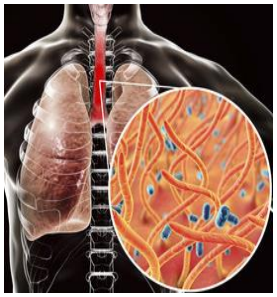
WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Pertussis Surveillance (Part 1)



The objectives of pertussis surveillance are to:
1.monitor disease burden and the impact of the pertussis vaccination programme, with a special focus on understanding the morbidity and mortality in children < 5 years of age;
2. Generate data to inform vaccine schedule and delivery strategy decisions to optimize the impact of vaccination
3. Detect and guide public health response to outbreaks of pertussis.

Given the complexity of pertussis epidemiology and diagnostics, the recommended minimal standard surveillance in most countries is case-based surveillance with laboratory confirmation in one or more sentinel facilities, with a focus on hospitalized children < 5 years of age, where the majority of severe disease will be captured. Prioritize facilities with a large number of children < 5 years of age in their catchment populations for sentinel site selection.

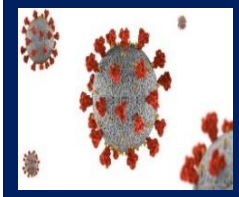
Sentinel site selection is based on a variety of factors including the objectives of surveillance, catchment population, specialization of hospital (paediatric hospital versus general population), health-seeking behaviour of population and capacity to conduct laboratory diagnostic testing. General hospitals that serve children with general infectious diseases (such as pneumonia) are usually better suited to capture pertussis cases than specialty hospitals that receive most patients through referrals.

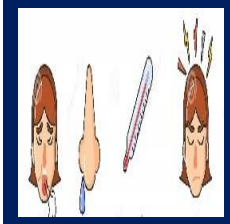
While pertussis morbidity surveillance should focus on children < 5 years of age, pertussis mortality will be concentrated among infants. When surveillance includes older children and adults, sentinel sites could also include outpatient departments/facilities since older children and adults typically have milder disease and are often less likely to be hospitalized. It should be noted that in community outbreaks in areas with poor care-seeking, many pertussis deaths might occur outside of health care settings, and would be missed by facility-based surveillance.

The recommended minimal standard to detect pertussis outbreaks can be either event-based or aggregate surveillance using the suspected case definition, with laboratory confirmation only once a cluster of clinically compatible cases is identified. Thorough investigation of all outbreaks, including case-based surveillance, should be done.

Taken from WHO website on 1/May/2025
https://cdn.who.int/media/docs/default-source/immunization/vpd_surveillance/vpd-surveillance-standards-publication/who-surveillancevaccinepreventable-16-pertussis-r2.pdf?sfvrsn=a0157ae7_10#:~:text=Recommended%20types%20of%20surveillance%20for%20pertussis&text=Prioritize%20facilities%20with%20a%20large,%2Dbased%20surveillance%20(4).
Picture taken from https://stock.adobe.com/search?k=bordetella

EPI WEEK 16





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SENTINEL SYNDROMIC SURVEILLANCE

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 – 13 to 16 of 2025

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

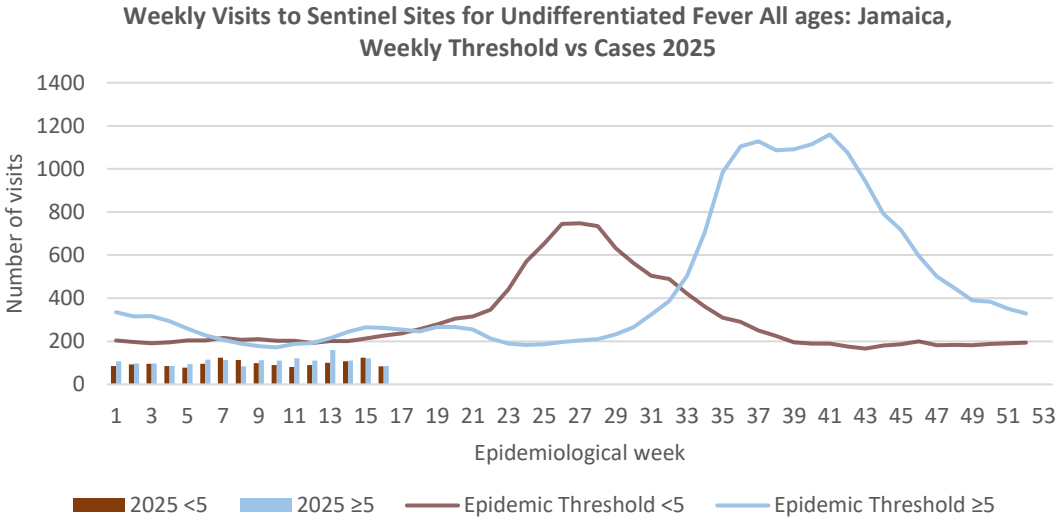
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
13	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
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	Late (T)	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.



2 NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

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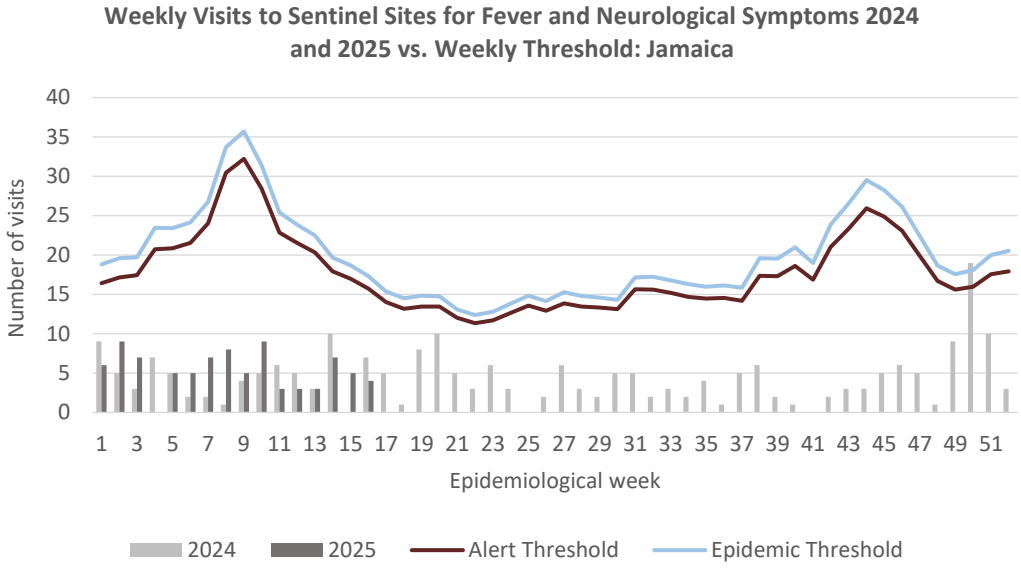
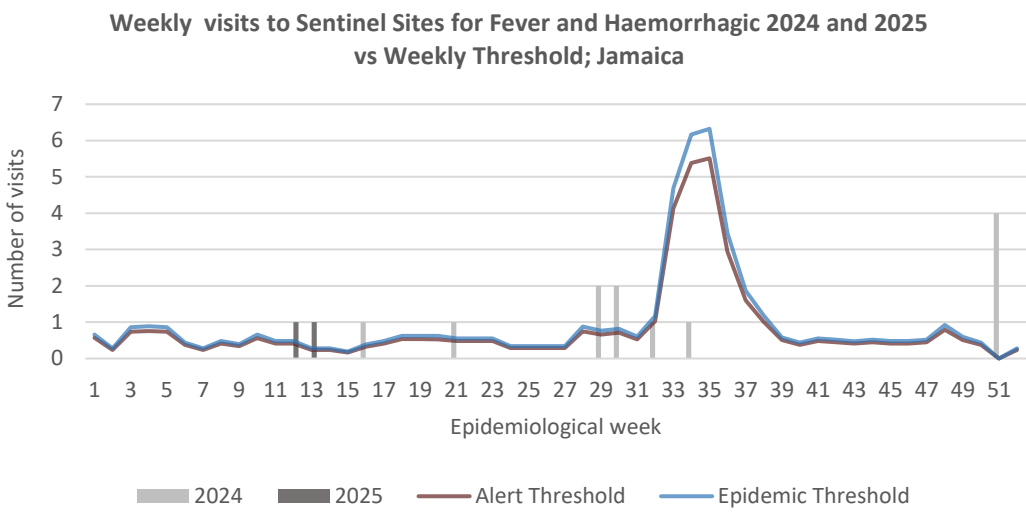
FEVER AND NEUROLOGICAL

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

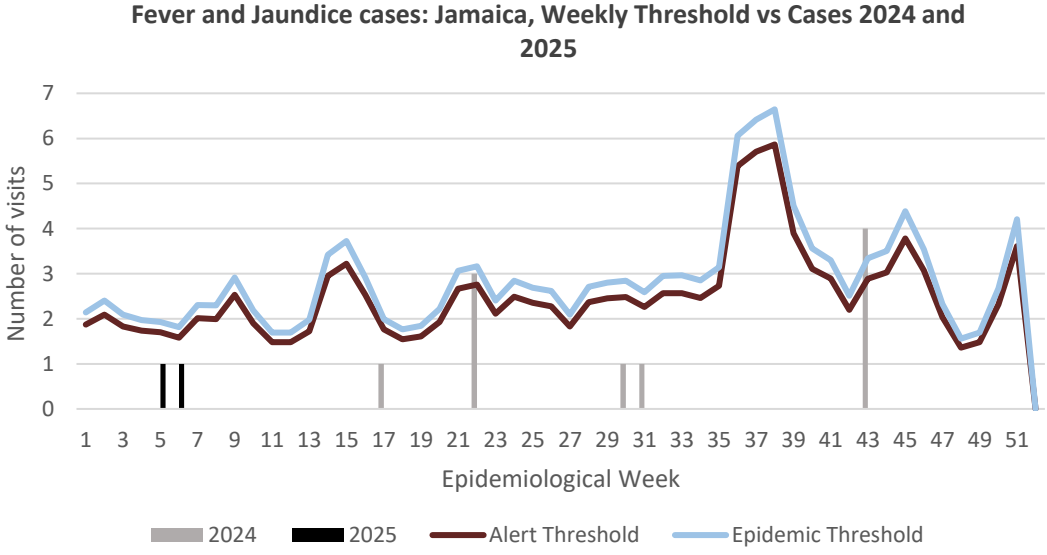
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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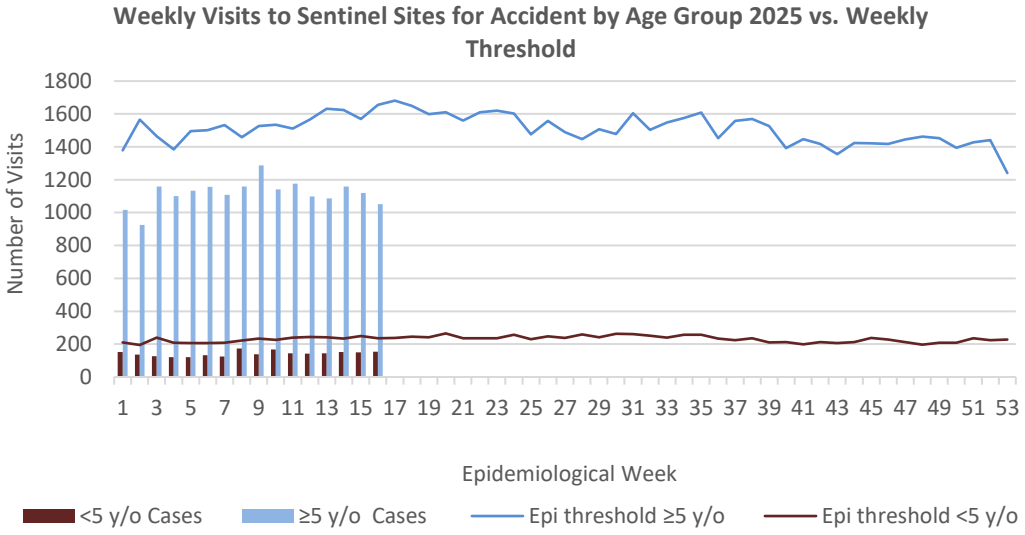
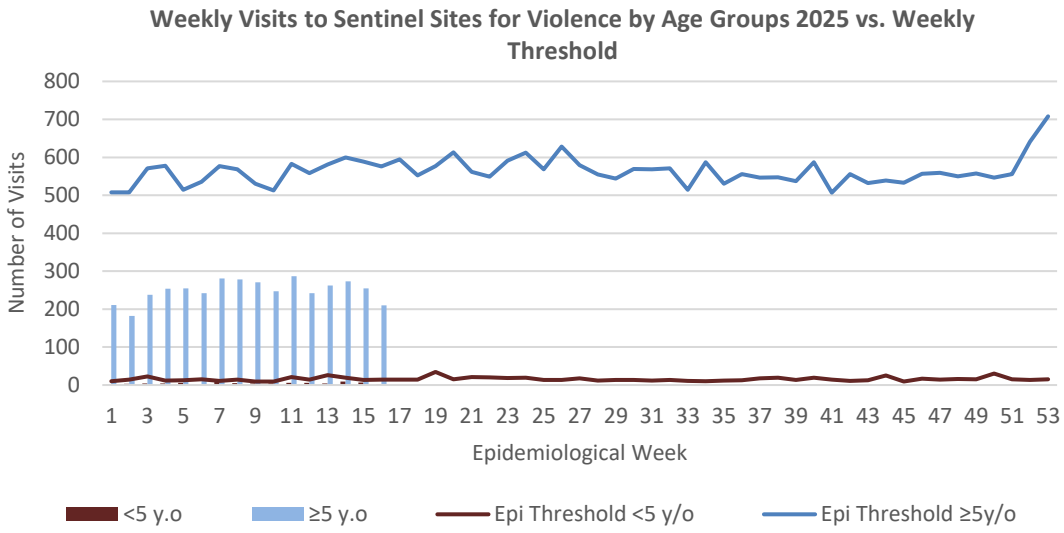
ACCIDENTS

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



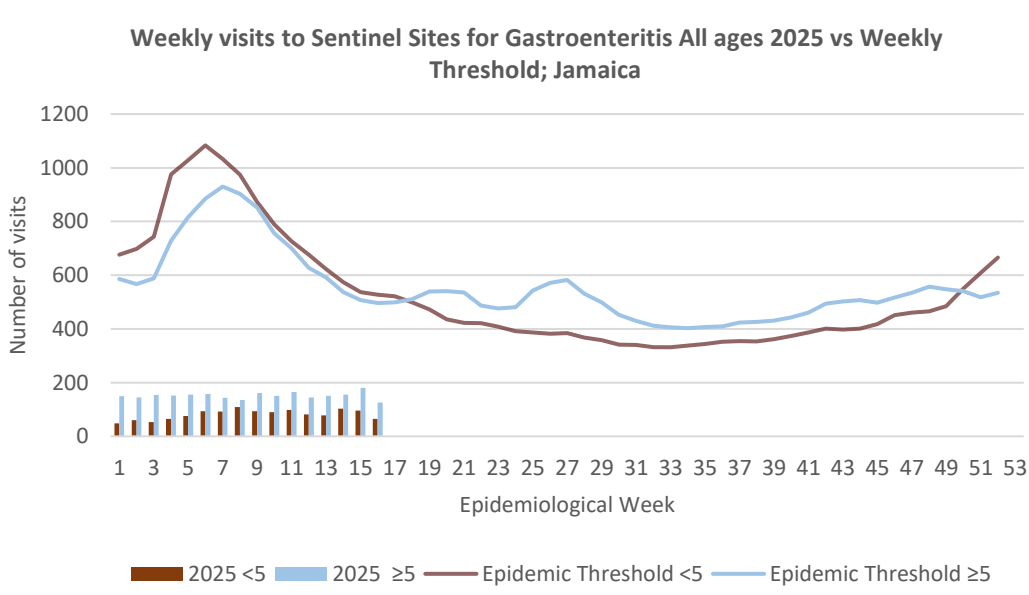
VIOLENCE

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 2025	PREVIOUS YEAR 2024
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		12[β]	136[β]
	Cholera		0	0
	Severe Dengue[Y]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		76	168
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	16
	Hepatitis C		1	5
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		4	8
	Monkeypox		1	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]		21	20
	Ophthalmia Neonatorum		12	58
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		1	0
	Tuberculosis		2	20
	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

NOTIFICATIONS- All clinical sites

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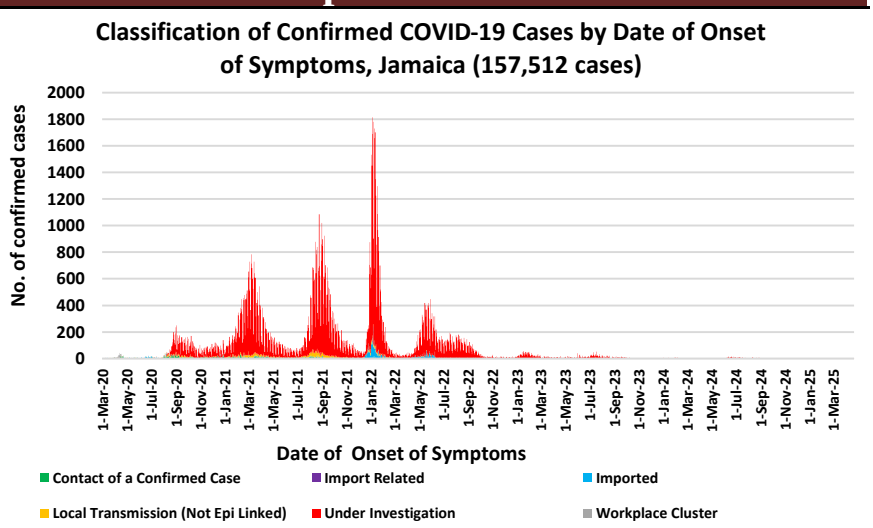
May 2, 2025 ISSN 0799-3927

COVID-19 Surveillance Update

CASES	EW 16	Total
Confirmed	6	157512
Females	2	90748
Males	4	66761
Age Range	65 days to 89 years	1 day to 108 years

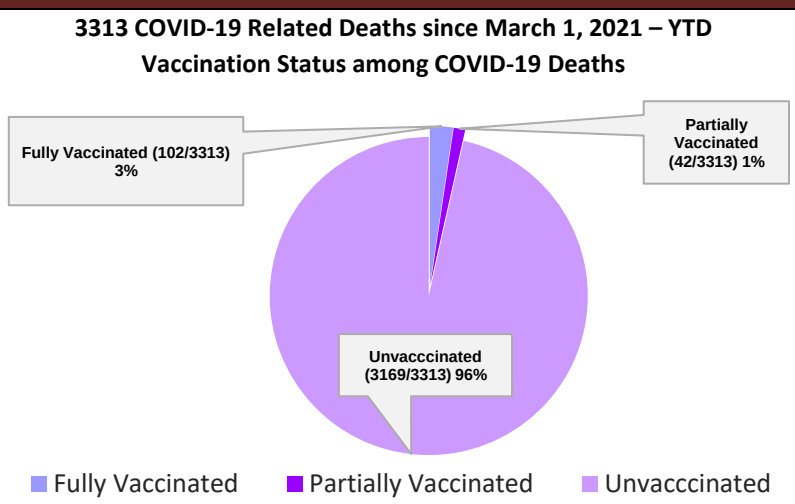
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

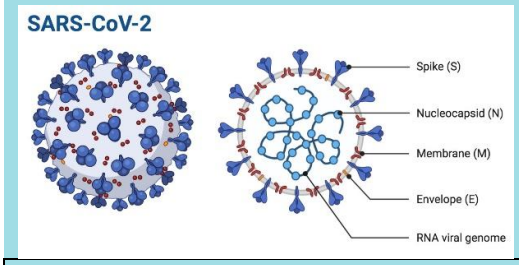
Outcomes	EW 16	Total
ACTIVE *2 weeks*		19
DIED – COVID Related	0	3877
Died - NON COVID	0	396
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157512

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



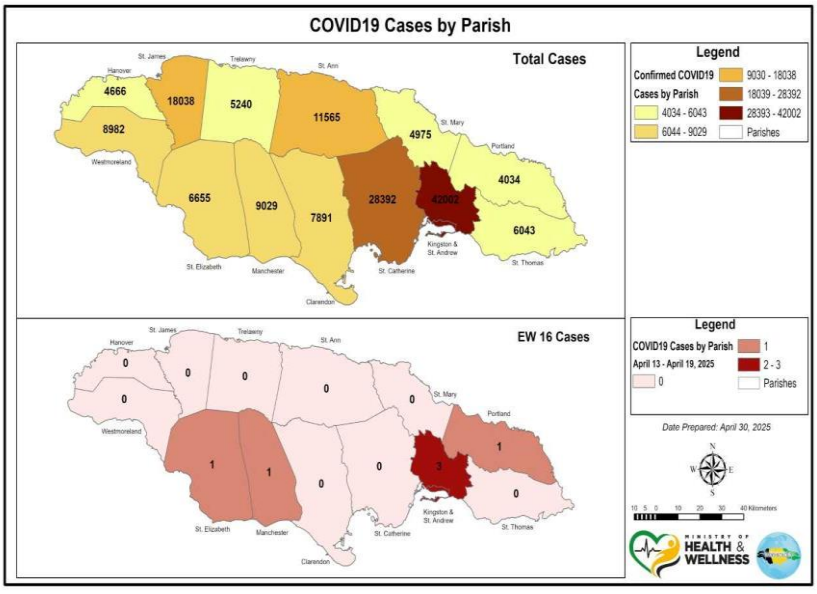
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 13 -16, 2025

Epi Week	Confirmed Cases	Deaths
13	10300	493
14	8300	447
15	6400	331
16	6300	293
Total (4weeks)	**31300**	**1564**



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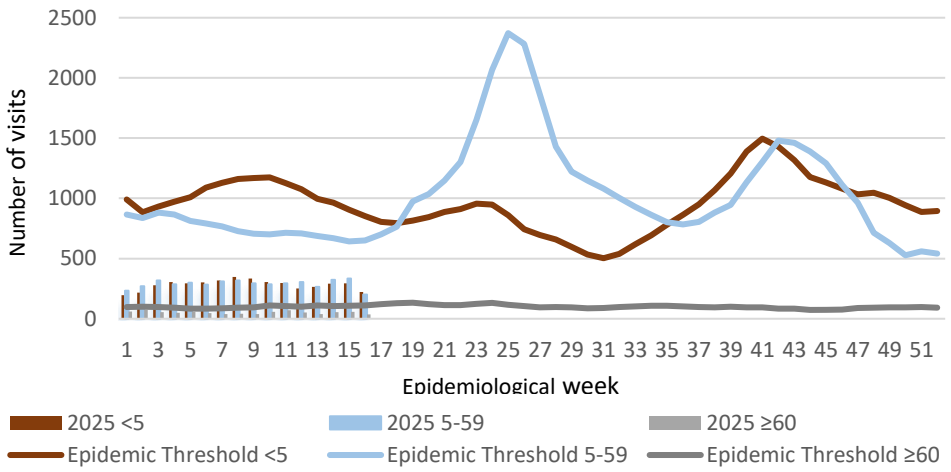
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 16

April 13, 2025 – April 19, 2025 Epidemiological Week 16

	EW 16	*YTD*
SARI cases	5	172
Total Influenza positive Samples	0	137
Influenza A	0	121
H1N1pdm09	0	74
H3N2	0	47
Not subtyped	0	0
Influenza B	0	16
B lineage not determined	0	0
B Victoria	0	16
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	28

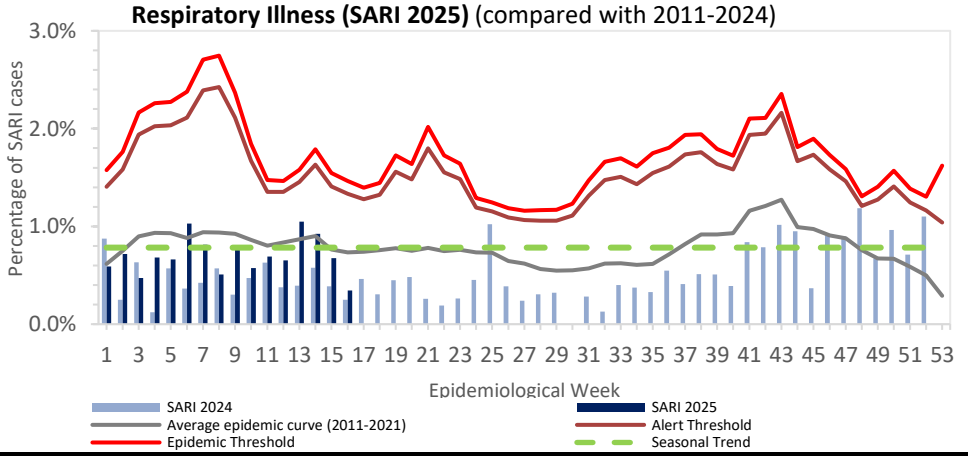
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 16, five (5) SARI admissions were reported.

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



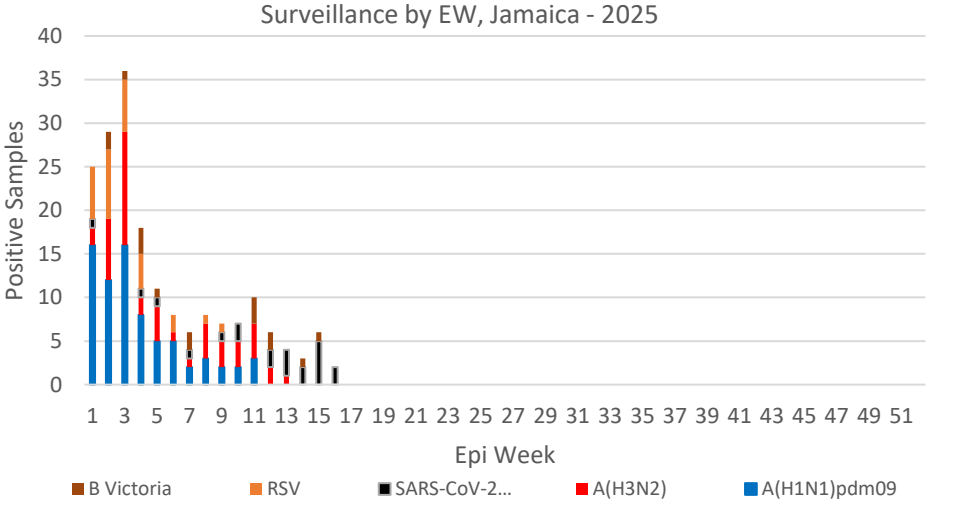
Caribbean Update EW 16

Caribbean: Influenza activity is decreasing for ILI and SARI. The predominant influenza subtype reported was A(H1N1)pdm09. RSV cases remain low with a slight increase in the last two EW. SARS-CoV-2 remains at low levels, with an increase in the last week.

By country: Over the past four EW, influenza activity increased in Cuba, while it has decreased in Barbados, Belize, Suriname, Guyana, the Dominican Republic and Saint Lucia as well as an increase in SARS-CoV detection in Jamaica and Saint Lucia.

(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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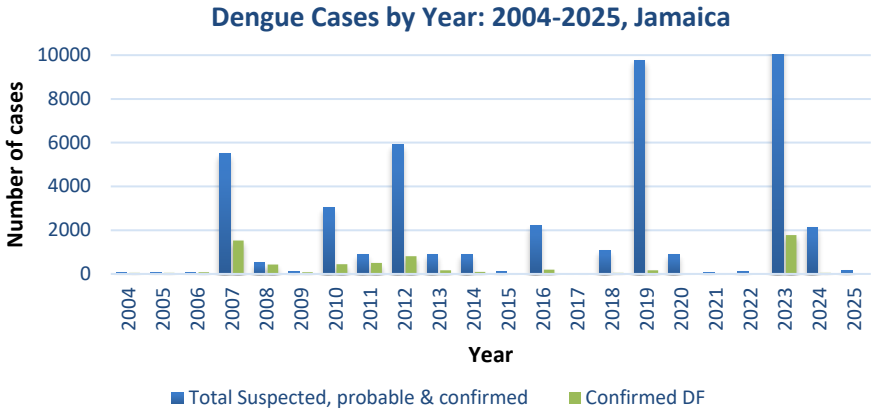
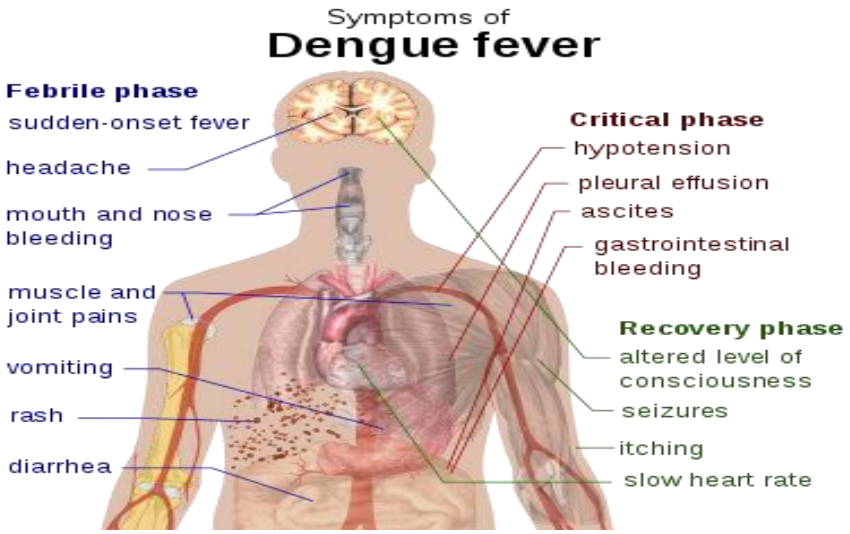
Dengue Bulletin

April 13, 2025 – April 19, 2025 Epidemiological Week 16 | Epidemiological Week 16



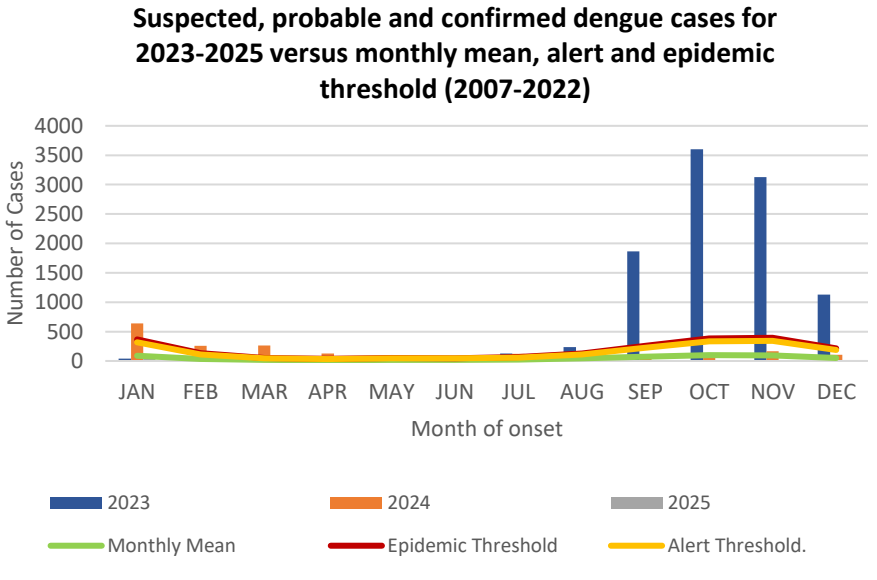
Reported suspected, probable and confirmed dengue with symptom onset in week 16 of 2025

	2025*	
	EW 16	YTD
Total Suspected, Probable & Confirmed Dengue Cases	1	141
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, May 1, 2025**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as presumed dengue.**



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RESEARCH PAPER

Abstract

NHRC-23-O13

Impact of the COVID-19 Pandemic on the Utilization of Jamaican Health Clinics

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[1]Faculty of Medical Sciences, University of the West Indies, Mona, Jamaica [2]Tropical Metabolism Research Unit, Caribbean Institute for Health Research, University of the West Indies, Mona, Jamaica

Objective: The objective of this study was to determine the impact of COVID-19 Family Planning (FP), Antenatal (ANC), Postnatal (PNC), Child Health (CHC) Psychiatry, and NCD- Curative Clinics by comparing their utilisations during the first ten months of the pandemic March-December 2020, with the corresponding non-COVID reference period March-December 2019.

Method: Retrospective data from the MCSR was extracted for the clinics evaluated, and patient count was compared between the COVID-19 and non-COVID-19 reference period by calculating the per cent change in utilisation. Utilisation was analysed by Parish, Health Region, Age, Sex, and Service. Bivariate (X2) and multivariate analyses (Poisson regression models) were conducted to test statistical significance and to calculate incidence risk ratios (IRR).

Results: There was a significant decline in CHC (-19.3%) and PNC (-4.77%) attendance. All other clinics showed an increase in utilisation. This increase was not seen across all parishes and Regions. For Curative Clinics, marginal differences were observed for Diabetes and Hypertension Clinics. However, there was an increase in patients presenting with Uncontrolled Diabetes and Uncontrolled Hypertension.

The results of the bivariate analyses were corroborated by the IRR for Child Health (0.74 (C.I. 0.74-0.75)), indicating a 26% decline.

Conclusion: The COVID-19 pandemic affected healthcare utilisation in Jamaica, and Child Health Clinics were the most affected. Increases in the utilisation of family planning, antenatal and psychiatric services are notable. The declines in utilisation of clinic services found by Region and Parish require further investigation.

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