

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Diabetes (Part 2)



#### Type 1 diabetes

Type 1 diabetes (previously known as insulin-dependent, juvenile or childhood-onset) is characterized by deficient insulin production and requires daily administration of insulin. In 2017 there were 9 million people with type 1 diabetes; the majority of them live in high-income countries. Neither its cause nor the means to prevent it are known.

#### Type 2 diabetes

Type 2 diabetes affects how your body uses sugar (glucose) for energy. It stops the body from using insulin properly, which can lead to high levels of blood sugar if not treated. Over time, type 2 diabetes can cause serious damage to the body, especially nerves and blood vessels.

Type 2 diabetes is often preventable. Factors that contribute to developing type 2 diabetes include being overweight, not getting enough exercise, and genetics. Early diagnosis is important to prevent the worst effects of type 2 diabetes. The best way to detect diabetes early is to get regular check-ups and blood tests with a healthcare provider.

Symptoms of type 2 diabetes can be mild. They may take several years to be noticed. Symptoms may be similar to those of type 1 diabetes but are often less marked. As a result, the disease may be diagnosed several years after onset, after complications have already arisen.

More than 95% of people with diabetes have type 2 diabetes. Type 2 diabetes was formerly called non-insulin dependent, or adult onset. Until recently, this type of diabetes was seen only in adults but it is now also occurring increasingly frequently in children.

#### Gestational diabetes

Gestational diabetes is hyperglycaemia with blood glucose values above normal but below those diagnostic of diabetes. Gestational diabetes occurs during pregnancy.

Women with gestational diabetes are at an increased risk of complications during pregnancy and at delivery. These women and possibly their children are also at increased risk of type 2 diabetes in the future.

Gestational diabetes is diagnosed through prenatal screening, rather than through reported symptoms.

Taken from WHO website on 28/November/2024

<https://www.who.int/news-room/fact-sheets/detail/diabetes>

## EPI WEEK 46



Syndromic Surveillance

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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.

Table showcasing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks – 43 to 46 of 2024

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

**KEY:**  
**Yellow** - late submission on Tuesday  
**Red** - late submission after Tuesday

Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2024													
43	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
44	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
45	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
46	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time

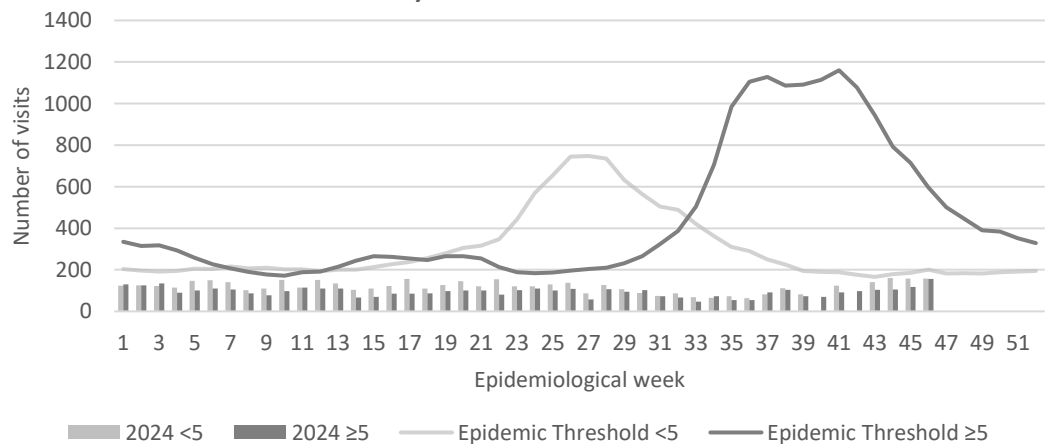
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED 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.



Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2024



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



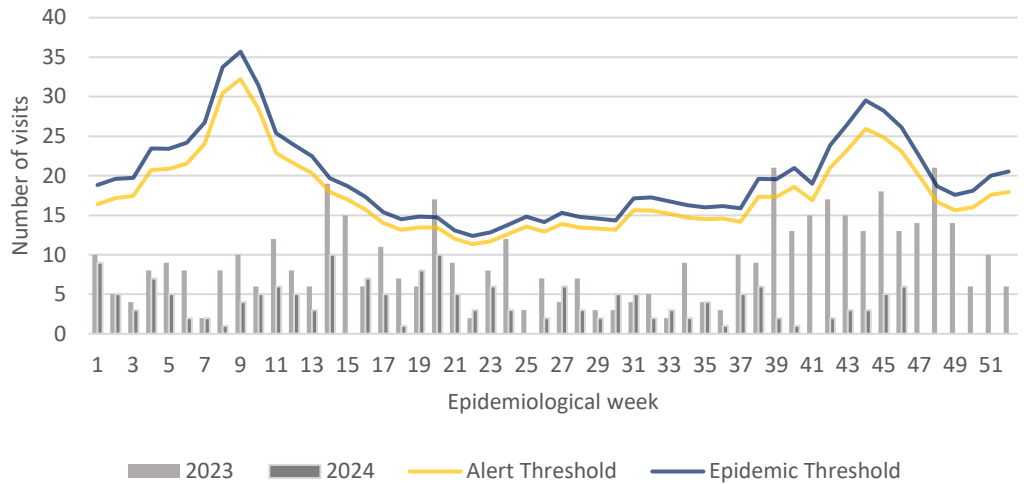
SENTINEL REPORT- 78 sites. Automatic reporting

**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 2023 and 2024 vs. Weekly Threshold: Jamaica**

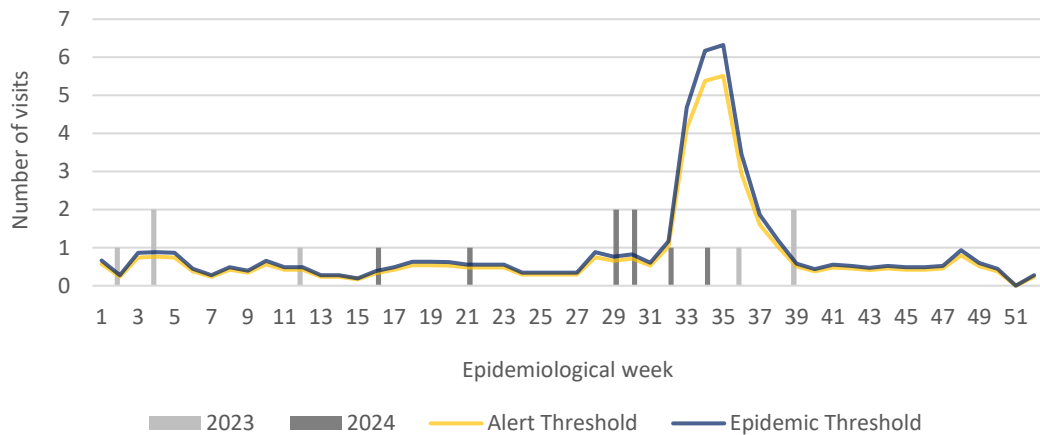


**FEVER AND HAEMORRHAGIC**

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 2023 and 2024 vs Weekly Threshold; Jamaica**



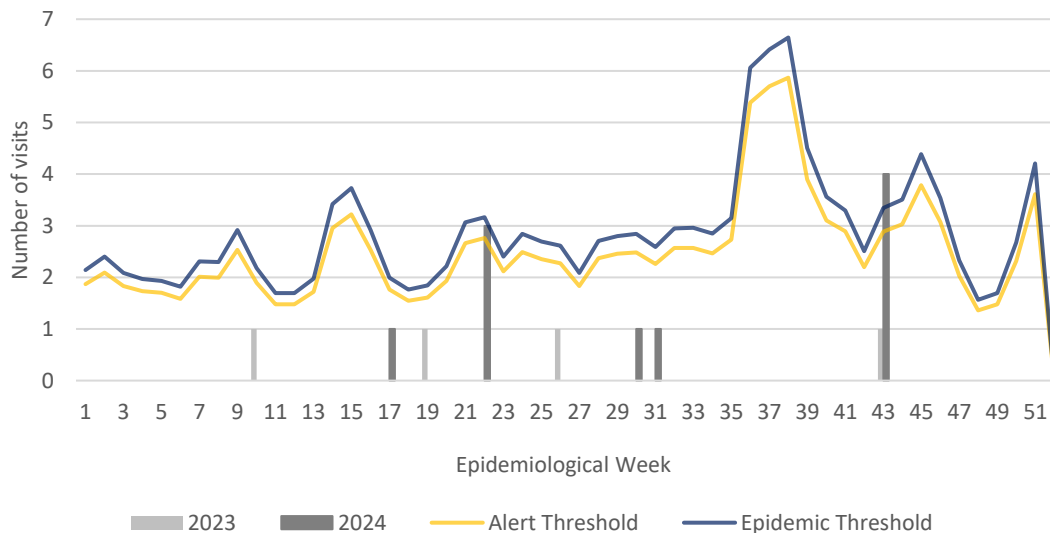
**FEVER AND JAUNDICE**

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 2023 and 2024**



**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

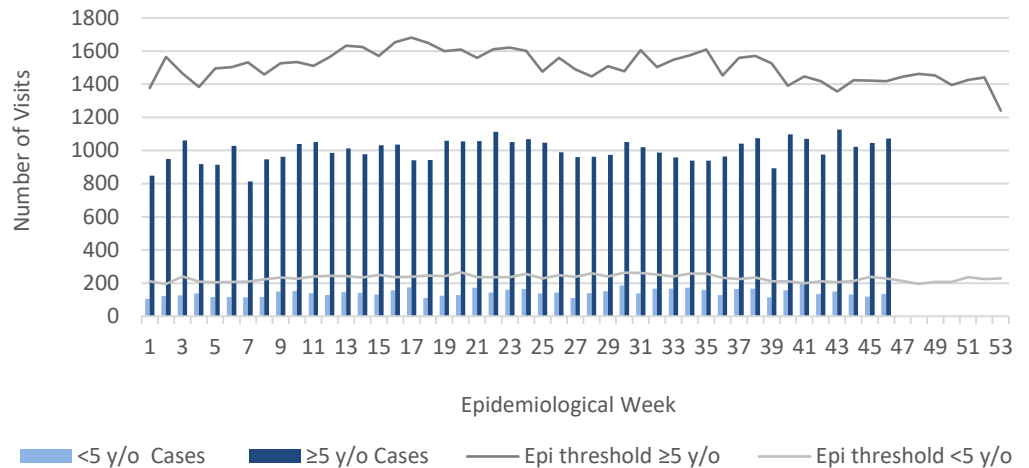


### ACCIDENTS

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



Weekly Visits to Sentinel Sites for Accident by Age Group 2024 vs. Weekly Threshold

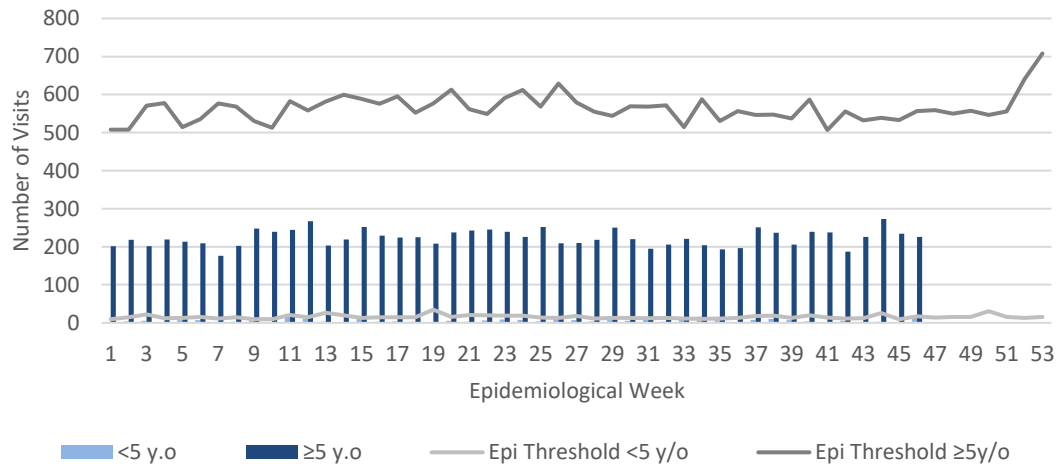


### VIOLENCE

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



Weekly Visits to Sentinel Sites for Violence by Age Groups 2024 vs. Weekly Threshold

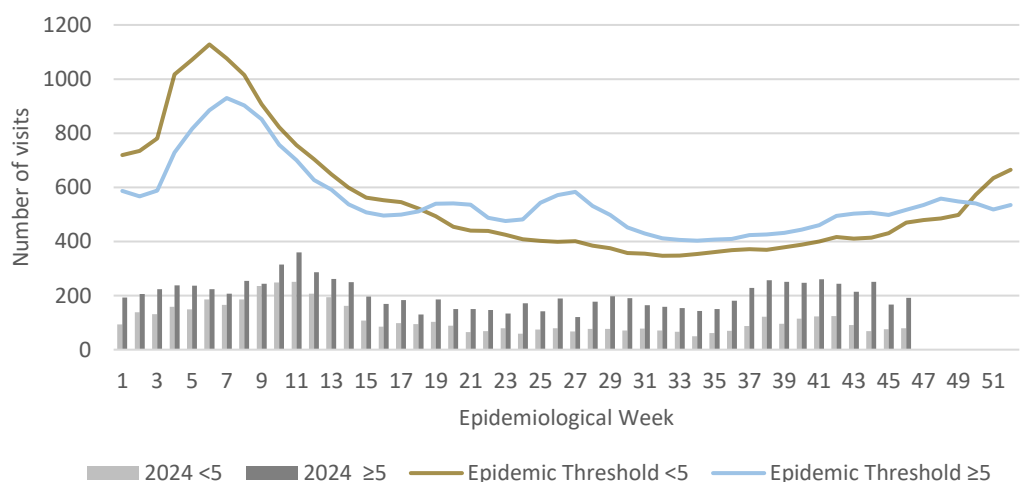


### GASTROENTERITIS

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



Weekly visits to Sentinel Sites for Gastroenteritis All ages 2024 vs Weekly Threshold; Jamaica



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 <sup>α</sup>		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.	
		CURRENT YEAR 2024	PREVIOUS YEAR 2023		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	288 <sup>β</sup>	355 <sup>β</sup>	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.  <sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;  <sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.	
	Cholera	0	0		
	Severe Dengue <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	689	3799		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	27	58		
	Hepatitis C	3	28		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	2	3		
	Meningitis	13	25		
	Monkeypox	0	3		
EXOTIC/ UNUSUAL	Plague	0	0	<sup>ε</sup> CHIKV IgM positive cases <sup>θ</sup> Zika PCR positive cases <sup>β</sup> Updates made to prior weeks.  <sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0		
	Neonatal Tetanus	0	0		
	Typhoid Fever	0	0		
	Meningitis H/Flu	1	2		
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 <sup>δ</sup>	58	51		
	Ophthalmia Neonatorum	166	155		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	29	59		
Yellow Fever	0	0			
Chikungunya <sup>ε</sup>	0	0			
Zika Virus <sup>θ</sup>	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



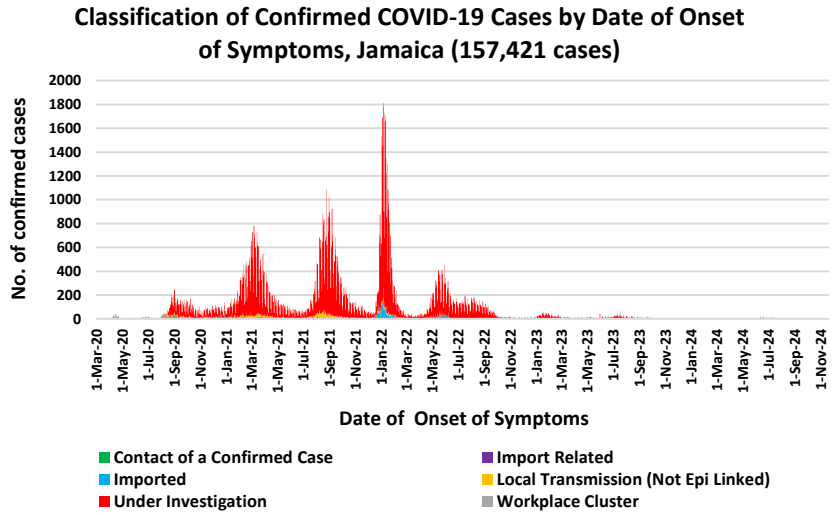
**SENTINEL REPORT-** 78 sites. Automatic reporting



# COVID-19 Surveillance Update

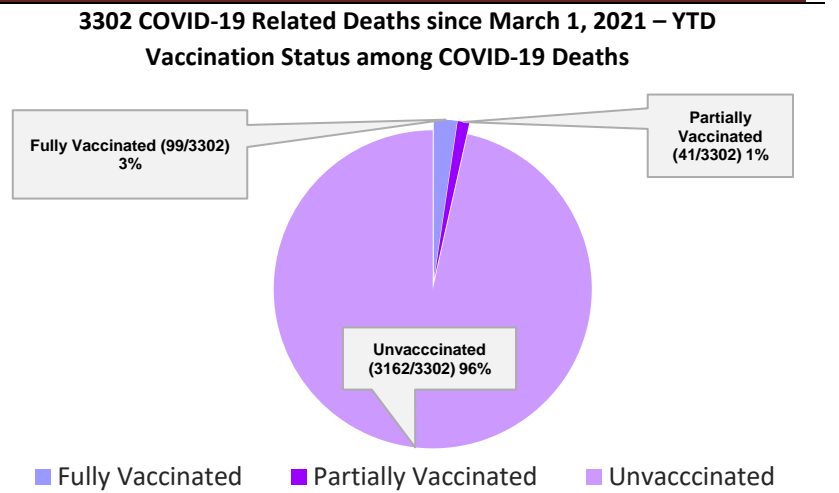
CASES	EW 46	Total
Confirmed	3	157421
Females	0	90701
Males	3	66717
Age Range	35 to 83 years old	1 day to 108 years

\* 3 positive cases had no gender specification  
 \* PCR or Antigen tests are used to confirm cases  
 \* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



## COVID-19 Outcomes

Outcomes	EW 46	Total
ACTIVE *2 weeks*		5
DIED – COVID Related	0	3866
Died - NON COVID	0	388
Died - Under Investigation	0	154
Recovered and discharged	0	103226
Repatriated	0	93
Total		157421

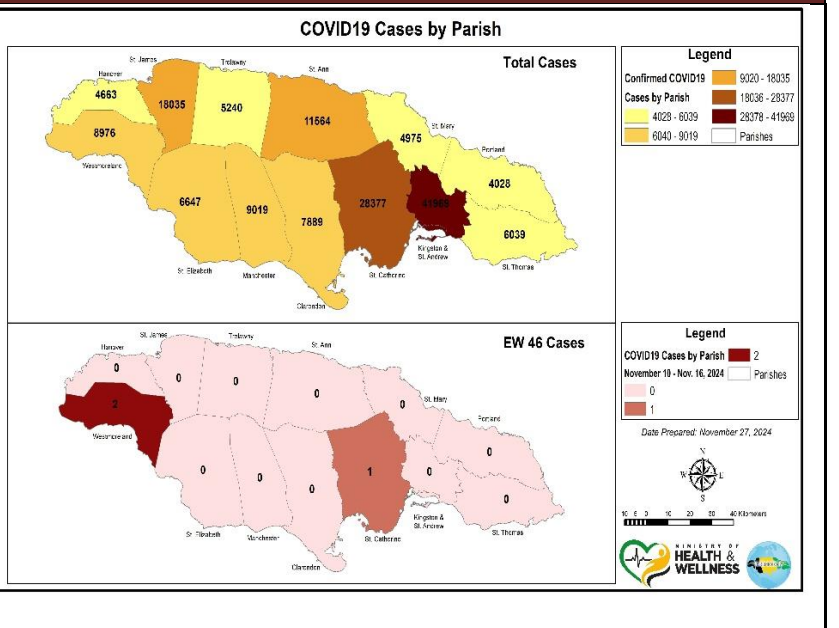


\*Vaccination programme March 2021 – YTD  
 \* Total as at current Epi week

## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

**SARS-CoV-2**



### COVID-19 WHO Global Statistics EW 43-46, 2024

Epi Week	Confirmed Cases	Deaths
43	59500	930
44	54800	811
45	46000	759
46	41200	571
<b>Total (4weeks)</b>	<b>201500</b>	<b>3071</b>

**6 NOTIFICATIONS-**  
All clinical sites

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

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

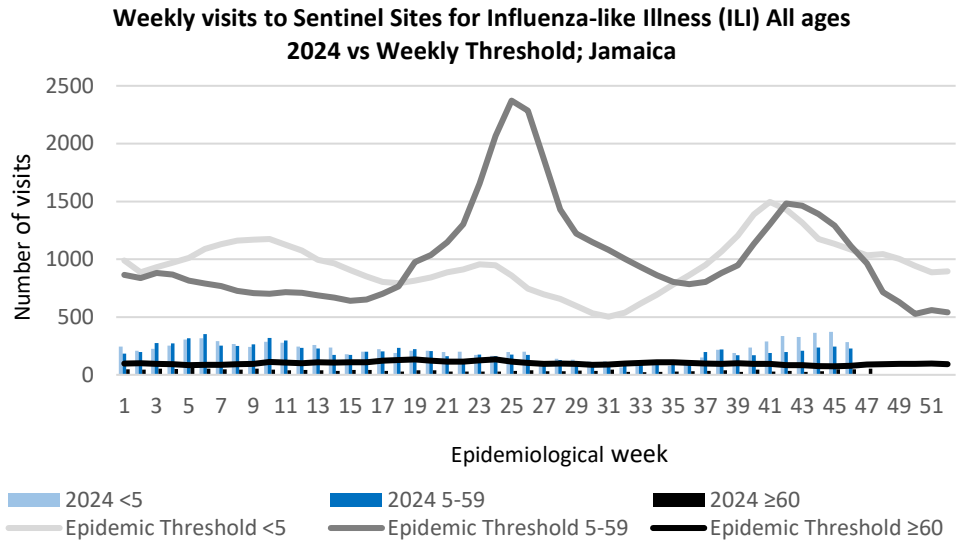
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# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 46

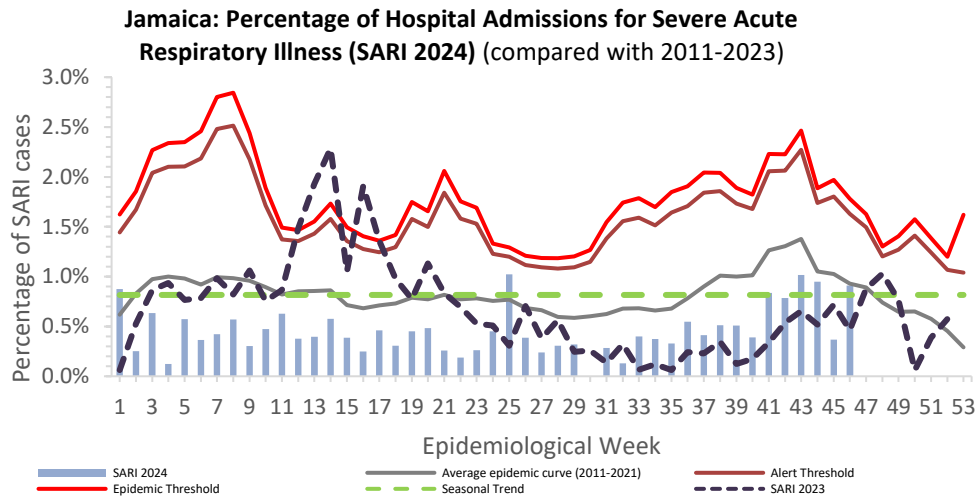
November 9, 2024 – November 16, 2024 Epidemiological Week 46

	EW 46	YTD
SARI cases	16	334
<b>Total Influenza positive Samples</b>	<b>10</b>	<b>167</b>
<b>Influenza A</b>	<b>10</b>	<b>162</b>
H3N2	0	42
H1N1pdm09	10	120
Not subtyped	0	0
<b>Influenza B</b>	<b>0</b>	<b>5</b>
B lineage not determined	0	0
B Victoria	0	5
<b>Parainfluenza</b>	<b>0</b>	<b>0</b>
<b>Adenovirus</b>	<b>0</b>	<b>0</b>
<b>RSV</b>	<b>8</b>	<b>62</b>



## Epi Week Summary

During EW 46, sixteen (16) SARI admissions were reported.



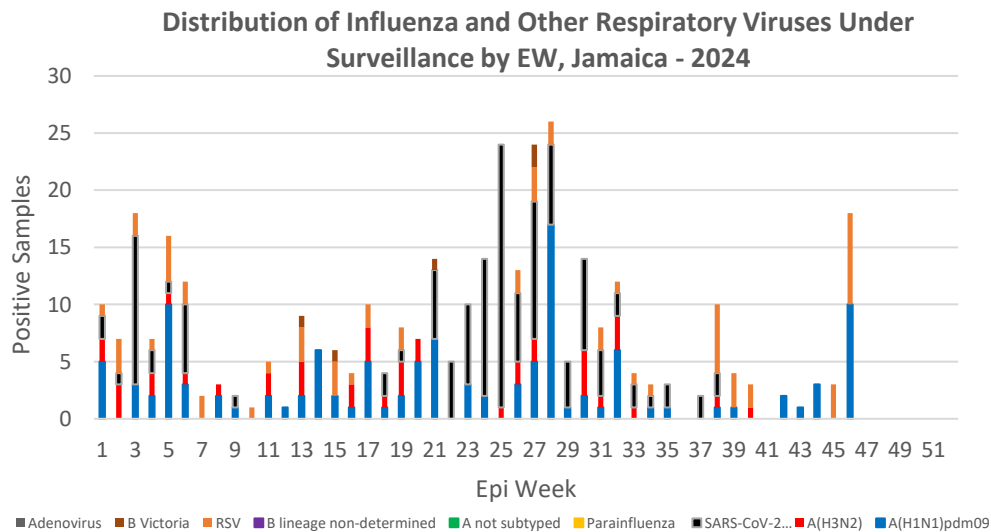
## Caribbean Update EW 46

**Caribbean:** ILI cases have remained low over the past four weeks, although the proportion of RSV- positive cases has increased. SARI cases remain low, but an increase in SARS-CoV-2 positivity has been observed. Influenza activity remains at low levels, predominantly A(H1N1)pdm09. RSV and SARS-CoV-2 activity have risen significantly in several countries over the past four weeks.

**By country:** In the past four weeks, influenza activity has been observed in Belize, Barbados and Jamaica. SARS-CoV-2 activity has been reported in Haiti. RSV activity has been detected in Belize, the Dominican Republic, Jamaica, Barbados, the Cayman Islands, Guyana and Saint Vincent and the Grenadines.

In Jamaica, SARI cases remain around the epidemic threshold, while pneumonia cases are declining at epidemic levels. Over the past four weeks, influenza activity has exceeded the epidemic threshold, accompanied by an increase in RSV activity.

(taken from PAHO Respiratory viruses weekly report) <https://www.paho.org/en/influenza-situation-report>



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



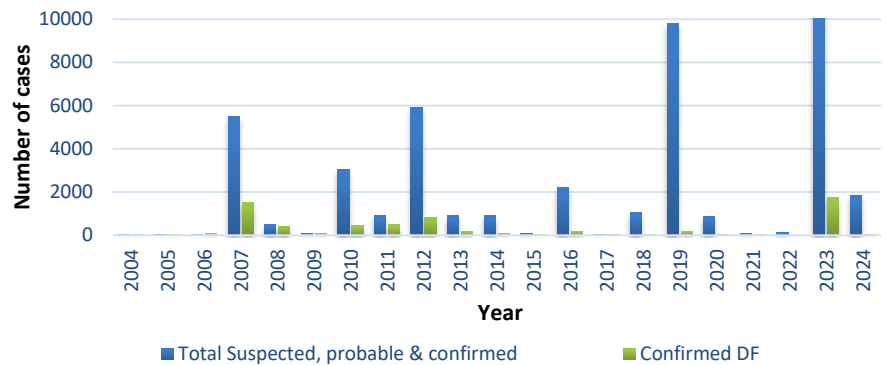
# Dengue Bulletin

November 9, 2024 – November 16, 2024 Epidemiological Week 46


Epidemiological Week 46



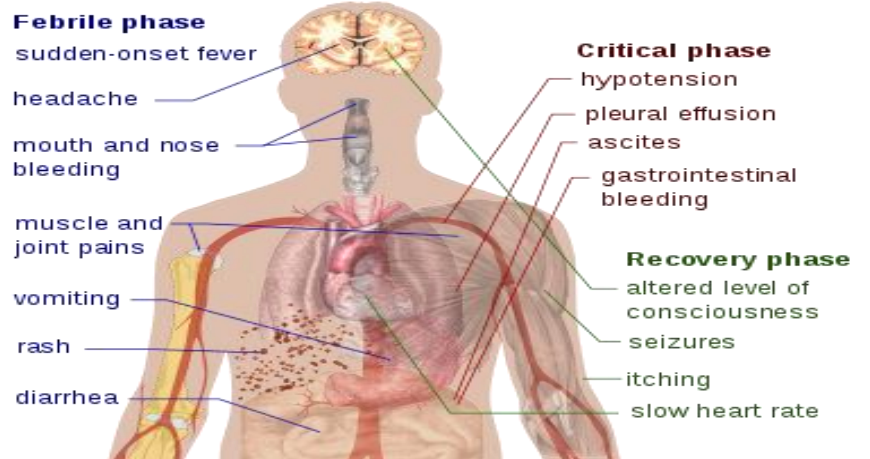
Dengue Cases by Year: 2004-2024, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 46 of 2024

	2024*	
	EW 46	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	0	1859
Lab Confirmed Dengue cases	0	43
CONFIRMED Dengue Related Deaths	0	2

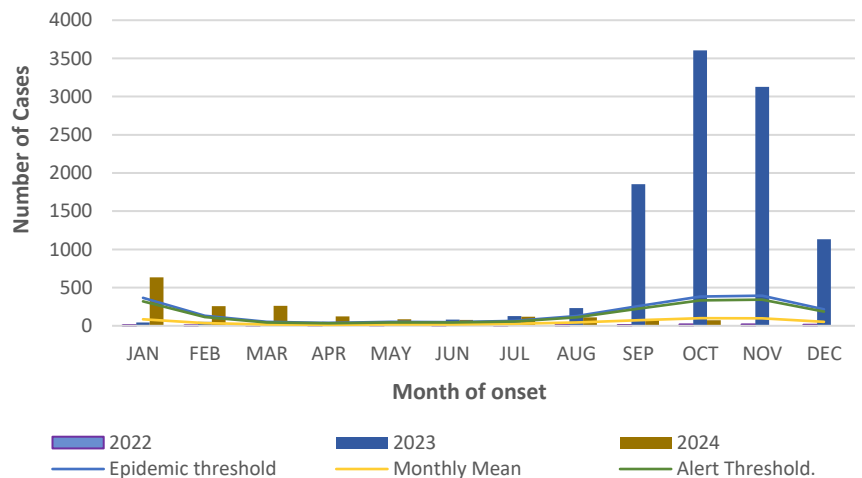
## Symptoms of Dengue fever



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at November 28, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected, probable and confirmed dengue cases for 2022 - 2024 versus monthly mean, alert, and epidemic thresholds (2007-2022)



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



# RESEARCH PAPER

## Abstract

NHRC-23-P05

### The Demographic Characteristics of Patients Referred to the Liaison Psychiatric Service at the Bustamante Hospital for Children

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<sup>1</sup>University of the West Indies, Mona Campus-University Hospital of the West Indies

**Objective:** To Investigate the epidemiological characteristics of children with medical illnesses who are referred to the psychiatric liaison service at the Bustamante Hospital for Children

**Method:** This is a secondary data analysis of a longitudinal census of all patients seen on the liaison psychiatric service of the Bustamante Hospital for children from July 2016- June 2020. Frequencies were generated of the gender, age, reason for referral, medical and psychiatric diagnoses of patients referred to the liaison service. Chi-Square analyses was used to test the statistical association between the types of medical/surgical disorders which referred children had, with their psychiatric diagnoses.

**Results:** There were 496 patients referred to the Pediatric Liaison service between July 2016 to June 2020. Fifty-three percent of referrals were male and 47% were female. The mean age was 8.82 years with a standard deviation of 2.801 years. The median age was 9.00 years, and the modal age was 10 years. The most common reasons for referrals were behavioural issues (25%) and psychological trauma (25%). Among referred patients, neurodevelopmental/ neurocognitive disorders (Autism Spectrum Disorder, Communicative Disorders, Attention Deficit Hyperactivity Disorder, Intellectual Disabilities, Learning Disorders) was the most commonly diagnosed group of psychiatric disorder; 23.3% (n=107). The second most common group of psychiatric disorders was Mood Disorders (Depressive Disorders, Bipolar Disorders, Adjustment Disorders, Bereavement Disorder) with 22.3% of patients (n= 103). Half of the patients referred; 50% (n=248), had a chronic medical/surgical illness and their psychiatric disorder was associated with that. Nineteen percent (n=93) of patients had a psychiatric disorder with no medical condition. There was a statistically significant association between having Medical/Surgical Diagnoses and anxiety disorders ( $p < .005$ ), mood disorders ( $p < .005$ ), neurodevelopmental disorders ( $p < .05$ ) and Somatic disorders ( $p < .005$ ).

**Conclusion:** Children with medical and surgical disorders, at the Bustamante Hospital for Children's hospital, have psychiatric and psychological issues which require the interventions of The Liaison Psychiatric Service.

**Keywords:** paediatric consultation-liaison psychiatry service; demographic characteristics



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9 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.  
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