Epidemiological Report

3rd January, 2018

As at January 3, 2019, one hundred and twenty three (123) dengue case reports (suspected, presumed and confirmed) were received for the month of December 2018. This exceeded the outbreak threshold of 96 cases for December; the first month for 2018 in which the number of cases exceeded the outbreak threshold (figure 1).

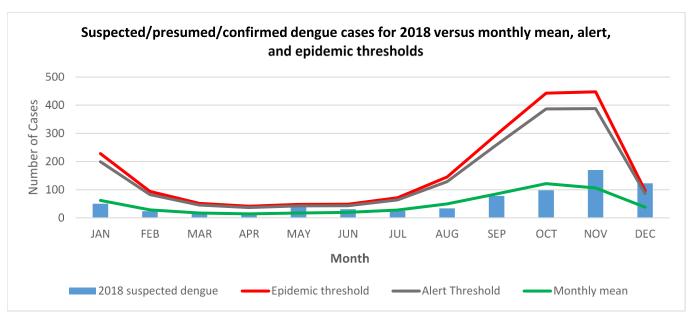


Figure 1. Number of suspected, presumed and confirmed dengue cases by month for 2018 versus monthly averages and epidemic threshold¹ for Jamaica.

Summary

As at January 3, 2019 the Ministry of Health had in its electronic database a total of 1700 notifications for dengue. Of the 1700 notifications for 2018 to date, 830 have been classified as suspected, presumed or confirmed. The number of confirmed cases of dengue stands at 23 for the period January 1, 2018 to January 3, 2019. Of 52 reported cases with samples tested using PCR at CARPHA, 23 cases were PCR positive and therefore classified as confirmed; 22 of these 23 cases were identified as DENV Type 3 while one (1) case had low viral titres and the dengue type was not identified.

Table 1. Number of cases of suspected and confirmed dengue fever and dengue haemorrhagic fever/dengue shock syndrome, Weeks 1-52, Jamaica, 2016, 2017 and 2018

	Dengue		DHF/DSS		Dengue Related Deaths	
	Suspected	Confirmed	Suspected	Confirmed	Suspected	Confirmed
2016	2297	190	157	3	2	0
2017	177	0	38	0	6	0
2018	830	23	70	3	7	2

Geographic distribution of cases

The largest numbers of suspected/presumed/confirmed cases for the period (2018) were reported from Kingston and Saint Andrew, Westmoreland, and Saint Catherine respectively (Figure 2). The largest number of suspected/presumed/confirmed cases for December 2018 were reported from Kingston and Saint Andrew, Saint Ann and Saint Thomas. The greatest rates per 100,000 population, however, were reported from St Ann, St Thomas, and St Mary, respectively.

Table 2. Number and percentage of suspected/presumed/confirmed cases by parish: December 2018 versus Total for 2018, Jamaica

Parish	December 2018	}	Total 2018	
	Number	Percentage	Number	Percentage
Kingston and St. Andrew	32	26.0	207	24.9
Westmoreland	8	6.5	90	10.8
St. Catherine	12	9.8	84	10.1
St. Ann	30	24.4	76	9.2
Manchester	2	1.6	55	6.6
St. Thomas	13	10.6	37	4.5
St. Elizabeth	2	1.6	31	3.7
Clarendon	2	1.6	30	3.6
Trelawney	1	0.8	28	3.4
St. Mary	12	9.8	24	2.9
Portland	4	3.3	15	1.8
Hanover	1	0.8	14	1.7
St. James	1	0.8	14	1.7
Unknown	3	2.4	125	15.1
Total	123	100.0	830	100.0

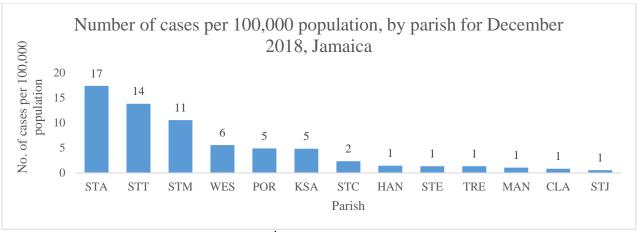


Figure 3. Rate per 100,000 population of suspected/presumed/confirmed dengue cases by parish, December 2018, Jamaica.

MOH Response Activities for Dengue Outbreak, 3 January 2019

Coordination and Response

The MOH intensified its activities for dengue since July 2018 and the Emergency Operations
 Center commenced partial activation at 11:22 am on December 27, 2018 and full activation on
 3 January 2019 due to the increase in the dengue cases across the island in order to coordinate
 and report on activities to respond to the increased numbers of dengue cases and to mitigate
 against an outbreak of dengue.

Enhanced Surveillance

- The strategies for Prevention and Control of dengue include Heightened Surveillance through the integrated surveillance programme (sentinel sites, laboratory, vector breeding hot spots),
 Risk Communication with Public Education, Enhanced Vector Control and appropriate clinical management.
- Dengue case definitions were recirculated to all parishes and regions on 2 January 2019 and presentations are to be made at the Medical Officers of Health Meeting on January 4, 2019 to update on the response to reinforce surveillance and clinical management.

¹ Population based on 2012 mid-year estimates of parish population, STATINJA

Public Relations and Education

- There is a plan that is in place regarding dengue sensitization and community involvement. This
 is supported by a Public Relations and Education plan with a multidisciplinary approach that will
 intensify over the next few weeks.
- Members of the public are asked to play their part to reduce dengue fever and it complications, even as the Ministry increases its mosquito control activities and public education campaign.

Vector Control Measures

- Enhanced vector control activities commenced July 2018 and will be further strengthened over the next few weeks using strategies including increased community based vector control workers. This programme was slated to end December 2018 but will now be continued until March 2019.
- Partnerships have been established with private pest control operators to increase services in all parishes.

Clinical Management

- Clinical staff has been re sensitized to the management of dengue.
- Emergency department at hospital have been bolstered by increased clinical and administrative staff
- Sensitization of all doctors, private and public has been conducted.
- Blood inventory at the National Blood Transfusion Services has been conducted and adequate been increased as at 3 January 2019.

Laboratory Capacity

Laboratory capacity has been enhanced through the support of CARPHA and UHWI.

Multi sectorial Response

 The National Emergency Response mechanism has been notified and there will be activation of a coordinated national response facilitating the multisectoral approach.