

January 27, 2015

LAC DPH Health Advisory:

Chikungunya Fever among Returning Travelers from El Salvador

This message is intended for primary care, urgent care, emergency care, infectious disease providers, and infection control staff.

Please distribute as appropriate.

Key messages

- **There has been an increase in chikungunya infections in Los Angeles County residents returning from El Salvador.**
- **Chikungunya infection should be considered in patients presenting with acute onset of fever and polyarthralgia who have recently returned from El Salvador as well as from Mexico, the Caribbean, and other areas with known virus transmission.**
- **Prompt reporting of all suspect chikungunya cases is needed to decrease the risk of local transmission.**

Situation

Chikungunya infection was first documented in Los Angeles County (LAC) in May 2014 in a resident returning from the Caribbean. Since then, LAC DPH has documented 14 confirmed and 25 probable travel-associated cases of this mosquito borne disease. Nearly three-quarters of LAC cases reported recent travel to El Salvador. Other countries and regions of travel reported include Jamaica, Puerto Rico, other parts of the Caribbean, and South America.

Local transmission of chikungunya virus has not been identified within Los Angeles County.

Chikungunya has now been made a reportable disease (effective January 1, 2015) in order to facilitate diagnosis and prevent local spread.

Actions Requested of Providers

- ✓ Consider chikungunya infection in patients presenting with acute onset of fever and polyarthralgia who have recently returned from El Salvador, Mexico, the Caribbean and other areas with known virus transmission (for full list of regions of risk click [here](#))
- ✓ Collect serum specimens from suspect cases for both chikungunya and dengue.
- ✓ Report suspect cases of chikungunya to the LAC DPH Morbidity Central Reporting Unit by completing a Confidential Morbidity Report (CMR) form and faxing it to (888) 397-3778 or by phoning (888) 397-3993. (For persons residing in the Cities of Long Beach or Pasadena, contact the numbers listed below).

Clinical Overview of Chikungunya

Chikungunya infection is caused by a virus transmitted by *Aedes aegypti* and *Aedes albopictus* mosquitoes. The majority of people infected with chikungunya virus become symptomatic. The incubation period is typically 3–7 days (range: 2–12 days). The most common clinical findings are acute onset of fever, severe muscle and joint pains, a non-specific maculo-papular rash, and lymphopenia. In at least 20% of patients, recurrent joint pain can last over 1 year. Mortality is rare and it occurs mostly in older adults.

Treatment and Prevention

There is no specific anti-viral treatment for chikungunya infection. Treatment targets the symptoms and can include rest, fluids, and initial use of acetaminophen or paracetamol until dengue has been ruled out to relieve acute pain and fever. Persistent joint pain may benefit from non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroids or physiotherapy. People infected with chikungunya should be protected from further mosquito exposure during the first week of illness to reduce the risk of local transmission.

There is no vaccine or medicine available to prevent chikungunya infection. Travelers to regions of risk should reduce their exposure to mosquitos.

Diagnosis of Chikungunya Infection

Laboratory diagnosis is generally accomplished by testing serum to detect virus, viral nucleic acid, or virus-specific immunoglobulin (Ig) M and neutralizing antibodies.

- If < 8 days from illness onset—RT-PCR is available to detect viral RNA.
- > 4 days from illness onset-- IgM antibody tests are recommended. [note: at least 0.5 mL of serum is required for serology testing].

For more detailed information on specimen collection click [here](#).

Note: Dengue fever should be in the differential diagnosis as both viruses are transmitted by the same mosquitoes and both diseases have similar clinical features. The two viruses can circulate in the same area and can cause occasional co-infections in the same patient. It is important to rule out dengue virus infection because proper clinical management of dengue can improve chikungunya outcome.

Chikungunya and dengue diagnostic testing is available at the California Department of Public Health (CDPH), Centers for Disease Control and Prevention (CDC), and Focus Diagnostics.

Confirmation of commercial laboratory results at CDC or CDPH is not required.

Contact ACDC for assistance with coordination of testing by calling: (213) 240-7941.

Reporting

Clinically suspect cases in Los Angeles County:

- Complete a Confidential Morbidity Report (CMR), available at <http://publichealth.lacounty.gov/acd/reports/cmr-h-794.pdf>, and fax to the DPH Morbidity Unit at (888) 397-3778 or
- Report cases by telephone during normal business hours from 8:00 a.m. to 5:00 p.m. by calling (888) 397-3993.

Clinically suspect cases in the cities of Long Beach or Pasadena, please contact their local health departments:

- City of Long Beach Health Department: 562-570-4302
- City of Pasadena Health Department: 626-744-6043

Additional Resources:

- For medical consultation regarding chikungunya, dengue and other arboviral infections including disease surveillance and test interpretation, contact ACDC at (213) 240-7941 during normal business hours. Critical after-hours consultation is available by contacting doctor on call at (213) 974-1234.
- CDC Chikungunya virus for health care providers: <http://www.cdc.gov/chikungunya/hc/index.html>
- CDC chikungunya fact sheet for providers: http://www.cdc.gov/chikungunya/pdfs/CHIKV_Clinicians.pdf
- CDC dengue for health care providers: <http://www.cdc.gov/dengue/clinicalLab/clinical.html>

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