

NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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To: NC Clinicians
Date: 23 August 2024

Background

In 2024, an increase in Oropouche virus (OROV) cases in both endemic areas and new, non-endemic regions, including Cuba has been reported. There is also a reported increase in severity of illness and potential vertical transmission. While travel-associated cases have been identified in the United States, there has been no evidence of local transmission to date. For more information, please see the [CDC HAN](#). OROV, a member of the Orthobunyavirus genus, has historically occurred primarily in South and Central America. In Brazil, it is the causative agent of the second most common arboviral febrile disease after dengue fever [1].

Transmission

OROV is primarily an arthropod transmitted virus. In endemic regions, its primary vector is a biting midge (*Culicoides paraensis*). Some types of mosquitoes, including members of the *Culex* genus, are also capable of transmitting the virus. North Carolina insect vectors could include mosquitoes of the *Culex pipiens* complex, and at least one endemic species of midges in the *Culicoides* genus. Studies are currently underway to identify potential competent vectors in the United States. Vertical transmission from mother to fetus has been reported and is currently being investigated.

Clinical Presentation

Approximately 60% of people become symptomatic. Incubation is typically 3-10 days. Patients present with fever, chills, headache, myalgia, and arthralgia; other symptoms such as photophobia, skin rashes, and dizziness may also occur [2].

A large percentage of patients (~70%) experience recurrent symptoms several days to weeks after initial resolution of symptoms. Hemorrhagic and neuroinvasive manifestations are possible but less common (<5% of cases). In cases of vertical transmission of OROV, fetal death and congenital abnormalities, including microcephaly, have been observed.

Testing

Commercial testing for OROV is not available at this time. CDC is supporting clinical diagnostic testing using a Plaque Reduction Neutralization Test (PRNT) on serum and CSF (if patient has

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

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neuroinvasive disease). OROV testing is available at CDC through the North Carolina State Laboratory of Public Health (NCSLPH). Testing will be restricted to individuals who meet criteria for clinical presentation and travel history (see “Should a patient be tested for Oropouche?” flow chart below).

Specimens sent to NCSLPH for OROV testing must include complete [DHHS-3445: Special Serology](#) and [CDC 50.34 DASH](#) forms, and a copy of negative dengue virus (DENV) test results if DENV testing is not requested through NCSLPH. These documents will be forwarded to CDC.

- To request OROV testing, choose “Other” on the Special Serology form and write in Oropouche. Select Arbovirus Neutralization Antibody CDC-10283 on the DASH Form. If also requesting DENV testing, choose that as well. Symptom onset date, travel dates, and travel locations must be included for testing to proceed
- OROV testing turnaround time is 4 weeks
- For questions, please call the Special Serology Laboratory at NCSLPH at 919-807-8623.

Treatment

There is no antiviral treatment available for OROV. Acetaminophen is the preferred first-line treatment for fever and pain; aspirin and NSAIDs should be avoided in patients with suspected dengue or OROV infection due to the potential risk of hemorrhage.

Control Measures

No vaccine is available. Returning travelers should take special precautions to avoid insect bites, including both mosquitos and biting midges (no-see-ums) for 3 weeks following return to the US. Advise use of [EPA-approved insect repellants](#), protective clothing, and keeping windows and doors closed when possible, as biting midges can fit through most commonly used screens. Pregnant people should discuss travel plans with their healthcare provider and reconsider travel to countries with a [Level 2 Travel Health Notice for OROV](#).

References and Additional Resources

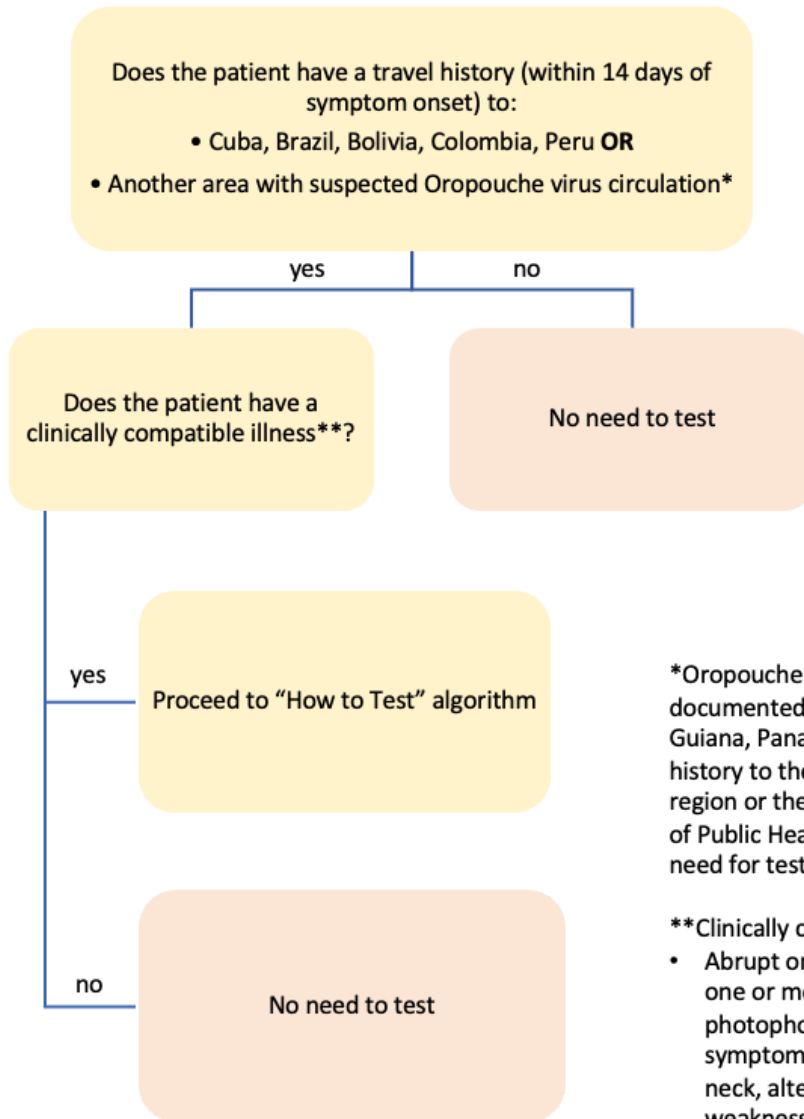
1. [Oropouche Fever: A Review. H Sakkas et. al. Viruses 2018, 10\(4\), 175.](#)
2. [Oropouche fever, an emergent disease from the Americas. D Romero-Alvarez and LE Escobar. Microbes and Infection 2018, 20\(3\), 135.](#)

[CDC/IDSA Clinician Update Call for Arboviral Diseases](#)

[Oropouche Virus Disease Among US Travelers – United States, 2024](#)

[Interim Guidance for Evaluating and Managing Infants Born to Pregnant People with Confirmed or Probable Oropouche Virus Disease](#)

Should a patient be tested for Oropouche?



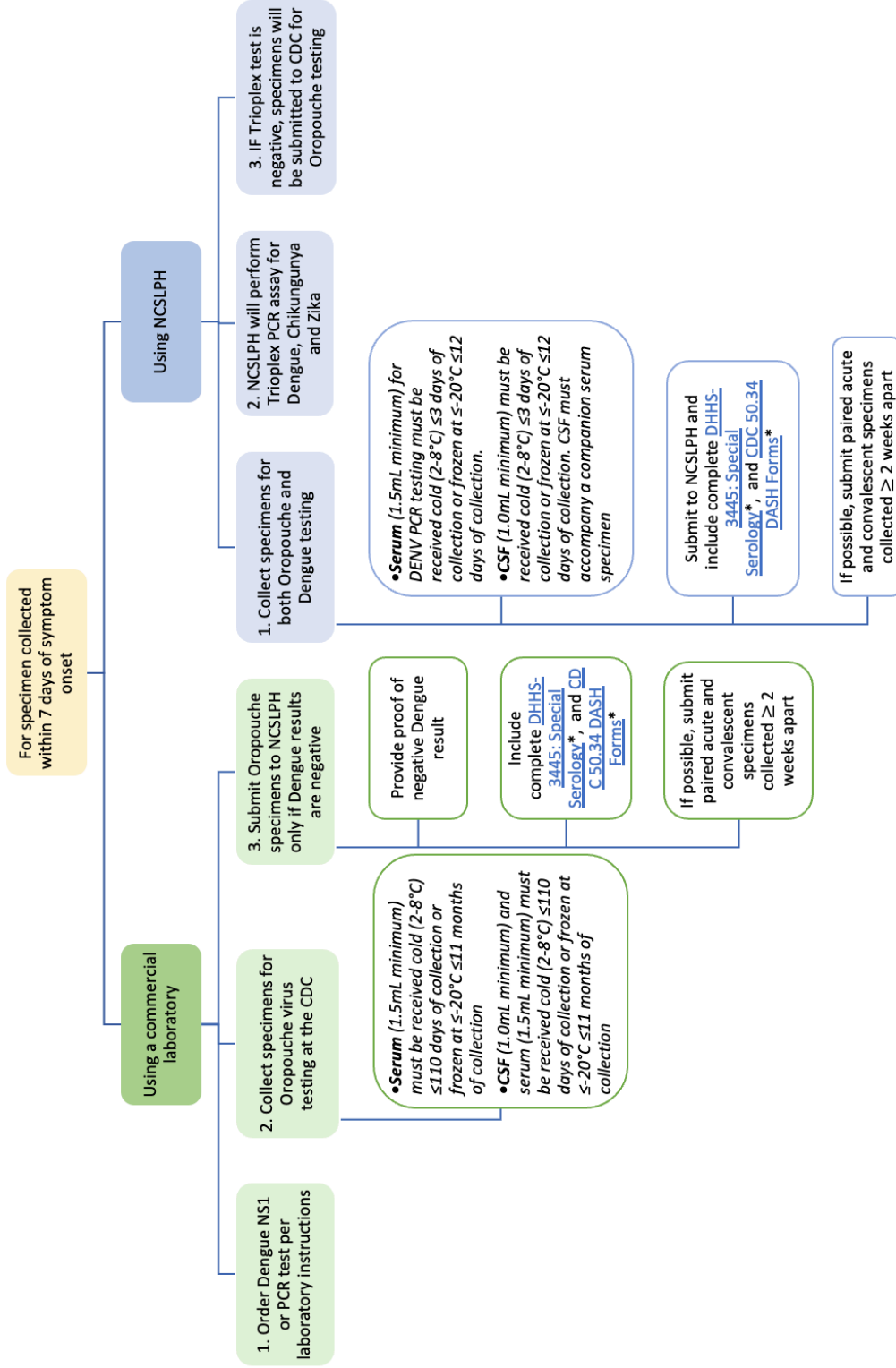
*Oropouche virus cases have previously been documented in Trinidad and Tobago, Ecuador, French Guiana, Panama, and Haiti. If the patient has travel history to these or other countries in the Amazon region or the Caribbean, please contact the Division of Public Health at 919-733-3419 to evaluate the need for testing on a case-by-case basis.

**Clinically compatible illness:

- Abrupt onset of reported fever, headache, and one or more of the following: myalgia, arthralgia, photophobia, retroorbital/eye pain, or signs and symptoms of neuroinvasive disease (e.g., stiff neck, altered mental status, seizures, limb weakness, or cerebrospinal fluid pleocytosis); **AND**
- No respiratory symptoms (e.g., cough, rhinorrhea, shortness of breath)

How to Test for Oropouche Algorithm

Part A: For specimens collected within 7 days of symptom onset

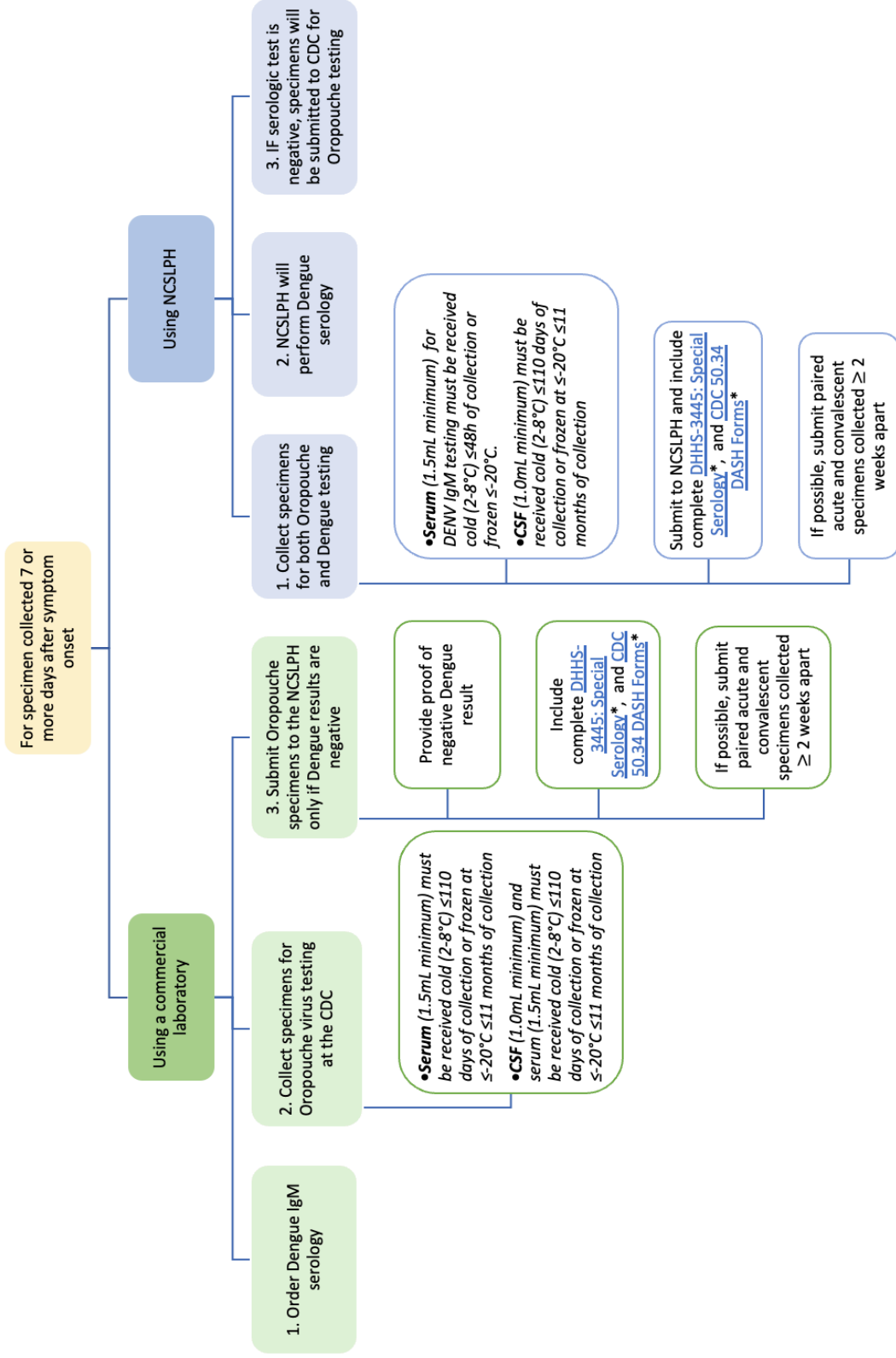


For any questions about testing, please call the NCSLPH Special Serology Lab at 919-807-8623.

* Links to NCSLPH Forms: [DHHS-3445: Special Serology](#) and [CDC 50.34 DASH Forms](#)

How to Test for Oropouche Algorithm

Part B: For specimens collected 7 or more days after symptom onset



For any questions about testing, please call the NCSLPH Special Serology Lab at 919-807-8623.

*Links to NCSLPH Forms: [DHHS-3445: Special Serology](#) and [CDC 50.34 DASH Forms](#)