WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Tetanus (Part 1)

Tetanus is an acute infectious disease caused by spores of the bacterium *Clostridium tetani*. The spores are found everywhere in the environment, particularly in soil, ash, intestinal tracts/feces of animals and humans, and on the surfaces of skin and rusty tools like nails, needles, barbed wire, etc. Being very resistant to heat and most antiseptics, the spores can survive for years. Anyone can get tetanus, but the disease is particularly common and serious in newborn babies and pregnant women who have not been sufficiently immunized with tetanus-toxoid-containing vaccines. Tetanus during pregnancy or within 6 weeks of the end of pregnancy is called maternal tetanus, and tetanus within the first 28 days of life is called neonatal tetanus.

The disease remains an important public health problem in many parts of the world, but especially in low-income countries or districts, where immunization coverage is low, and unclean birth practices are common. Neonatal tetanus occurs when nonsterile instruments are used to cut the umbilical cord or when contaminated material is used to cover the umbilical stump. Deliveries carried out by people with unclean hands or on a contaminated surface are also risk factors.

In 2018, approximately 25 000 newborns died from neonatal tetanus, a 97% reduction from 1988 when an estimated 787 000 newborn babies died of tetanus within their first month of life. However, there is increased risk of tetanus in adolescent and adult males who undergo circumcision due to waning immunity and limited opportunity for receiving booster doses in males in many countries.

Symptoms and diagnosis

The incubation period of tetanus varies between 3 and 21 days after infection. Most cases occur within 14 days. Symptoms can include:

- jaw cramping or the inability to open the mouth
- muscle spasms often in the back, abdomen and extremities
- sudden painful muscle spasms often triggered by sudden noises
- trouble swallowing
- seizures
- headache
- fever and sweating
- changes in blood pressure or fast heart rate.

In neonatal tetanus, symptoms include muscle spasms, which are often preceded by the newborn's inability to suck or breastfeed, and excessive crying.

Tetanus is diagnosed on the basis of clinical features and does not require laboratory confirmation. The WHO definition of a confirmed neonatal tetanus case is an illness occurring in an infant who has the normal ability to suck and cry in the first 2 days of life, but who loses this ability between days 3 and 28 of life and becomes rigid or has spasms.

The WHO definition of non-neonatal tetanus requires at least one of the following signs: a sustained spasm of the facial muscles in which the person appears to be grinning, or painful muscular contractions. Although this definition requires a history of injury or wound, tetanus may also occur in patients who are unable to recall a specific wound or injury.

Taken from WHO website on 20/March/2025
https://www.who.int/news-room/fact-sheets/detail/tetanus
Pictures taken from https://health.thefuntimesguide.com/getting-tetanus-shot/

EPI WEEK 10

Syndromic Surveillance

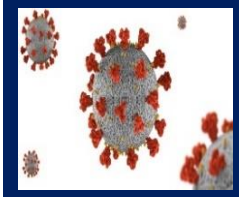
Accidents

Violence

Pages 2-4

Class 1 Notifiable Events

Page 5



COVID-19

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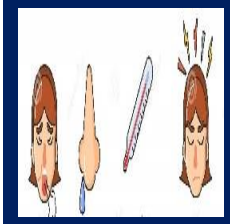

Influenza

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Dengue Fever

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Research Paper

Page 9

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 – 7 to 10 of 2025

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

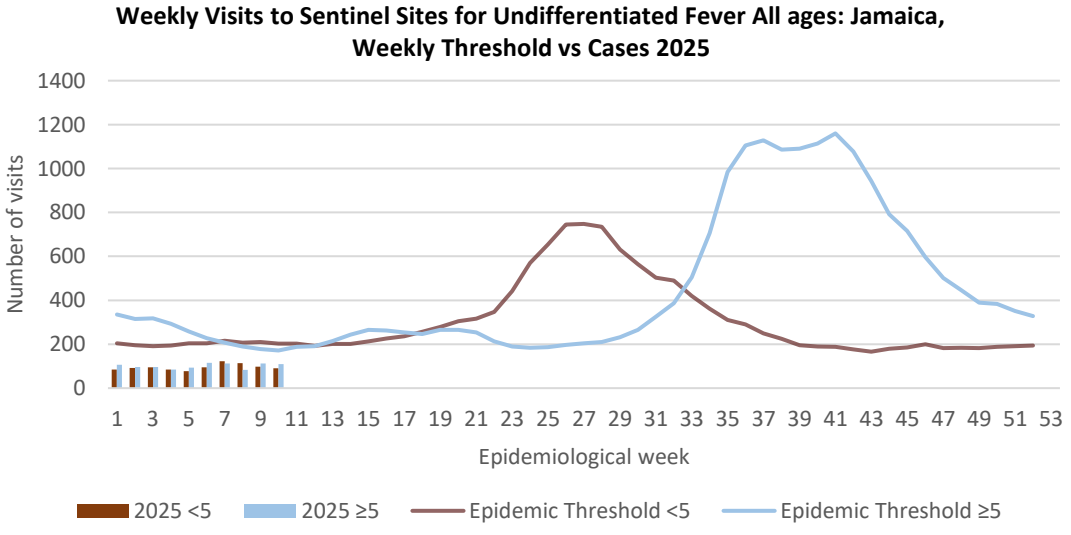
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
7	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
8	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
9	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
10	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

REPORTS FOR 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.



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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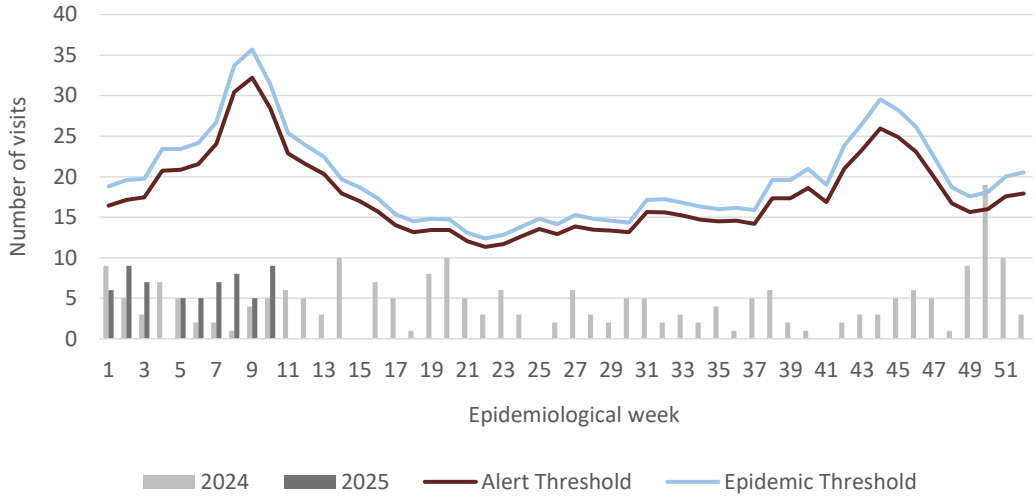
FEVER AND NEUROLOGICAL

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).

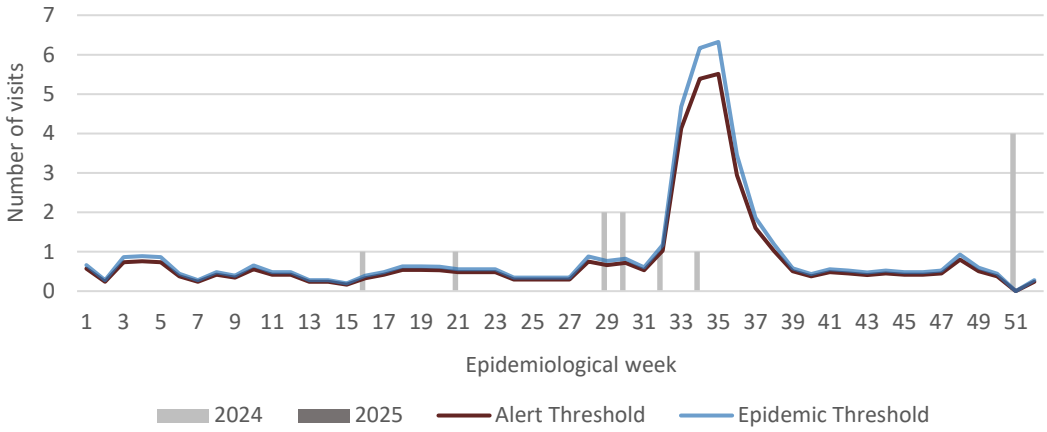
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2024 and 2025 vs. Weekly Threshold: Jamaica



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 2024 and 2025 vs Weekly Threshold; Jamaica

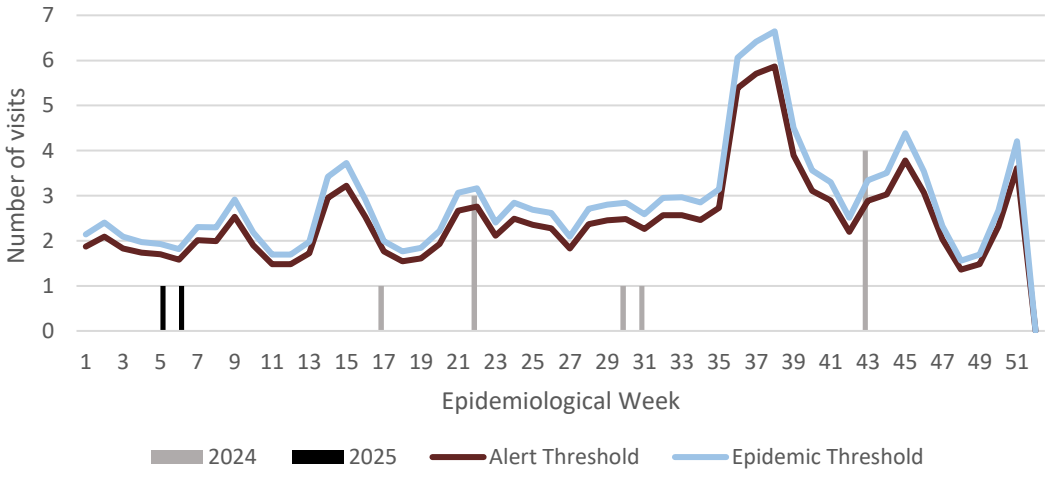


FEVER AND JAUNDICE

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.

Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2024 and 2025



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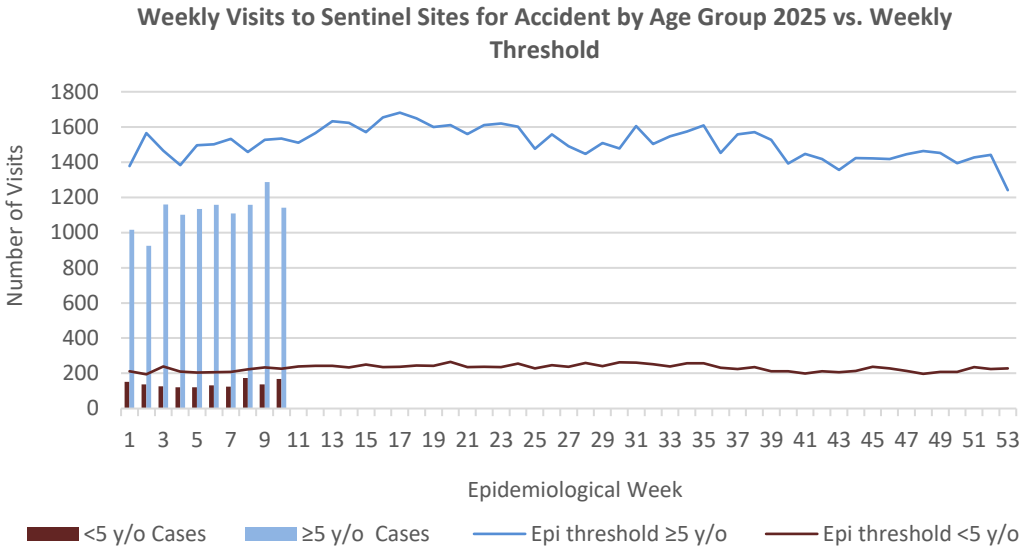
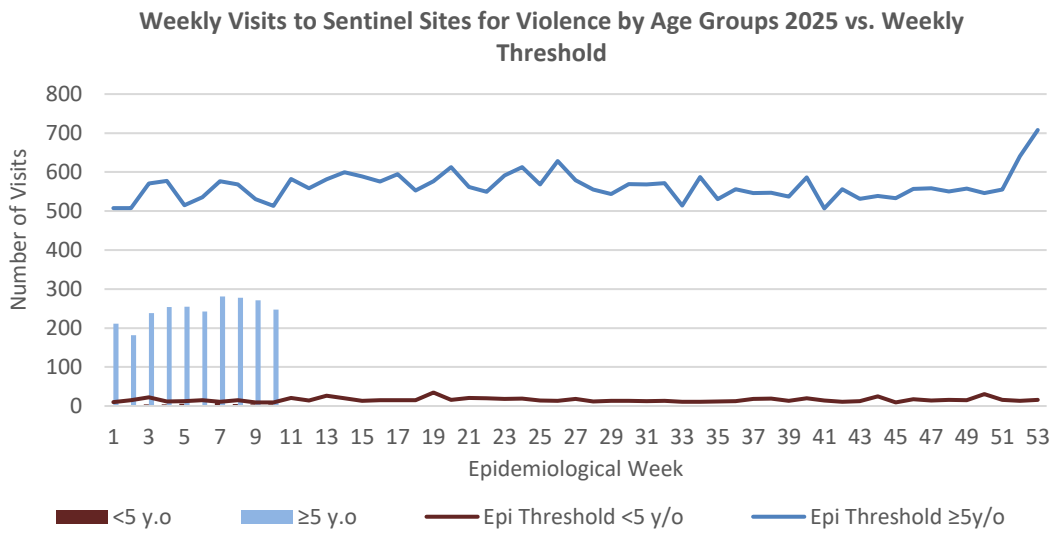
ACCIDENTS

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



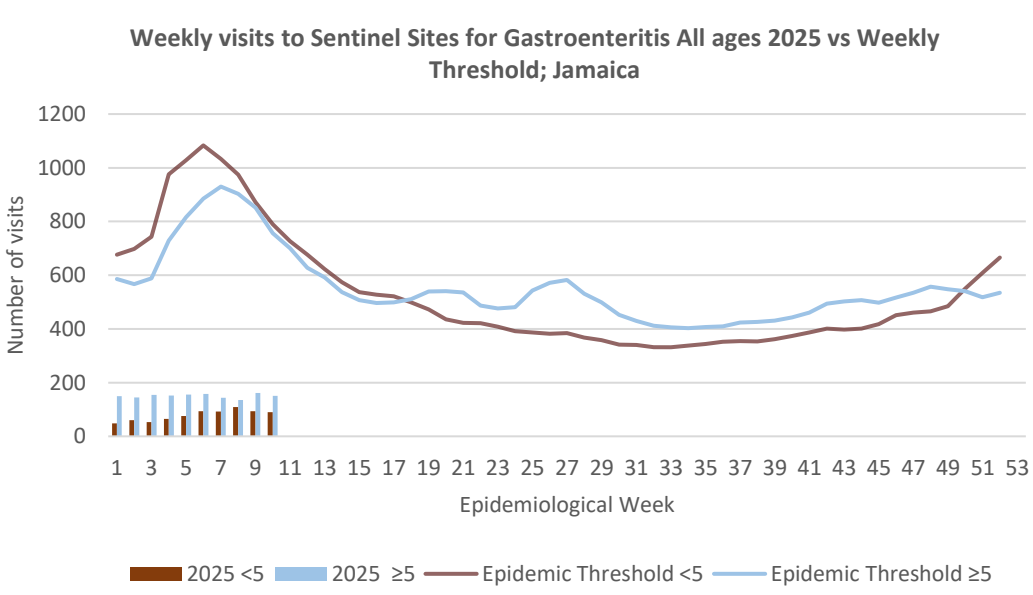
VIOLENCE

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		8[β]	77[β]
	Cholera		0	0
	Severe Dengue[Y]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		33	148
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	8
	Hepatitis C		0	2
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		2	5
	Monkeypox		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]		11	11
	Ophthalmia Neonatorum		2	34
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		0	12
	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

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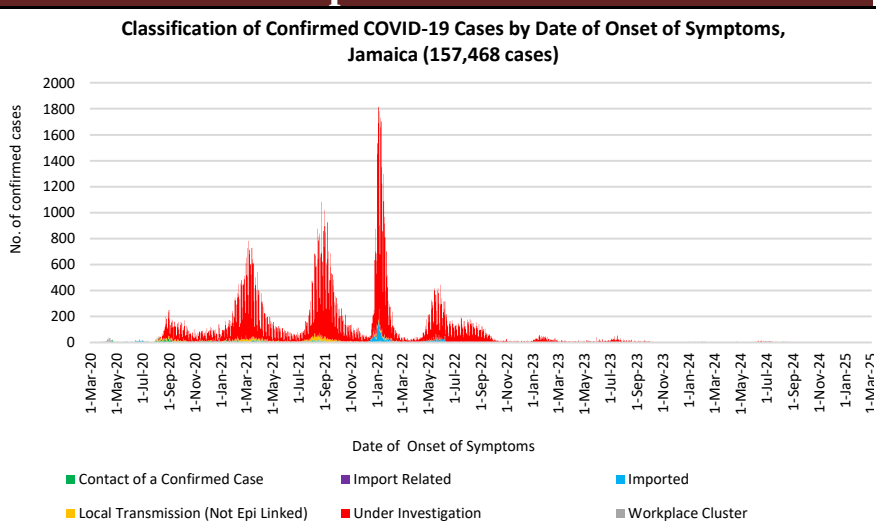
COVID-19 Surveillance Update

CASES	EW 10	Total
Confirmed	2	157468
Females	0	90726
Males	2	66739
Age Range	13 to 28 years	1 day to 108 years

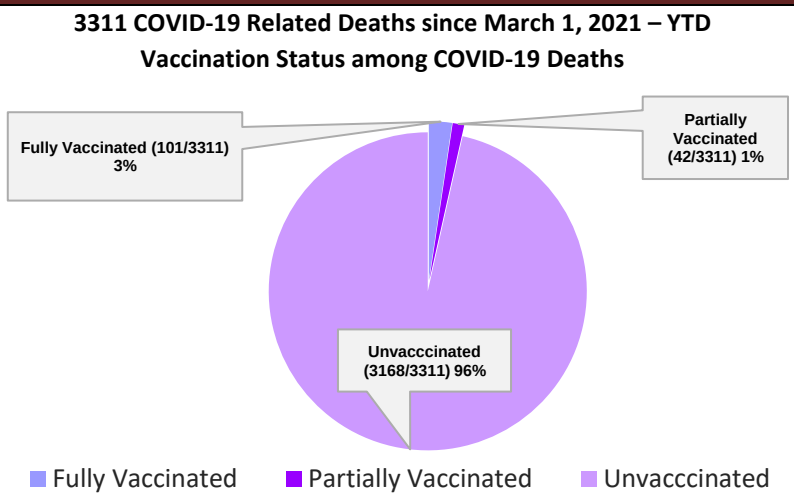
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



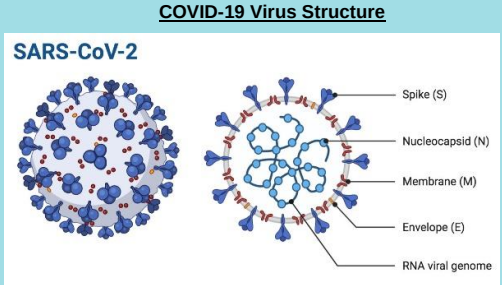
COVID-19 Outcomes

Outcomes	EW 10	Total
ACTIVE *2 weeks*		5
DIED – COVID Related	0	3875
Died - NON COVID	0	396
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157468

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

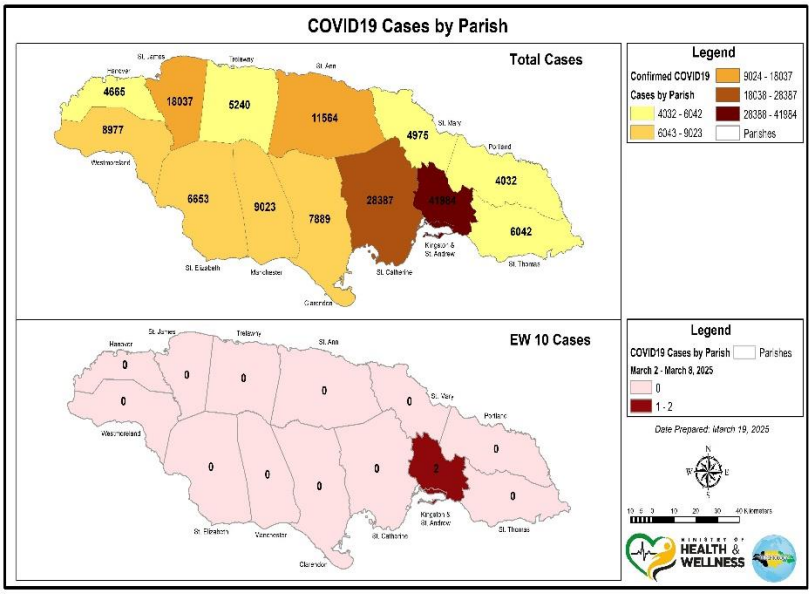


COVID-19 Parish Distribution and Global Statistics



COVID-19 WHO Global Statistics EW 7 -10, 2025

Epi Week	Confirmed Cases	Deaths
7	31900	856
8	35300	761
9	30800	642
10	17500	517
Total (4weeks)	**115500**	**2776**



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March 21, 2025 ISSN 0799-3927

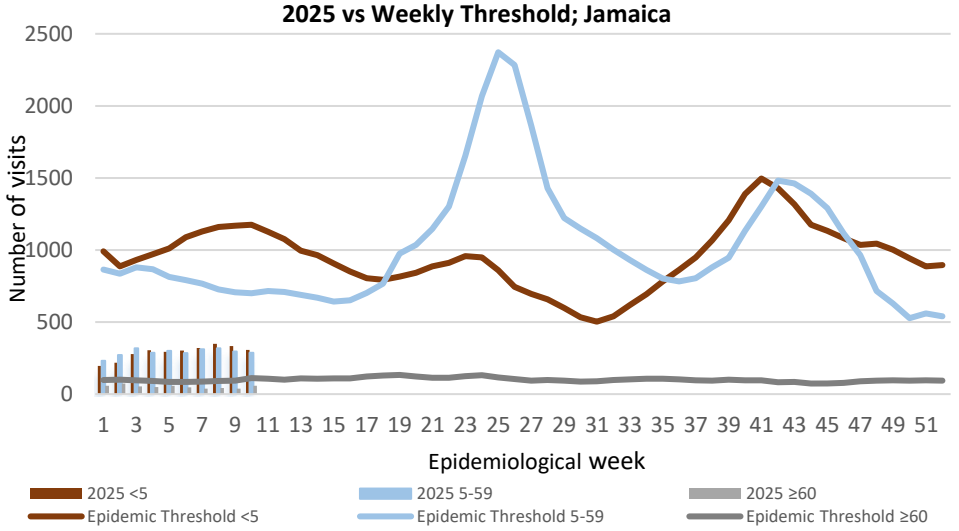
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 10

March 2, 2025 – March 8, 2025 Epidemiological Week 10

	EW 10	*YTD*
SARI cases	7	102
Total Influenza positive Samples	2	107
Influenza A	2	98
H3N2	0	64
H1N1pdm09	2	34
Not subtyped	0	0
Influenza B	0	9
B lineage not determined	0	0
B Victoria	0	9
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	27

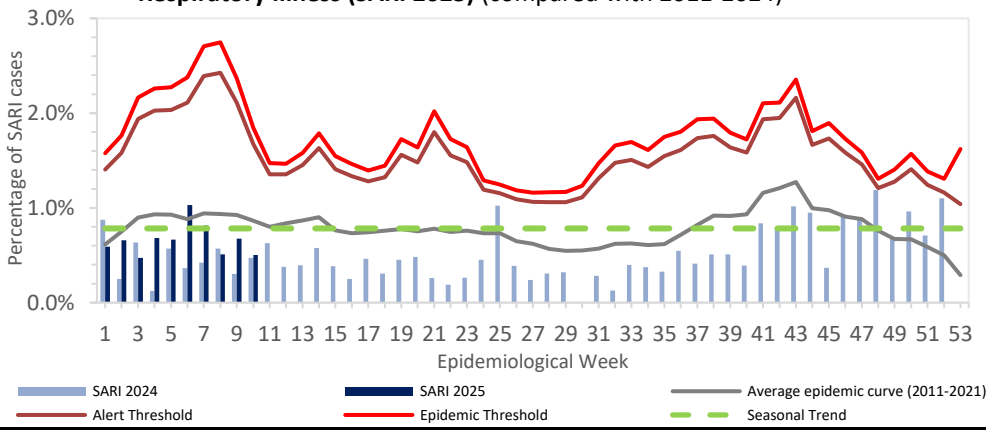
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 10, seven (7) SARI admissions were reported.

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



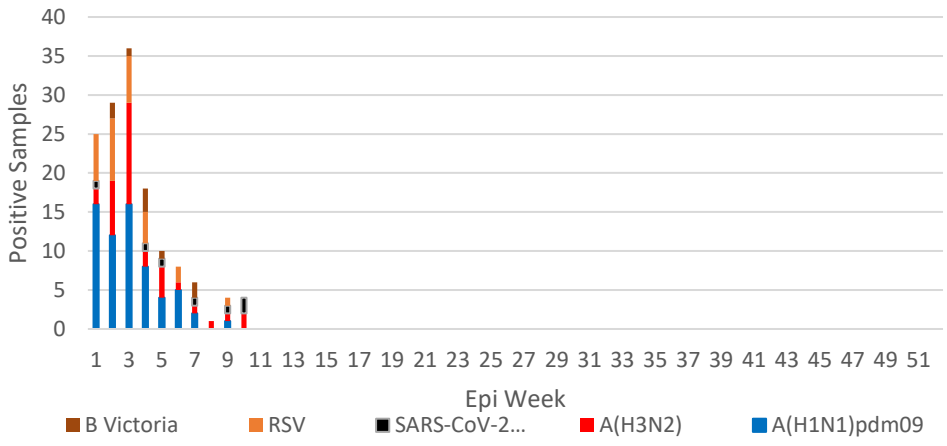
Caribbean Update EW 10

Caribbean: Influenza activity remains high for ILI and decreasing for SARI. The predominant influenza subtype was reported to be A(H1N1)pdm09. RSV and SARS-CoV-2 cases remain low.

By country: Over the past 4 EW, influenza activity has increased in Belize, the Dominican Republic, Jamaica, Suriname, Barbados and Guyana, while decreasing in Saint Lucia and Saint Vincent and the Grenadines. An increase in RSV activity was observed in Jamaica and Suriname as well as increase in SARS-CoV-2 detections in Hati and Jamaica.

(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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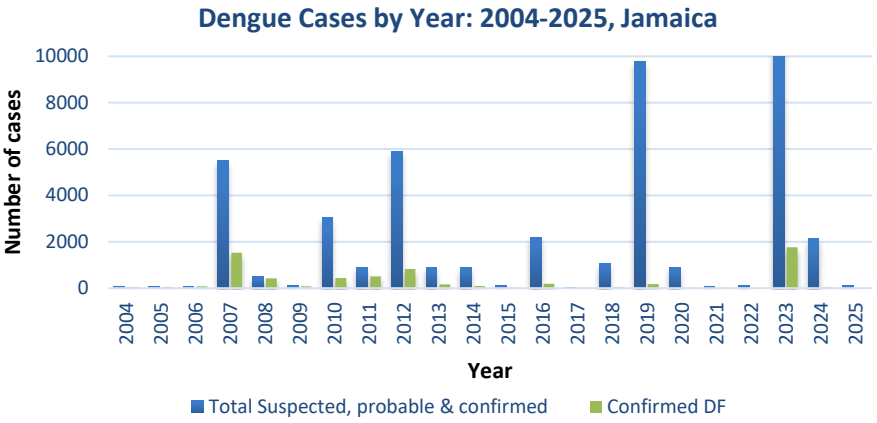
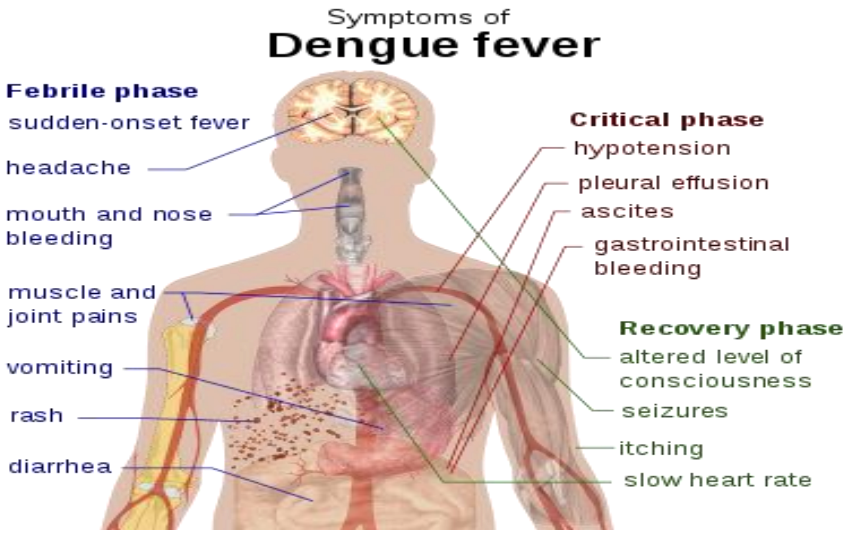
Dengue Bulletin

March 2, 2024 – March 8, 2025 Epidemiological Week 10 | Epidemiological Week 10



Reported suspected, probable and confirmed dengue with symptom onset in week 10 of 2025

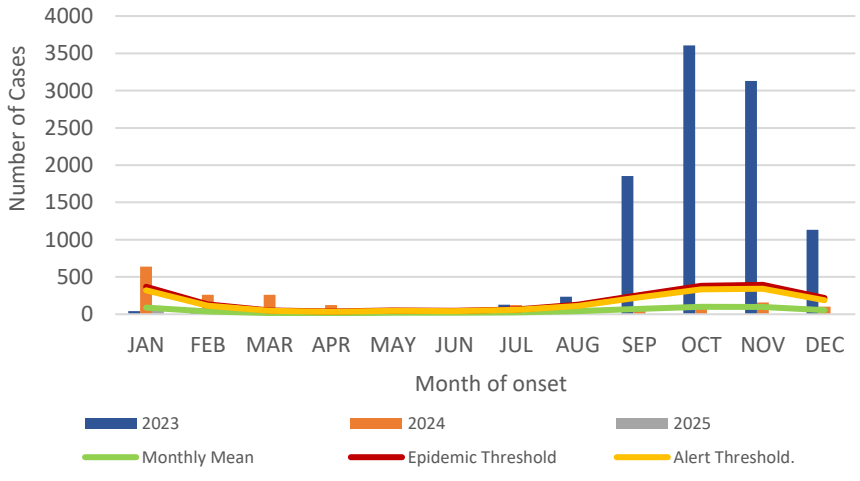
	2025*	
	EW 10	YTD
Total Suspected, Probable & Confirmed Dengue Cases	2	104
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- **Dengue deaths are reported based on date of death.**
- ***Figure as at, March 21, 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)



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RESEARCH PAPER

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

Lyle-Miller L[1], Kiffin V[1], McIntosh-Morgan V[1], Sutherland G[1], Tyndale D[2].

[1]University of the West Indies, Mona, Jamaica [2]Mona 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.

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