

SPECIMEN COLLECTION INSTRUCTIONS

ZIKA VIRUS DISEASE TESTING

These laboratory instructions provide guidance on how to properly collect specimens and how to successfully ensure safe transport to the laboratory. It is absolutely critical that specimens be collected properly, labeled properly, stored appropriately, and submitted with a complete laboratory test request/submission form.

If you have a suspect case of Zika virus disease, contact your local health department (LHD) as soon as possible for consult. If your LHD is unavailable, contact the Division of Infectious Disease Epidemiology (DIDE) at 304-558-5358 and ask to speak with the epidemiologist on call. All suspect cases are subject to review and consultation prior to approval of testing. Only patients who meet the current CDC clinical and epidemiological criteria for testing will be considered. DO NOT send specimens for testing unless approved by DIDE.

WHAT TESTING IS AVAILABLE?

The Office of Laboratory Services offers the TRIOPLEX real-time RT-PCR test method for Dengue, Chikungunya, and Zika Virus. The IgM MAC-ELISA test method is available for Zika only.

WHAT IS COLLECTED?

Serum and urine are the primary diagnostic specimen types for Zika virus infection testing.

To collect serum, whole blood should be collected in a “tiger-top” tube with gel separator. Do not collect blood in tubes containing preservatives or additives. After collection, allow specimen to sit at room temperature for 15 minutes to clot. Spin tubes at 2800 rpm for 10 minutes. Transfer serum to a separate sterile, screw-top vial for shipping. Label the vial indicating “serum” along with the patient’s name or unique identifier. Be sure to close the vial tightly and seal with Parafilm or tape. A minimum of one milliliter (1.0mL) of serum will be accepted for testing.

Urine should be collected using a urine cup. Transfer a minimum of one milliliter (1.0mL) to a separate sterile, screw-top vial. Label the cup indicating “urine” along with the patient’s name or unique identifier. Be sure to close the vial tightly and seal with Parafilm or tape.

Cerebrospinal fluid (CSF) should be collected in a sterile, screw-top vial. Label the vial with the patient’s name or unique identifier. Be sure to close the vial tightly and seal with Parafilm or tape. A minimum of 0.5mL of CSF will be accepted for testing.

Other specimen types may be accepted for testing. Please contact OLS for consultation before collecting.

STORAGE OF SPECIMENS

All specimens (serum, urine, CSF, etc.) must be stored refrigerated (2-8°C; 35-46°F) until shipping. Do not freeze or allow to sit at room temperature.

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COMPLETION OF TEST REQUEST FORM

The Arbovirus Laboratory Human Specimen Submission Form (http://www.wvdhhr.org/labservices/shared/docs/Micro/Test_Request_Form_Arbo_Human.pdf) must be completed in its entirety. The form must contain the patient name (and/or unique identifier), patient date of birth, date of specimen collection, source of specimen, and submitting facility name and address at a minimum. OLS also requires the completion of additional information including date of symptom onset, and travel history. Be sure to indicate patient's pregnancy status in the comments section. **FAILURE TO COMPLETE THE REQUIRED INFORMATION ON THE TEST REQUEST FORM MAY RESULT IN THE REJECTION OF THE SAMPLE.**

PACKAGING AND SHIPPING

Specimens should be packaged in an insulated box and shipped overnight with ice packs. DO NOT SHIP SPECIMENS IF THEY WILL ARRIVE AT OLS DURING WEEKENDS OR HOLIDAYS. OLS does not have the means to accept any packages during weekends or holidays. The package must be shipped according to the current DOT, IATA, and ICAO regulations. See our website - www.wvdhhr.org/labservices - for complete packaging and shipping guidelines.

ADDRESS FOR SHIPPING

Office of Laboratory Services
ATTN: Central Accessioning
167 11th Avenue
South Charleston, WV 25303

REPORTING

Turn-around-time varies depending upon which test method is used. RT-PCR results are typically available within 24 hours of receipt of specimens. MAC-ELISA results are typically available within 10 days of receipt. All reports are faxed to DIDE. DIDE will notify the submitting agency and the local county health department of the results.

CONTACTS

Questions regarding specimen collection, shipping, and laboratory testing can be directed to the OLS Threat Preparedness Bioterrorism Unit at 304-558-3530 extension 2301.

REFERENCES

www.cdc.gov/zika/laboratories/lab-guidance.html
www.zikawv.org