



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 Directions

VRDL (State Lab) and CDC will NOT test asymptomatic patients including pregnant women, unless ultrasound shows fetal microcephaly or intracranial calcifications, regardless of travel history.

Notification and Pre-approval Required:

Consultation and prior approval is required from the San Diego County Epidemiology Program. Epidemiology program can be contacted by calling 619-692-8499 during business hours. For after hours, weekends, or holidays, call 858-565-5255 and ask for the Epidemiology Duty Officer.

Required Form(s) and Supplemental Information:

- VRDL General Submittal Form 300:
https://www.cdph.ca.gov/programs/vrdl/Documents/VRDL_General_Human_Specimen_Submittal_Form_Lab300.pdf
- CDC DASH Form (CDC Form 50.34).
Test order name: **Arbovirus Serology**
Test order code: **CDC-10282**. On page 2 of the DASH form, under PATIENT HISTORY, BRIEF CLINICAL SUMMARY, “Requesting Zika virus testing”

Acceptable Specimens and Required Volume:

For acute illness (≤ 7 days), RT-PCR is the preferred diagnostic method. Serology should be used for samples collected at 4 or more days after illness onset.

- Serum: ≥ 2 mL red or tiger top serum separator vacutainer plastic tube
- CSF: 1-2 mL in sterile, leak-proof, screw cap plastic tube
- Amniotic fluid and other nonstandard specimens (cord blood, placenta, tissue, fetal specimens): Freeze after collection. Maybe accepted upon consultation. SDPHL will provide collection instructions.

Paired acute and convalescent blood samples are requested for serology. Acute and convalescent serum must be tested concurrently for optimal results. Collect specimens 2-3 weeks apart.

Specimen Collection/Storage/Transport Instructions:

- Store samples at 4-8 °C.
- Specimens ≤ 72 hours old from collection date should be shipped on cold pack.
- Specimens ≥ 72 hours should be frozen and shipped on dry ice. NOTE: Frozen serum specimens must be spun, separated, and aliquoted to a sterile, leak-proof, screw cap plastic tube.

Shipping Instructions and Specimen Handling Requirements:

Do not send specimens to San Diego County Public Health Laboratory (SDPHL) without prior consultation and approval from the Epidemiology Program. Samples without prior approval and complete paperwork will not be tested. Please DO NOT send specimens directly to VRDL and CDC for testing.

For questions related to sample requirements, call SDPHL at (619) 692-8500 during business hours, and 619-666-8889 for after hours, weekends or holidays.

Turnaround Time (TAT):

- VRDL: For surveillance only. No official TAT.
- CDC: varies from two to six weeks depending on CDC lab processing. Samples requiring serology confirmation by Plaque Reduction Neutralization Test (PRNT) will take additional time to report.

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.

Reference Range:

Not Detected