

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Foodborne Diseases



Foodborne and waterborne diarrhoeal diseases are a problem for every country in the world but they can be prevented. Diarrhoea is the acute, most common symptom of foodborne illness, but other serious consequences include kidney and liver failure, brain and neural disorders, reactive arthritis, cancer and death.

Diseases that people get from eating contaminated food are an

important cause of illness, disability and deaths around the world, as revealed by the first ever WHO Estimates of the Global Burden of Foodborne diseases published in December 2015. Foodborne diseases—especially those caused by bacteria, viruses, parasites and fungi—are preventable, and education in safe food handling is a key measure for prevention, including to contain antimicrobial resistance.

WHO built the Five Keys to Safer Food Programme to assist Member States in promoting safe food handling behaviors and educate all food handlers, including consumers, with tools easy to adopt and adapt. The Five Keys to Safer Food explain the basic principles that each individual should know all over the world to prevent foodborne diseases. Over 130 countries have reported using the Five Keys to Safer Food. As a result, billions of food handlers, including consumers, are empowered to prevent foodborne diseases, make safe and informed choices and have a voice to push for a safer food supply.



[https://www.who.int/foodsafety/areas\\_work/foodborne-diseases/en/](https://www.who.int/foodsafety/areas_work/foodborne-diseases/en/)  
[https://www.who.int/foodsafety/areas\\_work/food-hygiene/5keys/en/](https://www.who.int/foodsafety/areas_work/food-hygiene/5keys/en/)

## EPI WEEK 50

SYNDROMES



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CLASS 1 DISEASES



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INFLUENZA



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DENGUE FEVER



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GASTROENTERITIS



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RESEARCH PAPER



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# SENTINEL SYNDROMIC SURVEILLANCE

## Sentinel Surveillance in Jamaica



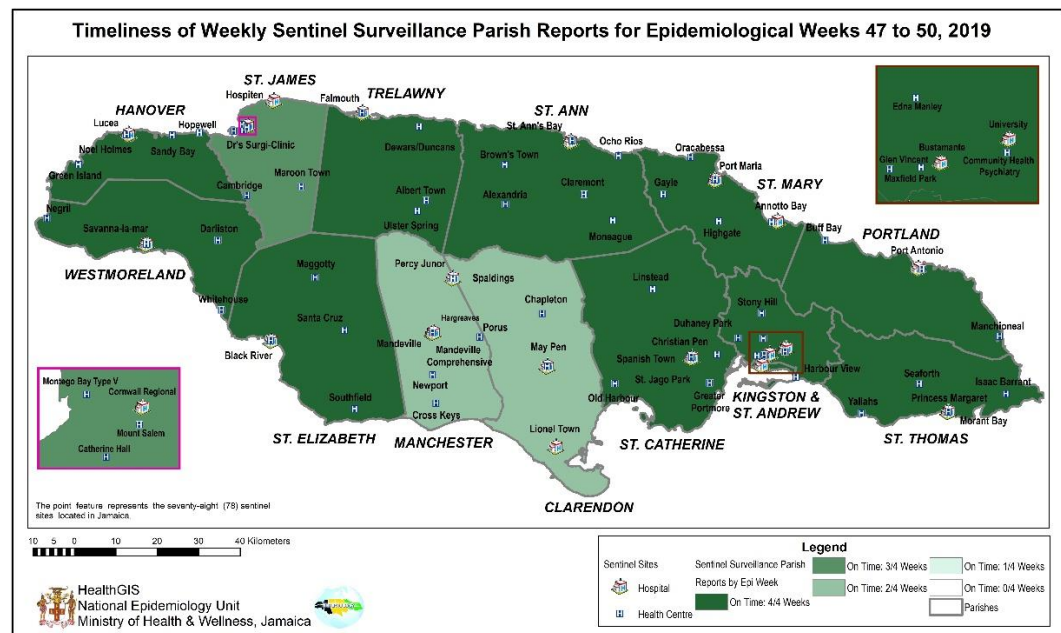
A syndromic surveillance system is good for early detection of and response to public health events.

Sentinel surveillance occurs when selected health facilities (sentinel sites) form a network that reports on certain health conditions on a regular basis, for example, weekly. Reporting is mandatory whether or not there are cases to report.

Jamaica's sentinel surveillance system concentrates on visits to sentinel sites for health events and syndromes of national importance which are reported weekly (see pages 2 -4). There are seventy-eight (78) reporting sentinel sites (hospitals and health centres) across Jamaica.

## Map representing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks - Weeks 47 to 50

Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.



## REPORTS FOR SYNDROMIC SURVEILLANCE

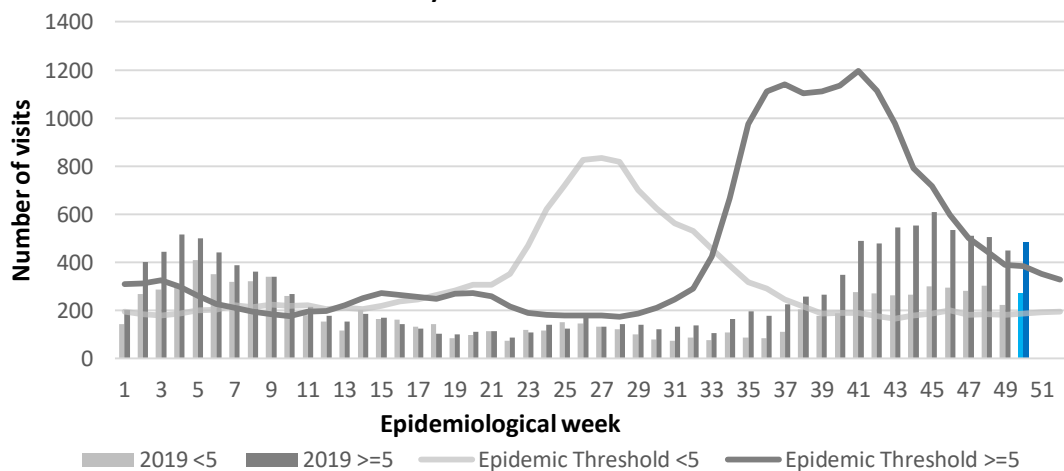
### FEVER

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



**KEY**  
VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2019



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



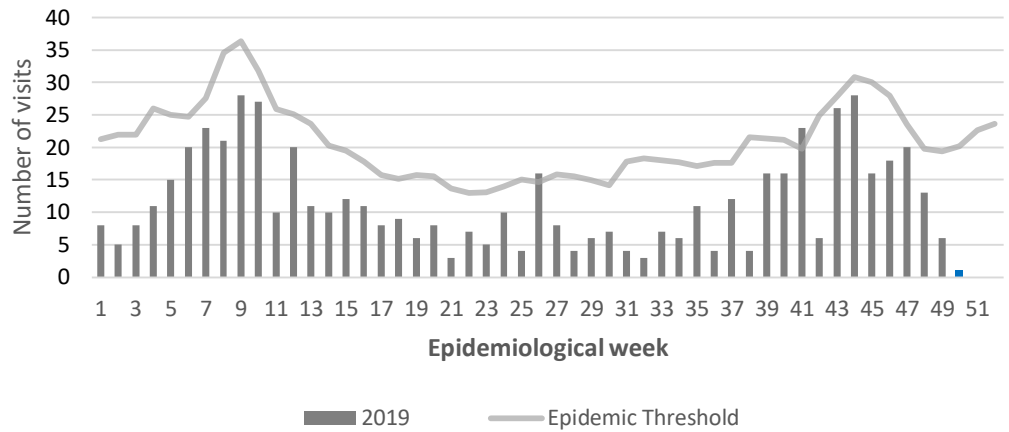
SENTINEL REPORT- 78 sites. Automatic reporting

**FEVER AND NEUROLOGICAL**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person with or without headache and vomiting. The person must also have meningeal irritation, convulsions, altered consciousness, altered sensory manifestations or paralysis (except AFP).



Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2019 vs. Weekly Threshold: Jamaica

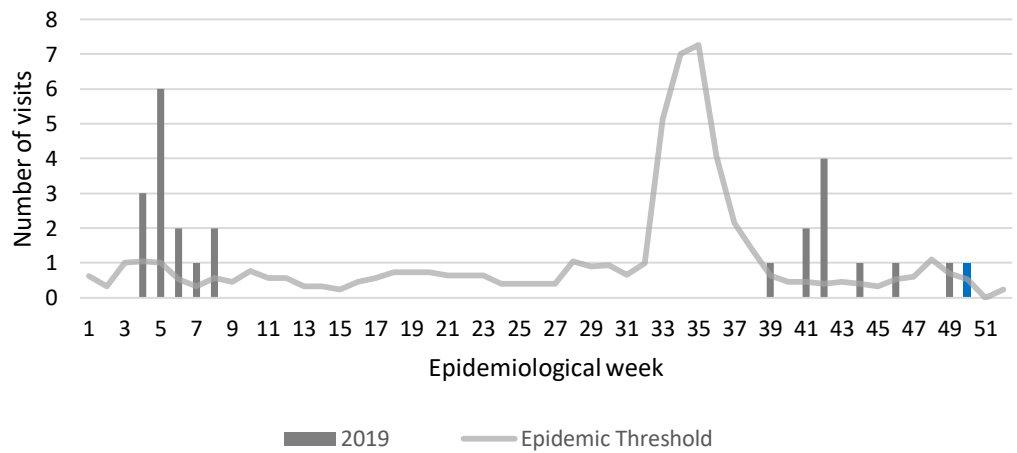


**FEVER AND HAEMORRHAGIC**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice. Visits for Fever and Haemorrhagic symptoms were reported in weeks 4 to 8, 39,41,42, 44, 46 and 49 year to date.



Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2019 vs Weekly Threshold; Jamaica

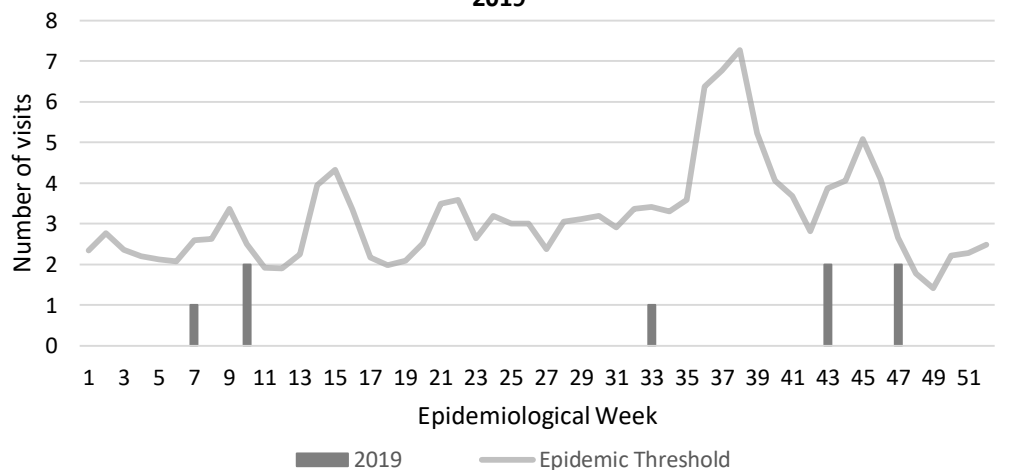


**FEVER AND JAUNDICE**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with jaundice.

The epidemic threshold is used to confirm the emergence of an epidemic in order to implement control measures. It is calculated using the mean reported cases per week plus 2 standard deviations. Visits to sentinel sites for Fever and Jaundice were reported in weeks 7, 10, 33, 43 and 47 only, year to date.

Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2018 and 2019



**3 NOTIFICATIONS-**  
All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued



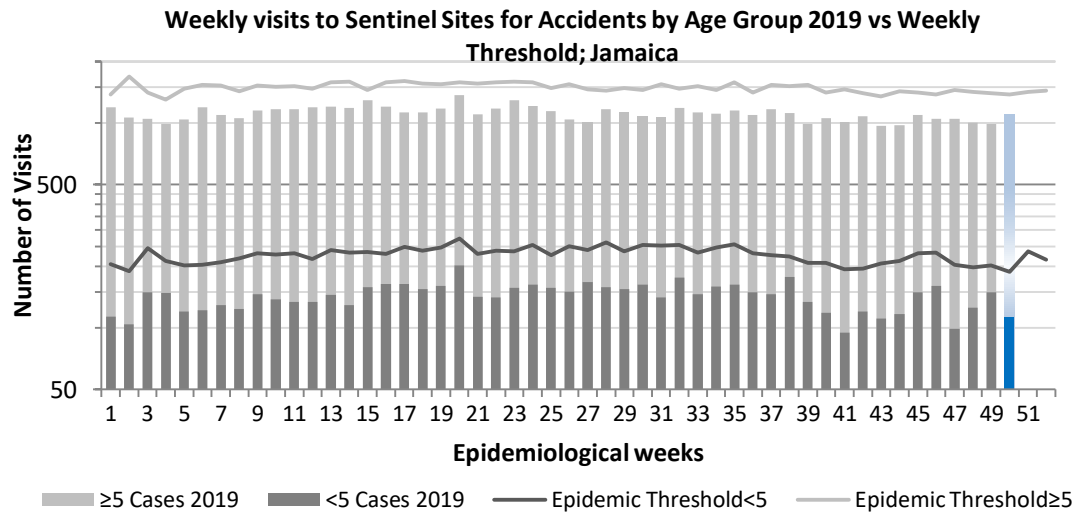
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

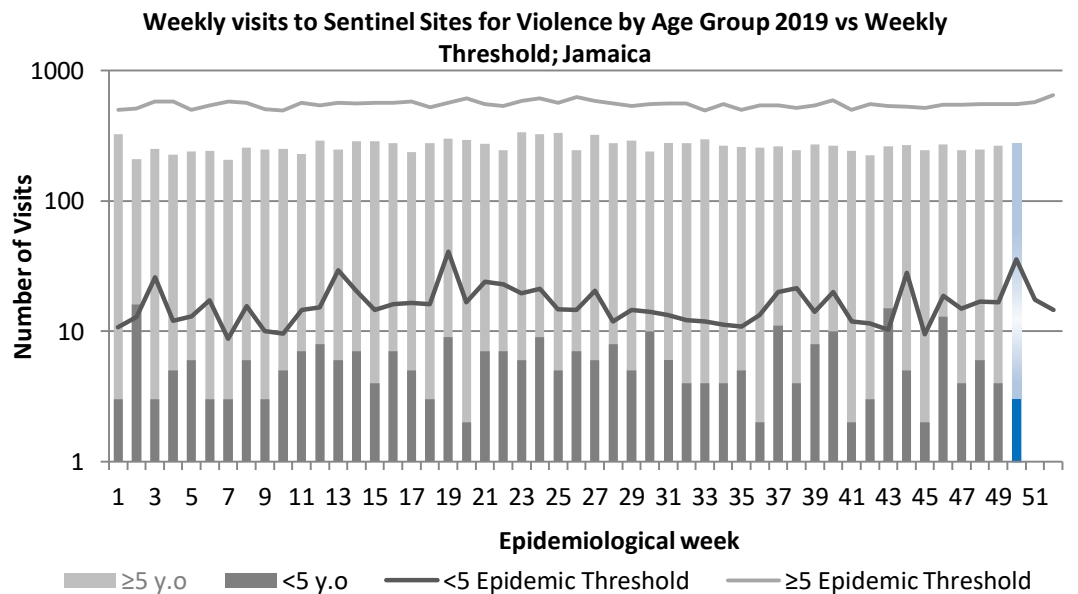
**KEY**

VARIATIONS OF BLUE SHOW CURRENT WEEK



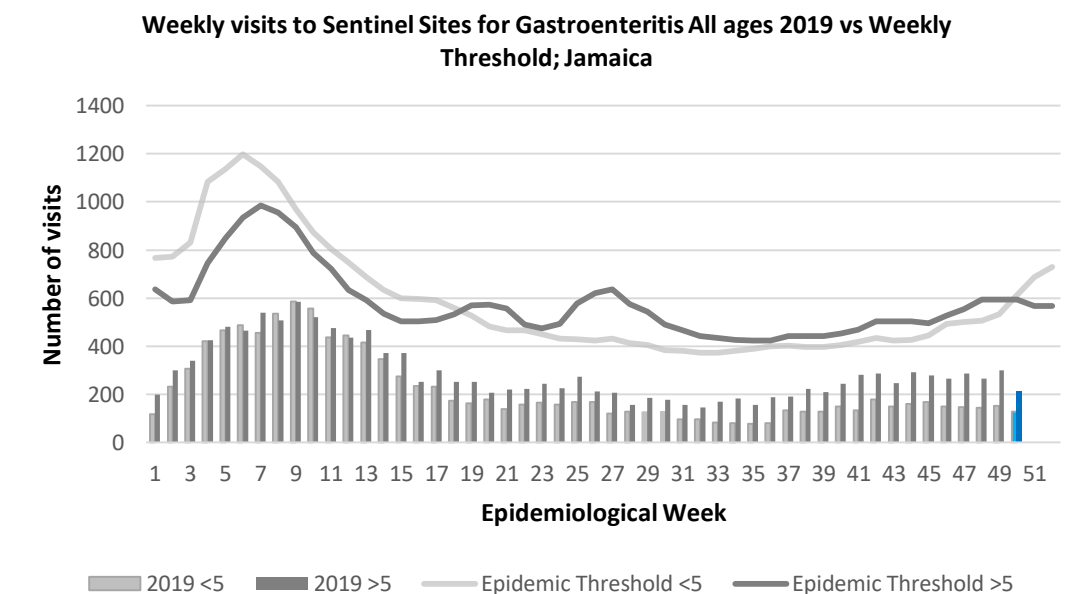
**VIOLENCE**

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



**GASTROENTERITIS**

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



**4 NOTIFICATIONS-**  
All clinical sites




**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued



**SENTINEL REPORT-** 78 sites. Automatic reporting

CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD			
		CURRENT YEAR	PREVIOUS YEAR		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	106	184	AFP Field Guides from WHO indicate that for an effective surveillance system, detection rates for AFP should be 1/100,000 population under 15 years old (6 to 7) cases annually.  Pertussis-like syndrome and Tetanus are clinically confirmed classifications.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever*	NA	NA		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	24	90		
	Hepatitis C	2	9		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	1	6		
	Meningitis (Clinically confirmed)	23	37		
EXOTIC/ UNUSUAL	Plague	0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths;	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	** Figures include all deaths associated with pregnancy reported for the period.	
	Neonatal Tetanus	0	0		
	Typhoid Fever	0	0		
	Meningitis H/Flu	0	0		
SPECIAL PROGRAMMES	AFP/Polio	0	0	*** CHIKV IgM positive cases  **** Zika PCR positive cases	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths**	60	61		
	Ophthalmia Neonatorum	222	290		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	64	73		
Yellow Fever	0	0			
	Chikungunya***	7	10		
	Zika Virus****	0	1	NA- Not Available	

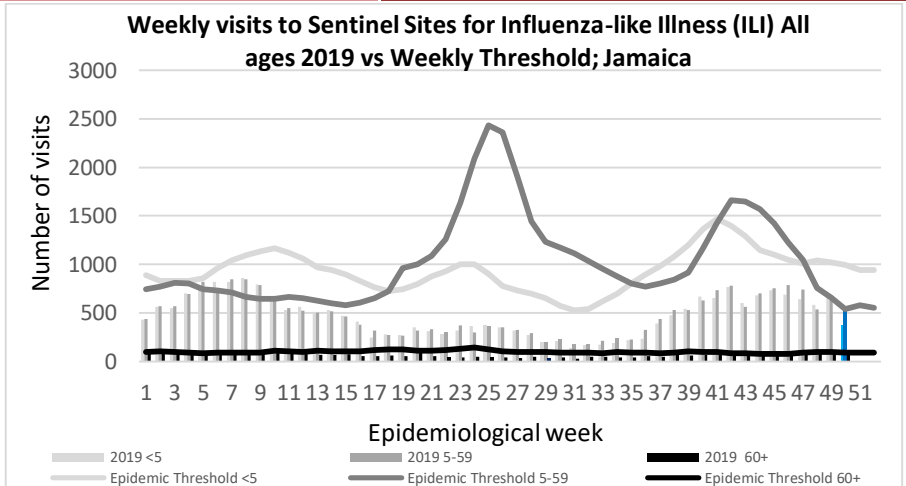
	5 NOTIFICATIONS- All clinical sites		INVESTIGATION REPORTS- Detailed Follow up for all Class One Events		HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued		SENTINEL REPORT- 78 sites. Automatic reporting
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# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

## EW 50

December 8– December 14, 2019 Epidemiological Week 50

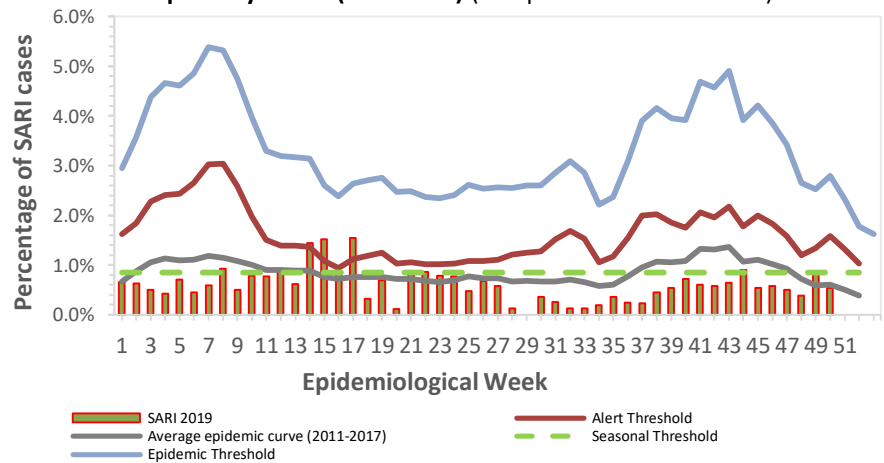
	EW 50	YTD
SARI cases	10	515
<b>Total Influenza positive Samples</b>	<b>5</b>	<b>477</b>
<b>Influenza A</b>	<b>4</b>	<b>433</b>
H3N2	0	189
H1N1pdm09	0	228
Not subtyped	4	13
<b>Influenza B</b>	<b>1</b>	<b>44</b>
<b>Parainfluenza</b>	<b>0</b>	<b>7</b>



### Epi Week Summary

During EW 50, 10 (ten) SARI admissions were reported.

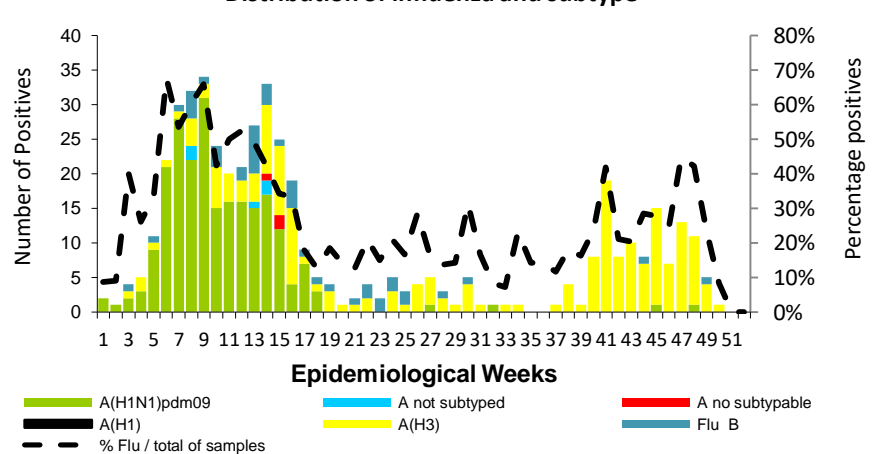
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



### Caribbean Update EW 49

Influenza activity increased in some countries of the sub-region. In Cuba, influenza activity continues to increase with the prevalence of influenza B; IRAG cases increased, but remained below the levels observed in previous seasons during the same period. Influenza activity remains high in Jamaica with the prevalence of influenza A (H3N2) and the concurrent circulation of influenza A (H1N1) virus pdm09; IRAG cases were at low levels

Distribution of influenza and subtype



**6 NOTIFICATIONS-**  
All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued



**SENTINEL REPORT-** 78 sites. Automatic reporting

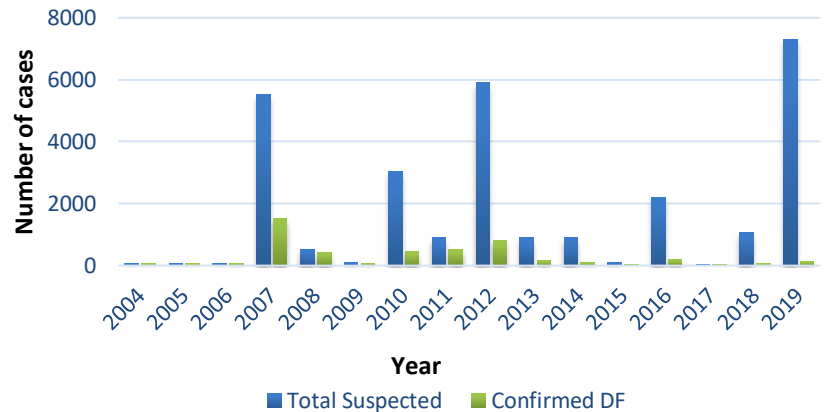
# Dengue Bulletin

December 8– December 14, 2019 Epidemiological Week 50


Epidemiological Week 50



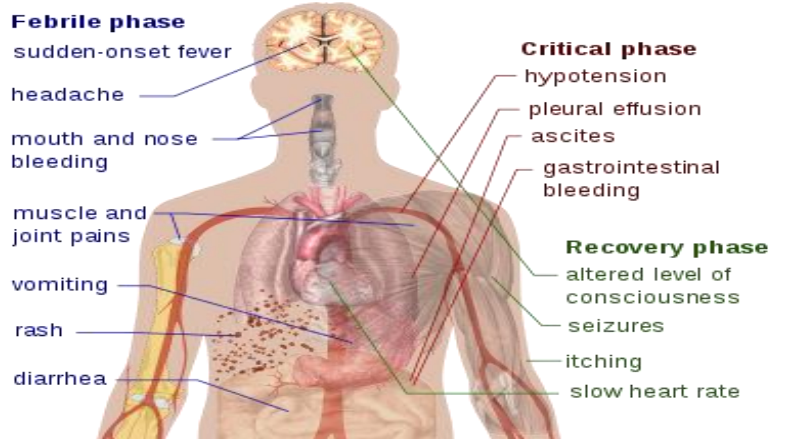
Dengue Cases by Year: 2004-2019, Jamaica



**Reported suspected and confirmed dengue with symptom onset in weeks 1-50 2019**

	2019		2018 YTD
	EW 50	YTD	
 Total Suspected Dengue Cases	0	7291	710
Lab Confirmed Dengue cases	1	193	16
<b>CONFIRMED</b> Dengue Related Deaths	0	15	4

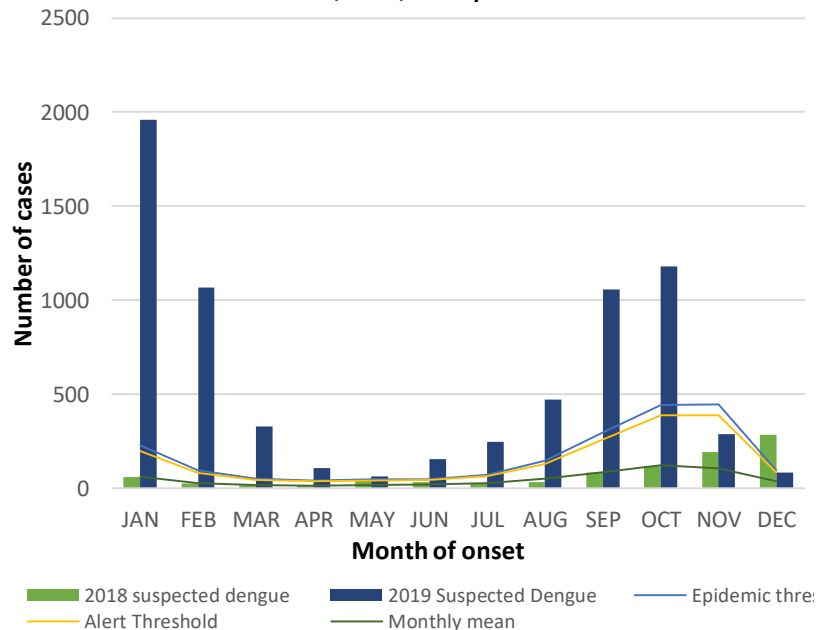
Symptoms of Dengue fever




Points to note:


- **\*\*figure as at December 19, 2019**
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2018 and 2019 versus monthly mean, alert, and epidemic thresholds



 **7 NOTIFICATIONS-** All clinical sites

 **INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events

 **HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued

 **SENTINEL REPORT-** 78 sites. Automatic reporting

# RESEARCH PAPER

## ABSTRACT

**Title:** “ Anthropometry and food frequency in chronic non-communicable disease: associations in a clinic population”

Authors: S. Robinson, S. Dawson

E-mail address: [stephenrobinson29@yahoo.com](mailto:stephenrobinson29@yahoo.com)

### Objective:

To investigate the relation of body mass index (BMI) and waist circumference (WC) to frequency of consumption of commonly consumed foods, in patients enrolled at a Type V Health Centre in Kingston.

### Method:

Twenty –four adult patients (22 females) attending the CNCD Clinic were conveniently selected for the study, with a cross-sectional analysis being conducted on these patients. Participants were selected if they were diagnosed with at least one CNCD. Their weights, heights, and waist circumferences were measured and data on the frequency of consumption of selected foods acquired utilizing an administered questionnaire. The main outcome measure was a correlation between anthropometry and food frequency.

### Results:

Of the 24 subjects, 23 had a BMI >25.0 with 22 having a waist circumference exceeding the recommended limit (Females= 89 cm and Males =101 cm). Mean BMI was  $34.3 \pm 7.4$  with mean WC being  $104.9 \pm 17.7$  cm.

Neither BMI nor WC was significantly associated with frequency of consumption of any food item from the different Food Groups, but positive correlations were identified between BMI and age ( $p < 0.0001$ ), and BMI and WC ( $p = 0.00051$ ).

### Conclusion:

No statistically significant associations were found between BMI, Waist Circumference and food frequency in this population. A follow-up study (larger sample size, other food intake measures) is recommended to demystify whatever link may exist between anthropometry and food intake. Alongside BMI measurements, WC could be used routinely in the nutritional assessment of CNCD patients at Health facilities.



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8 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
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