

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## EPI WEEK 15

### Depression

**“There is no health without mental health”.**

Depression is a common but serious illness that interferes with daily life, the ability to work, sleep, study, eat, and enjoy life. Depression is caused by a combination of genetic, biological, environmental, and psychological factors.

Some genetics research indicates that risk for depression results from the influence of several genes acting together with environmental or other factors.

Some types of depression tend to run in families. However, depression can occur in people without family histories of depression too. People with depressive illnesses do not all experience the same symptoms. The severity, frequency, and duration of symptoms vary depending on the individual and his or her particular illness.

#### Key facts

- Depression is an illness characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks.
- People with depression normally have several of the following: a loss of energy; a change in appetite; sleeping more or less; anxiety; reduced concentration; indecisiveness; restlessness; feelings of worthlessness, guilt, or hopelessness; and thoughts of self-harm or suicide.
- In terms of burden and prevalence, depression continues to be the leading mental disorder and is twice as frequent in women as in men. From 10% to 15% of women in industrialized countries and from 20% to 40% of women in developing countries suffer from depression during pregnancy or the postpartum period.
- Experiencing and/or witnessing violence can negatively impact a person’s mental health and put them at greater risk for developing depression. Women who have experienced partner violence are almost twice as likely to experience depression compared to women who have not experienced any violence.
- Being exposed to violence can also increase a person’s risk of suicide.

**DEPRESSION**

**Symptoms**

- ISOLATION
- NO ENERGY
- NO CONCENTRATION
- ANGER
- ALCOHOL AND DRUG ABUSE
- SADNESS
- NO APPETITE
- SLEEP PROBLEM
- THOUGHTS OF DEATH
- GUILT

**What can you do**

- TRAVEL
- DOCTOR
- VITAMINS
- ANTIDEPRESSANTS
- SLEEP MIN 8H
- YOGA
- POSITIVE THOUGHTS
- CREATIVITY
- MUSIC
- SCHEDULE
- COMMUNICATION
- BATH



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



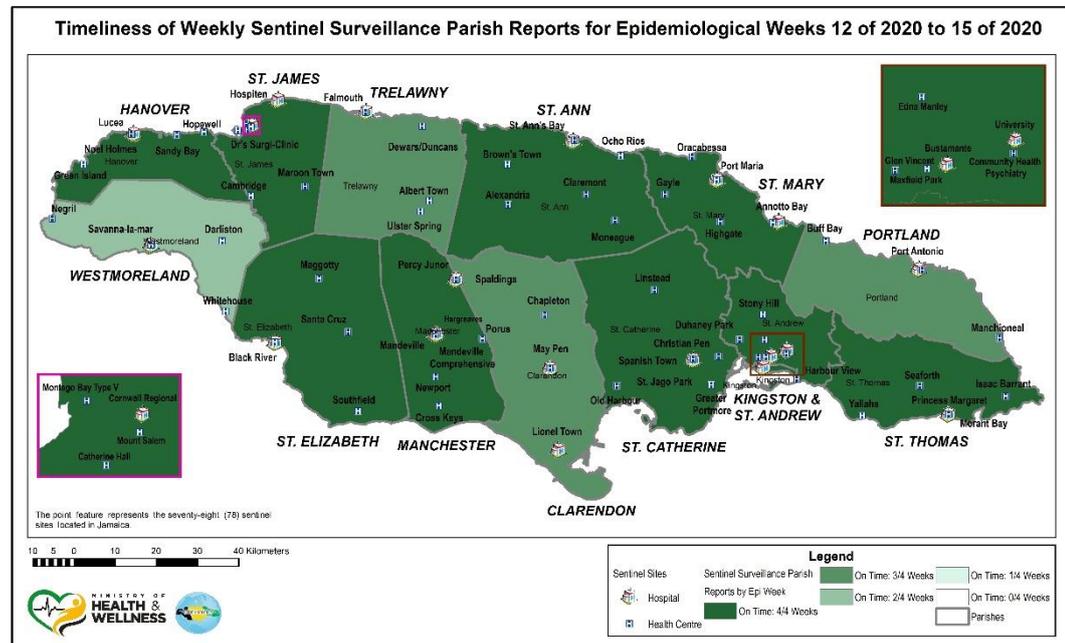
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 12 to 15 of 2020

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

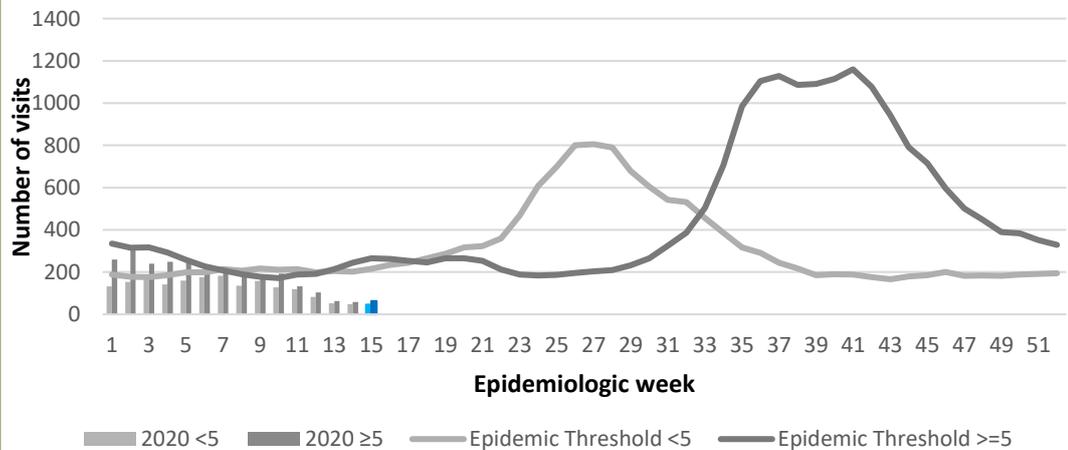
### FEVER

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 2020



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



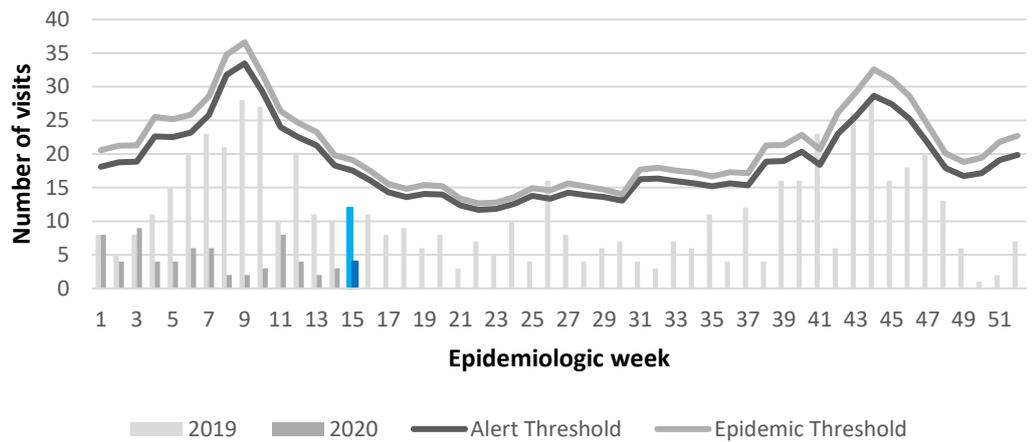
SENTINEL REPORT- 78 sites. Automatic reporting

**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 and 2020 vs. Weekly Threshold: Jamaica**

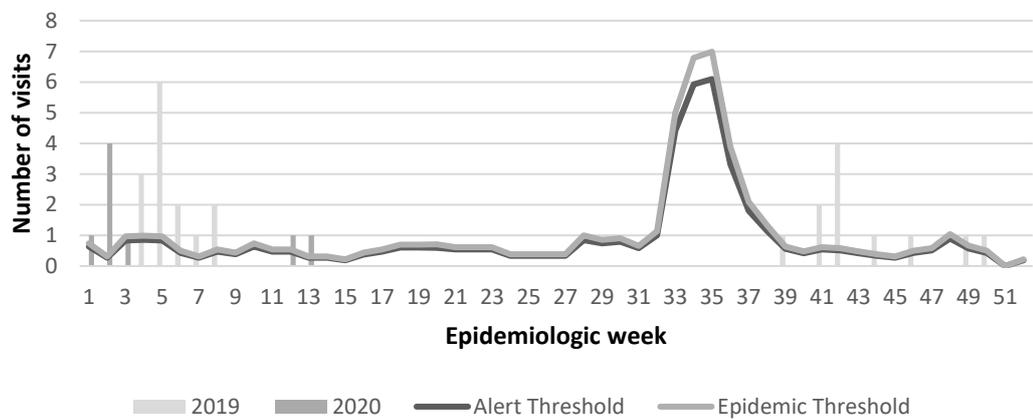


**FEVER AND HAEMORRHAGIC**

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.



**Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2019 and 2020 vs Weekly Threshold; Jamaica**



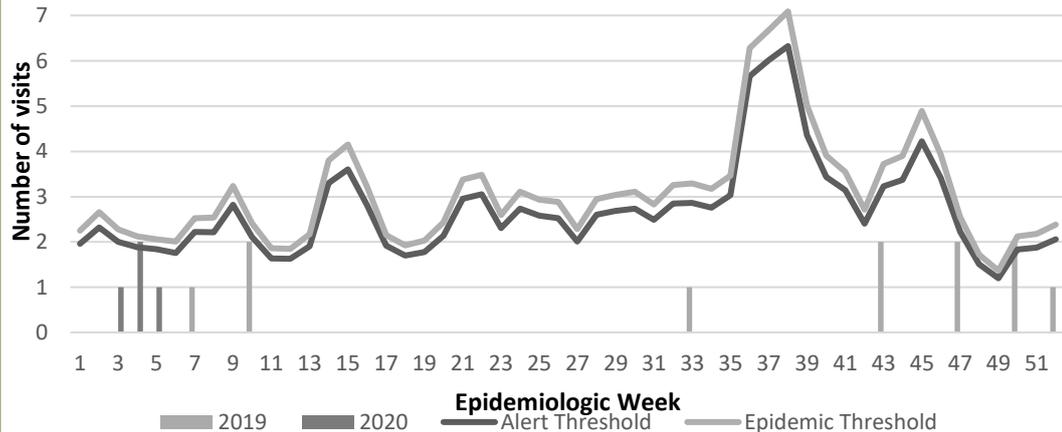
**FEVER AND JAUNDICE**

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.



**Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2019 and 2020**



**3 NOTIFICATIONS-**  
All clinical sites



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



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



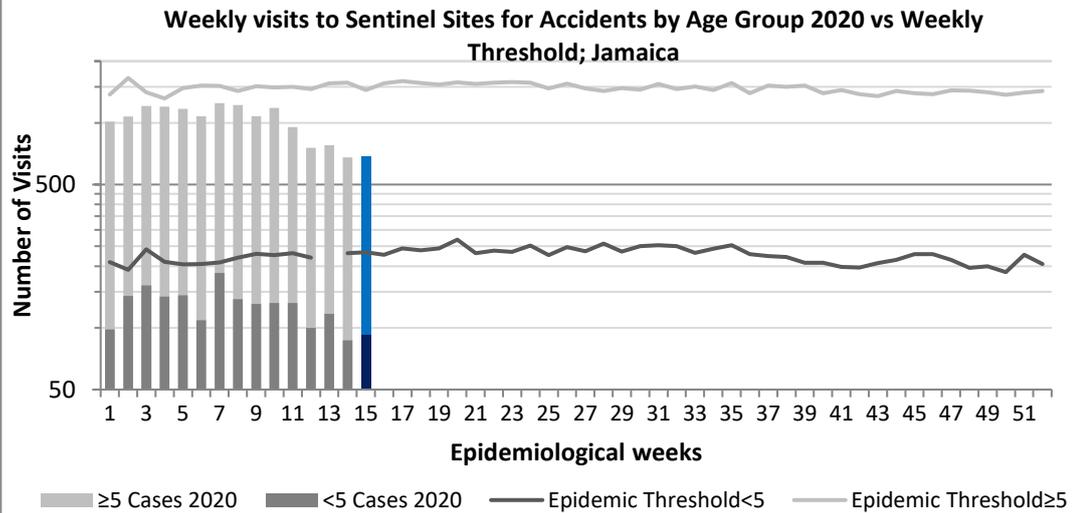
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

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

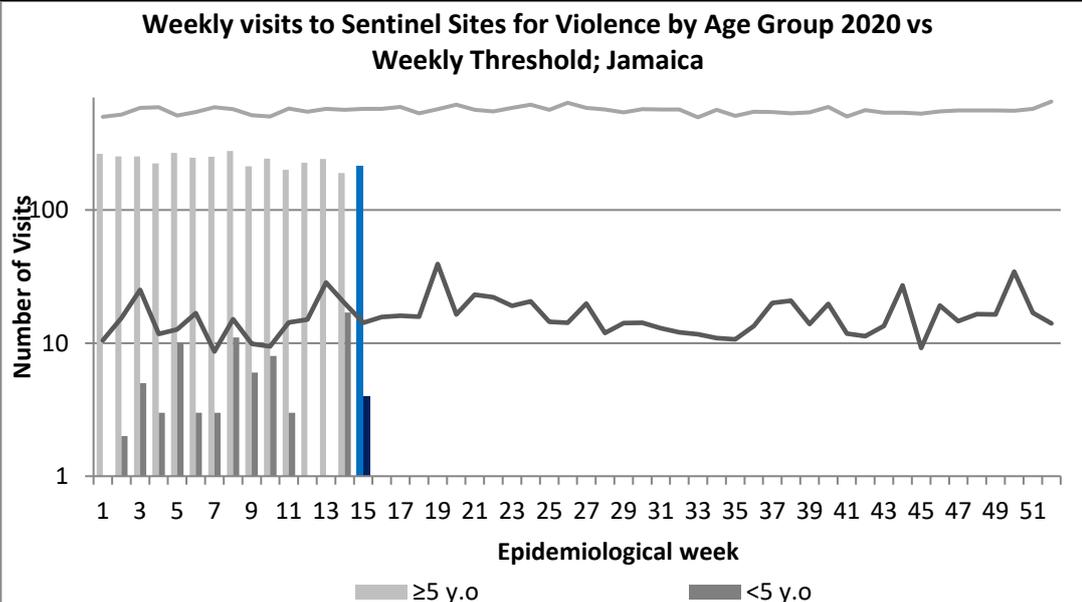
**KEY**

VARIATIONS OF BLUE SHOW CURRENT WEEK



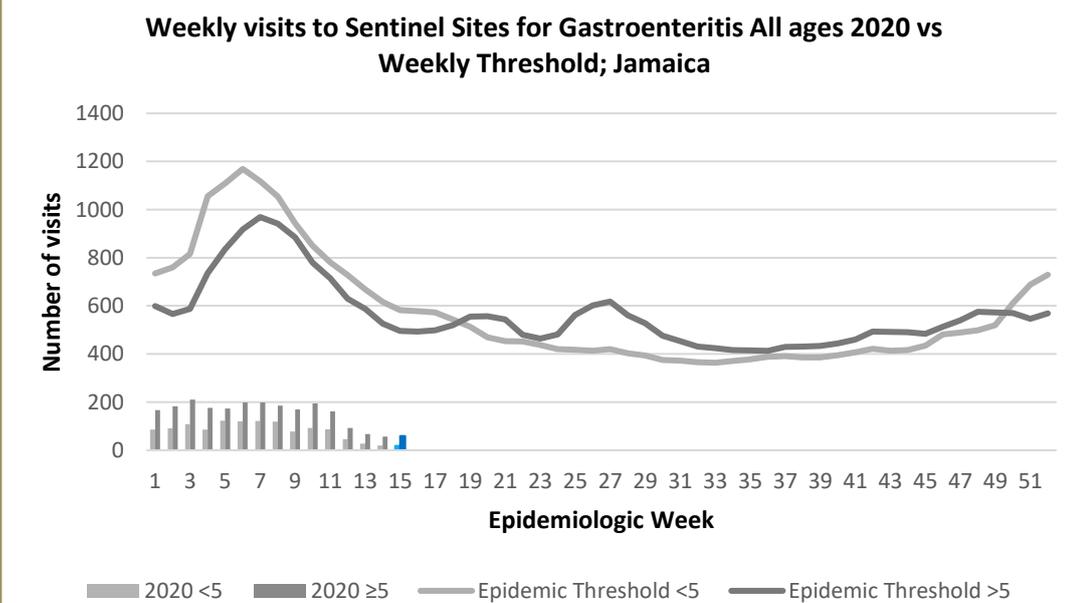
**VIOLENCE**

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 2020	PREVIOUS YEAR 2019	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	5	6	
	Cholera	0	0	
	Dengue Hemorrhagic Fever*	NA	NA	
	Hansen’s Disease (Leprosy)	0	0	
	Hepatitis B	0	1	
	Hepatitis C	0	1	
	HIV/AIDS	NA	NA	
	Malaria (Imported)	0	0	
	Meningitis (Clinically confirmed)	1	1	
EXOTIC/ UNUSUAL	Plague	0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	
	Neonatal Tetanus	0	0	
	Typhoid Fever	0	0	
	Meningitis H/Flu	0	0	
SPECIAL PROGRAMMES	AFP/Polio	0	0	
	Congenital Rubella Syndrome	0	0	
	Congenital Syphilis	0	0	
	Fever and Rash	Measles	0	0
		Rubella	0	0
	Maternal Deaths**	13	17	
	Ophthalmia Neonatorum	23	53	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	0	
	Tetanus	0	0	
	Tuberculosis	0	11	
Yellow Fever	0	0		
Chikungunya***	0	0		
Zika Virus****	0	0		

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.

\* Dengue Hemorrhagic Fever data include Dengue related deaths;

\*\* Figures include all deaths associated with pregnancy reported for the period. \* 2019 YTD figure was updated.

\*\*\* CHIKV IgM positive cases

\*\*\*\* Zika PCR positive cases

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



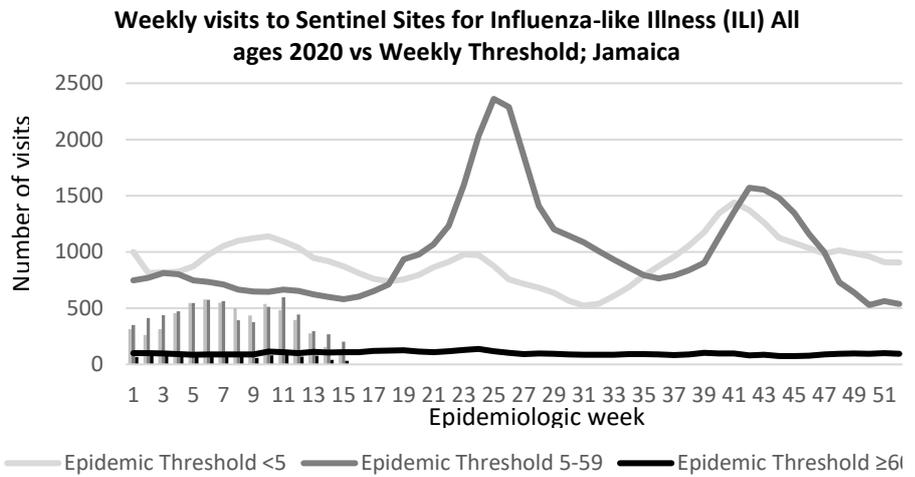
**SENTINEL REPORT-** 78 sites. Automatic reporting

# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 15*

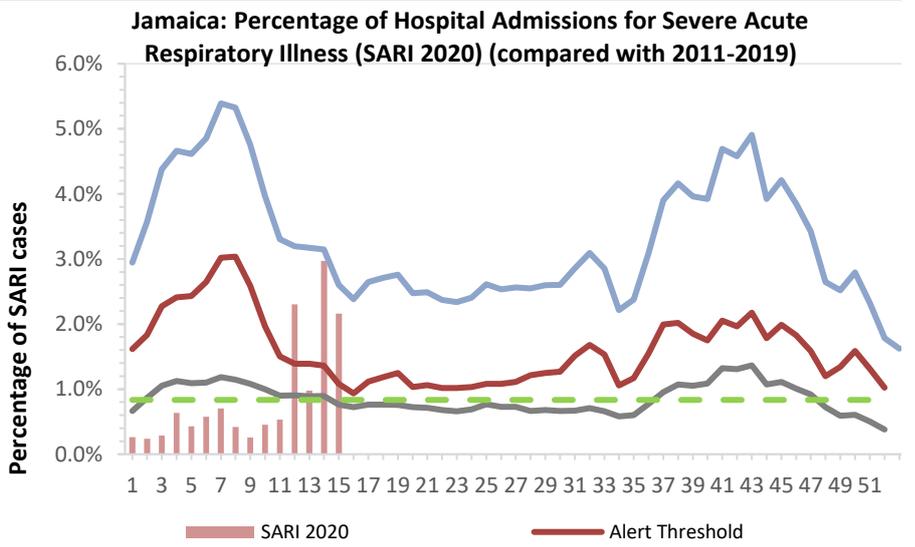
March 05, 2020-April 11, 2020 Epidemiological Week 15

	<i>EW 15</i>	<i>YTD</i>
SARI cases	21	167
<b>Total Influenza positive Samples</b>	<b>0</b>	<b>68</b>
<b>Influenza A</b>	<b>0</b>	<b>44</b>
H3N2	0	3
H1N1pdm09	0	38
Not subtyped	0	3
<b>Influenza B</b>	<b>0</b>	<b>23</b>
<b>Parainfluenza</b>	<b>0</b>	<b>0</b>



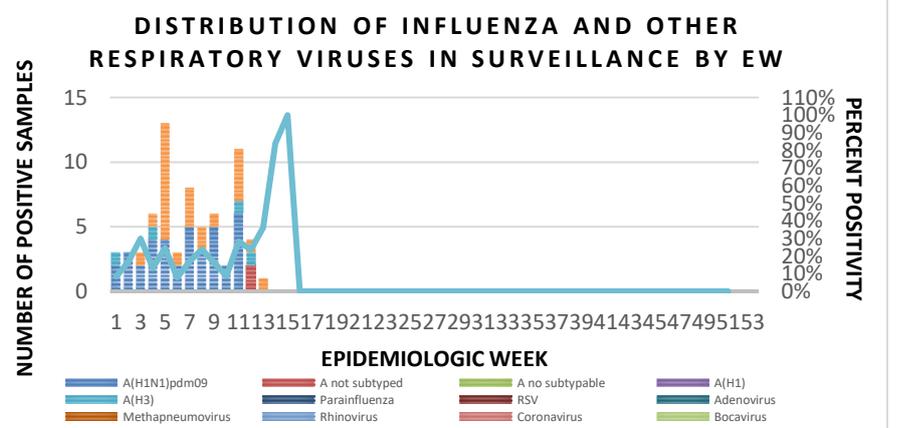
**Epi Week Summary**

During EW 15, 21 (twenty one) SARI admissions were reported.



**Caribbean Update EW 15**

Caribbean: Overall, influenza activity was elevated in the sub-region. In Cuba, influenza activity increased with influenza A and B viruses co-circulating. Influenza activity decreased in Belize with influenza A(H1N1)pdm09 and influenza B viruses co-circulating. All the French Territories are in the epidemic phase with a continued increase in influenza activity observed in Guadeloupe and Martinique. In Saint-Barthélemy influenza activity was stable. In the Dominican Republic, influenza activity slightly decreased with influenza A(H1N1)pdm09 predominance and influenza B/Yamagata co-circulating. In Saint Lucia, influenza-like illness was above the epidemic threshold with influenza A(H1N1)pdm09 virus circulating in recent weeks.



**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

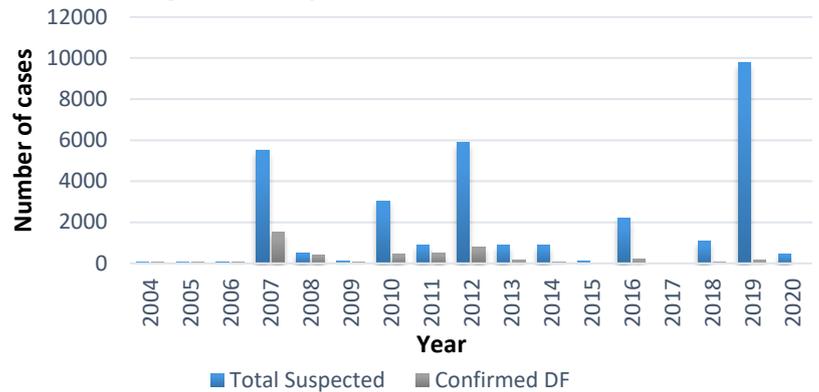
# Dengue Bulletin

April 05, 2020-April 11, 2020 Epidemiological Week 15

Epidemiological Week 15

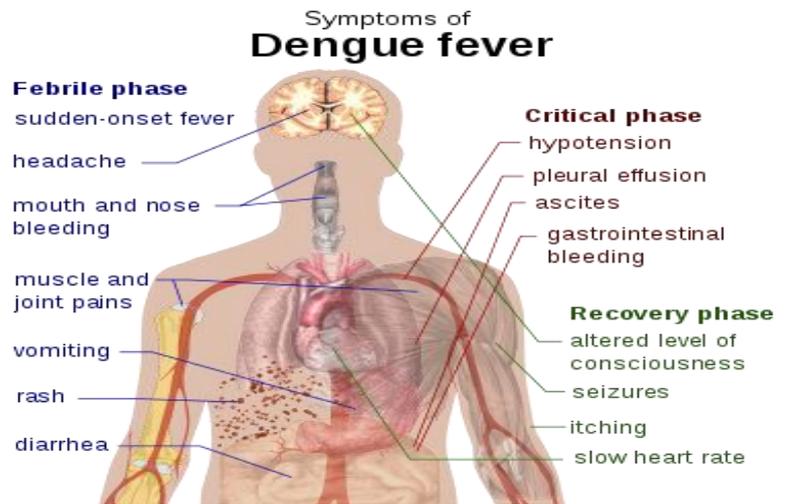


Dengue Cases by Year: 2004-2020, Jamaica



## Reported suspected and confirmed dengue with symptom onset in week 15 of 2020

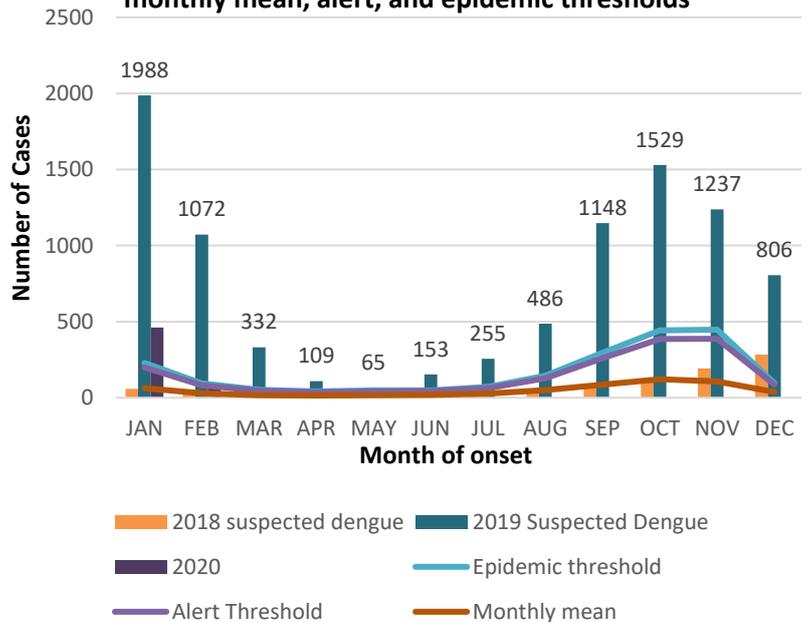
	2020	
	EW 15	YTD
Total Suspected Dengue Cases	0**	583**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**



### Points to note:

- \*\* figure as at April 20 , 2020
- 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

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# RESEARCH PAPER

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## ABSTRACT

### Using the Beck Depression Inventory to Identify Depressive Symptoms in Jamaican Youths

Ms. Denise Simpson – Citizen Security and Justice Programme, Ministry of National Security  
([dendenson@gmail.com](mailto:dendenson@gmail.com))

Mr. Kenneth Barnes - Citizen Security and Justice Programme, Ministry of National Security

#### **Objectives:**

This study examined the prevalence of depressive symptoms in youths and seeks to find the symptoms that tend to occur most frequently within this sample. The assessments were done at a treatment site within the Central Region of the Citizen, Security and Justice Program (CSJP) under the Ministry of National Security (MNS).

#### **Methods:**

Participants ages 18 to 30 years completed the Beck Depression Inventory II (BDI-II; Beck, Steer, & Brown, 1996), over the period January 2017 to December 2018. Other measures of socio-demographic background were also collected. Data gathered from the 21 categories of the BDI-II instrument were then entered into SPSS for analysis.

#### **Results:**

A wide cross-section of at risk youths from four (4) parishes in rural Jamaica were sampled (n=154; 61% male, 39% females; mean age =22.7. An analysis of the data showed that approximately seven in every ten participant (71.4%) reported some symptoms of depression with 16.9% reporting mild symptoms; 22.7% reporting moderate symptoms and 31.8% reporting severe symptoms of depression. Symptoms that were most prevalent in this sample included sadness (73.9%); punishment feelings (70.7%); and guilty feelings (67.5%)

Results also show that there were significant differences in gender in their prevalence of depressive symptoms. Females were more likely to report depressive symptoms than males (p=.004). Additionally, the analysis revealed significant differences in educational levels for depressive symptoms. Participants who reported having primary/all age as the highest level of education were more likely to report depressive symptoms than those who reported having secondary/high school education (p=.024).

#### **Conclusion:**

The use of the Beck Depression Inventory II (BDI-II) to assess depressive symptoms in youths in Jamaica is an effective way to identify prevalent symptoms that impact mental health for that population. Gender differences in depression scores are consistent with studies in other countries (Lowe, 2005). In comparison to previous studies (Beck 1967) this sample had a higher percentage of youths scoring in the “none to minimal” depressive and severely depressed ranges.

These findings warrant closer examination of the contributing factors of depression among Jamaican youths. This information should be useful for practitioners working with similar populations.



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8 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
30 sites. Actively  
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SENTINEL  
REPORT- 78 sites.  
Automatic reporting