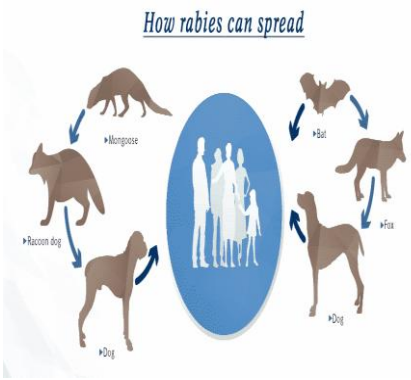
# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## *Weekly Spotlight*

### Rabies pt 1

Rabies is a vaccine-preventable, zoonotic, viral disease affecting the central nervous system. In up to 99% of the human rabies cases, dogs are responsible for virus transmission. Children between the age of 5 and 14 years are frequent victims. Rabies infects mammals, including dogs, cats, livestock and wildlife. Rabies spreads to people and animals via saliva, usually through bites, scratches, or direct contact with mucosa (e.g. eyes, mouth, or open wounds). Once clinical symptoms appear, rabies is virtually 100% fatal.The global cost of rabies is estimated to be around US$ 8.6 billion per year including lost lives and livelihoods, medical care and associated costs, as well as uncalculated psychological trauma.




Rabies is present on all continents except Antarctica. Globally there are an estimated 59 000 deaths from rabies annually; however, due to underreporting, documented case numbers often differ from the estimate. Rabies, a neglected tropical diseases (NTD), predominantly affecting marginalized populations. Although effective human vaccines and immunoglobulins exist for rabies, these are often inaccessible or unaffordable to those in need.

As of 2018, the average estimated cost of rabies post-exposure prophylaxis (PEP) was US$ 108 (along with travel costs and loss of income), which can be a financial burden on those earning US$ 1–2 per person, daily. Over 29 million people worldwide receive human rabies vaccine annually.In the Americas, where dog-mediated rabies is mostly controlled, hematophagous (blood-feeding) bats are now the primary source of human rabies. Human deaths following exposure to foxes, raccoons, skunks, and other wild mammals are very rare, and bites from rodents are not known to transmit rabies. Contraction of rabies through inhalation of virus-containing aerosols, consumption of raw meat or milk of infected animals, or through organ transplantation is extremely rare. Human-to-human transmission through bites or saliva is theoretically possible but has never been confirmed.

The incubation period for rabies is typically 2–3 months but may vary from one week to one year, depending on factors such as the location of virus entry and the viral load. Initial symptoms of rabies include generic signs like fever, pain and unusual or unexplained tingling, pricking, or burning sensations at the wound site. As the virus moves to the central nervous system, progressive and fatal inflammation of the brain and spinal cord develops. Clinical rabies in people can be managed but very rarely cured, and not without severe neurological deficits.

There are two forms of rabies:
**Furious rabies** results in hyperactivity, excitable behaviour, hallucinations, lack of coordination, hydrophobia (fear of water) and aerophobia (fear of drafts or of fresh air). Death occurs after a few days due to cardio-respiratory arrest.

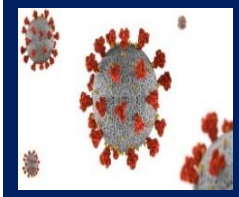
**Paralytic rabies** accounts for about 20% of the total number of human cases. This form of rabies runs a less dramatic and usually longer course than the furious form. Muscles gradually become paralysed, starting from the wound site. A coma slowly develops and eventually death occurs. The paralytic form of rabies is often misdiagnosed, contributing to the under-reporting of the disease.

Taken from WHO website on 12/May/2026
https://www.who.int/news-room/fact-sheets/detail/rabies
Picture taken from: https://homelabvet.com/wp-content/uploads/2021/12/Rabies.png

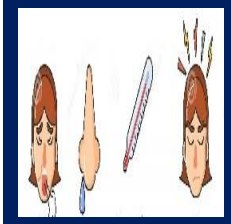
## EPI WEEK 17













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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 – 14 to 17 of 2026.**

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

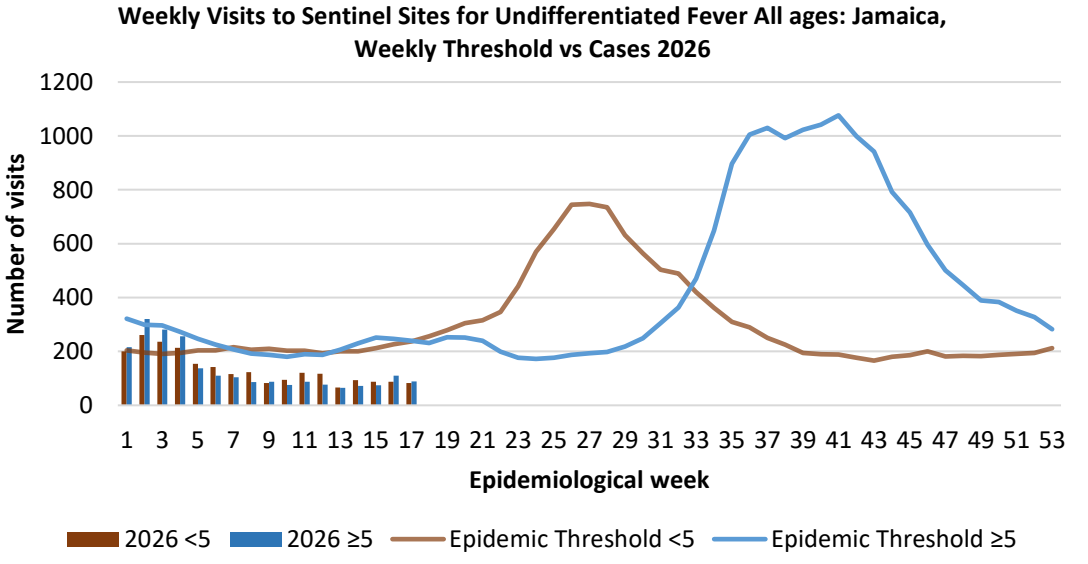
**KEY:**
**Yellow-** late submission on Tuesday
**Red –** late submission after Tuesday
**White-** No reports received

| Epi week | Kingston and Saint Andrew | Saint Thomas | Saint Catherine | Portland | Saint Mary | Saint Ann | Trelawny | Saint James | Hanover | Westmoreland | Saint Elizabeth | Manchester | Clarendon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | | | | | | | | | | | | | |
| 14 | 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | 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

**FEVER**
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

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HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

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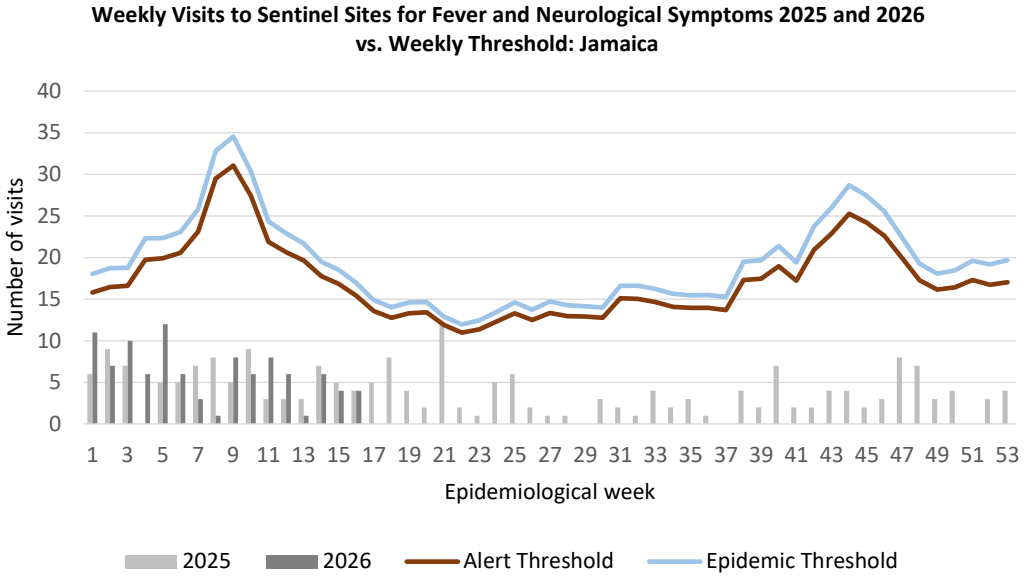
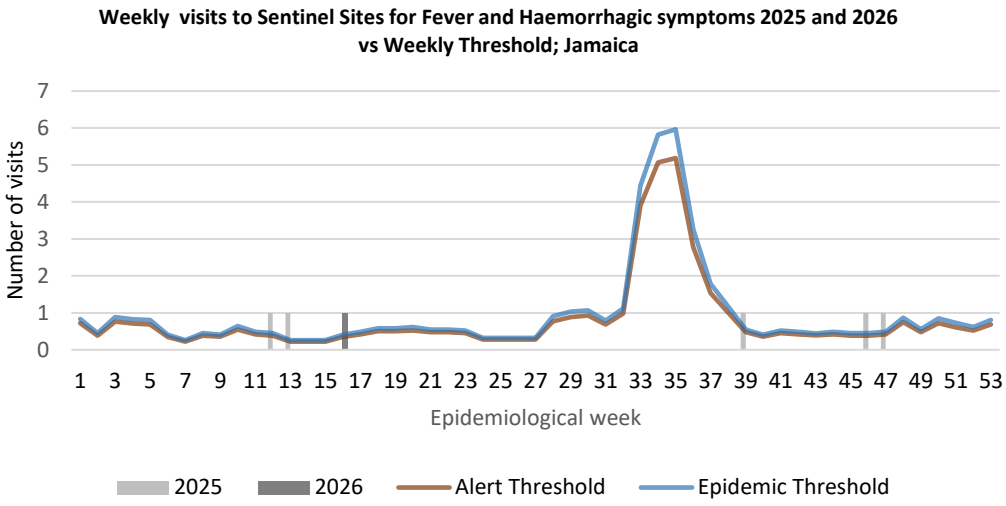
## FEVER AND NEUROLOGICAL

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

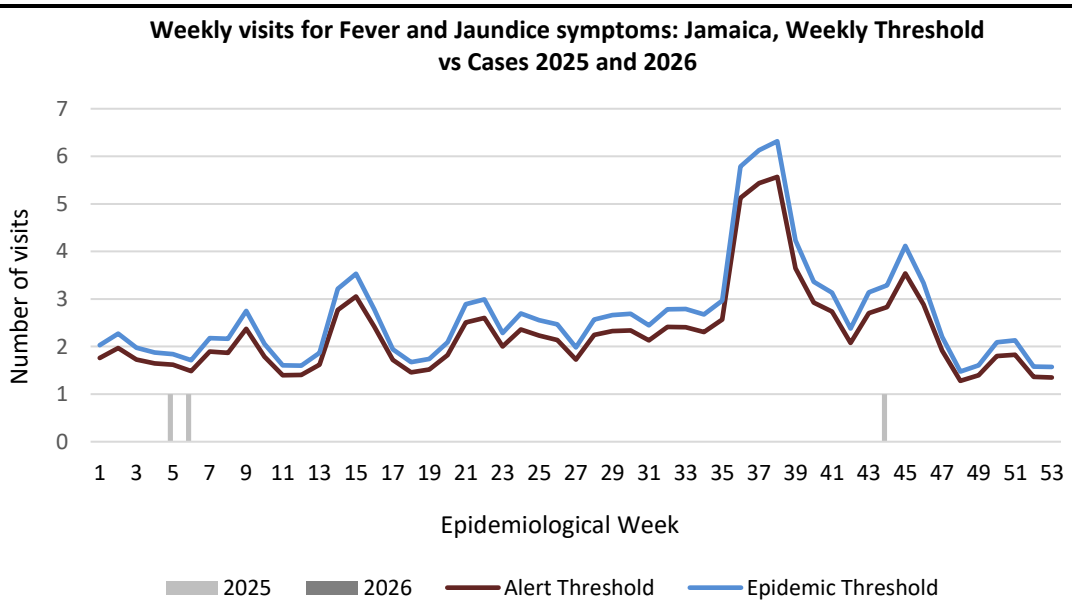
Temperature of >38$^0C$ /100.4$^0F$ (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.




## 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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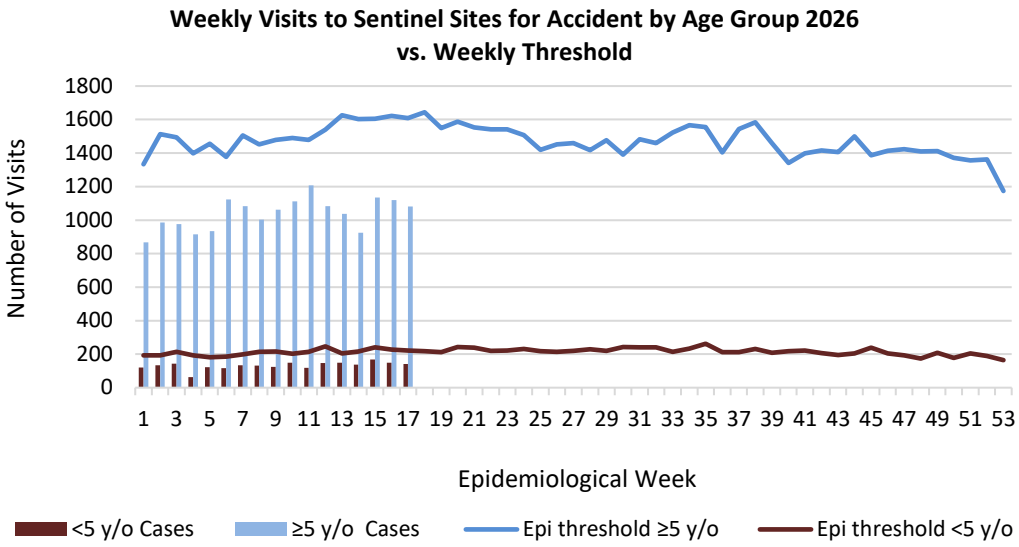
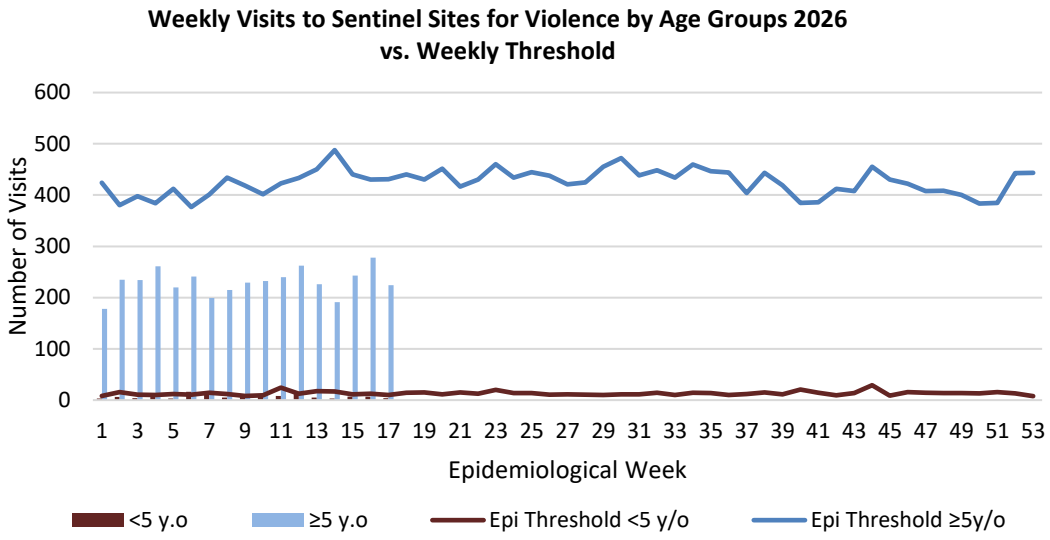
## ACCIDENTS

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



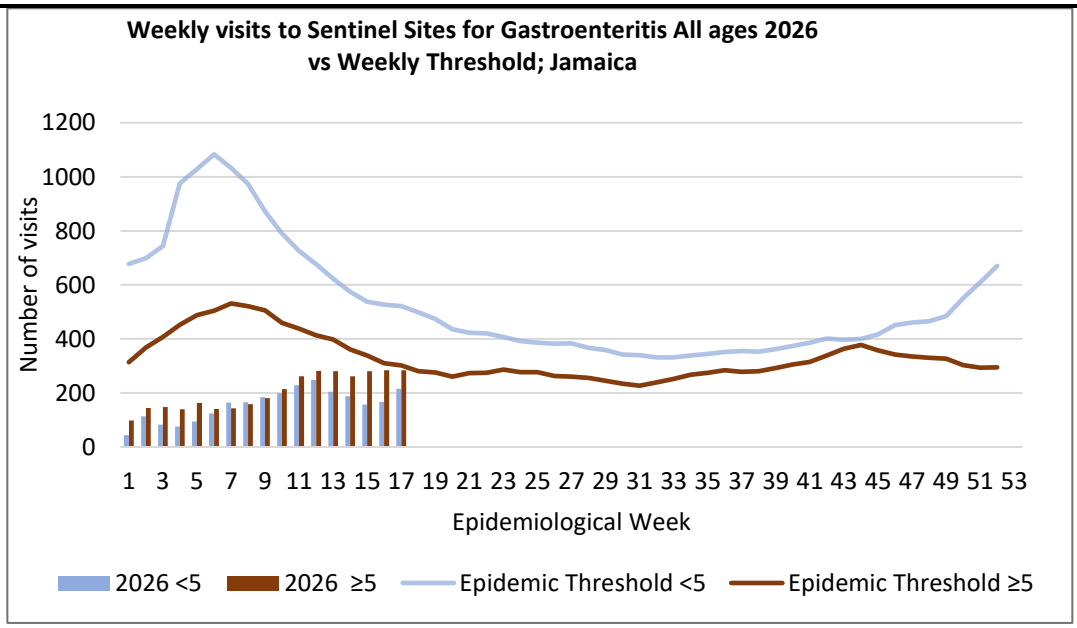

## VIOLENCE

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 2026 | Confirmed YTD[α] PREVIOUS YEAR 2025 |
|---|---|---|---|
| NATIONAL /INTERNATIONAL INTEREST | Accidental Poisoning | 14[β] | 72[β] |
| | Cholera | 0 | 0 |
| | Severe Dengue[Y] | See Dengue page below | See Dengue page below |
| | COVID-19 (SARS-CoV-2) | 4 | 79 |
| | Hansen's Disease (Leprosy) | 0 | 0 |
| | Hepatitis B | 3 | 6 |
| | Hepatitis C | 0 | 2 |
| | HIV/AIDS | NA | NA |
| | Malaria (Imported) | 0 | 0 |
| | Meningitis | 2 | 6 |
| | Mpox | 0 | 1 |
| 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 |
| | Fever and Rash – Rubella | 0 | 0 |
| | Maternal Deaths (notified pregnanacy related deaths)[δ] | 14 | 23 |
| | Ophthalmia Neonatorum | 20 | 28 |
| | Pertussis-like syndrome | 0 | 0 |
| | Rheumatic Fever | 0 | 0 |
| | Tetanus | 1 | 0 |
| | Tuberculosis | 22 | 23 |
| | 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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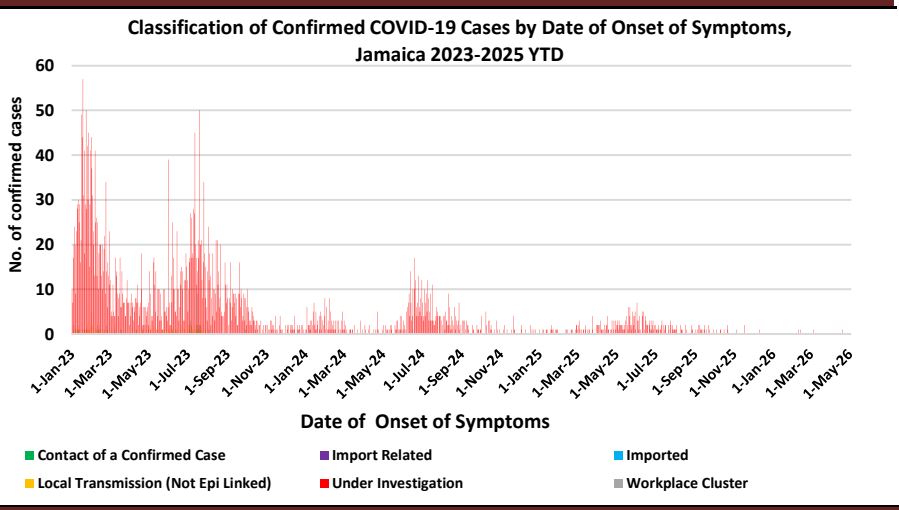
# COVID-19 SURVEILLANCE

| CASES | EW 17 | Total |
|---|---|---|
| Confirmed | 1 | 157754 |
| Females | 0 | 90885 |
| Males | 1 | 66866 |
| Age Range | - | 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.

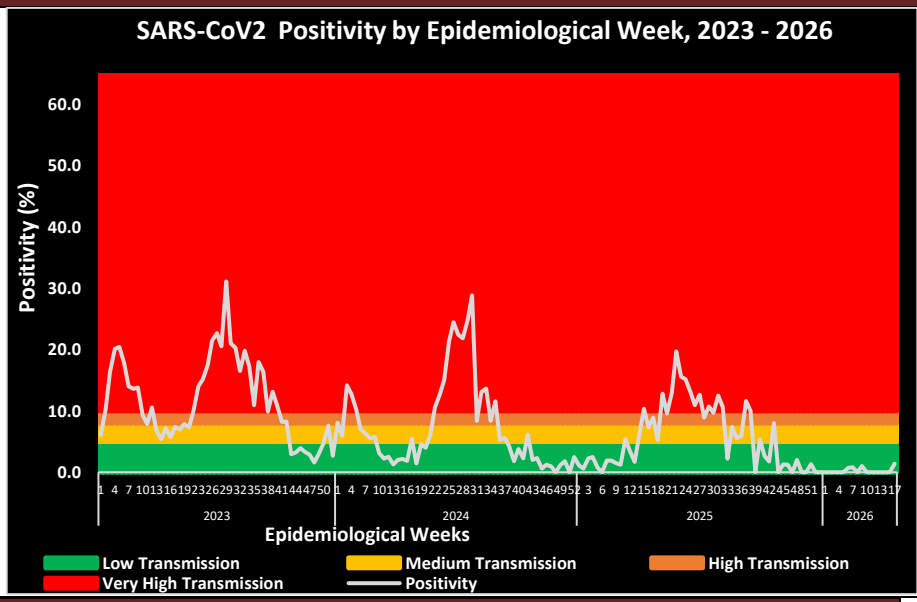



## COVID-19 Outcomes

**Number of Confirmed COVID-19 cases and deaths, Jamaica 2022-2026**

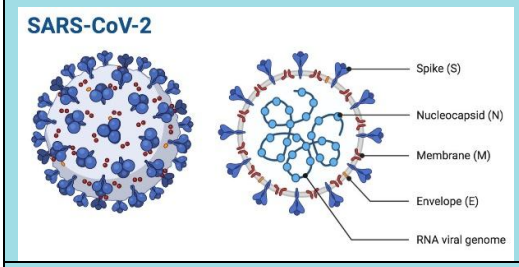
| COVID-19 | Year | | | | | |
|---|---|---|---|---|---|---|
| | 2022 | 2023 | 2024 | 2025 | 2026 | Total (2020-2026) |
| Cases | 55,721 | 3,842 | 705 | 315 | 4 | 157,754 |
| Deaths | 621 | 116 | 24 | 13 | 0 | 3,921 |

- **Current positivity rate: 1.4%**
- **Positivity = (positive samples/total samples tested)**
- **Low transmission for infection**



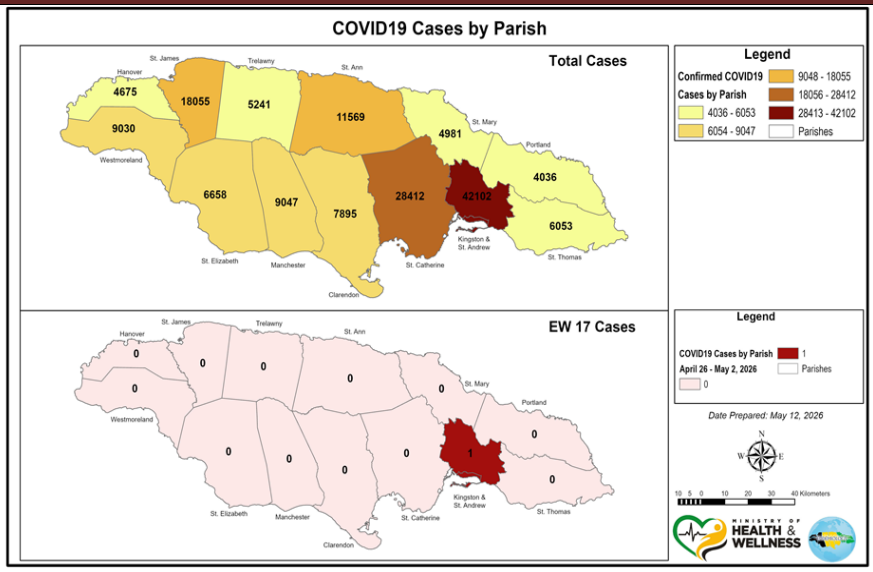

## COVID-19 Parish Distribution and Global Statistics

**COVID-19 Virus Structure**




**COVID-19 WHO Global Statistics EW 14 -17 2026**

| Epi Week | Confirmed Cases | Deaths |
|---|---|---|
| 14 | 4600 | 195 |
| 15 | 3700 | 156 |
| 16 | 2900 | 138 |
| 17 | 2800 | 97 |
| **Total (4weeks)** | **14000** | **586** |

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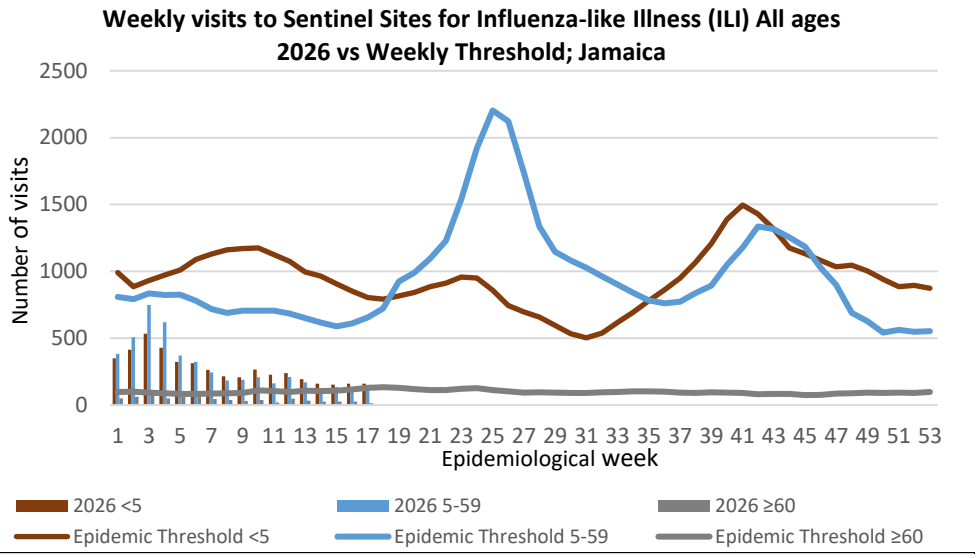
# INFLUENZA SURVEILLANCE

# *EW 17*

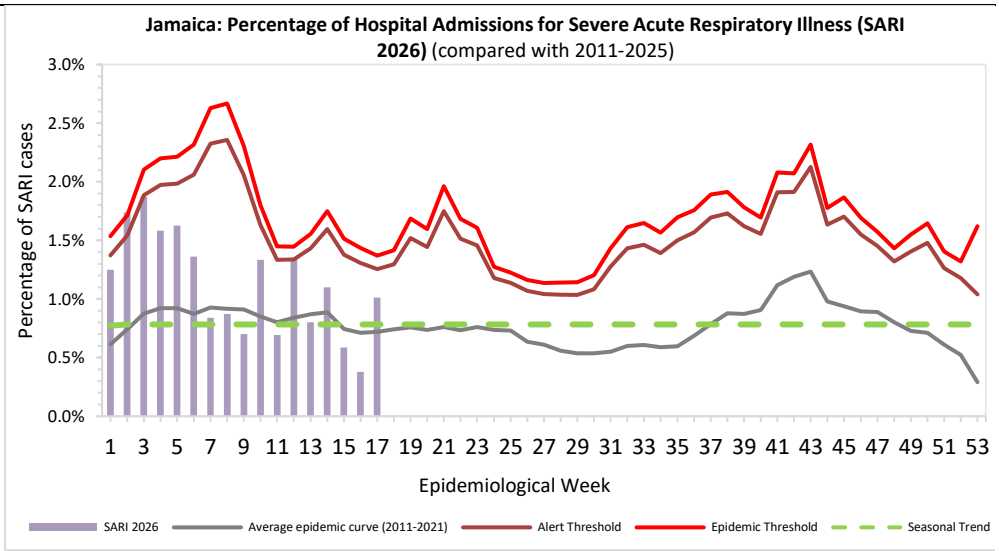
April 26, 2026 – May 2, 2026 Epidemiological Week 17

| | *EW 17* | *YTD* |
|---|---|---|
| SARI cases | 14 | 284 |
| **Total Influenza positive Samples** | **0** | **251** |
| **Influenza A** | **0** | **224** |
| H1N1pdm09 | 0 | 21 |
| H3N2 | 0 | 212 |
| Not subtyped | 0 | 0 |
| **Influenza B** | **0** | **18** |
| B lineage not determined | 0 | 0 |
| B Victoria | 0 | 18 |
| **Parainfluenza** | 0 | 0 |
| **Adenovirus** | 0 | 0 |
| **RSV** | 0 | 37 |




## Epi Week Summary

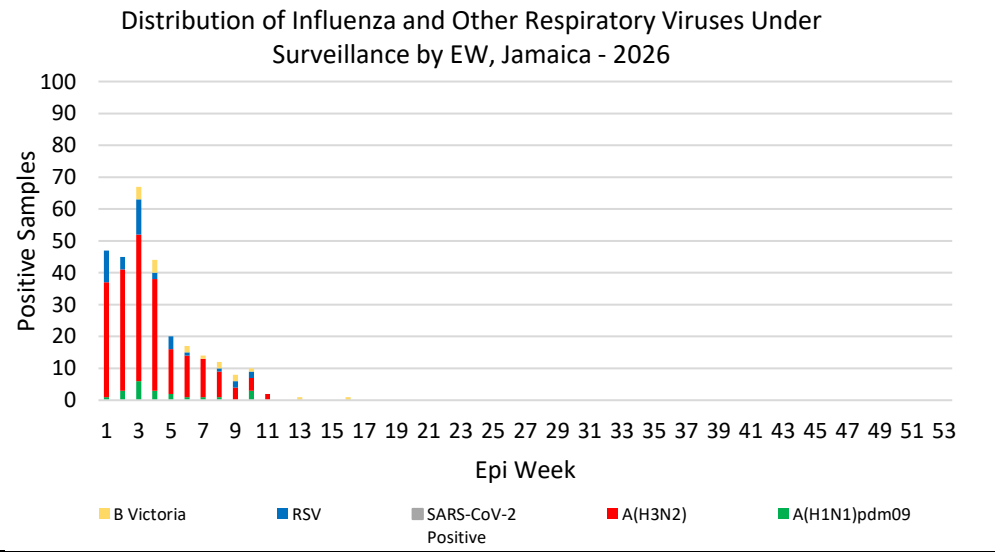
**During EW 17, fourteen (14) SARI admissions were reported.**




## Caribbean Update EW 17

The Caribbean continues the post-peak decline, consolidating the end of the Northern Hemisphere season, with subregional positivity of approximately 4.5% in the reporting period. The predominance of A(H3N2) persists (47.6% in the last 4 EWs) with cocirculation of A(H1N1) (17.5%) and B Victoria (22.2%). SARI and ILI indicators show consistent decline. RSV and SARS-CoV-2 remain at low inter-seasonal levels.

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

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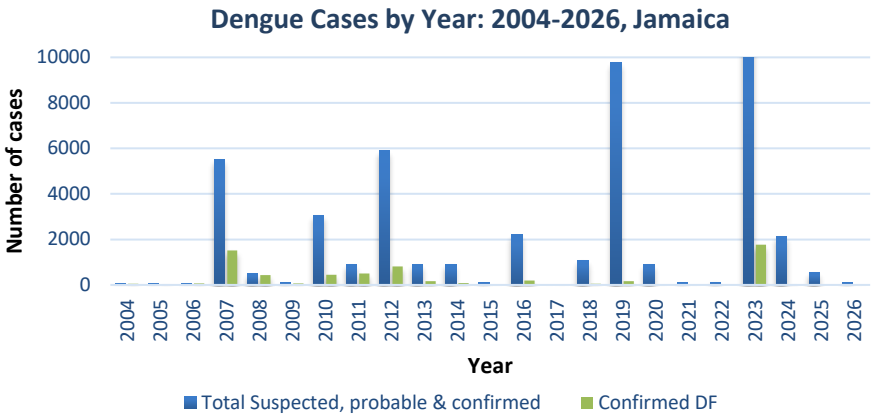
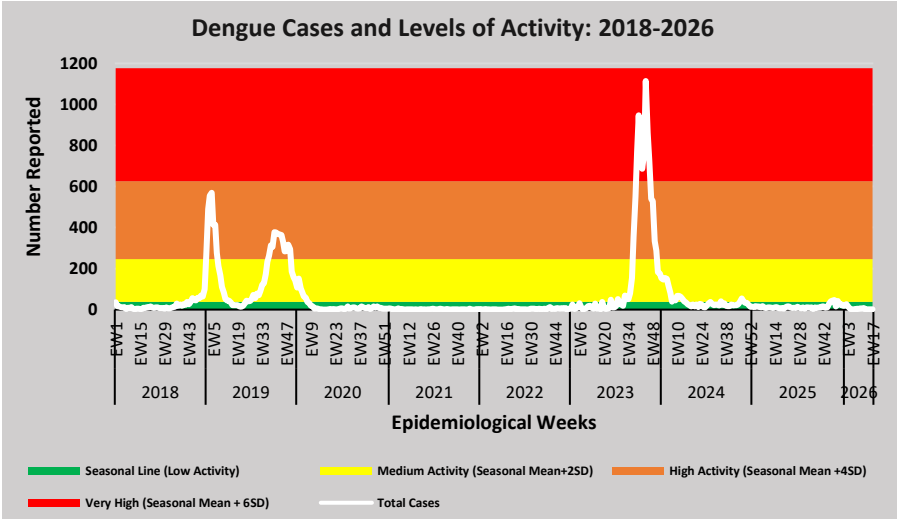
# DENGUE SURVEILLANCE

April 26, 2026 – May 2, 2026 Epidemiological Week 17 | Epidemiological Week 17



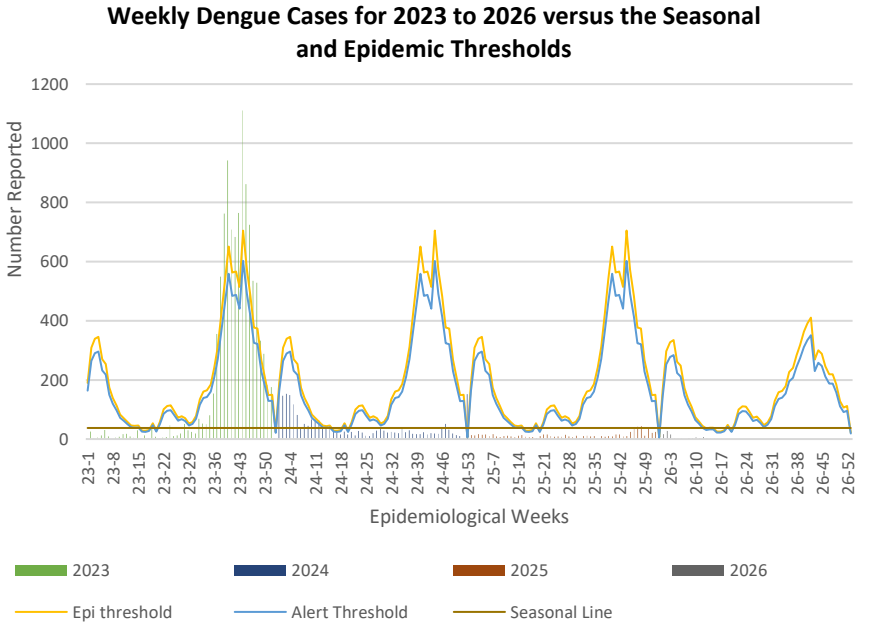

**Reported suspected, probable and confirmed dengue with symptom onset in week 17 of 2026**

| | 2026* | |
|---|---|---|
| | EW 17 | YTD |
| Total Suspected, Probable & Confirmed Dengue Cases | 1 | 99 |
| Lab Confirmed Dengue cases | 0 | 1 |
| CONFIRMED Dengue Related Deaths | 0 | 0 |




**Points to note:**

- **Dengue deaths are reported based on date of death.**
- ***Figure as at May 15, 2026**
- **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-25-O

**Arterial stiffness and stroke risk classification in Jamaican children with sickle cell anaemia: a completed cross-sectional study**

AE Rankine-Mullings[1], N Younger- Coleman[1], M Reid[1]

[1]*The University of the West Indies, Mona, Jamaica*

**Objectives**: To determine arterial stiffness differences between high and low transcranial Doppler (TCD)-defined stroke risk groups.

**Method**: This cross-sectional study included 34 children, placed in two groups - high stroke risk (TCD velocity ≥ 200cm/second cm/sec), n=19 and low stroke risk (TCD velocity <170 cm/second), n=15. Measurements included arterial (or aortic) stiffness indices, namely, pulse wave velocity (aoPWV in metres/sec), pulse pressure (aoPP in mmHg) and augmentation index (aoAI, %); hematological and biochemical variables; and hydroxyurea use. The Student's T-test and analysis of variance with adjustment for co-variates determined evidence of group differences thus quantifying the relationship between arterial stiffness and TCD classification. The Pearson's chi-squared test assessed association between TCD classification and other categorical variables.

**Results**: Stroke risk groups differed by hydroxyurea use (p=0.007). For two of the three indices, arterial stiffness was higher in the high-risk group [Mean aoPWV(SD): 5.8(0.8), vs 5.2(0.8)m/s, p=0.03), Mean aoPP(SD): 42.3(6.7) vs 37.4(4.3) mmHg, p=0.02]. Aortic pulse wave velocity (aoPWV) remained significantly different between groups (p<0.05) after adjusting for Gamma-glutamyl transferase (GGT), hydroxyurea use and each haematological variable, except for basophil count.

**Conclusion**: Arterial stiffness was different between groups suggesting that arterial stiffness may be a valid marker of high stroke risk in children and may be used in children in whom the current screening method (TCD measurement) cannot be completed.

**Keywords**: stroke risk, sickle cell anaemia, transcranial Doppler, arterial stiffness

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