WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Influenza (seasonal) Part 1

Seasonal influenza (the flu) is an acute respiratory infection caused by influenza viruses. It is common in all parts of the world. Most people recover without treatment. Influenza spreads easily between people when they cough or sneeze. Vaccination is the best way to prevent the disease. Symptoms of influenza include acute onset of fever, cough, sore throat, body aches and fatigue. Treatment should aim to relieve symptoms. People with the flu should rest and drink plenty of liquids. Most people will recover on their own within a week. Medical care may be needed in severe cases and for people with risk factors. There are 4 types of influenza viruses, types A, B, C and D. Influenza A and B viruses circulate and cause **seasonal epidemics** of disease.

- **Influenza A viruses** are further classified into subtypes according to the combinations of the proteins on the surface of the virus. Currently circulating in humans are subtype A(H1N1) and A(H3N2) influenza viruses. The A(H1N1) is also written as A(H1N1)pdm09 as it caused the pandemic in 2009 and replaced the previous A(H1N1) virus which had circulated prior to 2009. Only influenza type A viruses are known to have caused pandemics.
- **Influenza B viruses** are not classified into subtypes but can be broken down into lineages. Influenza type B viruses belong to either B/Yamagata or B/Victoria lineage.
- **Influenza C virus** is detected less frequently and usually causes mild infections, thus does not present public health importance.
- **Influenza D viruses** primarily affect cattle and are not known to infect or cause illness in people.

Signs and symptoms

Symptoms of influenza usually begin around 2 days after being infected by someone who has the virus.

Symptoms include:

- sudden onset of fever
- cough (usually dry)
- headache
- muscle and joint pain
- severe malaise (feeling unwell)
- sore throat
- runny nose.

The cough can be severe and can last 2 weeks or more.

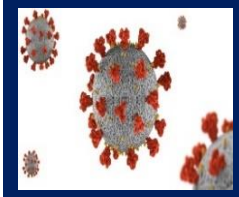
Most people recover from fever and other symptoms within a week without requiring medical attention. However, influenza can cause severe illness or death, especially in people at high risk.

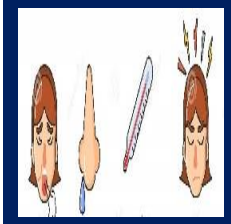
Taken from WHO website on 30/Jan/2026

https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal)

Picture taken from https://www.freepik.com/free-photos-vectors/flu

EPI WEEK 2





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SENTINEL SYNDROMIC SURVEILLANCE

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 – 52 2025 to 2 of 2026.

Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.

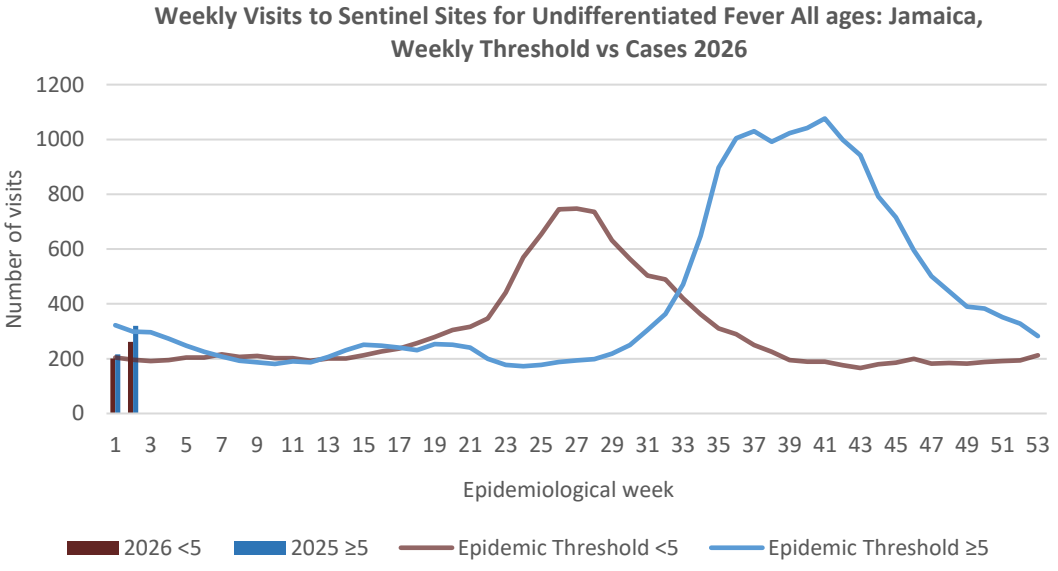
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday
White- No reports received

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 - 2026													
52	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
53	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
1	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
2	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

SYNDROMIC SURVEILLANCE

FEVER
UNDIFFERENTIATED FEVER

Temperature of >38^0C /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



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

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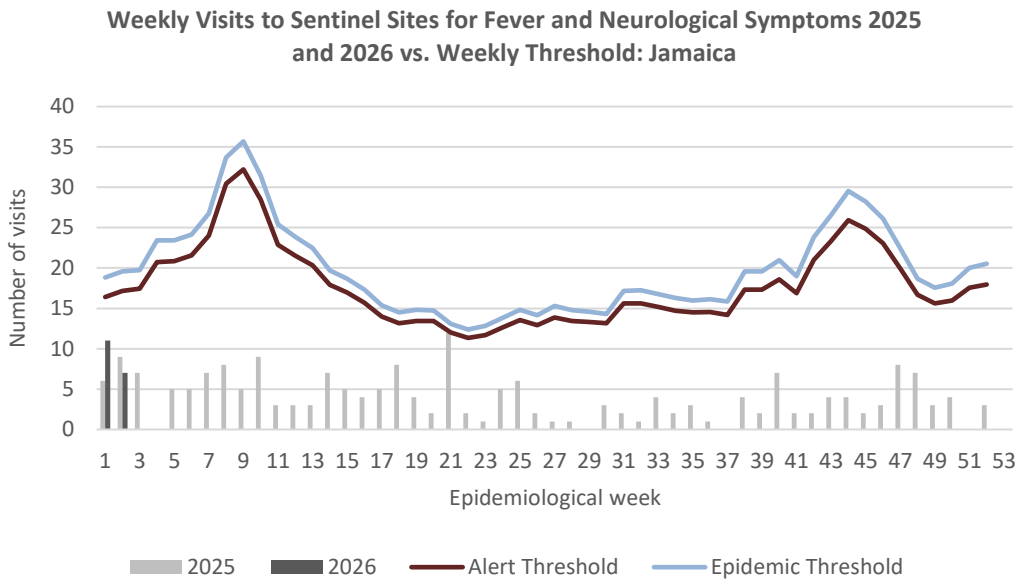
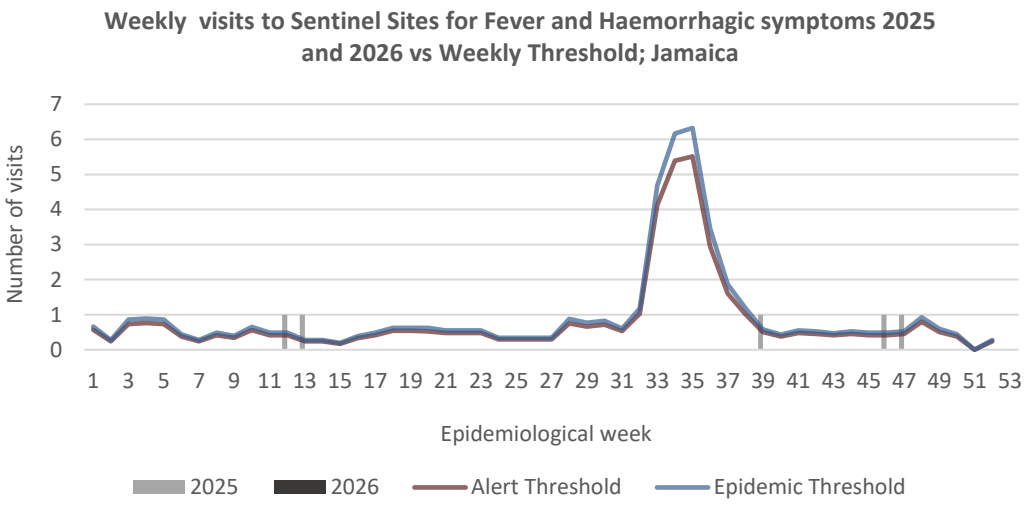
FEVER AND NEUROLOGICAL

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).



FEVER AND HAEMORRHAGIC

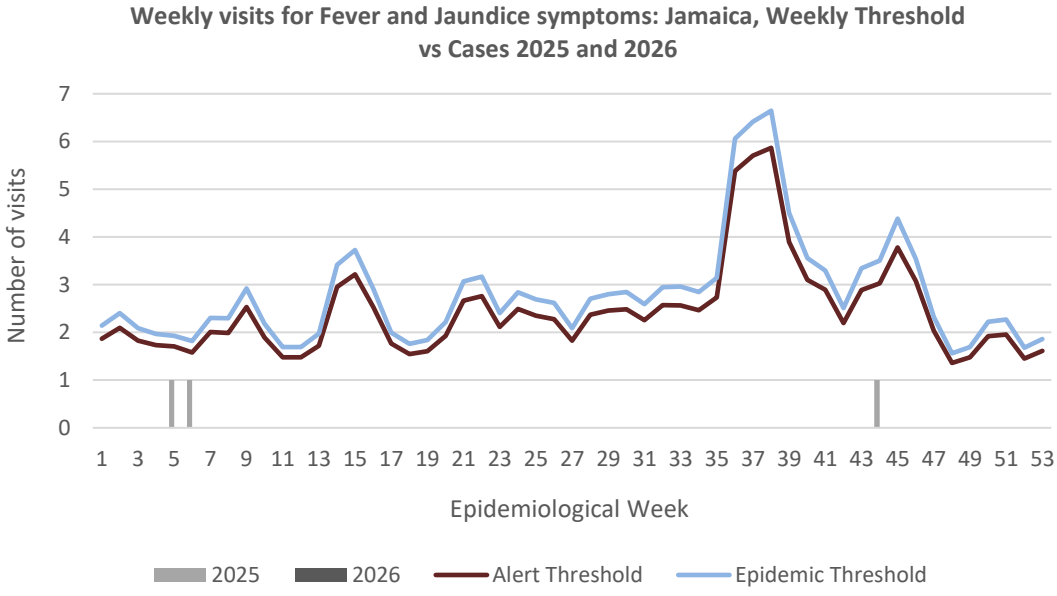
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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.



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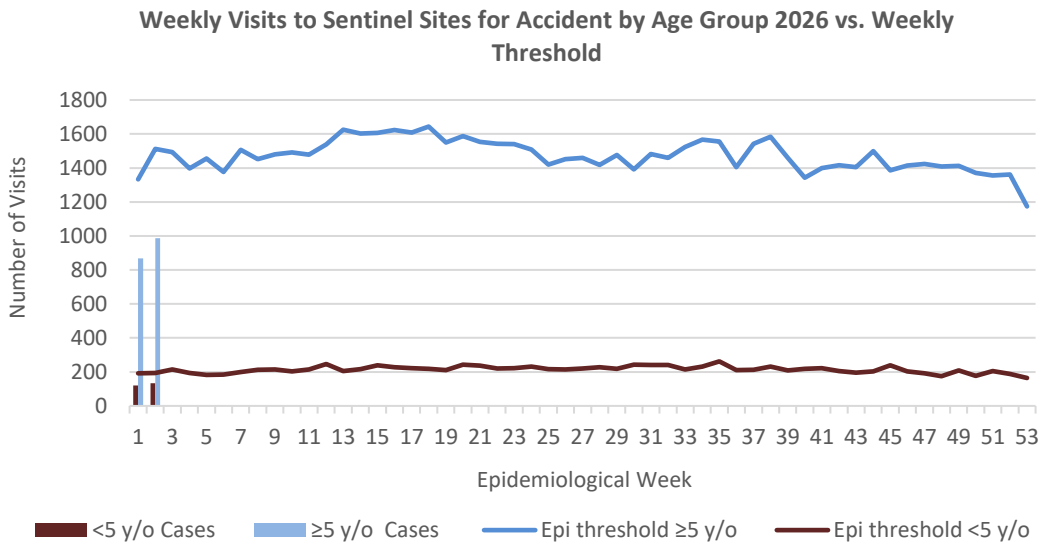
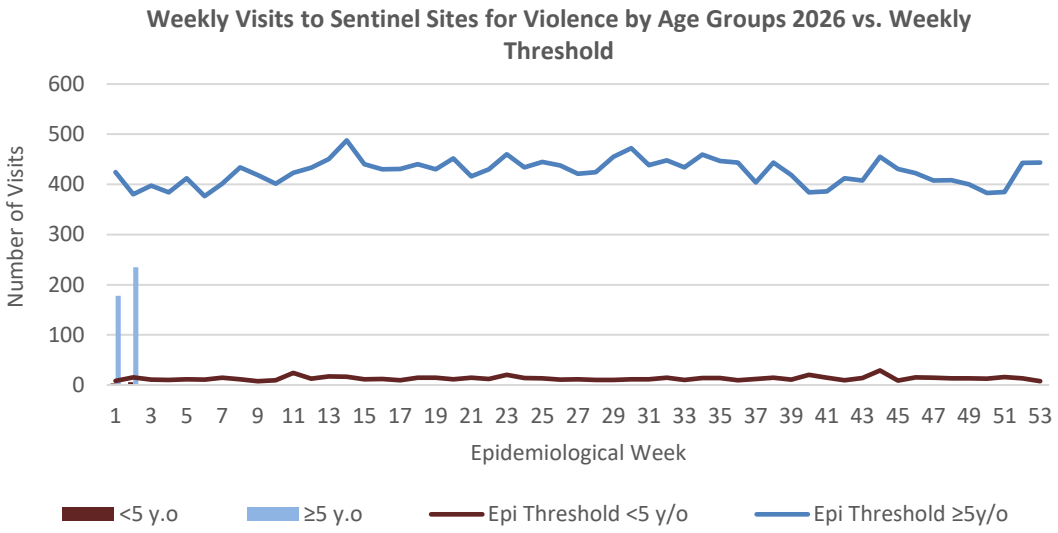
ACCIDENTS

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



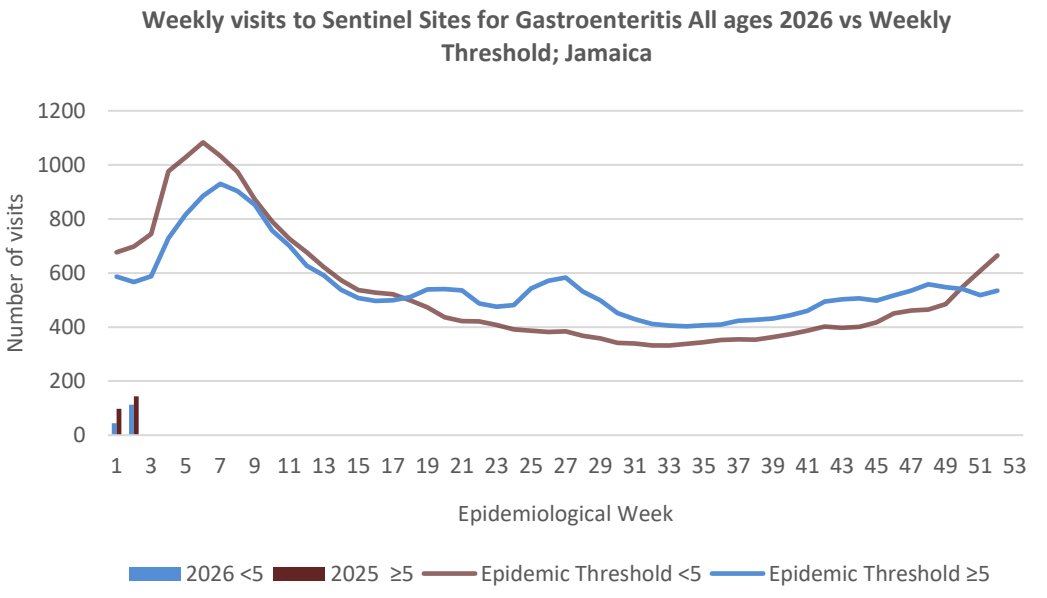
VIOLENCE

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.



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CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS		Confirmed YTD[α] CURRENT YEAR 2026	PREVIOUS YEAR 2025
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		0[β]	6[β]
	Cholera		0	0
	Severe Dengue[Y]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		0	4
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	0
	Hepatitis C		0	0
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		0	2
	Mpox		0	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
		Rubella	0	0
	Maternal Deaths[δ]		1	3
	Ophthalmia Neonatorum		0	0
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		0	0
	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.

[Y]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

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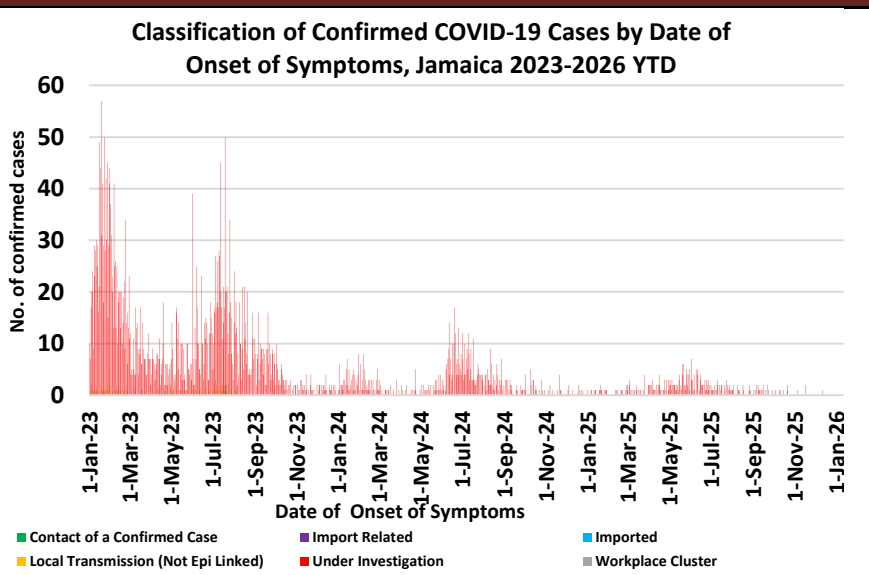
COVID-19 SURVEILLANCE

CASES	EW 2	Total
Confirmed	0	157750
Females	0	90883
Males	0	66864
Age Range	-	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.

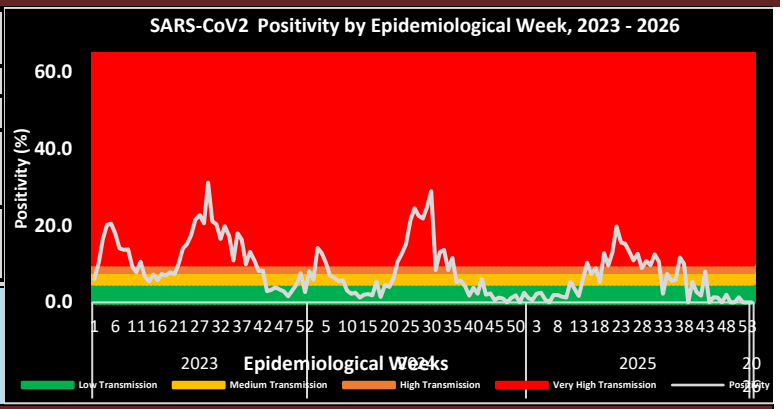


COVID-19 Outcomes

Number of Confirmed COVID-19 cases and deaths, Jamaica 2020-2025

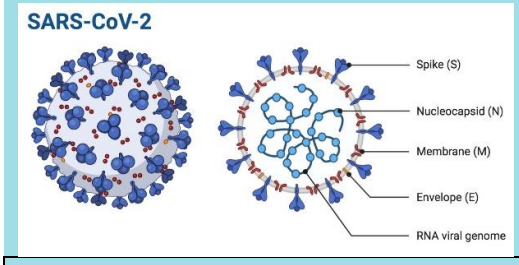
COVID-19	Year						
	2020	2021	2022	2023	2024	2025	Total
Cases	13,352	83,815	55,721	3,842	705	315	157,750
Deaths	332	2,815	621	116	24	13	3,921

*Current positivity rate: 0.0%
- (positive samples/total samples tested)
* Low transmission for infection



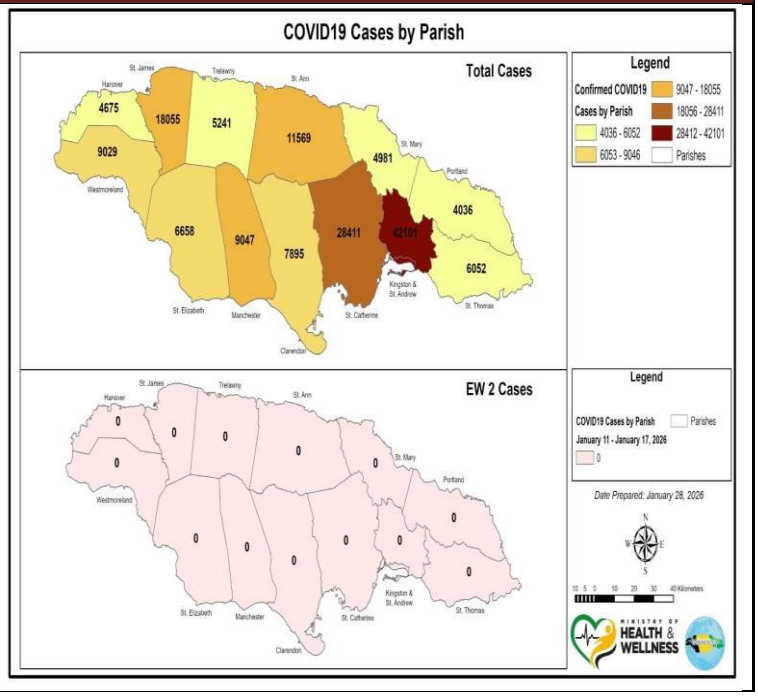
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 52 2025 -2 2026

Epi Week	Confirmed Cases	Deaths
52	14000	332
53	9700	342
1	8800	419
2	11700	408
Total (4weeks)	**44200**	**1501**



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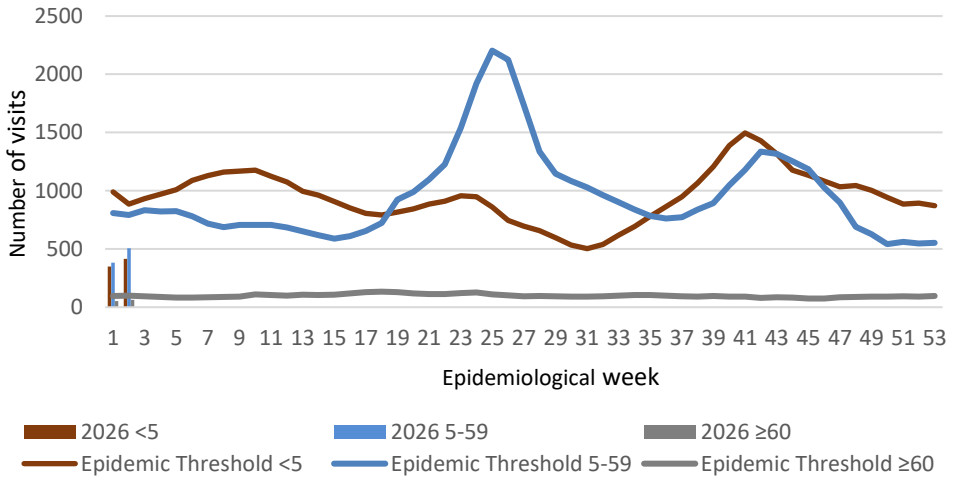
INFLUENZA SURVEILLANCE

EW 2

January 11, 2026 – January 11, 2026 Epidemiological Week 2

	EW 2	*YTD*
SARI cases	15	31
Total Influenza positive Samples	**5**	**9**
Influenza A	**5**	**9**
H1N1pdm09	2	2
H3N2	3	7
Not subtyped	0	0
Influenza B	**0**	**0**
B lineage not determined	0	0
B Victoria	0	0
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	0

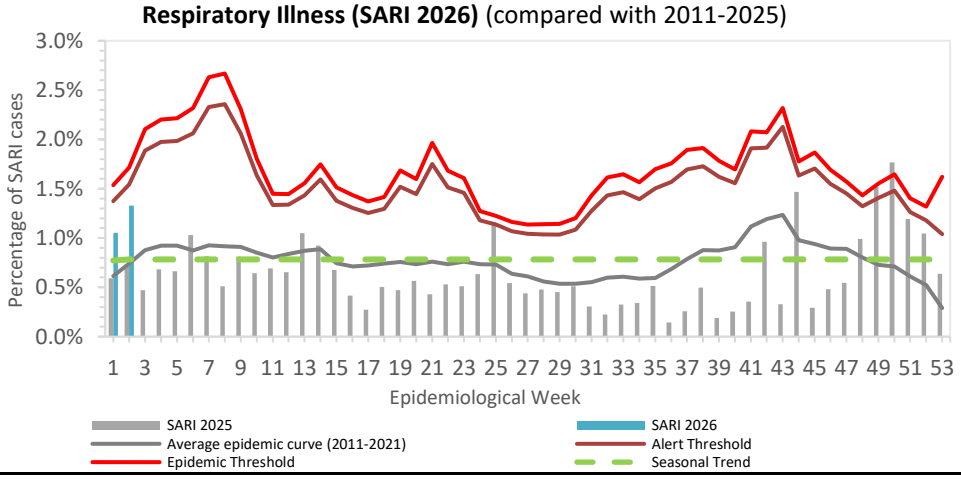
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 2, fifteen (15) SARI admissions were reported.

Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2026) (compared with 2011-2025)



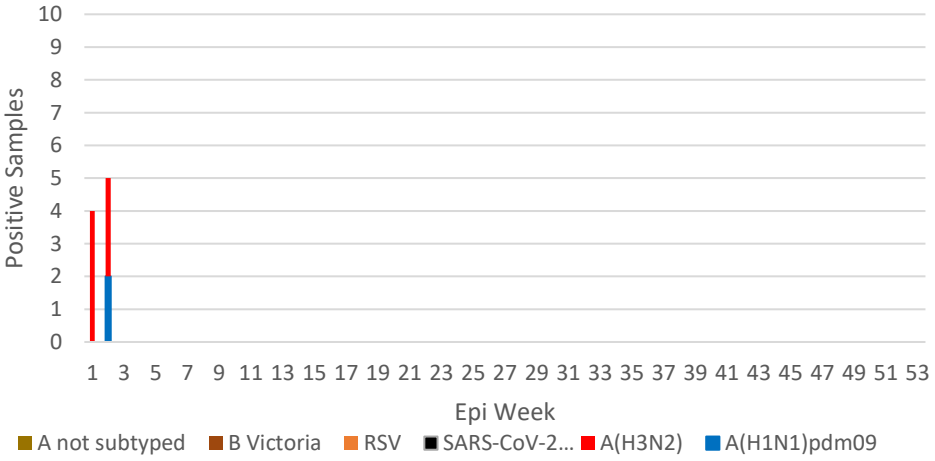
Caribbean Update EW 2

(Updates as at EW 1 remains)

Influenza activity remains high in the subregion, with a positivity rate of 34.2% and a marked predominance of influenza A(H3N2), which accounts for 80.5% of subtyped samples. RSV circulation has declined in recent weeks, reaching a positivity rate of 6.9%, while SARS-CoV-2 activity remains low and stable, below 1%. Cases of acute respiratory infections remain at low levels.

(Retrieved 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 - 2026



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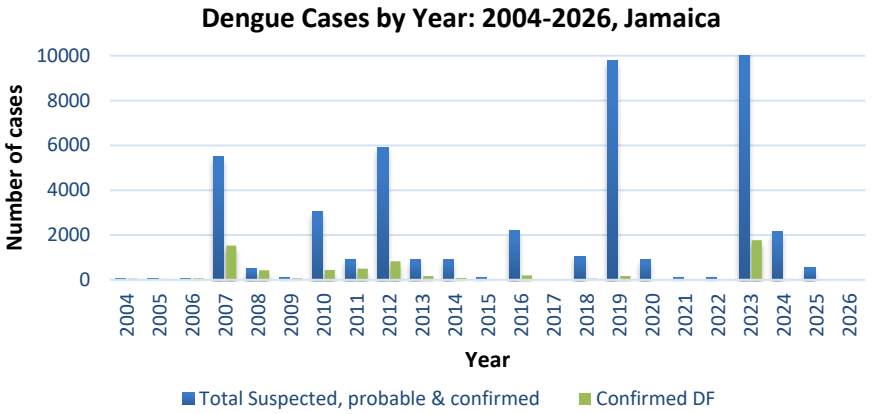
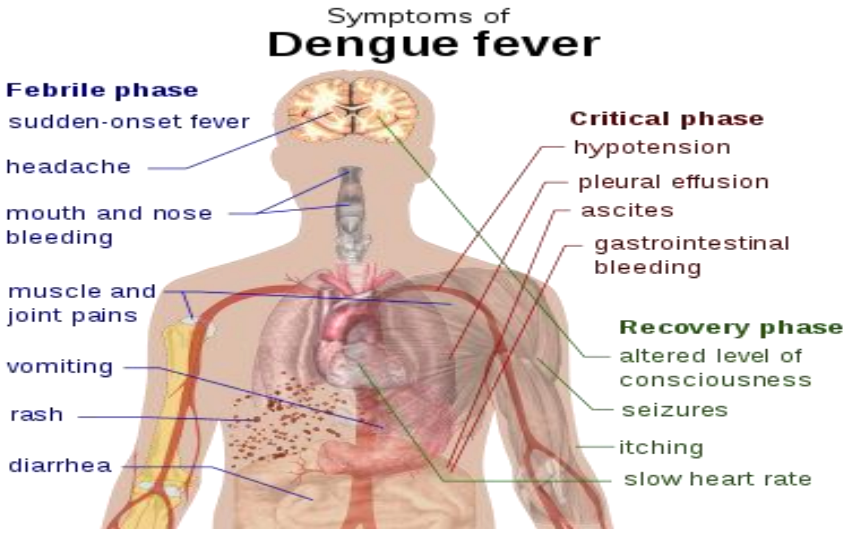
DENGUE SURVEILLANCE

January 11, 2026 – January January 17, 2026 Epidemiological Week 2 | Epidemiological Week 2



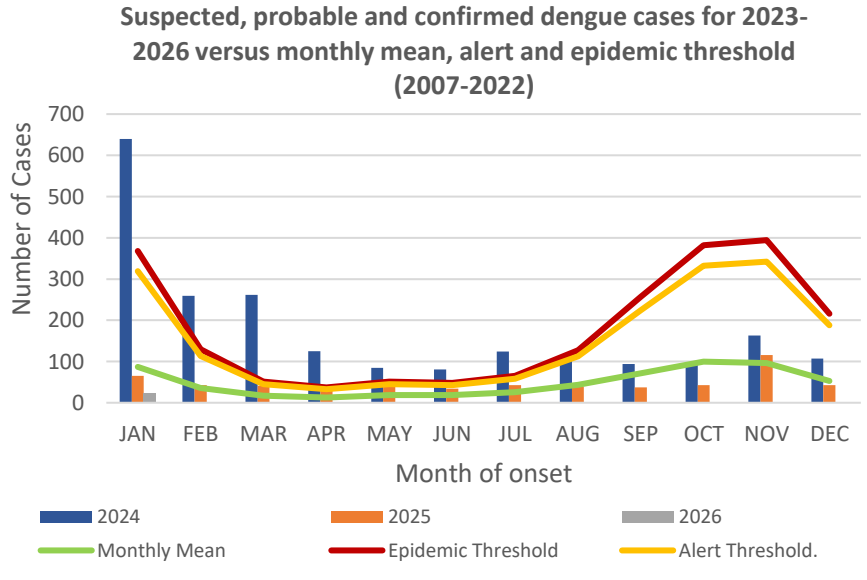
Reported suspected, probable and confirmed dengue with symptom onset in week 2 of 2026

	2026*	
	EW 2	YTD
Total Suspected, Probable & Confirmed Dengue Cases	5	17
Lab Confirmed Dengue cases	0	1
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- **Dengue deaths are reported based on date of death.**
- ***Figure as at January 28, 2026**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as probable dengue.**



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RESEARCH ABSTRACT

Abstract

NHRC-24-O-10

Investigation of the insecticidal activity of Jamaican *Myristica fragrans* Houtt. essential oil against *Aedes aegypti* mosquitoes

Golding M[1], Khouri N[1], Gould C[2], Tiede E[2], Wood T[2], Sandiford S[1]

[1]University of the West Indies, Mona, Jamaica, [2]University at Buffalo, Buffalo, NY, USA

Objective: To evaluate the insecticidal activity of *Myristica fragrans* essential oil against all *Aedes aegypti* life stages

Methods: The essential oil of *Myristica fragrans* obtained via hydro-distillation was screened against the eggs, L1-L4 larvae, pupae and adults of the *Aedes aegypti* laboratory Rockefeller strain and L3 and pupae of a local field strain. Mortality was assessed using modified established protocols at 72 hours (eggs), 24 hours (larvae/pupae) and14 days (adults). The chemical composition of the oil was then determined using gas chromatography-mass spectrometry and ThermoScientific compound discoverer.

Results: The oil demonstrated no activity against the egg stage and the LC50 value of the L1 stage could not be determined. LC50 values for L2, L3 and L4 were 26.57, 7.179 and 246.1 ppm respectively. As expected, the LC50 value for the non-feeding pupal stage was higher at 1090 ppm. The oil also displayed excellent activity against a local field strain with LC50 values of 15.82 and 965.9 ppm for L3 and pupae respectively. At concentrations of 100 and 1000 ppm, the survival rate of adult Rockefeller mosquitoes decreased from 100% to 68.3% and 53.3%, respectively. The major constituents of the oil as determined by gas chromatography–mass spectrometry were alpha-thujene, terpinolene, and o-cymene with relative abundances of 32.09%, 31.86%, and 17.34%, respectively.

Conclusion: The remarkable efficacy of the *Myristica fragrans* essential oil, especially against both larval and adult forms of the *Aedes aegypti* mosquito, suggests that it may be viable for development as a mosquito insecticide, subject to further assessments.

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