

**FOR PATIENTS PRESENTING WITH FEVER AND RASH AND REPORTING TRAVEL TO ENDEMIC AREAS**

Also consider **Zika** and **chikungunya** virus. See [nyc.gov/health/zika](https://nyc.gov/health/zika) and [www1.nyc.gov/site/doh/health/health-topics/chikungunya.page](https://www1.nyc.gov/site/doh/health/health-topics/chikungunya.page) for more information.

**DENGUE:****Testing and Reporting Guidelines for Cases of Dengue**

(Revised June 2022)

- PCR should be done on serum collected within 5 days of illness onset.
- The IgM antibody capture (MAC) enzyme immunoassay (EIA) on serum is most sensitive at least 6 days and up to 50 days post onset of illness.
- Dengue NS1 ELISA antigen testing is specific to dengue and can detect the NS1 antigen as early as 1 day and up to 14 days post onset of illness.
- Dengue and all laboratory-diagnosed arboviral infections are reportable conditions in New York City.

**WHEN TO CONSIDER DENGUE TESTING FOR YOUR PATIENT**

Consider dengue in patients with history of recent travel (within 2 weeks of onset of illness) to an endemic area and presenting with any of the following signs or symptoms:

**Acute febrile illness**, especially if accompanied by headache, myalgias, arthralgias, photophobia, anorexia, nausea or rash. Some patients go on to develop hemorrhagic manifestations such as petechiae, epistaxis, gingival bleeding, and hematuria. Warning signs include severe abdominal pain, persistent vomiting, marked change in temperature, change in mental status, or early signs of shock.

**Diagnostic methods include:**

1. Serology - IgM and IgG enzyme immunoassay (EIA) or NS1 antigen test
2. PCR
3. Virus Isolation - public health laboratories only
4. PRNT – public health laboratories only

**DIAGNOSIS OF DENGUE INFECTION**

Laboratory testing is done on serum to detect virus, viral nucleic acid, or virus-specific immunoglobulin and neutralizing antibodies. Serum is the specimen of choice for both PCR and serology. PCR testing is most sensitive on serum specimens collected within 5 days of illness onset. Because dengue IgM may not be detected for up to 5 days following onset of illness, specimens collected less than 5 days after onset may be negative for IgM, and testing should be repeated. A positive dengue IgG in the absence of a positive dengue IgM is consistent with past infection.

**Commercial Laboratories Test Options Include**

1. Serologic IgM and IgG enzyme immunoassay (EIA)
2. NS1 antigen (select laboratories)
3. PCR

### Commercial Laboratories Offering Dengue Testing

1. Associated Regional and University Pathologists (ARUP – does not offer NS1 antigen testing)  
[aruplab.com](http://aruplab.com)  
1-800-522-2787
2. Mayo Clinic  
[mayocliniclabs.com](http://mayocliniclabs.com)  
1-800-533-1710
3. Quest Diagnostics  
[testdirectory.questdiagnostics.com](http://testdirectory.questdiagnostics.com)  
1-800-631-1390

**Public Health Laboratory Testing** - For select cases, special testing can be performed by public health laboratories including the NYC Public Health Laboratories, Wadsworth, and Centers for Disease Control and Prevention (CDC). For more information or assistance, contact the Bureau of Communicable Disease by calling the Provider Access Line (PAL) at 866-692-3641.

## REPORTING

### What is Reportable:

Providers are required to report dengue and other arboviruses with laboratory evidence of current or recent infection.

### How to Report:

Report the above conditions directly to the Bureau of Communicable Disease electronically via NYC DOHMH's Reporting Central Home Page at [www1.nyc.gov/site/doh/providers/reporting-and-services/reporting-central.page](http://www1.nyc.gov/site/doh/providers/reporting-and-services/reporting-central.page) (you must have a NYCMED account to access Reporting Central or sign up for an account at: [nyc.gov/health/nycmed](http://nyc.gov/health/nycmed)).

You may also report using the *Universal Reporting Form*: [nyc.gov/assets/doh/downloads/pdf/hcp/urf-0803.pdf](http://nyc.gov/assets/doh/downloads/pdf/hcp/urf-0803.pdf); fax to the Bureau of Communicable Disease at 347-396-2632. You may also call in reports directly to the Provider Access Line (PAL) at 866-692-3641.

## QUESTIONS?

During regular business hours, for questions or to report a cluster of cases, or an individual urgent case, such as a suspected dengue virus case due to transfusion or organ transplantation, contact the:

- NYC DOHMH Bureau of Communicable Disease by calling the Provider Access Line (PAL) at 866-692-3641.
- After hours, contact the New York City Poison Control Center at 212-POISONS (212-764-7667) or 1-800-222-1222, and ask for the doctor on call.