

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Diarrhoeal Diseases (Part 2)



The most severe threat posed by diarrhoea is dehydration. During a diarrhoeal episode, water and electrolytes (sodium, chloride, potassium and bicarbonate) are lost through liquid stools, vomit, sweat, urine and breathing. Dehydration occurs when these losses are not replaced.

The degree of dehydration is rated on a scale of 3.

- severe dehydration (at least two of the following signs):
 - lethargy/unconsciousness
 - sunken eyes
 - unable to drink or drink poorly
 - skin pinch goes back very slowly (≥ 2 seconds)
- some dehydration (two or more of the following signs):
 - restlessness, irritability
 - sunken eyes
 - drinks eagerly, thirsty
- no dehydration (not enough signs to classify as some or severe dehydration).

Causes

Infection: Diarrhoea is a symptom of infections caused by a host of bacterial, viral and parasitic organisms, most of which are spread by faeces-contaminated water. Infection is more common when there is a shortage of adequate sanitation and hygiene and safe water for drinking, cooking and cleaning. Among children under 5 years of age, the most common viral pathogens are rotavirus, norovirus, adenovirus and astrovirus. Bacterial pathogens include *Escherichia coli*, *Salmonella spp.*, *Shigella spp.*, and *Campylobacter spp.*, while parasitic pathogens include *Cryptosporidium*, *Giardia*, and *Entamoeba spp.* Rotavirus and *E. coli* are the most common pathogens among children across all age groups, while parasitic pathogens, are prevalent in children aged 3–5 years. Bacterial pathogens, including *E. coli*, *Salmonella*, and *Shigella*, were common in the children age 6 to 10-year age group, as were rotavirus, norovirus, and sapovirus. Location-specific etiologic patterns also need to be considered.

Malnutrition: Children who die from diarrhoea often suffer from underlying malnutrition, which makes them more vulnerable to diarrhoea. Each diarrhoeal episode, in turn, makes their malnutrition even worse. Diarrhoea is a leading cause of malnutrition in children under 5 years old.

Source: Water contaminated with human faeces, for example from sewage, septic tanks and latrines, is of particular concern. Animal faeces also contain microorganisms that can cause diarrhoea.

Other causes: Diarrhoeal disease can also spread from person-to-person, aggravated by poor personal hygiene. Food is another major cause of diarrhoea when it is prepared or stored in unhygienic conditions. Unsafe domestic water storage and handling is also an important risk factor. Fish and seafood from polluted water may also contribute to the disease.

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

EPI WEEK 34



Syndromic Surveillance

Accidents

Violence

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Class 1 Notifiable Events

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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 – 31 to 34 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													
31	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
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

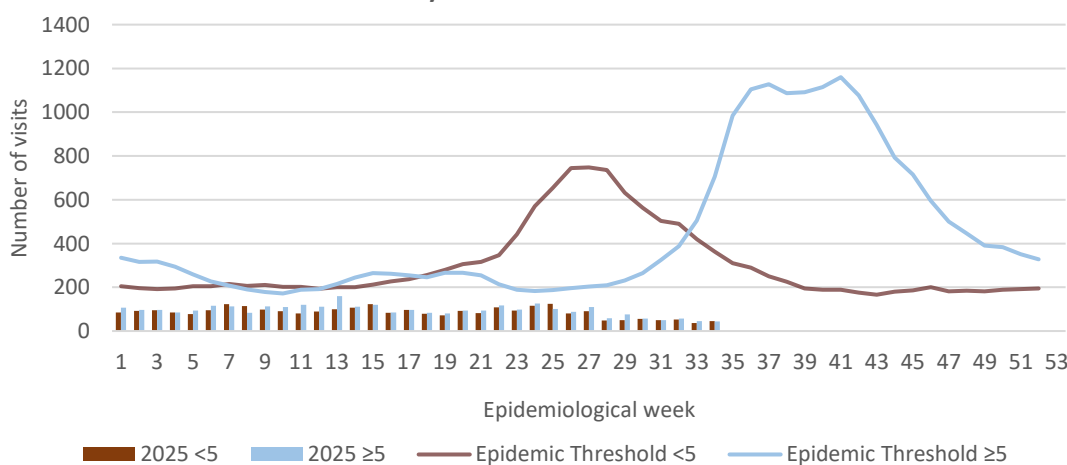
SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

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



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



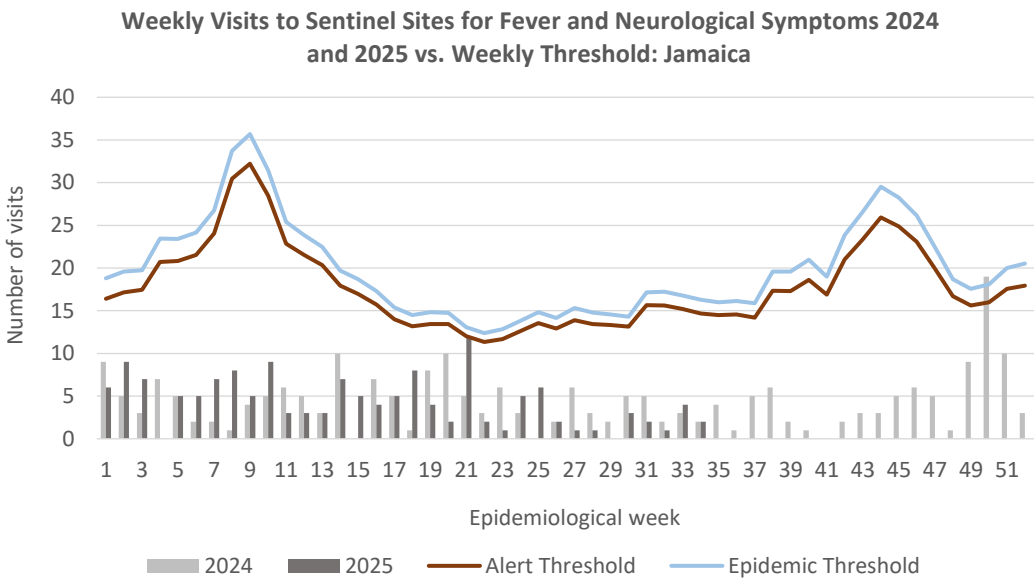
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

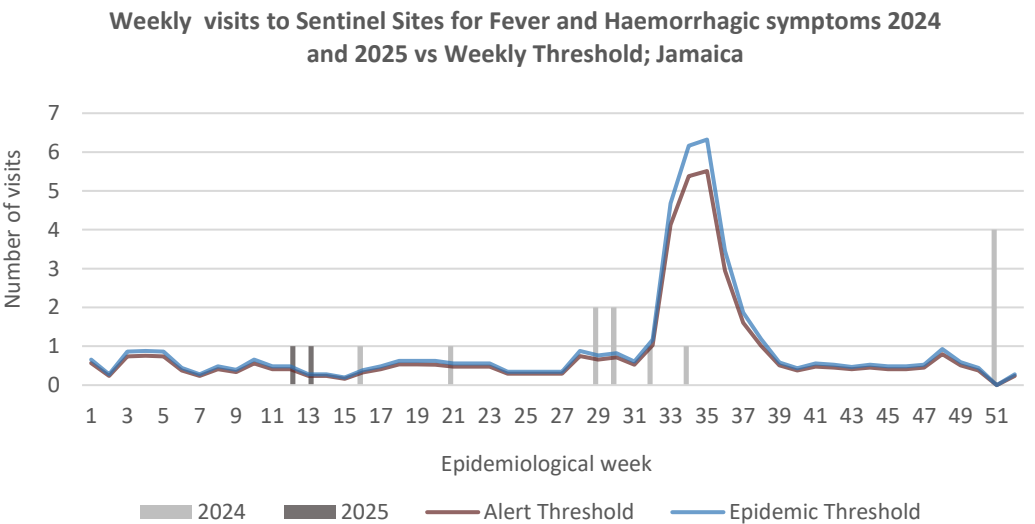
FEVER AND NEUROLOGICAL

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

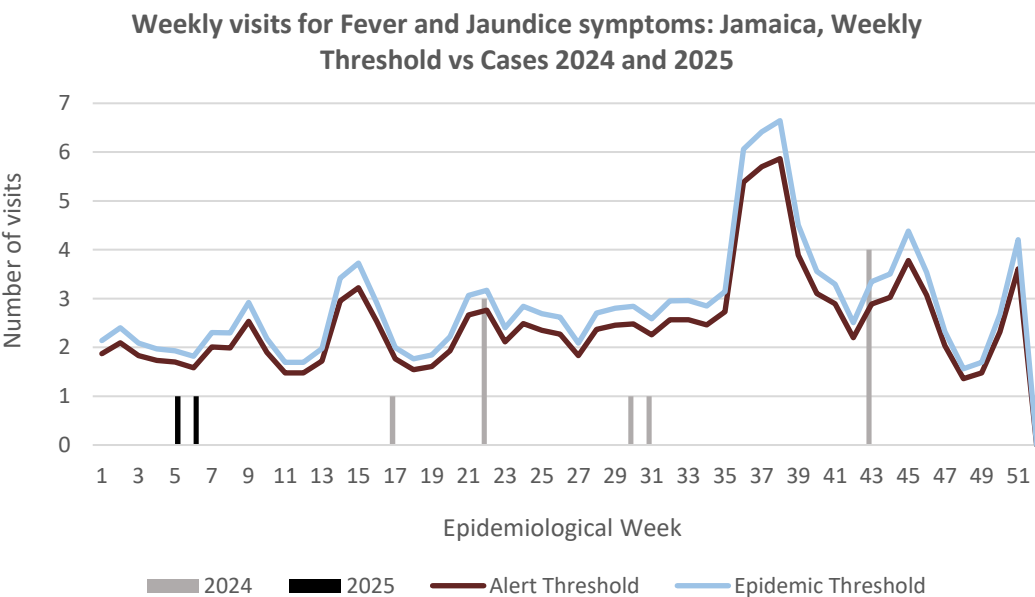
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE

Temperature of $>38^{\circ}\text{C}$ / 100.4°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.



3

NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
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HOSPITAL
ACTIVE
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30 sites. Actively
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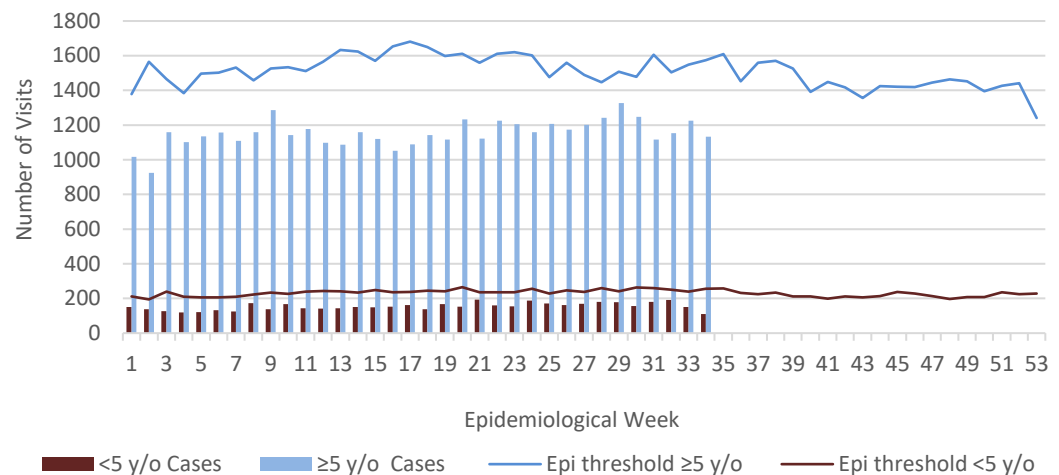
SENTINEL
REPORT- 78 sites.
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ACCIDENTS

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



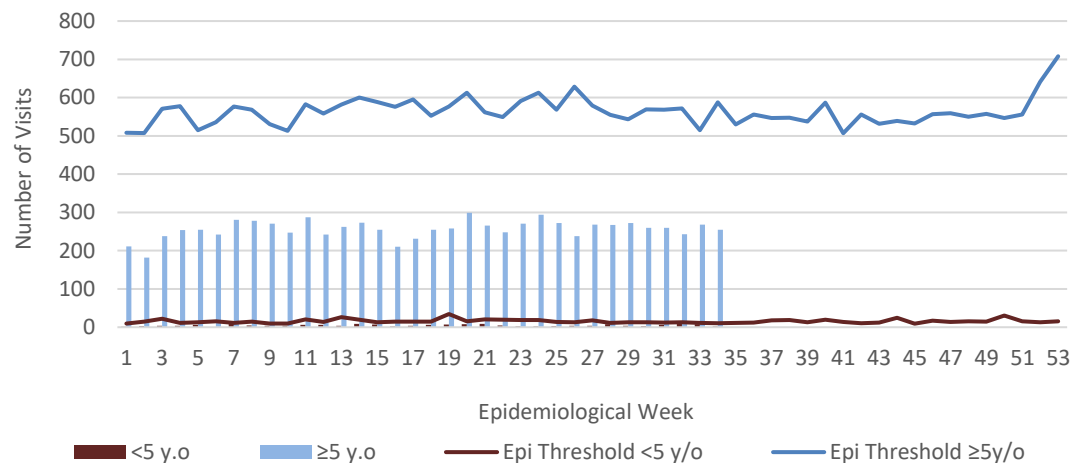
Weekly Visits to Sentinel Sites for Accident by Age Group 2025 vs. Weekly Threshold

**VIOLENCE**

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



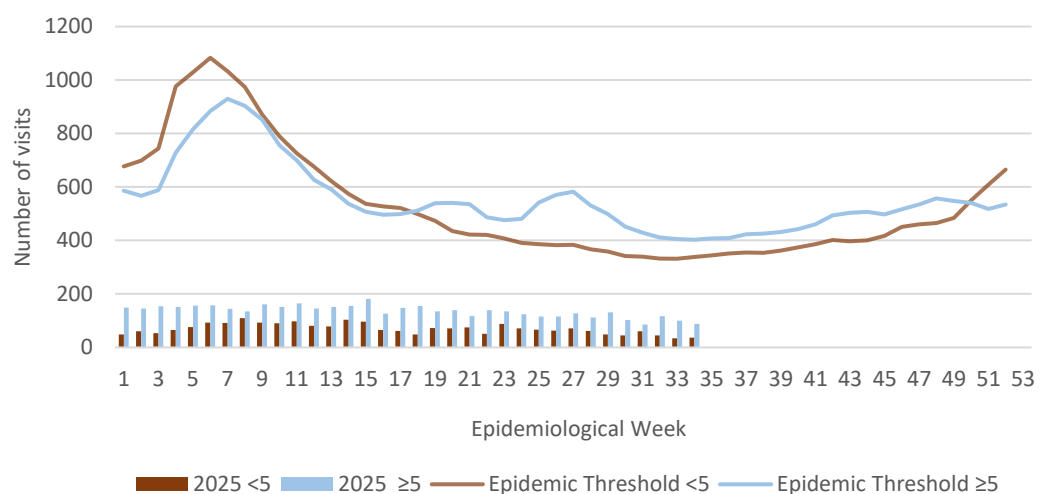
Weekly Visits to Sentinel Sites for Violence by Age Groups 2025 vs. Weekly Threshold

**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
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CLASS ONE NOTIFIABLE EVENTS					Comments
			Confirmed YTD ^α		
	CLASS 1 EVENTS		CURRENT YEAR 2025	PREVIOUS YEAR 2024	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		89 ^β	243 ^β	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.
	Cholera		0	0	
	Severe Dengue ^γ		See Dengue page below	See Dengue page below	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	COVID-19 (SARS-CoV-2)		278	595	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		3	35	
	Hepatitis C		1	9	Dengue Hemorrhagic Fever data include Dengue related deaths;
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	δ Figures include all deaths associated with pregnancy reported for the period.
	Meningitis		8	13	
	Monkeypox		1	0	ε CHIKV IgM positive cases
EXOTIC/ UNUSUAL	Plague		0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	β Updates made to prior weeks.
	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		39	43	
	Ophthalmia Neonatorum		34	139	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		2	0	
	Tuberculosis		21	35	
Yellow Fever		0	0		
	Chikungunya ^ε		0	0	
	Zika Virus ^θ		0	0	



5 NOTIFICATIONS-
All clinical
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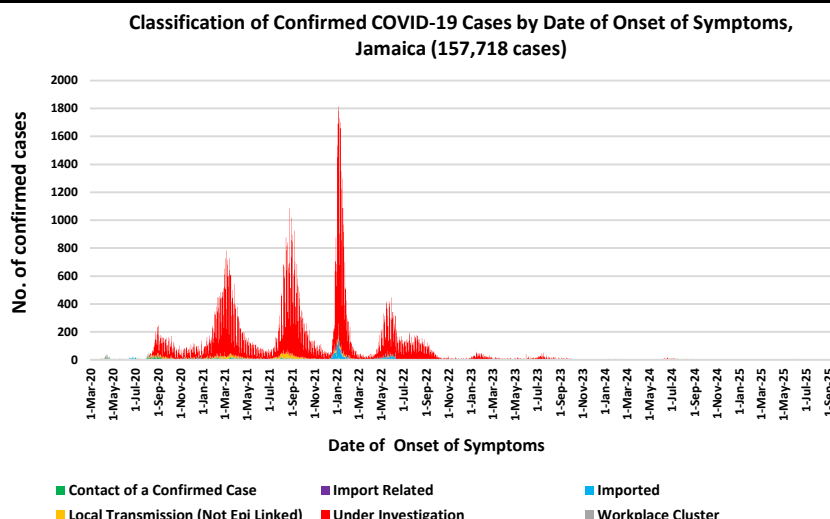
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COVID-19 SURVEILLANCE

CASES	EW 34	Total
Confirmed	2	157718
Females	1	90862
Males	1	66853
Age Range	33 to 74 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.		



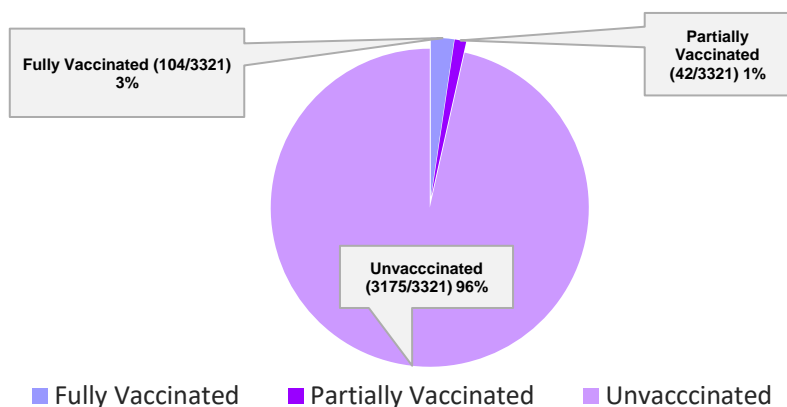
COVID-19 Outcomes

Outcomes	EW 34	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		157718

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

3321 COVID-19 Related Deaths since March 1, 2021 – YTD

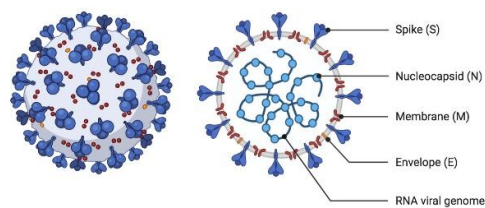
Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

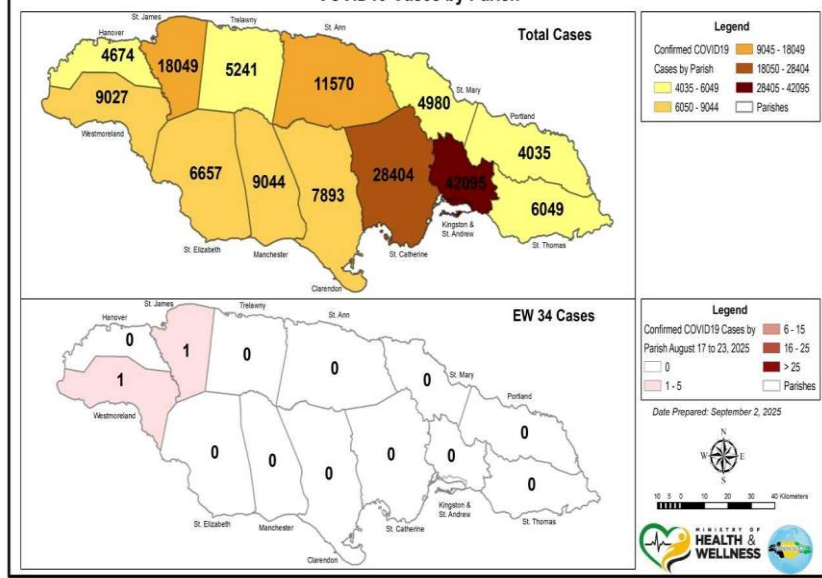
SARS-CoV-2



COVID-19 WHO Global Statistics EW 31 -34 2025

Epi Week	Confirmed Cases	Deaths
31	23500	231
32	14400	265
33	16500	238
34	17200	235
Total (4weeks)	71600	969

COVID19 Cases by Parish



6 NOTIFICATIONS-
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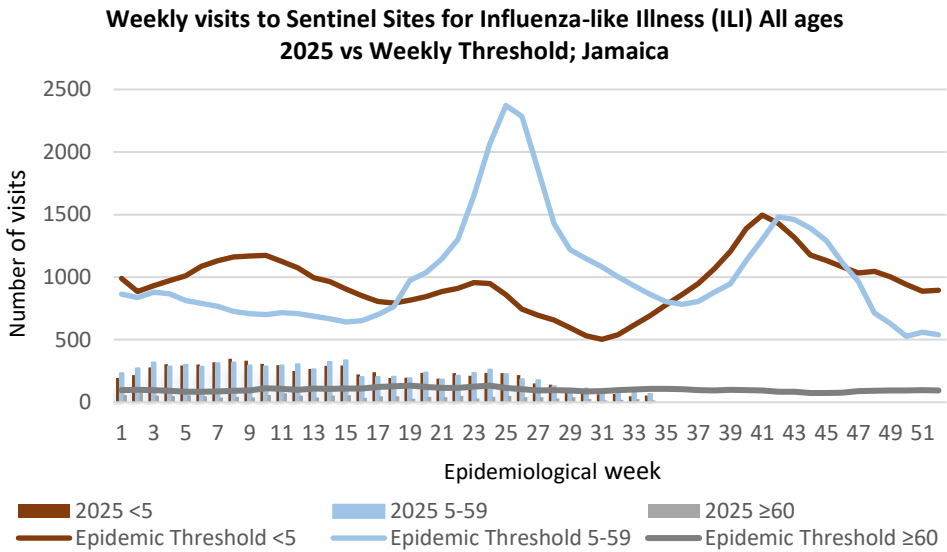
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INFLUENZA SURVEILLANCE

EW 34

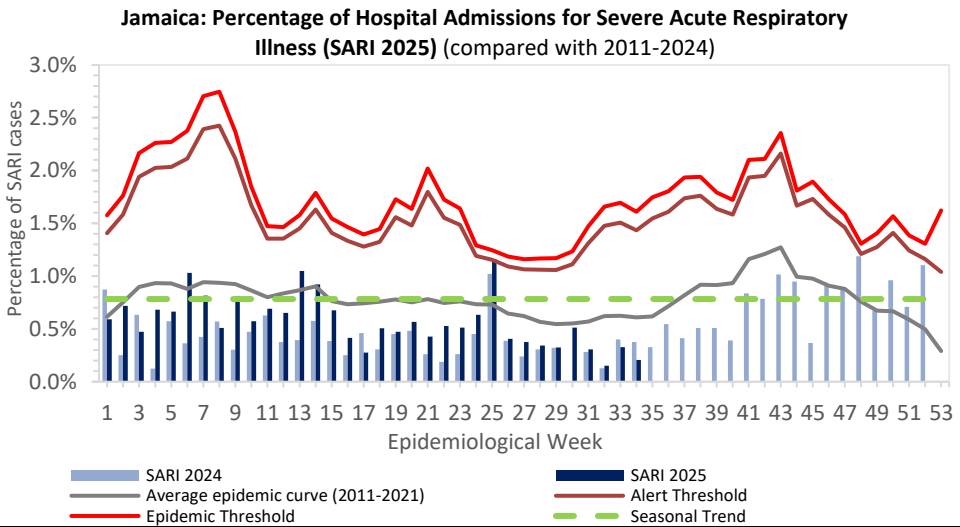
August 17, 2025 – August 23, 2025 Epidemiological Week 34

	EW 34	YTD
SARI cases	3	292
Total Influenza positive Samples	0	169
Influenza A	0	145
H1N1pdm09	0	78
H3N2	0	67
Not subtyped	0	0
Influenza B	0	24
B lineage not determined	0	0
B Victoria	0	24
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	30



Epi Week Summary

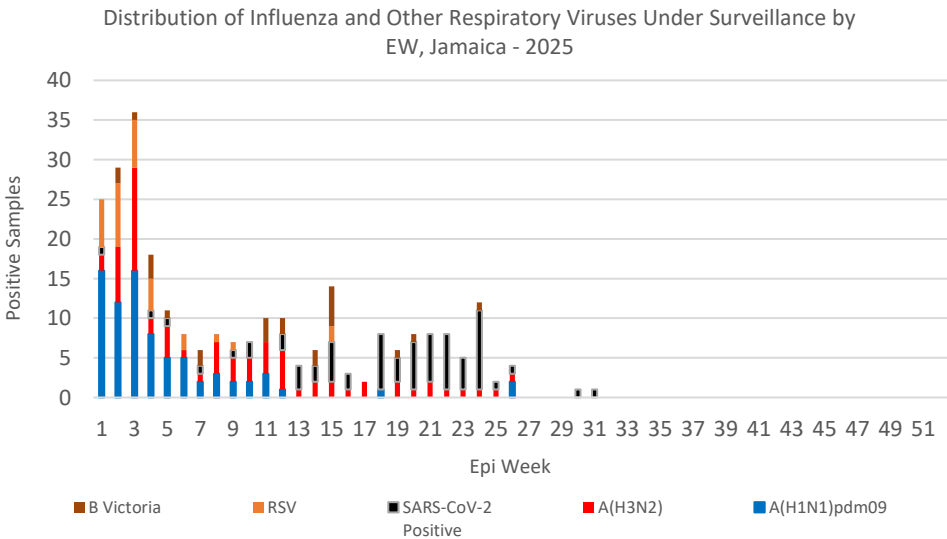
During EW 34, three (3) SARI admissions was reported.



Caribbean Update EW 34

Influenza activity, primarily driven by A(H1N1)pdm09, increased in the latest epidemiological week (EW), with a subregional positivity rate of 9.3%. In Haiti, Belize, and Saint Lucia, influenza activity remains at epidemic levels but is trending downward. In contrast, Cuba, Jamaica, and the Dominican Republic continue to report interseasonal levels. In Guyana, activity has increased compared to the previous EW. RSV circulation in the subregion has decreased relative to the previous EW, with a positivity rate of 6.2%. In the Dominican Republic, circulation declined compared to the previous EW, while in Guyana it increased slightly. SARS-CoV-2 activity rose this EW compared to the previous one, with a subregional positivity rate of 18.6%. Activity declined in Belize, Haiti, Jamaica, the Cayman Islands, Guyana and Saint Vincent and the Grenadines. In Cuba, the Dominican Republic, Saint Lucia and Barbados, positivity increased.

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

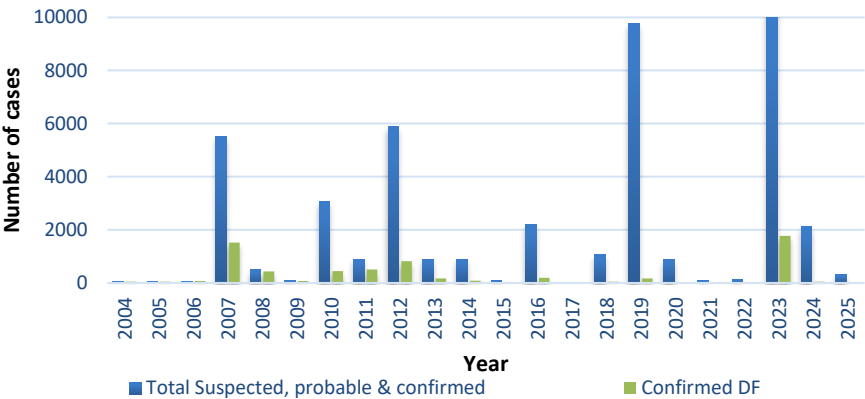


DENGUE SURVEILLANCE

August 17, 2025 – August 23, 2025 Epidemiological Week 34



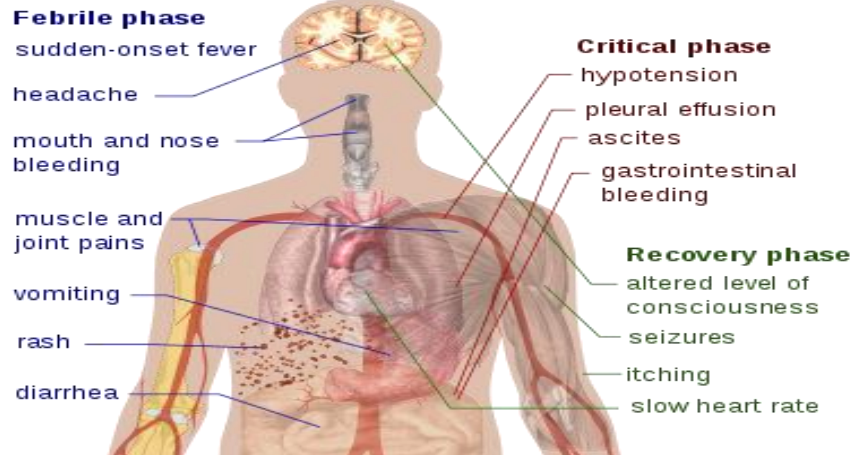
Dengue Cases by Year: 2004-2025, Jamaica



Reported suspected, probable and confirmed dengue with symptom onset in week 34 of 2025

	2025*	
	EW 34	YTD
Total Suspected, Probable & Confirmed Dengue Cases	4	324
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

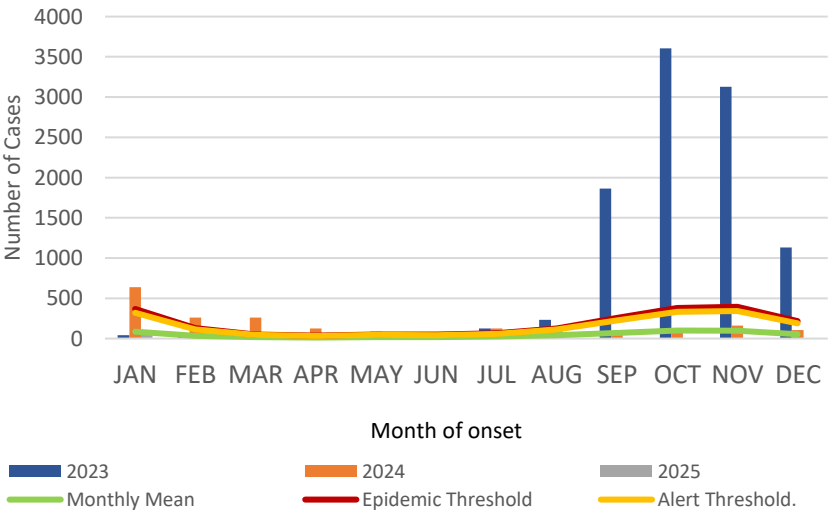
Symptoms of Dengue fever



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at September 02, 2025
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as probable 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



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RESEARCH ABSTRACT

Abstract

NHRC-23-O07

Knowledge, attitude, and practices towards stroke prevention and management among adults 18 years and older in rural (St. Elizabeth) and urban (St. Andrew) communities in Jamaica

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¹University of the West Indies, Mona, Jamaica ²Mona Aging and Wellness Centre, University of the West Indies, Mona, Jamaica

Aim: To determine the knowledge, attitude and practices towards stroke prevention and management among adults aged 18 years and older in urban and rural communities within St. Andrew and St. Elizabeth.

Objectives: Among Jamaicans aged 18 years and older in urban & rural communities (St. Andrew and St. Elizabeth, respectively), the study sought: to determine the knowledge and attitude towards risk factors associated with an acute stroke, towards stroke prevention strategies, towards long-term outcomes of a stroke, to ascertain the knowledge and attitude regarding the signs and symptoms of a stroke, to determine the proportion of individuals who can identify the 5 major warning signs and symptoms of a stroke, to determine if socio-demographic factors influence knowledge regarding stroke risk factors and signs and symptoms.

Methods: A cross-sectional study was conducted in the parishes of St. Andrew (urban) and St. Elizabeth (rural). Five communities were selected randomly with 342 participants. The participants' stroke knowledge, attitudes, and practices were documented. Data was collected using an original 41-question interviewer-administered questionnaire, using a stratified random sampling of selected households in the communities. The data was analysed using the SPSS Version 23 and descriptive statistics including frequencies and measures of central tendency were utilised. A statistically significant association was denoted by a p-value < 0.05. Logistics regression was used to further analyse the statistically significant associations with p-value less than 0.1.

Results: Among 342 participants, concerning spontaneous stroke knowledge, only 1% of the sample were able to spontaneously identify 7 risk factors with hypertension (54.1%) and stress (41.8%) most frequently reported. Regarding the stroke signs and symptoms, 47% of the sample demonstrated good knowledge, spontaneously reporting 2 of the 5 signs and symptoms. When these were listed 50.6% were able to select all 5 warning signs and symptoms. Respondents showed a good understanding of stroke prevention strategies, exercise (95.4%) and diet modification (92.9%) were predominantly selected, with the lowest proportion of respondents (79.8%) recognising medication adherence as a preventive measure. The attitude towards stroke prevention strategies was mostly positive; however, they often did not translate into practice. Statistically significant associations were found between socio-demographic factors and stroke prevention practices (p<0.05).

Conclusion: The findings underscore the need for targeted educational campaigns to enhance public awareness and knowledge, to reduce stroke morbidity and mortality in the country.



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9 NOTIFICATIONS-
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