

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Tetanus (Part 2)

#### Treatment

Tetanus is a medical emergency requiring:

- care in the hospital
- immediate treatment with medicine called human tetanus immune globulin (TIG)
- aggressive wound care
- drugs to control muscle spasms
- antibiotics
- tetanus vaccination.



People who recover from tetanus do not have natural immunity and can be infected again, and therefore need to be immunized.

#### Prevention

Tetanus can be prevented through immunization with tetanus-toxoid-containing vaccines (TTCV), which are included in routine immunization programmes globally and administered during antenatal care contacts.

To be protected throughout life, WHO recommends that an individual receives 6 doses (3 primary plus 3 booster doses) of TTCV. The 3-dose primary series should begin as early as 6 weeks of age, with subsequent doses given with a minimum interval of 4 weeks between doses. The 3 booster doses should preferably be given during the second year of life (12–23 months), at 4–7 years of age, and at 9–15 years of age. Ideally, there should be at least 4 years between booster doses.

There are many kinds of vaccines used to protect against tetanus, all of which are combined with vaccines for other diseases:

- diphtheria and tetanus (DT) vaccines
- diphtheria, tetanus, and pertussis (whooping cough) (DTaP) vaccines
- tetanus and diphtheria (Td) vaccines
- tetanus, diphtheria, and pertussis (Tdap) vaccines.

Neonatal tetanus can be prevented by immunizing women of reproductive age with TTCV, either during pregnancy or outside of pregnancy. Additionally, robust medical practices can also prevent tetanus disease including clean delivery and cord care during childbirth, and proper wound care for surgical and dental procedures. In countries where national programmes have maintained high immunization coverage for several decades, tetanus incidence rates are very low.

Taken from WHO website on 24/March/2025

<https://www.who.int/news-room/fact-sheets/detail/tetanus>

Pictures taken from <https://health.thefuntimesguide.com/getting-tetanus-shot/>

## EPI WEEK 11



Syndromic Surveillance

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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 – 8 to 11 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													
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
11	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

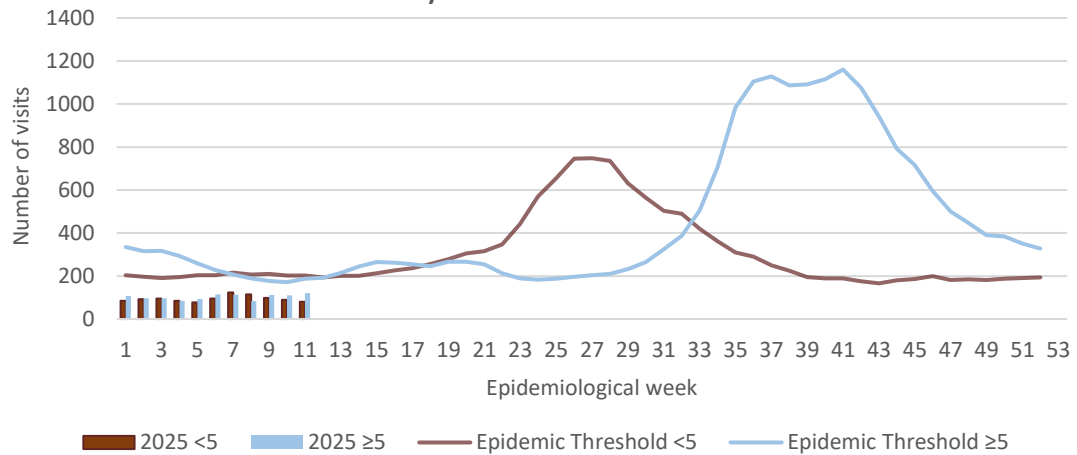
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of >38°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



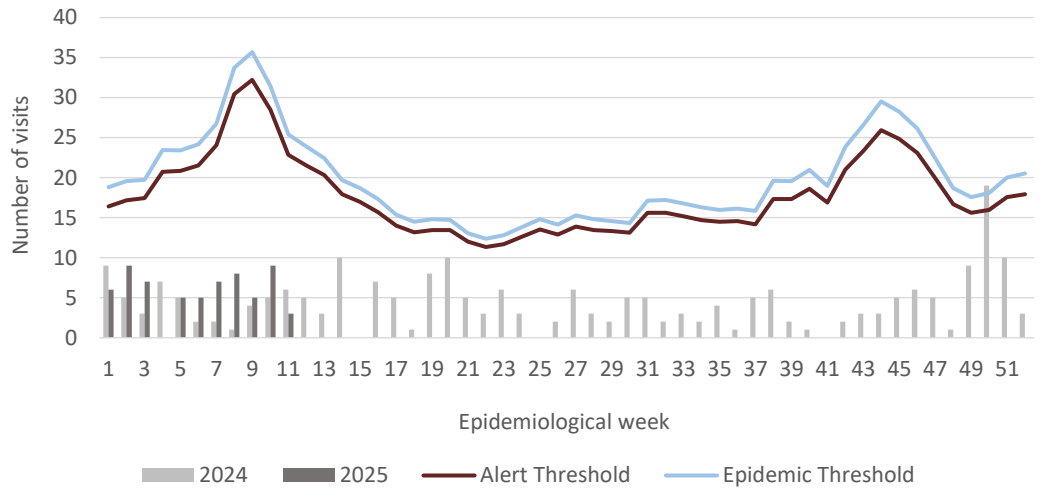
SENTINEL REPORT- 78 sites. Automatic reporting

**FEVER AND NEUROLOGICAL**

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

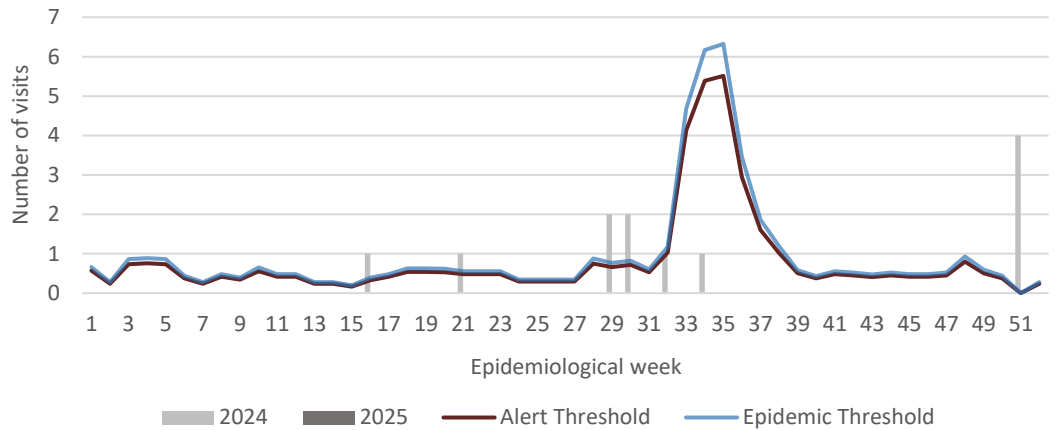


**FEVER AND HAEMORRHAGIC**

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



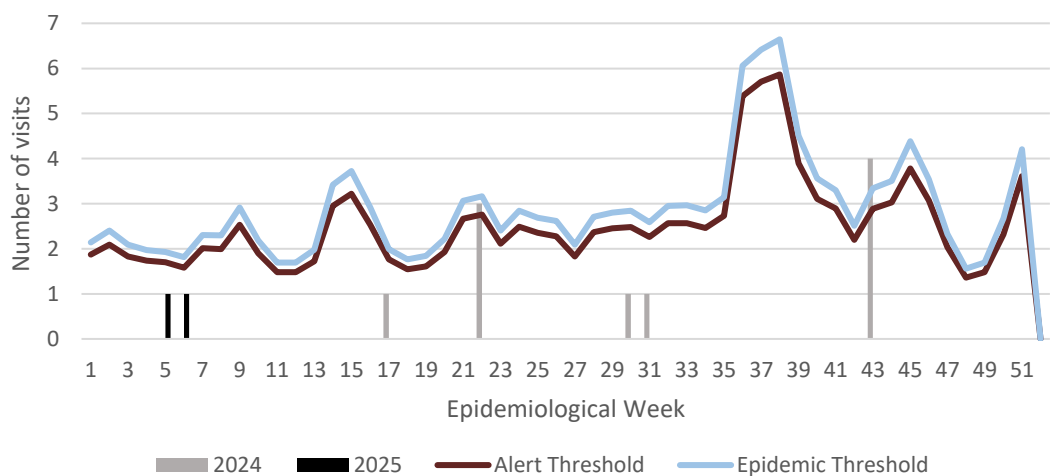
**FEVER AND JAUNDICE**

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



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



3 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

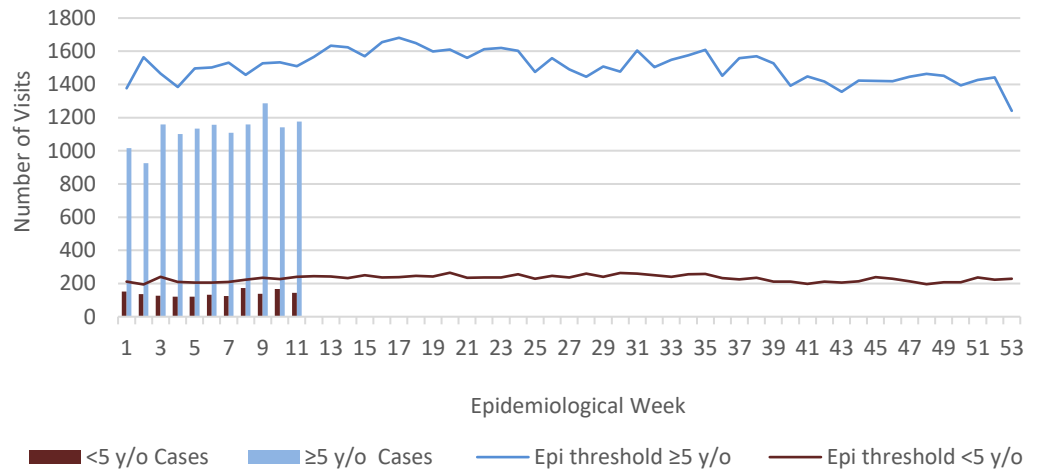


### ACCIDENTS

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



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

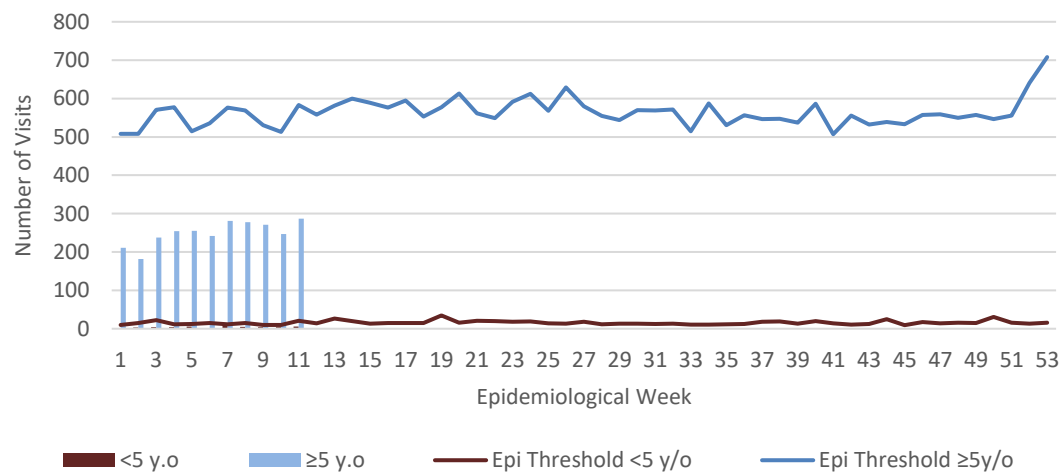


### VIOLENCE

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

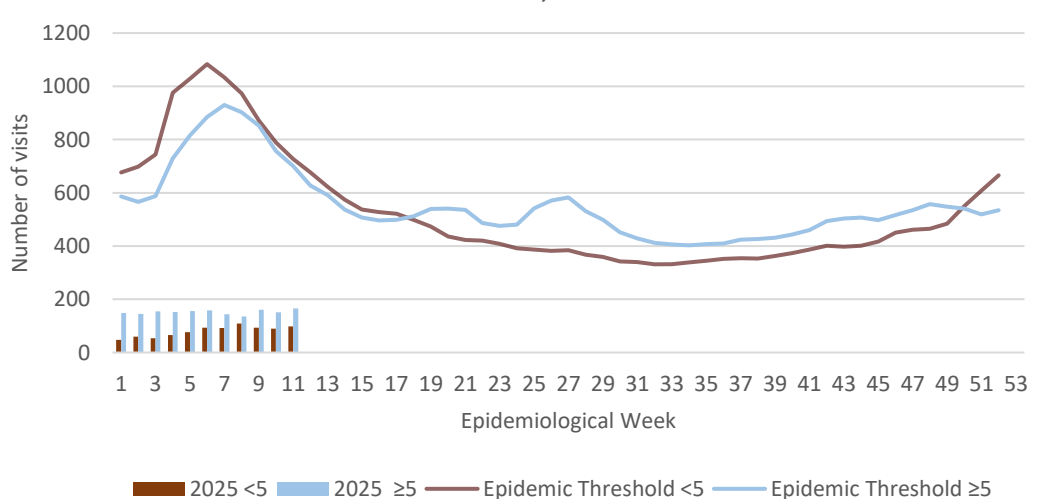


### GASTROENTERITIS

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 sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD <sup>α</sup>			
		CURRENT YEAR 2025	PREVIOUS YEAR 2024		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	11 <sup>β</sup>	89 <sup>β</sup>	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.  <sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;  <sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.	
	Cholera	0	0		
	Severe Dengue <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	38	153		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	0	11		
	Hepatitis C	0	2		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	2	6		
	Monkeypox	0	0		
EXOTIC/ UNUSUAL	Plague	0	0	<sup>ε</sup> CHIKV IgM positive cases <sup>θ</sup> Zika PCR positive cases  <sup>β</sup> Updates made to prior weeks.  <sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.	
HIGH 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 <sup>δ</sup>	14	12		
	Ophthalmia Neonatorum	2	38		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	0	15		
Yellow Fever	0	0			
Chikungunya <sup>ε</sup>	0	0			
Zika Virus <sup>θ</sup>	0	0	NA- Not Available		



**5 NOTIFICATIONS-**  
All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued



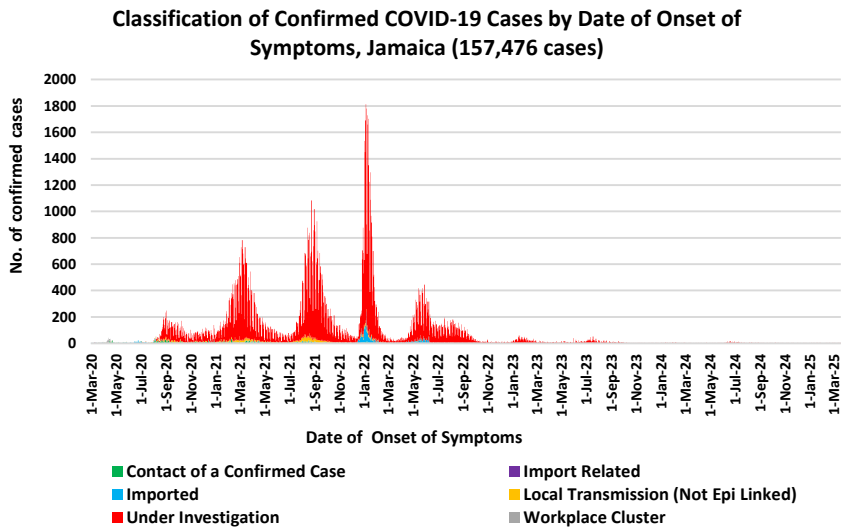
**SENTINEL REPORT-** 78 sites. Automatic reporting



# COVID-19 Surveillance Update

CASES	EW 11	Total
Confirmed	7	157476
Females	5	90732
Males	2	66741
Age Range	6 to 75 years	1 day to 108 years

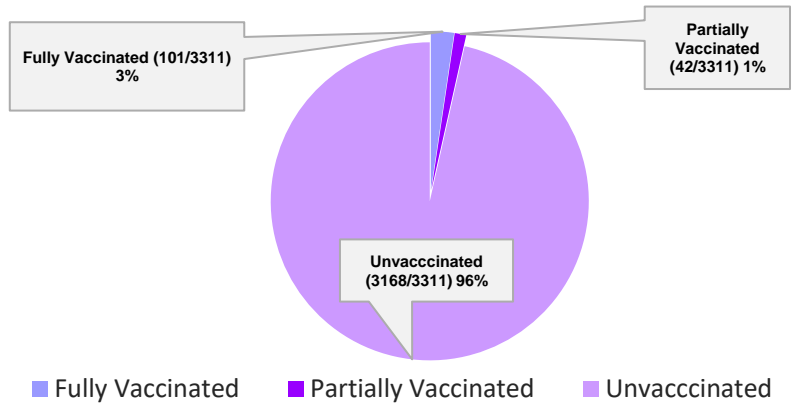
\* 3 positive cases had no gender specification  
 \* PCR or Antigen tests are used to confirm cases  
 \* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



## COVID-19 Outcomes

Outcomes	EW 11	Total
ACTIVE *2 weeks*		9
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

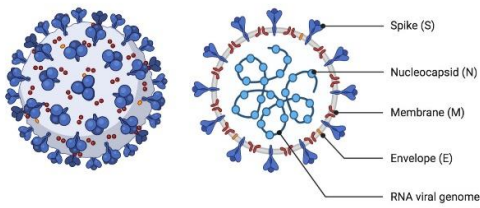
## 3311 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

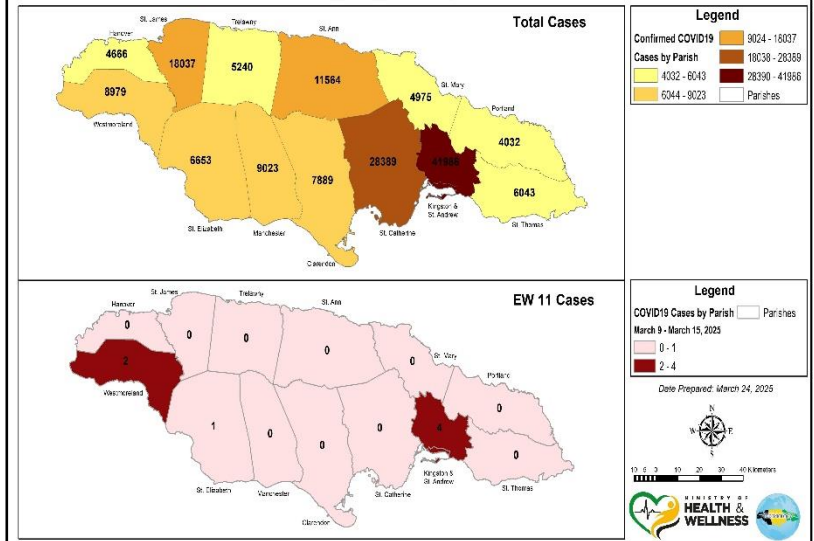
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW 8 -11, 2025

Epi Week	Confirmed Cases	Deaths
8	36400	780
9	32900	698
10	22200	632
11	13000	469
<b>Total (4weeks)</b>	<b>104500</b>	<b>2579</b>

### COVID19 Cases by Parish



6 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



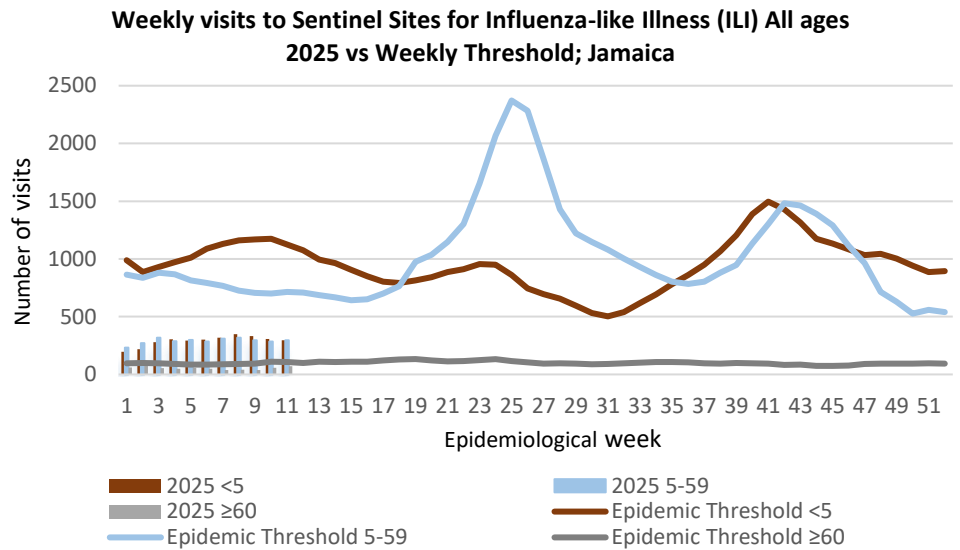
SENTINEL REPORT- 78 sites. Automatic reporting

# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 11*

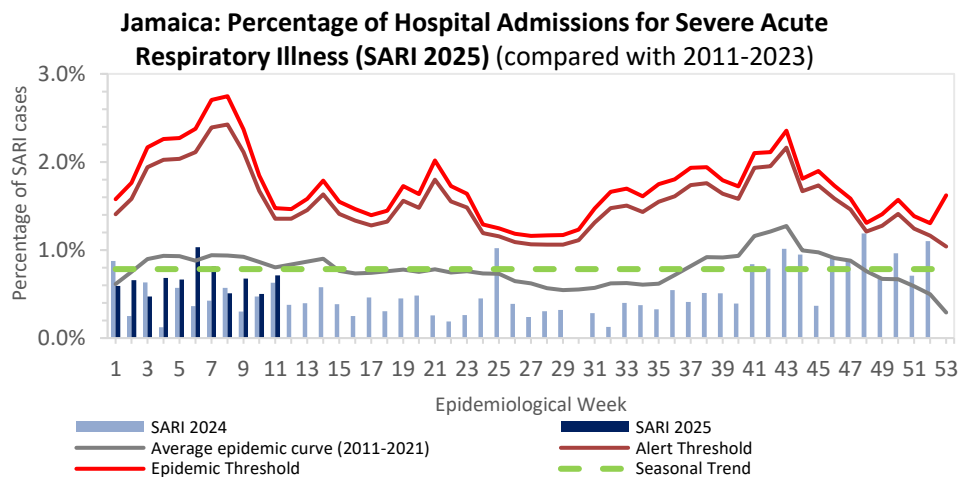
March 9, 2025 – March 15, 2025 Epidemiological Week 11

	EW 11	YTD
SARI cases	8	110
<b>Total Influenza positive Samples</b>	1	113
<b>Influenza A</b>	1	104
H1N1pdm09	1	68
H3N2	0	36
Not subtyped	0	0
<b>Influenza B</b>	0	9
B lineage not determined	0	0
B Victoria	0	9
<b>Parainfluenza</b>	0	0
<b>Adenovirus</b>	0	0
<b>RSV</b>	0	28



## Epi Week Summary

During EW 11, eight (8) SARI admissions were reported.

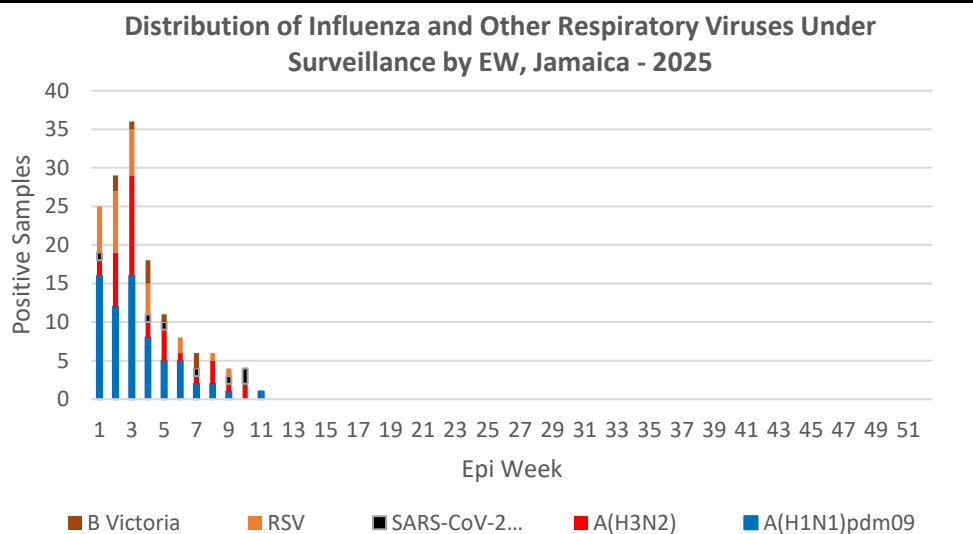


## Caribbean Update EW 11

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

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

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



**7 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

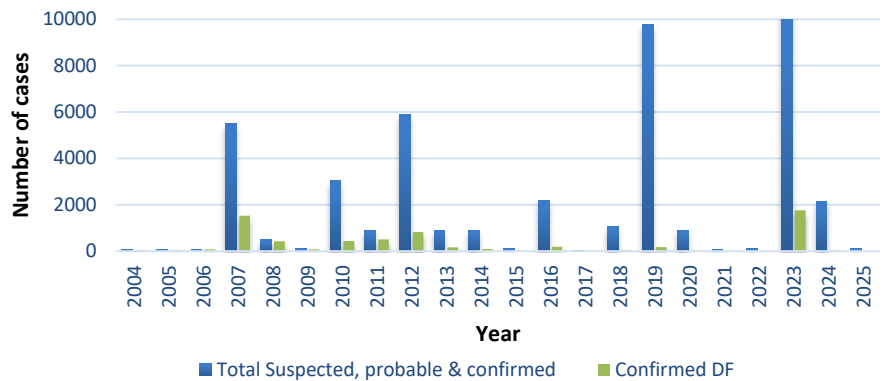
# Dengue Bulletin

March 9, 2024 – March 15, 2025 Epidemiological Week 11


Epidemiological Week 11



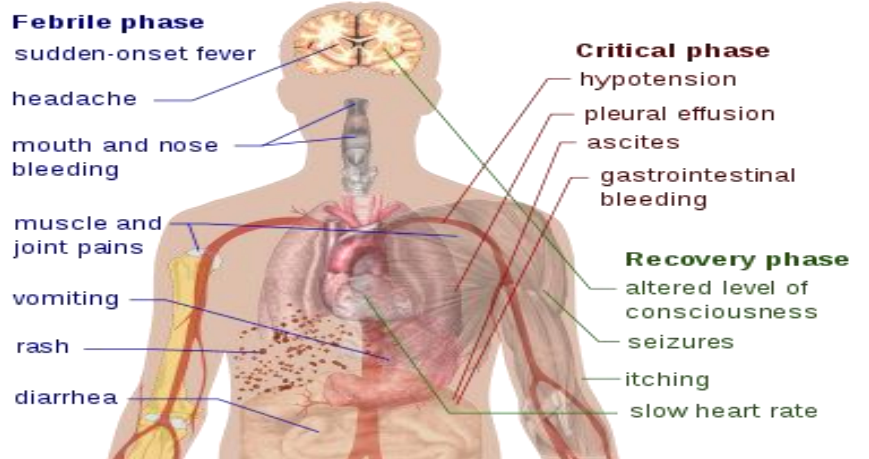
Dengue Cases by Year: 2004-2025, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 11 of 2025

	2025*	
	EW 11	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	2	104
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

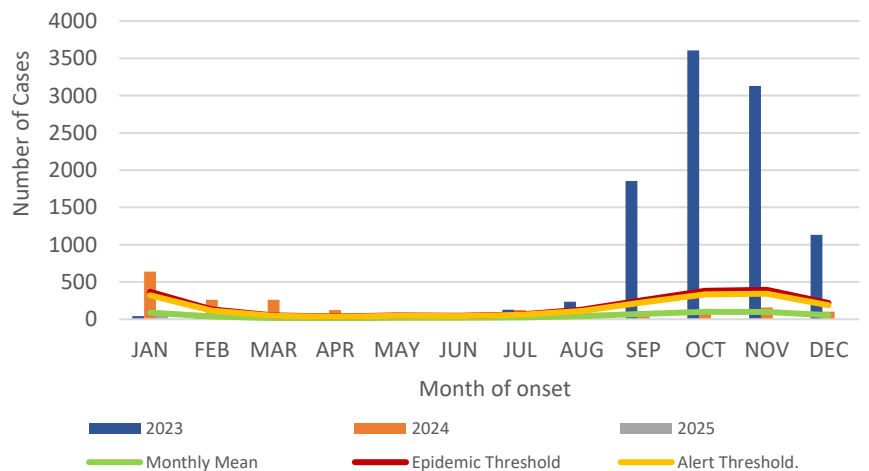
## Symptoms of Dengue fever



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at, March 28, 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)



8 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



# RESEARCH PAPER

## Abstract

NHRC-23-008

### 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 ( $3.09 \pm 0.52$  mmol/L vs  $6.01 \pm 0.29$  mmol/L;  $P = 0.001$ ); 90 minute ( $5.22 \pm 0.26$  mmol/L vs  $7.49 \pm 0.61$  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 ( $2.62 \pm 0.60$  mmol/L vs  $5.69 \pm 0.23$  mmol/L;  $P = 0.004$ ); 120 minute ( $3.86 \pm 0.85$  mmol/L vs  $6.43 \pm 0.47$  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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9 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