

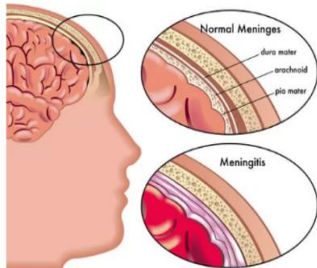
# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Meningitis (Part 3)

#### Diagnosis



To diagnose meningitis, a lumbar puncture is needed to examine the cerebrospinal fluid (CSF). This should be done before starting antibiotics; however, if bacterial meningitis is suspected based on the signs and symptoms, a lumbar puncture should never delay antibiotic treatment. Laboratories will then perform specific tests with CSF or blood to identify the pathogen causing the infection. The tests will also help identify the treatments needed, and specifically for bacterial

infections the susceptibility to types of antibiotics, as well as identify the strain(s) of the pathogen responsible and inform public health responses.

#### Treatment

Meningitis is a medical emergency and requires urgent medical attention in an appropriate health-care facility. Antibiotic treatment should be started as soon as possible when bacterial meningitis is suspected. The first dose of antibiotic treatment should not be delayed until the results of the lumbar puncture are available. The choice of antibiotic treatment should consider the age of the patient, presence of immunosuppression, and local prevalence of antimicrobial resistance patterns. In non-epidemic settings, intravenous corticosteroids (e.g., dexamethasone) are initiated with the first dose of antibiotics to reduce the inflammatory response and the risk of neurological sequelae and death. Those who have lived through meningitis can have complications such as deafness, learning impairment or behavioural problem and require long-term treatment and care. The ongoing psychosocial impacts of disability from meningitis can have medical, educational, social and human rights-based implications. Access to both services and support for these conditions is often insufficient, especially in low- and middle-income countries.

Individuals and families with members disabled by meningitis should be encouraged to seek services and guidance from local and national organizations of disabled people and other disability focused organizations, which can provide vital advice about legal rights, economic opportunities and social engagement to ensure people disabled by meningitis are able to live full and rewarding lives.

#### Surveillance

Surveillance, from case detection to investigation and laboratory confirmation, is essential to the control of meningitis. Main objectives include:

- detect and confirm outbreaks;
- monitor the incidence trends, including the distribution and evolution of serogroups and serotypes;
- estimate the disease burden;
- monitor the antibiotic resistance profile;
- monitor the circulation, distribution, and evolution of specific strains (clones); and
- estimate the impact of meningitis control strategies, particularly preventive vaccination programmes.

Taken from WHO website on 2/Jun/2025  
<https://www.who.int/news-room/fact-sheets/detail/meningitis>  
 picture from Meningitis Centre Australia 2021

## EPI WEEK 21



Syndromic Surveillance

Accidents

Violence

Pages 2-4



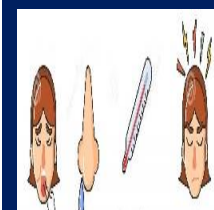
Class 1 Notifiable Events

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 - 18 to 21 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													
18	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
19	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
20	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
21	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

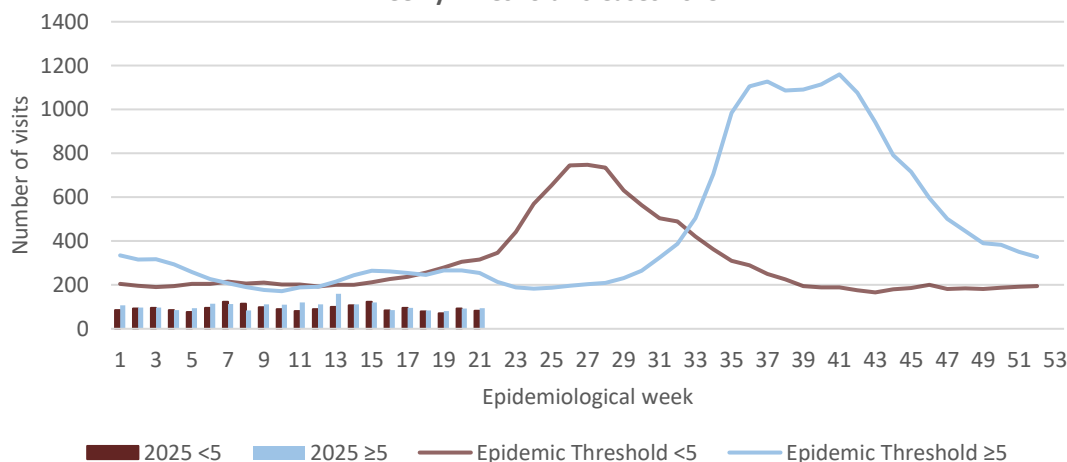
## REPORTS FOR SYNDROMIC SURVEILLANCE

## UNDIFFERENTIATED FEVER

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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



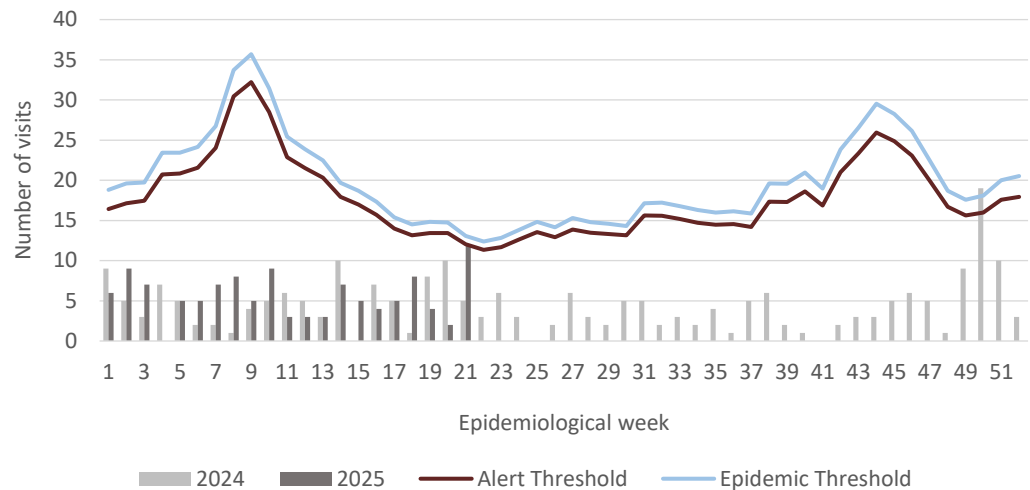
SENTINEL  
REPORT- 78 sites.  
Automatic reporting

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

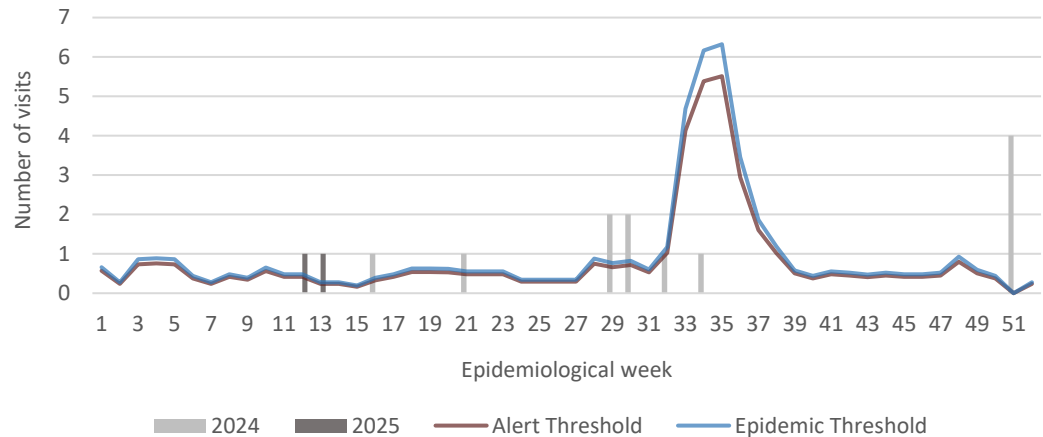


FEVER AND HAEMORRHAGIC

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



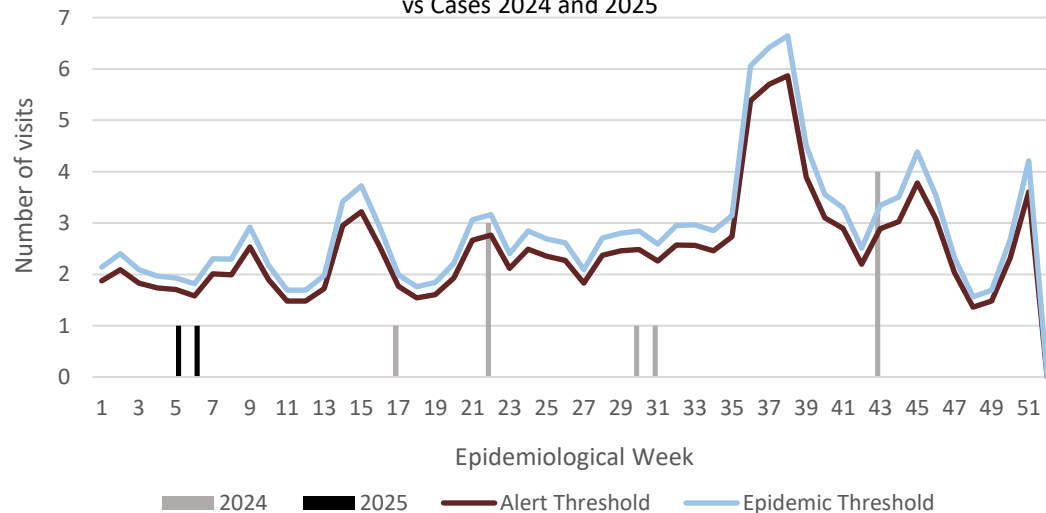
FEVER AND JAUNDICE

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



3

NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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HOSPITAL  
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30 sites. Actively  
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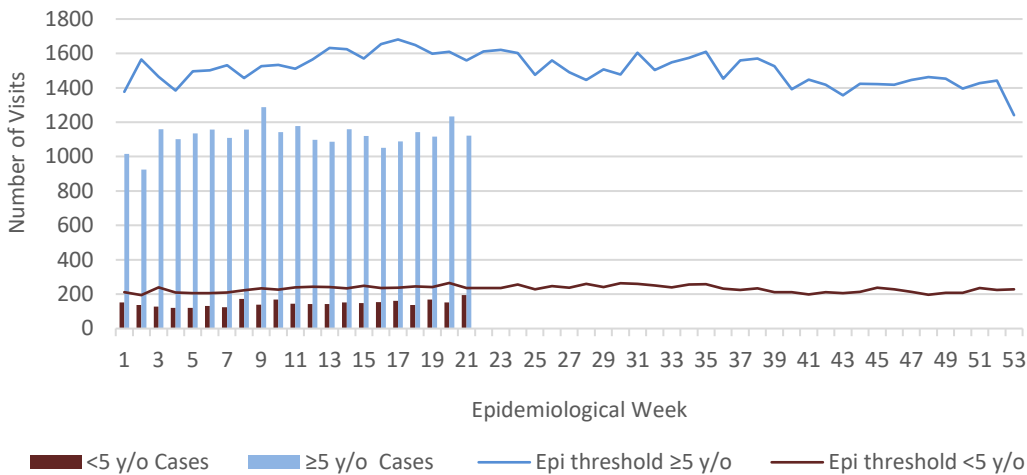
SENTINEL  
REPORT- 78 sites.  
Automatic reporting

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

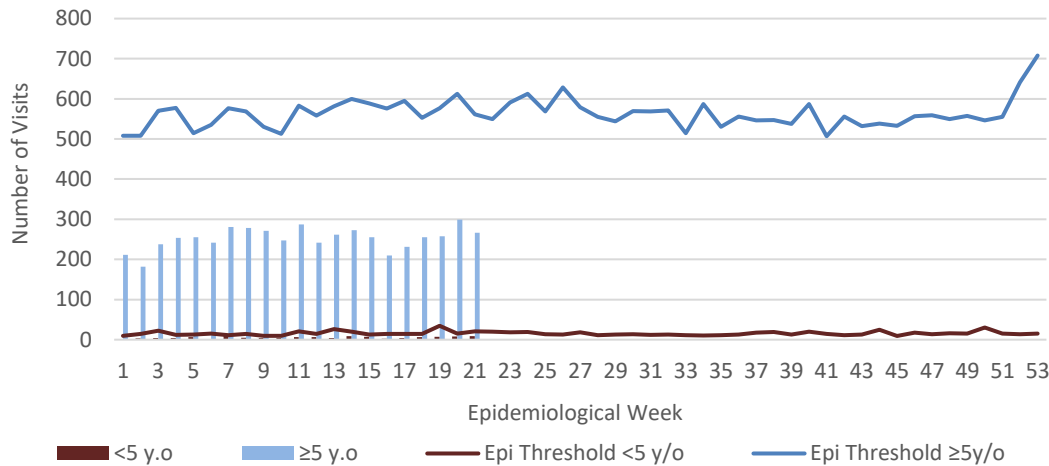


VIOLENCE

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

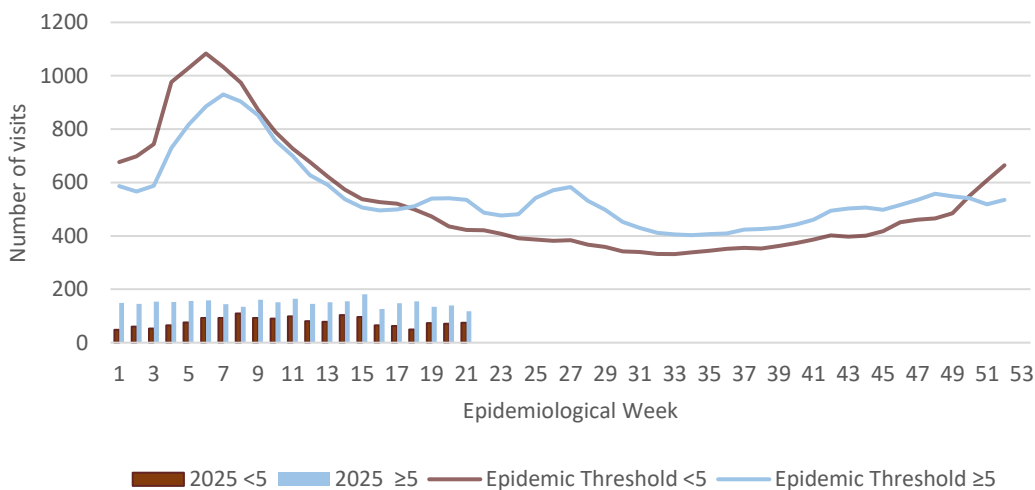


GASTROENTERITIS

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  
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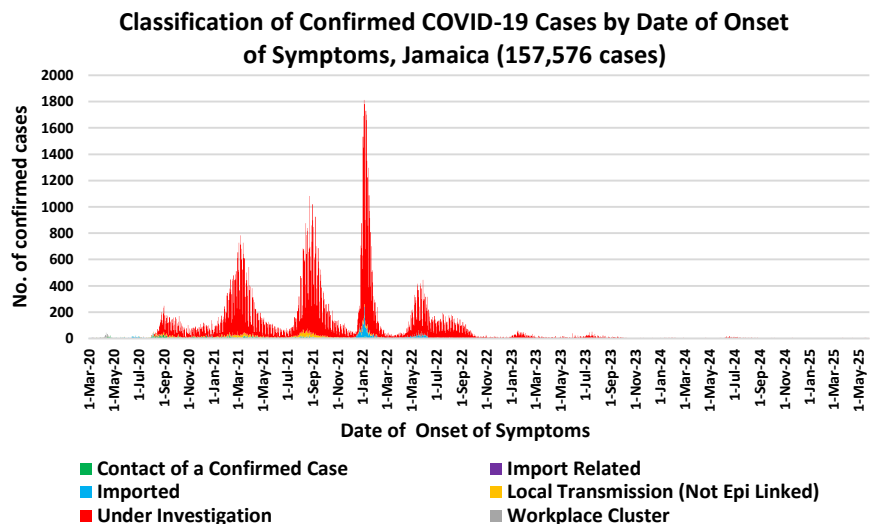
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CLASS ONE NOTIFIABLE EVENTS					Comments
			Confirmed YTD <sup>α</sup>		AFP Field Guides from WHO indicate that for an effective surveillance system, detection rates for AFP should be 1/100,000 population under 15 years old (6 to 7) cases annually.
	CLASS 1 EVENTS		CURRENT YEAR 2025	PREVIOUS YEAR 2024	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		31 <sup>β</sup>	177 <sup>β</sup>	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Cholera		0	0	
	Severe Dengue <sup>γ</sup>		See Dengue page below	See Dengue page below	
	COVID-19 (SARS-CoV-2)		138	200	<sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		1	21	
	Hepatitis C		1	6	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis		5	11	
	Monkeypox		1	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.
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	<sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.
	Congenital Rubella Syndrome		0	0	
	Congenital Syphilis		0	0	
	Fever and Rash	Measles	0	0	
		Rubella	0	0	
	Maternal Deaths <sup>δ</sup>		23	22	
	Ophthalmia Neonatorum		12	80	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		1	0	
	Tuberculosis		13	24	
	Yellow Fever		0	0	
	Chikungunya <sup>ε</sup>		0	0	NA- Not Available
	Zika Virus <sup>θ</sup>		0	0	



# COVID-19 Surveillance Update

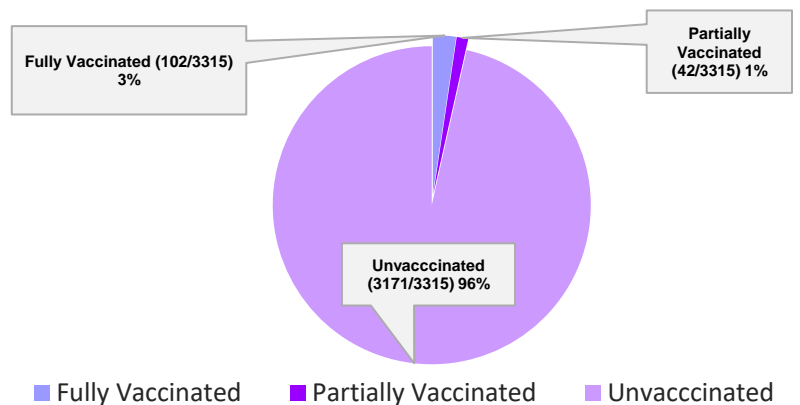
CASES	EW 21	Total
Confirmed	20	157576
Females	12	90791
Males	8	66782
Age Range	67 days to 89 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases * Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.		



## COVID-19 Outcomes

Outcomes	EW 21	Total
ACTIVE *2 weeks*		31
DIED – COVID Related	0	3879
Died - NON COVID	0	396
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157576
*Vaccination programme March 2021 – YTD * Total as at current Epi week		

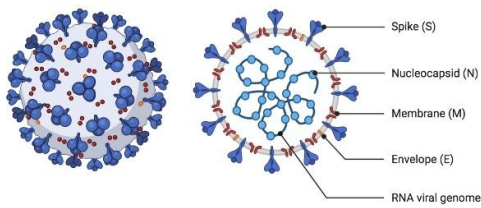
## 3315 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

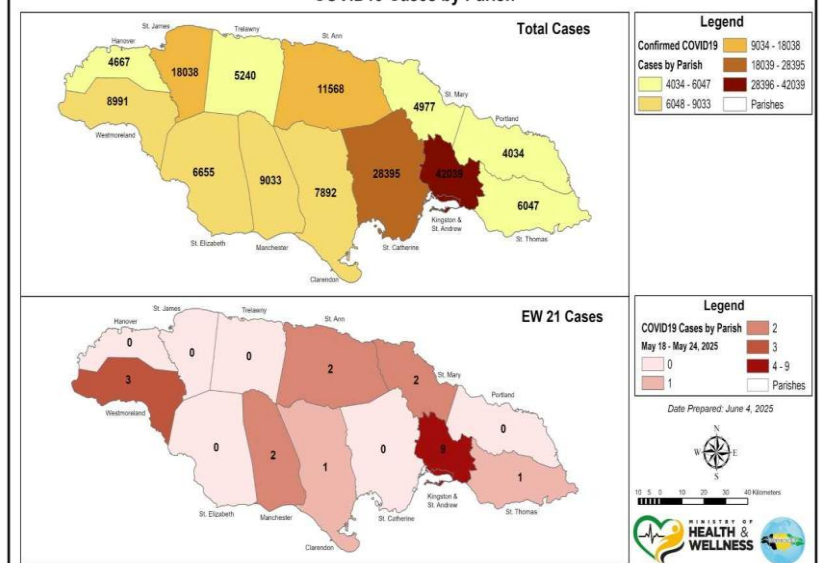
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW 18 -21, 2025

Epi Week	Confirmed Cases	Deaths
18	5900	349
19	5700	287
20	75000	284
21	64000	190
Total (4weeks)	150600	1110

### COVID19 Cases by Parish



6 NOTIFICATIONS-  
All clinical  
sites

INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events

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30 sites. Actively  
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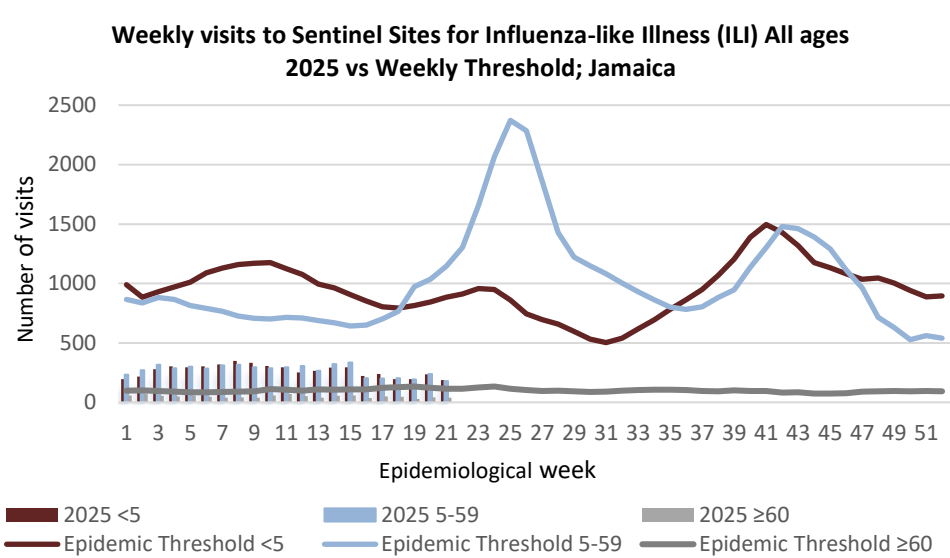
NATIONAL SURVEILLANCE UNIT

INFLUENZA REPORT

May 18, 2025 – May 24, 2025 Epidemiological Week 21

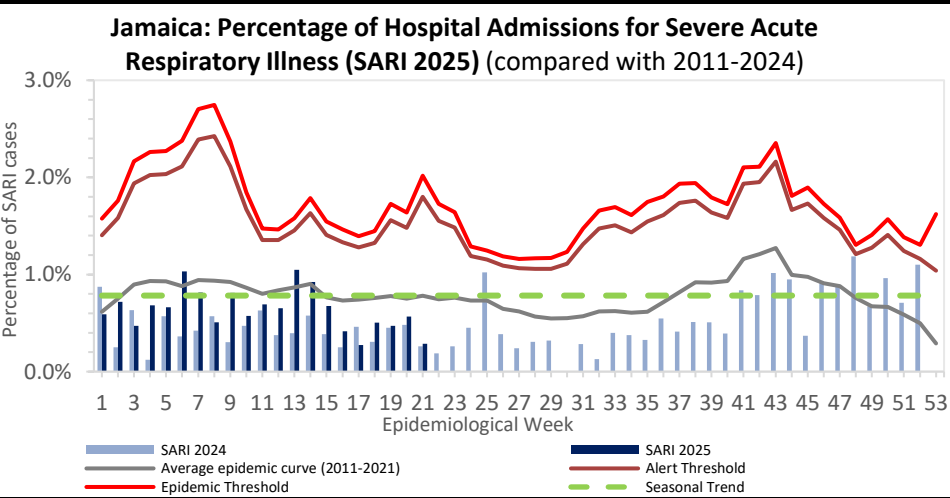
EW 21

	EW 21	YTD
SARI cases	4	204
Total Influenza positive Samples	0	157
Influenza A	0	134
H1N1pdm09	0	75
H3N2	0	59
Not subtyped	0	0
Influenza B	0	23
B lineage not determined	0	0
B Victoria	0	23
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	30



**Epi Week Summary**

During EW 21, four (4) SARI admissions were reported.

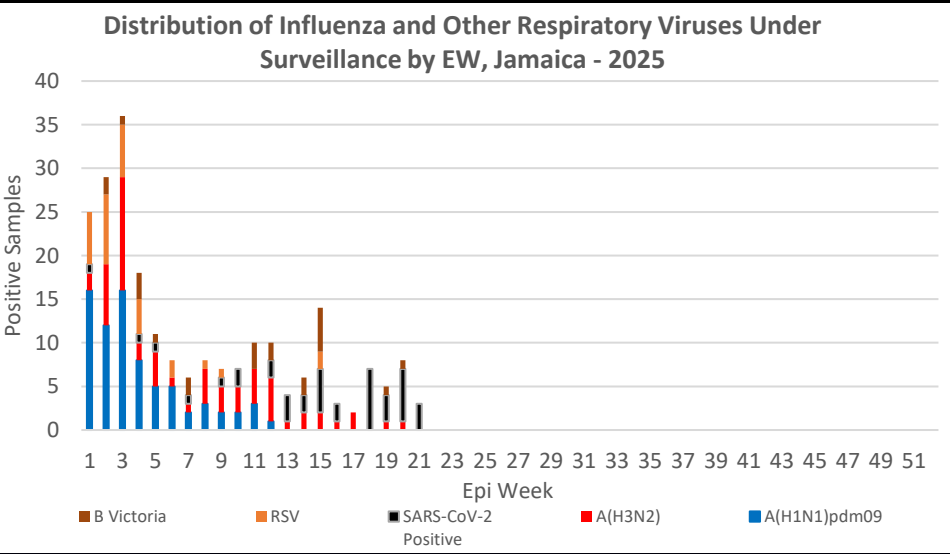


**Caribbean Update EW 21**

**Caribbean:** Influenza activity, mainly A(H1N1)pdm09 has decreased for SARI cases, while an increase in ILI cases associated with influenza and SARS-CoV-2 has been observed. RSV circulation remains low.

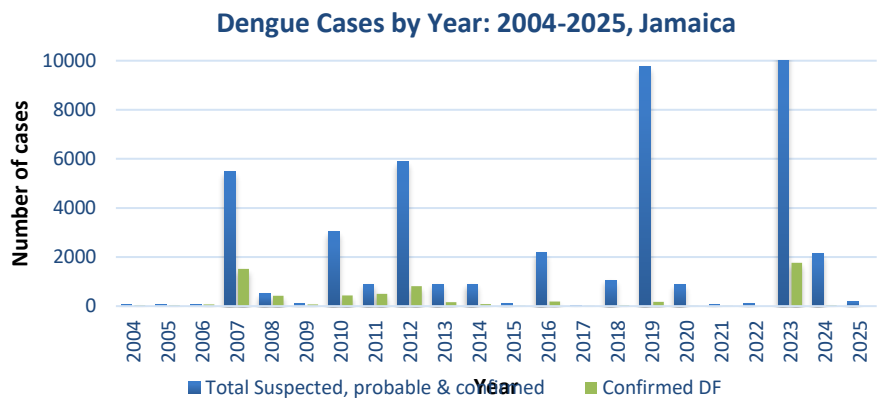
**By country:** During the last EW, influenza activity has increased in the Dominican Republic, Jamaica, Suriname, Barbados and Guyana, while it has decreased in Belize and the Cayman Islands. An increase in RSV activity has been observed in Cuba. SARS-CoV-2 detection has risen in the Dominican Republic, Saint Lucia, Barbados, Guyana and Saint Vincent and the Grenadines.

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




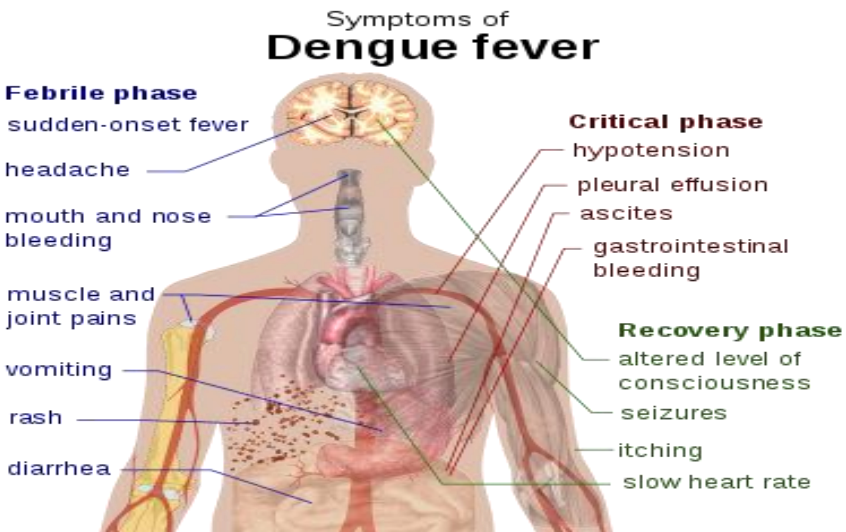
# Dengue Bulletin

May 18, 2025 – May 24, 2025 Epidemiological Week 21



Reported suspected, probable and confirmed dengue with symptom onset in week 21 of 2025

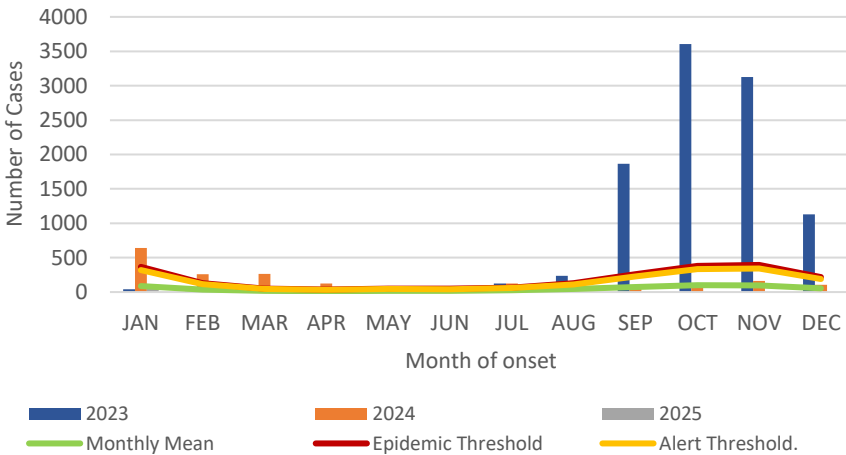
	2025*	
	EW 21	YTD
Total Suspected, Probable & Confirmed Dengue Cases	8	195
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at, June 4, 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)**





# SEARCH PAPER

## Abstract

### Social Support and Risk for Cognitive Impairment among Community-Dwelling Older Persons in Jamaica

Donaldson-Davis, K<sup>1</sup>, Willie-Tyndale, D<sup>1</sup>, Edwards, T<sup>1</sup>, McKoy-Davis J<sup>1</sup>, Chin-Bailey C<sup>2</sup>, James, K<sup>2</sup>, Eldemire-Shearer, D<sup>1</sup>

<sup>1</sup>Mona Ageing and Wellness Centre, University of the West Indies, Mona, Jamaica, <sup>2</sup>Department of Community Health and Psychiatry, University of the West Indies, Mona, Jamaica

**Objective:** To describe social support among older Jamaicans by Mini-Mental Status Examination (MMSE) scores.

**Methods:** A nationally representative survey was conducted in 2012 among persons  $\geq 60$  years ( $n = 2,943$ ). MMSE scores were available for 2,782 participants. Number of children alive, quality of relationship with children, source of main physical and emotional support, caregiver presence and number of visiting contacts were used as indicators of social support. MMSE scores  $<20$  were categorized as low. Logistic regression, incorporating demographic and support variables, was used to identify factors associated with low MMSE scores.

**Results:** One-tenth of persons with low MMSE scores had no children and 8.9% of persons with low scores rated relationships with their children as poor or non-existent. The plurality of persons considered themselves their main physical and emotional support. Seventy-three percent of persons with low scores had no caregiver. Older age, female gender and  $\leq$  primary education level were associated with low MMSE scores. High quality relationships with children were less likely among the lower MMSE score category [OR 0.69, 95% CI: 0.517 – 0.919]. Persons with caregivers were more likely to be in the lower score category [OR 2.2, 95% CI: 1.6 – 3.1].

**Conclusion:** Low MMSE scores are associated with increased risk of cognitive impairment. Many community-dwelling older persons at risk for cognitive impairment lack adequate social support. Persons with low MMSE scores should receive close clinical surveillance, and be prioritized for community based social support interventions. Programmes incentivizing caregiving could benefit cognitively impaired older persons.



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Tele: (876) 633-7924  
Email: surveillance@moh.gov.jm



9 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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