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Chikungunya virus: Caribbean and the Americas

Ongoing surveillance on Chikungunya virus in Caribbean and the Americas

Between 1 January and 17 July 2015, a total of 443,779 suspected cases of chikungunya virus (CHIKV) including 60 deaths have been reported in the Caribbean and the Americas. The most recent country reporting autochthonous (locally acquired) transmission is Peru; as of 17 July 2015, there have been eleven suspected and seven confirmed cases. Many countries have not reported any new cases in weeks, however in other areas weekly case numbers continue to increase (e.g. Colombia, El Salvador, Honduras)[1].

Please see [the map of countries/territories with autochthonous \(locally acquired\) transmission or imported cases of chikungunya.](#)

As of the 17 July 2015, the countries and territories in the Caribbean and the Americas with confirmed autochthonous (locally acquired) transmission since December 2013 (when the first locally acquired cases were reported in the region) are [1]:

Central, North and South America	Caribbean Islands
Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Nicaragua, Mexico, Peru, Panama, Paraguay, Suriname, United States (US), Venezuela	Aruba, Anguilla, Antigua and Barbuda, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Curacao, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, Saint-Barthélemy, Saint Kitts and Nevis, Saint

Lucia, Saint Martin, Saint Vincent and the Grenadines, Sint Maarten, Trinidad & Tobago, Turks and Caicos, US Virgin Islands
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The two main vectors of CHIKV, *Aedes aegypti* and *Aedes albopictus* mosquitoes, are distributed throughout the Caribbean and the Americas, so the region is highly susceptible to the introduction and spread of the virus [3].

Autochthonous transmission from an imported viraemic chikungunya case during the summer season in the EU is possible, as the competent vector (*Aedes albopictus*) is present and the environmental requirements are met during the summer and early autumn in Europe [4].

In symptomatic illness, there is the sudden onset of fever, headache, myalgia and arthralgia. After two to three days, a generalised maculo-papular rash can develop. Most cases recover in three to five days. However, up to 10% of cases experience arthritis, chronic joint pain and fatigue.

Complications of CHIKV infection can include hepatitis, myocarditis, neurological and ocular disorders. Treatment is supportive [4].

Advice to travellers

There is no vaccine or chemoprophylaxis available to prevent CHIKV. You should take [insect bite avoidance measures](#) when travelling to outbreak affected areas. *Aedes* mosquitoes are most active during daylight hours. Particular vigilance with bite avoidance should be taken around dawn and dusk. High mosquito numbers following the rainy season increases the risk of disease transmission.

You are advised to check the [Outbreak Surveillance section](#) for further information on confirmed and suspected CHIKV outbreaks, including country specific CHIKV case reports.

Advice for health professionals

CHIKV does not occur in the UK, but a number of cases are reported each year in travellers returning from endemic areas.

In 2014, the majority of cases (88%) were acquired on trips to the Caribbean and South America and only once case was associated with travel to the Pacific region (Tonga) [5]. This is in contrast to previous years, where the majority of UK cases were associated with travel to South and South East Asia.

Health professionals should be aware of the possibility of CHIKV in febrile travellers who have recently visited affected areas. If a case is suspected, appropriate samples should be sent for testing (including a full travel and clinical history, with relevant dates) to the [Public Health England, Rare and Imported Pathogens Laboratory](#).

The [Imported Fever Service](#), Public Health England is also available to local infectious disease physicians or microbiologists, if specialist advice is needed on: 0844 778 8990[5].

Resources

- [CDC: Chikungunya Geographic Distribution](#)
- [ECDC: Chikungunya outbreak in Caribbean region](#)
- [Country Information pages](#)
- [PAHO: Chikungunya Statistic Data](#)
- [Public Health England: Chikungunya](#)

References

1. [Pan American Health Organization \(PAHO\)/World Health Organization. Cases of chikungunya fever in the Americas, by country or territory 2013-2015. Epidemiological Week 28 \(updated 17 July 2015\). \[Accessed 21 July 2015\]](#)
2. Vega-Rua A, Zouache K, Girod R et al. High vector competence of *Aedes aegypti* and *Aedes albopictus* from ten American countries as a crucial factor of the spread of Chikungunya. *Journal of Virology*. 2014 Jun; 88(11): 6294-306.
3. [European Centre for Disease Prevention and Control. Rapid Risk assessment. Chikungunya outbreak in Caribbean region. 25 June 2014. \[Accessed 21 July 2015\]](#)
4. [World Health Organization. Chikungunya fact sheet. February 2015. \[Accessed 20 July 2015\]](#)
5. [Public Health England. Chikungunya in England, Wales and Northern Ireland: 2014. 15 March 2015. \[Accessed 21 July 2015\]](#)