

Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services
Richmond, Virginia

Oropouche Testing Guidance

All testing must be approved by the Virginia Department of Health (VDH) before testing can be performed at DCLS. Please contact your local Health Department for consultation.

TESTING:

- DCLS does not provide testing for Oropouche virus currently, but The Centers for Disease Control and Prevention (CDC) provides diagnostic testing for Oropouche virus disease. The test results can be provided to treating physicians and used for clinical decision making.
- DCLS will facilitate the shipment of specimens **Monday through Thursday** to the CDC for testing upon Epi approval.
- DCLS will provide testing to rule-out Dengue, Chikungunya and Zika virus infections to support investigations, as applicable.

I. CDC Oropouche virus Disease Diagnostic Testing Algorithm

TESTING		Acceptable Specimens	
Test Type*	Algorithm	Type / Minimum volume	Temperature
Reverse Transcriptase Polymerase Chain Reaction (RT-PCR)	0 – 7 days post onset	Serum [‡] / 0.5 mL Cerebrospinal Fluid (CSF) / 1.0 mL	Samples must be received at 2 - 8°C, or < -20°C using dry ice
Plaque Reduction Neutralization Test (PRNT)**	6 -7 days post onset, if RT-PCR negative > 7 days post onset	Submit 1 of each specimen type per patient	Samples received outside of temperature ranges will be <u>REJECTED</u>

* RT-PCR detects viral RNA; PRNT detects neutralizing antibodies in serum and/or CSF specimens.

** In some cases, an acute (**3 -10 days after onset**) and a convalescent (**2 -3 weeks after acute sample**) specimen are Preferred to confirm recent infection.

[‡] Collect serum in a serum separator blood tube (**spin down before shipping**) or a red-top blood tube (**spin down and transfer serum to a sterile tube before shipping**). Collect CSF in a sterile, sealed specimen tube or cup.

II. DCLS Arbovirus Testing

MOLECULAR TESTING ^{¥¥}	Sample Type / Minimum Volume	Storage /Holding Time (Post-Collection)	Transport / Receipt Temperature(s)
<p><u>CDC Triplex Real Time RT-PCR assay:</u></p> <ul style="list-style-type: none"> • Zika virus (ZIKV) • Dengue Virus (DENV) • Chikungunya virus (CHIKV) <p><u>CDC DENV-1-4 Real Time RT-PCR assay:</u></p> <ul style="list-style-type: none"> • Dengue virus serotypes 1, 2, 3 and 4 	<p>Serum / 1mL</p> <ul style="list-style-type: none"> • Serum separator blood tube (spin down tube before shipping) <p>OR</p> <ul style="list-style-type: none"> • Red-top blood tube (spin down and place serum in a clean tube before shipping) <p>Submit 2 tubes per patient</p>	<ul style="list-style-type: none"> • <u>RT-PCR testing,</u> • <u>Chikungunya IgM testing:</u> Store samples at 2 to 8°C, and deliver to DCLS within <u>7 days</u> • <u>Zika and Dengue virus IgM testing:</u> Store samples at 2 to 8°C, and deliver to DCLS within <u>2 days</u> 	<p>All samples <u>must</u> be received at 2 - 8°C</p> <p>Samples received outside of temperature ranges will be <u>REJECTED</u></p>
SEROLOGIC TESTING			
<p><u>InBios IgM ELISA Assay:</u></p> <ul style="list-style-type: none"> • Zika IgM • Dengue virus IgM • Chikungunya virus IgM[€] 			

¥¥ High-priority cases can be tested outside of normal business hours upon Epi request.

€ An acute specimen should be collected within 0-8 days of onset, and a convalescent specimen 2-3 weeks after the acute specimen.

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SUBMISSION INSTRUCTIONS:

- Include a completed DCLS Test Request Form (#16857) for each patient to be tested. DCLS will complete all required CDC submission forms. **It is imperative that the following data is provided on the DCLS Test Request form when specimens are submitted:**
 - 1) Complete submitter information
 - 2) Patient name and date of birth
 - 3) **Relevant travel, exposure history**
 - 4) Date and Time of collection
 - 5) Symptoms and Onset date
 - 6) VDH outbreak ID
- Collection and/or shipping kits can be requested at DCLS_SSSKits@dgs.virginia.gov.
- **Package specimens on adequate ice packs to maintain 2-8°C temperature and send via routine DCLS courier.**

RESULTS / REPORTING:

- Verbal reporting of DCLS results will be provided to the listed submitter. All reports will be issued within 1-2 business days after test completion.
- CDC will send test reports to state public health laboratories. DCLS will provide copies of all CDC reports upon receipt to the listed submitter and VDH.

POINTS OF CONTACT (DCLS):

- **DCLS Emergency Number (24/7):** 804-335-4617
- **Dr. LaToya Griffin-Thomas (Biothreat/Special Pathogens Lead Scientist):** 804-648-4480, x281
- **Dr. Heather Masri (Immunology/Virology Group Manager):** 804-648-4480, x269
- **Dr. Neeti Dahal (Biothreat Response Group Manager):** 804-648-4480, x410
- **Terri Harper (Specimen Transport Manager):** 804-648-4480, x140

REFERENCES:

CDC Oropouche Interim Guidance: <https://www.cdc.gov/oropouche/php/reporting/index.html>

CDC Arboviral Specimen Submission Guidance: <https://www.cdc.gov/vector-borne-diseases/php/laboratories/submitting-arboviral-specimens.html>

DCLS Test Request Form: <https://dgs.virginia.gov/globalassets/document-center/dcls-forms/dcls-test-request-form-168572.pdf>

Virginia Department of Health (VDH) - Health Department Locator:
<https://www.vdh.virginia.gov/health-department-locator/>