

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Measles (Part 2)



Complications can include: blindness, encephalitis (an infection causing brain swelling and potentially brain damage), severe diarrhoea and related dehydration, ear infections, severe breathing problems including pneumonia.

If a woman catches measles during pregnancy, this can be dangerous for the mother and can result in her baby being born prematurely with a low birth weight. Complications are most common in children under 5 years and adults over age 30. They are more likely in children who are malnourished, especially those without enough vitamin A or with a weak immune system from HIV or other diseases. Measles itself also weakens the immune system and can make the body “forget” how to protect itself against infections, leaving children extremely vulnerable.

#### Who is at risk?

Any non-immune person (not vaccinated or vaccinated but did not develop immunity) can become infected. Unvaccinated young children and pregnant persons are at highest risk of severe measles complications.

Measles is still common, particularly in parts of Africa, the Middle East and Asia. The overwhelming majority of measles deaths occur in countries with low per capita incomes or weak health infrastructures that struggle to reach all children with immunization.

Damaged health infrastructure and health services in countries experiencing or recovering from a natural disaster or conflict interrupt routine immunization and overcrowding in residential camps increases the risk of infection. Children with malnutrition or other causes of a weak immune system are at highest risk of death from measles.

#### Transmission

Measles is one of the world’s most contagious diseases, spread by contact with infected nasal or throat secretions (coughing or sneezing) or breathing the air that was breathed by someone with measles. The virus remains active and contagious in the air or on infected surfaces for up to two hours. For this reason, it is very infectious, and one person infected by measles can infect nine out of 10 of their unvaccinated close contacts. It can be transmitted by an infected person from four days prior to the onset of the rash to four days after the rash erupts.

Measles outbreaks can result in severe complications and deaths, especially among young, malnourished children. In countries close to measles elimination, cases imported from other countries remain an important source of infection.

Taken from WHO website on 25/February/2025  
<https://www.who.int/news-room/fact-sheets/detail/measles>  
 Picture taken from <https://www.nhs.uk/conditions/measles/>

## EPI WEEK 8



Syndromic Surveillance

Accidents

Violence

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Class 1 Notifiable Events

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Influenza

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Dengue Fever

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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 – 5 to 8 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												
5	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
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

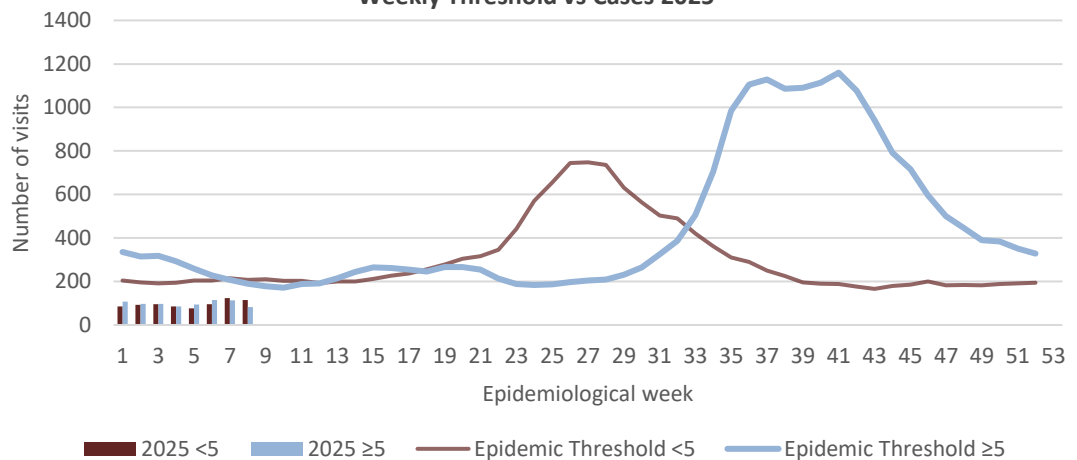
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

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



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



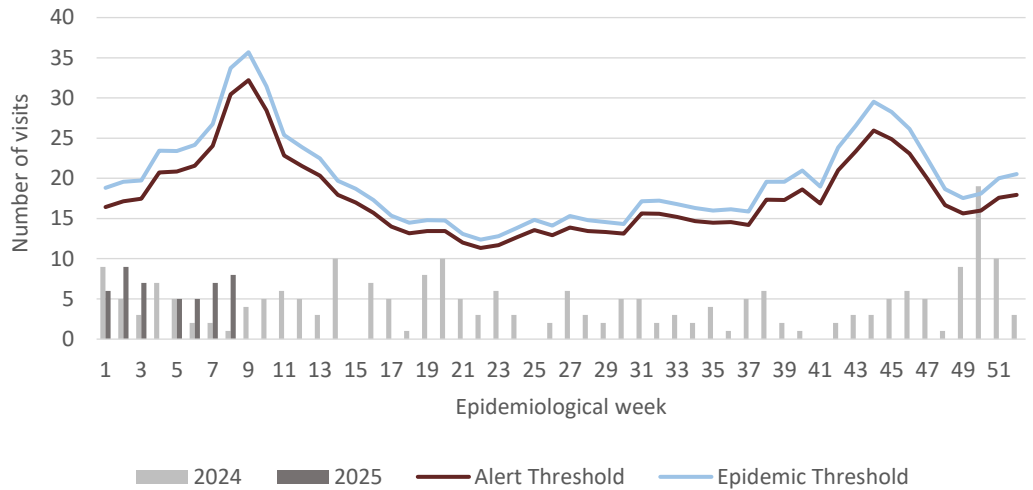
SENTINEL REPORT- 78 sites. Automatic reporting

**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**

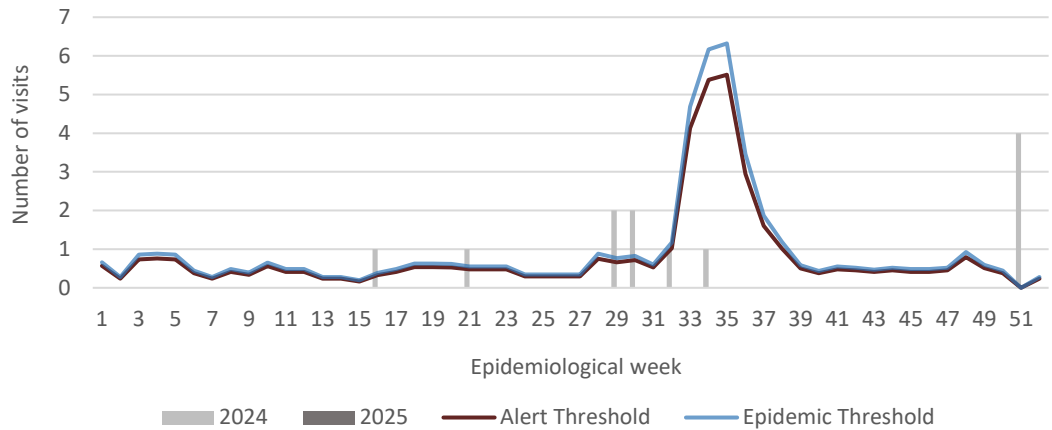


**FEVER AND HAEMORRHAGIC**

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 2024 and 2025 vs Weekly Threshold; Jamaica**



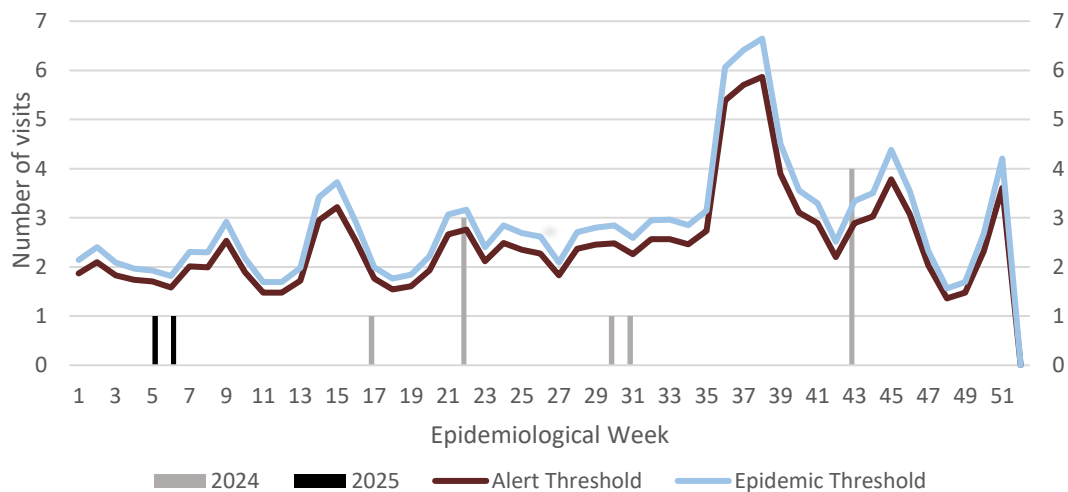
**FEVER AND JAUNDICE**

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

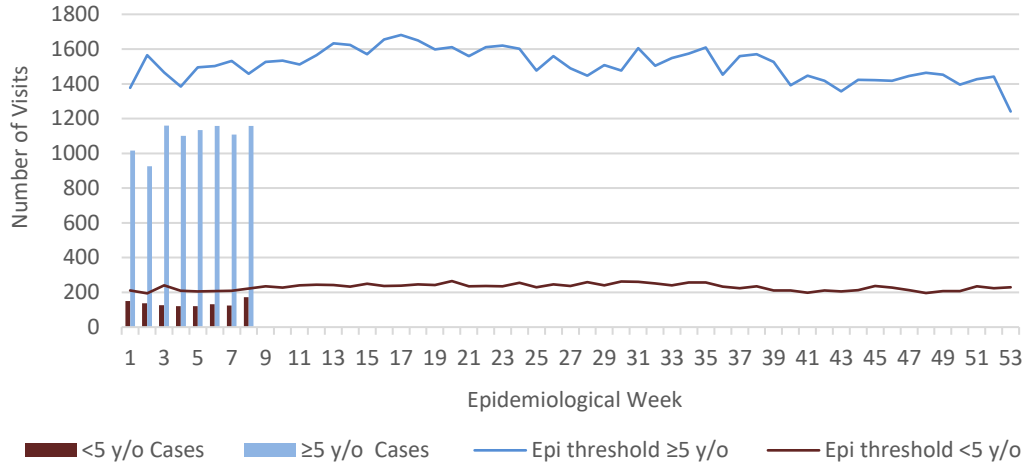


### ACCIDENTS

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

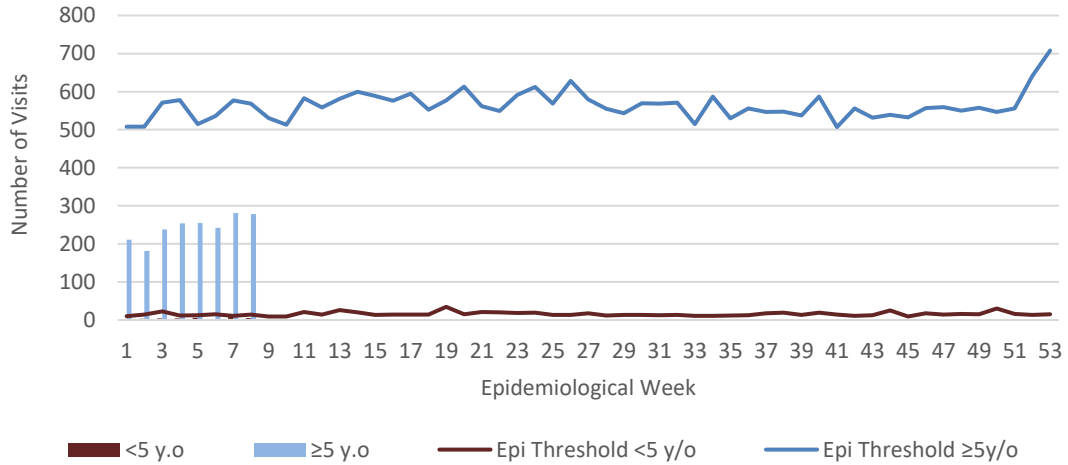


### VIOLENCE

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

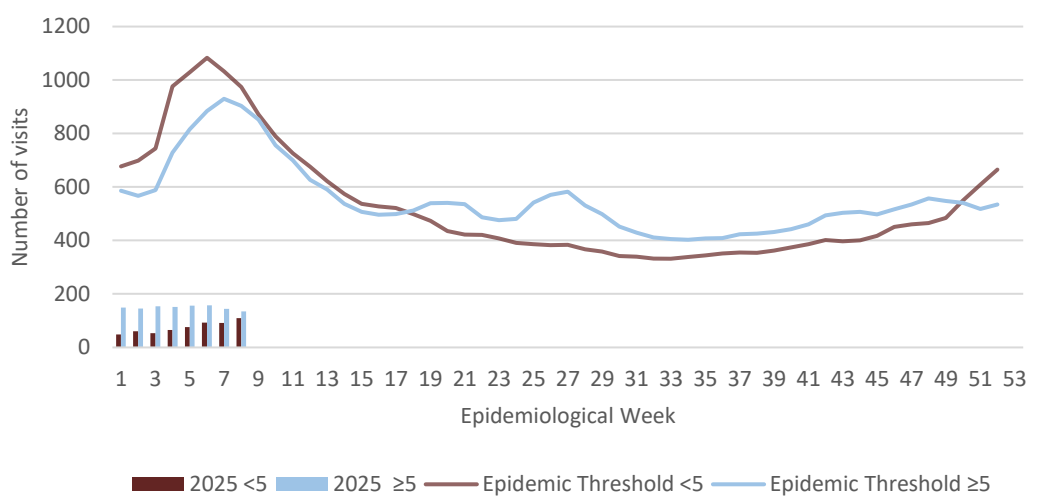


### GASTROENTERITIS


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>			
		CURRENT YEAR 2025	PREVIOUS YEAR 2024		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	4 <sup>β</sup>	66 <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.  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.  <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.	
	Cholera	0	0		
	Severe Dengue <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	21	131		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	0	8		
	Hepatitis C	0	1		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	2	1		
	Monkeypox	0	0		
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 <sup>δ</sup>	11	8		
	Ophthalmia Neonatorum	1	23		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	0	11		
	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

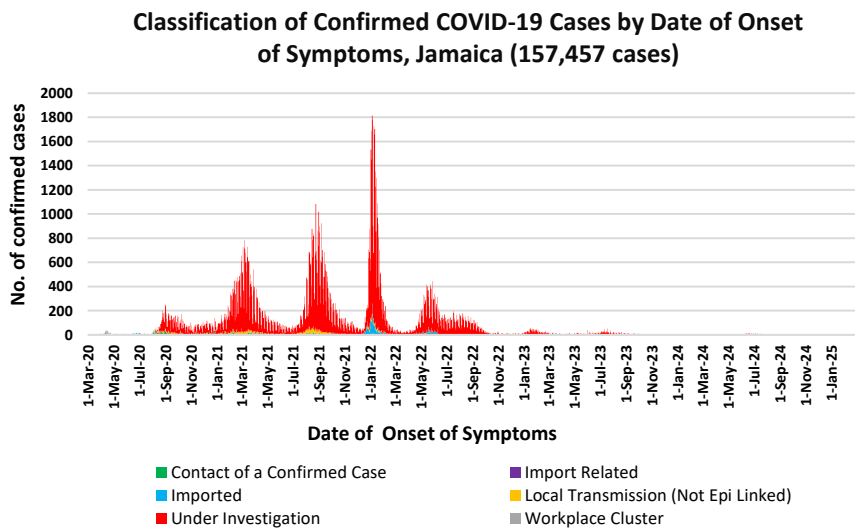


**SENTINEL REPORT-** 78 sites. Automatic reporting

# COVID-19 Surveillance Update

CASES	EW 8	Total
<b>Confirmed</b>	2	157457
<b>Females</b>	1	90721
<b>Males</b>	1	66733
<b>Age Range</b>	unknown to 69 years	1 day to 108 years

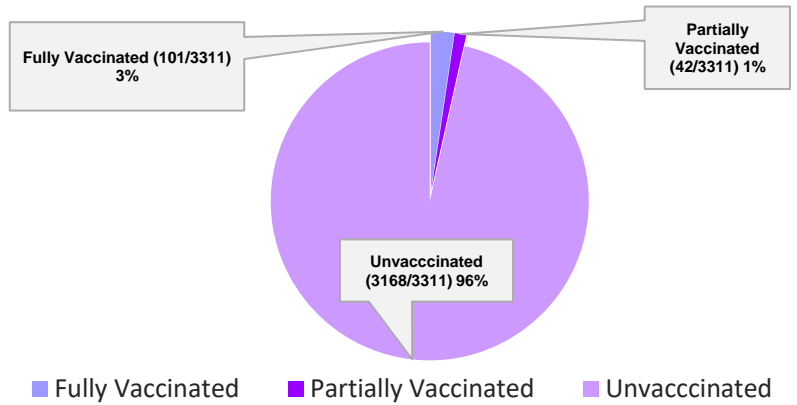
\* 3 positive cases had no gender specification  
 \* PCR or Antigen tests are used to confirm cases  
 \* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



## COVID-19 Outcomes

Outcomes	EW 8	Total
<b>ACTIVE</b> *2 weeks*		4
<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>		157457

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

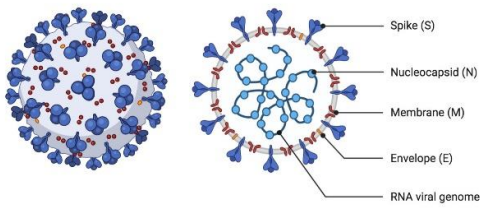


\*Vaccination programme March 2021 – YTD  
 \* Total as at current Epi week

## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

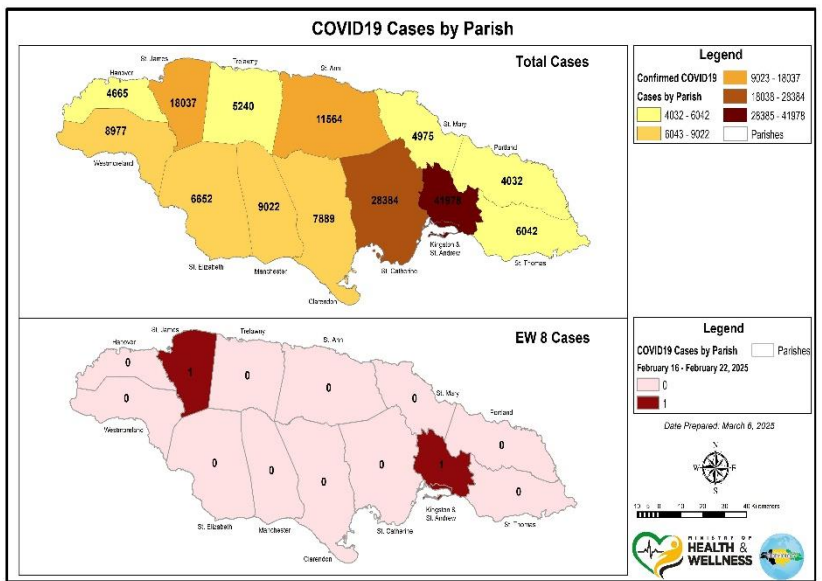
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW 5 -8, 2025

Epi Week	Confirmed Cases	Deaths
5	33700	1100
6	31700	970
7	28100	778
8	21700	589
<b>Total (4weeks)</b>	<b>115200</b>	<b>3437</b>

### COVID19 Cases by Parish



**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

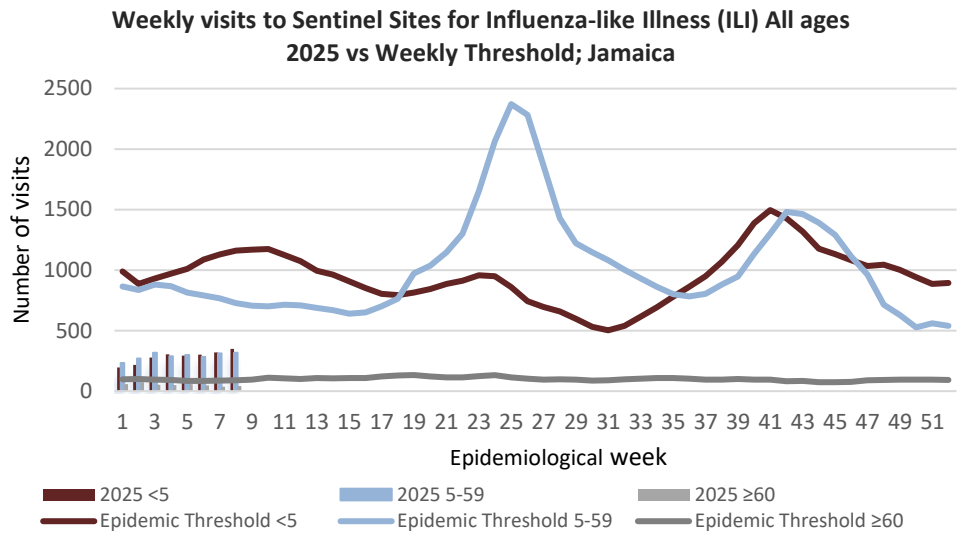


# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 8

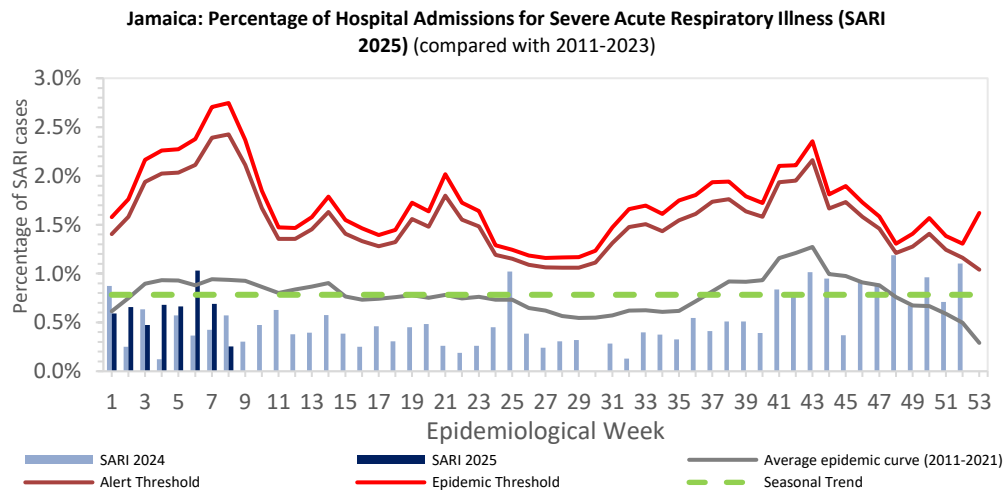
February 16, 2025 – February 22, 2025 Epidemiological Week 8

	EW 8	YTD
SARI cases	4	79
Total Influenza positive Samples	1	92
<b>Influenza A</b>	1	85
H3N2	1	28
H1N1pdm09	0	57
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>	0	24



## Epi Week Summary

During EW 8, four (4) SARI admissions were reported.

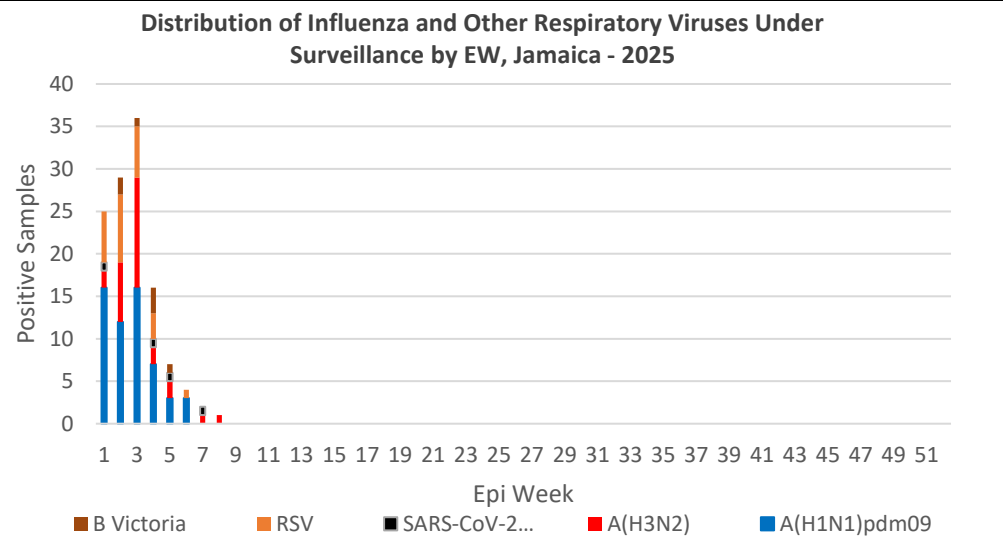


## Caribbean Update EW 8

**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. 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>



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



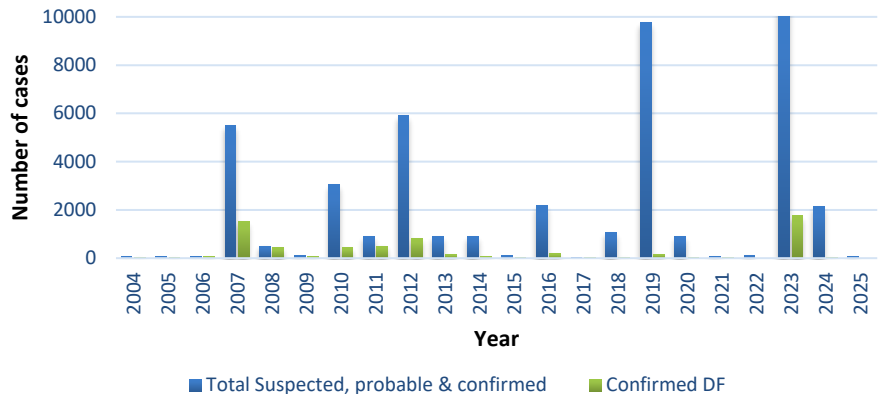
# Dengue Bulletin

February 16, 2024 – February 22, 2025 Epidemiological Week 8


Epidemiological Week 8

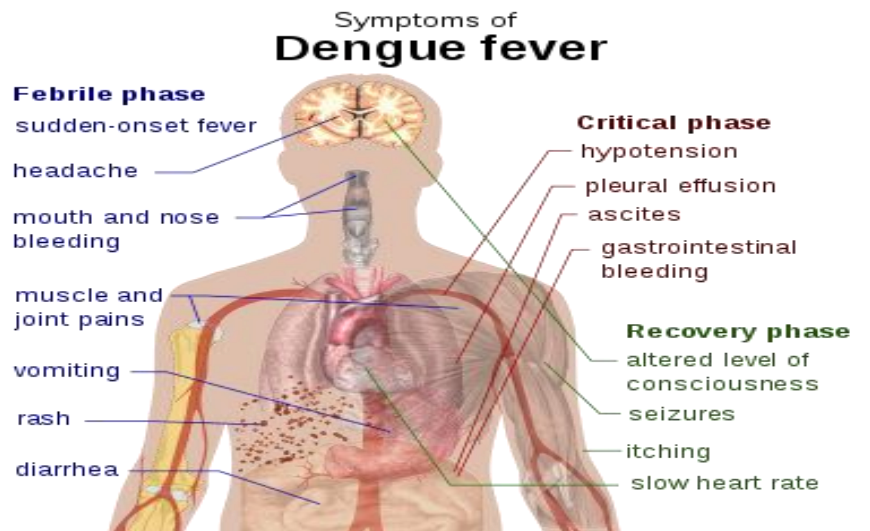


Dengue Cases by Year: 2004-2025, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 8 of 2025

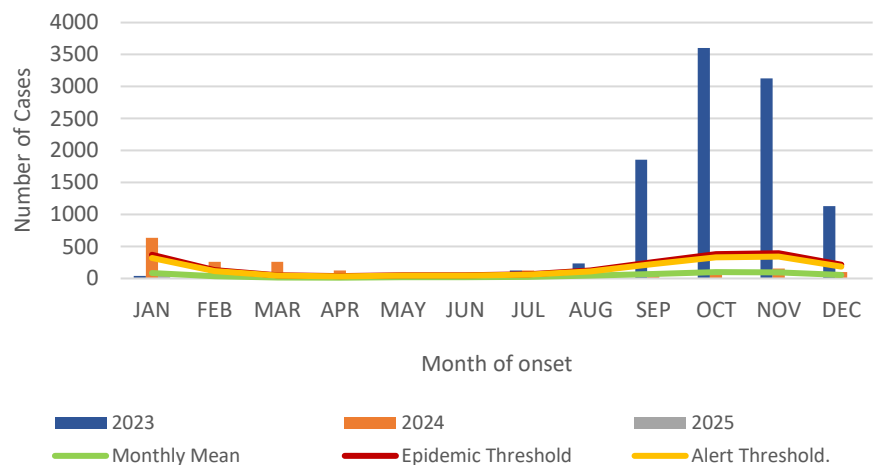
	2025*	
	EW 8	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	6	78
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at, March 7, 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-O05

### The relationship between social determinants (socioeconomic status, and access to food), and medication adherence and lifestyle practices among persons with hypertension in Colombia and Jamaica

<sup>1</sup>Bennett N, <sup>2</sup>Duncan J, <sup>2</sup>Bailey A, <sup>3</sup>Hahne M, <sup>3</sup>Mills K, <sup>3</sup>Whelton P, <sup>4</sup>Anderson A, <sup>5</sup>Natacha Lanza Mora P, <sup>5</sup>Otero J, <sup>5</sup>Castaneda Hernandez A, <sup>5</sup>Lopez Jaramillo J, <sup>4</sup>Lopez-Lopez J, <sup>6</sup>Williams M, <sup>6</sup>Tutse-Tonwe V, <sup>1</sup>Ferguson T, <sup>1</sup>Tulloch-Reid M.

<sup>1</sup>Caribbean Institute for Health Research, The University of the West Indies, Mona, Jamaica; <sup>2</sup>Department of Community Health and Psychiatry, The University of the West Indies, Mona, Jamaica; <sup>3</sup>Department of Epidemiology, Tulane University School of Public Health and Tropical Medicine, New Orleans, USA; <sup>4</sup>University of Alabama at Birmingham, Birmingham, AL USA <sup>5</sup>Masira Research Institute, Universidad de Santander, Colombia; <sup>6</sup>Center for Translation Research and Implementation Science, National Heart, Lung and Blood Institute (NHLBI), NIH, Bethesda, Maryland, USA;

**Objectives:** To examine associations between food insecurity and medication adherence and healthy lifestyle practices among hypertensive patients in Colombia and Jamaica

**Methods:** A Cross-sectional survey of hypertensive patients in primary care clinics using interviewer-administered questionnaires was conducted. Medication adherence was measured using the IMPACT-MAS questionnaire and patients classified as having high or low/medium adherence. Unfavourable ( $\leq 2$  points) or favourable ( $\geq 3$  points) lifestyle was on a 5-point scale—1 point for eating less salt, exercising regularly, none or were reducing alcohol consumption, adequate fruits ( $\geq 2$  servings) and vegetables ( $\geq 3$  servings) daily. Patients were food insecure based on a modified USDA food security instrument if there was uncertainty about money for food or their ability to obtain healthy foods. Logistic regression was used to assess the relationship between food insecurity and low/medium medication adherence & unfavourable lifestyle practices.

**Results:** Of the 576 participants (50% Colombian, 31% male), Columbian patients were older (64.6 vs 62.5 years), had higher educational attainment and longer duration of hypertension. They also reported lower levels of food-insecurity (63.8% vs 70.1%  $p < 0.0001$ ), better medication adherence (88% vs. 50.7%  $p < 0.0001$ ) and more favorable lifestyle adherence scores (86.2% vs 47.2%  $p < 0.0001$ ). When adjusting for age, sex, country, employment, and hypertension duration those who were food-insecure had increased odds of unfavourable lifestyle adherence OR 2.0 [95%CI (1.2 3.5)] but there was no association with medication adherence.

**Conclusion:** Food-insecure participants had increased odds of unfavourable lifestyle adherence but not medication adherence. Understanding the role of food-insecurity in hypertensive patients is critical to improving their health outcomes.



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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  
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