

25-ID-01

Committee: Infectious Disease

Title: Public Health Reporting and National Notification for Non-congenital and Congenital Oropouche Virus (OROV) Disease

Check this box if this position statement is an update to an existing standardized surveillance case definition and include the most recent position statement number here: Interim-25-ID-01.

Synopsis:

- This position statement creates standardized surveillance case definitions for non-congenital and congenital Oropouche (OROV) disease and recommends that OROV disease be made nationally notifiable.
- Standardized surveillance case definitions and national notification are needed to:
 - Provide a consistent framework to classify and report travel-associated and locally acquired cases across jurisdictions, identify and monitor risk factors and adverse outcomes, promptly detect and trace outbreaks, and inform control and prevention measures.
 - Identify pregnancies and infants for possible further follow-up through SET-NET (CDC’s Surveillance for Emerging Threats to Mothers and Babies Network) to further understand the risk of vertical transmission and potential adverse pregnancy and infant outcomes.
- Case ascertainment criteria include clinical paired with epidemiologic linkage criteria, laboratory, vital record, and healthcare record criteria.
- Case classification criteria include clinical, laboratory, and epidemiologic linkage criteria.
- Case classification for non-congenital disease includes confirmed and probable cases. Case classification for congenital disease includes confirmed, probable, and suspect cases.

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I. Statement of the Problem

Oropouche virus (OROV) is an emerging virus in the Americas endemic to the Amazon basin [1]. The virus is spread to people by infected biting midges and possibly some mosquito species. In 2024, OROV caused outbreaks in South America and the Caribbean, expanding into areas to which the virus was previously not endemic [2]. This geographic range expansion, in conjunction with reports of fatalities and vertical transmission potentially associated with fetal deaths and birth defects, has raised concerns about the broader threat this virus represents to the Americas [3]. In 2024, cases were identified in the United States (U.S.), Canada, and Europe associated with travel to Cuba or Brazil [4-6]. A standardized case definition and national notification are needed to monitor and detect OROV risk factors, adverse outcomes, outbreaks, and transmission mechanisms and to inform control and prevention measures.

II. Background and Justification

OROV is an orthobunyavirus first identified in Trinidad and Tobago in 1955 [7]. Prior to 2000, outbreaks of OROV were reported in Brazil, Panama, and Peru. In the last 25 years, OROV disease cases have been identified in many countries, including Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Haiti, Panama, and Peru [8]. Starting in late 2023, outbreaks of OROV disease were reported in endemic areas, and the virus emerged in new areas where it had not been previously documented. Travel-associated cases have been reported among persons in the U.S., Canada, and Europe traveling back from Cuba and Brazil [4-6].

OROV circulates in a sylvatic cycle, possibly involving certain vertebrate hosts (e.g., sloths, nonhuman primates, and birds) and mosquitoes, and an urban cycle with humans serving as amplifying hosts with known vectors of biting midges (*Culicoides paraensis*) and possibly mosquitoes (e.g., *Culex quinquefasciatus*) [4, 9-13]. Humans develop sufficient viremia to contribute to viral spread, serving as bridge hosts that introduce OROV from its sylvatic cycle to populated areas [1]. The Centers for Disease Control and Prevention (CDC) is conducting vector competency studies on mosquitoes to better understand the potential for local transmission in the U.S.

There have been no reports of OROV transmission through sexual activity. A recent publication describes the first OROV disease patient with virus and viral RNA detected in bodily fluids [14]. Specific real-time reverse transcription PCR (RT-PCR) detected persistent shedding of OROV RNA in serum, whole blood, urine, and semen. The patient's semen was RT-PCR positive on days 16, 32, and 58 after symptom onset. Culturable OROV was recovered from the day 16 semen sample but could not be recovered on day 32 (viral culture was not attempted on day 58). This detection of replication-competent virus in semen raises concern about the possible risk of sexual transmission.

The incubation period for OROV disease is 1 to 10 days, and most infected people become symptomatic [15-17]. Typically, disease starts with the abrupt onset of fever (38-40°C) with headache (often severe), chills, myalgia, and arthralgia. Other signs and symptoms include photophobia, dizziness, retroorbital or eye pain, nausea and vomiting, or maculopapular rash. Symptoms typically last less than a week (2 to 7 days); however, in up to 60% of patients, symptoms can recur a few days or even weeks later [18]. A small proportion of persons can develop more severe disease with hemorrhagic symptoms (e.g., gingival bleeding, melena, and menorrhagia) or neurologic symptoms consistent with meningitis, meningoencephalitis, or Guillain-Barré syndrome (GBS) [2, 4, 17, 19, 20]. GBS is a postinfectious autoimmune disorder of the peripheral nervous system characterized by limb weakness. In one report describing three OROV patients with GBS, GBS developed 10 to 11 days after initial onset of symptoms [20].

Based on limited data from Brazil and Cuba, vertical transmission of OROV is possible [21, 22]. In case reports from Brazil and Cuba, findings among women with OROV infection during pregnancy have included stillbirth and congenital anomalies of the central nervous system (e.g., severe microcephaly) [21-23]. Additional findings have included hydrops, ventriculomegaly/hydrocephalus, corpus collosum anomalies, loose redundant skin folds on the head, arthrogyposis, and talipes equinovarus (club foot). Most, but not all, mothers of affected infants reported an OROV-like illness during their first trimester. However, it is unclear how the timing of infection during pregnancy (e.g., first, second, or third trimester) may impact outcomes.

The development of a standardized case definition and national notification will provide a consistent framework to classify and report travel-associated and locally acquired cases across jurisdictions; identify and monitor risk factors and adverse outcomes; promptly detect and trace outbreaks; and inform control and prevention measures. A standardized case definition and national notification will also help identify pregnancies for inclusion in enhanced surveillance through the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET), a collaboration between CDC and state, local, and territorial health departments. SET-NET conducts linkages of pregnant women and infant cases, collects additional pregnancy and outcome-specific data elements, and follows exposed infants longitudinally. This network can be used to assess risks of OROV during pregnancy to the pregnant women, the fetus/infant, and early childhood outcomes not available within routine surveillance. SET-NET is covered by an Assurance of Confidentiality (<https://www.cdc.gov/os/integrity/confidentiality/index.htm>) [24, 25].

III. Statement of the Desired Action(s) to be Taken

CSTE recommends the following actions:

1. Implement a standardized surveillance case definition for **non-congenital and congenital OROV disease**.
 - A. Utilize recommended reporting* sources for case ascertainment for **non-congenital and congenital OROV disease**. Surveillance for **non-congenital and congenital OROV disease** should use the recommended sources of data to the extent of coverage presented in Section V.
 - B. Utilize standardized criteria for case ascertainment for **non-congenital and congenital OROV disease** presented in Section VI and Table VI in Technical Supplement.
 - C. Utilize standardized criteria for case classification for **non-congenital and congenital OROV disease** presented in Section VII and Table VII in Technical Supplement.
2. Utilize standardized criteria for case ascertainment and classification (based on Sections VI and VII and Technical Supplement) for **non-congenital and congenital OROV disease** and **add non-congenital and congenital OROV disease** to the *Nationally Notifiable Condition List* using the following notification** timeframe:
 - Immediately notifiable, extremely urgent (within 4 hours)
 - Immediately notifiable, urgent (within 24 hours)
 - Routinely notifiable
 - No longer notifiable
3. CSTE recommends that all States and Territories enact laws (statute or rule/regulation as appropriate) to make this disease or condition reportable in their jurisdiction. Jurisdictions (e.g., States and Territories) conducting surveillance (according to these methods) should submit case notifications to CDC.
4. CSTE recommends that all jurisdictions (e.g., States, Localities, or Territories) with legal authority should conduct public health surveillance and use the case classifications included in this standardized surveillance position statement.
5. Expectations for Message Mapping Guide (MMG) development for a newly notifiable condition: the National Notifiable Diseases Surveillance System (NNDSS) is transitioning to HL7-based messages for case notifications; the specifications for these messages are presented in MMGs. When CSTE recommends a new condition be made nationally notifiable, CDC must obtain Office of Management and Budget Paperwork Reduction Act (OMB PRA) approval prior to accepting case notifications for the new condition. Under anticipated timelines, notification using the Generic V2 MMG would support transmission of the basic demographic and epidemiologic information common to all cases and could begin with the new MMWR year following the CSTE annual conference. Input from CDC programs and CSTE would prioritize development of a disease-specific MMG for the new condition among other conditions waiting for MMGs.

6. CDC should publish data on non-congenital and congenital OROV disease as appropriate (see Section IX). CSTE recommends the following case statuses be included in the CDC Print Criteria:

- Confirmed
- Probable
- Suspect
- Unknown

* *Reporting: process of a healthcare provider, laboratory, or other entity submitting a report (case information) of a condition under public health surveillance to local, state, or territorial public health.*

***Notification: process of a local or state public health authority submitting a report (case information) of a condition on the Nationally Notifiable Conditions List to CDC.*

IV. Goals of Surveillance

- To provide information on the temporal, geographic, and demographic occurrence of OROV and indicators of morbidity (e.g., hospitalization) and mortality associated with OROV disease to facilitate prevention and control.
- To identify pregnancies and infants for possible follow-up through enhanced surveillance, e.g., SET-NET (CDC's Surveillance for Emerging Threats to Mothers and Babies Network) to further understand vertical transmission and potential adverse pregnancy and infant outcomes.

V. Recommended Data Sources and Methods for Surveillance

Surveillance for non-congenital and congenital OROV disease should use the following recommended sources of data and/or methodologies and the extent of coverage listed in Table V.

Table V. Recommended Sources of Data, Surveillance Methods, and Extent of Coverage for Ascertainment of Cases of non-congenital and congenital OROV disease.

| Source of Data/Methodology for Case Ascertainment | Coverage | |
|---|-----------------|----------------|
| | Population-Wide | Sentinel Sites |
| Clinician reporting | X | |
| Laboratory reporting | X | |
| Reporting by other entities, specify: Hospitals | X | |
| Death certificates | X | |
| Hospital discharge or outpatient records | X | |
| Data from electronic medical records | X | |
| Telephone or online survey | | |
| School-based survey | | |
| Other, specify: N/A | | |

VI. Criteria for Case Ascertainment

Case ascertainment is the process through which public health identifies potential cases of a disease or condition using data reported or provided to public health by healthcare, laboratories, and other reporting entities. This public health reporting is triggered by the case ascertainment criteria (a single criterion or a combination of criteria) included in this position statement, and each initial report sent to public health should include common data elements and disease-specific data elements. Case ascertainment criteria are not intended to be used for clinical diagnosis purposes.

A. Narrative: A description of suggested criteria for case ascertainment of a specific condition and recommended reporting procedures.

Recommended reporting procedures for OROV disease:

- All suspected cases of non-congenital and congenital OROV disease based on the criteria below should be reported.
- Reporting should be ongoing and routine.
- Frequency of reporting should follow the jurisdiction health department's reporting schedule.

Report the following to public health authorities:

- Any person meeting at least one criterion in both the clinical and epidemiologic linkage criteria for reporting below (A1 and A3).
- Any person meeting at least one laboratory criterion for reporting below (A2).
- Any person meeting the vital records criterion for reporting below (A4).
- Any person meeting the healthcare record criterion for reporting below (A5).

A1. Clinical Criteria for Reporting

- Acute onset of fever (measured or reported) or chills; **OR**
- Acute onset of two or more of the following: headache, myalgia, arthralgia, retro-orbital pain, or generalized rash; **OR**
- Meningitis, encephalitis, acute flaccid paralysis, Guillain-Barré syndrome, or other acute sign of central or peripheral neurologic dysfunction (e.g., altered mental status, ataxia, paresis, seizures), as documented by a physician; **OR**
- Loss of a fetus at greater than or equal to 20 weeks gestation; **OR**
- Congenital anomaly of the brain or eye, or arthrogyrosis in an infant.

A2. Laboratory Criteria for Reporting

- Detection of Oropouche virus, viral antigen, or viral RNA in a body fluid or tissue; **OR**
- Detection of OROV IgM or neutralizing antibodies in blood or cerebrospinal fluid (CSF).

A3. Epidemiologic Linkage Criteria for Reporting

- Resided in or traveled to an area with a risk¹ of OROV transmission; **OR**
- Sexual contact with a person who has either recently been diagnosed with OROV infection or recently returned from traveling to an area with possible risk¹ of OROV transmission; **OR**
- Laboratory exposure to OROV; **OR**
- Receipt of blood products, solid organs, or human cellular or tissue-based products²; **OR**
- An infant whose mother met any of the epidemiologic linkage criteria above during pregnancy.

A4. Vital Records Criteria for Reporting

- A person whose death certificate lists OROV infection or disease as an underlying cause of death or a significant condition contributing to death.

A5. Healthcare Record Criteria for Reporting

- A person whose healthcare record contains a diagnosis of OROV infection or disease.

¹ Visit <https://www.cdc.gov/oropouche/data-maps/countries-and-territories-at-risk-for-oropouche.html> for geographic areas with known current or previous risk of OROV; for areas where cases have not been previously identified, consult with CDC for assistance on risk determination.

² Contact CDC for further guidance given limited data on these potential modes of transmission. Some immunocompromised patients may experience a prolonged incubation period for arboviral diseases.

B. Disease-Specific Data Elements to be Included in the Initial Report

Disease-specific data elements should be included in addition to the common data elements that are to be reported for all initial individual case reports (see CSTE Position Statement 09-SI-01 “Common Core Data Elements for Case Reporting and Laboratory Result Reporting” <https://cdn.ymaws.com/www.cste.org/resource/resmgr/PS/09-SI-01.pdf>). Public health authorities do not expect that an initial report will contain all the information necessary for case investigation and case classification.

- Pregnancy status
- Exposure history (e.g., prenatal, blood transfusion, laboratory, travel, and sex)
- Congenital anomalies
- Fetal demise
- Hospitalized
- Fatality

VII. Case Definition for Case Classification

This case definition for case classification is intended solely for public health surveillance purposes and does not recommend criteria for clinical diagnosis purposes. Once a public health agency has ascertained data on potential cases of a disease or condition from reporting entities, the public health agency assigns case statuses based on the case classifications included within this position statement.

A. Narrative: A description of criteria to determine how public health should classify cases of non-congenital and congenital OROV disease.

A1. Clinical Criteria

Non-congenital OROV disease:

A person with one of the following not explained by another etiology:

- Acute onset of fever (measured or reported) or chills; **OR**
- Acute onset of two or more of the following: headache, myalgia, arthralgia, retro-orbital pain, or generalized rash; **OR**
- Meningitis, encephalitis, acute flaccid paralysis, Guillain-Barré syndrome, or other acute sign of central or peripheral neurologic dysfunction (e.g., altered mental status, ataxia, paresis, seizures), as documented by a physician; **OR**
- Loss of a fetus at greater or equal to 20 weeks gestation.

Congenital OROV disease:

A liveborn infant without an identified genetic or other cause for the findings, including a positive test for another more likely etiology³, and one or more of the following congenital anomalies typically identifiable in the neonatal period:

- Microcephaly (defined as head circumference measurement >2 standard deviations below the average [or <3rd percentile] for the same age and sex, notation of microcephaly in the medical record, or diagnostic code of microcephaly [e.g., ICD-10 code Q02]); **OR**
- Structural brain anomaly (e.g., ventriculomegaly, cortical hypoplasia, abnormal gyral patterns such as lissencephaly, corpus callosum abnormalities); **OR**
- Structural eye anomaly (e.g., microphthalmia, chorioretinal atrophy, optic nerve hypoplasia); **OR**
- Congenital contractures of major joints (arthrogryposis).

³ Other infectious etiologies (e.g., Zika virus, cytomegalovirus, rubella virus, varicella zoster virus, herpes simplex virus, lymphocytic choriomeningitis virus, Toxoplasma gondii, or Treponema pallidum) may have similar clinical findings, and testing for these infections should be considered as part of the complete evaluation for congenital disease.

A2. Laboratory Criteria*Non-congenital OROV disease:*Confirmatory Laboratory Evidence:*

- Detection of Oropouche virus, viral antigen, or viral RNA in a body fluid or tissue⁴; **OR**
- Four-fold or greater change in OROV-specific neutralizing antibody titers in paired acute and convalescent blood specimens collected optimally ≥ 2 weeks apart; **OR**
- Detection of OROV-specific IgM antibodies in blood or CSF **with** positive OROV-specific neutralizing antibodies in the same or a later specimen.

Presumptive Laboratory Evidence:

- Detection of OROV-specific IgM **or** neutralizing antibodies in blood or CSF.

Congenital OROV disease⁵:*Confirmatory Laboratory Evidence:*

- Detection of Oropouche virus, viral antigen, or viral RNA in the infant's body fluid or tissue; **OR**
- Detection of OROV-specific IgM antibodies in infant blood or CSF **with** positive OROV-specific neutralizing antibody titers.

Presumptive Laboratory Evidence:

- Detection of Oropouche virus, viral antigen, or viral RNA in amniotic fluid, placenta, umbilical cord, or cord blood⁶; **OR**
- Detection of OROV-specific IgM antibodies in infant blood or CSF.

** Note: The categorical labels used here to stratify laboratory evidence are intended to support the standardization of case classifications for public health surveillance. The categorical labels should not be used to interpret the utility or validity of any laboratory test methodology.*

A3. Epidemiologic Linkage Criteria

- Resided in or traveled to an area with a risk⁷ of OROV transmission in the 14 days before symptom onset, in the 28 days before onset of Guillain-Barré syndrome, or during pregnancy; **OR**
- Sexual contact, in the 14 days before symptom onset or during pregnancy, with a person who has recently been diagnosed with OROV infection or has recently been in an area with a risk⁷ of OROV transmission⁸; **OR**
- Laboratory exposure to OROV before onset of symptoms or during pregnancy; **OR**
- Receipt of blood products, solid organs, or human cellular or tissue-based products in the 30 days before symptom onset or during pregnancy from a person who has either been diagnosed with OROV infection or has been in an area with a risk⁷ of OROV transmission⁹.

⁴ This includes pregnancy related specimens such as amniotic fluid, placenta, or products of conception.

⁵ To prevent misclassifying postnatal OROV disease as congenital cases, in OROV endemic areas, specimens should be collected within 4 weeks after birth.

⁶ Positive laboratory findings in amniotic fluid, placenta, umbilical cord, or cord blood are considered presumptive evidence of congenital OROV disease since they may detect infection in the mother in the absence of congenital infection.

⁷ Visit <https://www.cdc.gov/oropouche/data-maps/countries-and-territories-at-risk-for-oropouche.html> for geographic areas with known current or previous risk of OROV; for areas where cases have not been previously identified, consult with CDC for assistance on risk determination.

⁸ Visit <https://www.cdc.gov/oropouche/hcp/clinical-overview/possible-sexual-transmission.html> for current information on Oropouche sexual transmission risk

⁹ Contact CDC for further guidance given limited data on these potential modes of transmission. Some immunocompromised patients may experience a prolonged incubation period for arboviral diseases.

A4. Case Classifications

Non-congenital OROV disease:

Confirmed:

- Meets clinical criteria and confirmatory laboratory evidence for non-congenital OROV disease AND meets epidemiologic linkage criteria.

Probable:

- Meets clinical criteria and presumptive laboratory evidence for non-congenital OROV disease AND meets epidemiologic linkage criteria.

Congenital OROV disease:

Confirmed:

- Infant meets the clinical criteria for congenital OROV disease, **AND**
- Infant meets the confirmatory laboratory criteria for congenital OROV disease, **AND**
- Infant's mother meets:
 - Epidemiologic linkage criteria, **OR**
 - Confirmatory or presumptive laboratory criteria for non-congenital OROV disease during this pregnancy.

Probable:

- Infant meets the clinical criteria for congenital OROV disease, **AND**
- Infant meets the presumptive laboratory criteria for congenital OROV disease, **AND**
- Infant's mother meets:
 - Epidemiologic linkage criteria, **OR**
 - Confirmatory or presumptive laboratory criteria for non-congenital OROV disease during this pregnancy.

Suspect:

- Infant meets the clinical criteria for congenital OROV disease, **AND**
- Infant has no laboratory testing performed, or IgM testing was not performed and there is no detection of Oropouche virus, viral antigen, or viral RNA in any specimen, **AND**
- Infant's mother meets confirmatory or presumptive laboratory criteria for non-congenital OROV disease during this pregnancy.

B. Criteria to Distinguish a New Case of OROV disease from Reports or Notifications which Should Not be Enumerated as a New Case for Surveillance

A person not previously enumerated as a case that meets confirmed or probable case classification.

Note: Current understanding is that infection with Oropouche virus is expected to provide lifelong immunity. However, in persons who are severely immunocompromised, viral persistence following infection may occur, which can lead to persistent disease. Immunocompromised individuals may also be vulnerable to reinfection with Oropouche virus.

VIII. Period of Surveillance

Surveillance should be ongoing.

IX. Data Sharing/Release and Print Criteria

CSTE recommends the following case statuses* be included in the 'case' count released outside of the public health agency:

- Confirmed
- Probable
- Suspect
- Unknown

**Which case statuses are included in case counts constitute the "print criteria."*

Jurisdictions (e.g., States and Territories) conducting surveillance under this case definition can voluntarily submit de-identified case information to CDC, if requested and in a mutually agreed upon format.

Production of national data summaries and national data re-release for non-NNCs:

- Prior to release of national data summaries CDC should follow the CDC/ATSDR Policy on Releasing & Sharing Data, issued on April 16, 2003 and referenced in 11-SI-01 and custodians of such data should consult the CDC-CSTE Intergovernmental Data Release Guidelines Working Group report (www.cste2.org/webpdfs/drgwgreport.pdf) which contains data release guidelines and procedures for CDC programs re-releasing state, local, or territorial-provided data.
- CDC programs have a responsibility, in collaboration with states, localities, and territories, to ensure that CDC program-specific data re-release procedures meet the needs of those responsible for protecting data in the states and territories.

Pregnant cases of OROV disease and cases of congenital OROV disease that are reported to CDC will be shared with SET-NET for possible enhanced follow-up of pregnancy and infant outcomes.

X. Revision History

| Position Statement ID | Section of Document | Revision Description |
|-----------------------|--|---|
| 25-ID-01 | III. Desired Actions to be Taken | <ul style="list-style-type: none"> • Adds non-congenital and congenital OROV disease to the Nationally Notifiable Conditions List as routinely notifiable to CDC. |
| 25-ID-01 | VI. Criteria for Case Ascertainment | <p>Clinical Criteria:</p> <ul style="list-style-type: none"> • Specified fever as (measured or reported), • Added Guillain-Barré syndrome as clinical sign, • Specified other acute signs of central or peripheral neurologic dysfunction (e.g., altered mental status, ataxia, paresis, seizures). |
| 25-ID-01 | VII. Case Definition for Case Classification | <p>Clinical Criteria:</p> <ul style="list-style-type: none"> • Specified fever as (measured or reported), • Added Guillain-Barré syndrome as clinical sign, <p>Specified other acute signs of central or peripheral neurologic dysfunction (e.g., altered mental status, ataxia, paresis, seizures).</p> <p>Case Classifications:</p> <ul style="list-style-type: none"> • Suspect classification clarified to read “Infant has no laboratory testing performed, or IgM testing was not performed and there is no detection of Oropouche virus, viral antigen, or viral RNA in any specimen.” <p>Criteria to Distinguish a New Case:</p> <ul style="list-style-type: none"> • Note added, “Current understanding is that infection with Oropouche virus is expected to provide lifelong immunity. However, in persons who are severely immunocompromised, viral persistence following infection may occur, which can lead to persistent disease. Immunocompromised individuals may also be vulnerable to reinfection with Oropouche virus.” |
| N/A | Interim-25-ID-01 | <p>Established standardized surveillance case definition for non-congenital and congenital OROV disease.</p> <p>Provisionally added non-congenital and congenital OROV disease to the Nationally Notifiable Conditions List as routinely notifiable to CDC.</p> |

XI. References

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Technical Supplement

Table VI. Table of criteria to determine whether a case should be reported to public health authorities.

| Criterion | Reporting of OROV disease | | | |
|--|---------------------------|---|---|---|
| <i>Clinical Criteria for Reporting</i> | | | | |
| Acute onset | | N | | |
| Fever (measured or reported) or chills | | O | | |
| Two or more of the following: <ul style="list-style-type: none"> • Headache • Arthralgia • Generalized rash • Myalgia • Retro-orbital pain | | O | | |
| Meningitis, encephalitis, acute flaccid paralysis, Guillain-Barré syndrome, or other acute sign of central or peripheral neurologic dysfunction (e.g., altered mental status, ataxia, paresis, seizures), as documented by a physician | | | O | |
| Loss of a fetus at ≥ 20 weeks gestation | | | O | |
| Congenital anomaly of the brain or eye, or arthrogyriposis | | | | N |
| Infant | | | | N |
| <i>Laboratory Criteria for Reporting</i> | | | | |
| Detection of Oropouche virus, viral antigen, or viral RNA in a body fluid or tissue | S | | | |
| Detection of OROV IgM or neutralizing antibodies in blood or cerebrospinal fluid (CSF) | S | | | |
| <i>Epidemiologic Linkage Criteria for Reporting</i> | | | | |
| Resided in or traveled to an area with a risk ¹ of OROV transmission | | O | O | |
| Sexual contact with a person who has either recently been diagnosed with OROV infection or recently returned from traveling to an area with possible risk ¹ of OROV transmission | | O | O | |
| Laboratory exposure to OROV | | O | O | |
| Receipt of blood products, solid organs, or human cellular or tissue-based products ² | | O | O | |
| Mother resided in or traveled to an area with a risk ¹ of OROV transmission during pregnancy | | | | O |
| Mother had sexual contact during pregnancy with a person who has either recently been diagnosed with OROV infection or recently returned from traveling to an area with possible risk ¹ of OROV transmission | | | | O |
| Mother had a laboratory exposure to OROV during pregnancy | | | | O |
| Mother received blood products, solid organs, or human cellular or tissue-based products ² during pregnancy | | | | O |
| <i>Vital Record Criteria for Reporting</i> | | | | |
| A person whose death certificate lists OROV infection or disease as an underlying cause of death or a significant condition contributing to death | S | | | |
| <i>Healthcare Record Criteria for Reporting</i> | | | | |
| A person whose healthcare record contains a diagnosis of OROV infection or disease | S | | | |

Notes: S = This criterion alone is SUFFICIENT to report a case.

N = All "N" criteria in the same column are NECESSARY to report a case.

O = At least one of these "O" (ONE OR MORE) criteria in each category (categories=clinical, laboratory, epidemiologic linkage, vital records, etc.) in the same column—in conjunction with all "N" criteria in the same column (if any included)—is required to report a case.

¹ Visit <https://www.cdc.gov/oropouche/data-maps/countries-and-territories-at-risk-for-oropouche.html> for geographic areas with known current or previous risk of OROV; for areas where cases have not been previously identified, consult with CDC for assistance on risk determination.

² Contact CDC for further guidance given limited data on these potential modes of transmission. Some immunocompromised patients may experience a prolonged incubation period for arboviral diseases.

Table VII.A. Classification Table: Criteria for defining cases of non-congenital and congenital OROV disease.

| Criterion | Non-congenital OROV disease | | | | Congenital OROV disease ¹ | | | | | | | | | | |
|--|-----------------------------|----------------|----------|---|--------------------------------------|---|----------------|----------------|----------------|---|---|----------------|----------------|----------------|----------------|
| | Confirmed | | Probable | | Confirmed | | | | Probable | | | | Suspect | | |
| <i>Clinical Evidence</i> | | | | | | | | | | | | | | | |
| Clinical evidence not explained by another etiology | N | N | N | N | | | | | | | | | | | |
| Acute onset | N | | N | | | | | | | | | | | | |
| Fever (measured or reported) or chills | O | | O | | | | | | | | | | | | |
| Two or more of the following: • Headache • Arthralgia • Generalized rash • Myalgia • Retro-orbital pain | O | | O | | | | | | | | | | | | |
| Meningitis, encephalitis, acute flaccid paralysis, Guillain-Barré syndrome, or other acute sign of central or peripheral neurologic dysfunction (e.g. altered mental status, ataxia, paresis, seizures), as documented by a physician | | | O | O | | | | | | | | | | | |
| Loss of a fetus at ≥ 20 weeks gestation | | | O | O | | | | | | | | | | | |
| Liveborn infant | | | | | N | N | N | N | N | N | N | N | N | N | N |
| No identified genetic or other cause for the findings, including a positive test for another more likely etiology ² | | | | | N | N | N | N | N | N | N | N | N | N | N |
| Microcephaly (head circumference measurement >2 standard deviations below the average [or <3 rd percentile] for same age and sex, notation of microcephaly in the medical record, or diagnostic code of microcephaly [e.g., ICD-10 code Q02]) | | | | | O | O | O | O | O | O | O | O | O | O | O |
| Structural brain anomaly (e.g., ventriculomegaly, cortical hypoplasia, abnormal gyral patterns such as lissencephaly, corpus callosum abnormalities) | | | | | O | O | O | O | O | O | O | O | O | O | O |
| Structural eye anomaly (e.g., microphthalmia, chorioretinal atrophy, optic nerve hypoplasia) | | | | | O | O | O | O | O | O | O | O | O | O | O |
| Congenital contractures of major joints (arthrogryposis) | | | | | O | O | O | O | O | O | O | O | O | O | O |
| <i>Laboratory Evidence</i> | | | | | | | | | | | | | | | |
| Detection of Oropouche virus, viral antigen, or viral RNA in a body fluid or tissue | O [^] | O [^] | | | | | N [#] | | | | | N [#] | | | O [#] |
| Four-fold or greater change in OROV-specific neutralizing antibody titers in paired acute and convalescent blood specimens collected optimally ≥2 weeks apart | O | O | | | | | N [#] | | | | | N [#] | | | O [#] |
| Detection of OROV-specific IgM antibodies in blood or CSF with positive OROV-specific neutralizing antibodies in the same or later specimen | O | O | | | | | | N [#] | | | | | N [#] | | O [#] |
| Detection of OROV-specific IgM or neutralizing antibodies in blood or CSF | | | N | N | | | | | N [#] | | | | | N [#] | O [#] |
| Detection of Oropouche virus, viral antigen, or viral RNA in infant's body fluid or tissue | | | | | O | O | O | O | O | | | | | | |
| Detection of OROV-specific IgM antibodies in infant blood or CSF with positive OROV-specific neutralizing antibody titers | | | | | O | O | O | O | O | | | | | | |

| Criterion (continued) | Non-congenital OROV disease | | | | Congenital OROV disease ¹ | | | | | | | | | | | | | |
|---|-----------------------------|---|----------|---|--------------------------------------|--|--|--|--|----------|--|--|--|--|---------|--|--|---|
| | Confirmed | | Probable | | Confirmed | | | | | Probable | | | | | Suspect | | | |
| Detection of Oropouche virus, viral antigen, or viral RNA in amniotic fluid, placenta, umbilical cord, or cord blood ³ | | | | | | | | | | | | | | | | | | |
| Detection of OROV-specific IgM antibodies in infant blood or CSF | | | | | | | | | | | | | | | | | | |
| No laboratory testing performed or in the absence of IgM testing, has no detection of Oropouche virus, viral antigen, or viral RNA in any specimen | | | | | | | | | | | | | | | | | | N |
| Epidemiologic Linkage Evidence | | | | | | | | | | | | | | | | | | |
| Resided in or traveled to an area with a risk ⁴ of OROV transmission in the 14 days before symptom onset or in the 28 days before onset of Guillain-Barré syndrome | O | O | O | O | | | | | | | | | | | | | | |
| Sexual contact, in the 14 days before symptom onset, with a person who has recently been diagnosed with OROV infection or has recently been in an area with a risk ⁴ of OROV transmission ⁵ | O | O | O | O | | | | | | | | | | | | | | |
| Laboratory exposure to OROV before onset of symptoms | O | O | O | O | | | | | | | | | | | | | | |
| Receipt of blood products, solid organs, or human cellular or tissue-based products ⁶ in the 30 days before symptom onset from a person who has either been diagnosed with OROV infection or has been in an area with a risk ⁴ of OROV transmission | O | O | O | O | | | | | | | | | | | | | | |
| Has a mother who resided in or traveled to an area with a risk ⁴ of OROV transmission during pregnancy | | | | | O | | | | | | | | | | | | | |
| Has a mother who had sexual contact during pregnancy with a person who has recently been diagnosed with OROV infection or has recently been in an area with a risk ⁴ of OROV transmission ⁵ | | | | | O | | | | | | | | | | | | | |
| Has a mother with laboratory exposure to OROV during pregnancy | | | | | O | | | | | | | | | | | | | |
| Has a mother who received blood products, solid organs, or human cellular or tissue-based products ⁶ from a person who has either been diagnosed with OROV infection or has been in an area with a risk ⁴ of OROV transmission | | | | | O | | | | | | | | | | | | | |

Notes: N = All "N" criteria in the same column are NECESSARY to classify a case.

O = At least one of these "O" (ONE OR MORE) criteria in each category (categories=clinical evidence, laboratory evidence, and epidemiologic evidence) in the same column—in conjunction with all "N" criteria in the same column—is required to classify a case.

¹ To prevent misclassifying postnatal OROV disease as congenital cases, in OROV endemic areas specimens should be collected within 4 weeks after birth.

² Other infectious etiologies (e.g., Zika virus, cytomegalovirus, rubella virus, varicella zoster virus, herpes simplex virus, lymphocytic choriomeningitis virus, Toxoplasma gondii, or Treponema pallidum) may have similar clinical findings and testing for these infections should be considered as part of the complete evaluation for congenital disease.

³ Positive laboratory findings in amniotic fluid, placenta, umbilical cord, or cord blood are considered presumptive evidence of congenital OROV disease since they may detect infection in the mother in the absence of congenital infection.

⁴ Visit <https://www.cdc.gov/oropouche/data-maps/countries-and-territories-at-risk-for-oropouche.html> for geographic areas with known current or previous risk of OROV; for areas where cases have not been previously identified, consult with CDC for assistance on risk determination.

⁵ Visit <https://www.cdc.gov/oropouche/hcp/clinical-overview/possible-sexual-transmission.html> for current information on Oropouche sexual transmission risk.

⁶ Contact CDC for further guidance given limited data on these potential modes of transmission. Some immunocompromised patients may experience a prolonged incubation period for arboviral diseases.

[^] This includes pregnancy related specimens such as amniotic fluid, placenta, or products of conception.

[#] Diagnostic results apply to the mother. Results must be obtained during the current pregnancy.

Table VII.B. Classification Table: Criteria to distinguish new cases of non-congenital and congenital OROV disease from reports or notifications which should not be enumerated as a new case for surveillance.

| Criterion | Non-congenital OROV disease | | Congenital OROV disease | |
|---|-----------------------------|----------|-------------------------|----------|
| | Confirmed | Probable | Confirmed | Probable |
| <i>Criteria to distinguish a new case</i> | | | | |
| A person not previously enumerated as a case that meets the confirmed case classification | S | | S | |
| A person not previously enumerated as a case that meets the probable case classification | | S | | S |

S = This criterion alone is SUFFICIENT to enumerate as a new case.