WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Diarrhoeal Diseases (Part 3)

Prevention and treatment

Key measures to prevent diarrhoea include:

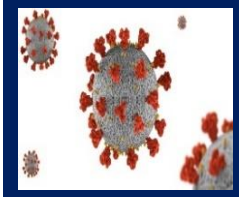
- access to safe drinking-water
- use of improved sanitation
- hand washing with soap
- exclusive breastfeeding for the first 6 months of life
- good personal and food hygiene
- health education about how infections spread
- rotavirus vaccination.

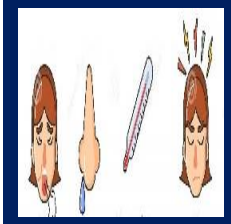
Key measures to treat diarrhoea include the following.

- Rehydration with oral rehydration salts (ORS) solution. ORS is a mixture of clean water, salt and sugar. It costs a few cents per treatment. ORS is absorbed in the small intestine and replaces the water and electrolytes lost in the faeces.
- Zinc supplements reduce the duration of a diarrhoea episode by 25% and are associated with a 30% reduction in stool volume.
- Rehydration with intravenous fluids in case of severe dehydration or shock.
- Nutrient-rich foods. The vicious circle of malnutrition and diarrhoea can be broken by continuing to give nutrient-rich foods – including breast milk – during an episode, and by giving a nutritious diet – including exclusive breastfeeding for the first 6 months of life – to children when they are well.
- Consulting a health professional, in particular for management of persistent diarrhoea or when there is blood in stool or if there are signs of dehydration.

Taken from WHO website on 3/Sep/2025
https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease

EPI WEEK 35





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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 – 32 to 35 of 2025

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

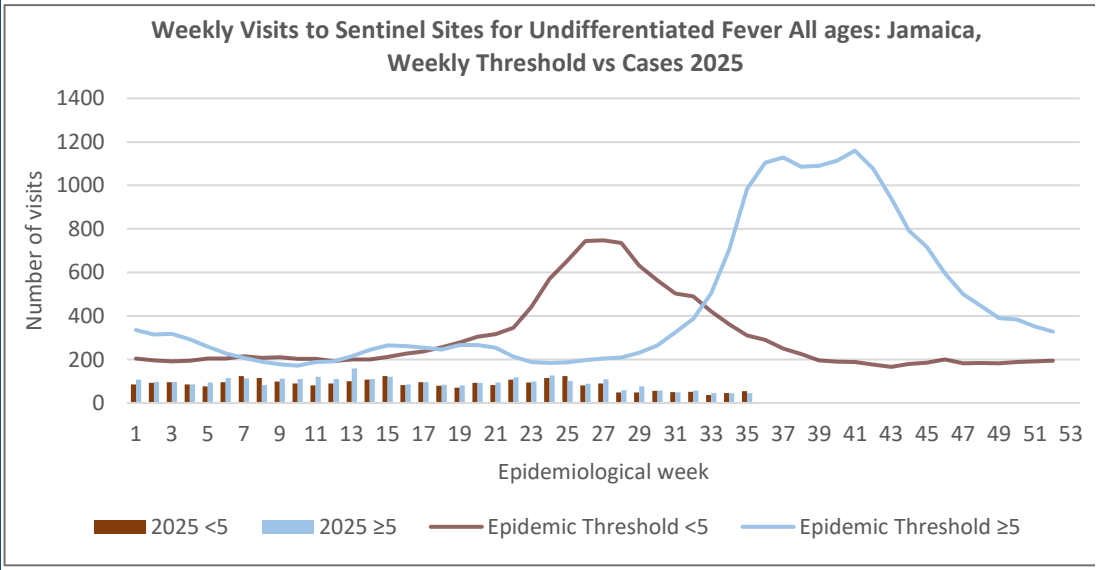
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
32	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
33	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
34	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
35	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

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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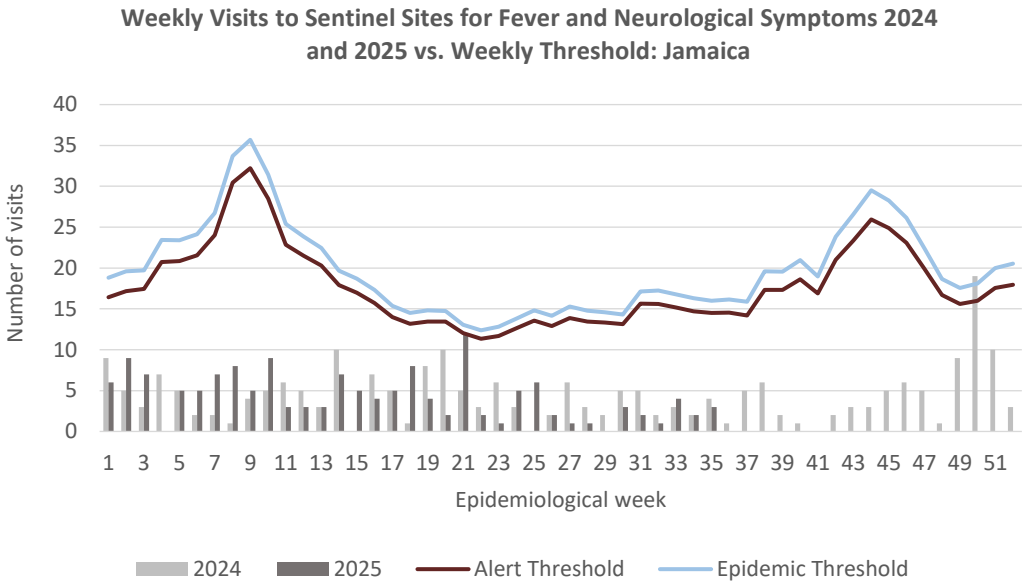
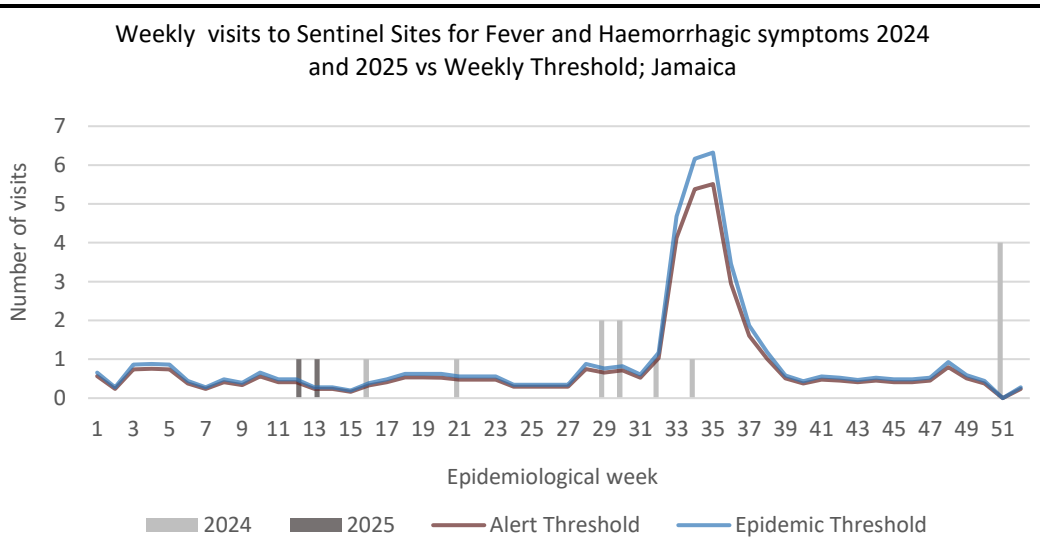
FEVER AND NEUROLOGICAL

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

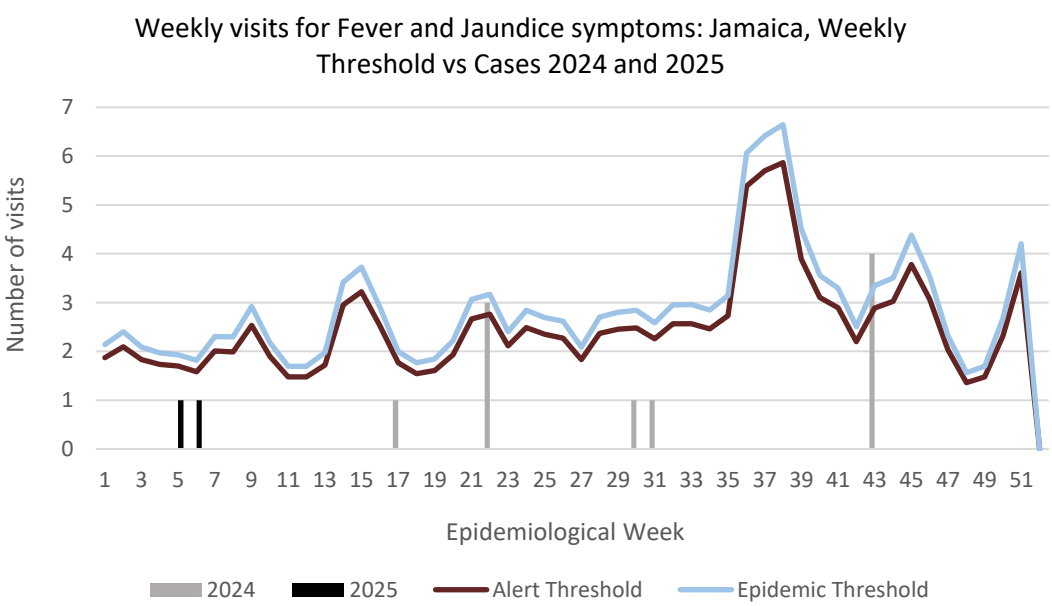
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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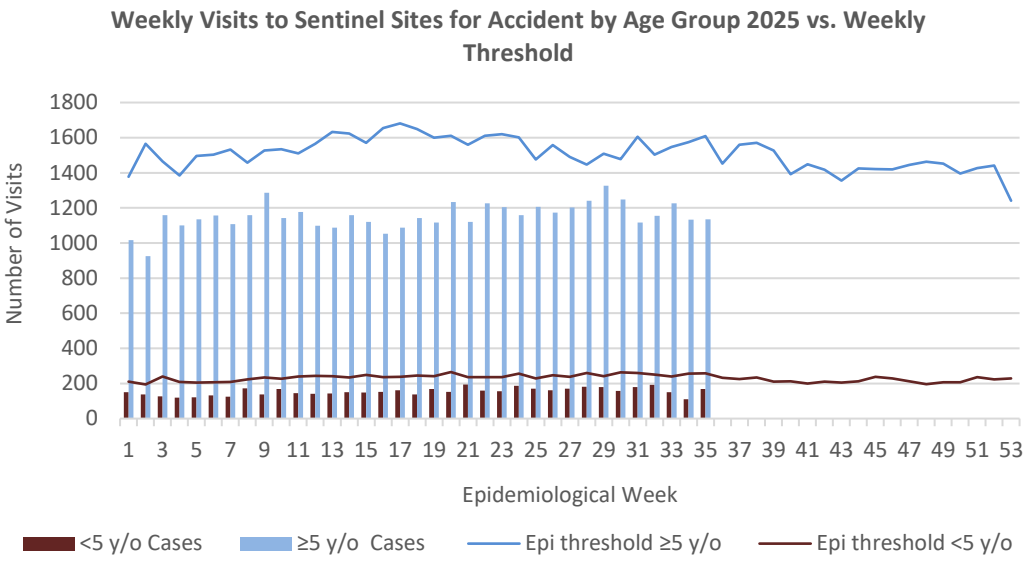
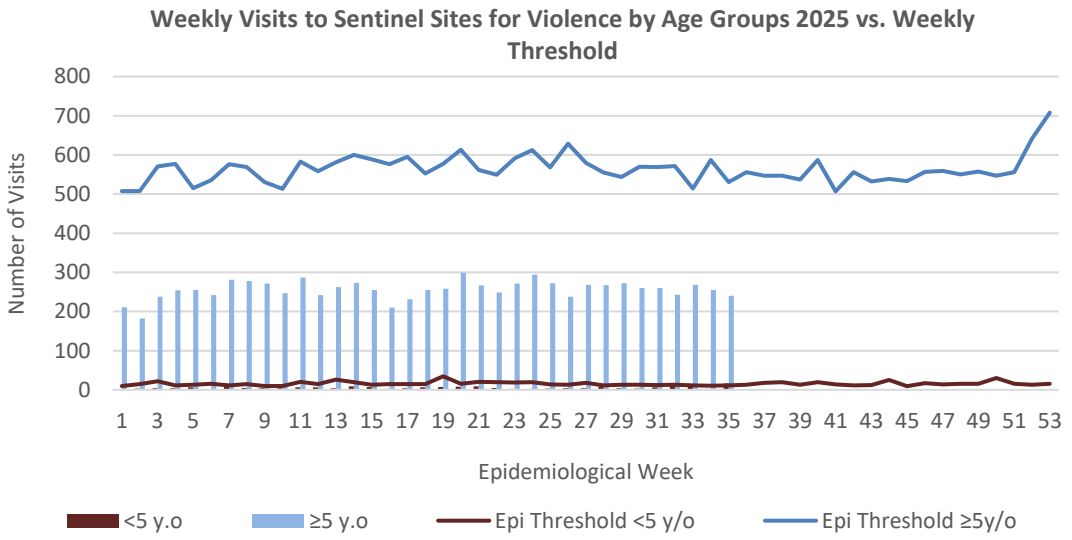
ACCIDENTS

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



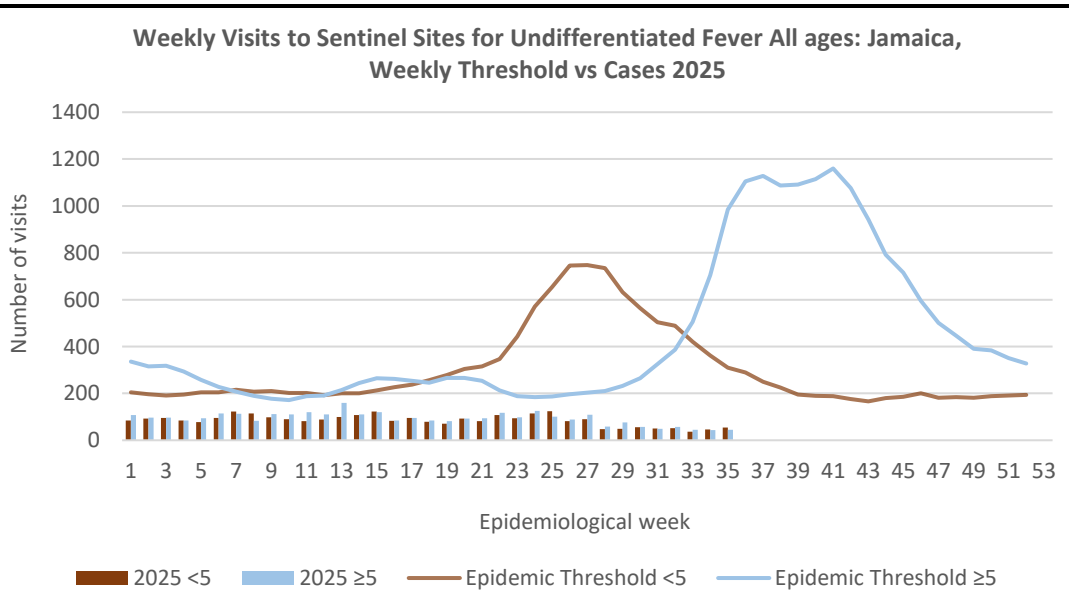
VIOLENCE

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 2025	PREVIOUS YEAR 2024
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		92[β]	243[β]
	Cholera		0	0
	Severe Dengue[Y]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		286	629
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		5	35
	Hepatitis C		1	9
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		8	14
	Monkeypox		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
		Rubella	0	0
	Maternal Deaths[δ]		40	44
	Ophthalmia Neonatorum		35	144
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		2	0
	Tuberculosis		24	35
	Yellow Fever		0	0
	Chikungunya[ε]		0	0
	Zika Virus[θ]		0	0

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

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

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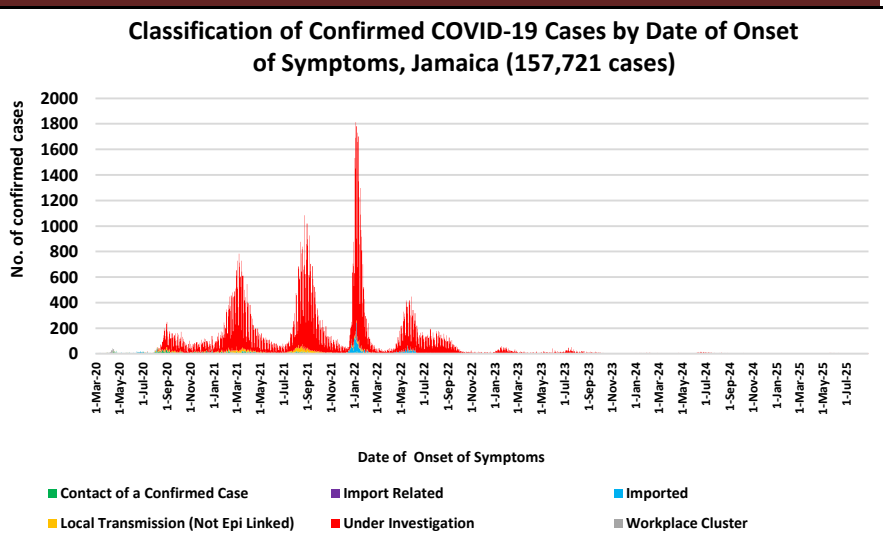
COVID-19 SURVEILLANCE

CASES	EW 35	Total
Confirmed	5	157721
Females	3	90865
Males	2	66853
Age Range	42 to 83 years	1 day to 108 years

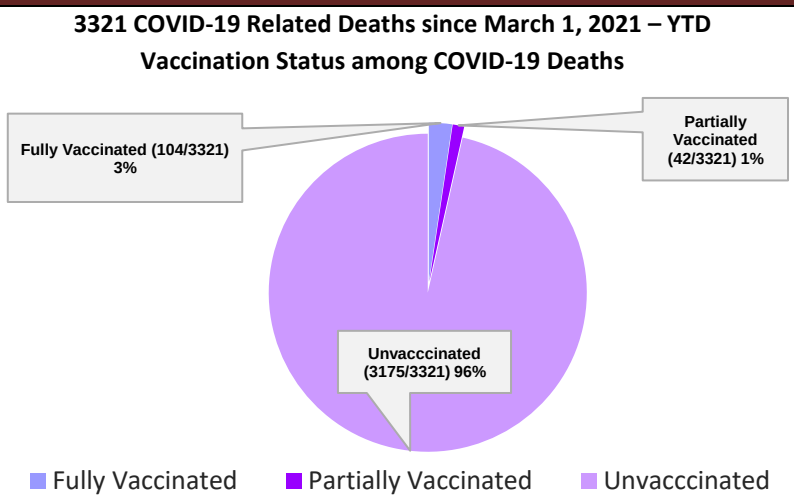
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

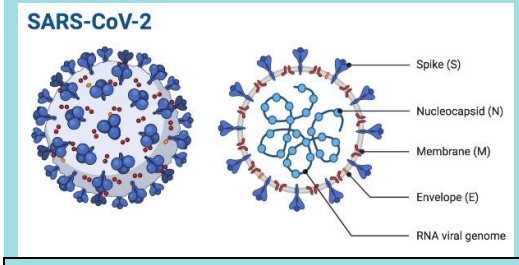
Outcomes	EW 35	Total
ACTIVE *2 weeks*		7
DIED – COVID Related	0	3885
Died - NON COVID	0	400
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157721

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



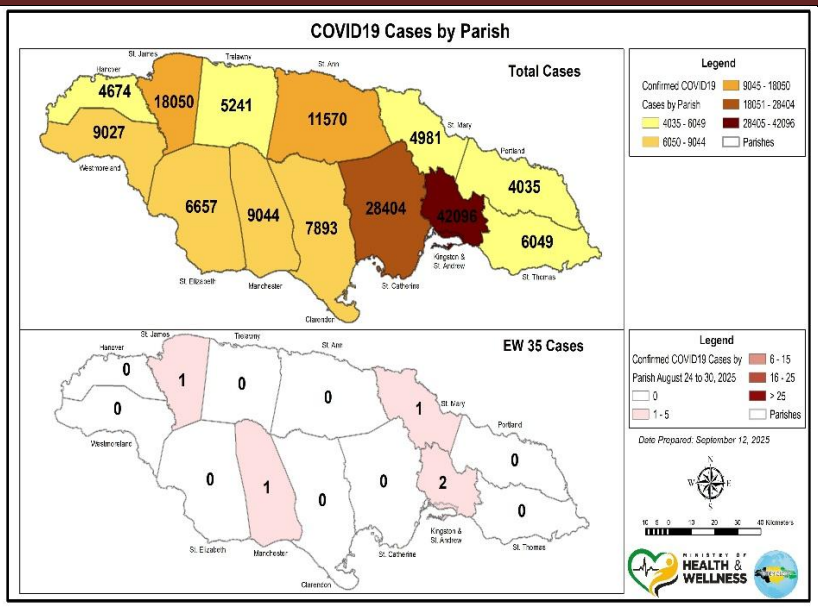
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 32 -35 2025

Epi Week	Confirmed Cases	Deaths
32	14900	274
33	17400	266
34	21100	294
35	25400	277
Total (4weeks)	**78800**	**1111**



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September 12, 2025 ISSN 0799-3927

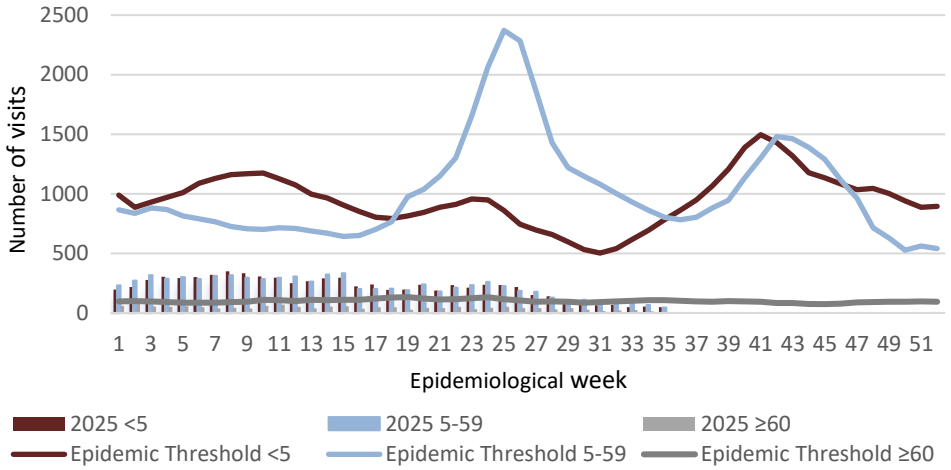
INFLUENZA SURVEILLANCE

EW 35

August 24, 2025 – August 30, 2025 Epidemiological Week 35

	EW 35	*YTD*
SARI cases	4	304
Total Influenza positive Samples	**0**	**172**
Influenza A	**0**	**147**
H1N1pdm09	0	79
H3N2	0	68
Not subtyped	0	0
Influenza B	**0**	**25**
B lineage not determined	0	0
B Victoria	0	25
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	30

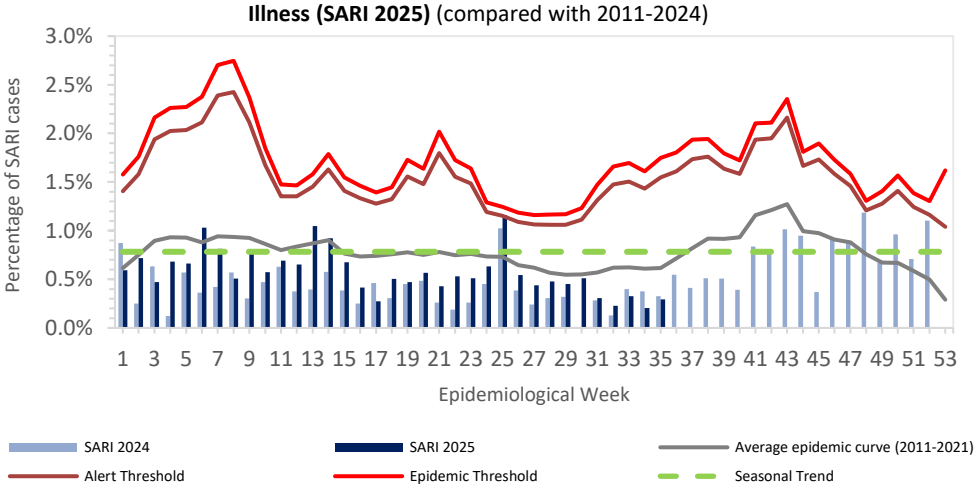
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 35, four (4) SARI admissions was reported.

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

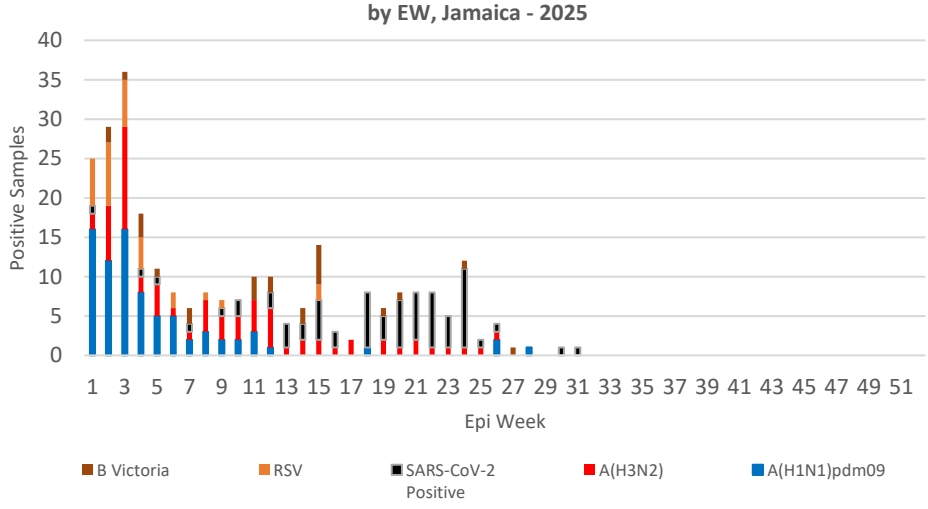


Caribbean Update EW 35

Influenza activity primarily driven by A(H1N1)pdm09, decreased in the latest EW, with a sudregional posivity rate of 8.5%. In Haiti, Belize and Saint Lucia, influenza activity remains at epidemic levels but shows a downward trend. In constrast, in Cuba, Jamaica, Suriname and the Dominican Rupublic, it remains at interseasonal levels. In Barbados and the Cayman Islands, influenza activity remains low. In Guyana, activity increased compared to the previous EW, with a positivity rate of 9.6%. RSV circulation in the subregion decreased compared to the previous EW, with positivity rate of 4.9%. In Cuba, the Dominincan Republic, the Cayman Islands and Saint Vincent and the Grenadines, circulation decreased compared to the previous EW. In Guyana, circulation increased compared to the previous EW. SARS-CoV-2 activity increased this EW compared to the previous one, with a subregional positivity rate of 19.8%. In Belize, Haiti, the Dominican Republic, Jamaica, Guyana, and Saint Vincent and the Grenadines, activity decreased. In Cuba, Saint Lucia, Barbados and the Cayman Islands, positivity increased

(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



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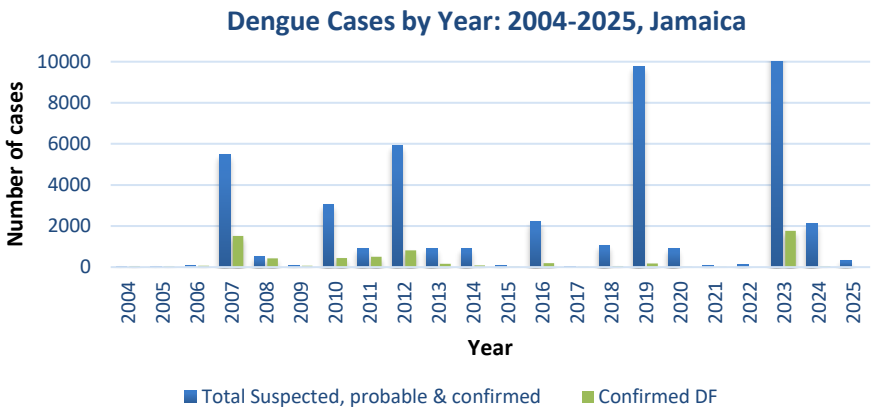
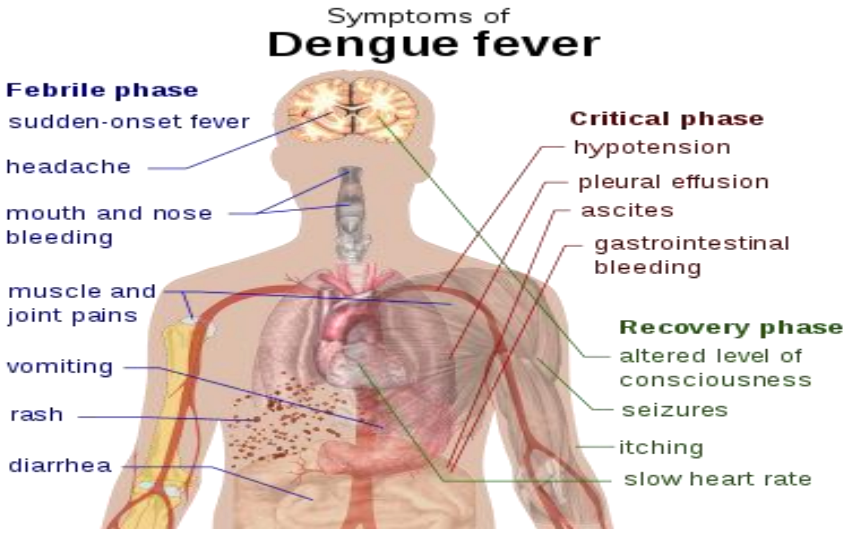
DENGUE SURVEILLANCE

August 24, 2025 – August 30, 2025 Epidemiological Week 35 | Epidemiological Week 35



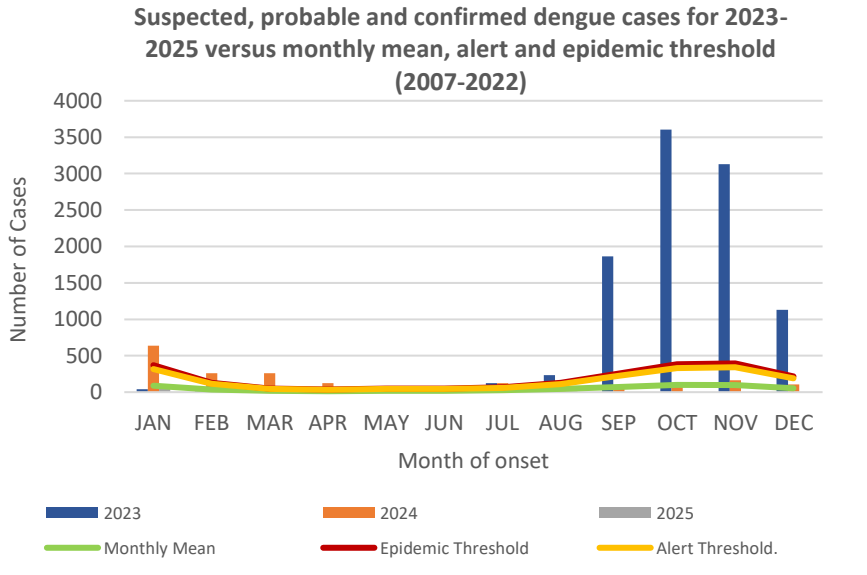
Reported suspected, probable and confirmed dengue with symptom onset in week 35 of 2025

	2025*	
	EW 35	YTD
Total Suspected, Probable & Confirmed Dengue Cases	1	325
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 September 12, 2025**
- **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-23-O08

The effects of semi-purified fractions from *Plectranthus blumei* (Joseph Coat) in normal healthy Sprague-Dawley rats.

Gordon A and Alexander-Lindo R

The University of the West Indies, Mona Campus, Kingston 7, Jamaica.

Objective: To investigate the effects of semi-purified fractions from ethyl acetate crude extract of *Plectranthus blumei* (Joseph Coat) on blood glucose levels in normal, healthy Sprague-Dawley rats.

Method: Ethyl acetate crude extract was obtained and purified using chromatographic techniques. The fractions AG/A-AG/J were collected and grouped according to similar TLC profiles and the active hypoglycaemic fraction AG/F was further purified to obtain sub-fractions AG/F1-AG/F6 which were bioassayed using the Oral Glucose Tolerance Test (OGTT). A fasting blood glucose reading was obtained followed by intravenous administration of the semi-purified fractions (30 mg/kg body weight (BW), 20 mg/kg BW) versus the control dimethyl sulfoxide (DMSO).

Results: At 30 mg/kg BW the fraction AG/F showed the most significant hypoglycaemic activity throughout the entire OGTT. Hypoglycaemic activity was observed at time intervals 30 minute (3.09 ± 0.52 mmol/L vs 6.01 ± 0.29 mmol/L; P = 0.001); 90 minute (5.22 ± 0.26 mmol/L vs 7.49 ± 0.61 mmol/L; P = 0.006) when compared with the control DMSO. The subfractions AG/F1-AG/F6 were administered intravenously at 20 mg/kg BW where fraction AG/F5 showed the most hypoglycaemic activity. Significant lowering was observed throughout the experiment at time intervals 60 minute (2.62 ± 0.60 mmol/L vs 5.69 ± 0.23 mmol/L; P = 0.004); 120 minute (3.86 ± 0.85 mmol/L vs 6.43 ± 0.47 mmol/L; P = 0.022) when compared with DMSO. The subfractions AG/F indicated compounds which are fatty acids and phenolic in nature.

Conclusion: Bioassay-guided purification of the ethyl acetate crude extract resulted in sub-fractions showing hypoglycaemic capabilities.

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