

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Rubella



Rubella is a highly contagious disease caused by a virus. It spreads easily when an infected person coughs or sneezes. Most children and adults who get rubella have a mild fever and rash. When a woman is infected with the rubella virus early in pregnancy, she has a 90% chance of passing the virus on to her fetus. Rubella in pregnancy, especially during the first trimester, can result in miscarriage, fetal death, stillbirth, or infants with congenital malformations, known as congenital rubella syndrome (CRS).

#### Symptoms

In children, the disease is usually mild, with symptoms including a rash, low fever (<math><39^{\circ}\text{C}</math>), nausea and mild conjunctivitis. The rash, which occurs in 50–80% of cases, lasts 1–3 days and usually starts on the face and neck before progressing down the body. Swollen lymph glands behind the ears and in the neck are the most characteristic clinical feature. Infected adults, more commonly women, may develop arthritis and painful joints that usually last from 3–10 days. Once a person is infected, the virus spreads throughout the body in about 5–7 days. Symptoms usually appear 2 to 3 weeks after exposure. The most infectious period is usually 1–5 days after the appearance of the rash.

When a woman is infected with the rubella virus early in pregnancy, she has a 90% chance of passing the virus on to her fetus. This can cause the death of the fetus, or it may cause CRS. Infants with CRS may excrete the virus for a year or more.

#### Congenital rubella syndrome

Children with CRS can suffer hearing impairments, eye and heart defects and other lifelong disabilities, including autism, diabetes mellitus and thyroid dysfunction – many of which require costly therapy, surgeries and other expensive care.

The highest risk of CRS is in countries where women of childbearing age do not have immunity to the disease (either through vaccination or from having had rubella). Before the introduction of the vaccine, up to 4 babies in every 1000 live births were born with CRS.

#### Vaccination

The rubella vaccine is a live attenuated strain, and a single dose gives more than 95% long-lasting immunity, which is similar to that induced by natural infection. Rubella vaccines are available either in monovalent formulation (a vaccine directed at only one pathogen) or more commonly in combinations with other vaccines such as with vaccines against measles (MR), measles and mumps (MMR), or measles, mumps and varicella (MMRV).

Adverse reactions following vaccination are generally mild. They may include pain and redness at the injection site, low-grade fever, rash and muscle aches. Mass immunization campaigns in the Region of the Americas involving more than 250 million adolescents and adults did not identify any serious adverse reactions associated with the vaccine.

Taken from WHO website on 18/February/2025

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

## EPI WEEK 6



Syndromic Surveillance

Accidents

Violence

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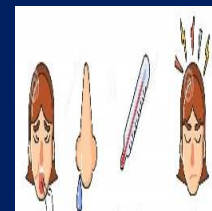
Class 1 Notifiable Events

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COVID-19

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Influenza

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Dengue Fever

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Research Paper

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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 – 3 to 6 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													
3	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
4	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
5	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
6	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)

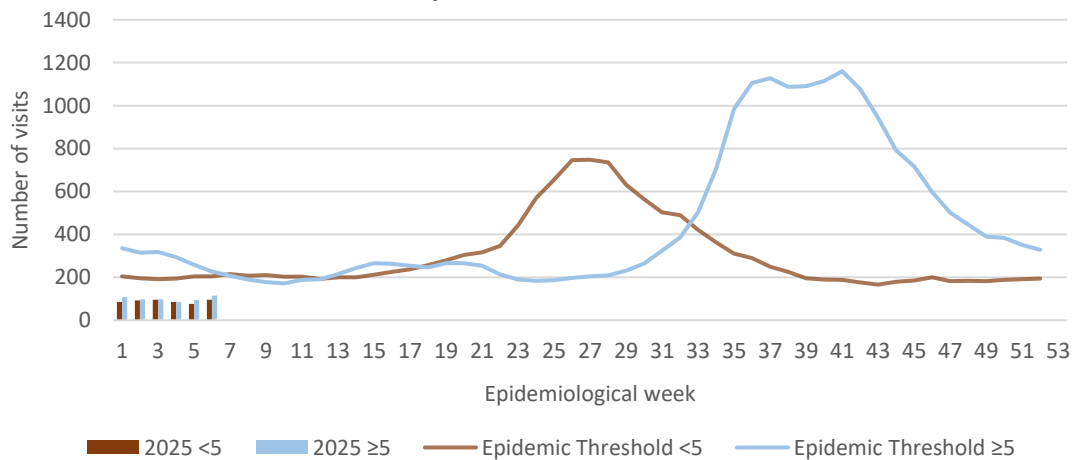
REPORTS FOR SYNDROMIC SURVEILLANCE

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



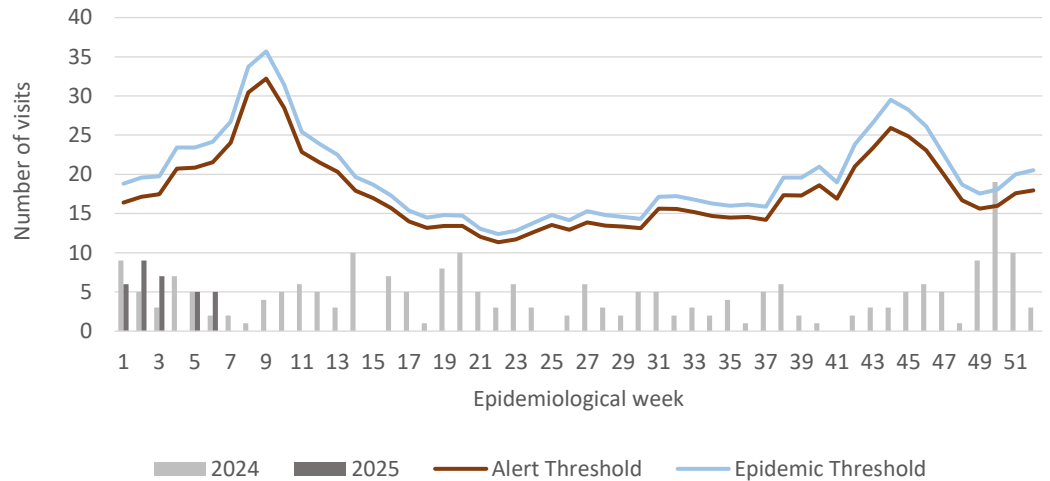
SENTINEL REPORT- 78 sites. Automatic reporting

**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

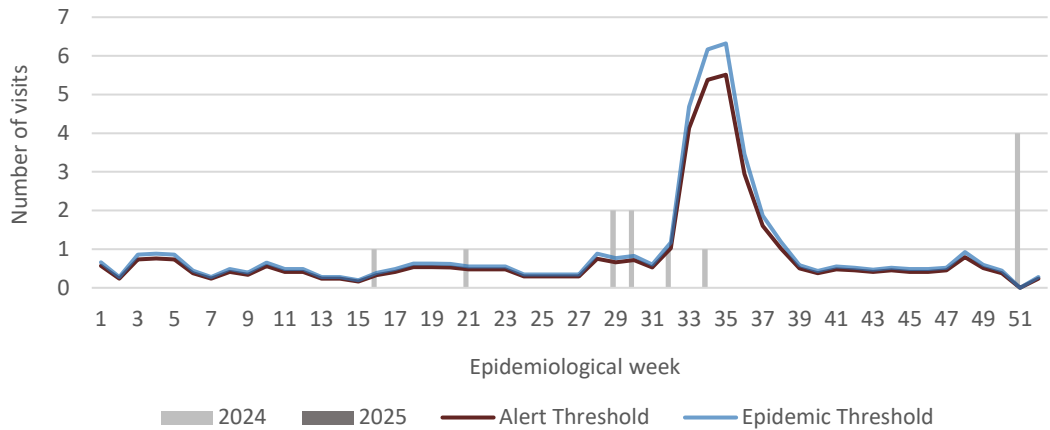


**FEVER AND HAEMORRHAGIC**

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



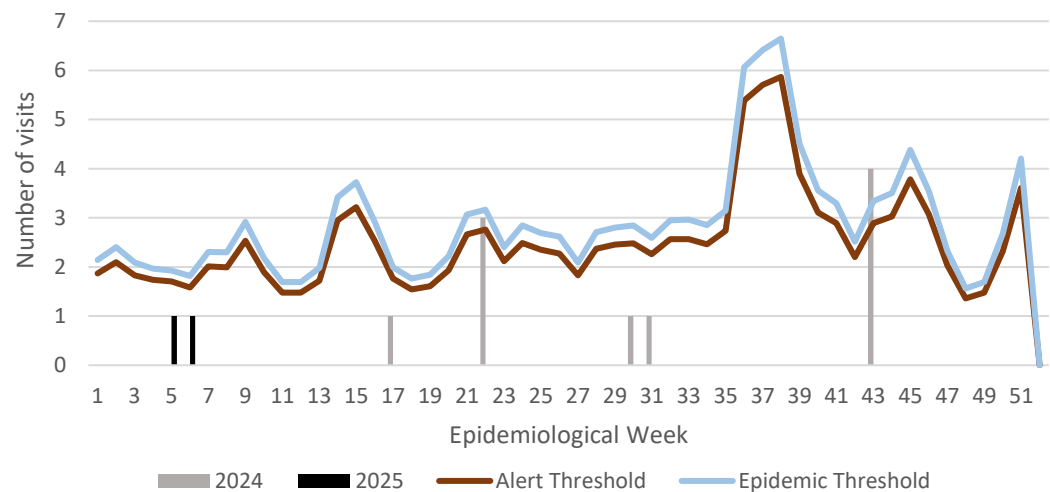
**FEVER AND JAUNDICE**

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

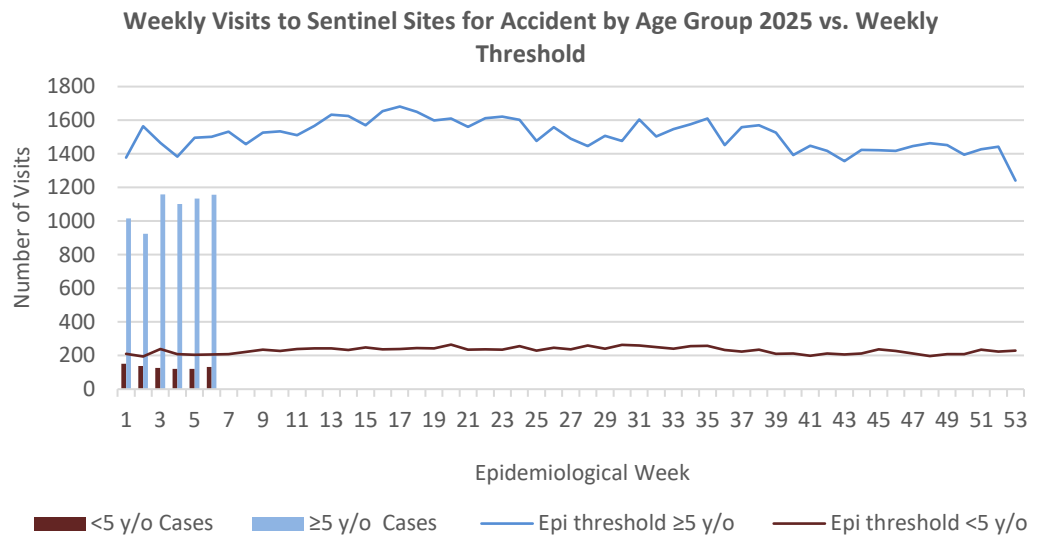


SENTINEL REPORT- 78 sites. Automatic reporting



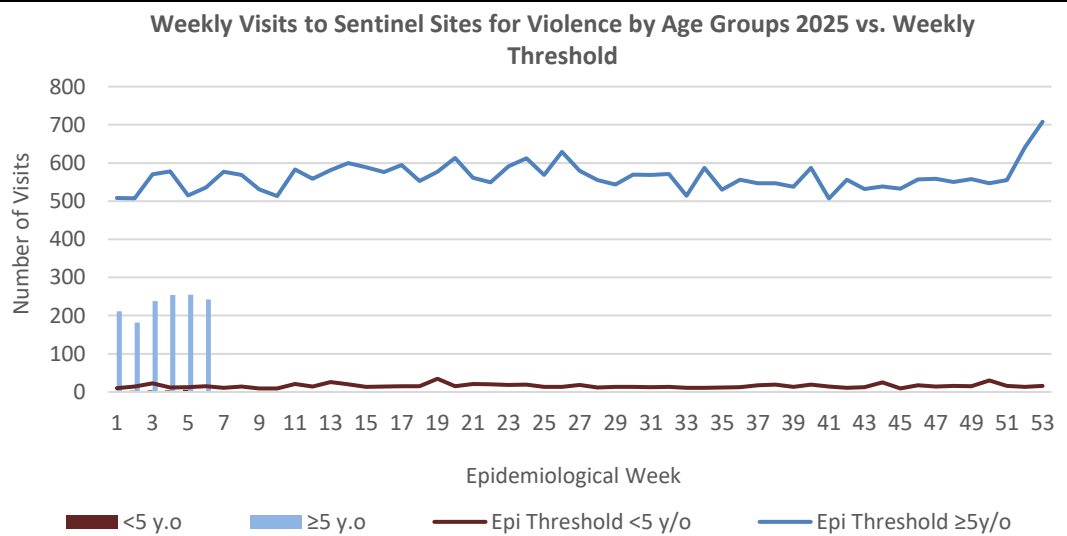
### ACCIDENTS

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



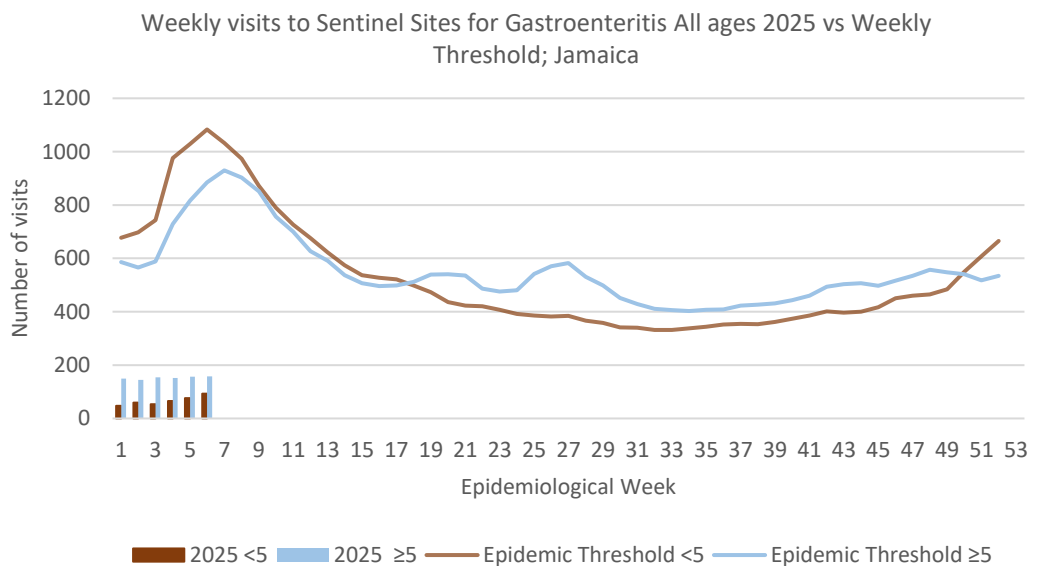
### VIOLENCE

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.



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

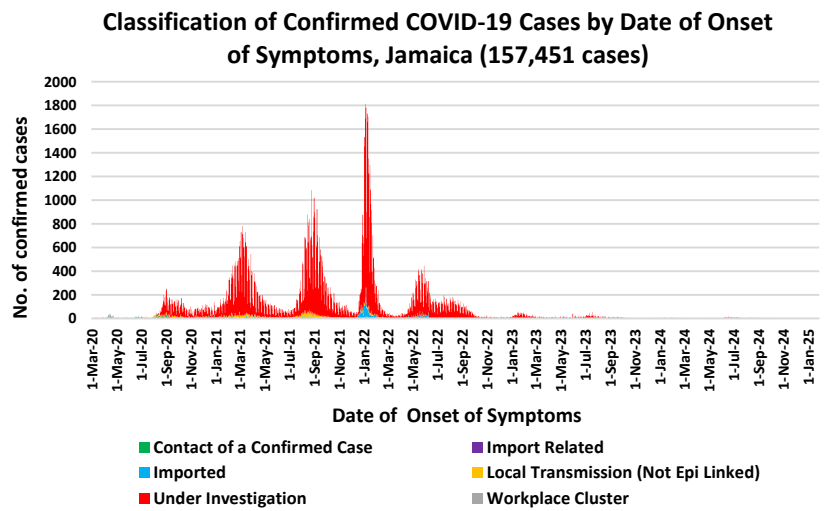
CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD <sup>α</sup>			
		CURRENT YEAR 2025	PREVIOUS YEAR 2024		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	4 <sup>β</sup>	54 <sup>β</sup>	AFP Field Guides from WHO indicate that for an effective surveillance system, detection 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)	16	111		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	0	8		
	Hepatitis C	0	1		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	1	1		
	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>	8	8		
	Ophthalmia Neonatorum	0	23		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	0	11		
Yellow Fever	0	0			
Chikungunya <sup>ε</sup>	0	0			
Zika Virus <sup>θ</sup>	0	0	NA- Not Available		

 <p><b>5 NOTIFICATIONS-</b> All clinical sites</p>	 <p><b>INVESTIGATION REPORTS-</b> Detailed Follow up for all Class One Events</p>	 <p><b>HOSPITAL ACTIVE SURVEILLANCE-</b> 30 sites. Actively pursued</p>	 <p><b>SENTINEL REPORT-</b> 78 sites. Automatic reporting</p>
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# COVID-19 Surveillance Update

CASES	EW 6	Total
Confirmed	3	157451
Females	1	90718
Males	2	66730
Age Range	4 to 70 years	1 day to 108 years

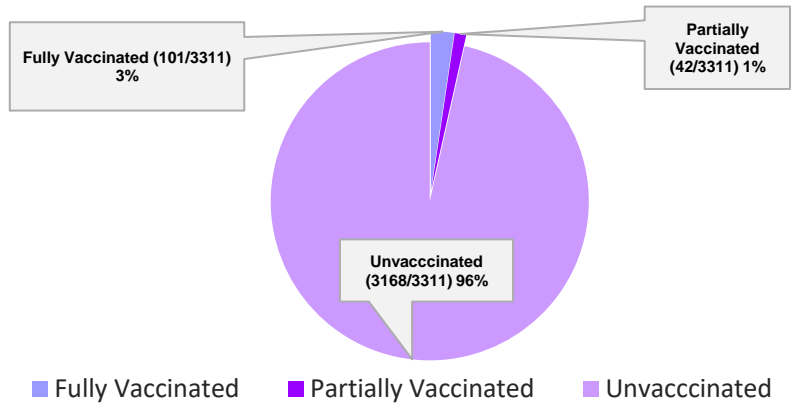
\* 3 positive cases had no gender specification  
 \* PCR or Antigen tests are used to confirm cases  
 \* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



## COVID-19 Outcomes

Outcomes	EW 6	Total
ACTIVE *2 weeks*		6
DIED – COVID Related	0	3875
Died - NON COVID	0	396
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157451

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

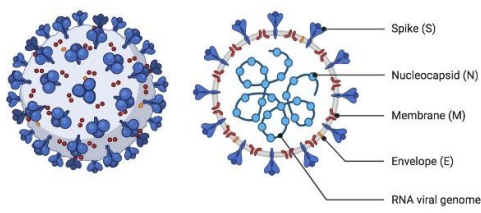


\*Vaccination programme March 2021 – YTD  
 \* Total as at current Epi week

## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

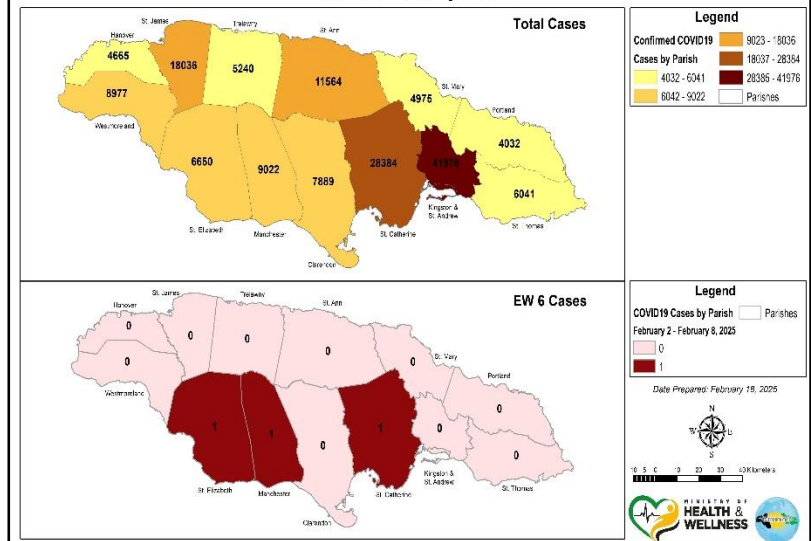
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW 3 - 6, 2025

Epi Week	Confirmed Cases	Deaths
3	23600	1100
4	19500	1100
5	16100	910
6	15300	736
<b>Total (4weeks)</b>	<b>74500</b>	<b>3846</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

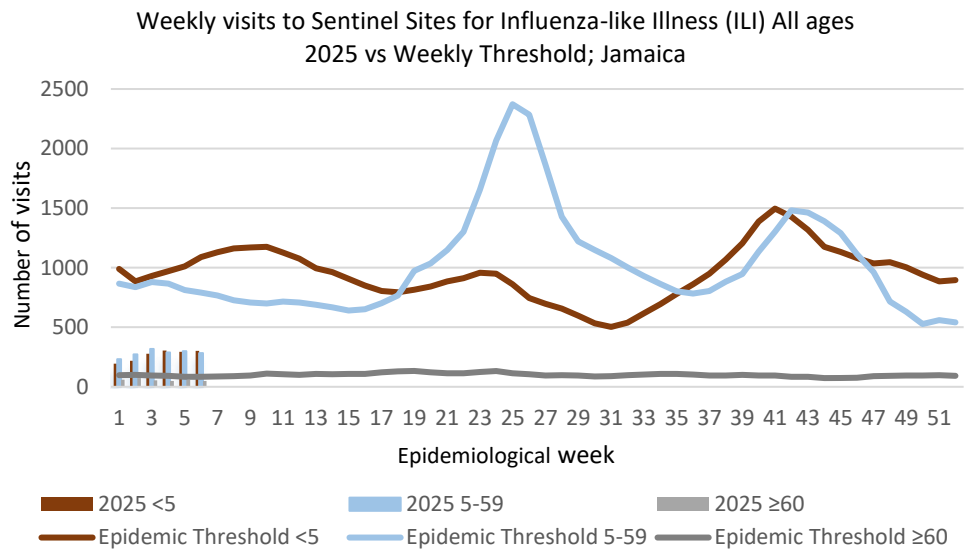


# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 6*

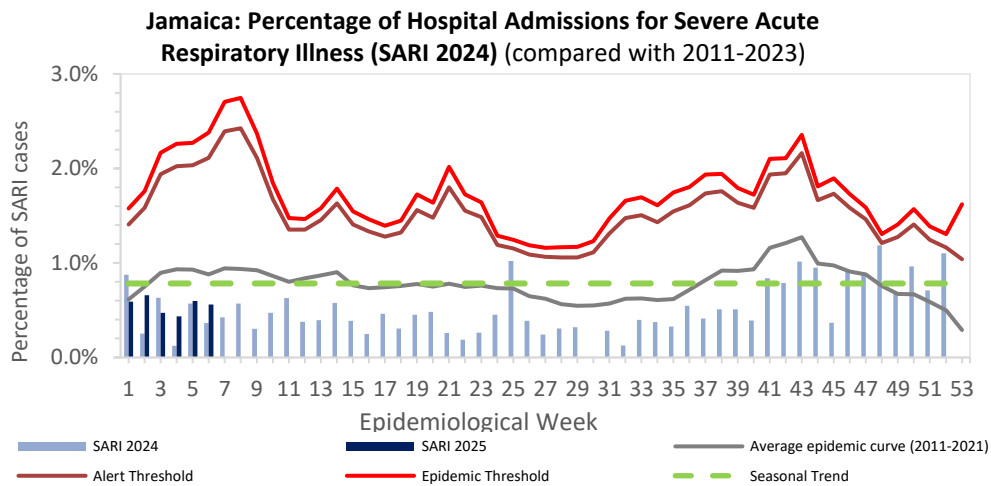
February 2, 2025 – February 8, 2025 Epidemiological Week 6

	EW 6	YTD
SARI cases	11	54
Total Influenza positive Samples	1	75
Influenza A	1	70
H3N2	0	25
H1N1pdm09	1	45
Not subtyped	0	0
Influenza B	0	5
B lineage not determined	0	0
B Victoria	0	5
Parainfluenza	0	0
Adenovirus	0	0
RSV	1	22



## Epi Week Summary

During EW 6, eleven (11) SARI admissions were reported.

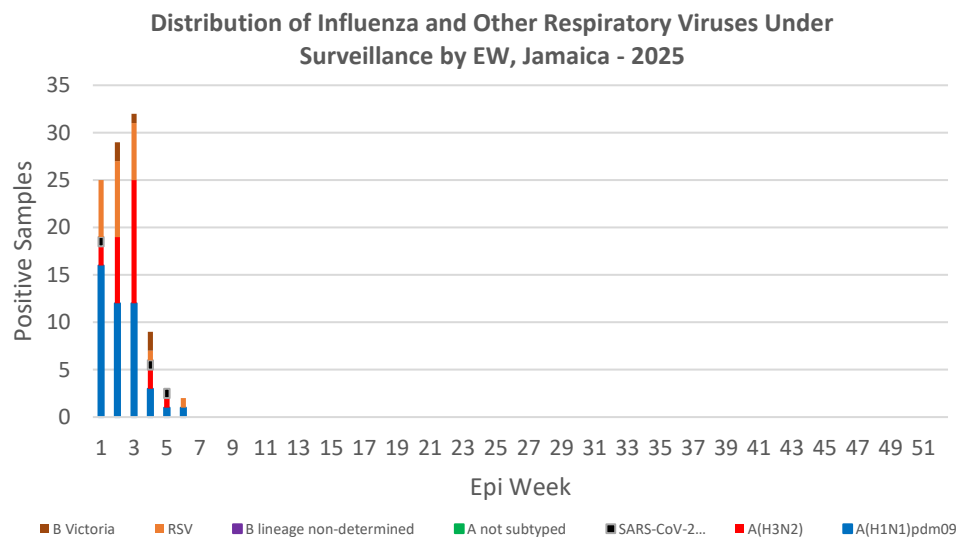


## Caribbean Update EW 6

Caribbean: ILI cases for SARS-CoV-2 remain low, while RSV shows a slight increase. Influenza remains high but is trending downward and SARI cases linked to influenza have decreased compared to the previous EWs. A(H1N1)pdm09 was as the predominant subtype.

By country: Over the past four epidemiological weeks, influenza activity has increased in the Dominican Republic, Suriname, Barbados, Guyana and Saint Vincent and the Grenadines while declining in Belize, Haiti, Jamaica, Saint Lucia and the Cayman Islands. Additionally, RSV activity, after reaching seasonal peaks, continues to decline. SARS-CoV-2 circulation remains low.

(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



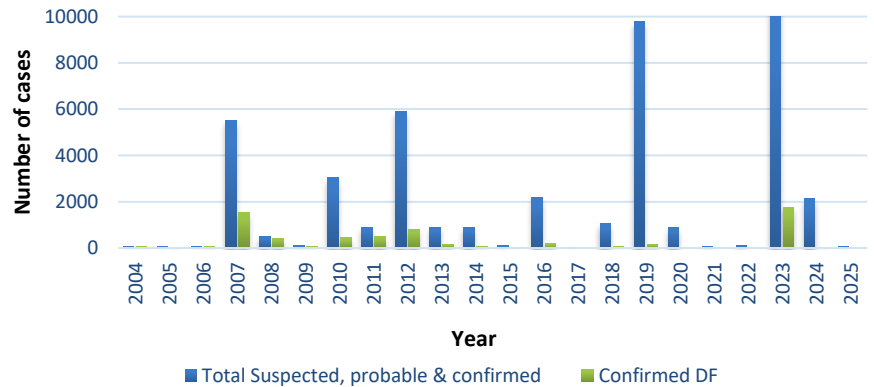
# Dengue Bulletin

February 2, 2024 – February 8, 2025 Epidemiological Week 6


Epidemiological Week 6



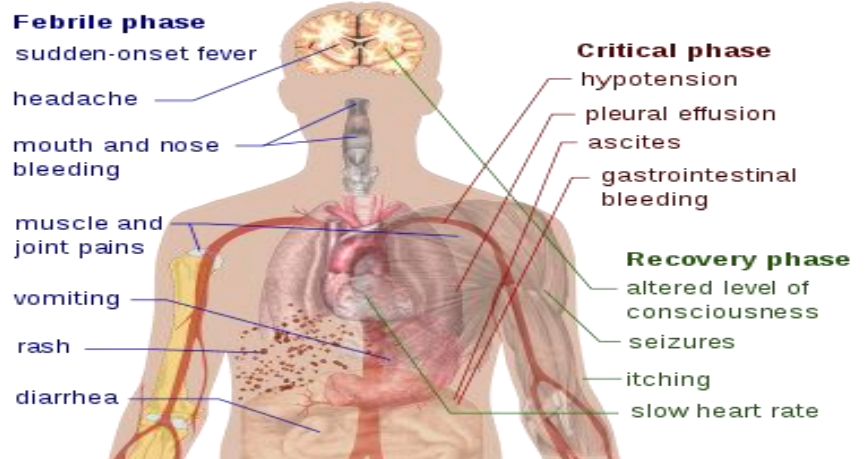
Dengue Cases by Year: 2004-2025, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 6 of 2025

	2025*	
	EW 6	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	1	48
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

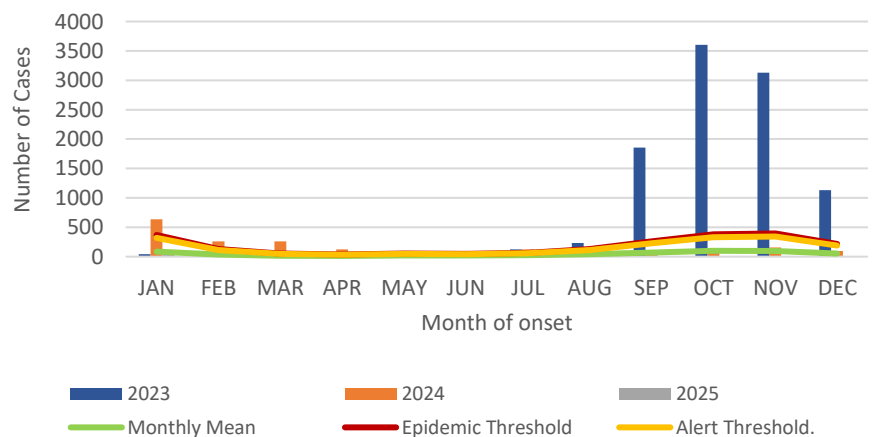
## Symptoms of Dengue fever



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at February 18, 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-O03

### The prevalence of elevated blood pressure and hypertension in adolescents 10-14 years old in Kingston and St. Andrew, Jamaica—a pilot study

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**Objectives:** This study aimed to determine the prevalence of elevated blood pressure (EBP) and hypertension (HTN) in early adolescents (10-14 years) in the Kingston metropolitan area and investigate associated sociodemographic and anthropometric factors.

**Methods:** A cross-sectional study was conducted in randomly selected schools in the Kingston metropolitan region. Requisite consent and assent were obtained with institution approvals. Participants completed self-administered questionnaires collecting sociodemographic data, medical and family histories. Participants' weight, height, and blood pressure were measured using standardized procedures. Logistic regression was used to evaluate factors associated with prevalent EBP (SBP and/or DBP  $\geq$  90th < 95th percentile for sex, age, and height). Obesity is defined as a BMI  $\geq$  95<sup>th</sup> percentile. Statistical significance was at the 5% level.

**Results:** Two hundred and seventy-six adolescents participated (male: n=123, 44.6%, mean (SD) age 11.34 (1.20) y; female: n=153, 55.4%; mean (SD) age 11.67 (1.20) y). Most participants (n=213, 77.7%) visited the doctor or nurse in the past year; 39% (n=106) had checked their BP in the past 12 months. Participants' nutritional status was categorised as underweight (n=6, 2.2%); normal weight (n=165, 59.8%); overweight (n=46, 16.7%); and obesity (n=59, 21.4%).

Five participants (n=3 males, 2 females; 1.8%) met criteria for systolic hypertension (4<sup>th</sup> report).

Overweight/obesity was the only variable significantly associated with hypertension (OR 4.1, 95% CI 1.42-11.91; p<0.01) in early adolescents.

**Conclusion:** Elevated blood pressure and hypertension are health concerns for early Jamaican adolescents and are positively correlated with overweight or obesity. Suboptimal screening of BP by health care providers occurs and should be encouraged.



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9 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
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SENTINEL  
REPORT- 78 sites.  
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