LAC DPH Health Update:
Zika Virus Infection – Testing and Reporting in Los Angeles County

This message is intended for ob-gyn and prenatal care providers, pediatrics, internal medicine, family practice, urgent care, infectious disease, and emergency medicine health care providers.
Please distribute as appropriate.

Key messages
• Pregnant women in any trimester should consider postponing travel to areas with ongoing Zika virus transmission.
• Travelers, including pregnant women who do travel, should strictly follow steps to avoid mosquito bites.
• It is recommended that providers routinely check the Centers for Disease Control (CDC) webpages for up to date information on affected geographic areas, travel and clinical guidance. Important changes will be communicated via LAHAN.
• Pregnant women who have returned from an affected area should be tested for Zika virus infection if they have had symptoms suggestive of Zika virus infection during or within 2 weeks of travel, or if their fetus/infant has evidence of microcephaly or intracranial calcifications.
• In Los Angeles County (LAC), all requests for Zika virus testing must be made by calling the Acute Communicable Disease Control Program (ACDC) at 213-240-7941.
• Providers must report all suspected cases of Zika virus infection in Los Angeles County to ACDC.
• All children diagnosed with microcephaly whose mother was pregnant while in a Zika-affected area since March 2015 also should be reported to ACDC.

Situation
A substantial increase in the number of babies born with microcephaly has been reported in 2015 from Brazil, the site of a large Zika virus outbreak. Zika virus was identified in tissue specimens and amniotic fluid from several infants born with microcephaly and in early fetal losses. The incidence of microcephaly associated with congenital Zika virus infection, the spectrum of possible congenital defects, and the causal link between Zika virus infection and adverse pregnancy outcomes is unknown.

Currently, local transmission of Zika virus has not been reported in the continental United States. However, as the number of infections among U.S. travelers is expected to increase, viral introduction and local spread via Aedes mosquitos within the U.S. is possible.

Actions requested of providers
- Advise pregnant women to postpone travel to areas of ongoing Zika virus transmission
- Advise all persons traveling to Zika-affected areas how to prevent mosquito bites (see Prevention of Zika Virus Infection and Mosquito Bites below)
- Contact ACDC at (213) 240-7941 to report all suspect cases and to coordinate Zika testing for patients with suspect infection (see Testing for Zika Virus in LAC below).

Clinical Presentation and Treatment
About 1 in 5 people infected with Zika virus become symptomatic. Characteristic clinical findings are acute onset of fever with maculopapular rash, arthralgia, or conjunctivitis. Other commonly reported symptoms include myalgia and headache. Clinical illness is usually mild with symptoms lasting for several days to a week.

No specific antiviral treatment is available for Zika virus disease. Treatment is supportive. Because of similar geographic distribution and symptoms, patients with suspected Zika virus infections also should be evaluated for possible dengue or Chikungunya virus infection. Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until dengue can be ruled out to reduce the risk of hemorrhage. People infected with Zika, Chikungunya, or dengue virus should be protected from mosquito exposure while ill to reduce the risk of local transmission.

Prevention of Zika Virus Infection and Mosquito Bites
Zika virus infection is prevented by avoiding being bitten by an infected mosquito. The mosquitoes that transmit Zika, dengue, and Chikungunya viruses are aggressive and are present during the daytime and early evening. The best way to prevent infection with Zika virus is to avoid travel to areas with high rates of transmission. If patients do travel, they should follow all precautions to avoid mosquito bites including the following:
- Use insect repellents containing DEET, picaridin, and IR3535. If sunscreen is being used it should be applied before insect repellent. Insect repellant should be reapplied as directed on the product label.
- Providers should specifically communicate to pregnant women that, when used as directed on the product label, EPA-registered insect repellents can be used safely during pregnancy.
- Other precautions include covering exposed skin, staying in rooms with screens or air conditioning, and treating clothing with permethrin.

Testing for Zika Virus in Los Angeles County
Testing is recommended for the following situations:
- Pregnant women with a history of travel to a Zika-affected area AND:
  o Compatible symptoms (two or more of the following: fever, maculopapular rash, arthralgia, or non-purulent conjunctivitis) during or within 2 weeks of travel OR
  o Presence of fetal microcephaly or intracranial calcifications on ultrasound.
- Children with microcephaly whose mothers were in an affected area during their pregnancy since the outbreak began in March 2015.
- Infants born to mothers with positive or inconclusive test results for Zika virus infection.
- Non-pregnant patients with compatible symptoms and history of travel to a Zika-affected area.

NOTE: because laboratory testing capacity is limited, priority will be given to specimens from pregnant women and infants with microcephaly.
Testing should be considered for the following situation:

- Patients diagnosed with Guillain-Barre Syndrome (GBS) with a history of travel to a Zika-affected area may be tested. There have been reports of GBS in patients following suspected Zika virus infection in other countries, however the relationship between Zika virus infection and GBS is currently unknown.

Testing is not recommended for asymptomatic persons.

- CDC does not currently recommend testing for Zika virus in asymptomatic pregnant women with a travel history unless there is fetal ultrasound finding of microcephaly or intracranial calcifications because of concerns about test accuracy. However, serial ultrasound evaluation for microcephaly or intracranial calcifications may be considered, per CDC.

At this time, testing is only available at the CDC. All Zika virus testing must be coordinated and approved by ACDC which will provide the test submission form and advice on specimen collection, storage and shipping. Providers should have the following information ready before contacting ACDC:

- Symptoms; date of onset
- Dates of travel and country/countries of travel
- If pregnant, gestational age
- History of previous infection with dengue, Chikungunya or West Nile virus, and history of vaccination for Yellow Fever or Japanese encephalitis

Note: test results may be delayed due to the volume of requests.

Evaluation for Dengue or Chikungunya

Patient with suspected Zika should also be evaluated for dengue and Chikungunya virus infections. Specimens should be sent to a commercial laboratory to test for these viruses.

For Zika consultation or to report a suspected Zika or other travel-associated reportable disease

Los Angeles County DPH ACDC:

- Weekdays 8:30 am-5:00 pm call 213-240-7941
- Non-business hours (evenings, weekends and holidays) call 213-974-1234. Ask for the physician on call.

Long Beach Health and Human Services:

- Weekdays 8-5PM call 562-570-4302
- After hours call 562-435-6711 and ask for Communicable Disease Lead

Pasadena Public Health Department:

- 626-744-6043

Additional Resources on Zika Virus

LAC DPH

- Further information on Zika virus can be found at http://publichealth.lacounty.gov/acd/VectorZika.htm
- Waiting room poster “Zika travel warning”: http://www.publichealth.lacounty.gov/hea/library/topics/zikavirus/CDCP-ACDC-0081-01.pdf (English)
http://www.publichealth.lacounty.gov/hea/library/topics/zikavirus/CDCP-ACDC-0081-02.pdf (Spanish)

- Zika frequently asked questions:
  http://www.publichealth.lacounty.gov/hea/library/topics/zikavirus/CDCP-ACDC-0080-01.pdf (English)
  http://www.publichealth.lacounty.gov/hea/library/topics/zikavirus/CDCP-ACDC-0080-02.pdf (Spanish)

CDC
- CDC Zika slide-set and recorded webinar (with free continuing education credits) for providers: http://emergency.cdc.gov/coca/calls/2016/callinfo_012616.asp

Pan American Health Organization

This Health Update was sent by Dr. Laurene Mascola, Chief, Acute Communicable Disease Control Program, Los Angeles County Department of Public Health.

Please visit our LAHAN webpage to view this and other communications.