



DENGUE GUIDELINES

TRAVELLERS COMING TO THE CARIBBEAN

January 24, 2019

This document provides information on Dengue virus (DENV) prevention and preparedness for travellers coming to the Caribbean. This information is based on currently available scientific evidence and has been adapted and prepared for the Caribbean situation.

Background

Dengue is found in tropical and sub-tropical regions worldwide and is endemic in the Caribbean. There are four serotypes of the virus (DENV1, DENV2, DENV3 and DENV4) all of which can be found in the Caribbean. The last major regional outbreak of Dengue occurred in 2009. However, using epidemiological disease modelling, CARPHA has predicted that another Regional outbreak of Dengue is likely to occur [1]. On January 03, 2019, the Government of Jamaica declared a Dengue outbreak on the island [2], while several other countries have been reporting isolated cases. CARPHA has since advised the Caribbean Ministries of Health to increase preparedness activities due to the potential for a Regional outbreak [1].

What is Dengue?

In the Caribbean, Dengue virus (DENV) is transmitted through the bite of an infected *Aedes aegypti* mosquito. This is the same mosquito that transmits CHIKV and Zika virus. This mosquito prefers to feed during the daytime but will feed indoors in the evening if the lights are on.

Dengue causes flu like symptoms including; high fever, headaches, pain behind the eyes, nausea, vomiting, muscle and/or bone pain and rash. The symptoms can last for approximately 2-7 days. Dengue can potentially develop into a lethal complication known as severe dengue, formerly referred to as Dengue Haemorrhagic fever. Severe dengue is one of the leading causes of serious illness and death among children in some Asian, Latin American and Caribbean countries. The risk of developing severe dengue is increased when one recovers from an infection resulting from a specific serotype and is then subsequently infected by other serotypes.

DENV can NOT be transmitted by close or casual contact with an infected person (i.e., not person to person) or through the air, food or water.

Dengue prevention messages for travellers coming to the Caribbean

To decrease the risk of becoming infected, prevention measures are recommended.

All travellers are advised to:

- Stay informed about the Dengue situation in countries they are travelling to.

Prevent mosquito bites:

- Use insect repellents on exposed skin. Insect repellents that contain DEET, Picaridin (also known as Icaridin), oil of lemon eucalyptus (OLE) or IR3535 are the most effective and safe when used according to the label. If also using sunscreen, apply sunscreen first and insect repellent second.
- Where possible, wear light coloured, long-sleeved shirts and long pants, socks and shoes to minimize exposed skin.
- When indoors use air conditioning and keep the doors and windows closed, unless they are screened, to keep out mosquitoes. If this is not possible sleep under mosquito nets to prevent bites.

What should you do if you feel sick and think you may have Dengue?

- Consult a healthcare professional if you are feeling ill, especially if you have a fever. If you have returned home, make sure to tell them about your travel to the Caribbean.
- Use acetaminophen or paracetamol to treat fever and pain.
- Do not use aspirin or other NSAIDs (e.g., ibuprofen, naproxen, toradol) as these can worsen symptoms
- Get lots of rest and drink plenty of liquids.
- A person infected with DENV will have the virus in their blood for the first week of infection. The virus can be passed on to other mosquitoes if they bite you while you are carrying the virus. Therefore, be especially careful to prevent mosquito bites during the first week to avoid spreading the disease.

Note: CARPHA will continue to evaluate new information as it becomes available, and will update this guidance as needed.

References

- Caribbean Public Health Agency (2019). CARPHA Urges Region to Prepare for the Possibility of a Severe Outbreak of Dengue Fever. Available from: http://carpha.org/articles/ID/196/CARPHA-Urges-Region-to-Prepare-for-the-Possibility-of-a-Severe-Outbreak-of-Dengue-Fever
- 2. Jamaica W.I. The Gleaner (2019). Outbreak Ministry urges caution as dengue cases spike, fatalities confirmed. Available from: http://jamaica-gleaner.com/article/lead-stories/20190104/outbreak-ministry-urges-caution-dengue-cases-spike-fatalities
- 3. Caribbean Public Health Agency (2019). Mosquito mission. Available from: http://missionmosquito.carpha.org/