



## San Diego County Public Health Laboratory

Health and Human Services Agency  
3851 Rosecrans Street, Suite 716  
San Diego, CA 92110  
619-692-8500  
CLIA #05D0060808

### Zika Virus (ZIKV) Diagnostic Specimen Testing Guidance

#### Who should be tested:

Zika testing can be performed at the San Diego County Public Health Laboratory (SDPHL) and other commercial laboratories. Dengue and Chikungunya testing is available at commercial laboratories. Patients that are symptomatic who lives in or recently traveled to an area with risk of Zika should be tested, he or she may have been infected with other mosquito-borne viruses like dengue or chikungunya that often circulate in the same geographic regions and present with similar clinical illness. Asymptomatic pregnant women who have traveled to areas with Centers for Disease Control and Prevention (CDC) Zika travel notices should also be tested. See CDC website for more information at <https://www.cdc.gov/zika/hc-providers/types-of-tests.html>. Algorithm for testing can be found on the SDPHL website at [http://www.sandiegocounty.gov/hhsa/programs/phs/phs\\_laboratory/index.html](http://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/index.html).

#### Required Form(s) and Supplemental Information:

- San Diego County Public Health Laboratory Test Request Form, go to the website at [http://www.sandiegocounty.gov/hhsa/programs/phs/phs\\_laboratory/index.html](http://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/index.html)
  - **NOTE: To process specimens the following information must be completed on the form**
    - First and Last Name
    - DOB
    - Gender
    - Ordering Physician
    - Facility
    - Phone number
    - Fax number
    - Alternate contact and phone number
    - Date collected
    - Specimen source
    - Requested test
- California Department of Public Health (CDPH) Viral and Rickettsial Disease Laboratory (VRDL) General Submittal Form 300 needed if specimen needs additional testing: [https://www.cdph.ca.gov/programs/vrdl/Documents/VRDL\\_General\\_Human\\_Specimen\\_Submittal\\_FormLab300.pdf](https://www.cdph.ca.gov/programs/vrdl/Documents/VRDL_General_Human_Specimen_Submittal_FormLab300.pdf)
- CDC DASH Form2016 (CDC Form 50.34) for saliva, semen, or tissue samples. **Pre-approval required.** Please call the Epidemiology Program at 619-692-8499

**Tests Offered and Specimens Collection Requirements:**

| Test Name  | Description   | Test Method   | Acceptable Specimens  | Collection  |
|--|---|---|---|---|
| Zika Panel   | For <u>acute and convalescent</u> screening of Zika infection         | Detection of Zika nucleic acid and IgM antibodies       | Urine<br>Urine specimen <b>must</b> be accompanied with a serum specimen                              | Collect 2-5 mL within 14 days after onset of symptoms or exposure         |
|  |   |   | Serum   | Collect 2 SSTs within 7 days-12 weeks after onset of symptoms or exposure |
| Zika NAAT  | For <u>acute</u> detection of Zika infection                          | Detection of Zika nucleic acid                          | Urine   | Collect 2-5 mL within 14 days of onset of symptoms or exposure            |
| Triplex PCR<br><b><u>This test is available upon consultation. Please contact the lab.</u></b> | For <u>acute</u> detection of Zika, Dengue, and Chikungunya infection | Detection of Zika, Dengue, and Chikungunya nucleic acid | Urine<br>(for Zika detection only)<br>Urine specimen <b>must</b> be accompanied with a serum specimen | Collect 2-5 mL within 14 days of onset of symptoms or exposure            |
|  |   |   | Serum   | Collect 2 SSTs within 14 days of onset of symptoms or exposure            |
|  |   |   | CSF   | Collect 1-2 mL within 14 days of onset of symptoms or exposure            |
|  |   |   | Amniotic Fluid<br>(for Zika detection only)   | Collect 2-5 mL within 14 days of onset of symptoms or exposure            |

**Storage and Transport Instructions:**

Store samples at 4-8 °C and ship on cold packs to San Diego County Public Health Lab within 24 to 72 hours.

**Turnaround Time (TAT):**

- SDPHL: 1-7 days
- CDPH VRDL: 2-4 weeks
- CDC: 4-6 weeks

**Interferences and Limitations:**

ZIKV IgM antibodies may be detected after 3 days post-onset of symptoms but may not develop during the first 7 days of illness. A convalescent specimen may be required. ZIKV IgM may persist for months and may cross react with other arboviruses leading to false positive IgM capture ELISA serology results. Additional confirmatory testing by PRNT is required. Immunization against Yellow Fever or Japanese Encephalitis as well as past infection with other arboviruses such as West Nile or St. Louis encephalitis virus may complicate interpretation of serology results. If specimens are tested outside the recommended range, the results may have little clinical value.

**Reference Range:**

Not Detected

**Interpretation of Test Results:**

Access the Emergency Use Authorization Fact Sheets for interpretation of test results from the SDPHL website at [http://www.sandiegocounty.gov/hhsa/programs/phs/phs\\_laboratory/index.html](http://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/index.html).