



**ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
PUBLIC HEALTH DEPARTMENT**

Division of Communicable Disease Control and Prevention  
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## **HEALTH ADVISORY ZIKA VIRUS**

October 24, 2016

*Information is evolving rapidly, please check website resources listed for the most up to date information.*

### **KEY UPDATES** since 8/10/16 Zika Health Advisory

#### **Prevention**

- In addition to recommendations for pregnant women to postpone travel to areas with local mosquito-borne Zika transmission and outbreaks, CDC issued **special travel considerations for Southeast Asian countries where Zika virus is endemic** (<https://wwwnc.cdc.gov/travel/page/zika-virus-southeast-asia>)
- **Prevention of sexual transmission was expanded to include** recommendations for **use of barrier methods** after possible Zika exposure, *even if asymptomatic*, for both men and women for 6 months and 8 weeks respectively, after travel to areas with active Zika transmission

#### **Situation Update**

- Alameda County has reported 20 cases of Zika virus infections & California has reported 348 (including 43 pregnant women, and 2 infants with birth defects, and 3 due to sexual transmission) as of 10/21/16. All California cases are travel-associated, with no locally acquired mosquito borne transmission. Case counts will be updated weekly on Fridays  
<https://www.cdph.ca.gov/HealthInfo/discond/Documents/TravelAssociatedCasesofZikaVirusinCA.pdf>

#### **Testing**

- **Zika testing is now available at commercial laboratories:** Several commercial laboratories now offer Zika PCR and/or Zika IgM antibody testing. Confirmatory serologic testing for Zika by Plaque Reduction Neutralization Test (PRNT) is still only available through the California Department of Public Health (CDPH) and CDC. Some large commercial labs have arranged to forward serum specimens that test positive or indeterminate for Zika to CDC or CDPH for confirmatory testing; as of 10/14/16, we are aware that LabCorp and Quest have made such arrangements.
- **Zika testing criteria & timeframes have been updated and clarified** for possible Zika exposure for pregnant women and sexual exposure depending on the gender of the sexual partner with possible Zika infection
- **Zika testing criteria for infants have been updated to include all infants born to** mothers with laboratory evidence of Zika virus infection during pregnancy or in the 8 weeks prior to conception, *regardless of clinical abnormalities.*
- *See Laboratory Testing Section & algorithm on p. 4 for additional details*

#### **Clinical Practice Guidelines**

- New practice guidelines for managing pregnant women, monitoring fetuses, and evaluating and managing infants affected by Zika virus have been issued (*see below for details and links*)



**ACTIONS REQUESTED OF CLINICIANS:**

- **OBTAIN TRAVEL HISTORY** from patients with a febrile and/or rash illness.
- **ASSESS ALL PREGNANT WOMEN FOR ZIKA EXPOSURE AT EVERY VISIT.**
- **CONSIDER ZIKA TESTING** for the following persons with possible Zika exposure (see Testing Section below for definitions based on patient category)
  - Pregnant women, regardless of symptoms
  - Persons with Zika symptoms, defined as >1 of the following: fever, maculopapular rash, arthralgia, &/or conjunctivitis
  - Patients with Guillain-Barré Syndrome
  - Infants with microcephaly, intracranial calcifications, or other congenital abnormalities and a mother who had possible Zika virus exposure OR born to mothers with laboratory evidence of Zika virus infection during pregnancy or in the 8 weeks prior to conception, regardless of clinical abnormalities.
- **FAX the [ACPHD ZIKA VIRUS TESTING REQUEST FORM](http://www.acphd.org/zika/specimen-submission.aspx)** (available at <http://www.acphd.org/zika/specimen-submission.aspx>) to **PUBLIC HEALTH at 510-268-2111** to obtain approval and receive further instructions **prior to sending specimens.**
- **COUNSEL WOMEN who are pregnant or who are attempting to conceive** about travel precautions and use of barrier methods for all sexual contact (vaginal, oral, or anal) with sexual partners who have possible Zika exposure.
- **COUNSEL TRAVELERS TO ZIKA AFFECTED AREAS to use barrier methods for all sexual contact** (vaginal, oral, or anal) **for the following timeframes: MEN for 6 months** after symptom onset or last possible Zika exposure & **WOMEN for 8 weeks** after symptom onset or last possible Zika exposure to prevent sexual transmission to their partners.
- **REPORT suspected or confirmed** Zika infections diagnosed by a commercial laboratory to ACPHD. Fax a Confidential Morbidity Report form and the Zika test reports to 510-268-2111.

**LABORATORY TESTING – additional information and details:** *(See testing algorithm on p. 4.)*

**Definitions & Timeframes for testing:**

- **All pregnant women with possible Zika exposure, even if asymptomatic, up to 12 weeks after exposure.** A possible Zika exposure for pregnant women is defined as:
  - (a) Travel to an area with active Zika transmission or endemic countries in Southeast Asia within 8 weeks prior to conception through the end of pregnancy; or
  - (b) Unprotected sexual contact (vaginal, oral, or anal) with a partner who traveled to an area with active Zika virus transmission (period of potential contagion varies with gender of partner<sup>1</sup>).
- **Non-pregnant persons with Zika symptoms, up to 12 weeks after possible Zika exposure.** A possible Zika exposure for non-pregnant persons is defined as:
  - (a) Travel to areas with active Zika transmission or endemic countries in Southeast Asia in the 2 weeks before symptom onset; or
  - (b) Unprotected sexual contact (vaginal, oral, or anal) with a partner who traveled to an area with active Zika virus transmission (period of potential contagion varies with gender of partner<sup>1</sup>).
- **Persons with Guillain-Barré syndrome**, who have a history of possible Zika exposure, regardless of time interval between last possible Zika exposure and the onset of Guillain-Barré symptoms.
- **Infants:**
  - (a) With microcephaly, intracranial calcifications, or other congenital abnormalities suggestive of congenital Zika syndrome whose mother had possible Zika exposure, regardless of maternal Zika virus testing results; or

<sup>1</sup> Females: At least 8 weeks after a Zika diagnosis, start of symptoms, or last possible exposure  
Males: At least 6 months after a Zika diagnosis, start of symptoms, or last possible exposure



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- (b) Born to mothers with laboratory evidence of Zika virus infection during pregnancy or in the 8 weeks prior to conception, regardless of clinical abnormalities.

For patients meeting CDC/CDPH testing criteria for Zika virus, specimen collection should be pursued as soon as possible with the following timeframes:

- **Within 14 days** of symptom onset or last potential Zika exposure both blood and urine can be tested by Zika RT-PCR. (Urine can be collected up to 3 weeks after symptom onset for PCR). However, negative Zika RT-PCR test does not exclude current or recent infection, so **both Zika and dengue IgM testing** should be ordered 2-12 weeks after the last exposure or symptom onset.
- **Between 2-12 weeks** from symptom onset or last potential Zika exposure, **both Zika and dengue IgM testing** should be ordered. Positive, equivocal, or nonspecific results require confirmatory testing by PCR (if pregnant), PRNT, or both.

Testing for dengue infection is essential because areas of active Zika transmission have concurrent dengue epidemics, and dengue and Zika serologic tests have significant cross-reactivity. Positive Zika IgM may actually be due to recent or current dengue infection. There is currently no FDA-approved Zika IgG test.

**Testing Options:**

**Consider using commercial lab testing**, especially for *non-pregnant patients with uncomplicated clinical illness* and Zika virus exposure related to travel. Select a laboratory that offers appropriate test types. As noted above, because many patients will require Zika PCR and IgM antibody testing, dengue PCR and/or antibody testing, and Chikungunya PCR and/or antibody testing in order to interpret the patient's Zika infection status, selecting a laboratory that offers all required tests is advantageous.

**Obtain testing through public health in complex situations**, such as a fetus or infant with microcephaly or signs of congenital Zika virus syndrome whose mother was exposed to Zika virus; a person with Guillain-Barré syndrome and exposure to Zika virus; or when sexual, local mosquito-borne, or laboratory exposure is suspected. For updated testing request forms, specimen collection, storage and shipping guidance from the Alameda County Public Health Laboratory, check ACPHD website (<http://www.acphd.org/zika/specimen-submission.aspx>) and fax to 510-268-2111 to obtain approval and receive instructions *prior* to sending specimens.

**Testing Interpretation:**

See CDPH Zika Virus Testing FAQs for Healthcare Providers:

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/ZikaVirusTestingFAQsforHCPs.pdf>

**CLINICAL PRACTICE GUIDELINES**

- **Pregnant Women:**
  - The American Congress of Obstetricians and Gynecologists (ACOG) & the Society for Maternal-Fetal Medicine (SMFM) have posted a Zika virus Practice Advisory which is periodically updated: <http://www.acog.org/About-ACOG/News-Room/Practice-Advisories/Practice-Advisory-Interim-Guidance-for-Care-of-Obstetric-Patients-During-a-Zika-Virus-Outbreak>
  - Guidelines for evaluating microcephaly and monitoring the fetus by ultrasound in women infected with Zika virus: [http://www.ajog.org/article/S0002-9378\(16\)00343-4/pdf](http://www.ajog.org/article/S0002-9378(16)00343-4/pdf)
- **Infants:**
  - CDC Interim Guidance for the Evaluation and Management of Infants with Possible Congenital Zika Virus Infection, August 2016: [https://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm?s\\_cid=mm6533e2\\_w](https://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm?s_cid=mm6533e2_w)

**RESOURCES**

Alameda County Public Health Department Zika Virus <http://www.acphd.org/zika.aspx>

CDPH Zika Virus: <http://www.cdph.ca.gov/HealthInfo/discond/Pages/Zika.aspx>

CDC Zika Virus general information: <http://www.cdc.gov/zika/>



# General Zika Virus Testing Algorithm – For Clinicians

Algorithm based on CDC guidance; flow chart developed by Kern County Department of Public Health (DPH); updated 9/20/2016 by San Francisco DPH; modified 10/11/16 by ACPHD

