WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Leptospirosis (Part 1)

Leptospirosis is a zoonotic disease with epidemic potential, especially after a heavy rainfall, caused by a bacterium called *Leptospira*. *Leptospira interrogans* is pathogenic to humans and animals, with more than 200 serologic variants or serovars. Humans usually acquire leptospirosis through direct contact with the urine of infected animals or a urine-contaminated environment. Human-to-human transmission occurs only very rarely. Leptospirosis may present with a wide variety of clinical manifestations, from a mild illness that may progress to a serious and sometimes fatal disease. Its symptoms may mimic many diseases, such as influenza, dengue and other viral haemorrhagic diseases; making the correct diagnosis (clinical and laboratory) at the onset of symptoms is important to prevent severe cases and save lives, primarily in outbreak situations.

Clinical diagnosis

1. Typically, the disease presents in four broad clinical categories:
2. A mild, influenza-like illness
3. Weil's syndrome characterized by jaundice, renal failure, haemorrhage and myocarditis with arrhythmias
4. Meningitis/meningoencephalitis
5. Pulmonary haemorrhage with respiratory failure

Of the many symptoms the most common clinical features of leptospirosis include fever, headache, myalgia (particularly in the calf muscle), conjunctival suffusion, jaundice, general malaise in addition to other symptoms/signs. Incubation period: 5-14 days, with a range of 2-30 days. Symptoms are easily confused with other common diseases in the tropics, such as dengue and other hemorrhagic fevers. The diagnosis of leptospirosis should be considered in any patient presenting with an abrupt onset of fever, chills, conjunctival suffusion, headache, myalgia and jaundice. History of occupational or recreational exposure to infected animals or to an environment potentially contaminated with animal urine.

Differential diagnosis

The following diseases should be considered in the differential diagnosis of leptospirosis: influenza, dengue and dengue hemorrhagic fever, hanta virus infection, yellow fever and other viral hemorrhagic fevers, rickettsiosis, borreliosis, brucellosis, malaria, pyelonephritis, aseptic meningitis, chemical poisoning, food poisoning, typhoid fever and other enteric fevers, viral hepatitis, pyrexia of unknown origin, primary HIV seroconversion, legionnaire’s disease, toxoplasmosis, infectious mononucleosis, pharyngitis.

Taken from PAHO website on 18/Nov/2025

https://www.paho.org/en/topics/leptospirosis

https://www.google.com/search?q=Leptospirosis+rat+pictures&rlz=1C1GCEA_enJM1049JM1049&oq=Leptospirosis+rat+pictures&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCTIwMTY0ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8#vhid=RMhmLVXchs3w9M&vssid=_aMIcacSuPI6MwbkPk8C-WA_56

EPI WEEK 45

ISSN 0799-3927

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 – 42 to 45 of 2025.

***Timeliness of submission from EW 43 onward is likely impacted by passage of Hurricane Mellissa.**

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
White- No reports received

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													
42	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time
43	On Time	On Time	On Time	On Time	Late (W)	Late (W)	On Time		On Time	On Time		On Time	On Time
44	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time		On Time	Late (W)		Late (W)	On Time
45	On Time	On Time	On Time	On Time	On Time	On Time	On Time		On Time	On Time	On Time	On Time	On Time

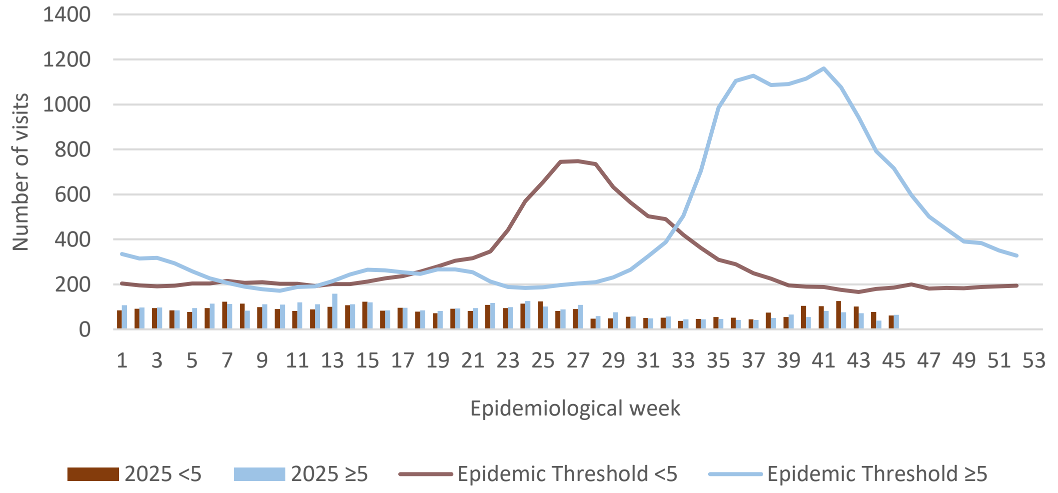
SYNDROMIC SURVEILLANCE

FEVER

UNDIFFERENTIATED FEVER

Temperature of >38⁰C /100.4⁰F (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



NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

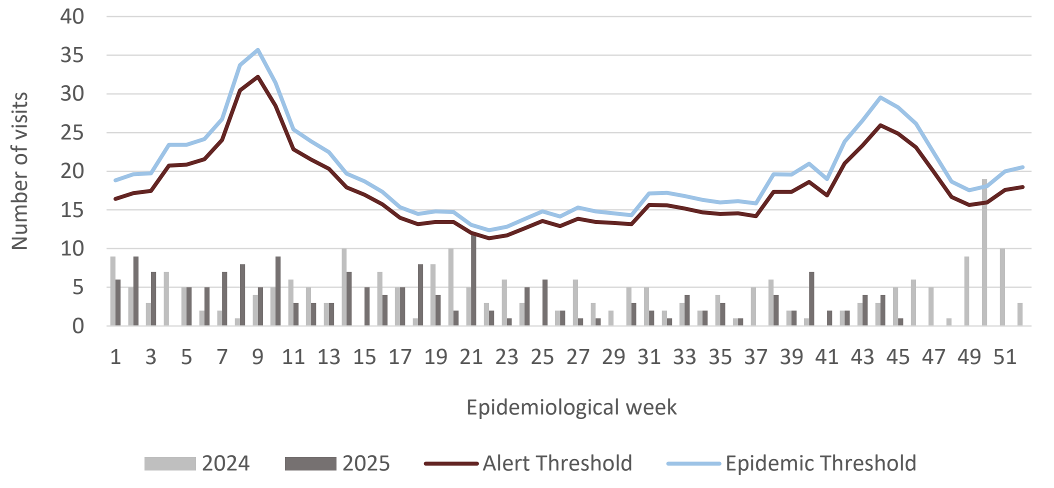
SENTINEL REPORT- 78 sites. Automatic reporting

 ISSN 0799-3927

FEVER AND NEUROLOGICAL

Temperature of >38^{0}C /100.4^{0}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).

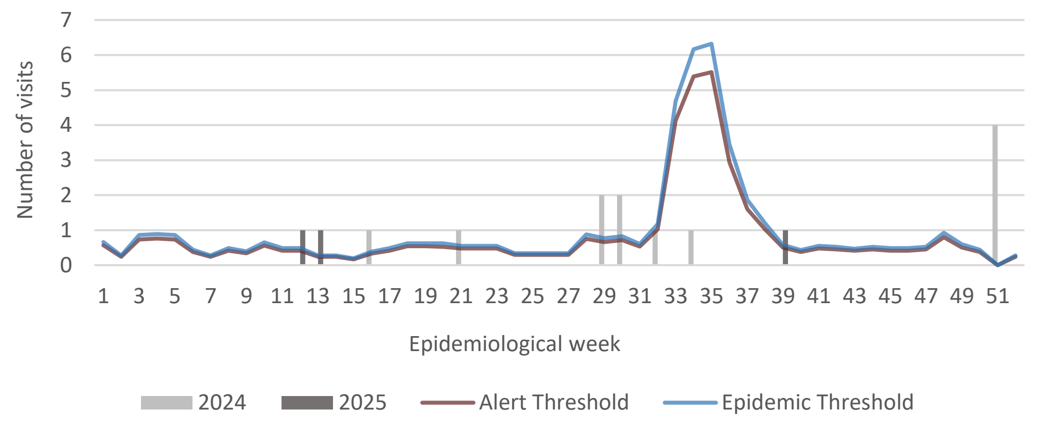
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2024 and 2025 vs. Weekly Threshold: Jamaica



FEVER AND HAEMORRHAGIC

Temperature of >38^0C /100.4^0F (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

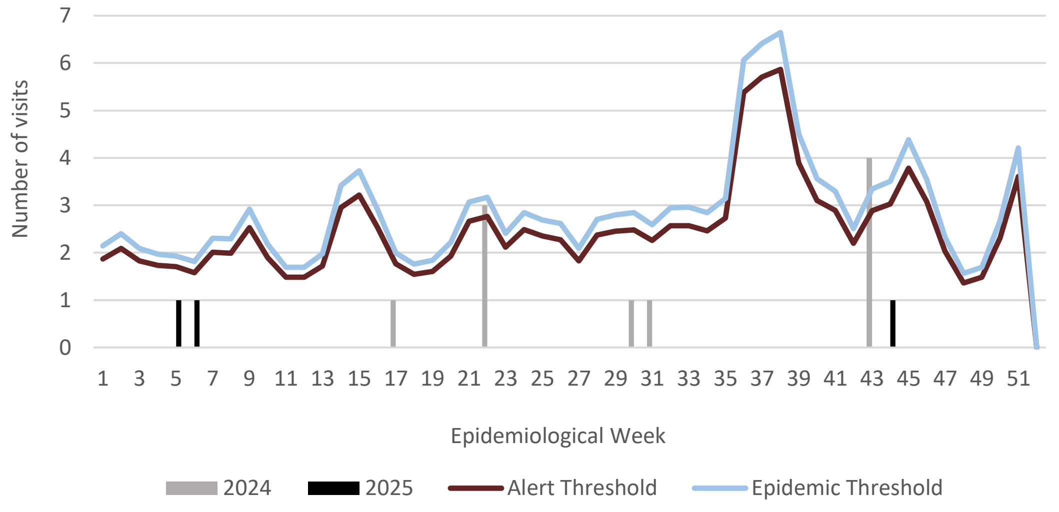


FEVER AND JAUNDICE

Temperature of >38^0C /100.4^0F (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



NOTIFICATIONS- All clinical sites

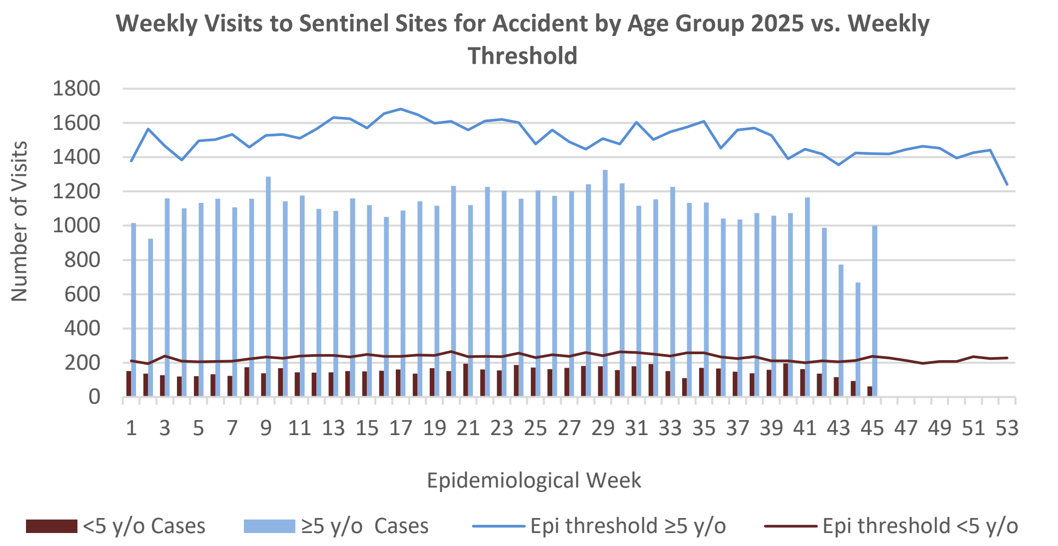
INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

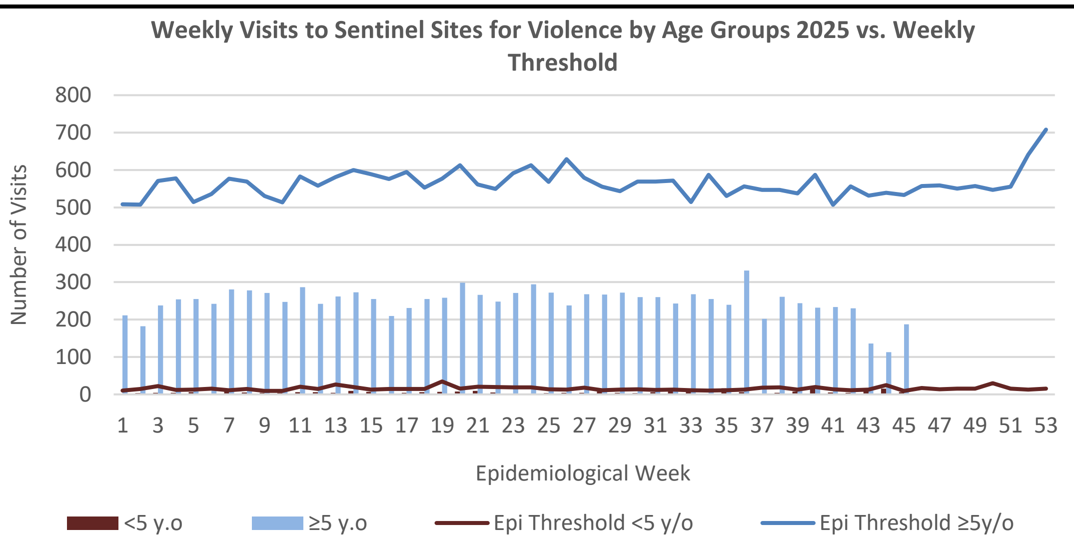
ACCIDENTS

Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.



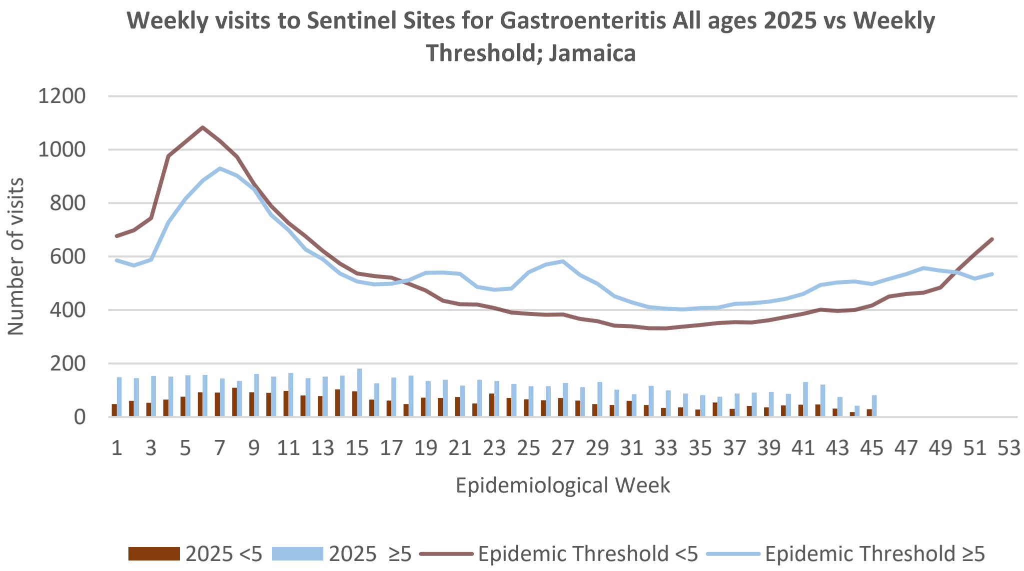
VIOLENCE

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



GASTROENTERITIS

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



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

 ISSN 0799-3927

CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS	Confirmed YTD[α] CURRENT YEAR 2025	Confirmed YTD[α] PREVIOUS YEAR 2024
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	117[β]	266[β]
	Cholera	0	0
	Severe Dengue[γ]	See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)	312	688
	Hansen's Disease (Leprosy)	0	0
	Hepatitis B	7	51
	Hepatitis C	1	10
	HIV/AIDS	NA	NA
	Malaria (Imported)	1	2
	Meningitis	12	21
	Mpox	1	0
EXOTIC/ UNUSUAL	Plague	0	0
H IGH 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
	Fever and Rash: Rubella	0	0
	Maternal Deaths[δ]	51	61
	Ophthalmia Neonatorum	36	159
	Pertussis-like syndrome	0	0
	Rheumatic Fever	0	0
	Tetanus	3	0
	Tuberculosis	42	49
	Yellow Fever	0	0
	Chikungunya[ε]	0	0
	Zika Virus[θ]	0	0

Comments

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.

[γ]Dengue Hemorrhagic Fever data include Dengue related deaths;

[δ] Figures include all deaths associated with pregnancy reported for the period.

[ε] CHIKV IgM positive cases

[θ] Zika PCR positive cases

[β] Updates made to prior weeks.

[α] Figures are cumulative totals for all epidemiological weeks year to date.

NA- Not Available

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

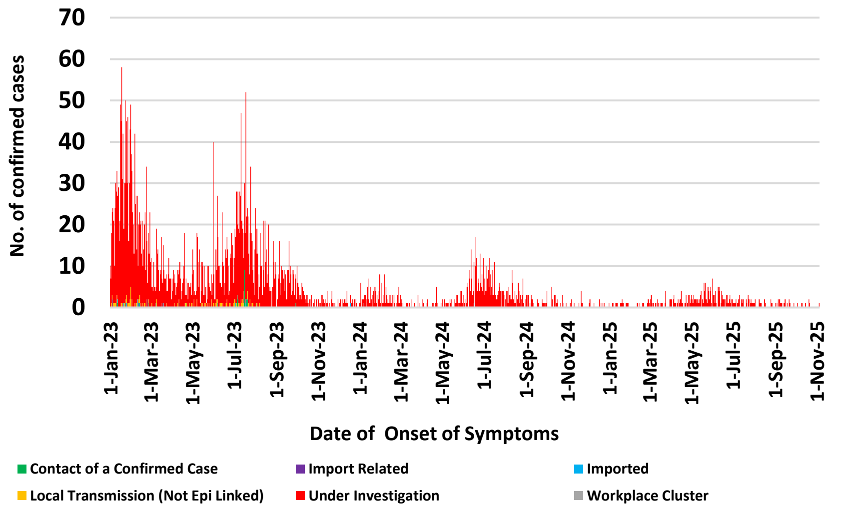
November 21, 2025 ISSN 0799-3927

COVID-19 SURVEILLANCE

CASES	EW 45	Total
Confirmed	1	157747
Females	1	90880
Males	0	66864
Age Range	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.

Classification of Confirmed COVID-19 Cases by Date of Onset of Symptoms, Jamaica 2023-2025 YTD



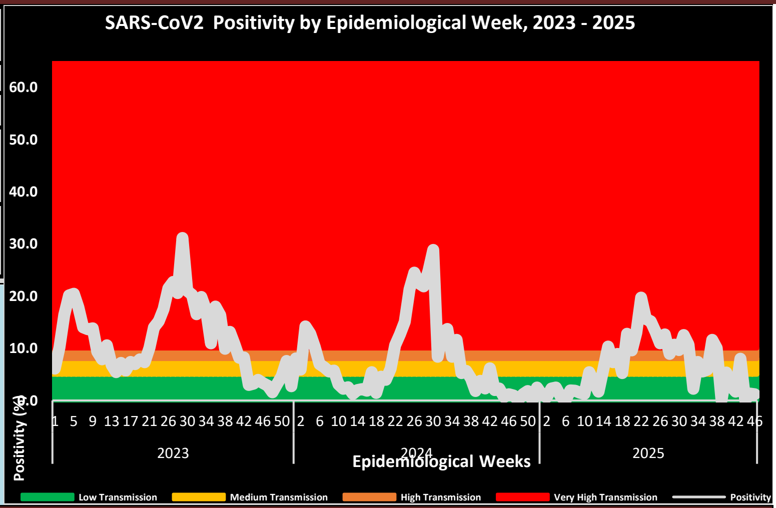
COVID-19 Outcomes

Number of Confirmed COVID-19 cases and deaths, Jamaica 2020-2025							
	Year						
COVID-19	2020	2021	2022	2023	2024	2025	Total
Cases	13352	83815	55721	3842	705	311	157746
Deaths	332	2815	621	116	24	13	3921

*Current positivity rate 0.0%
- (positive samples/total samples tested)

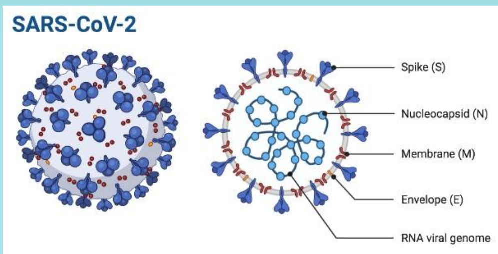
* Low transmission for infection

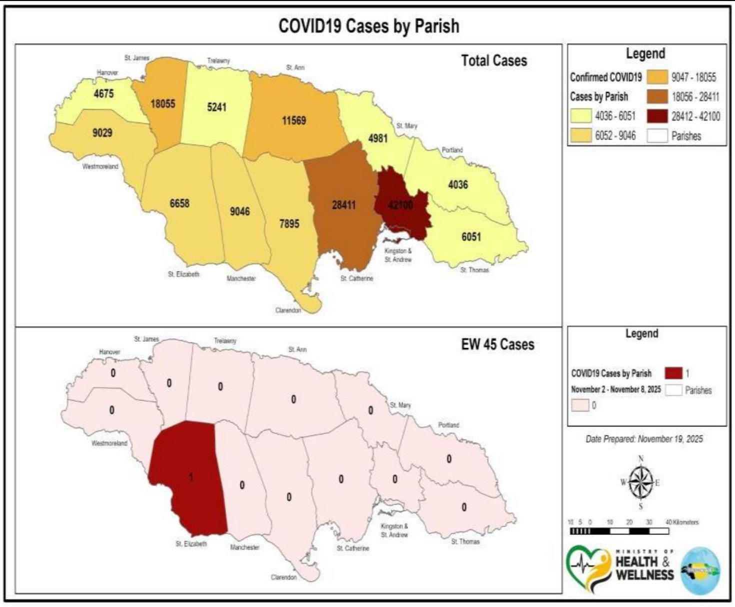
SARS-CoV2 Positivity by Epidemiological Week, 2023 - 2025



OVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure





COVID-19 WHO Global Statistics EW 42 -45 2025

Epi Week	Confirmed Cases	Deaths
42	37800	91
43	31800	78
44	27700	55
45	22100	71
Total (4weeks)	**119400**	**295**

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

ISSN 0799-3927

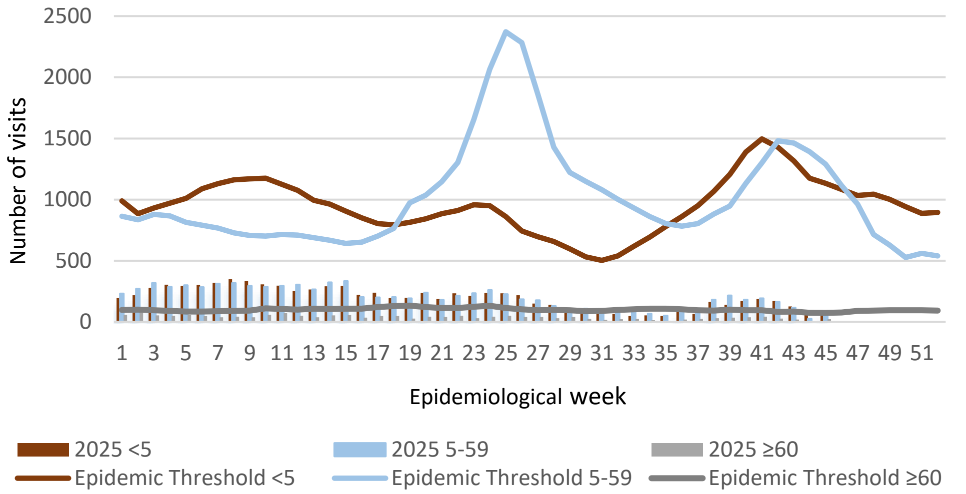
INFLUENZA SURVEILLANCE

EW 45

November 2, 2025 – November 8, 2025 Epidemiological Week 45

	EW 45	*YTD*
SARI cases	4	370
Total Influenza positive Samples	**0**	**184**
Influenza A	**0**	**157**
H1N1pdm09	0	86
H3N2	0	71
Not subtyped	0	0
Influenza B	**0**	**27**
B lineage not determined	0	0
B Victoria	0	27
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	35

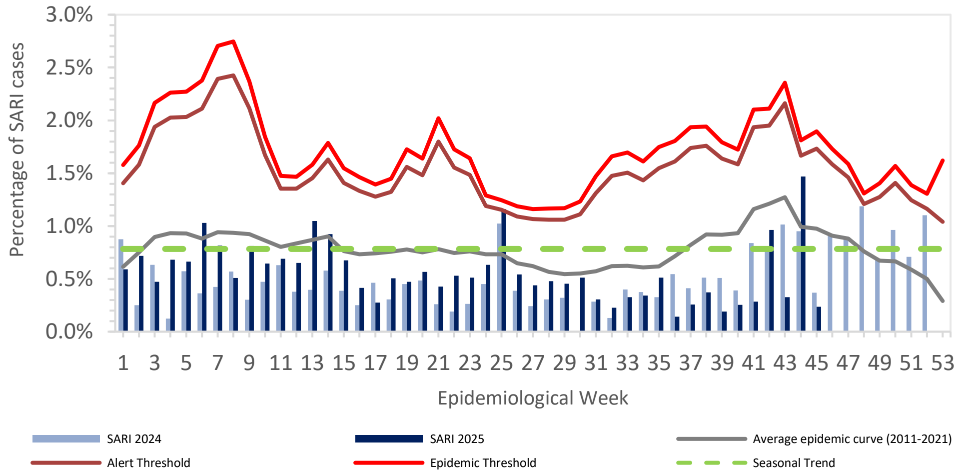
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 45, four (4) SARI admissions was reported.

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

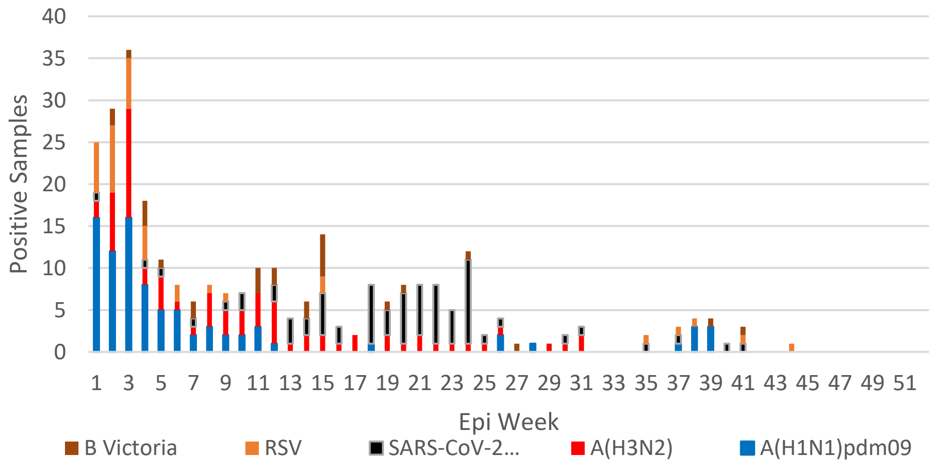


Caribbean Update EW 45

Influenza activity, primarily driven by the circulation of subtype A(H1N1)pdm09, increased in the latest EW, with a subregional positivity rate of 10.6%. RSV circulation rose compared to the previous EW, reaching a positivity rate of 18%. Meanwhile, SARS-CoV-2 activity declined, with a subregional positivity rate of 2.7%. SARI cases show a decreasing trend, mainly associated with influenza and RSV. ILI cases present a slight increase, also mostly linked to influenza, followed by SARS-CoV-2. At the country level, influenza activity is at epidemic levels in Belize and the Dominian Republic, with an upward trend observed in Suriname and Barbados. A stable trend has been noted in the Cayman Islands. Countries showing a decrease in influenza circulation include Haiti, Cuba, Guyana and Jamaica. Regarding RSV, circulation decreased in Belize and Haiti compared to the previous EW. It also declined in the Dominican Republic, although positivity remains high at 27.2%. RSV circulation increased in Jamaica (7.2% positivity), Barbados (15%), Guyana (5.5%) and the Cayman Islands (25.2%). SARS-CoV-2 activity declined in Guyana and the Cayman Islands during the latest EW. Barbados also shows a downward trend, with a positivity rate of 9.2%. Haiti, the Dominican Republic, Jamaica, Suriname, and Saint Vinvent and the Grenadines maintain low and stable circulation. Belize and Saint Lucia show an increase in circulation, with positivity rates of 3.8% and 50%, respectively.

(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



NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

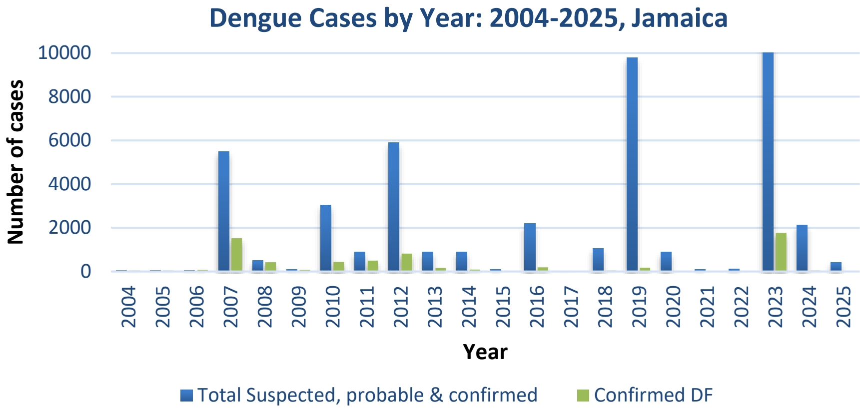
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

ISSN 0799-3927

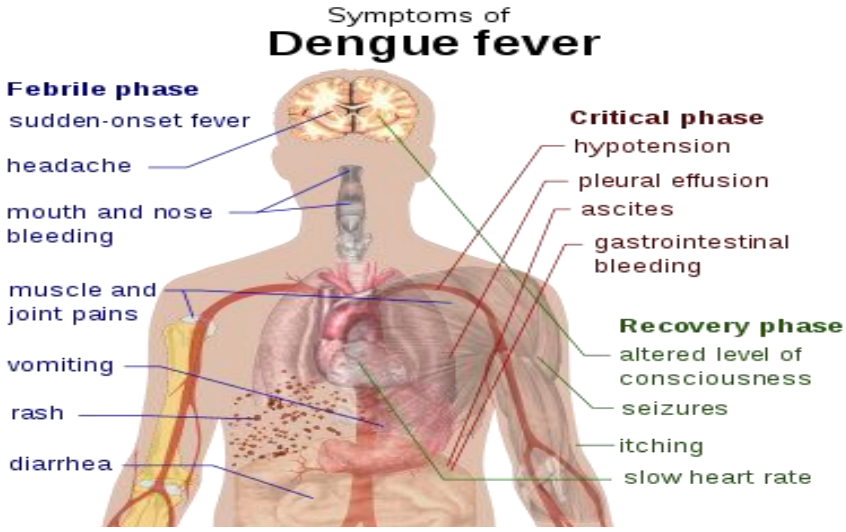
DENGUE SURVEILLANCE

November 2, 2025 – November 8, 2025 Epidemiological Week 45 | Epidemiological Week 45



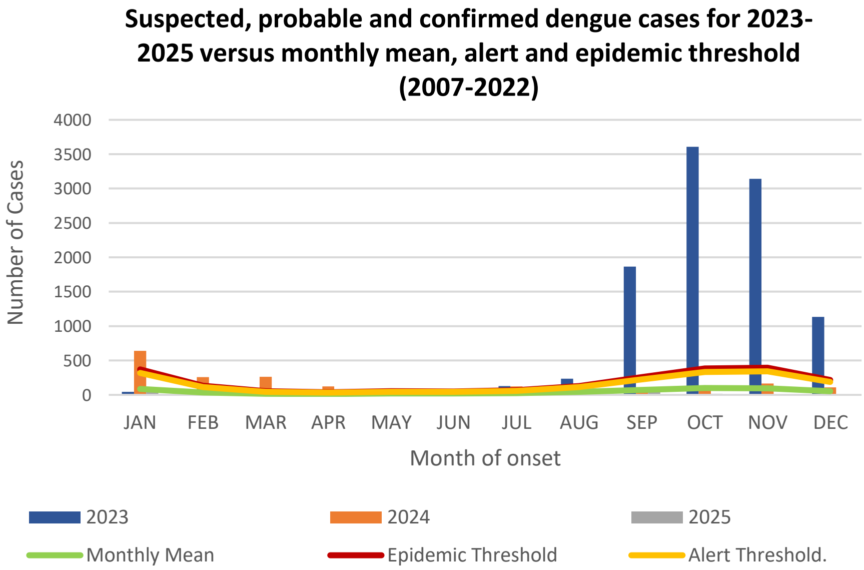
Reported suspected, probable and confirmed dengue with symptom onset in week 45 of 2025

	2025*	
	EW 45	YTD
Total Suspected, Probable & Confirmed Dengue Cases	5	424
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 November 18, 2025**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as probable dengue.**



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

November 21, 2025 ISSN 0799-3927

RESEARCH ABSTRACT

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]

[1]Mona Ageing and Wellness Centre, University of the West Indies, Mona, Jamaica, [2]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 ≥ 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 ≤ 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