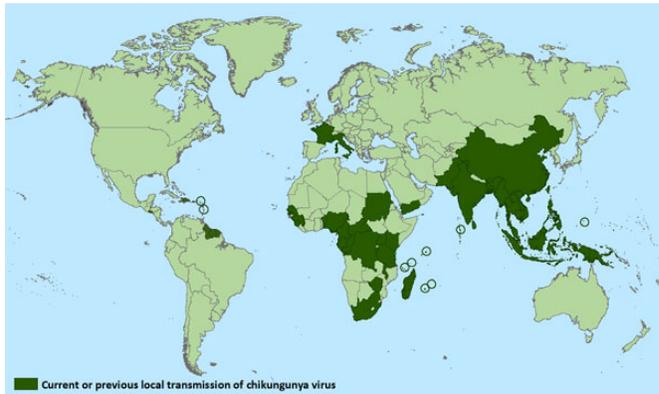


Knowledge that will change your world



A number of mosquito-borne viruses have previously been detected, or are currently being transmitted, within the U.S., including La Crosse encephalitis virus, St. Louis encephalitis virus, Western equine encephalitis virus, West Nile virus, and sporadic cases of Dengue virus. Recently, there has been a dramatic rise in the cases of Chikungunya (pronounced chik-en-gun-ye) fever detected in the continental U.S. Although each of these cases was acquired from mosquito bites abroad, health officials are on high alert for local outbreaks of Chikungunya virus.

The chikungunya name originates from the Makondo language, meaning “bent up” or “contorted”, which describes the posture of those afflicted with the disease. Chikungunya virus was first isolated during a Tanzanian epidemic in 1952 and periodic outbreaks have been detected in African and Asian countries, since the 1960s. Between 2005-2006 Chikungunya outbreaks occurred in India (1.5 million infected) as well as the Indian Ocean islands of Réunion and Mauritius (272,000 infected). In 2007, infected travelers caused an outbreak in northeast Italy, demonstrating the potential for non-tropical epidemics in Europe and the United States. The first local transmission of Chikungunya virus in the Americas was detected in the Caribbean, Saint Martin, in December of 2013. Since then, it has spread to 14 other countries



and has been declared an epidemic in the Caribbean. As such, the number of imported cases in the U.S. has significantly increased; an average of 28 cases/year 2006-2013, compared to 129 as of July 1st in 2014. To date, all reported cases in the continental U.S. have been travel-related (travelers infected prior to arriving in the US). However, with the ongoing epidemic in the Caribbean, some experts believe it's only a matter of time before an outbreak occurs here.

What are the symptoms of Chikungunya fever?

- Most people infected will exhibit some symptoms, beginning 3-7 days after being bitten from an infected mosquito.
- The most common symptoms are high fever (104F), along with swelling and severe pain in the joints, particularly in the extremities (ankles, knees, wrists or phalanges).
- Other symptoms may include headache, muscle pain, nausea, fatigue, and a rash on the body and limbs.
- Approximately 3-28% of infections are asymptomatic and 0.4% are fatal.
- Acute phase symptoms typically last 2-7 days. After the acute phase, some patients experience chronic fatigue and/or joint pains (weeks to years).
-
-



Knowledge that will change your world

- Newborns infected around the time of birth, older adults (≥65 years), and people with medical conditions such as high blood pressure, diabetes, or heart disease have a higher risk of more severe disease.
- Once infected, a person will likely be immune to future infections.

How is it treated?

- No antivirals have demonstrated efficacy.
- Treatments are only available to alleviate symptoms; antipyretics and anti-inflammatory drugs (e.g., diclofenac). Steroids and aspirin should be avoided.

How do you prevent a chikungunya infection?

Although candidate vaccines are being evaluated in clinical trials, no commercial vaccines are currently available to prevent Chikungunya fever. Therefore, prevention of bites from infected mosquitos is the only way to avoid infection.

General measures to protect against mosquito-borne illnesses:

- **Avoid outbreak locales.** If possible, resist traveling to locations that are experiencing an epidemic, particularly when traveling to areas where the disease is prevalent. The CDC maintains a [travelers' health advisory site](#), which informs travelers of regional disease transmission patterns and outbreaks.
- **Insect repellents.** Application of an [EPA-registered insect repellent](#) to skin and clothing is one of the easiest and most effective measures for avoiding mosquito bites. These include products containing DEET, picaridin, IR3535, oil of lemon eucalyptus, and para-menthane- diol.
- **Wear protective clothing.** Minimize exposed areas of skin by wearing long-sleeved shirts, pants, boots, close-toed shoes with socks, and hats. Insect repellents applied to clothing offer added protection.
- **Insect-controlled housing.** When traveling, seek accommodations that have air conditioning, screened windows, or bed nets. Bed netting that does not reach the floor can be tucked under the mattress. If netting is your only option, request netting that has been pre-treated with pyrethroid insecticide.
- **Eliminate breeding grounds.** Get rid of mosquito breeding sites by emptying standing water from flowerpots, buckets and barrels. Change the water in pet dishes and replace the water in birdbaths weekly. Drill holes in tire swings so water drains out. Keep wading pools empty and on their sides when they are not being used. Clean out gutters so water does not stand.

Additional resources:

General travel information:

<http://wwwnc.cdc.gov/travel/>

Chikungunya in the Caribbean:

<http://wwwnc.cdc.gov/travel/notices/watch/chikungunya-saint-martin>

Insect repellents:

<http://www.cdc.gov/westnile/faq/repellent.html>

Additional CDC resources:

<http://www.cdc.gov/chikungunya/resources/index.html>