



KAREN L. SMITH, MD, MPH
Director and State Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

February 24, 2016

Dear Colleagues:

As of February 23, 2016, the California Department of Public Health (CDPH) Viral and Rickettsial Diseases Laboratory (VRDL) will conduct diagnostic real time polymerase chain reaction (RT-PCR) testing for Zika virus disease. The testing will only be performed for serum specimens from symptomatic individuals who have had an exposure to Zika virus. Exposure could include being present in an area with ongoing Zika virus transmission or sexual contact with a person with such exposure within 14 days of symptom onset. Serum specimens must be acute-phase samples collected less than seven days after symptom onset. VRDL will also perform RT-PCR for chikungunya and dengue viruses on all acute-phase serum samples. Until further notice, all specimens should continue to be sent to VRDL with the two submittal forms (VRDL General Purpose Specimen Submittal Form Lab 300 and 2016 version CDC Dash Form), since CDC will continue to perform serological testing on these serum samples. **VRDL will report RT-PCR results upon completion of testing; however, the overall laboratory interpretation of the submitted sample will depend upon all testing performed (i.e., both molecular and serological testing).** The turnaround time for RT-PCR testing will be 2 weeks from receipt of the specimen at VRDL.

VRDL is continuing to validate IgM and Plaque Reduction Neutralization Test (PRNT) assays to detect Zika-specific antibodies in serum and RT-PCR to detect Zika virus in urine. For symptomatic individuals, urine samples collected within 30 days of illness onset can be submitted along with the serum sample. VRDL will continue to forward serum specimens for Zika serology and urine samples for RT-PCR testing to CDC until validations are completed. VRDL can provide diagnostic serology for dengue and chikungunya virus infection as needed.

RT-PCR testing is the preferred test for symptomatic individuals who have been exposed to Zika virus. For symptomatic individuals, serum samples should be collected 4 or more days after illness onset for serological testing. For asymptomatic pregnant women who have lived in an area with Zika virus transmission or who have traveled to areas with ongoing Zika virus transmission, the blood sample should be collected between 2 and 12 weeks after return from travel for serologic testing. IgM testing is done as an initial test. Because of cross reactivity among flaviviruses, a PRNT test is done on flavivirus IgM positive specimens. PRNT is able to distinguish among flaviviruses in some cases.

As noted above, RT-PCR testing of urine is being investigated for symptomatic individuals with a urine specimen collected less than 30 days after symptom onset. RT-PCR can also be considered for other specimen types (e.g., amniotic fluid) by special request.

To review all of our testing guidance, please refer “ZIKA LABORATORY TESTING GUIDANCE” at

VRDL website

https://www.cdph.ca.gov/programs/vrdl/Documents/Zika_Testing_VRDL_Quicksheet_021016.pdf or consult with VRDL if needed.

Again, if you have any questions about specimen collection, submittal, shipping or result reporting, please contact the VRDL Medical and Epidemiology Liaison Section at (510) 307-8585 or email VRDL.submittal@cdph.ca.gov.

Thank you,

A handwritten signature in blue ink that reads "Dongxiang Xia". The signature is fluid and cursive, with the first name "Dongxiang" written in a larger, more prominent script than the last name "Xia".

Dongxiang Xia, MD, PhD, D(ABMM), SV(ASCP)
Chief/Director, Viral & Rickettsial Disease
Laboratory
California Department of Public Health
850 Marina Bay Parkway, Rm. E-361
Richmond, CA 94804
Tel: (510) 620-6275
E-mail: Dongxiang.xia@cdph.ca.gov