



## GUAM PUBLIC HEALTH LABORATORY GUIDELINES

SPECIMEN REQUIREMENTS FOR CHIKUNGUNYA VIRUS  
IN CLINICAL SAMPLES

<b>Methodology:</b>	<b>CDC Chikungunya (CHIK) Virus real-time (rt) Reverse-Transcriptase Polymerase Chain Reaction (RT-PCR) Assay</b>
<b>Performed at Guam Public Health Lab:</b>	<p>CDC Chikungunya Virus real-time RT-PCR Assay is a <b>non-FDA</b> approved:</p> <ul style="list-style-type: none"><li>• For the detection of <i>Mycobacterium tuberculosis</i> complex DNA in raw sputum or concentrated sputum sediment prepared from induced or expectorated sputum.</li><li>• For the detection of Rifampin-resistance associated mutations of the <i>rpoB</i> gene in specimens where <i>Mycobacterium tuberculosis</i> complex (MTB complex) is detected.</li><li>• In which is intended as an aid in all diagnosis of pulmonary tuberculosis when used in conjunction with clinical and other laboratory findings.</li></ul>
<b>Criteria for testing:</b>	<p>Testing of clinical sputum specimens with the Xpert MTB/RIF real-time RT-PCR Assay should not be performed unless the patient meets clinical signs and symptoms compatible with tuberculosis and/or specimens meeting the case definition set and/or updated by the CDC and/or the Bureau of the Communicable Disease Control (BCDC) under the Division of Public Health of the Department of Public Health and Social Services (DPHSS).</p> <p><b>Note:</b> Xpert MTB/RIF Assay is intended for use with specimens from patients for whom there is clinical suspicion of tuberculosis (TB) and who have received no antituberculosis therapy, or less than three days of therapy.</p>
<b>For private clinics and providers:</b>	<p><b>Sputum Specimen Submission Guidelines</b></p> <ol style="list-style-type: none"><li>1. Induced, early morning specimens are requested for MTB/RIF Assay.</li><li>2. minimum of 1ml serum collected in red top or in separator tube (marble or tiger-top).</li><li>3. Fill out required form(s) completely. Include the following information date of onset of illness, signs and symptoms and travel history. CHIK specimens must be collected within the first five (5) days from onset of signs and symptoms. Send forms with the specimen.</li><li>4. Refrigerate serum at 4°C or maintain on ice for no longer than 24 hours. If storage/transport will exceed 24 hours, freeze serum at -20°C or lower.</li><li>5. Send frozen specimens to GPHL Mondays-Fridays 8AM-430PM.</li></ol>

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<b>Specimen Required:</b>	The laboratory requires a blood sample taken during the acute period of the disease (first 5 days of symptoms). Note: If the patient makes the first visit to the physician on or after day 7 of onset of the symptoms, that sample is likely not to render a positive RT-PCR result.
<b>Specimen Collection:</b>	<ul style="list-style-type: none"> <li>• Once there is a clinical diagnosis of suspected Chikungunya virus, take a venous, whole blood sample.</li> <li>• Follow serum specimen collection devices manufacturer instructions for proper collection, separation and storage methods. Separated serum samples should be frozen at -20 °C and sent or shipped in dry ice to GPHL. If dry ice is not available, separated serum should be maintained on ice or in a refrigerator for no longer than 2 hours before it is either frozen at -20 °C or sent to GPHL.</li> </ul>
<b>Specimen Transport, Storage and Stability</b>	<p>Store and transport specimens in frozen state.</p> <p>For USAPI Laboratories, follow the PIHOA Shipping Mechanism Guidelines.</p>
<b>Specimen Submission</b>	<ul style="list-style-type: none"> <li>• Ensure that when transporting human blood, plasma or serum specimens, all applicable regulations for transport of potentially infectious biological specimens are met.</li> <li>• Transport/ship human serum or plasma samples in dry ice.</li> </ul> <p>The submitting facility must notify Microbiologist or alternate of GPHL at (671) 735-7153/158/355 prior to submitting/ shipping specimens.</p> <p><b>NOTE: It is the responsibility of the submitter to track the arrival of the specimens along with the Chikungunya Specimen form at GPHL to ensure that these specimens are received by the Laboratory staff.</b></p>
<b>Rejection Criteria</b>	<ul style="list-style-type: none"> <li>• Specimen is not collected in a proper container or special handling instruction is not followed;</li> <li>• Specimen quantity is insufficient to perform the test;</li> <li>• Specimen received in a container that is leaking;</li> <li>• Specimen is not received at 4°C or packed in ice pack;</li> <li>• Frozen specimen not shipped in dry ice;</li> <li>• Blood collected with heparin or EDTA tube;</li> <li>• Unlabelled specimens;</li> <li>• Illegible/ incomplete labeling/documentation.</li> </ul>

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<b>Submission Form</b>	<p>Specimen Laboratory Submission Form</p> <ul style="list-style-type: none"><li>• Each specimen submitted must have a completed Hawaii State Laboratory Submission HSLD Form 81.3, with the patient name, patient identification number, type of specimen, date/time of collection, submitter, date of onset, travel history, date shipped/sent to GPHL, test(s) requested and other pertinent information.</li><li>• Submission forms that are not consistent with the specimen submitted will be rejected and requesting facility will be asked to re-submit.</li><li>• Submission forms must not be in direct contact with the specimen(s).</li><li>• Fill out required form(s) <b>COMPLETELY</b>. &gt;Incomplete forms will be rejected.</li></ul>
<b>Result Notification:</b>	<p>Specimens run will be batched. Laboratory reports will be forwarded to the submitting facility, territory epidemiologist, and the BCDC Administrator via Facsimile.</p> <p>Any other request for copies of laboratory reports, apart from that stipulated above will not be accepted.</p>
<b>Contact:</b>	<p>Alan Mallari, Microbiologist II, GPHL (671) 735-7158/355 <a href="mailto:alanjohn.mallari@dphss.guam.gov">alanjohn.mallari@dphss.guam.gov</a></p> <p>Lea Nisay, Microbiologist I, GPHL(Alternate) (671) 735-7170 (671) 735-0348 FAX <a href="mailto:lea.nisay@dphss.guam.gov">lea.nisay@dphss.guam.gov</a></p> <p>Anne Marie Santos, Laboratory Administrator, GPHL (671) 735-7153/7158 <a href="mailto:Annemarie.santos@dphss.guam.gov">Annemarie.santos@dphss.guam.gov</a></p>

Reference:

1. CDC CHIK Virus Real Time RT-PCR Assay LPRP, BRS SOP