

Zika, Chikungunya, and Dengue

Trioplex PCR and Serology Specimen Submission Guidelines

(Subject to changes when new information becomes available. Updated on 8/30/16)

| Testing Approval, Laboratory and Health Department Contact Information | Zika virus testing MUST be approved by your Local Health Department epidemiologist. The local health department epidemiologists MUST notify the Houston Health Department (HHD) laboratory that a sample has been approved for testing by phone at (832) 393-3956, (832)-393-3959, or (832) 393-3968 and FAX a completed epidemiology investigation form to (832) 393-3982 or email to both Meilan.bielby@houstontx.gov and Mingzhong.zheng@houstontx.gov. The name and contact number of the epidemiologist who performs the investigation and approves the testing must be shown on the investigation form. If specimens are collected ≥14 days following symptom onset, please instruct submitters to ship specimens to Texas Department of State Health Services (DSHS) laboratory directly. To discuss approval for testing, clinicians should contact their local health department and complete required test request from(s). Please note on the form the name and contact number of the epidemiologist who approves the testing. Local health department contact information: Houston Health Department: Phone: 832-393-5080 (24 hour number); Fax: 832-393-5232 Harris County Public Health and Environmental Services: Phone: 713-430-6000; After hours: 713-755-5000; Texas Department of State Health Services Health Services Region 6/5 South: Phone: 713-767-3000; After hours: 800-270-3128 Galveston County Health District: Phone: 409-938-2322; After hours: 888-241-0442 Fort Bend County Health Department: Phone: 281-342-6414; After hours: 218-434-6494 Montgomery County Public Health Department: Phone: 936-523-5026; After hours: 888-825-9754 Brazoria County Health Department: Phone: 979-864-1166; After hours: 800-511-1632 For general questions about Zika, Chikungunya, and dengue viruses in Texas, please contact the DSHS Zoonosis Control Branch at (512) 776-7255. Additional information about local health department contacts is available at the following website: |
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| Texas DSHS Forms, Specimen Criteria, CDC guidance and Zika Websites | Link to request Texas DSHS laboratory test request forms including G2V form: http://www.dshs.texas.gov/lab/mrs_forms.shtm#email Link to DSHS laboratory "Chikungunya, Dengue, and Zika Testing Supplemental Information" form: http://www.texaszika.org/docs/DSHS-Chik-Den-Zika-Supplemental-Form.pdf DSHS Laboratory "Chikungunya, Dengue, and Zika PCR and Serology Specimen Criteria": http://www.texaszika.org/docs/DSHS-Chik-Den-Zika-Serology-and-PCR-specimens.pdf CDC "Guidance for U.S. Laboratories Testing for Zika Virus Infection (July 26, 2016): http://www.cdc.gov/zika/pdfs/laboratory-guidance-zika.pdf CDC Update: Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus Exposure — United States, July 2016: http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm CDC Collecting & Submitting Specimens At Time of Birth for Zika Virus Testing: http://www.cdc.gov/zika/hc-providers/test-specimens-at-time-of-birth.html |
| Acceptable Specimen Types | Texas and CDC Zika websites: http://www.cdc.gov/zika/ Acceptable Specimen Types (Indicate on requisition form which specimen types are submitted): Serum (and/or CSF), 1-2 mL; DO NOT ship whole blood. Urine (and/or amniotic fluid), 1-2 mL, For Zika only. Additional Notes: Serum and Urine are the preferred specimens for laboratory diagnosis of Zika virus infection. Serum must be submitted for all patients to be tested for Zika virus infection. Urine may be submitted alongside a patient-matched serum specimen. CSF and Amniotic Fluid may be submitted alongside a patient-matched serum specimen. |

One form must be filled out correctly with all required information and accompany the specimen(s). Symptom onset date must be filled out: either a specific date or asymptomatic. HHD laboratory currently performs only rRT-PCR testing for Zika, Dengue and Chikungunya virus. Note: Day 0 is day of symptom onset For specimens collected Day 0-13 (<14 Days) after symptom onset: Submit TWO serum specimens (1-2 mL each) AND one urine (1-2 mL) specimen. For one serum specimen and the **Important** urine specimen, fill out the HHD Zika Virus Specimen Submission Forms (one form for each Information specimen). For the second serum specimen, fill out Texas DSHS G2V Form AND Zika Testing on Supplemental Information Form (refer to the information in the second row on how to obtain the Specimen forms). Ship all three specimens to Houston Health Department (HHD) Laboratory. HHD laboratory **Submission** will perform PCR testing on one serum specimen and the urine specimen. If either is positive, no further testing is required. If both are negative, the other serum specimen submitted will be forwarded to Texas DSHS Laboratory for IgM serology testing. For specimens collected on and after Day 14 (≥ 14 Days) after symptom onset: Submit one serum (3-5 mL) specimen along with Texas DSHS G2V Form AND Zika Testing Supplemental Information Form and ship directly to the Texas DSHS laboratory. Refer to DSHS "Chikungunya, Dengue, and Zika PCR and Serology Specimen Criteria" (link is provided in the second row). Collect specimens as soon as possible after onset of symptoms. Collect at least 5 mL blood each in TWO red, gold, or tiger top blood collection tubes. Centrifuge Serum according to collection tube manufacturer's guidelines to separate the serum from the red blood Specimen cells (clot). Collection Transfer the serum from the blood collection tubes into separate serum transport tubes and label with patient information. The second sample will be forwarded to DSHS should additional testing and **Handling** be required. Specimens should be placed in a biohazard bag and stored as indicated below: > Specimens that are shipped the same day of collection and will arrive at the lab within 48 hours of collection can be stored at 4°C and should be shipped with cold packs. Specimens that will arrive at the lab more than 48 hours after collection should be stored frozen (-20 °C) and shipped on dry ice. Transport specimens to the laboratory as soon as possible. Do not ship on Fridays or before government holidays (except in cases where prior arrangements have been discussed). Ship specimens Monday-Thursday by overnight delivery. Serum samples collected on Friday-Sunday should be centrifuged, transferred into a serum **Specimen** transport tube, and frozen (-20°C). All other specimen types should also be frozen. Shipping The name and patient information on the tubes **MUST** match the forms **EXACTLY**. The submitter is responsible for transport to the lab. Specimens may be delivered or shipped to the physical address: Houston Health Department Laboratory, 2252 Holcombe Blvd., Houston, Texas 77030. REMINDER: Specimens should be packaged/labeled/shipped according to regulations for UN3373 Biological Substance, Category B. Additionally, frozen specimens should be packaged/labeled/shipped according to UN1845, Class 9 regulations for dry ice. CDC Trioplex Real-time RT-PCR Assay, Instruction for Use: http://www.fda.gov/downloads/MedicalDevices/Safety/EmergencySituations/UCM491592.pdf Information **Emergency Use Authorization (EUA) letter:** http://www.fda.gov/downloads/MedicalDevices/Safety/EmergencySituations/UCM491587.pdf on CDC **Trioplex Fact Sheet for Health Care Providers:** rRT-PCR http://www.fda.gov/downloads/MedicalDevices/Safety/EmergencySituations/UCM491588.pdf **Fact Sheet for Patients: EUA** and **Fact Sheets** http://www.fda.gov/downloads/MedicalDevices/Safety/EmergencySituations/UCM491590.pdf **Fact Sheet for Pregnant Women:** http://www.fda.gov/downloads/MedicalDevices/Safety/EmergencySituations/UCM491591.pdf