This document provides information on Dengue virus (DENV) prevention and preparedness for hotels, guesthouses and AirBnBs in 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 Chikungunya (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 Hotels and Guesthouses in the Caribbean DO to Prevent and Prepare for Dengue?

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

Hotels and Guesthouses are advised to:

- Stay informed about the Dengue situation in your country, and in other Caribbean countries.
- Provide staff and guests with information on DENV so that they are aware of the signs and symptoms, how DENV is transmitted and how it can be prevented.
- Consider placing having insect repellents in every room or having them available for purchase.
- Scale up of inspection of gardens and surroundings.
- Promote collaboration efforts with Public Health Vector Control Units and communities around hotels and resorts.
- Avoid storing water in outdoor containers that can collect water to prevent them from becoming mosquito breeding sites.
- Cover water tanks or reservoirs so that mosquitoes do not get in.
- Avoid the build-up of garbage, which can act as a breeding site for mosquitoes. Put garbage in closed plastic bags and keep it in closed containers.
- Uncover/unblock gutters and drains to release stagnant water.
- Install mosquito screening on windows and doors to help reduce contact between mosquitoes and guests.
- Consider supplying guests with bed nets in areas where the sleeping quarters are exposed to the outdoors.
- Increase inspection of gardens and surrounding areas to identify and eliminate breeding sites through collaboration with Public Health Vector Control Units and neighbouring communities.
- Frequent spraying with insecticides may be ineffective due to increasing mosquito insecticide resistance. Consult with Vector Control Units to determine best methods of mosquito infestation control.

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

