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## Mosquito and insect spread infections in the Caribbean

**An increase in cases of mosquito and insect spread infections have been reported in the Caribbean region**

A number of mosquito and insect spread infections are a risk in the Caribbean, and an increase in these infections has been reported across the region. This includes a rise in cases of dengue [1, 2, 3], Oropouche virus disease [4, 5] and Zika virus infection [6].

[Dengue](#) is caused by a virus (from the *Flaviviridae* virus family) and is spread by the bite of an infected *Aedes* spp. mosquito, which mainly feeds during the day.

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 (previously known as dengue haemorrhagic fever).

Most people infected with dengue remain well. If symptoms do occur, the illness usually begins abruptly with a high fever, a flu like illness, 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 including dangerously low blood pressure (shock), fluid build-up in the lungs and severe bleeding. If left untreated, severe dengue can be fatal.

[Oropouche virus disease](#) is spread mainly by the bite of an infected midge, (although some mosquitoes can also spread this infection) which mainly bites around dawn and dusk.

Oropouche virus disease is usually a mild infection. Symptoms include fever, a flu like illness, nausea, vomiting, rash, light sensitivity and pain behind the eyes. They typically last for up to seven days; in up to 60% of cases, symptoms reoccur a few days or even weeks later. Some people may develop more severe illness, including meningitis.

In 2023 to 2024, Oropouche virus started spreading in the Americas, including the Caribbean, and was found in areas where it had not previously been reported. In addition, it has been associated with several deaths and [infection during pregnancy](#) has been linked to fetal deaths and possible birth defects [4].

More recently, Oropouche virus was found in the semen of a traveller infected with Oropouche virus who had returned from an affected area. No cases of sexual transmission of Oropouche virus have been reported, but these recent findings are currently under investigation [7].

**As concerns regarding possible mother-to-child transmission, including potential for fetal deaths and birth defects, are currently being investigated, a cautious approach is recommended, given the high potential impact.**

Information about potential risks of Oropouche virus infection, including the risk of infection during pregnancy, will be updated once it becomes available.

[Zika virus infection](#), mainly spread by day biting mosquitoes (a small number of cases of sexual transmission have been reported), is a risk in the Caribbean [6]. Most infected people remain well. If symptoms do occur, they are usually mild and short-lived; serious complications are uncommon.

However, Zika virus infection in pregnancy can cause birth defects, known as [Congenital Zika Syndrome](#). This includes babies born with small heads (microcephaly), delayed brain development, seizures, hearing loss, vision problems and feeding difficulties.

## Advice for travellers

### Before you travel

See our [Country Information](#) pages to check for health risks and vaccine recommendations for your destination. Specific information about dengue and Zika risk can be found in the 'Other Risks' section, along with advice about other health risks.

Further information about dengue, Oropouche virus disease and Zika cases may also be available in the [Outbreak Surveillance section](#).

Check [Foreign, Commonwealth and Development Office](#) (FCDO) travel advice for safety and security information about your destination.

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

All travellers (including [cruise passengers](#)) visiting the Caribbean are at risk of mosquito and insect spread infections.

### Pregnancy and pre-conception

If you are pregnant or planning a pregnancy, you should carefully consider your travel plans. In particular, if you are thinking about visiting a country with a risk of Zika or Oropouche virus disease, you should discuss suitability of travel and the potential risks associated with these infections with your health care provider. You should also be aware of current advice about [avoiding sexual transmission of these infections](#).

More information is available here:

- [United Kingdom \(UK\) Teratology Information Service: Exposure to Oropouche virus in pregnancy](#)
- [UK Health Security Agency: Zika Travel advice](#)
- [UK Health Security Agency: Zika virus: preventing infection by sexual transmission](#)

### While you are away

As many insect and mosquito infections are spread by day-biting mosquitoes, take particular care with bite avoidance during the day, especially around dawn and dusk. Dengue fever is a risk throughout the year in the Caribbean.

Reduce your risk of insect spread illnesses, 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-ethylaminopropionate should be used.

See [Mosquito bite avoidance for travellers](#) for more advice.

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

### **When you return**

If you have symptoms like a high fever and severe headache or a rash within two weeks of your return from the Caribbean, get urgent medical advice. Remember to tell your GP every country you visited.

If you are pregnant or planning a pregnancy, remember to follow current advice about [avoiding sexual transmission of Zika](#) and [Oropouche virus disease](#).

## **Advice for health professionals**

Health professionals should consider the possibility of mosquito or insect spread infections, including dengue, Zika and Oropouche virus disease in a returning UK traveller presenting with a fever or flu-like illness who has recently visited the Caribbean.

Health professionals who suspect a mosquito or insect spread infection in a traveller recently returned from the Caribbean, should discuss this urgently with their local microbiology, virology or infectious diseases consultant. A full travel/clinical history will need to be provided. They may advise that appropriate samples are sent for testing to [specialist laboratory facilities](#) at the [Rare and imported pathogens laboratory \(RIPL\)](#) in the UK.

## **Resources**

- [Caribbean Public Health Agency: Dengue](#)
- [Dengue factsheet](#)
- [Insect spread illness reminder for pregnant travellers](#)
- [Pan American Health Organization: Dengue Prevention and Control in Barbados and the Eastern Caribbean countries](#)
- [UK Health Security Agency on behalf of the joint Human Animal Infections and Risk Surveillance \(HAIRS\) group: HAIRS risk assessment: Dengue](#)
- [UK Health Security Agency and NaTHNaC: Mosquito bite avoidance: advice for travellers](#)
- [UK Health Security Agency: Travel associated infections](#)
- [US Centers for Disease Control and Prevention: Countries and Territories with Recent or Previous Oropouche Virus Transmission](#)
- [US Centers for Disease Control and Prevention: Understanding Your Risk for Oropouche](#)
- [Travelling to visit friends and relatives](#)
- [Zika virus: Evaluating the risk to individual travellers](#)

## **References**

1. [Pan American Health Organization. Reported Cases of Dengue Fever in The Americas. 2024. \[Accessed 24 December 2024\]](#)
2. [Pan American Health Organization. Situation Report No 48 - Dengue Epidemiological Situation in the Region of the Americas - Epidemiological Week 48, 2024. Last updated 19 December 2024. \[Accessed 24 December 2024\]](#)
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. \[Accessed 24 December 2024\]](#)
4. [World Health Organization. Oropouche virus disease. 22 October 2024. \[Accessed 24 December 2024\]](#)
5. [Pan American Health Organization. Epidemiological Update Oropouche in the Americas Region - 15 October 2024. \[Accessed 24 December 2024\]](#)
6. [US Centers for Disease Control and Prevention. Countries and Territories at Risk for Zika. 27 June 2024. \[Accessed 24 December 2024\]](#)
7. [Castilletti C, Huits R, Passarelli Mantovani R et al. Replication-competent Oropouche virus in semen of a traveler returning to Italy from Cuba, 2024. Emerg Infect Dis. December 2024. \[Accessed 24 December 2024\]](#)