



## **PROVIDER ALERT: UPDATED GUIDANCE ON ZIKA VIRUS**

**June 8, 2018**

California continues to identify new cases of Zika virus infection though the incidence has substantially declined since 2015. Zika virus infection during pregnancy is linked to significant neurologic sequelae and fetal loss in affected pregnancies. Only approximately 20% of Zika virus infections have clinical symptoms so it is important that pregnant women and their newborns are screened for symptoms and exposure.

As of May 4, 2018, California has had 651 cases of travel-associated Zika virus infection and 9 cases of sexually transmitted Zika virus infection. To date, there has been no local mosquito-borne transmission of Zika virus in California though the *Aedes* vector mosquitoes are present in [some counties of California](#). No *Aedes* vector mosquitoes have been found in Santa Barbara County.

Recent epidemiologic data indicate a declining prevalence of Zika virus infections in California and Mexico, the most common country of exposure for Californians. This has led to a lower pre-test probability of infection and a higher probability of false-positive test results. Because of this, the California Department of Public Health (CDPH) has updated its recommendations for the assessment and testing of symptomatic persons, pregnant women and their newborns for Zika virus infection:

<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ZikaVirusInformationforHCPs.pdf>

### **Key Points**

- I. All pregnant women, women planning to become pregnant and patients who have symptoms consistent with Zika virus disease should be assessed for potential Zika exposure, and testing considered.
  - a. Criteria for potential Zika virus exposure includes (see attached algorithm):
    - i. Recent unprotected sexual contact with a male who has traveled within the prior 6 months to an area at risk for Zika or with a female who has traveled within the prior 8 weeks to an area of Zika risk. Sexual contact includes vaginal, anal and oral sex as well as sharing of sex toys.

- ii. Recent travel to an area at risk for Zika. The CDPH recommends the following references for determining areas with risk of Zika:
          - 1. For symptomatic persons/pregnant women, refer to the [CDC Areas with Risk of Zika](#)
          - 2. For asymptomatic pregnant women, use the [WHO Zika Virus Classification Tables](#) using risk classification “Category 1” and “Category 2” countries to limit the risk of false positive test results.
      - b. Recommended diagnostic testing for people with symptoms of Zika virus infection: See [CDC Zika virus Testing Guidance](#)
      - c. Preconception Zika virus guidance and testing:
        - i. Pregnant women in any trimester or within 8 weeks of anticipated pregnancy should not travel to areas with risk of Zika.
        - ii. Zika virus testing is not recommended for asymptomatic couples interested in attempting conception in which one or both partners has had a possible exposure to Zika virus.
        - iii. CDC recommends women and men diagnosed with Zika or who have possible exposure to Zika through sex wait before trying to conceive.
- II. CDPH, CDC and the American College of Obstetricians and Gynecologists (ACOG) recommend that all pregnant women be evaluated for possible Zika exposure and symptoms of Zika virus infection during each prenatal care visit.
- a. Use [CDC Screening of Pregnant Women for Zika Testing](#) for suggested questions to aid in this assessment.
  - b. Laboratory testing for Zika should be considered for the following patients:
    - i. Symptomatic patients.
      - 1. The patient has at least one of the four primary symptoms of Zika – maculopapular rash, arthralgias, conjunctivitis, fever >100.4, and
      - 2. Symptoms occurring within two weeks of potential exposure.
    - ii. Asymptomatic patient with ongoing exposure due to residence, repeated travel (daily or weekly) or ongoing sexual exposure.
    - iii. Asymptomatic patients with recent but not ongoing exposure (exposure in current pregnancy or 8 weeks before conception) are not recommended to routinely undergo Zika laboratory testing. However, after performing a risk assessment, the patient’s risk level, risk tolerance and decision-making regarding pregnancy may be sufficient justification to test for Zika infection.
    - iv. Patients with ultrasound findings consistent with Congenital Zika Virus Syndrome.
  - c. The specific tests and frequency of testing recommended has been updated and can be accessed in the following document:
    - i. [Updated Guidance for Health Care Providers: Assessment and Testing for Zika Virus Infection in Pregnant Women and their Newborns](#). (January 10, 2018) and
    - ii. [Comprehensive Zika Virus Information for Healthcare Providers; February 2018](#)

- III. Infant Zika virus assessment and evaluation:
- a. CDPH recommends Newborn Testing in the following situations:
    - i. Infants with clinical findings suggestive of congenital Zika Syndrome and possible maternal Zika exposure during pregnancy, regardless of maternal testing results.
      1. Congenital Zika syndrome can include
        - a. Severe microcephaly and decreased brain tissue with a specific pattern of brain damage, including subcortical calcifications.
        - b. Damage to the anterior and posterior eye including macular scarring and focal pigmentary retinal mottling
        - c. Sensorineural hearing loss
        - d. Congenital contractures such as clubfoot
        - e. Abnormalities in tone including severe hypertonia
      - ii. Infants born to mothers with laboratory evidence of possible Zika virus infection during pregnancy.
    - ii. Infants born to mothers with laboratory evidence of possible Zika virus infection during pregnancy.
  - b. Testing should be done within 2 days of delivery and includes Zika virus NAT on serum and urine and Zika virus IgM on serum. CSF should be considered in infants with clinical findings consistent with Congenital Zika Syndrome.
  - c. See [CDC Evaluation and Testing for Congenital Zika Virus Infection](#) for additional information
  - d. Infant Evaluation and Follow up
    - i. Pediatricians should be aware that clinical signs of congenital Zika virus infection may develop or become evident after birth with post-natal onset of symptoms.
    - ii. All infants born with symptoms of Congenital Zika Syndrome or asymptomatic infants of mothers with laboratory evidence of Zika virus exposure need comprehensive evaluation and follow up. Follow up evaluations should be arranged prior to discharge from birthing hospitals. The recommended evaluation for infants with possible Zika infection can be accessed at <https://www.cdc.gov/pregnancy/zika/testing-follow-up/documents/pediatric-evaluation-follow-up-tool.pdf>

### **Laboratory Testing for Zika Virus**

Zika virus testing by detection of viral RNA (nucleic acid testing, NAT) or serology (IgM antibody testing) should be submitted to commercial clinical laboratories for processing using your regular clinical testing protocol. The Santa Barbara County Public Health Laboratory recommends that providers verify your commercial laboratory's process for Zika testing. The California Department of Public Health (CDPH) Viral Rickettsial Disease Laboratory (VRDL) is currently the only laboratory in California offering a confirmatory plaque reduction neutralizing tests (PRNT) to identify Zika virus IgM-positive sera.

**References:**

Comprehensive Zika Virus Information for Healthcare Providers; February 2018  
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ZikaVirusInformationforHCPs.pdf>

CDPH Assessment and Testing for Zika Infection in Pregnant Women and their Newborns: January 10, 2018  
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CABirthingHospitalsInfo.pdf>

CDPH: Assessment and Testing for Zika Virus Infection in Pregnant Women and their Newborns: Information for California Birthing Hospitals; February 7, 2018  
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CABirthingHospitalsInfo.pdf>

CDC Update: Interim Guidance for the Diagnosis, Evaluation and Management of Infants with Possible Congenital Zika Virus Infection – United States, October, 2017  
<https://www.cdc.gov/mmwr/volumes/66/wr/pdfs/mm6641a1.pdf>

**CDC Zika Algorithms:**

CDC's Symptomatic Non-Pregnant algorithm  
[www.cdc.gov/zika/pdfs/testing-algorithm-symptomatic-nonpregnant.pdf](http://www.cdc.gov/zika/pdfs/testing-algorithm-symptomatic-nonpregnant.pdf)

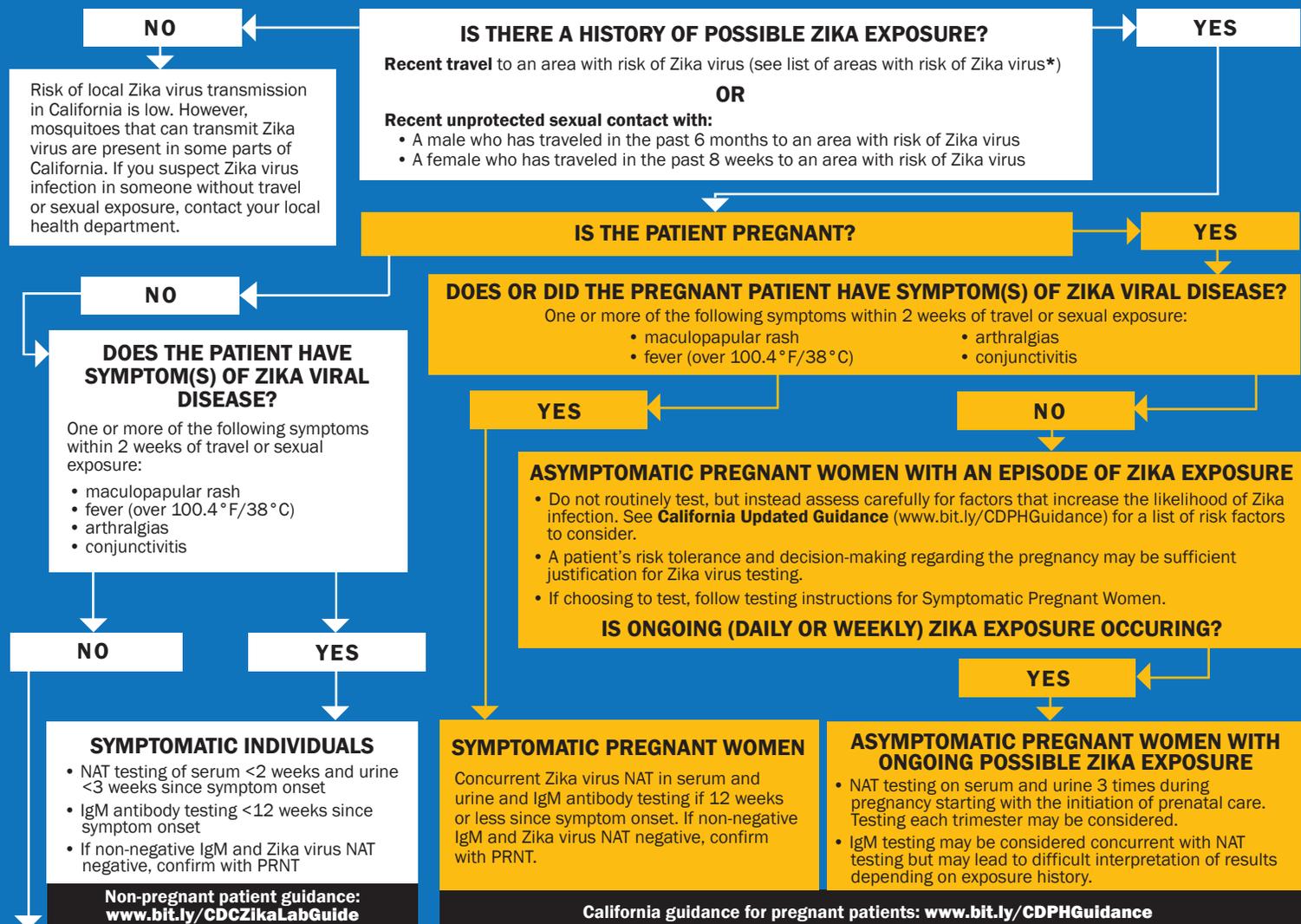
CDC's Asymptomatic Pregnant algorithm (ongoing exposure):  
<https://www.cdc.gov/pregnancy/zika/testing-follow-up/documents/testing-algorithm-asymptomatic.pdf>

CDC's Symptomatic Pregnant algorithm:  
[https://www.cdc.gov/pregnancy/zika/testing-follow-up/documents/Testing\\_Algorithm.pdf](https://www.cdc.gov/pregnancy/zika/testing-follow-up/documents/Testing_Algorithm.pdf)



# ZIKA SCREENING ALGORITHM

## FOR CHILDREN AND ADULTS



**ALL PATIENTS WITH EXPOSURE:**

- Recommend sexual abstinence (vaginal, anal, oral) or condom use (male or female) for all exposed patients, especially **pregnant couples**
  - >> Males: For at least 6 months after last potential Zika exposure
  - >> Females: For at least 8 weeks after last potential Zika exposure
- If not pregnant, recommend delay pregnancy for the above periods of time and prescribe effective contraceptive methods
- Advise use of mosquito repellent for 3 weeks after return from an area with risk of Zika
- For counseling recommendations, see: [www.bit.ly/CDPHFamilyPlan](http://www.bit.ly/CDPHFamilyPlan)

**\*AREAS WITH RISK OF ZIKA:** For symptomatic persons, refer to **CDC Areas with Risk of Zika** ([www.bit.ly/CDCRiskAreas](http://www.bit.ly/CDCRiskAreas)). For asymptomatic pregnant women, use the **WHO Zika Virus Classification Table** ([www.bit.ly/WHOZikaTable](http://www.bit.ly/WHOZikaTable)) WHO risk classification "Category 1" and "Category 2" countries to help limit the risk of false positive test results. Only Texas and Florida have experienced transmission in the U.S., but transmission is not ongoing at this time.

## FOR INFANTS

### INFANT ZIKA VIRUS TESTING FOR SUSPECTED CONGENITAL ZIKA VIRUS INFECTION

- Indications for testing include maternal exposure history plus any of the following:
- Maternal laboratory evidence of Zika virus infection
  - Infant findings consistent with congenital Zika syndrome regardless of maternal test results
- Newborn specimen collection:
- Zika virus NAT testing on infant serum and urine and Zika virus IgM antibody testing on infant serum. If non-negative IgM and negative Zika virus NAT, confirm with PRNT.
  - If CSF is collected for other purposes, NAT and IgM antibody testing should be performed on CSF.
  - For infants with findings consistent with congenital Zika syndrome with unknown etiology, consider CSF for Zika virus NAT and IgM antibodies.
- Birth hospitals may consider collecting infant specimens for concurrent Zika virus testing if maternal testing is being done: [www.bit.ly/CABirthingHospitals](http://www.bit.ly/CABirthingHospitals)