



# DENGUE GUIDELINES

## PASSENGER SHIPS COMING TO THE CARIBBEAN

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This document provides information on Dengue virus (DENV) prevention and preparedness for passenger ships 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.

## What can Passenger Ships coming to the Caribbean DO to Prevent and Prepare for Dengue?

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

Passenger ships are advised to:

- Stay informed about the Dengue situation in the countries on the itinerary.
- Provide passengers and crew with prepared materials on DENV so that they are aware of the signs and symptoms, how DENV is transmitted and how it can be prevented.
- Have insect repellent available for purchase on board the ship.
- Collaborate with harbor and public health authorities to increase inspections for mosquito breeding sites in and around ports.

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

### References

1. 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/>