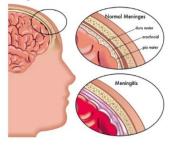
## WEEKLY EPIDEMIOLOGY BULLETIN NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## 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.

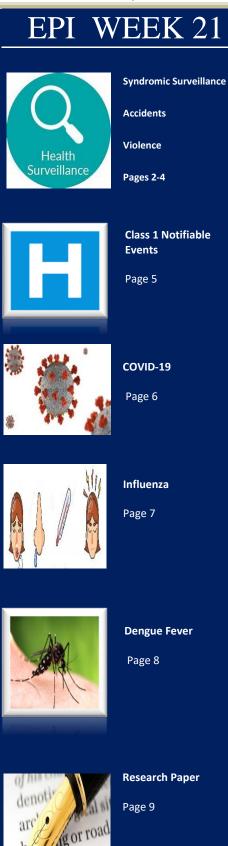
Individuals and families with members disabled by meningitis should be encouraged to seek services and guidance from local and national organizations of disabled people and other disability focused organizations, which can provide vital advice about legal rights, economic opportunities and social engagement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



re-sear

### SENTINEL SYNDROMIC SURVEILLANCE

## Sentinel Surveillance in 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 A syndromic surveillance system is good for early detection of and response to public health events.

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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.

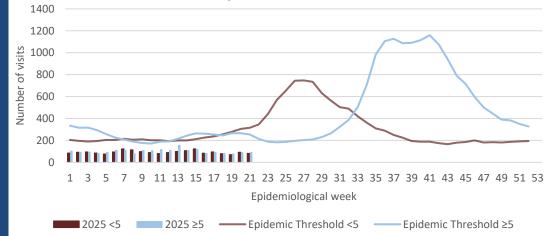
Jamaica's sentinel surveillance system concentrates on visits to sentinel sites for health events and syndromes of national importance which are reported weekly (see pages 2 -4). There are seventy-eight (78) reporting sentinel sites (hospitals and health centres) across Jamaica.

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	Late	On	On	On	On	On	On	On	On	On	On	On
	Time	(T)	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
19	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
20	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
21	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time

## REPORTS FOR SYNDROMIC SURVEILLANCE

## UNDIFFERENTIATED FEVER

Temperature of  $>38^{\circ}C$ /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

NS-

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

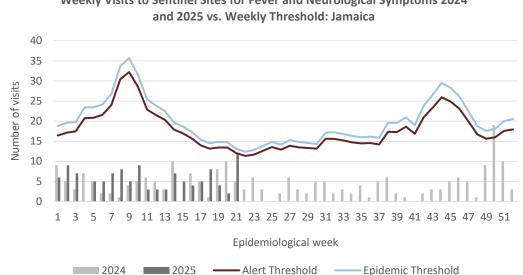




## June 6, 2025

## FEVER AND NEUROLOGICAL

Temperature of >38°C /100.4°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 Haemorrhagic symptoms 2024

and 2025 vs Weekly Threshold; Jamaica

Epidemiological week

Alert Threshold

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

17 19

13 15

2025



## **FEVER AND** HAEMORRHAGIC

Temperature of >38°C /100.4<sup>o</sup>*F* (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.

7

6

5

4

3

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7

6

5 4

3

2

1

0

1 3 5 7

Number of visits

1 3

2024

Number of visits



## **FEVER AND JAUNDICE**

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



NOTIFICATIONS-3 All clinical sites



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

2024



2025

HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51

Epidemiological Week

Alert Threshold

21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51

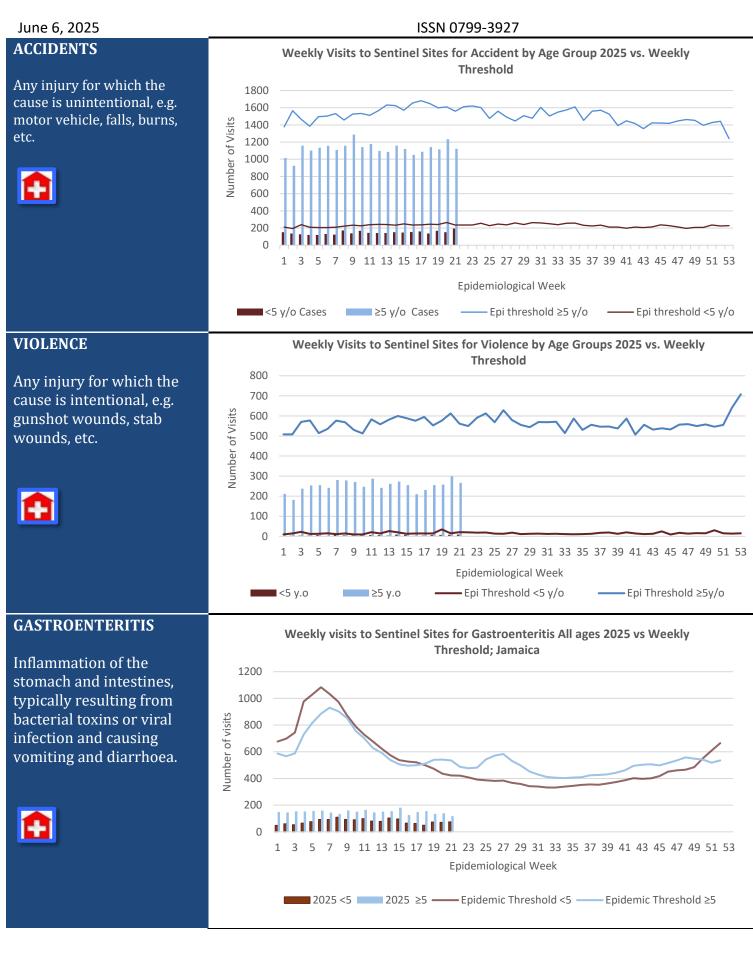
Epidemic Threshold

SENTINEL REPORT- 78 sites. Automatic reporting

Epidemic Threshold



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4 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





## ISSN 0799-3927

## CLASS ONE NOTIFIABLE EVENTS

## Comments

	CLASS 1 EVENTS		_ Confirm	ed $\text{YTD}^{\alpha}$	AFP Field Guides from	
			CURRENT YEAR 2025	PREVIOUS YEAR 2024	WHO indicate that for an effective surveillance system, detection rates for	
	Accidental Po	bisoning	31 <sup>β</sup>	177 <sup>β</sup>	AFP should be 1/100,000	
Ц	Cholera		0	0	population under 15 years old (6 to 7) cases annually.	
ANC	Severe Dengu	ie <sup>v</sup>	See Dengue page below	See Dengue page below	old (0 to 7) cases annually.	
NATIONAL /INTERNATIONAL INTEREST	COVID-19 (S	SARS-CoV-2)	138	200	Pertussis-like syndrome and	
EST	Hansen's Dis	ease (Leprosy)	0	0	Tetanus are clinically	
L /INTERN	Hepatitis B		1	21	confirmed classifications.	
AL /I	Hepatitis C		1	6	Y Dengue Hemorrhagic	
NO	HIV/AIDS		NA	NA	Fever data include Dengue related deaths;	
ATI	Malaria (Imp	ported)	0	0	related deaths,	
Z	Meningitis		5	11	$^{\delta}$ Figures include all deaths	
	Monkeypox		1	0	associated with pregnancy reported for the period.	
EXOTIC/ UNUSUAL	Plague		0	0	<sup>ε</sup> CHIKV IgM positive	
TY/ TY	Meningococc	al Meningitis	0	0	cases	
H IGH RBIDI RTALI	Neonatal Teta	anus	0	0	<sup><math>\theta</math></sup> Zika PCR positive cases	
H IGH Morbidity, Mortality	Typhoid Feve	er	0	0	$^{\beta}$ Updates made to prior	
W	Meningitis H	/Flu	0	0	weeks.	
	AFP/Polio		0	0	$^{\alpha}$ Figures are cumulative	
	Congenital R	ubella Syndrome	0	0	totals for all epidemiological weeks year to date.	
70	Congenital Sy	yphilis	0	0	weeks year to date.	
MES	Fever and Rash	Measles	0	0	-	
SPECIAL PROGRAMN		Rubella	0	0		
SOG	Maternal Dea	ths <sup>δ</sup>	23	22	-	
L PH	Ophthalmia N	Jeonatorum	12	80	-	
CIA	Pertussis-like	syndrome	0	0	-	
SPE	Rheumatic Fe	ever	0	0	-	
	Tetanus		1	0	-	
	Tuberculosis		13	24	-	
	Yellow Fever		0	0		
Chikungunya <sup>e</sup>			0	0		
Zika Virus <sup>θ</sup>			0	0	NA- Not Available	

NOTIFICATIONS-5 All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





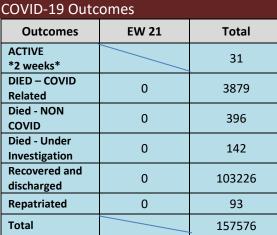
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CASES	EW 21	Total			
Confirmed	20	157576			
Females	12	90791			
Males	8	66782			
Age Range	67 days to 89 years	1 day to 108 years			
* 2 positive second had no condex exactlication					

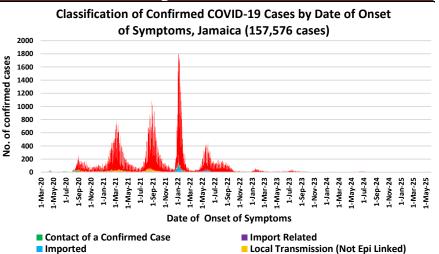
### 3 positive cases had no gender specification

\* PCR or Antigen tests are used to confirm cases \* Total represents all cases confirmed from 10 Mar 2020

to the current Epi-Week.

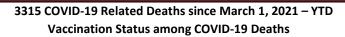


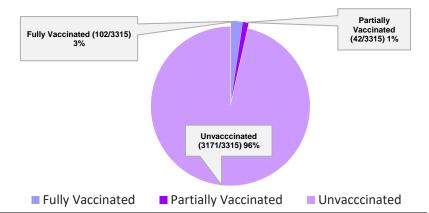
## **COVID-19 Surveillance Update**



Under Investigation

Workplace Cluster

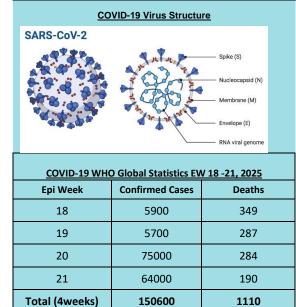


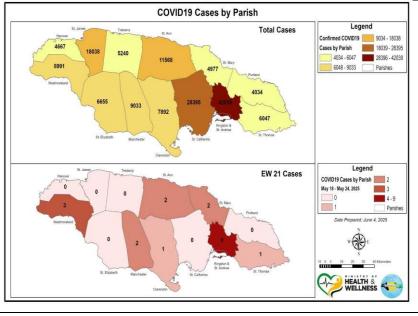


\*Vaccination programme March 2021 – YTD

\* Total as at current Epi week

## COVID-19 Parish Distribution and Global Statistics





NOTIFICATIONS-6 All clinical



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



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

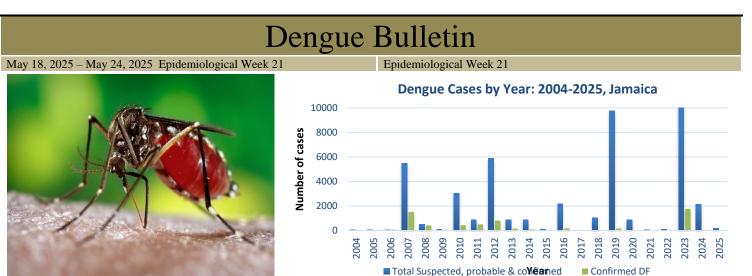


sites

#### June 6, 2025 ISSN 0799-3927 NATIONAL SURVEILLANCE UNIT **INFLUENZA REPORT** EW 21 May 18, 2025 - May 24, 2025 Epidemiological Week 21 EW 21 **YTD** Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages SARI cases 4 204 2025 vs Weekly Threshold; Jamaica **Total Influenza** 2500 positive 0 157 Samples 2000 Influenza A 0 134 Number of visits H1N1pdm09 75 0 1500 H3N2 0 59 1000 Not subtyped 0 0 Influenza B 0 23 500 B lineage not 0 0 0 determined 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 3 9 1 5 **B** Victoria 0 23 Epidemiological week Parainfluenza 0 0 2025 <5 2025 5-59 2025 >60 Adenovirus 0 0 Epidemic Threshold <5</p> - Epidemic Threshold ≥60 Epidemic Threshold 5-59 RSV 0 30 **Epi Week Summary** Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2025) (compared with 2011-2024) 3.0% During EW 21, four (4) SARI admissions were reported. Percentage of SARI cases 2.0% 1.0% 0.0% 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 3 5 7 1 **Epidemiological Week** SARI 2024 SARI 2025 Average epidemic curve (2011-2021) Epidemic Threshold Alert Threshold Seasonal Trend Caribbean Update EW 21 **Distribution of Influenza and Other Respiratory Viruses Under** Surveillance by EW, Jamaica - 2025 Influenza Caribbean: activity, mainly 40 A(H1N1)pdm09 has decreased for SARI cases, while an increase in ILI cases associated with 35 influenza and SARS-CoV-2 has been observed. 30 RSV circulation remains low. **Positive Samples** 25 By country: During the last EW, influenza activity has increased in the Dominican 20 Republic, Jamaica, Suriname, Barbados and Guyana, while it has decreased in Belize and the 15 Cayman Islands. An increase in RSV activity has 10 been observed in Cuba. SARS-CoV-2 detection has risen in the Dominican Republic, Saint Lucia, 5 Barbados, Guyana and Saint Vincent and the 0 Grenadines. 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 1 3 5 7 9 (taken from PAHO Respiratory viruses weekly report) https://www.paho.org/en/influenza-situation-report Epi Week B Victoria RSV SARS-CoV-2 A(H3N2) A(H1N1)pdm09 Positive NOTIFICATIONS-HOSPITAL **INVESTIGATION** SENTINEL 7 ÷ All clinical **REPORTS-** Detailed Follow ACTIVE REPORT- 78 sites. up for all Class One Events SURVEILLANCE-Automatic reporting sites 30 sites. Actively

pursued

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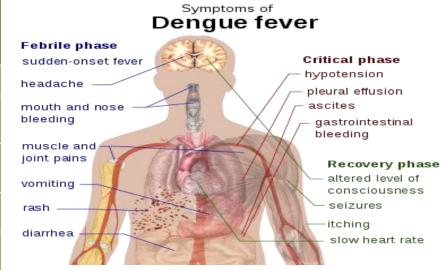


Reported suspected, probable and confirmed dengue with symptom onset in week 21 of 2025

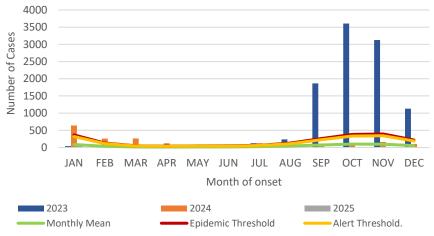
	2025*			
	EW 21	YTD		
Total Suspected, Probable & Confirmed Dengue Cases	8	195		
Lab Confirmed Dengue cases	0	0		
CONFIRMED Dengue Related Deaths	0	0		

## **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)



8 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





# SEARCH PAPER

## Abstract

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

Donaldson-Davis,  $K^1$ , Willie-Tyndale,  $D^1$ , Edwards,  $T^1$ , McKoy-Davis  $J^1$ , Chin-Bailey  $C^2$ , James,  $K^2$ , Eldemire-Shearer,  $D^1$ 

<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.



The Ministry of Health and Wellness 15 Knutsford Boulevard, Kingston 5, Jamaica Tele: (876) 633-7924 Email: surveillance@moh.gov.jm

9 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



