

**This is an official**  
**CDC HEALTH ADVISORY**

Distributed via the CDC Health Alert Network  
December 13, 2013, 1400:00 (2:00 PM ET)  
CDCHAN-00358

**Notice to Public Health Officials and Clinicians: Recognizing,  
Managing, and Reporting Chikungunya Virus Infections in Travelers  
Returning from the Caribbean**

**Summary**

On December 7, 2013, the World Health Organization (WHO) reported the first local (autochthonous) transmission of chikungunya virus in the Americas. As of December 12<sup>th</sup>, 10 cases of chikungunya have been confirmed in patients who reside on the French side of St. Martin in the Caribbean. Laboratory testing is pending on additional suspected cases. Onset of illness for confirmed cases was between October 15 and December 4. At this time, there are no reports of other suspected chikungunya cases outside St. Martin. However, further spread to other countries in the region is possible.

Chikungunya virus infection should be considered in patients with acute onset of fever and polyarthralgia, especially those who have recently traveled to the Caribbean. Healthcare providers are encouraged to report suspected chikungunya cases to their state or local health department to facilitate diagnosis and to mitigate the risk of local transmission.

**Background**

Chikungunya virus is a mosquito-borne alphavirus transmitted primarily by *Aedes aegypti* and *Aedes albopictus* mosquitoes. Humans are the primary reservoir during epidemics. Outbreaks have been documented in Africa, Southern Europe, Southeast Asia, the Indian subcontinent, and islands in the Indian and Pacific Oceans. Prior to the cases on St. Martin, the only chikungunya cases identified in the Americas were in travelers returning from endemic areas.

*Clinical Disease*

A 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 and polyarthralgia. Joint pains are often severe and debilitating. Other symptoms may include headache, myalgia, arthritis, or rash. Persons at risk for more severe disease include neonates (aged <1 month) exposed intrapartum, older adults (e.g.,  $\geq 65$  years), and persons with underlying medical conditions (e.g., hypertension, diabetes, or cardiovascular disease).

*Diagnosis*

Chikungunya virus infection should be considered in patients with acute onset of fever and polyarthralgia who recently returned from the Caribbean. Laboratory diagnosis is generally accomplished by testing serum to detect virus, viral nucleic acid, or virus-specific immunoglobulin M (IgM) and neutralizing antibodies. During the first week of illness, chikungunya virus infection can often be diagnosed by using viral culture or nucleic acid amplification on serum. Virus-specific IgM and neutralizing antibodies normally develop toward the end of the first week of illness. To definitively rule out the diagnosis, convalescent-phase samples should be obtained from patients whose acute-phase samples test negative.

Chikungunya virus diagnostic testing is performed at CDC, two state health departments (California and New York), and one commercial laboratory (Focus Diagnostics). Healthcare providers should contact their state or local health department to facilitate testing.

### *Treatment*

No specific antiviral treatment is available for chikungunya fever. Treatment is generally palliative and can include rest, fluids, and use of analgesics and antipyretics. Because of similar geographic distribution and symptoms, patients with suspected chikungunya virus infections also should be evaluated and managed for possible dengue virus infection. People infected with chikungunya or dengue virus should be protected from further mosquito exposure during the first few days of illness to prevent other mosquitoes from becoming infected and reduce the risk of local transmission.

### *Prevention*

No vaccine or preventive drug is available. The best way to prevent chikungunya virus infection is to avoid mosquito bites. Use air conditioning or screens when indoors. Use insect repellents and wear long sleeves and pants when outdoors. People at increased risk for severe disease should consider not traveling to areas with ongoing chikungunya outbreaks.

### **Recommendations for Health Care Providers and Public Health Practitioners**

- Chikungunya virus infection should be considered in patients with acute onset of fever and polyarthralgia, especially those who have recently traveled to the Caribbean.
- Healthcare providers are encouraged to report suspected chikungunya cases to their state or local health department to facilitate diagnosis and to mitigate the risk of local transmission.
- Health departments should perform surveillance for chikungunya cases in returning travelers and be aware of the risk of possible local transmission in areas where *Aedes* species mosquitoes are currently active.
- State health departments are encouraged to report laboratory-confirmed chikungunya virus infections to ArboNET, the national surveillance system for arthropod-borne viruses.

### **For More Information**

- General information about chikungunya virus and disease: <http://www.cdc.gov/chikungunya/>
- Chikungunya information for clinicians: [http://www.cdc.gov/chikungunya/pdfs/CHIKV\\_Clinicians.pdf](http://www.cdc.gov/chikungunya/pdfs/CHIKV_Clinicians.pdf)
- Protection against mosquitoes: <http://wwwnc.cdc.gov/travel/yellowbook/2014/chapter-2-the-pre-travel-consultation/protection-against-mosquitoes-ticks-and-other-insects-and-arthropods>
- Travel notices related to chikungunya virus: <http://wwwnc.cdc.gov/travel/notices>
- Information about chikungunya for travelers and travel health providers: <http://wwwnc.cdc.gov/travel/yellowbook/2014/chapter-3-infectious-diseases-related-to-travel/chikungunya>
- Chikungunya preparedness and response guidelines: [http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_download&gid=16984&Itemid](http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=16984&Itemid)
- Dengue clinical management guidelines: [http://whqlibdoc.who.int/publications/2009/9789241547871\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241547871_eng.pdf)

*The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.*

---

### **Categories of Health Alert Network messages:**

<b>Health Alert</b>	Requires immediate action or attention; highest level of importance
<b>Health Advisory</b>	May not require immediate action; provides important information for a specific incident or situation
<b>Health Update</b>	Unlikely to require immediate action; provides updated information regarding an incident or situation
<b>HAN Info Service</b>	Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##