

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Measles (Part 3)



#### Treatment

There is no specific treatment for measles. Caregiving should focus on relieving symptoms, making the person comfortable and preventing complications. Drinking enough water and treatments for dehydration can replace fluids lost to diarrhoea or vomiting. Eating a healthy diet is also important. Doctors may use antibiotics to treat pneumonia and ear and eye infections. All children or adults with measles should receive two doses of vitamin A supplements, given 24 hours apart. This restores low vitamin A levels that occur even in well-nourished children. It can help prevent eye damage and blindness. Vitamin A supplements may also reduce the number of measles deaths.

#### Prevention

Community-wide vaccination is the most effective way to prevent measles. All children should be vaccinated against measles. The vaccine is safe, effective and inexpensive. Children should receive two doses of the vaccine to ensure they are immune. The first dose is usually given at 9 months of age in countries where measles is common and 12–15 months in other countries. A second dose should be given later in childhood, usually at 15–18 months. The measles vaccine is given alone or often combined with vaccines for mumps, rubella and/or varicella.



Routine measles vaccination, combined with mass immunization campaigns in countries with high case rates are crucial for reducing global measles deaths. The measles vaccine has been in use for about 60 years and costs less than US\$ 1 per child. The measles vaccine is also used in emergencies to stop outbreaks from spreading. The risk of measles outbreaks is particularly high amongst refugees, who should be vaccinated as soon as possible. Combining vaccines slightly increases the cost but allows for shared delivery and administration costs and importantly, adds the benefit of protection against rubella, the most common vaccine preventable infection that can infect babies in the womb.

In 2023, 74% of children received both doses of the measles vaccine, and about 83% of the world's children received one dose of measles vaccine by their first birthday. Two doses of the vaccine are recommended to ensure immunity and prevent outbreaks, as not all children develop immunity from the first dose. Approximately 22 million infants missed at least one dose of measles vaccine through routine immunization in 2023.

Taken from WHO website on 10/March/2025  
<https://www.who.int/news-room/fact-sheets/detail/measles>  
 Pictures taken from <https://www.nhs.uk/conditions/measles/> and  
[https://www.who.int/health-topics/meningitis#tab=tab\\_1](https://www.who.int/health-topics/meningitis#tab=tab_1)

## EPI WEEK 9



Syndromic Surveillance

Accidents

Violence

Pages 2-4



Class 1 Notifiable Events

Page 5



COVID-19

Page 6



Influenza

Page 7



Dengue Fever

Page 8



Research Paper

Page 9

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 – 6 to 9 of 2025

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

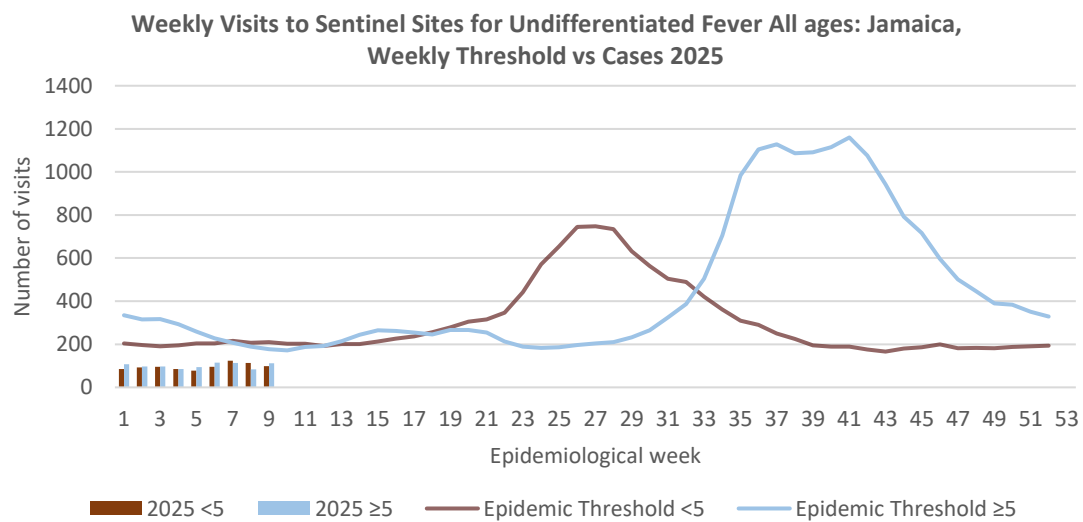
**KEY:**  
**Yellow** - late submission on Tuesday  
**Red** - late submission after Tuesday

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													
6	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)
7	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
8	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
9	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

REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of >38°C /100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



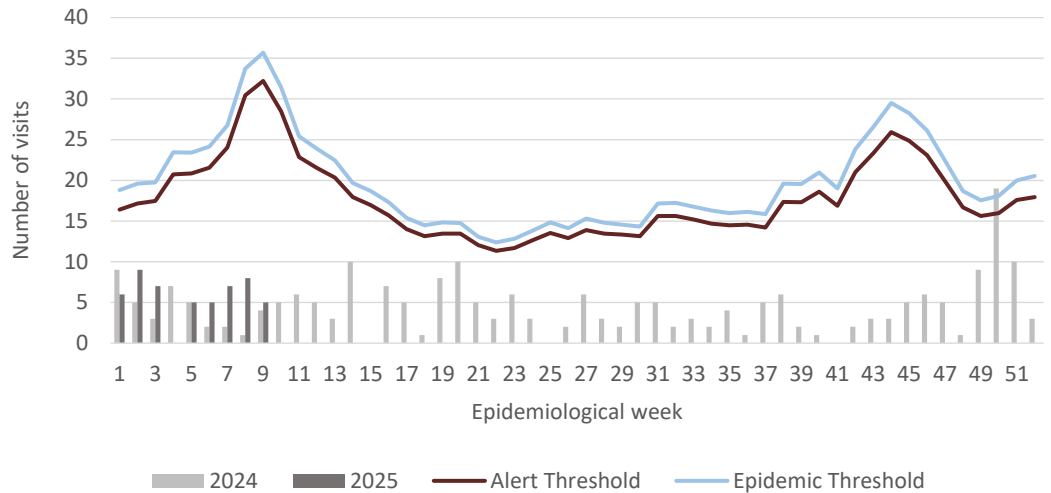
SENTINEL REPORT- 78 sites. Automatic reporting

**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**

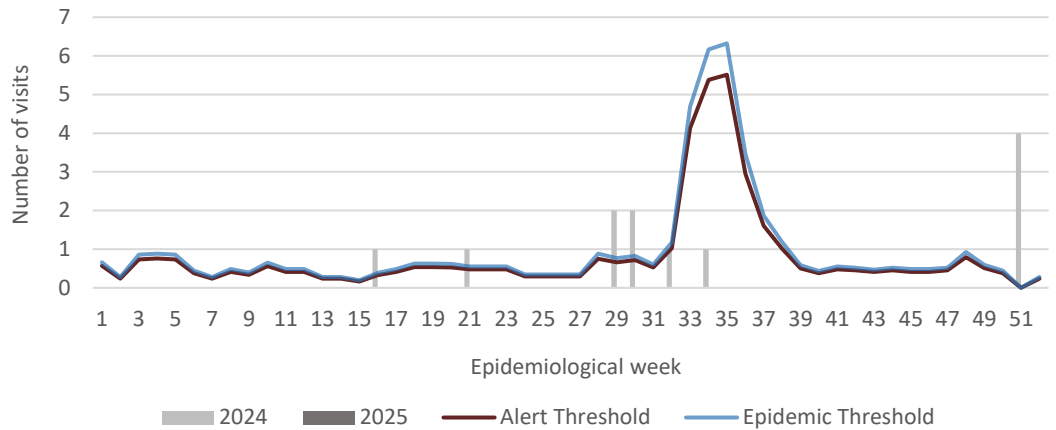


**FEVER AND HAEMORRHAGIC**

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 2024 and 2025 vs Weekly Threshold; Jamaica**



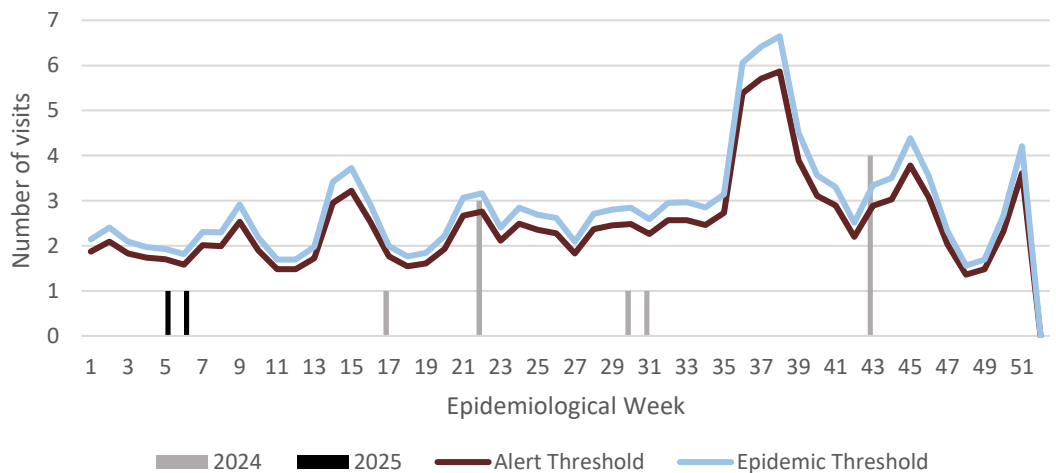
**FEVER AND JAUNDICE**

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.



**Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2024 and 2025**



**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

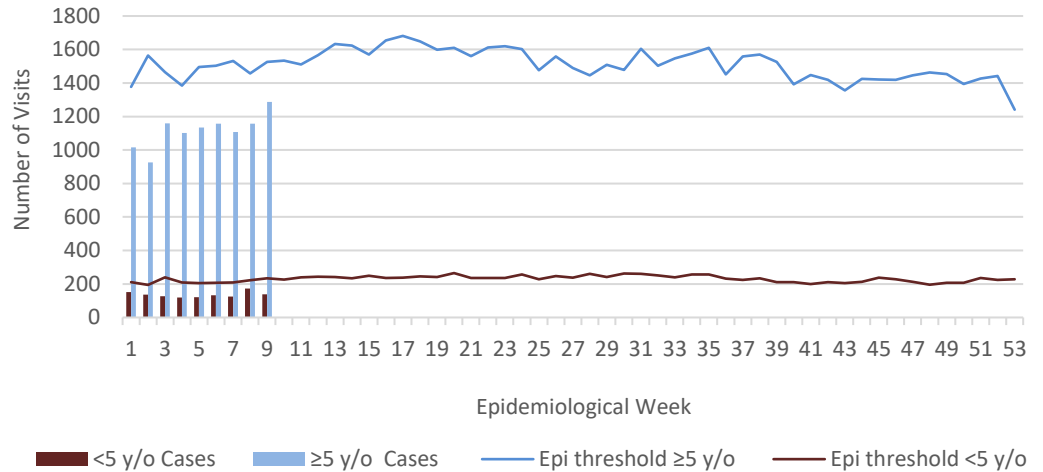


### ACCIDENTS

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 2025 vs. Weekly Threshold

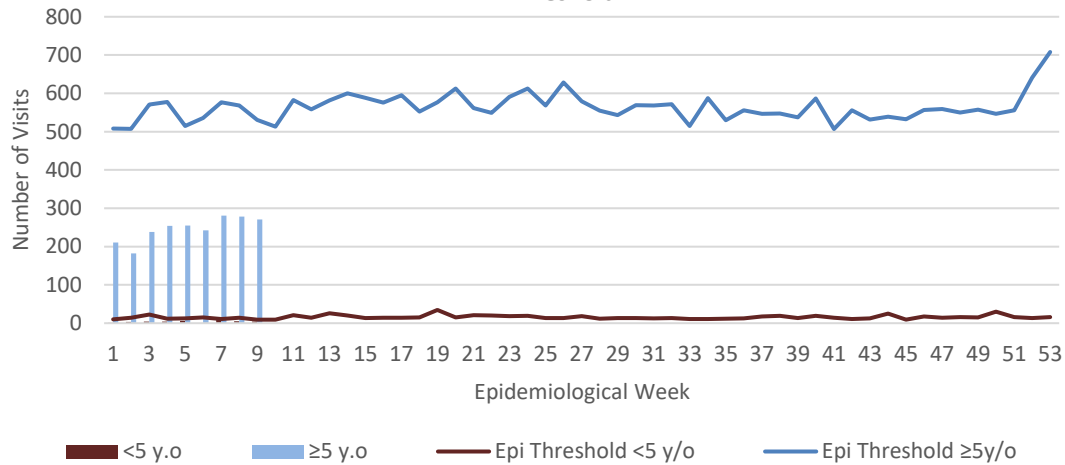


### VIOLENCE

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

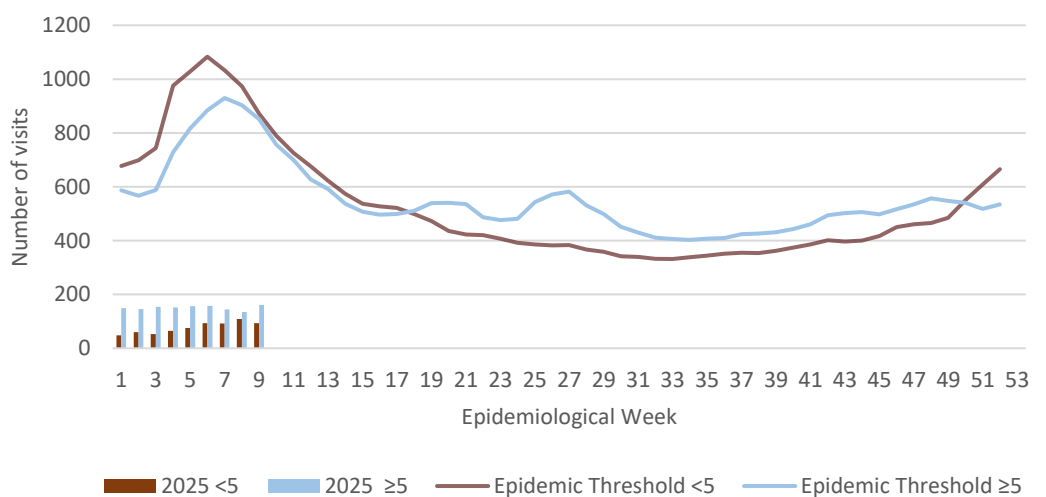


### GASTROENTERITIS

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



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 2025	PREVIOUS YEAR 2024		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	4 <sup>β</sup>	68 <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)	23	145		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	0	8		
	Hepatitis C	0	2		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	2	2		
	Monkeypox	0	0		
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	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>	11	8		
	Ophthalmia Neonatorum	2	34		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	0	12		
Yellow Fever	0	0			
Chikungunya <sup>ε</sup>	0	0			
Zika Virus <sup>θ</sup>	0	0	NA- Not Available		

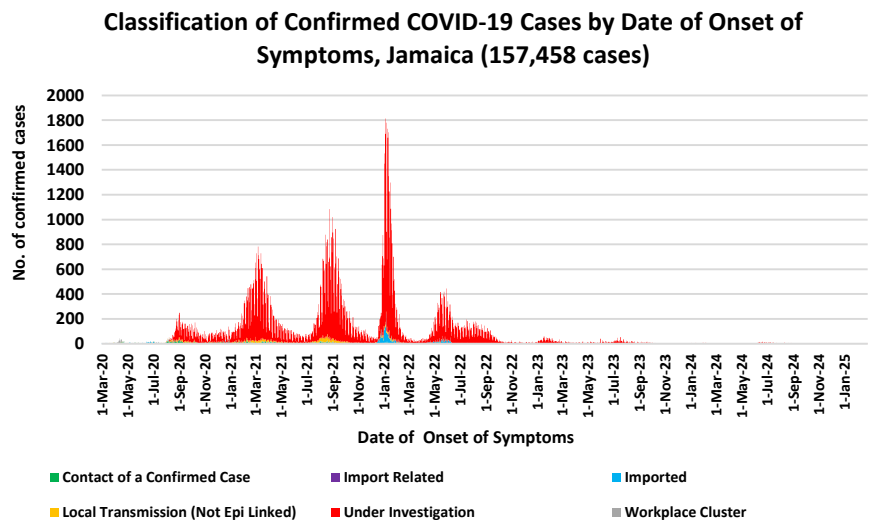
 <p><b>5 NOTIFICATIONS-</b> All clinical sites</p>	 <p><b>INVESTIGATION REPORTS-</b> Detailed Follow up for all Class One Events</p>	 <p><b>HOSPITAL ACTIVE SURVEILLANCE-</b> 30 sites. Actively pursued</p>	 <p><b>SENTINEL REPORT-</b> 78 sites. Automatic reporting</p>
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# COVID-19 Surveillance Update

CASES	EW 9	Total
<b>Confirmed</b>	1	157458
<b>Females</b>	1	90721
<b>Males</b>	0	66734
<b>Age Range</b>	42 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.

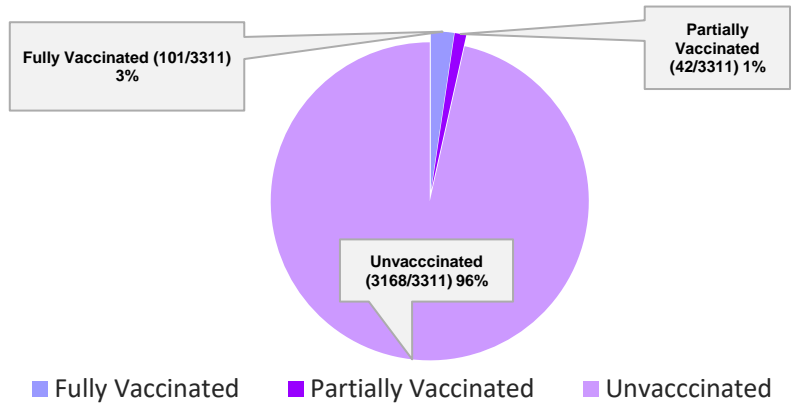


## COVID-19 Outcomes

Outcomes	EW 9	Total
<b>ACTIVE</b> *2 weeks*		5
<b>DIED – COVID Related</b>	0	3875
<b>Died - NON COVID</b>	0	396
<b>Died - Under Investigation</b>	0	142
<b>Recovered and discharged</b>	0	103226
<b>Repatriated</b>	0	93
<b>Total</b>		157458

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

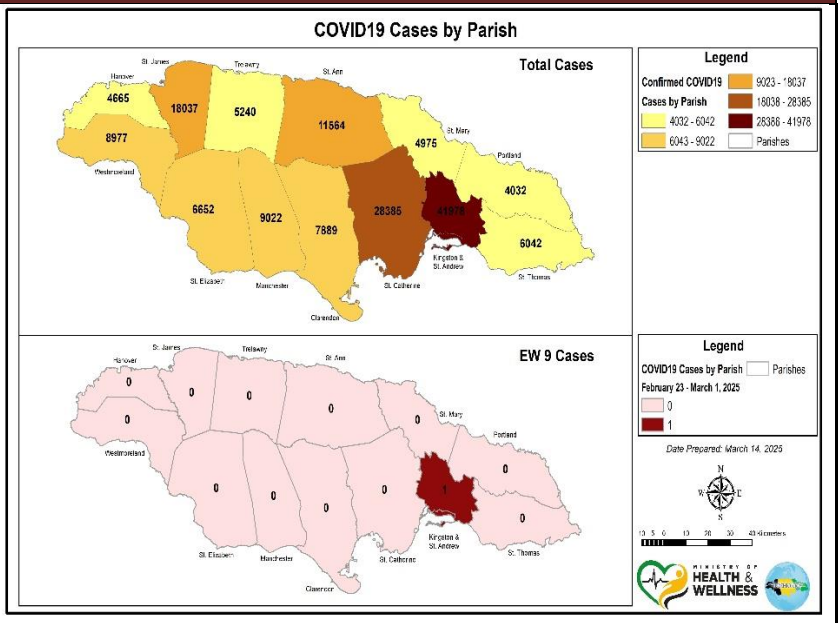
## 3311 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

**SARS-CoV-2**



### COVID-19 WHO Global Statistics EW 6 -9, 2025

Epi Week	Confirmed Cases	Deaths
6	32300	1000
7	28600	858
8	22100	698
9	11600	517
<b>Total (4weeks)</b>	<b>94600</b>	<b>3073</b>

**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

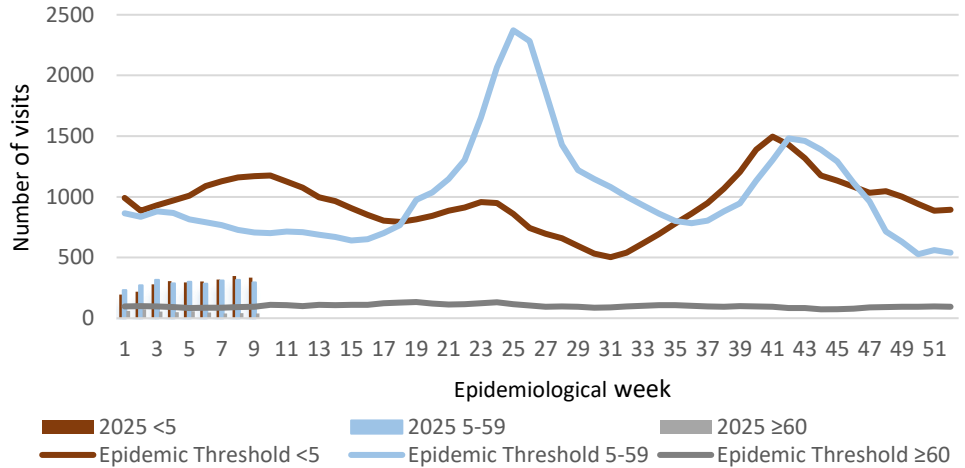
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 9*

February 23, 2025 – March 1, 2025 Epidemiological Week 9

	EW 9	YTD
SARI cases	10	95
<b>Total Influenza positive Samples</b>	0	98
<b>Influenza A</b>	0	91
H3N2	0	62
H1N1pdm09	0	29
Not subtyped	0	0
<b>Influenza B</b>	0	7
B lineage not determined	0	0
B Victoria	0	7
<b>Parainfluenza</b>	0	0
<b>Adenovirus</b>	0	0
<b>RSV</b>	1	27

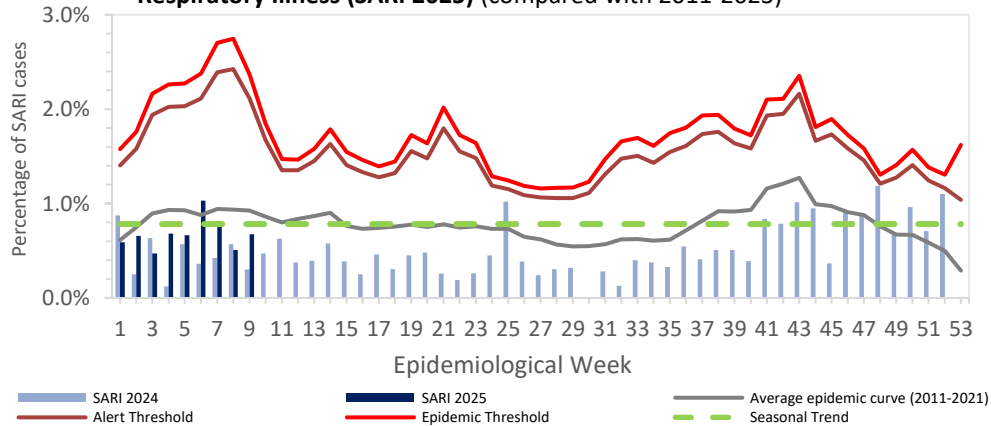
**Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica**



**Epi Week Summary**

During EW 9, ten (10) SARI admissions were reported.

**Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2025) (compared with 2011-2023)**



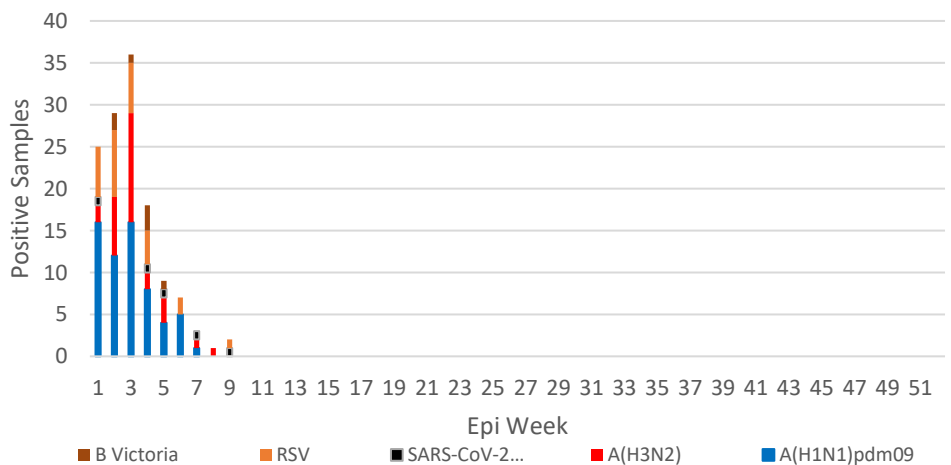
**Caribbean Update EW 9**

**Caribbean:** Influenza activity remains high for both ILI and SARI. The predominant influenza subtype was reported to be A(H1N1)pdm09. RSV and SARS-CoV-2 cases remain low.

**By country:** Over the past 4 EW, influenza activity has increased in Saint Lucia and Suriname, while it has decreased in Barbados, Belize, Jamaica and Guyana and Saint Vincent and the Grenadines. An increase in RSV activity was observed for Belize and Saint Lucia as well as an increase in SARS-CoV-2 detection in the Dominican Republic.

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

**Distribution of Influenza and Other Respiratory Viruses Under Surveillance by EW, Jamaica - 2025**



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



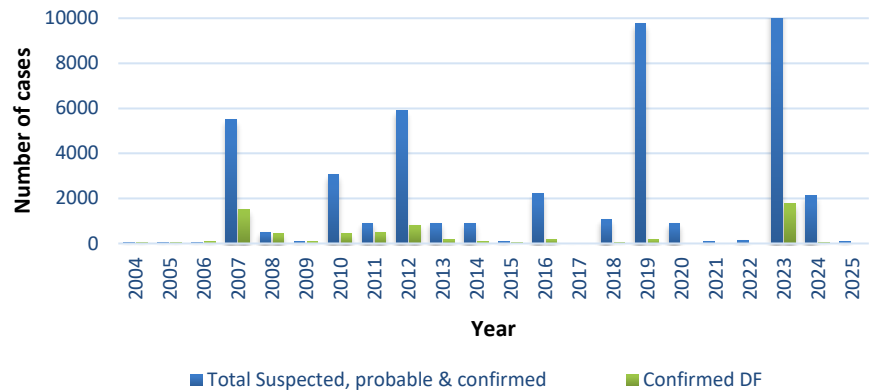
# Dengue Bulletin

February 16, 2024 – March 1, 2025 Epidemiological Week 9


Epidemiological Week 9

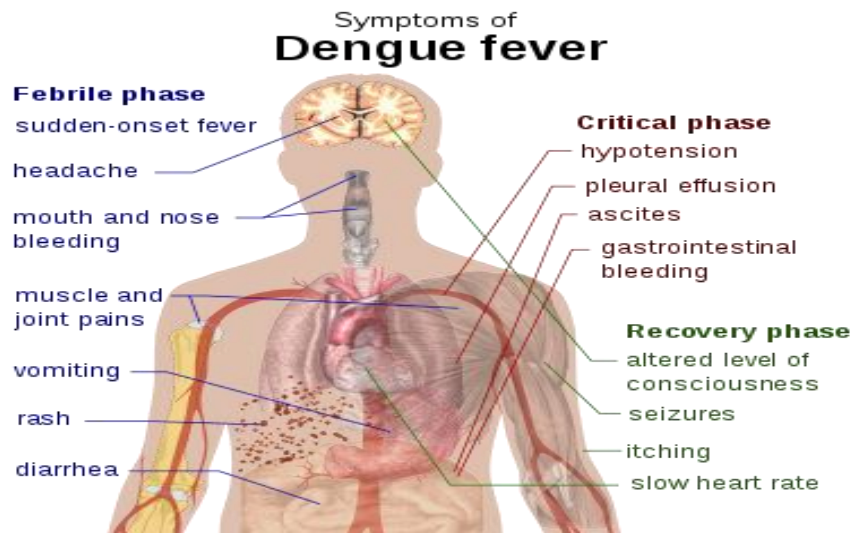


Dengue Cases by Year: 2004-2025, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 9 of 2025

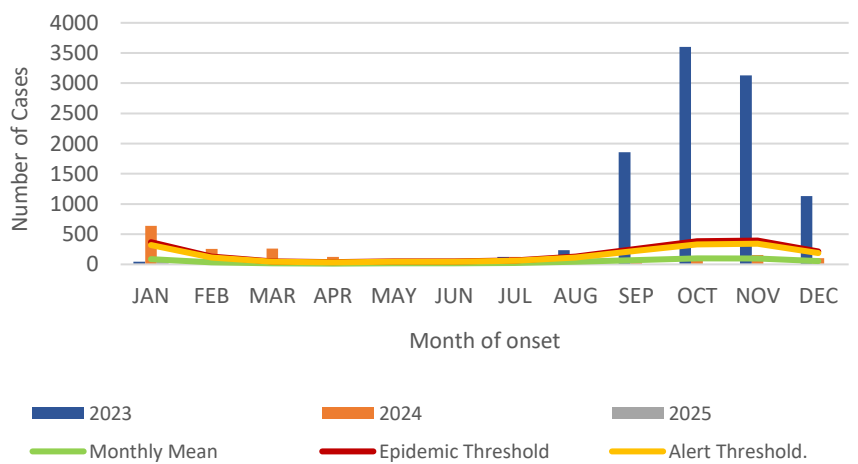
	2025*	
	EW 9	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	0	84
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at, March 14, 2025
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected, probable and confirmed dengue cases for 2023-2025 versus monthly mean, alert and epidemic threshold (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-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  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
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SENTINEL  
REPORT- 78 sites.  
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