

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## World Water Week 2019



Washington, DC April 2 - 4, 2019



Water safety and quality are fundamental to human development and well-being. Providing access to safe water is one of the most effective instruments in promoting health and reducing poverty.

As the international authority on public health and water quality, WHO leads global efforts to prevent transmission of waterborne disease. This is achieved by promoting health-based regulations to governments and working with partners to promote effective risk management practices to water suppliers, communities and households.

WHO produces international norms on water quality and human health in the form of guidelines that are used as the basis for regulation and standard setting world-wide.

The Guidelines for drinking-water quality (GDWQ) promote the protection of public health by advocating for the development of locally relevant standards and regulations, adoption of preventive risk management approaches covering catchment to consumer and independent surveillance to ensure that Water Safety Plans are being implemented and effective and that national standards are being met.

Emergency situations, including those due to natural hazards, technological hazards, complex situations and outbreaks, lead to health-related diseases and affect populations in all contexts. Depending upon the nature of the event, vulnerability of the people affected and capacity of local and national systems, deterioration in environmental conditions often results in a steep increase in WASH-related diarrhoeal disease. In particular, in emergencies WHO has the mandate to work with the Ministry of Health to ensure water quality and minimize water-related health risks and support provision of WASH in health care facilities.



## EPI WEEK 33



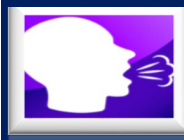
SYNDROMES

PAGE 2



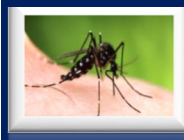
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

# SENTINEL SYNDROMIC SURVEILLANCE

## Sentinel Surveillance in Jamaica



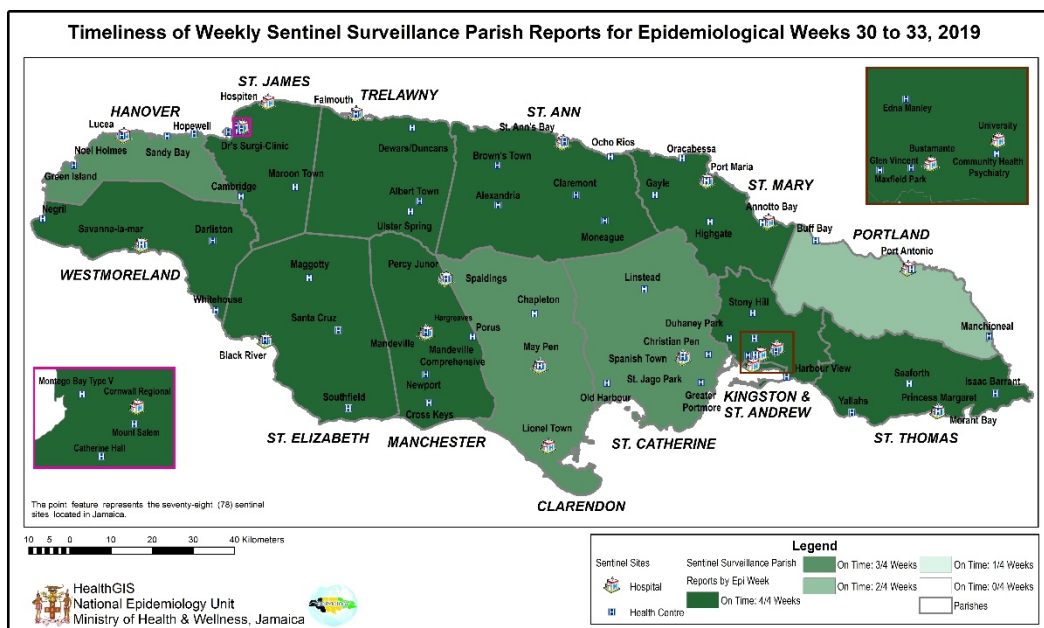
A syndromic surveillance system is good for early detection of and response to public health events.

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 30 to 33

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

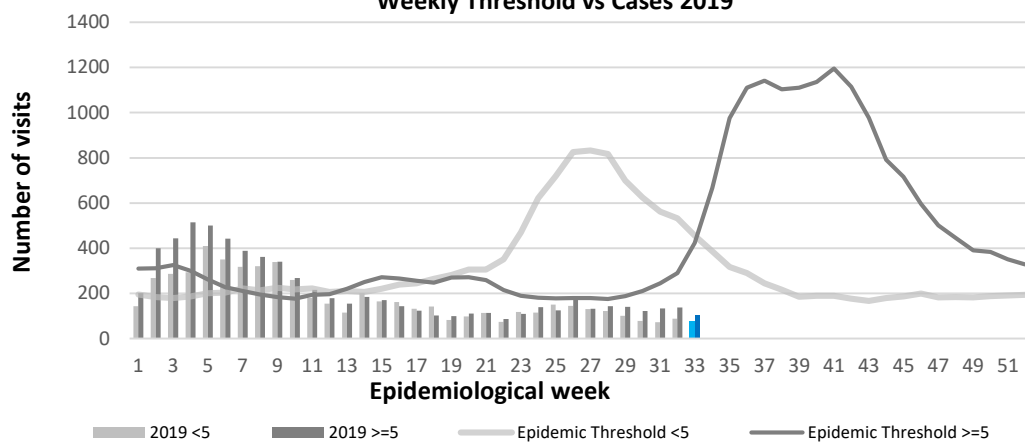
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



### 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



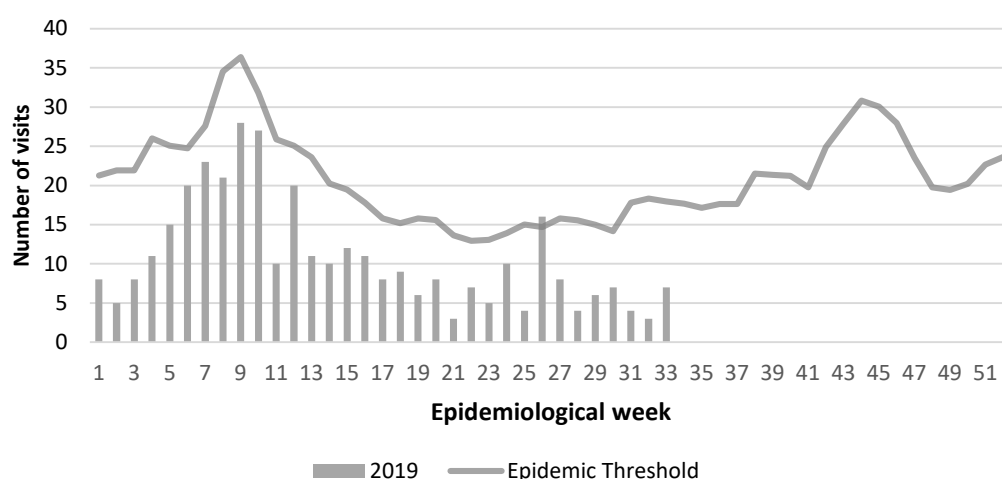
SENTINEL REPORT- 78 sites. Automatic reporting

**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).



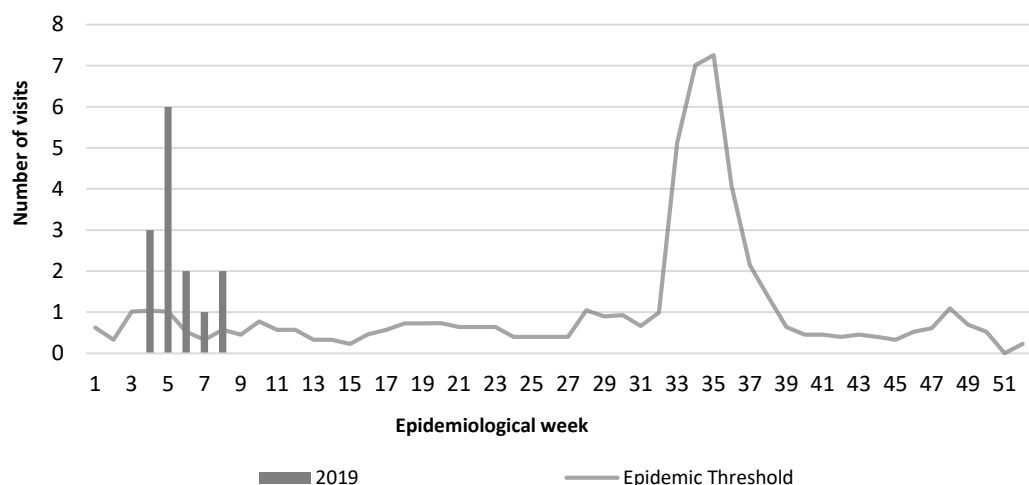
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2018 vs. Weekly Threshold: Jamaica**

**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 only, year to date.



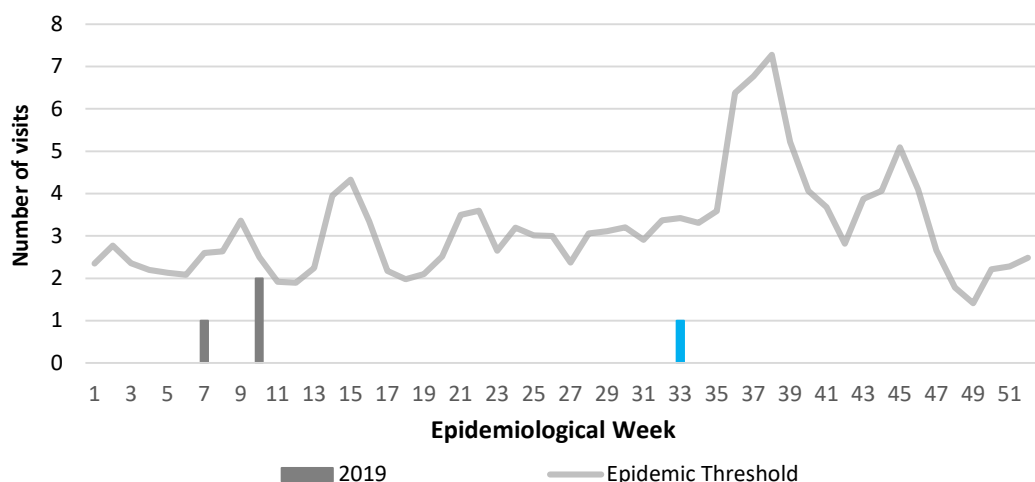
**Weekly visits to Sentinel Sites for Fever and Haemorrhagic Symptoms 2019 vs Weekly Threshold; Jamaica**

**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 and 10 only, year to date.

**Weekly Visits to Sentinel Sites for Fever and Jaundice 2019 vs. Weekly Threshold**



**3 NOTIFICATIONS-**  
All clinical sites



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



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



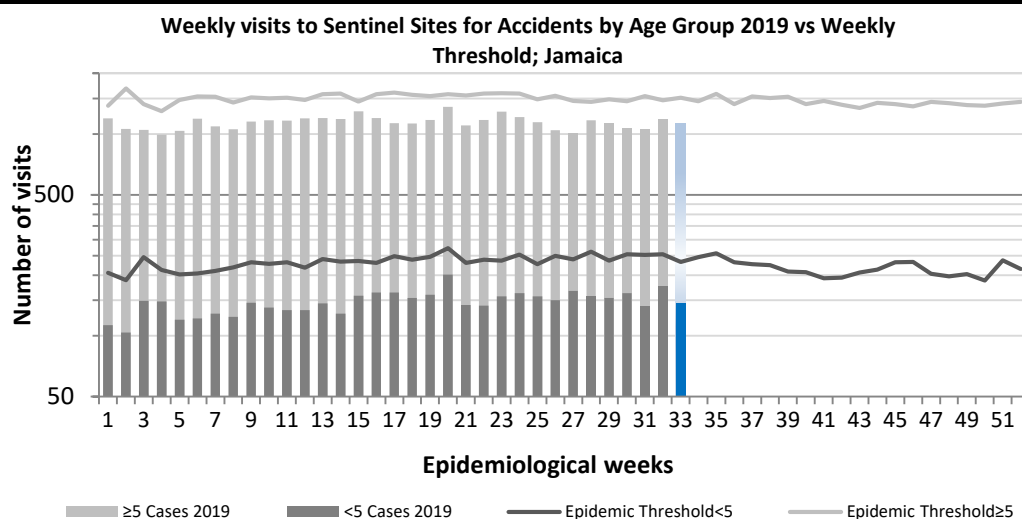
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

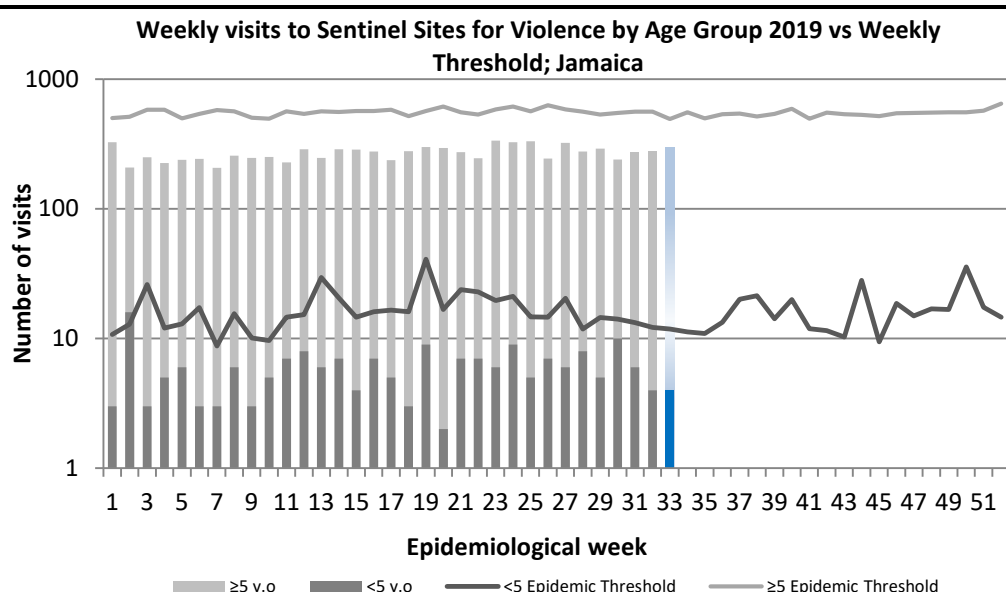
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

**KEY**

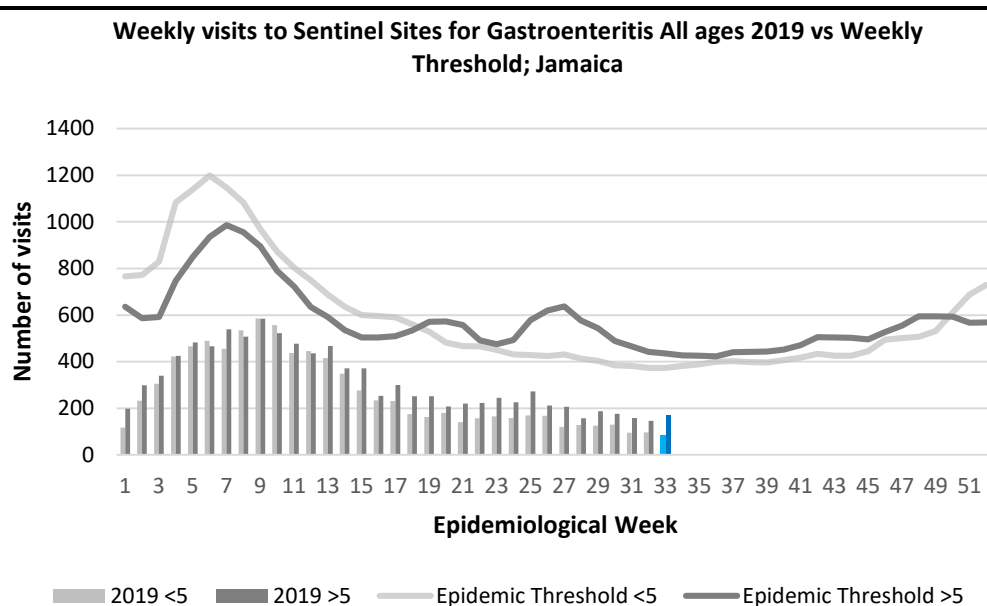
VARIATIONS OF **BLUE** SHOW CURRENT WEEK

**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
			Confirmed YTD		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.
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		40	143	
	Cholera		0	0	
	Dengue Hemorrhagic Fever*		NA	NA	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		11	26	
	Hepatitis C		2	2	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	2	
	Meningitis (Clinically confirmed)		15	37	
EXOTIC/ UNUSUAL	Plague		0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths;  ** Figures include all deaths associated with pregnancy reported for the period.
HIGH MORBIDIT/ MORTALITY	Meningococcal Meningitis		0	0	
	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**		40	44	
	Ophthalmia Neonatorum		161	201	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		33	43	
	Yellow Fever		0	0	
	Chikungunya***		1	0	
	Zika Virus****		0	0	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



# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

# EW 33

August 11– August 17, 2019 Epidemiological Week 33

	EW 33	YTD
SARI cases	1	352
<b>Total Influenza positive Samples</b>	<b>1</b>	<b>366</b>
<b>Influenza A</b>	<b>1</b>	<b>324</b>
H3N2	1	90
H1N1pdm09	0	226
Not subtyped	0	5
<b>Influenza B</b>	<b>0</b>	<b>42</b>
<b>Parainfluenza</b>	<b>0</b>	<b>5</b>

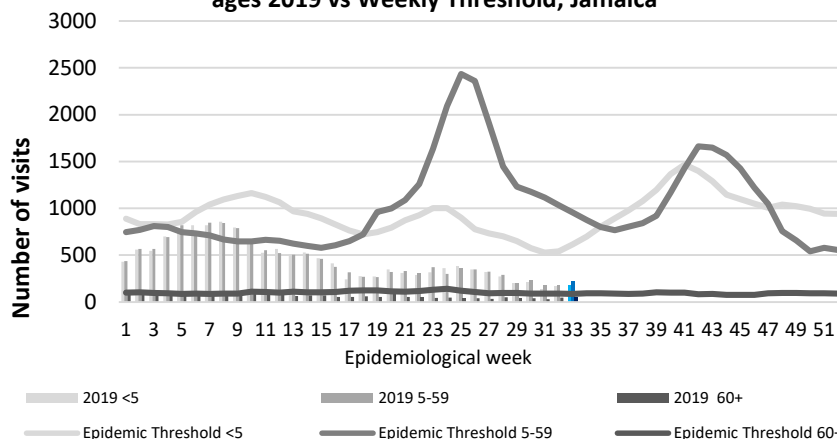
## Epi Week Summary

During EW 33, 1 case of influenza was detected. Percent positivity remained low.

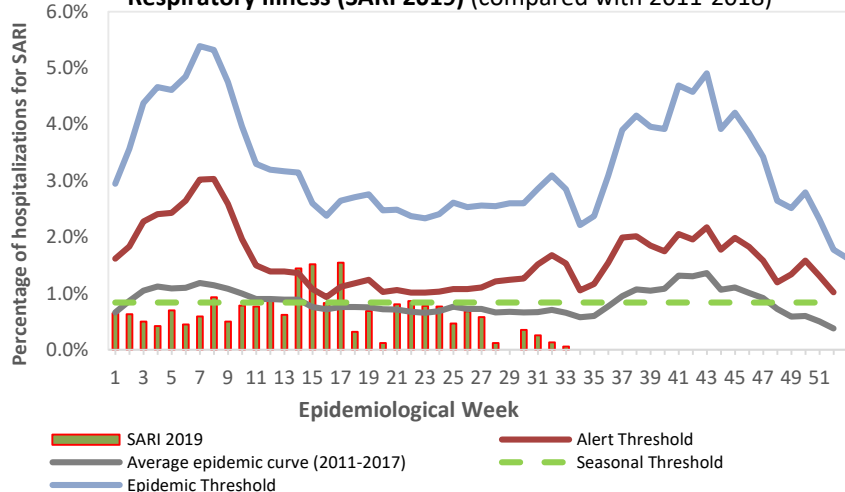
During EW 33, 1 (one) SARI admission was reported.

Caribbean: Influenza and SARI activity were low and continue to decrease in the sub-region.

Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2019 vs Weekly Threshold; Jamaica



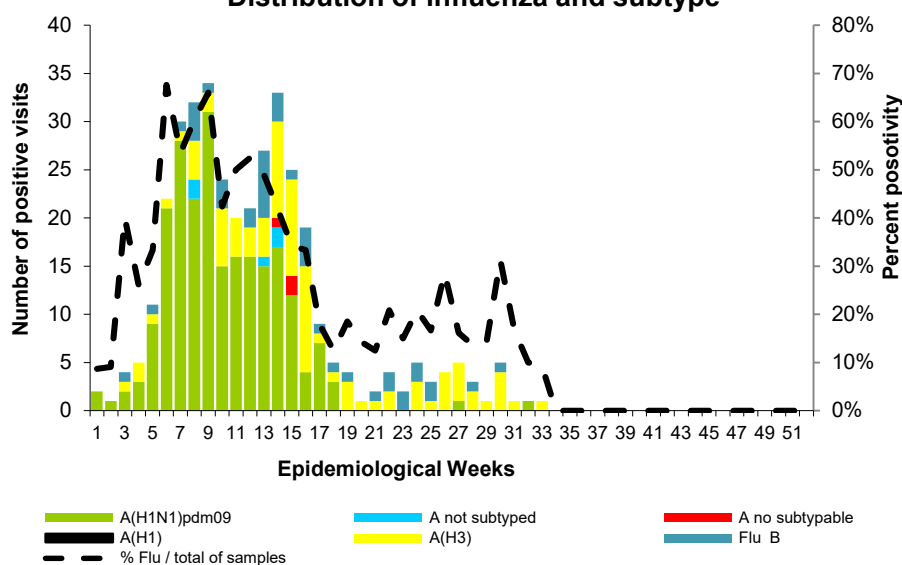
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



## Global Update EW33

Worldwide, the majority of the detections were seasonal influenza A viruses.

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



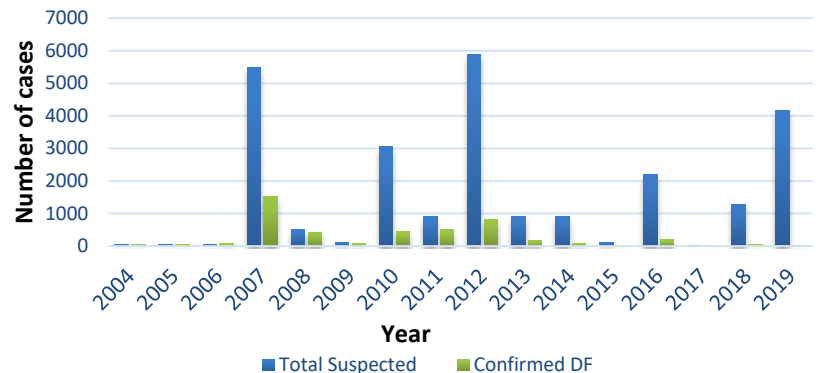
SENTINEL  
REPORT- 78 sites.  
Automatic reporting

# Dengue Bulletin

August 11– August 17, 2019 Epidemiological Week 33 Epidemiological Week 33



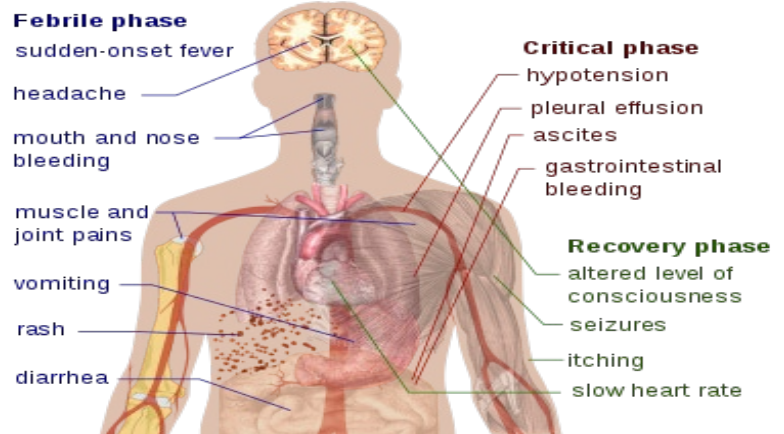
Dengue Cases by Year: 2004-2019, Jamaica



## Reported suspected and confirmed dengue with symptom onset in weeks 1-33, 2019

		2019		2018 YTD
		EW 33	YTD	
Total Suspected Dengue Cases		1	4183	200
Lab Confirmed Dengue cases		1	34	1
CONFIRMED	Dengue Related Deaths	0	6	0

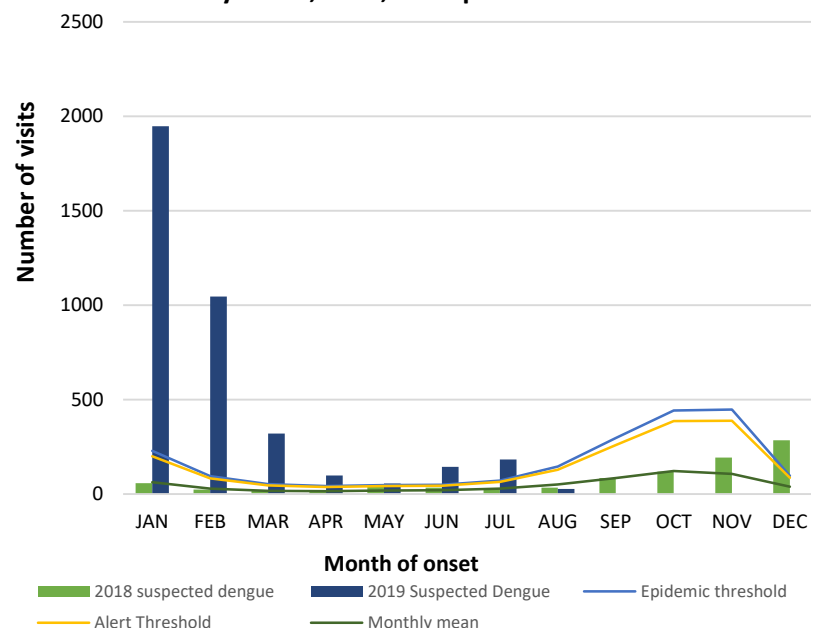
## Symptoms of Dengue fever



## Points to note:

- 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

## Working Women and Household Fast-food Consumption

*Author: Elroy Galbraith (BSc. Hons, MSc.)*

*Institution: Consumer Affairs Commission*

*Corresponding Author: Elroy Galbraith (BSc. Hons, MSc.)*

*Email: [elroy.galbraith@gmail.com](mailto:elroy.galbraith@gmail.com)*

### Abstract

#### Objectives:

This study examined how the participation of married women in the workforce affected household consumption of food away from home (FAFH) in Jamaica. The main hypothesis was that there was a positive relationship between hours worked by married females and household consumption of FAFH.

#### Method:

This study employed a backward step logistic regression on data collected during the 2012 Jamaica Survey of Living Conditions. Data came from households in which the female was in a married or common-law relationship with another household member. The predictors included employment data for both the husband and wife; household size, composition, economy and location; as well as the status of the female in the household. The outcome variable was a dummy variable indicating the decision to consume any meal away from home (breakfast, lunch or dinner).

#### Results:

Participation of the wife in the workforce significantly affected the household consumption of FAFH. The longer the wife worked outside the home the more likely it was for the household to purchase and consume FAFH. The most important predictor was the economy of the household, while the age and status of the female and household size were also significant.

#### Conclusion:

Participation of married females in the workforce increased household consumption of FAFH, even when controlling for various characteristics of the household. Traditional household divisions of labour along gender lines persist in the developing country, and could possibly pose a threat to nutrition and well-being.



The Ministry of Health and Wellness  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: [surveillance@moh.gov.jm](mailto:surveillance@moh.gov.jm)



8 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