

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Diarrhoeal Diseases (Part 1)



Diarrhoeal disease is the third leading cause of death in children under 5 years old and is responsible for killing around 443 832 children every year. Diarrhoea can last several days and can leave the body without the water and salts that are necessary for survival. In the past, for most people, severe dehydration and fluid loss were the main causes of diarrhoea-associated deaths. Now, other causes such as septic bacterial infections are likely to account for an increasing proportion of all diarrhoea-associated deaths. Children who are malnourished or have impaired immunity, as well as people living with HIV, are most at risk of life-threatening diarrhoea.

Diarrhoea is defined as the passage of 3 or more loose or liquid stools per day (or more frequent passage than is normal for the individual). Frequent passing of formed stools is not diarrhoea, nor is the passing of loose, pasty stools by breastfed babies. Diarrhoea is usually a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, viral and parasitic organisms. Infection is spread through contaminated food or drinking-water, or from person-to-person as a result of poor hygiene.

Interventions to prevent diarrhoea, including safe drinking-water, use of improved sanitation and hand washing with soap, can reduce disease risk. Diarrhoea should be treated with oral rehydration solution (ORS), a solution of clean water, sugar and salt. In addition, a 10–14 day supplemental treatment course of dispersible zinc tablets shortens diarrhoea duration and improves outcomes.

There are 3 clinical types of diarrhoea:

- acute watery diarrhoea – lasts several hours or days and includes cholera
- acute bloody diarrhoea – also called dysentery
- persistent diarrhoea – lasts 14 days or longer.

### Scope of diarrhoeal disease

Diarrhoeal disease is a leading cause of child mortality and morbidity in the world, and mostly results from contaminated food and water sources. Worldwide, 780 million individuals lack access to improved drinking-water and 2.5 billion lack improved sanitation. Diarrhoea due to infection is widespread throughout developing countries.

In low-income countries, children under 3 years old experience on average three episodes of diarrhoea every year. Each episode deprives the child of the nutrition necessary for growth. As a result, diarrhoea is a major cause of malnutrition, and malnourished children are more likely to fall ill from diarrhoea.

Taken from WHO website on 25/Aug/2025  
<https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease>

## EPI WEEK 33



Syndromic Surveillance

Accidents

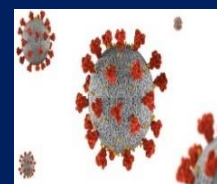
Violence

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Class 1 Notifiable Events

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COVID-19 Surveillance

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Dengue Surveillance

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## 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 – 30 to 33 of 2025

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
2025													
30	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
31	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
32	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
33	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

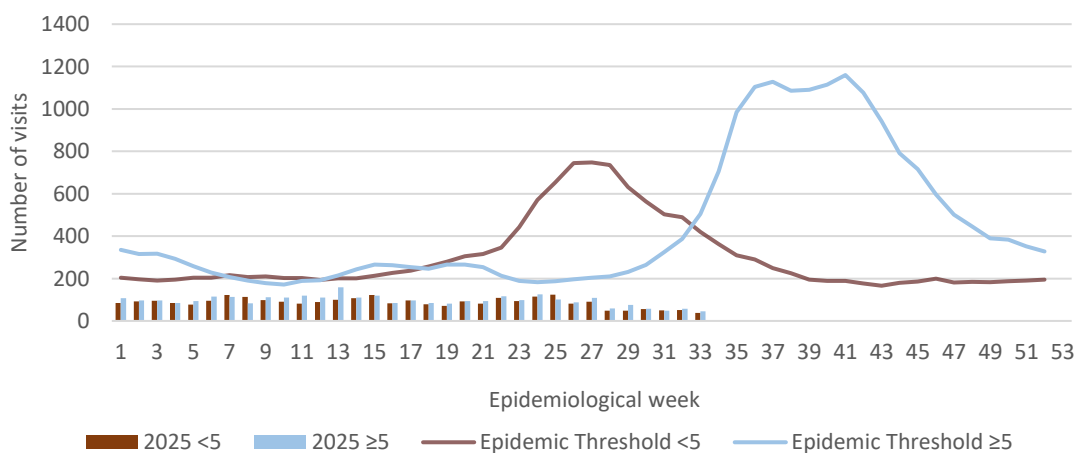
## SYNDROMIC SURVEILLANCE

## 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 2025



2 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
30 sites. Actively  
pursued



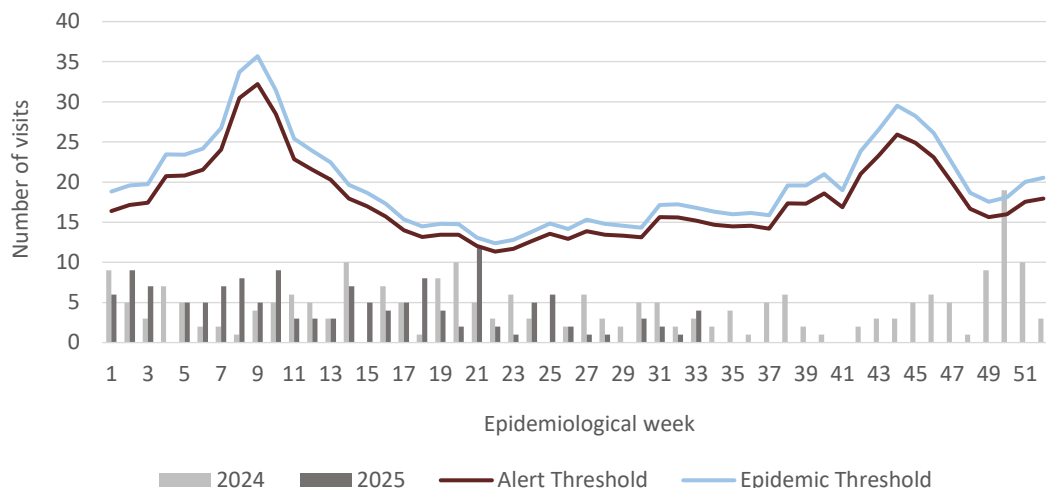
SENTINEL  
REPORT- 78 sites.  
Automatic reporting

**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).



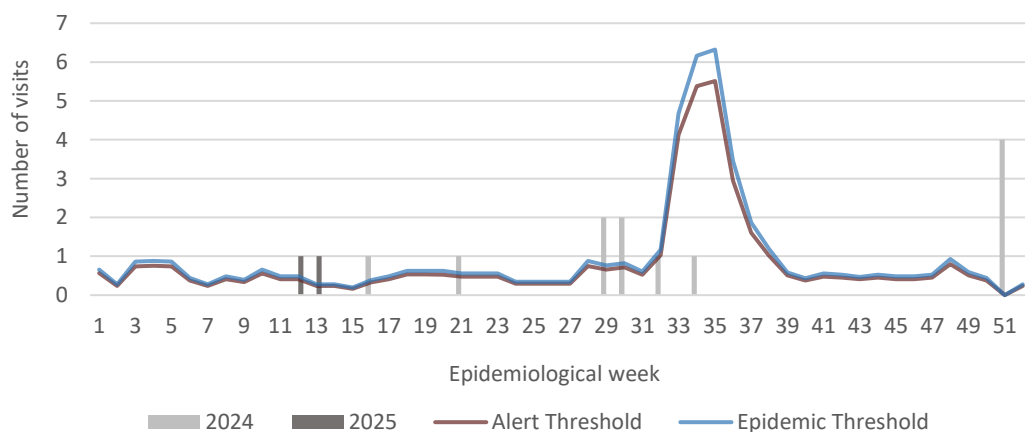
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2024 and 2025 vs. Weekly Threshold: Jamaica

**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 symptoms 2024 and 2025 vs Weekly Threshold; Jamaica

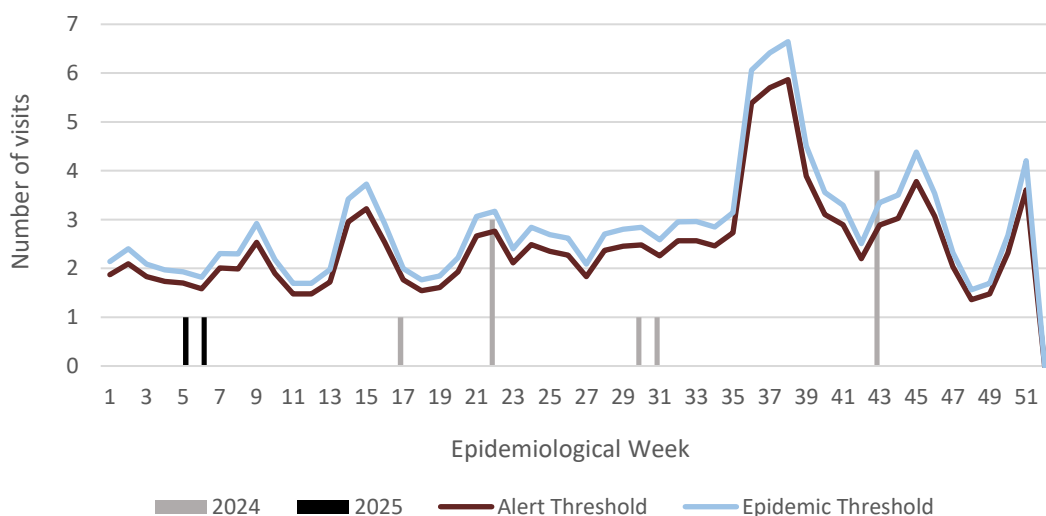
**FEVER AND JAUNDICE**

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.



Weekly visits for Fever and Jaundice symptoms: Jamaica, Weekly Threshold vs Cases 2024 and 2025



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**NOTIFICATIONS-**  
All clinical sites



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



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



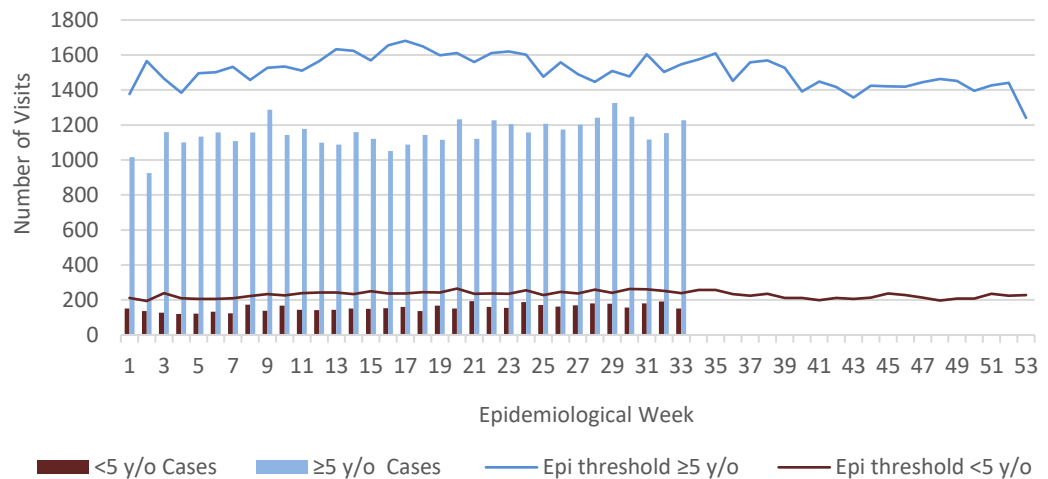
**SENTINEL REPORT-** 78 sites. Automatic reporting

## 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 2025 vs. Weekly Threshold

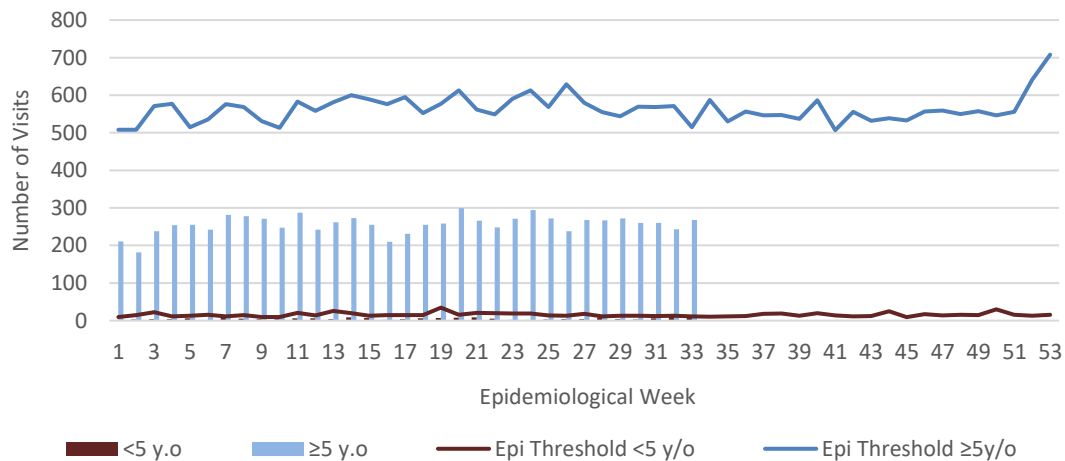


## VIOLENCE

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 2025 vs. Weekly Threshold

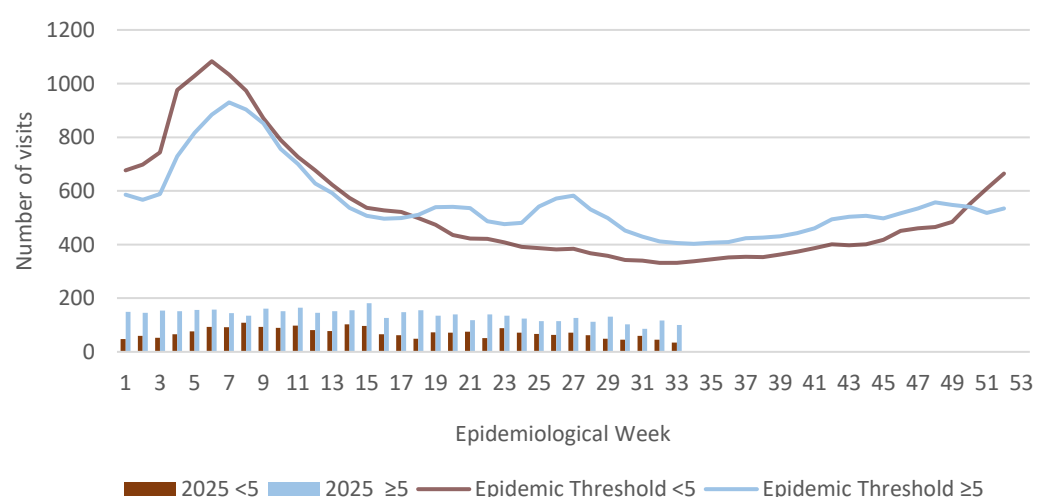


## GASTROENTERITIS

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 2025 vs Weekly Threshold; Jamaica



4 NOTIFICATIONS-  
All clinical  
sites



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REPORTS- Detailed Follow  
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CLASS ONE NOTIFIABLE EVENTS					Comments
			Confirmed YTD <sup>α</sup>		
	CLASS 1 EVENTS		CURRENT YEAR 2025	PREVIOUS YEAR 2024	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		88 <sup>β</sup>	239 <sup>β</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.
	Cholera		0	0	
	Severe Dengue <sup>γ</sup>		See Dengue page below	See Dengue page below	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	COVID-19 (SARS-CoV-2)		278	595	
	Hansen’s Disease (Leprosy)		0	0	Dengue Hemorrhagic Fever data include Dengue related deaths;
	Hepatitis B		3	32	
	Hepatitis C		1	9	δ Figures include all deaths associated with pregnancy reported for the period.
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	ε CHIKV IgM positive cases
	Meningitis		8	13	
	Monkeypox		1	0	θ Zika PCR positive cases
EXOTIC/ UNUSUAL	Plague		0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	α Figures are cumulative totals for all epidemiological weeks year to date.
	Neonatal Tetanus		0	0	
	Typhoid Fever		0	0	NA- Not Available
	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 <sup>δ</sup>		37	42	
	Ophthalmia Neonatorum		34	133	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		2	0	
	Tuberculosis		21	33	
	Yellow Fever		0	0	
Chikungunya <sup>ε</sup>		0	0		
Zika Virus <sup>θ</sup>		0	0		



5 NOTIFICATIONS-  
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sites



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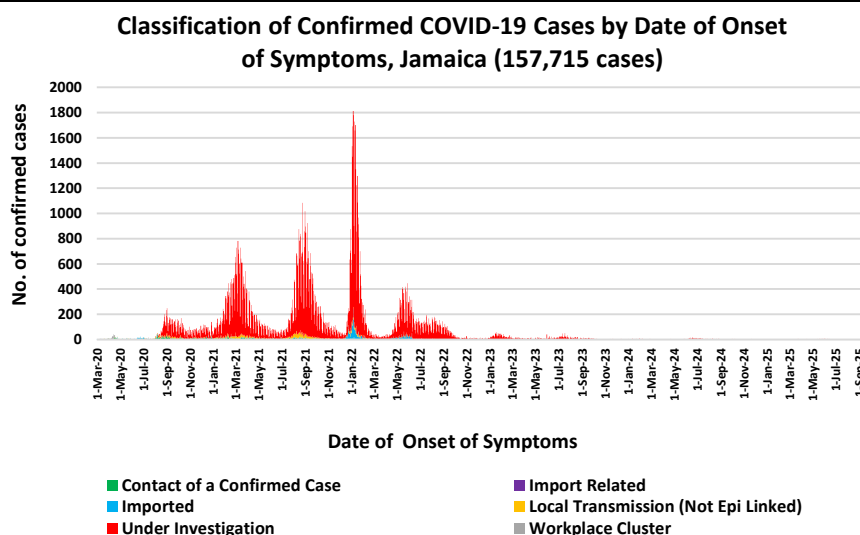


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# COVID-19 SURVEILLANCE

CASES	EW 33	Total
Confirmed	5	157715
Females	3	90861
Males	2	66851
Age Range	3 to 69 years	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.		



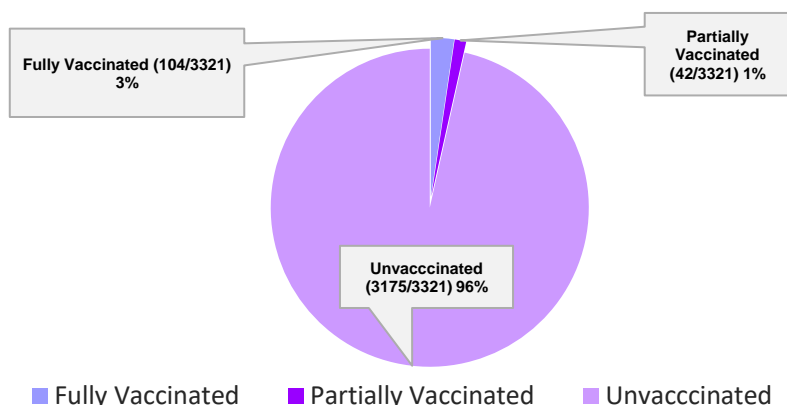
## COVID-19 Outcomes

Outcomes	EW 33	Total
ACTIVE *2 weeks*		10
DIED – COVID Related	0	3885
Died - NON COVID	0	400
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157715

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

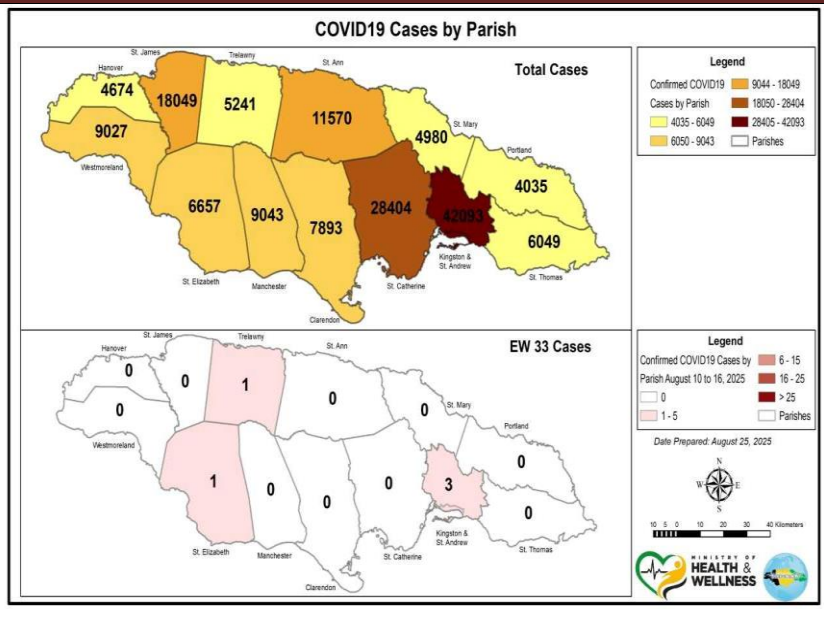
## 3321 COVID-19 Related Deaths since March 1, 2021 – YTD

### Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure		
COVID-19 WHO Global Statistics EW 30 -33 2025		
Epi Week	Confirmed Cases	Deaths
30	9900	231
31	23300	207
32	13700	203
33	15700	210
Total (4weeks)	62600	851



6

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



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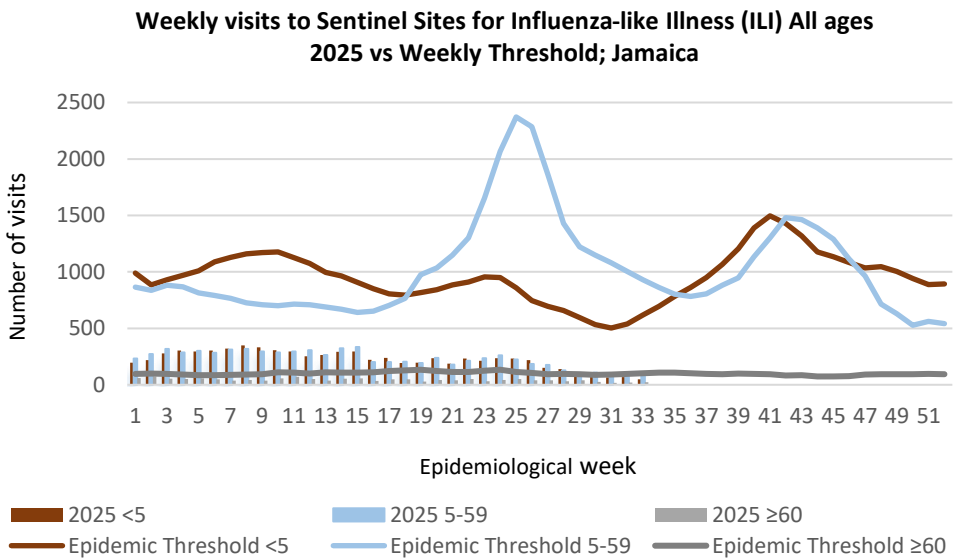
**SENTINEL REPORT-** 78 sites. Automatic reporting

INFLUENZA SURVEILLANCE

EW 33

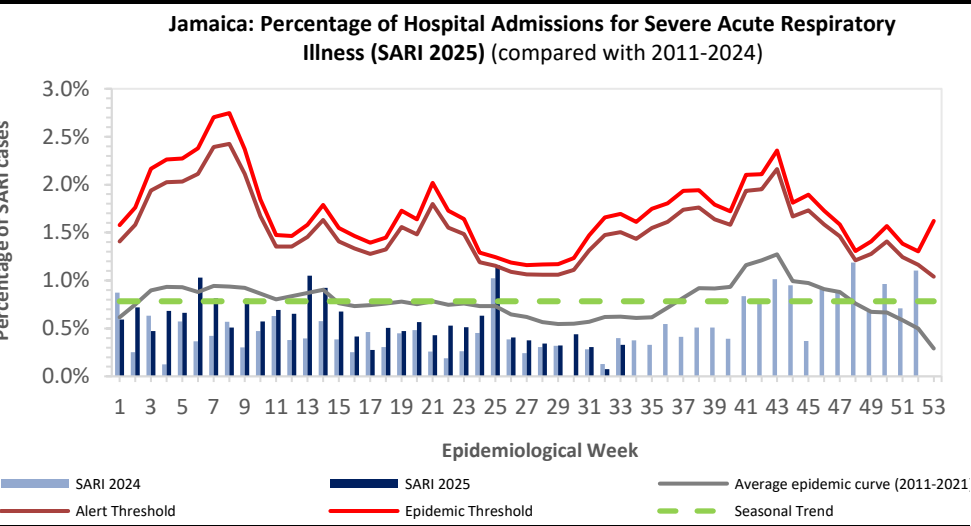
August 10, 2025 – August 16, 2025 Epidemiological Week 33

	EW 33	YTD
SARI cases	5	287
Total Influenza positive Samples	0	169
Influenza A	0	145
H1N1pdm09	0	78
H3N2	0	67
Not subtyped	0	0
Influenza B	0	24
B lineage not determined	0	0
B Victoria	0	24
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	30



**Epi Week Summary**

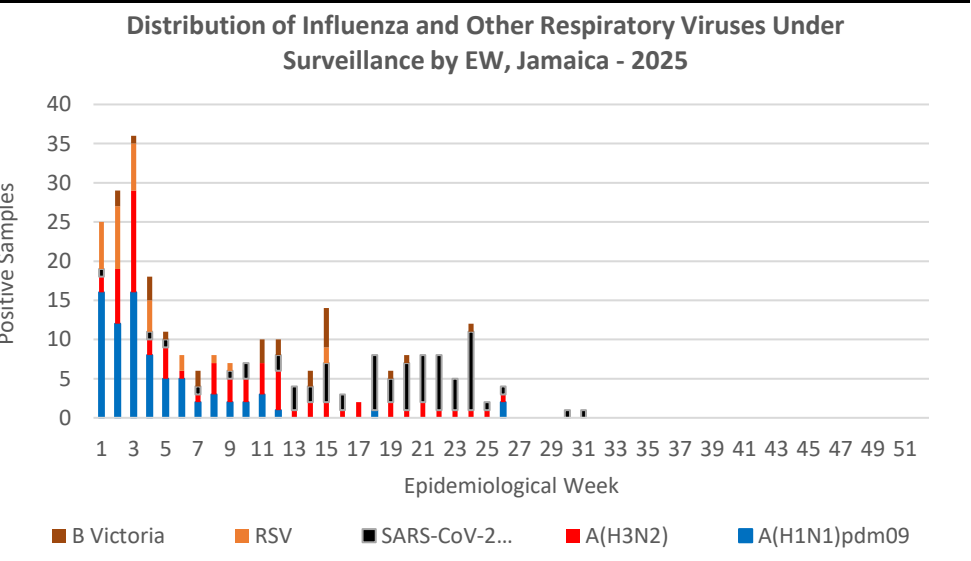
During EW 33, five (5) SARI admissions was reported.



**Caribbean Update EW 33**

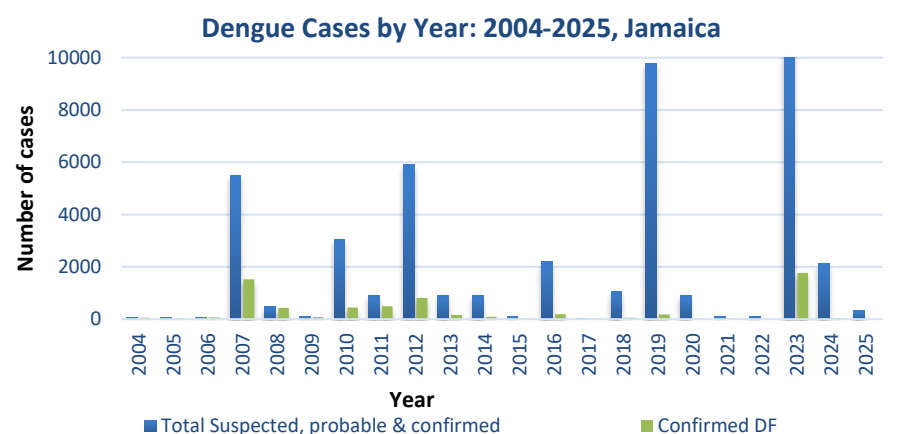
Influenza activity, primarily driven by A(H1N1)pdm09, declined in the latest EW, with a subregional positivity rate of 7.3%. In Haiti and Belize, influenza activity remains at epidemic levels but shows a downward trend. In constrast, activity in Cuba, Jamaica, Barbados and the Dominican Republic remains at interseasonal levels. In Guyana, activity deceased compared to the previous EW. RSV circulation increased across the subregion compared to the previous EW, with a positivity rate of 10.1%. In the Dominican Republic, circulation rose relative to the previous week. SARS-CoV-2 activity remained stable this EW compared to the previous one, with a subregional positivity rate of 20.5%. In Belize, Cuba, Haiti, Jamaica and Guyana, activity declined. In the Dominican Republic, Saint Lucia, Barbados and saint Vincent and the Grenadines, positivity increased.

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




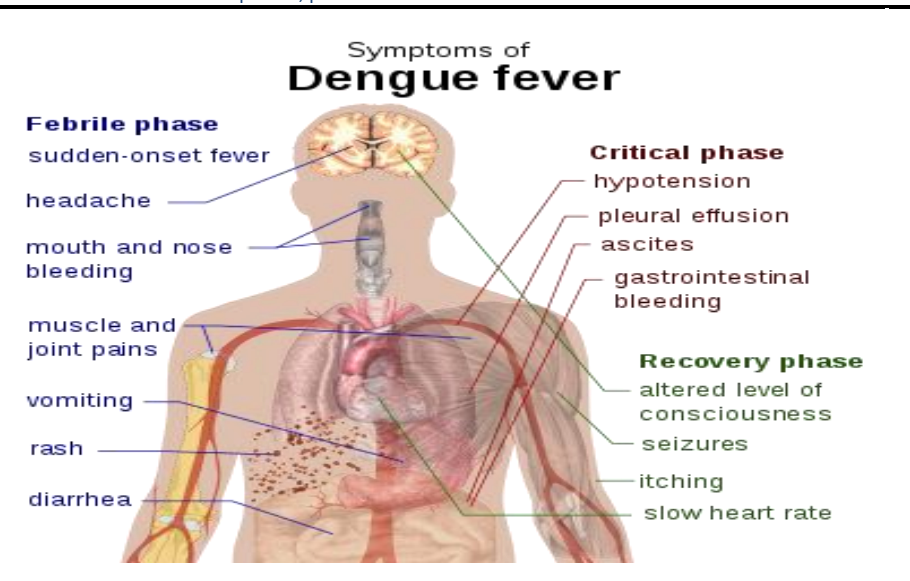
DENGUE SURVEILLANCE

August 10, 2025 – August 16, 2025 Epidemiological Week 33

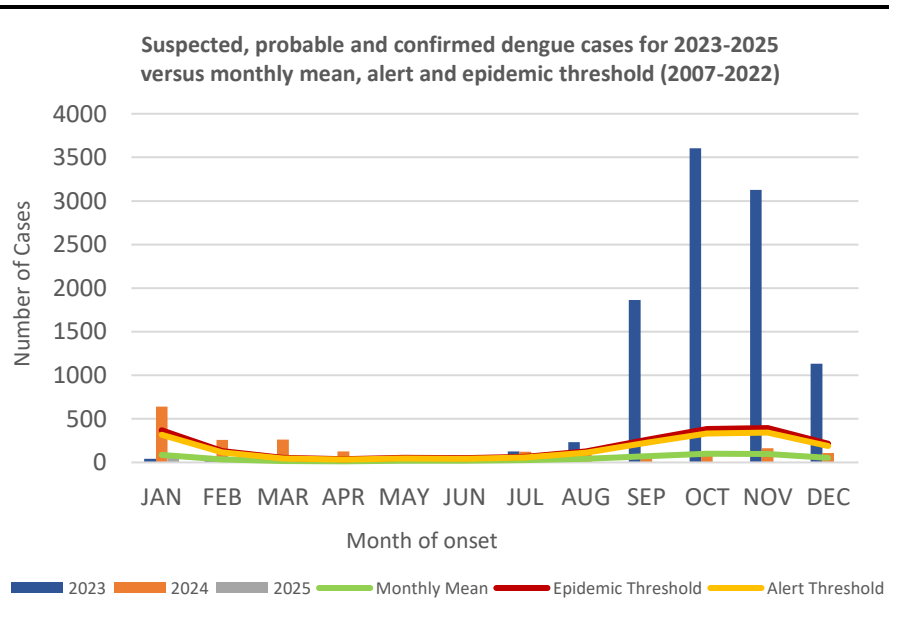


Reported suspected, probable and confirmed dengue with symptom onset in week 33 of 2025

	2025*	
	EW 33	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	3	319
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



- Points to note:
- Dengue deaths are reported based on date of death.
  - \*Figure as at August 27, 2025
  - Only PCR positive dengue cases are reported as confirmed.
  - IgM positive cases are classified as probable dengue.





# RESEARCH ABSTRACT

## Abstract

NHRC-23-O06

### The Prevalence and Determinants of Medication Adherence Amongst Persons with Type 2 Diabetes Mellitus Attending the Cayman Islands Health Services Authority GP Clinics

Rado SD<sup>1,3</sup>, Purai A<sup>2</sup>, Waldron N<sup>3</sup>

<sup>1</sup>Cayman Islands Health Services Authority, Cayman Islands <sup>2</sup>Family Medicine Department, Department of Community Health and Psychiatry, University of the West Indies, Mona Campus <sup>3</sup>Department of Community Health and Psychiatry, The University of the West Indies, Mona

**Objectives:** To assess the prevalence and determinants of medication adherence amongst persons with type 2 diabetes mellitus (DM) attending the Cayman Islands Health Services Authority (CIHSA) GP Clinics on Grand Cayman.

**Methods:** In this cross-sectional quantitative study, adult subjects with a doctor-diagnosis of type 2 DM, on antidiabetic medication, having been registered at any CIHSA GP clinic on Grand Cayman within a 12-month period and having at least one glycosylated hemoglobin A1 (HbA1c) lab value documented within a 12-month period were included. Adherence was assessed using the Adherence to Refills and Medication Scale in Diabetes (ARMS-D) tool in a self-administered questionnaire. Descriptive and inferential statistics were employed for data analysis.

**Results:** In total, 254 participants were included in the study (62.3% female; median age 64.5 years). The prevalence of perfect adherence was 23.9% while prevalence of non-adherence was 76.1%. The majority of both groups had HbA1c values  $\geq 7\%$  (57.6% and 64.9% for perfect adherence and non-adherence, respectively) without significant differences. Multivariate regression revealed significant independent positive associations between medication adherence and DM duration  $\geq 10$  years (adjusted odds ratio (aOR) 3.10; 95% confidence interval (CI) 1.13;8.50) as well as regular exercise (aOR 3.10; 95%CI 1.29;7.48) and an inverse association to out of pocket pay (aOR 0.23; 95%CI 0.07;0.76).

**Conclusions:** In conclusion, the prevalence of perfect medication adherence in persons with type 2 DM attending the CISHA GP clinics on Grand Cayman is low. DM duration, regular exercise and out of pocket pay are independent determinants for medication adherence.



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9 NOTIFICATIONS-  
All clinical  
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