

SFDPH UPDATE: Assessment and Testing for Zika Virus Infection in Pregnant Women and their Newborns¹

As of January 10, 2018, Zika virus testing (PCR and IgM) is available in commercial clinical laboratories throughout California, and providers should direct their testing requests to these laboratories. The CDPH Viral and Rickettsial Laboratory (VRDL) conducts confirmatory Zika Virus testing following preliminary positive Zika IgM results; commercial laboratories will forward specimens to CDPH VRDL for such testing.

ALL pregnant women should be evaluated for possible Zika virus exposure during each prenatal care visit. The evaluation should include an assessment of:

1. Signs and symptoms of Zika virus disease;
2. Travel history to an area with risk of Zika virus transmission; and
3. A woman's sexual partner's potential exposure.

Below is a summary of the current Zika testing guidance for pregnant women and their newborns:

Pregnancy Status	Clinical Status	Zika Exposure History	Testing Recommendations
Pregnant	Symptomatic ²	Recent or ongoing ^{3 4}	Concurrent Zika PCR (serum and urine) and Zika IgM if ≤ 12 weeks since symptom onset.
Pregnant	Asymptomatic	Ongoing ⁵	Zika PCR 3 times during pregnancy; testing each trimester may be considered, AND Zika IgM may be considered for those with exposure history limited to current pregnancy. If IgM is to be done, may be performed concurrently with PCR testing.

¹ California Department of Public Health, Updated Guidance for Healthcare Providers: Assessment and Testing for Zika Virus Infection in Pregnant Women and their Newborns, January 10, 2018

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

² Symptoms of Zika virus disease include acute onset of fever, maculopapular rash, arthralgia, and/or conjunctivitis. .

³ Ongoing risk of Zika exposure includes: Currently living in or frequently traveling to an area with Zika virus transmission, or having unprotected exposure to a potentially infected sexual partner.

⁴ For symptomatic women, refer to CDC Areas with Risk of Zika, <https://wwwnc.cdc.gov/travel/page/zika-information>.

⁵ For asymptomatic women, refer to the WHO Zika Virus Classification Table, <http://apps.who.int/iris/bitstream/10665/259690/1/zika-classification-12Dec17-eng.pdf?ua=1>, Category 1 and 2 countries.

Pregnancy Status	Clinical Status	Zika Exposure History	Testing Recommendations
Pregnant	Asymptomatic	Recent, but not ongoing.	Testing not routinely recommended; shared decision-making to assess Zika risk and indications for testing ⁶ . If testing is done, send concurrent Zika PCR and IgM ≤ 12 weeks from exposure.
Pregnant	Fetal ultrasound finding consistent with congenital Zika virus syndrome	Recent	Zika PCR and IgM (maternal specimens) concurrently as soon as the abnormal ultrasound is detected ⁷ .
At Delivery	Maternal history of Zika symptoms, unspecified flavivirus IgM positive during pregnancy (probable Zika infection)	Recent or ongoing possible maternal exposure	Placental PCR and IgM testing may be considered.
At Delivery	Mother asymptomatic, Zika testing not performed during pregnancy, fetus or infant with possible Zika virus-associated abnormalities	Recent or ongoing possible maternal exposure	Placental PCR and IgM testing may be considered.
Newborn	Mother with laboratory evidence of Zika virus infection during pregnancy	Possible maternal exposure history during pregnancy	Infant PCR (serum and urine) and IgM ⁸ .
Newborn	Findings suggestive of congenital Zika syndrome	Possible maternal exposure history during pregnancy	Infant PCR and IgM

⁶ See CDPH document Updated Guidance for Healthcare Providers: Assessment and Testing for Zika Virus Infection in Pregnant Women and their Newborns (Jan 10, 2018) <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/UpdatedZikaGuidanceforHCPsCaringforPregnantWomen.pdf>, section C, i, a-j, for risk factors that may prompt testing in asymptomatic pregnant women with recent, but not ongoing exposure.

⁷ If amniocentesis is being performed as part of clinical care, PCR testing of amniotic fluid should also be performed. Refer to CDPH Zika Laboratory Testing Guidance for specimen collection and handling information https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ZikaLaboratoryTestingGuidance_VRDL.pdf.

⁸ Newborn specimen collection should ideally occur within the first two days of life. Providers could consider collecting infant specimens if maternal testing is being done or maternal results are pending.