

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Measles (Part 1)

Measles is a highly contagious disease caused by a virus. It spreads easily when an infected person breathes, coughs or sneezes. It can cause severe disease, complications, and even death. Measles can affect anyone but is most common in children. Measles infects the respiratory tract and then spreads throughout the body. Symptoms include a high fever, cough, runny nose and a rash all over the body. Being vaccinated is the best way to prevent getting sick with measles or spreading it to other



people. The vaccine is safe and helps your body fight off the virus. Before the introduction of measles vaccine in 1963 and widespread vaccination, major epidemics occurred approximately every two to three years and caused an estimated 2.6 million deaths each year. An estimated 107 500 people died from measles in 2023 – mostly children under the age of five years, despite the availability of a safe and cost-effective vaccine. Accelerated immunization activities by countries, WHO, the Measles & Rubella Partnership (formerly the Measles & Rubella Initiative), and other international partners successfully prevented an estimated 60 million deaths between 2000–2023. Vaccination decreased an estimated measles deaths from 800 062 in 2000 to 107 500 in 2022.

#### Effects of the COVID-19 pandemic

The COVID-19 pandemic led to setbacks in surveillance and immunization efforts. The suspension of immunization services and declines in immunization rates and surveillance across the globe left millions of children vulnerable to preventable diseases like measles. No country is exempt from measles, and areas with low immunization encourage the virus to circulate, increasing the likelihood of outbreaks and putting all unvaccinated children at risk. We must regain progress and achieve regional measles elimination targets, despite the COVID-19 pandemic. Immunization programs should be strengthened within primary healthcare, so efforts to reach all children with two measles vaccine doses should be accelerated. Countries should also implement robust surveillance systems to identify and close immunity gaps.

#### Signs and symptoms

Symptoms of measles usually begin 10–14 days after exposure to the virus. A prominent rash is the most visible symptom. Early symptoms usually last 4–7 days. They include:

- running nose
- cough
- red and watery eyes
- small white spots inside the cheeks.

The rash begins about 7–18 days after exposure, usually on the face and upper neck. It spreads over about 3 days, eventually to the hands and feet. It usually lasts 5–6 days before fading. Most deaths from measles are from complications related to the disease

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 7



Syndromic Surveillance

Accidents

Violence

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Class 1 Notifiable Events

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COVID-19

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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 – 4 to 7 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												
4	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
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

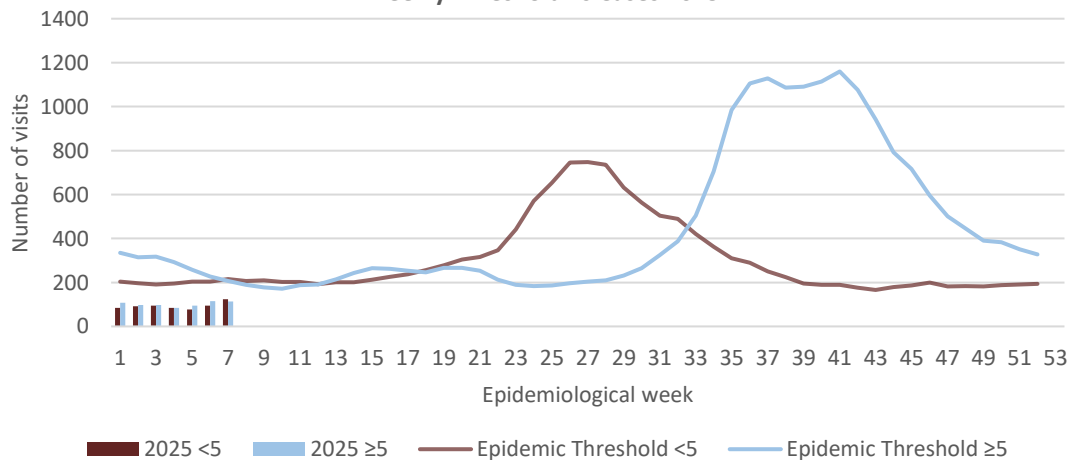
REPORTS FOR SYNDROMIC SURVEILLANCE

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



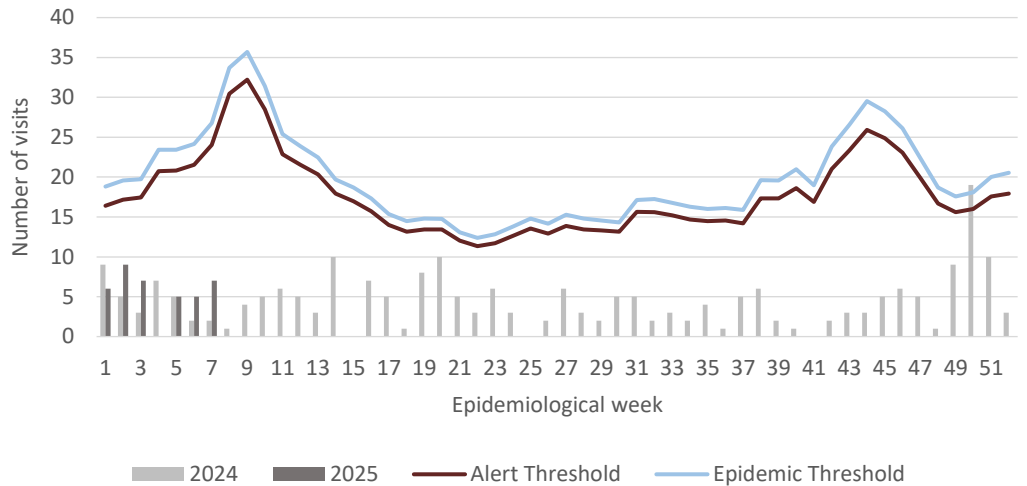
SENTINEL REPORT- 78 sites. Automatic reporting

**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

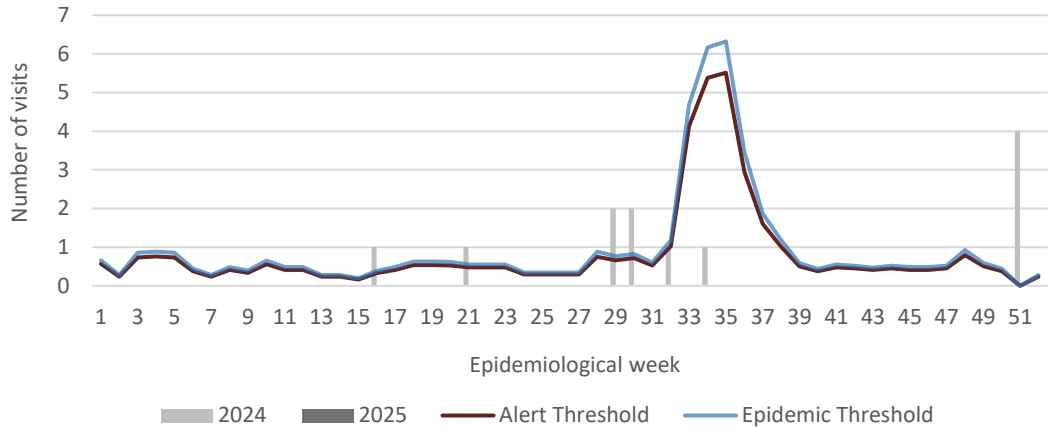


**FEVER AND HAEMORRHAGIC**

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



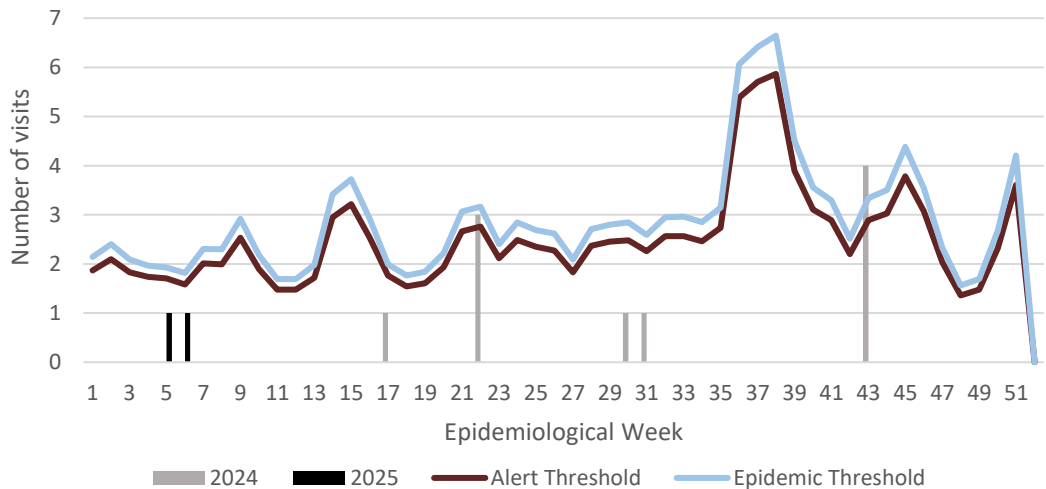
**FEVER AND JAUNDICE**

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

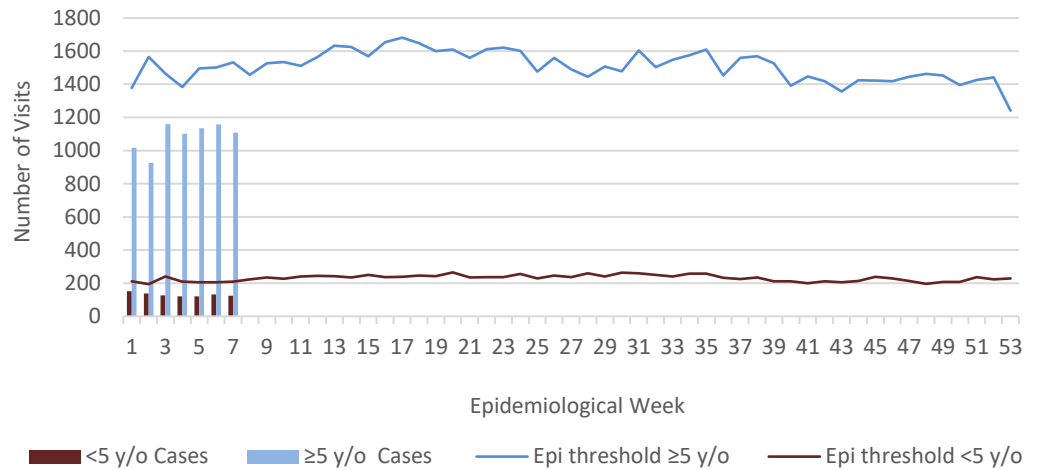


### ACCIDENTS

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

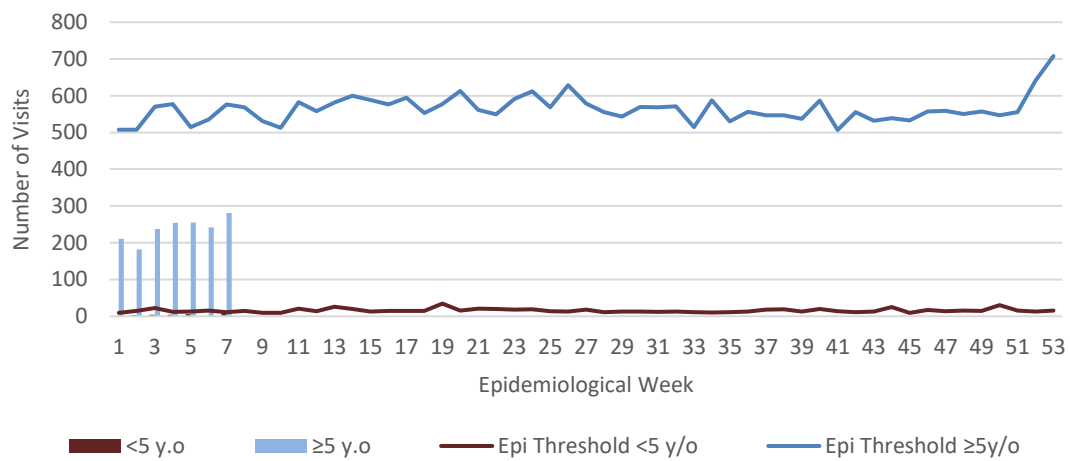


### VIOLENCE

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

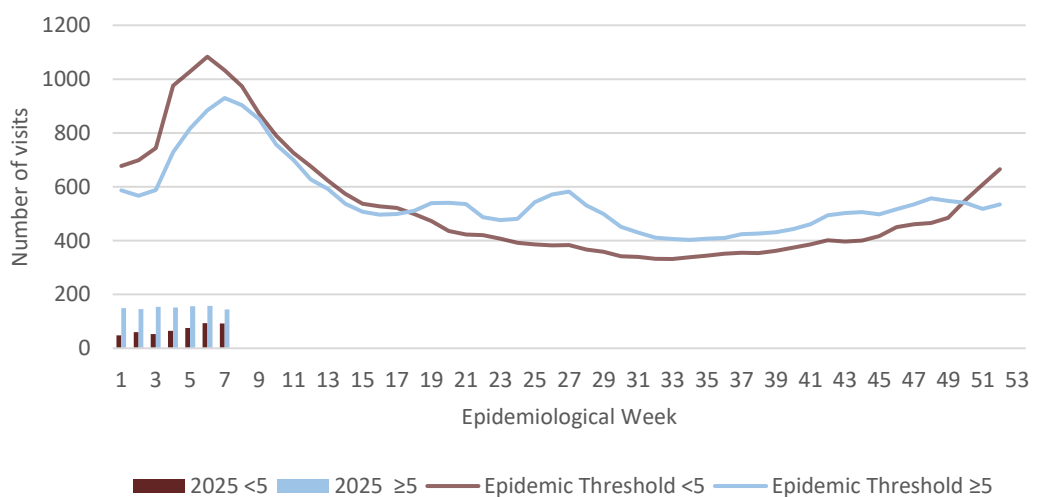


### GASTROENTERITIS

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>	61 <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.	
	Cholera	0	0		
	Severe Dengue <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	19	123		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	0	8		
	Hepatitis C	0	1		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	1	1		
	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>	10	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

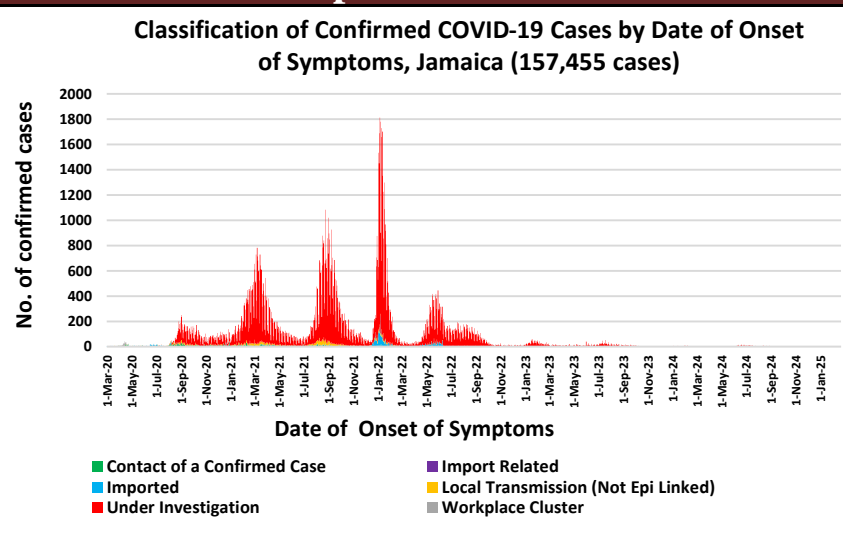


**SENTINEL REPORT-** 78 sites. Automatic reporting

# COVID-19 Surveillance Update

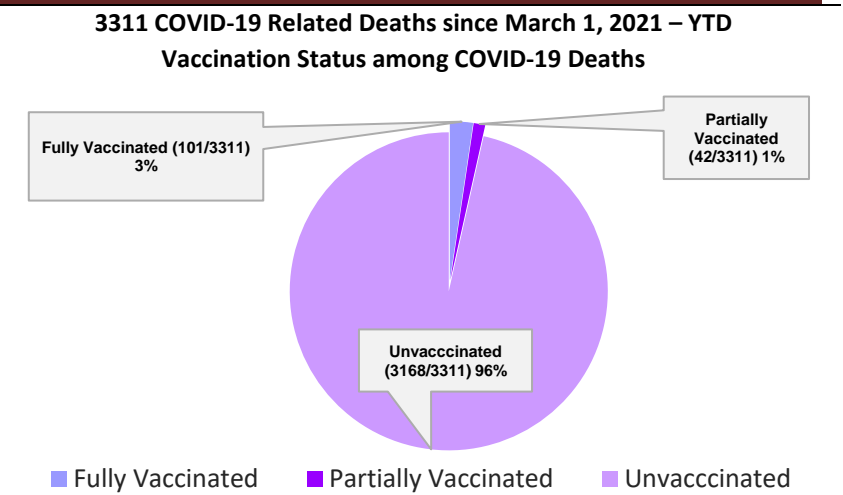
CASES	EW 7	Total
Confirmed	2	157455
Females	1	90720
Males	1	66732
Age Range	22 to 86 years	1 day to 108 years

\* 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 7	Total
ACTIVE *2 weeks*		5
DIED – COVID Related	0	3875
Died - NON COVID	0	396
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157455

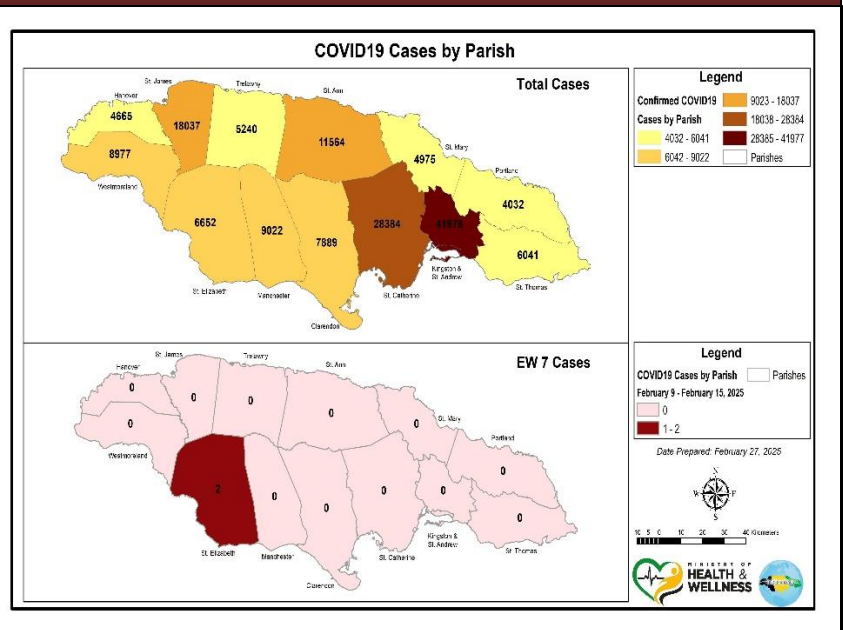


\*Vaccination programme March 2021 – YTD  
 \* Total as at current Epi week

## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW 4 -7, 2025

Epi Week	Confirmed Cases	Deaths
4	20600	1200
5	17100	991
6	15700	862
7	12800	616
<b>Total (4weeks)</b>	<b>66200</b>	<b>3669</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

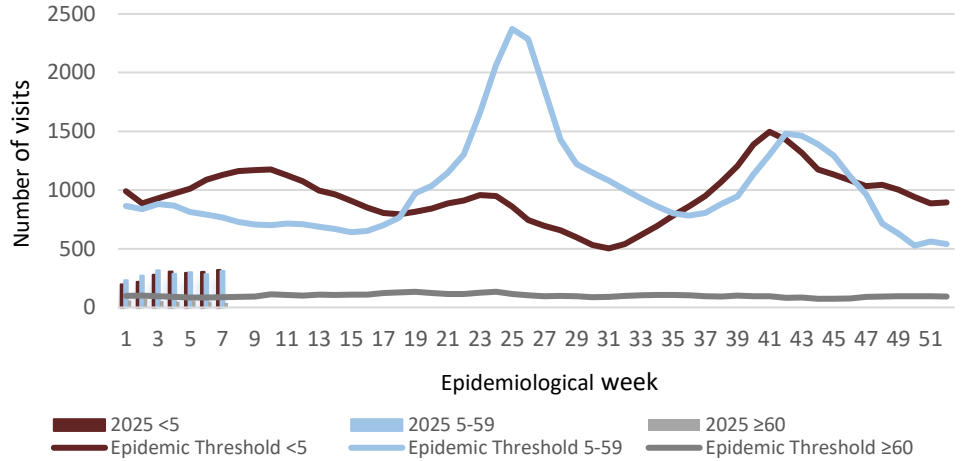
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 7*

February 9, 2025 – February 15, 2025 Epidemiological Week 7

	EW 7	YTD
SARI cases	8	71
<b>Total Influenza positive Samples</b>	1	80
<b>Influenza A</b>	1	70
H3N2	1	26
H1N1pdm09	0	48
Not subtyped	0	0
<b>Influenza B</b>	0	6
B lineage not determined	0	0
B Victoria	0	6
<b>Parainfluenza</b>	0	0
<b>Adenovirus</b>	0	0
<b>RSV</b>	0	23

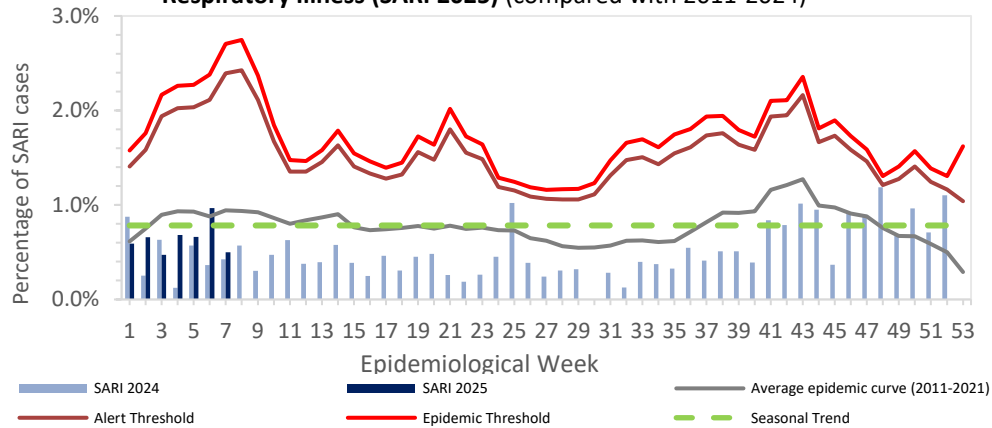
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



**Epi Week Summary**

During EW 7, eight (8) SARI admissions were reported.

Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2025) (compared with 2011-2024)



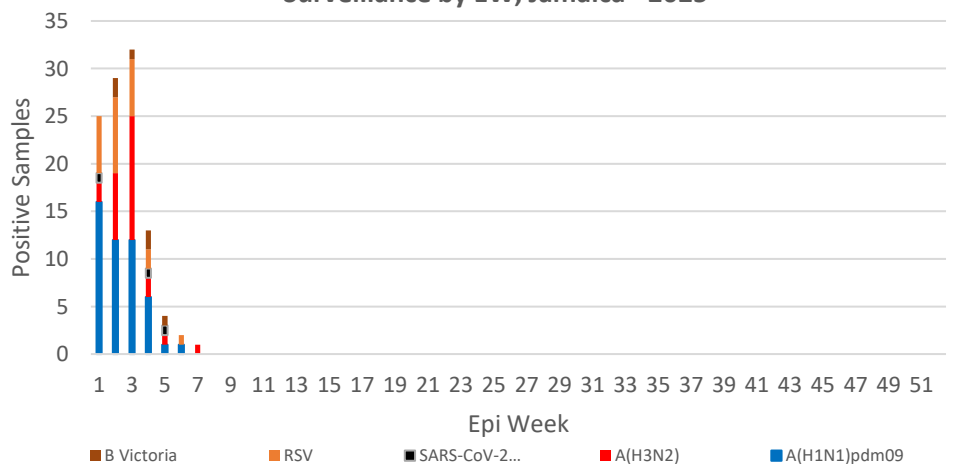
**Caribbean Update EW 7**

Caribbean: ILI cases due to SARS-CoV-2 and RSV remain low. Influenza activity remains high, with an increase in SARI cases. The predominant subtype reported is A(H1N1)pdm09.

By country: During the last four EW, influenza activity has increased in the Dominican Republic, Suriname, and Barbados, while it has decreased in Jamaica, Guyana and Belize, where influenza B/Victoria primarily circulates.

(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



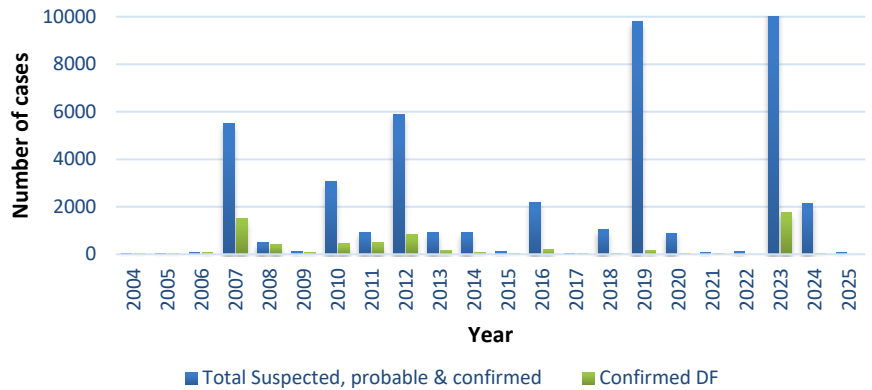
# Dengue Bulletin

February 9, 2024 – February 15, 2025 Epidemiological Week 7


Epidemiological Week 7

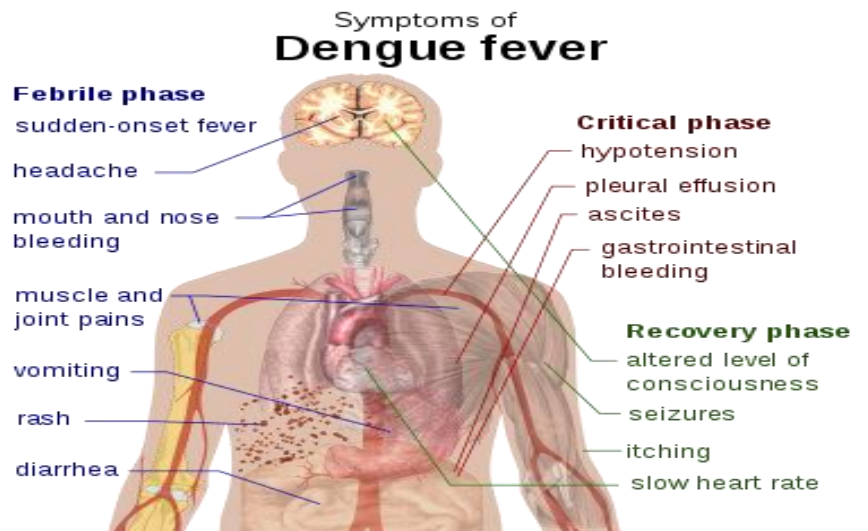


Dengue Cases by Year: 2004-2025, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 7 of 2025

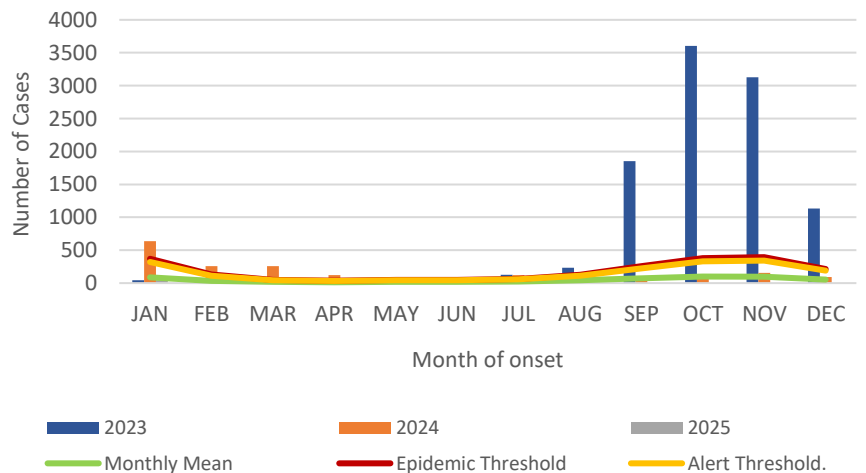
	2025*	
	EW 7	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	4	69
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at ,February 25, 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-23-004

### The Association between Social Factors and the Prevalence of Diabetes Mellitus in Urban Jamaica

McGrath, H<sup>1</sup>, Blake AL<sup>2</sup>, Guthrie-Dixon N<sup>3</sup>, Williams A<sup>1</sup>, McKenzie JA<sup>3</sup>, Younger-Coleman NOM<sup>3</sup>,  
Tulloch-Reid MK<sup>3</sup>, Wilks RJ<sup>3</sup>, Williams D<sup>4</sup>, Ferguson TS<sup>3</sup>

<sup>1</sup>The University of the West Indies, Open Campus, <sup>2</sup> School of Clinical Medicine and Research, The Faculty of Medical Sciences, The University of the West Indies, Mona, Nassau, The Bahamas,

<sup>3</sup>The Epidemiology Research Unit, Caribbean Institute for Health Research, The University of the West Indies, Mona, Kingston, Jamaica, <sup>4</sup> Department of Social and Behavioral Sciences, Harvard T.H. School of Public Health, Boston, MA, USA

**Objective:** To evaluate the associations of social support, education, and community property value with prevalent diabetes mellitus (DM) in urban Jamaica.

**Methods:** A secondary cross-sectional analysis was conducted using data collected in 2018 – 2019 from the Cardiovascular Health in Urban Communities Study. Height, weight, blood pressure and fasting blood glucose were measured. Education, doctor-diagnosed diabetes and hypertension were self-reported. Data on community property value were obtained from the National Land Agency. Social support (SS) was determined from responses on the number of friends: 1) in their social network, 2) willing to offer a small loan, and 3) who provide advice. Summary statistics and prevalence estimates were determined. Multivariable logistic regression was used to assess the association between social factors and prevalent DM. Statistical significance was defined as  $p < 0.05$ .

**Results:** The analyzed sample consisted of 763 participants (512 females, 251 males) with mean (SD) age of 47.9 (18.3) years. Overall prevalence of DM was 17.5% (95% CI: 15%-20%). Males who attained more than high school education were less likely to have DM (OR=0.24;  $p=0.028$ ). Among females; older age (OR=1.03;  $p=0.001$ ), higher BMI (OR=1.03;  $p=0.007$ ), and hypertension (OR=3.40;  $p=0.001$ ) were associated with higher odds of DM. No associations were found with SS or community property value.

**Conclusion:** Higher educational attainment was inversely associated with DM in urban Jamaica, but social factors such as community property value and SS were not. Further research is warranted to explore these associations in rural settings and their impact on other outcomes including diabetes complications and survivorship.



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9 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
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REPORT- 78 sites.  
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