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## **Dengue reminder**

Dengue is a viral infection transmitted by mosquitoes found in tropical and sub-tropical climates, including parts of Europe

Worldwide dengue rates have grown dramatically in recent decades, and it is estimated there are 100-400 million infections each year [1]. According to the World Health Organization, the Americas, South-East Asia, and Western Pacific regions are the most seriously affected [1]. Seasonal cases are also reported in some European countries and the US [1-3].

Countries in mainland Europe that have reported autochthonous (locally acquired) dengue cases since 2010 include Croatia, France, Italy, and Spain [1, 2, 4-6]. The island of Madeira, Portugal also reported cases in 2012 [7].

Most people infected with dengue remain symptom-free. If symptoms occur, they usually start abruptly and include fever, headache, muscle and joint pain, nausea, vomiting and a rash. They usually occur within four to 10 days of being bitten. Most infections are self-limiting, with recovery three to four days after the rash appears. A small number of people develop more severe illness, which if left untreated can be fatal [1].

### **Advice for travellers**

See our <u>Country Information</u> pages 'Other Risks' section for individual country recommendations to check the dengue risk at your destination. All travellers to areas reporting dengue cases or where dengue is believed to occur are at risk of dengue infection.

Reduce your risk by following <u>insect bite precautions</u>. As dengue is spread by day-biting mosquitoes, particular care with bite avoidance is advised during the day, especially around dawn and dusk. The mosquitoes may be active from spring to as late as November in parts of southern Europe [5]. During these months, you should be especially vigilant with bite precautions. The risk of dengue is present throughout the year in the tropics.

If you develop symptoms such as high fever and severe headache or rash within two weeks of return from an area where dengue is known to occur, you should seek medical attention and tell your GP about your travel history.

As of January 2023, a new vaccine Qdenga® has been licensed in the UK for the prevention of dengue disease in individuals from 4 years of age. The Joint Committee on Vaccination and Immunisation (JCVI) are in the process of reviewing the product information. Recommendations on the use of this vaccine will be published in due course.

# Advice for health professionals

Health professionals should consider the possibility of dengue in a returning UK traveller presenting with a fever or flu-like illness who has recently visited a dengue risk region. All those being assessed for possible <a href="COVID-19">COVID-19</a> must be asked if they have travelled abroad to exclude possible insect-borne infection.



Health professionals who suspect a case of dengue in a returned traveller, should discuss this urgently with their local microbiology, virology or infectious diseases consultant, giving a full travel/clinical history. They may advise that appropriate samples are sent for testing to specialist laboratory facilities in the UK.

#### Resources

- Dengue in brief
- European Centre for Disease Prevention and Control: Dengue worldwide overview
- UK Health Security Agency: Dengue fever: guidance, data and analysis
- UK Health Security Agency and NaTHNaC: Mosquito bite avoidance: advice for travellers

## References

- 1. World Health Organization. Dengue and severe dengue. Last updated 10 January 2022. [Accessed 2 February 2023]
- 2. European Centre for Disease Prevention and Control. Autochthonous transmission of dengue virus in EU/EEA, 2010-present. Last updated 24 October 2022. [Accessed 2 February 2023]
- 3. Centers for Disease Control and Prevention, Dengue. Statistics and Maps 2022. Dengue cases in the in US. Last updated 17 January 2023. [Accessed 2 February 2023]
- **4.** Lazzarini L, Barzon L, Foglia F et al. First autochthonous dengue outbreak in Italy, August 2020. Euro Surveill. 2020; 25(36). [Accessed 2 February 2023]
- **5.** European Centre for Disease Prevention and Control. Rapid Risk Assessment: Autochthonous cases of dengue in Spain and France. 1 October 2019. [Accessed 2 February 2023]
- **6.** European Centre for Disease Prevention and Control. Dengue Annual Epidemiological Report for 2020. 5 April 2022. [Accessed 2 February 2023]
- 7. World Health Organization. Dengue cases in Madeira, Portugal. 17 October 2012. [Accessed 2 February 2023]
- 8. European Centre for Disease Prevention and Control. Dengue worldwide overview. Last updated 27 January 2023. [Accessed 2 February 2023]