PREVENTION

- Pregnant women **should not** travel to any area where Zika virus is spreading.
- Preventing mosquito bites is the main control measure to avoid becoming infected.
- Sexual partners with Zika virus exposure can pass the infection to sex partner. A correctly used barrier method (condoms or dental dams) can reduce the risk of Zika transmission.
- Counsel patients about pregnancy planning and the timing of pregnancy after possible exposure to Zika virus.
  - Pregnant couples in which one or both partners have traveled to or live an area with Zika should **use a condom (or other barriers to prevent infection) every time** they have sex, should not share sex toys and/or should not have sex during the pregnancy.
  - Couples interested in conceiving should wait to get pregnant.
    - Women, regardless of symptom status, should wait **at least 8 weeks** from symptom onset (if symptomatic) or last possible exposure (if asymptomatic) to attempt conception.
    - Men, regardless of symptom status, wait **at least 6 months** from symptom onset (if symptomatic) or last possible exposure (if asymptomatic) before attempting conception with their partner. Zika virus can be detected in semen for a longer period of time than in blood.

## RESOURCES

- Map of Areas with Zika: (<http://www.cdc.gov/zika/geo/index.html>).
- Update: Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus Exposure — United States. (MMWR, July 2016)  
([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))
- Practice Advisory: Zika Prevention Strategies and Clinical Management of Pregnant Women (American College of Obstetricians and Gynecologists [ACOG] and the Society for Maternal-Fetal Medicine [SMFM])  
(<https://www.acog.org/About-ACOG/ACOG-Departments/Zika-Virus>)
- Update: Interim Guidance for Preconception Counseling and Prevention of Sexual Transmission of Zika Virus for Persons with Possible Zika Virus Exposure — United States (MMWR, September 2016)  
(<http://www.cdc.gov/mmwr/volumes/65/wr/mm6539e1.htm>)
- Update: Interim Guidance for the Evaluation and Management of Infants with Possible Congenital Zika Virus Infection — United States, (MMWR, August 2016)  
(<http://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm>)
- Interim Guidance for Interpretation of Zika Virus Antibody Test Results (MMWR, May 2016)  
(<http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm>)

