06 Feb 2024

Dengue: the Caribbean region

An increase in cases of dengue have been reported in the Caribbean region

An increase in <u>dengue</u> cases has been reported across the Caribbean [1, 2, 3], with the region reporting a <u>threefold increase to 62,460 cases in 2023</u> - a significant rise from 20,349 cases in 2022 [1]. This reflects a dramatic increase in dengue cases worldwide over the past two decades [4].

Since the beginning of 2023, the World Health Organization (WHO) has reported an increase in dengue cases and deaths in known risk countries, with further spread to areas previously considered dengue free. More than five million dengue cases and over 5 000 dengue-associated deaths have been recorded across all six WHO world regions [5].

Dengue is caused by a virus (from a family of viruses called *Flaviviridae*) and is spread by the bite of an infected *Aedes* spp. mosquito, which mainly feeds during daytime hours.

There are four different types of dengue virus: DEN 1, DEN 2, DEN 3 and DEN 4. All have the potential to cause either dengue or severe dengue, also known as dengue haemorrhagic fever (DHF).

Most people infected with dengue remain symptom-free. If symptoms do occur, the illness usually begins abruptly with a high fever, severe headache, muscle and joint pain, nausea, vomiting and a rash. Most infections are self-limiting, with a rapid recovery three to four days after the rash appears.

A small number of people develop more severe illness with symptoms which can include dangerously low blood pressure (shock), build-up of fluid in the lungs and severe bleeding. There is no specific drug treatment for severe dengue illness, although hospital admission and careful management of fever, fluid balance and pain can help with recovery. If left untreated, severe dengue illness can be fatal.

Advice for travellers

Before you travel

See our <u>Country Information</u> pages 'Other Risks' section to check the dengue risk at your destination and for specific advice about other health risks. Further information may also be available in the <u>Outbreak Surveillance section</u>.

Check Foreign, Commonwealth and Development Office (FCDO) advice for safety and security information for your destination.

See your GP, practice nurse, pharmacist or travel clinic to make sure all your recommended travel vaccines for the Caribbean and routine United Kingdom (UK) vaccines are in date.

All travellers (including <u>cruise</u> passengers) visiting areas reporting dengue cases or where dengue is believed to occur are at risk of dengue infection.



While you are away

As dengue is spread by day-biting mosquitoes, particular care with bite avoidance is advised during the day, especially around dawn and dusk. The risk of dengue is present throughout the year in the tropics.

Reduce your risk of insect spread illnesses, including dengue by wearing long sleeves/trousers, applying insect repellent regularly and following insect and tick bite avoidance advice.

Insect repellent should be applied after sunscreen and regularly reapplied after any activities, including swimming.

50% DEET (N, N-diethyl-m-toluamide) based insect repellents are the most effective repellents currently available and can be used in pregnancy, breastfeeding and for children from two months of age. If DEET is unsuitable, alternative insect repellents containing Icaridin (Picaridin) or Eucalyptus citriodora oil, hydrated, cyclized or 3-ethlyaminopropionate should be used.

See Mosquito bite avoidance for travellers for more advice.

If you are staying with friends or family, you can reduce mosquito breeding sites around the home by removing any pools of stagnant water in plant pots, gutters, drains and rubbish in the area [3]. Insecticide treated bed and cot nets offer good protection against mosquito bites if sleeping during the day [4].

When you return

If you have symptoms such as high fever and severe headache or a rash within two weeks of your return from a country with a risk of dengue, get urgent medical advice and remember to tell your GP every country you visited.

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.

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 <u>specialist</u> <u>laboratory facilities</u> at the <u>Rare and imported pathogens laboratory (RIPL)</u> in the UK.

Resources

- Caribbean Public Health Agency: Dengue
- Dengue factsheet
- Pan American Health Organization: Dengue Prevention and Control in Barbados and the Eastern Caribbean countries
- <u>UK Health Security Agency on behalf of the joint Human Animal Infections and Risk Surveillance (HAIRS) group: HAIRS risk assessment: Dengue</u>
- UK Health Security Agency and NaTHNaC: Mosquito bite avoidance: advice for travellers
- UK Health Security Agency: Travel associated infections
- Travelling to visit friends and relatives



References

- 1. Pan American Health Organization. Reported Cases of Dengue Fever in The Americas. 2024. [Accessed 6 February 2024]
- 2. Pan American Health Organization. Situation Report No 3 Dengue Epidemiological Situation in the Region of the Americas Epidemiological Week 02, 2024. Last updated 24 January 2024. [Accessed 6 February 2024]
- **3.** Caribbean Public Health Agency. CARPHA encourages member states to reinforce measures to reduce the spread of dengue and other mosquito borne diseases. 23 November 2023. [Accessed 6 February 2024]
- 4. World Health Organization. Dengue Global situation. 21 December 2023. [Accessed 6 February 2024]
- 5. World Health Organization. Dengue: WHO Health Emergency Appeal 2024. 15 January 2024. [Accessed 6 February 2024]