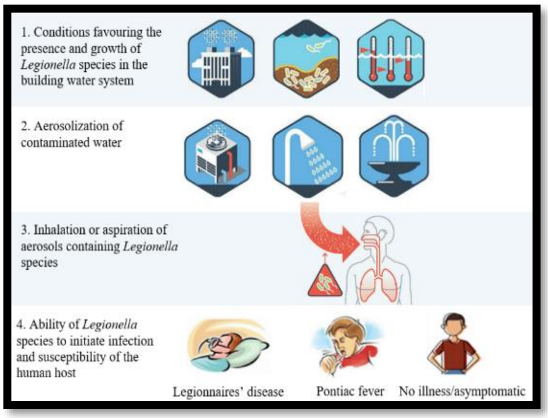
# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## *Weekly Spotlight*

## Legionellosis




**Key facts**

- **Legionnaires' disease has an incubation period of 2 to 10 days (but up to 16 days has been recorded in some outbreaks).**
- **Treatments exist, but there is currently no vaccine available for Legionnaires' disease.**
- **Death occurs through progressive pneumonia with respiratory failure and/or shock and multi-organ failure.**
- **Untreated Legionnaires' disease usually worsens during the first week.**
- **Of the reported cases, 75–80% are over 50 years and 60–70% are male**

### Overview

Legionellosis varies in severity from a mild febrile illness to a serious and sometimes fatal form of pneumonia and is caused by exposure to the *Legionella* bacteria species found in contaminated water and potting mixes.

Cases of legionellosis are often categorized as being community, travel or hospital acquired based on the type of exposure.

Worldwide, waterborne *Legionella pneumophila* is the most common cause of cases including outbreaks. *Legionella pneumophila* and related species are commonly found in lakes, rivers, creeks, hot springs and other bodies of water. Other species including *L. longbeachae* can be found in potting mixes.

The bacterium *L. pneumophila* was first identified in 1977 as the cause of an outbreak of severe pneumonia in a convention centre in the USA in 1976. It has since been associated with outbreaks linked to poorly maintained artificial water systems.

The infective dose is unknown but can be assumed to be low for susceptible people, as illnesses have occurred after short exposures and 3 or more kilometres from the source of outbreaks. The likelihood of illness depends on the concentrations of *Legionella* in the water source, the production and dissemination of aerosols, host factors such as age and pre-existing health conditions and the virulence of the particular strain of *Legionella*. Most infections do not cause illness.

### The cause

The causative agents are *Legionella* bacteria from water or potting mix. The most common cause of illness is the freshwater species *L. pneumophila*, which is found in natural aquatic environments worldwide. However, artificial water systems which provide environments conducive to the growth and dissemination of *Legionella* represent the most likely sources of disease.

The bacteria live and grow in water systems at temperatures of 20 to 50 degrees Celsius (optimal 35 degrees Celsius). *Legionella* can survive and grow as parasites within free-living protozoa and within biofilms which develop in water systems. They can cause infections by infecting human cells using a similar mechanism to that used to infect protozoa.

### Transmission

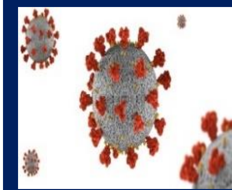
The most common form of transmission of *Legionella* is inhalation of contaminated aerosols from contaminated water. Sources of aerosols that have been linked with transmission of *Legionella* include air conditioning cooling towers, hot and cold water systems, humidifiers and whirlpool spas. Infection can also occur by aspiration of contaminated water or ice, particularly in susceptible hospital patients, and by exposure of babies during water births. To date, there has been no reported direct human-to-human transmission.

**Article:** https://www.who.int/news-room/fact-sheets/detail/legionellosis
**Image 1**::https://iaqresource.ca/legionella-control-in-building-water-systems/
**Image 2:**https://blog.veoliawatertechnologies.co.uk/hsfs/hubfs/Legionella.jpg?width=2991&height=1318&name=Legionella.jpg

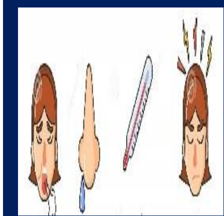
# EPI WEEK 26













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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 – 23 to 26 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

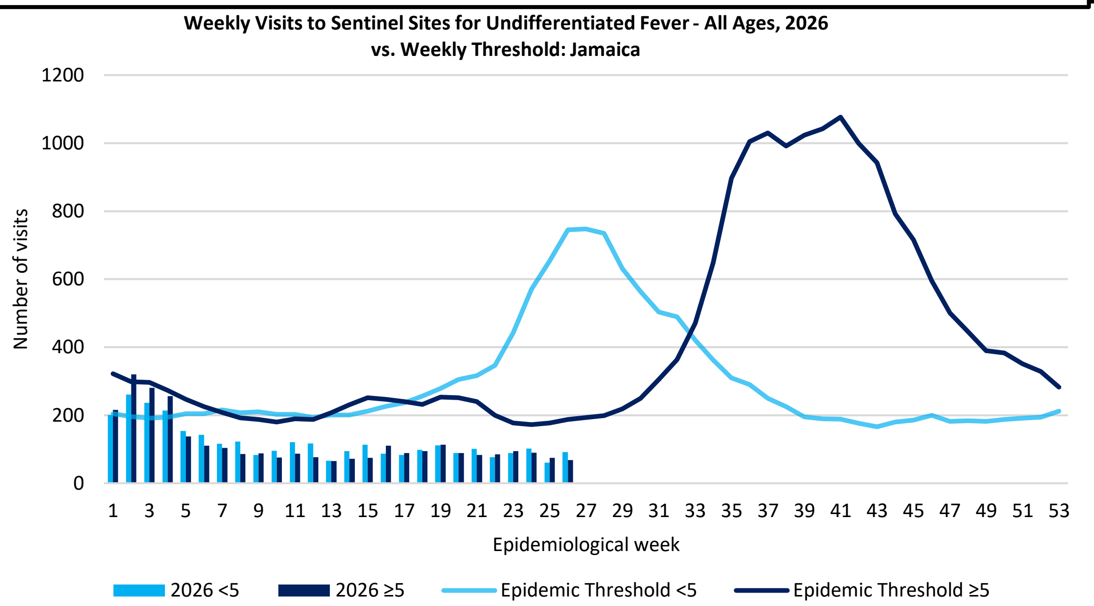
| Epi week | Kingston and Saint Andrew | Saint Thomas | Saint Catherine | Portland | Saint Mary | Saint Ann | Trelawny | Saint James | Hanover | Westmoreland | Saint Elizabeth | Manchester | Clarendon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | | | | | | | | | | | | | |
| 23 | On Time | On Time | On Time | On Time | On Time | Late (W) | On Time | On Time | On Time | On Time | On Time | On Time | On Time |
| 24 | 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 |
| 25 | On Time | On Time | On Time | On Time | Late (W) | On Time | On Time | On Time | On Time | On Time | On Time | On Time | On Time |
| 26 | On Time | On Time | On Time | On Time | On Time | Late (W) | On Time | On Time | On Time | On Time | On Time | On Time | On Time |

# SYNDROMIC SURVEILLANCE

**FEVER**

UNDIFFERENTIATED FEVER

Temperature of >38⁰C /100.4⁰F (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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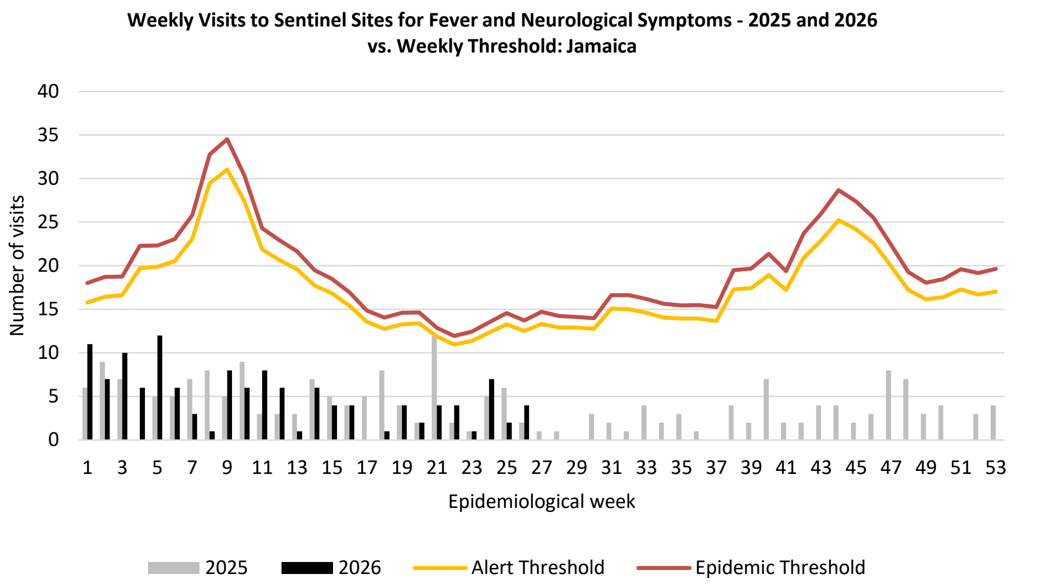
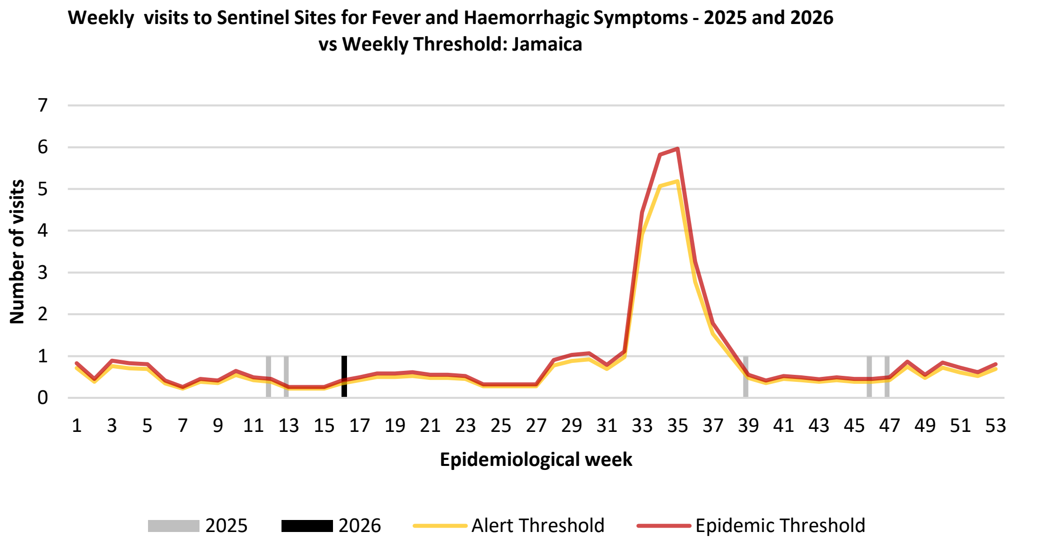
## FEVER AND NEUROLOGICAL

Temperature of >38⁰C /100.4⁰F (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

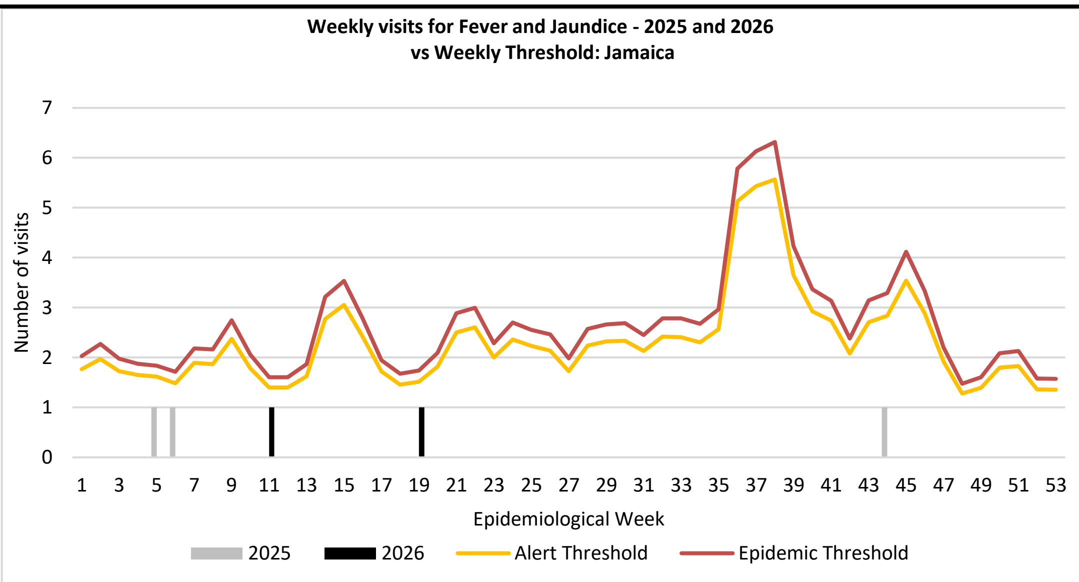
Temperature of >38⁰*C* /100.4⁰*F* (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.




## FEVER AND JAUNDICE

Temperature of >38⁰*C* /100.4⁰*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.



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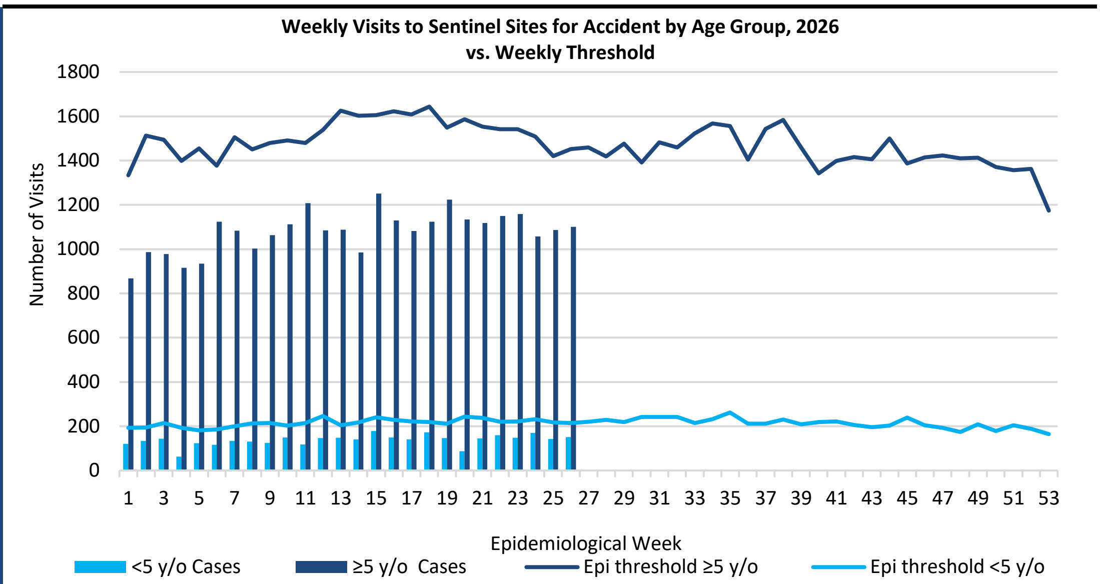
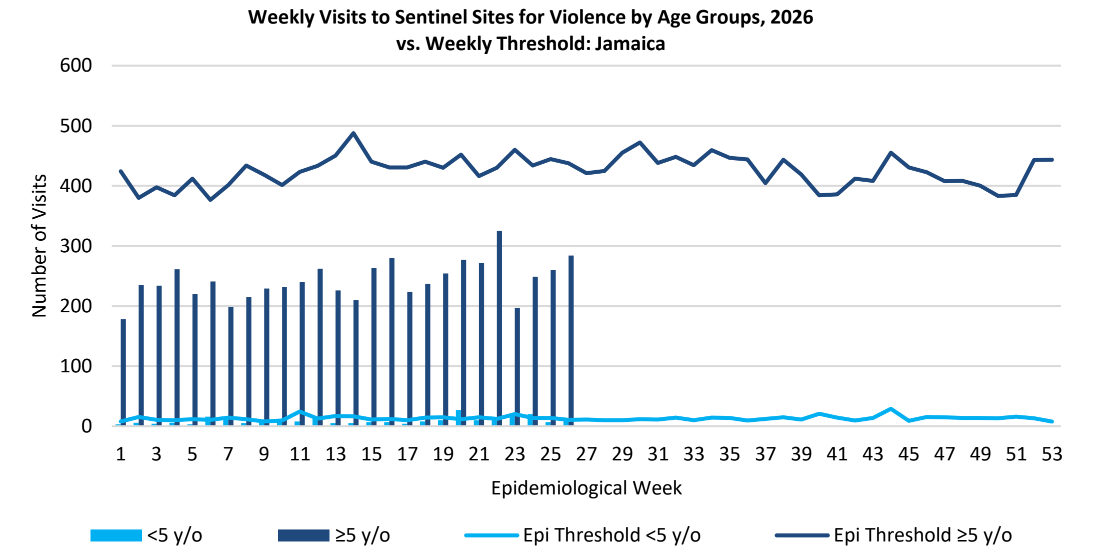
## ACCIDENTS

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



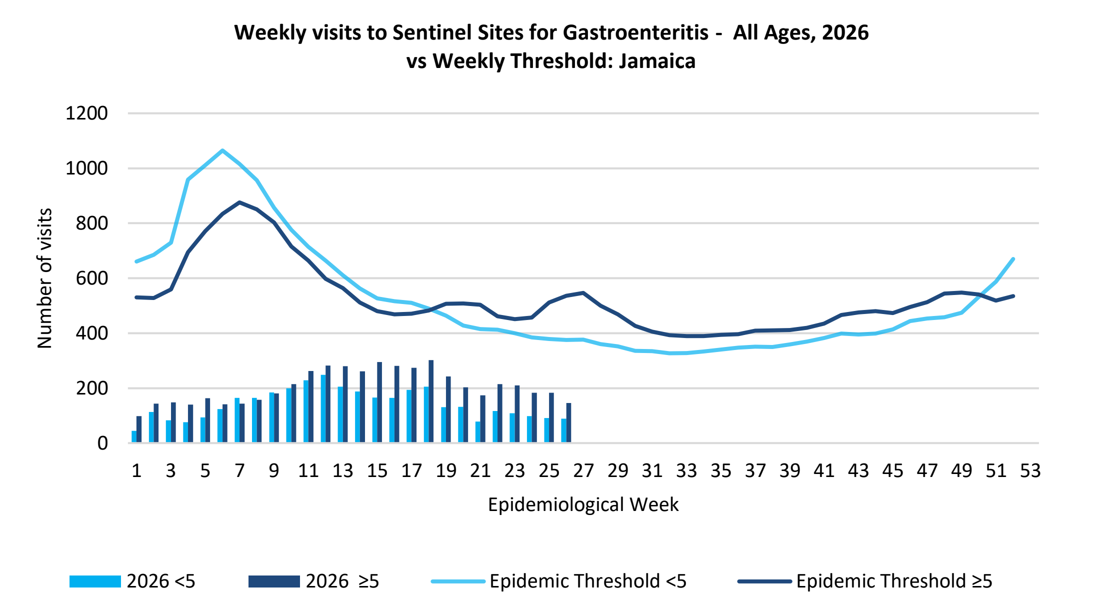

## VIOLENCE

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$^{\alpha}$ CURRENT YEAR 2026 | Confirmed YTD$^{\alpha}$ PREVIOUS YEAR 2025 |
|---|---|---|---|---|
| NATIONAL /INTERNATIONAL INTEREST | Accidental Poisoning | | $43^{\beta}$ | $109^{\beta}$ |
| | Cholera | | 0 | 0 |
| | Severe Dengue$^{\gamma}$ | | See Dengue page below | See Dengue page below |
| | COVID-19 (SARS-CoV-2) | | 15 | 232 |
| | Hansen's Disease (Leprosy) | | 0 | 0 |
| | Hepatitis B | | 7 | 8 |
| | Hepatitis C | | 0 | 2 |
| | HIV/AIDS | | NA | NA |
| | Malaria (Imported) | | 0 | 0 |
| | Meningitis | | 3 | 10 |
| | 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 |
| | | Rubella | 0 | 0 |
| | Maternal Deaths (notified pregnanacy related deaths)$^{\delta}$ | | 23 | 32 |
| | Ophthalmia Neonatorum | | 22 | 49 |
| | Pertussis-like syndrome | | 0 | 0 |
| | Rheumatic Fever | | 0 | 0 |
| | Tetanus | | 1 | 1 |
| | Tuberculosis | | 33 | 35 |
| | Yellow Fever | | 0 | 0 |
| | Chikungunya$^{\varepsilon}$ | | 0 | 0 |
| | Zika Virus$^{\theta}$ | | 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.

$^{\gamma}$ Dengue Hemorrhagic Fever data include Dengue related deaths;

$^{\delta}$ Figures include all deaths associated with pregnancy reported for the period.

$^{\varepsilon}$ CHIKV IgM positive cases

$^{\theta}$ Zika PCR positive cases

$^{\beta}$ Updates made to prior weeks.

$^{\alpha}$ Figures are cumulative totals for all epidemiological weeks year to date.

NA- Not Available



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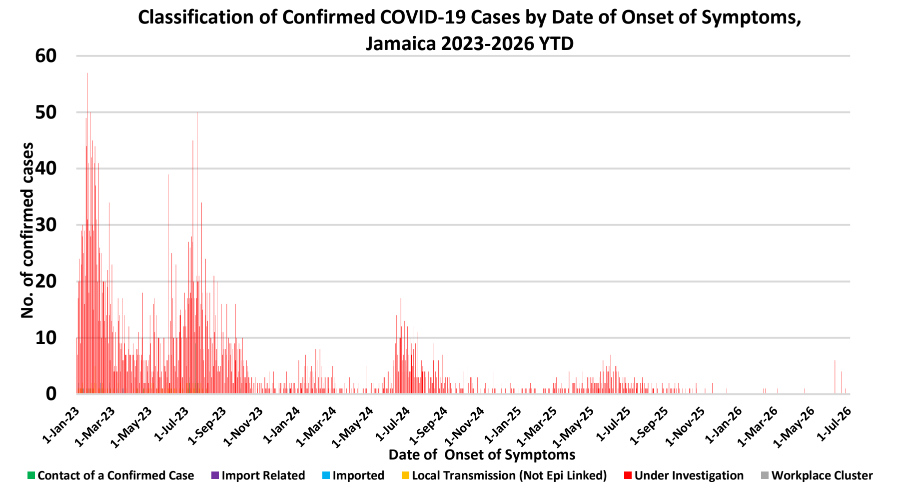
# COVID-19 SURVEILLANCE

| CASES | EW 26 | Total |
|---|---|---|
| Confirmed | 0 | 157,765 |
| Females | 0 | 90,889 |
| Males | 0 | 66,873 |
| 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.

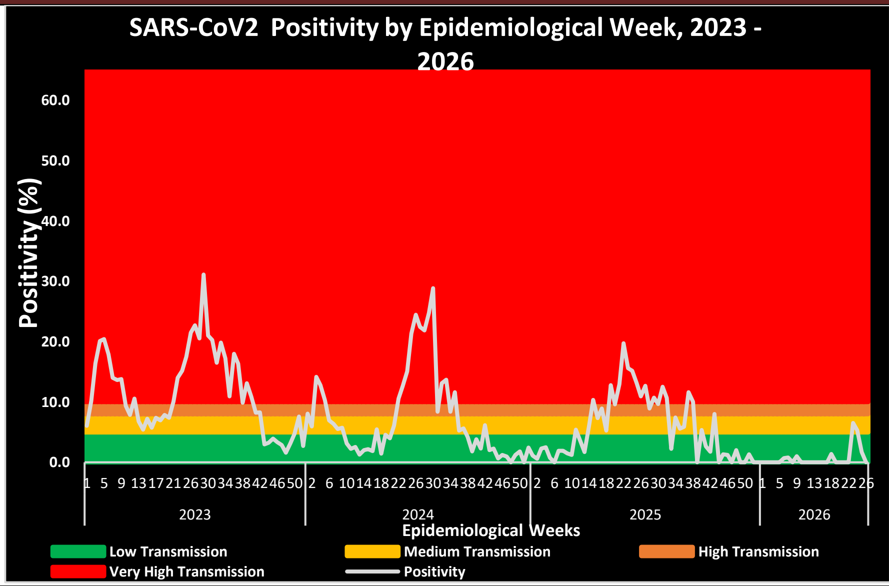



## COVID-19 Outcomes

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

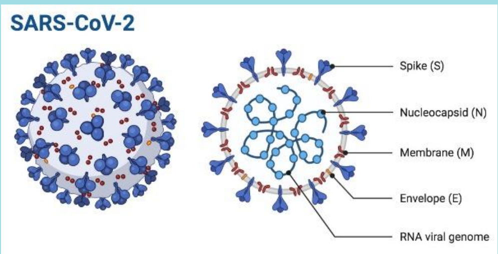
| COVID-19 | Year | | | | | |
|---|---|---|---|---|---|---|
| | 2022 | 2023 | 2024 | 2025 | 2026 | Total (2020-2026) |
| Cases | 55,721 | 3,842 | 705 | 315 | 15 | 157,765 |
| Deaths | 621 | 116 | 24 | 13 | 0 | 3,921 |

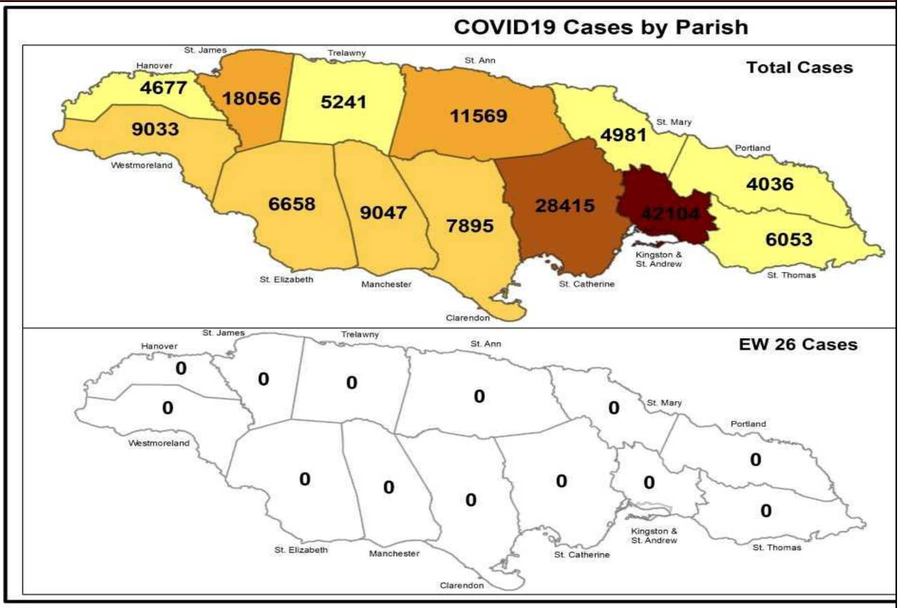
- **Current positivity rate: 0.0%**
- **Positivity = (positive samples/total samples tested)**
- **Low transmission for infection**




## COVID-19 Parish Distribution and Global Statistics

**COVID-19 Virus Structure**




**COVID-19 WHO Global Statistics Epi Week 23-26, 2026**

| Epi Week | Confirmed Cases | Deaths |
|---|---|---|
| 23 | 3,700 | 61 |
| 24 | 3,900 | 41 |
| 25 | 4,200 | 42 |
| 26 | 4,600 | 24 |
| Total (4weeks) | 16,400 | 168 |



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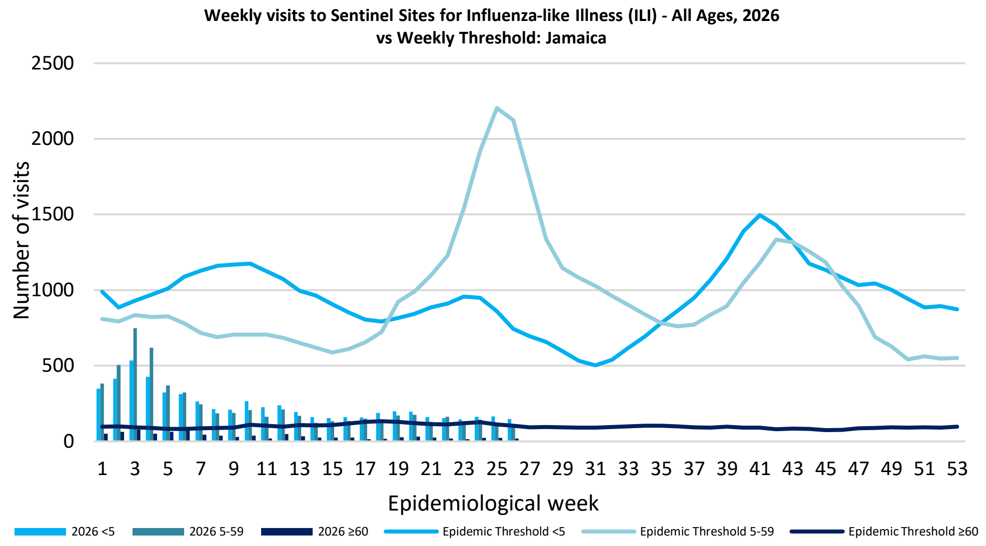
# INFLUENZA SURVEILLANCE

## EW 26

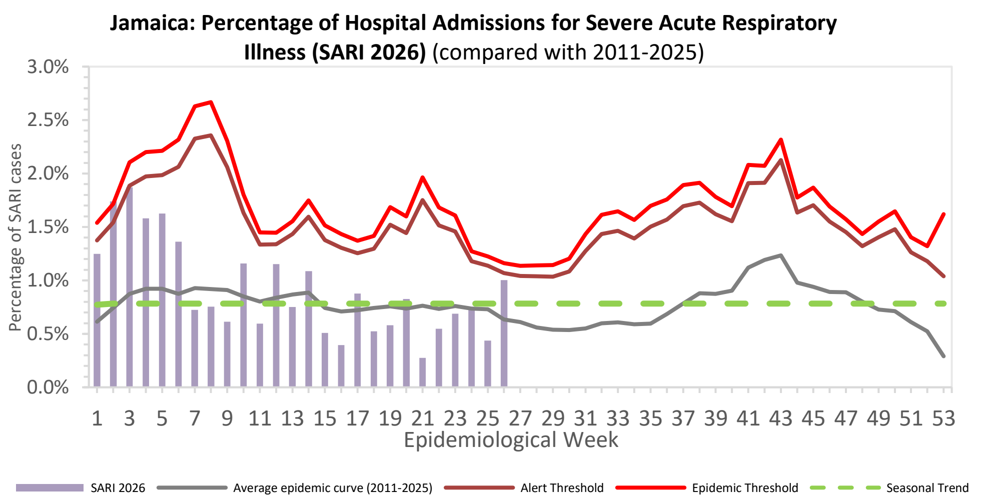
June 28, 2026 – July 04, 2026 Epidemiological Week 26

| | EW 26 | YTD |
|---|---|---|
| SARI cases | 8 | 364 |
| **Total Influenza positive Samples** | **0** | **263** |
| **Influenza A** | **0** | **234** |
| H1N1pdm09 | 0 | 21 |
| H3N2 | 0 | 213 |
| Not subtyped | 0 | 0 |
| **Influenza B** | **0** | **29** |
| B lineage not determined | 0 | 0 |
| B Victoria | 0 | 29 |
| **Parainfluenza** | 0 | 0 |
| **Adenovirus** | 0 | 0 |
| **RSV** | 0 | 50 |




## Epi Week Summary

**During Epi Week 26, eight (8) SARI admissions were reported.**

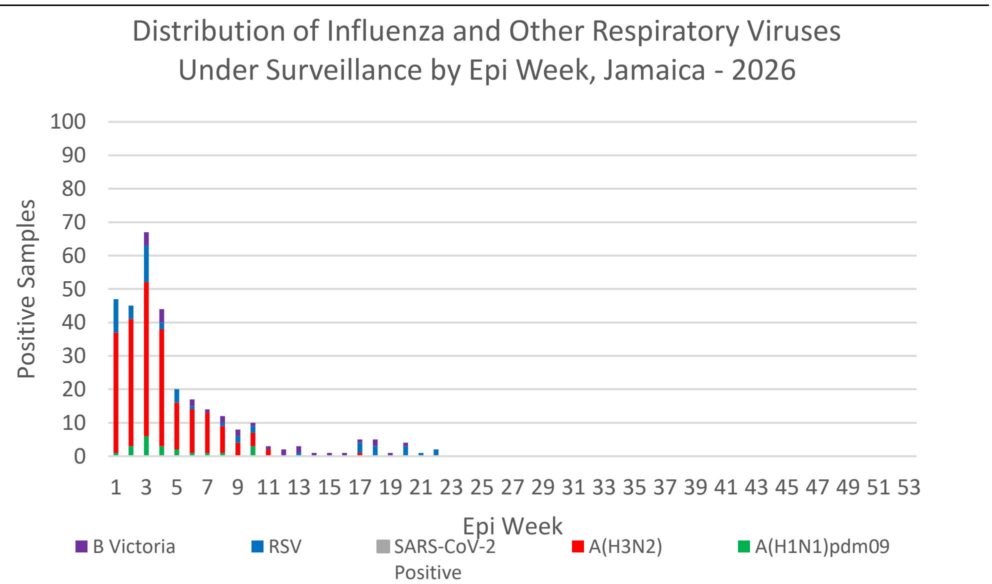



## Caribbean Update Epi Week 26

Influenza activity is trending upward, with a regional positivity rate of 3.8% in EW 22, with Influenza B Victoria predominating (61.9%) and A(H3N2) co-circulating (30.9%). Indicators for SARI and ILI remain at low levels. The circulation of RSV and SARS-CoV-2 remains low but is trending upward, with positivity rates of 7.5% and 4.9% respectively.*

*Update as of Epi Week 22

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



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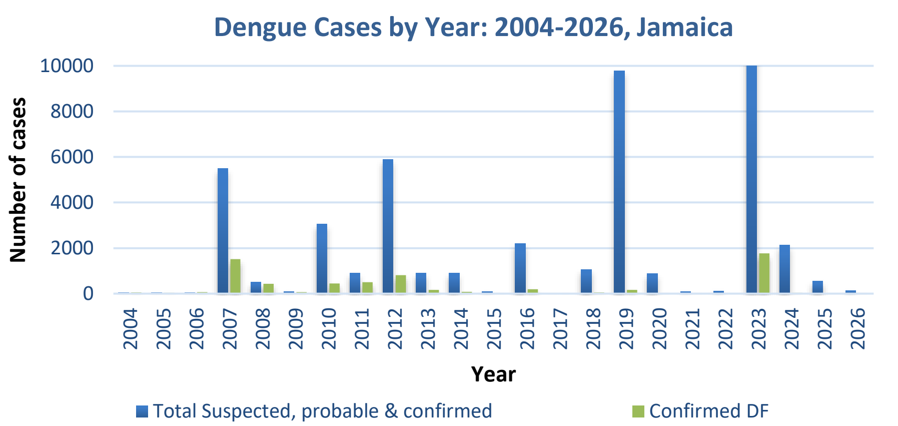
# DENGUE SURVEILLANCE

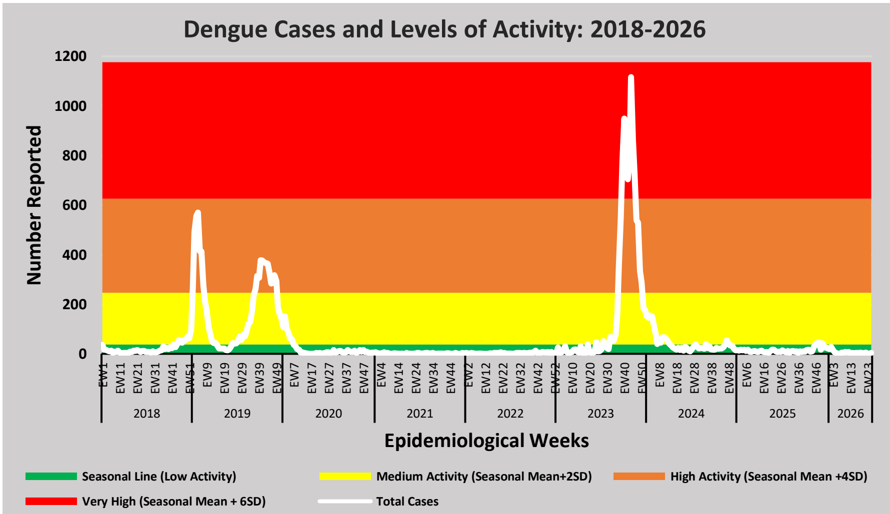
June 28, 2026 – July 4, 2026 Epidemiological Week 26

Epidemiological Week 26



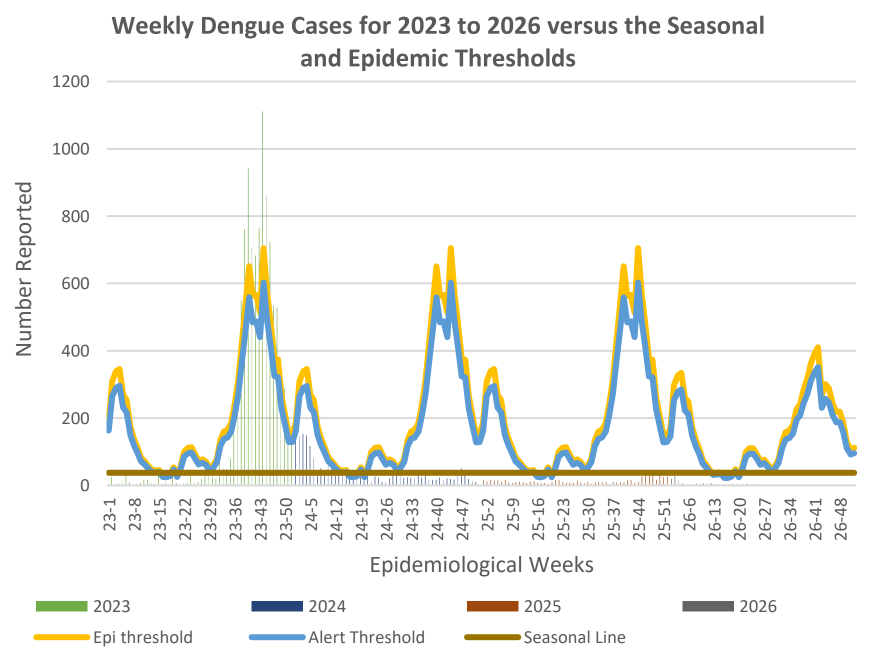

**Reported suspected, probable and confirmed dengue with symptom onset in week 26 of 2026**

| | 2026* | |
|---|---|---|
| | Epi Week 26 | YTD |
| **Total Suspected, Probable & Confirmed Dengue Cases** | 0 | 134 |
| **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 July 13, 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**

## Evaluating mammography unit density and access to breast cancer screening in Jamaica

Hyatt, O [1], *Copeland, J[2], Knight, K[3]*
[1]*University Hospital of the West Indies, Mona, Kingston, Jamaica,* [2]*Kingston Public Hospital, North Street, Kingston, Jamaica,* [3]*Kingston Public Hospital, North Street, Kingston, Jamaica*

**Objectives:** Breast cancer is the most common cancer among Jamaican women, and limited access to screening contributes to late-stage diagnoses and higher mortality. This study aimed to quantify mammography unit density and distribution in relation to women aged 40–74 and 50-69 years and identify underserved parishes.

**Methods:** A descriptive cross-sectional analysis of all registered public and private mammography units was conducted. Unit counts were compiled by parish and mapped to target female populations (40–74 and 50–69 years) using the **2011 Jamaica Population Census.** Densities were calculated per 100,000 women, and GIS-based comparisons highlighted geographic disparities.

**Results:** Nationally, 24 mammography units were identified, yielding 6.2 units per 100,000 women aged 40–74 years and 12.3 per 100,000 aged 50–69 years. Distribution was uneven: five parishes—St. Thomas, Portland, Trelawny, Hanover, and St. Mary—had no units (38.5% of parishes). Manchester which had three (10.6 per 100,000 for ages 40–74) and other rural parishes had one to two units. Capacity was concentrated in Kingston and St. Andrew with 11 units (10.4 per 100,000) and St. James three units (11.9 per 100,000). Minimum centroid-to-facility travel ranged from 1–82 km (median 20.5, IQR 6.5–34.5); 35.7% of parishes were ≥30 km, including 14.3% exceeding 50 km-Portland 82 km and St. Thomas 58 km.

**Conclusion:** Jamaica's mammography infrastructure is maldistributed, with zero-capacity zones in five parishes and heavy concentration in Kingston & St. Andrew. The first national mapping of mammography capacity, provided critical evidence of inequities in screening access. Expansion efforts should prioritize underserved parishes to reduce breast cancer disparities.

**Keywords:** Breast cancer; Mammography; Screening access; Jamaica; Health services distribution

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