CHIKUNGYUNYA:

Testing and Reporting Guidelines for Cases of Chikungunya
(Revised June 2018)

- PCR should be done on serum collected within 8 days of illness onset.
- The IgM enzyme immunoassay (EIA) on serum is most sensitive at least four days post onset of illness.
- Chikungunya and all laboratory-diagnosed arboviral infections are reportable conditions in New York City.

WHEN TO CONSIDER CHIKUNGYUNYA TESTING FOR YOUR PATIENT
Consider chikungunya 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 polyartrhalgias (mainly involving the distal joints of the extremities), headache, myalgias, back pain, or rash.

Diagnostic methods include:
- 1. Serologic IgM and IgG by enzyme immunoassay (EIA) and immunofluorescence assay (IFA)
- 2. PCR
- 3. Virus Isolation
- 4. PRNT

DIAGNOSIS OF CHIKUNGYUNYA 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 8 days of illness onset. Because chikungunya IgM may not be positive until up to 4 days following onset of illness, specimens collected less than 4 days after onset may be negative for IgM, and testing should be repeated. A positive chikungunya IgG in the absence of a positive chikungunya IgM is consistent with past infection.

Commercial laboratory test options include:
- 1. IgM and IgG serology by IFA
- 2. PCR

Commercial laboratories offering Chikungunya testing
- 1. Associated Regional and University Pathologists (ARUP – does not offer NS1 antigen testing)
  www.aruplab.com
  1-800-522-2787
- 2. Quest Diagnostics
  http://www.questdiagnostics.com/testcenter/TestCenterHome.action
  1-800-631-1390

FOR PATIENTS PRESENTING WITH FEVER AND RASH AND REPORTING TRAVEL TO ENDEMIC AREAS
Also consider Zika and dengue virus. See https://www1.nyc.gov/site/doh/health/health-topics/zika-virus.page and https://www1.nyc.gov/site/doh/health/health-topics/dengue-fever.page for more information.
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 all arboviral infections 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 (you must have a NYCMED account to access Reporting Central at https://www1.nyc.gov/site/doh/providers/reporting-and-services/reporting-central.page; instructions for setting up a NYCMED account are available at: https://www1.nyc.gov/site/doh/providers/reporting-and-services/nyc-med.page).

You may also report using the “Universal Reporting Form” (downloadable form at https://www1.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 Bureau of Communicable Disease by phone by calling 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.