WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Pertussis Surveillance (Part 2)

At all levels, surveillance for pertussis can potentially be linked with

surveillance for other respiratory illnesses, such as influenza-like illness (ILI) or pneumonia. However, as these other case definitions usually focus on acute illness rather than chronic cough, this could result in reduced sensitivity for detecting pertussis cases. Additionally, case definitions for influenza and pneumonia frequently include fever, which is not often a sign among pertussis cases. Therefore, existing case definitions might need to be modified to capture suspected pertussis cases. On the other hand, use of existing pneumonia or ILI case definitions might lead to identification of pertussis among patients that do not meet the suspected pertussis case definition. Whether to count these as confirmed pertussis cases should be evaluated on a case-by-case basis based on clinical characteristics and alternative diagnoses.

Case definition and final classification

A suspected case is a person of any age with a cough lasting ≥ 2 weeks, or of any duration in an infant or
any person in an outbreak setting, without a more likely diagnosis and with at least one of the following
symptoms, based on observation or parental report:

- paroxysms (fits) of coughing
- inspiratory whooping
- post-tussive vomiting, or vomiting without other apparent cause
- apnea (only in < 1 year of age)

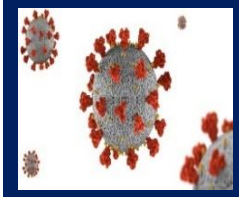
OR

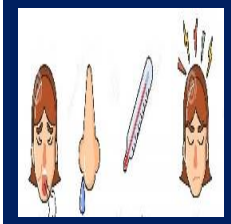
- clinician suspicion of pertussis.

Note that pertussis in immunized or previously infected individuals can present without the classic signs of
pertussis, and therefore might not be captured by the above case definition.

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 17





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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 – 14 to 17 of 2025

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

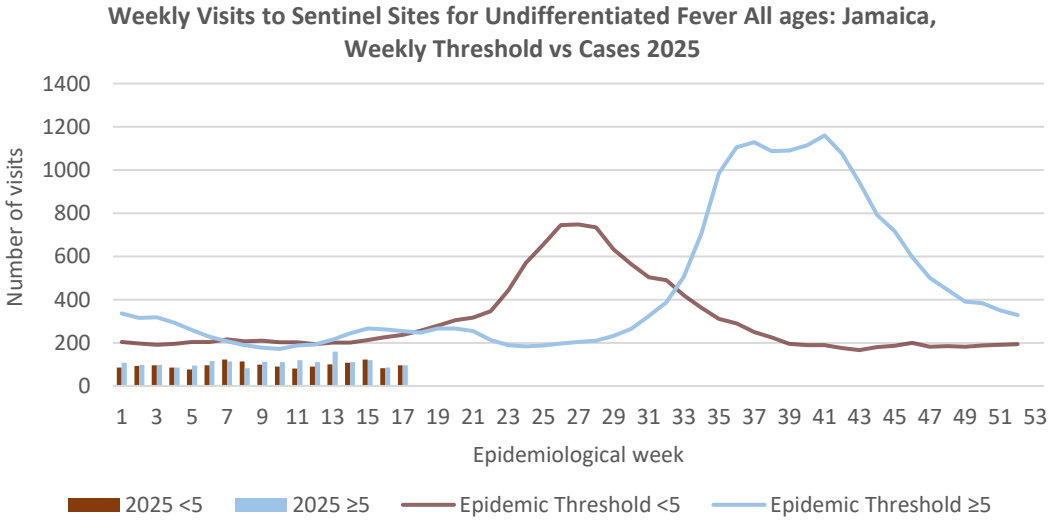
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
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
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

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.



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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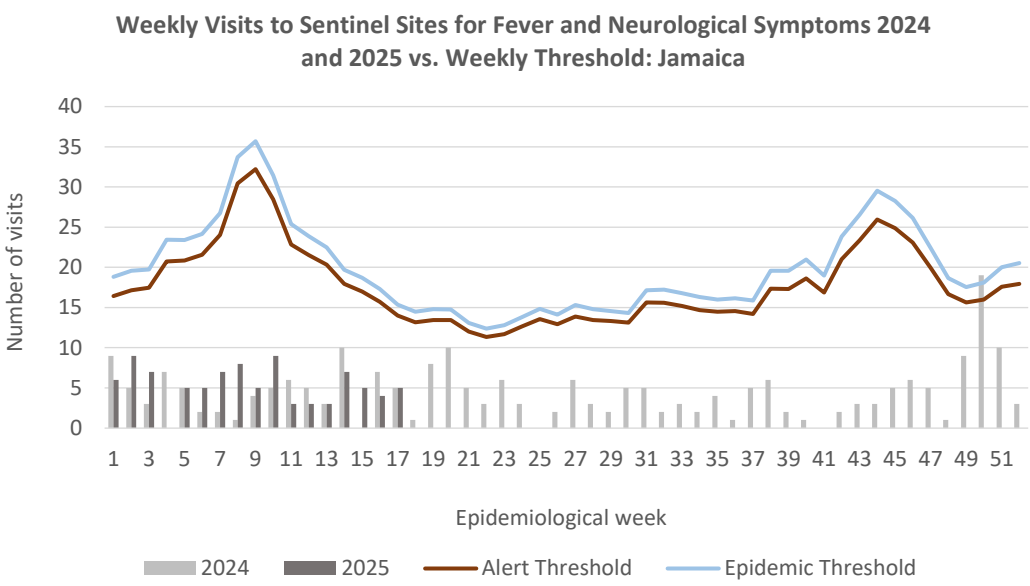
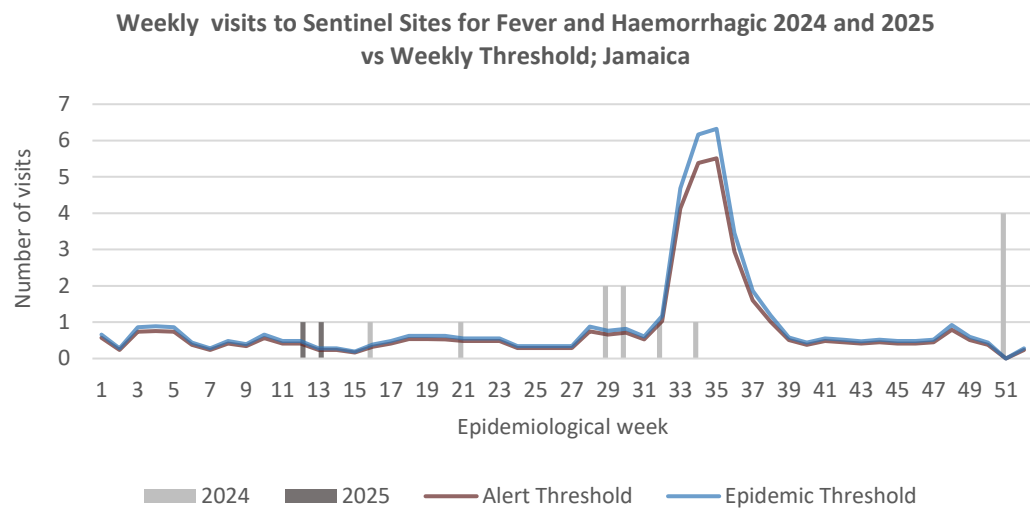
FEVER AND NEUROLOGICAL

Temperature of >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

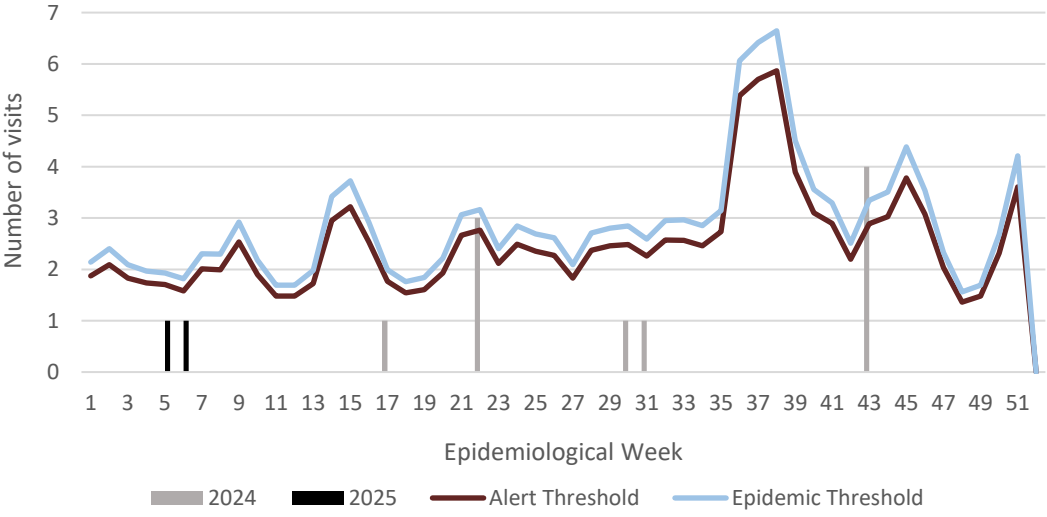
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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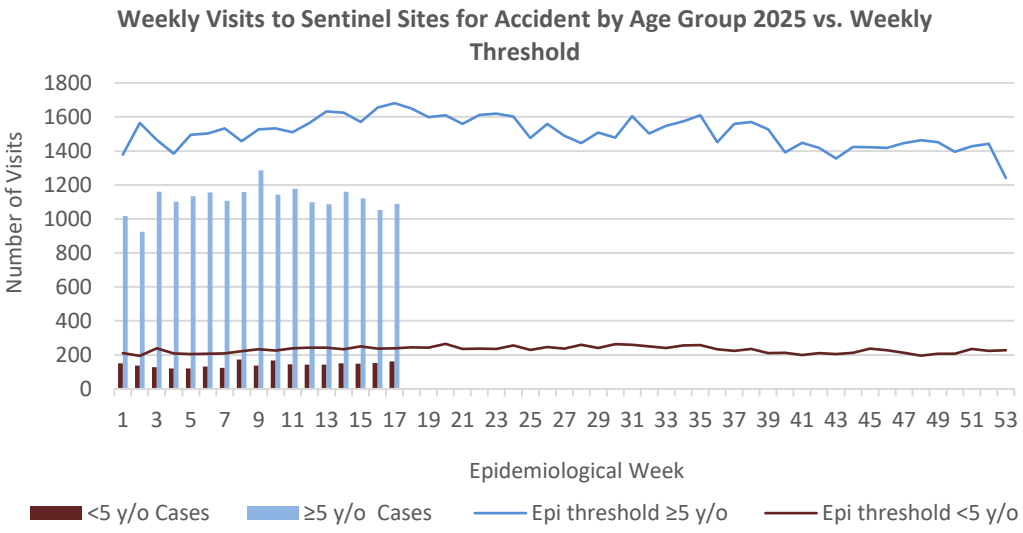
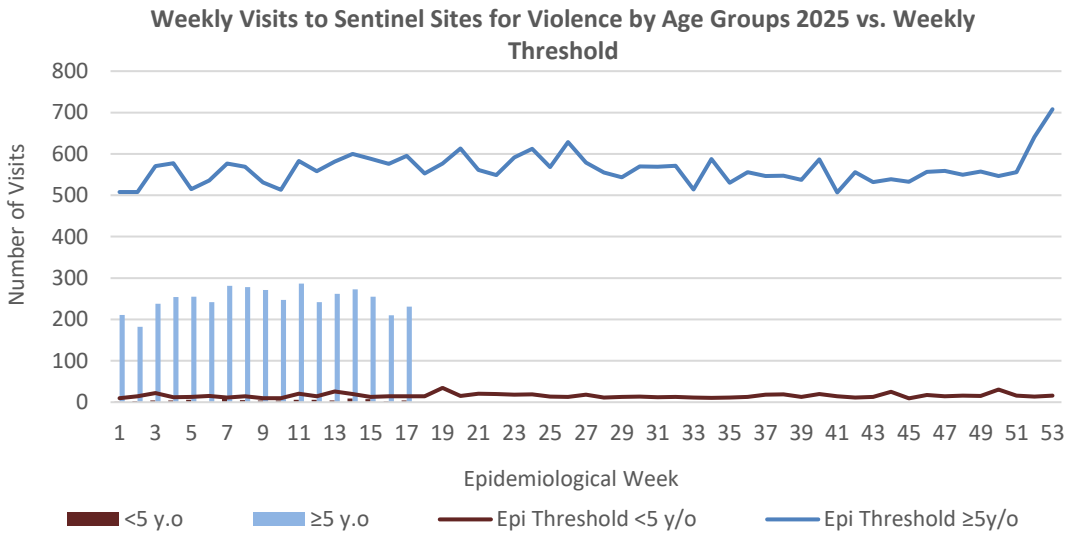
ACCIDENTS

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



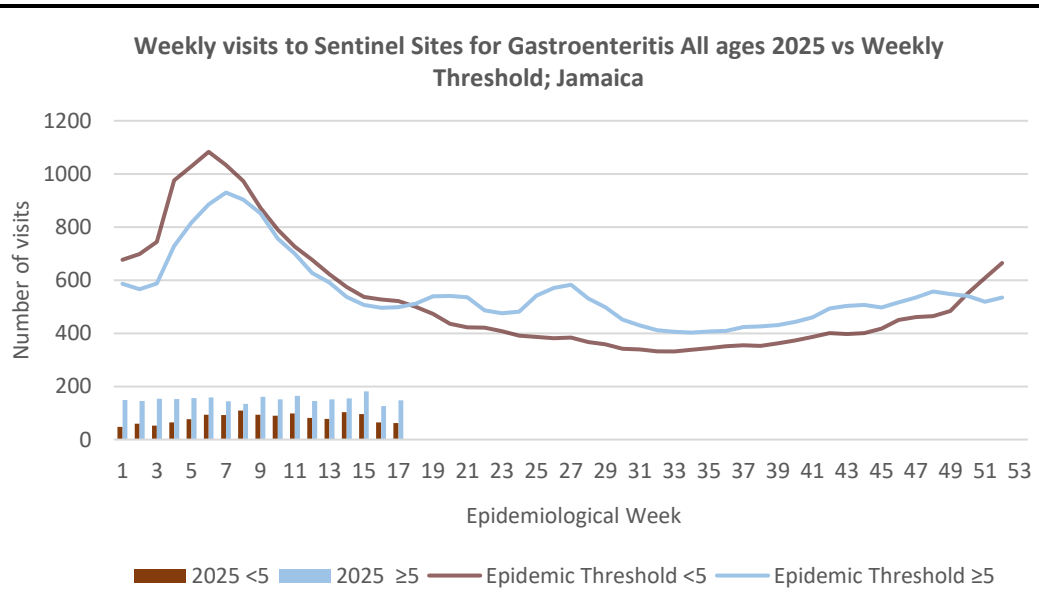
VIOLENCE

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	26[β]	144[β]
	Cholera	0	0
	Severe Dengue[Y]	See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)	80	175
	Hansen's Disease (Leprosy)	0	0
	Hepatitis B	0	16
	Hepatitis C	1	5
	HIV/AIDS	NA	NA
	Malaria (Imported)	0	0
	Meningitis	4	9
	Monkeypox	1	0
EXOTIC/ UNUSUAL	Plague	0	0
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
	Fever and Rash – Rubella	0	0
	Maternal Deaths[δ]	22	21
	Ophthalmia Neonatorum	12	61
	Pertussis-like syndrome	0	0
	Rheumatic Fever	0	0
	Tetanus	1	0
	Tuberculosis	7	22
	Yellow Fever	0	0
	Chikungunya[ε]	0	0
	Zika Virus[θ]	0	0

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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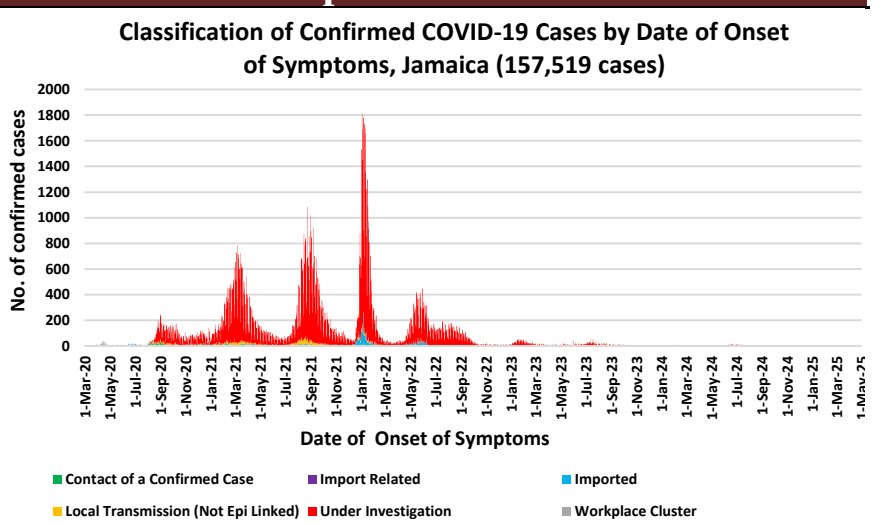
COVID-19 Surveillance Update

CASES	EW 17	Total
Confirmed	8	157519
Females	3	90753
Males	5	66763
Age Range	7 days to 30 years	1 day to 108 years

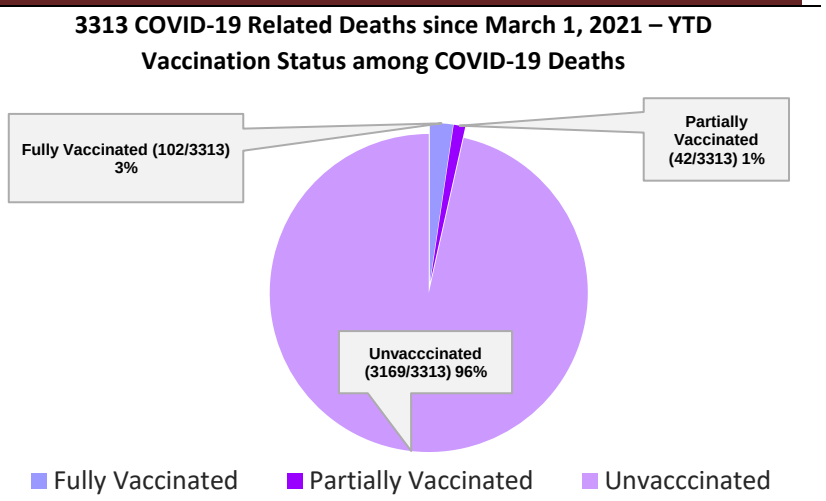
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



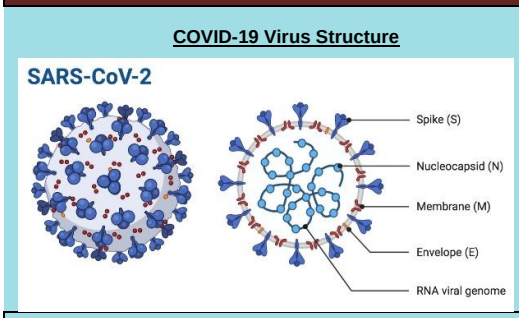
COVID-19 Outcomes

Outcomes	EW 17	Total
ACTIVE *2 weeks*		14
DIED – COVID Related	0	3877
Died - NON COVID	0	396
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157519

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

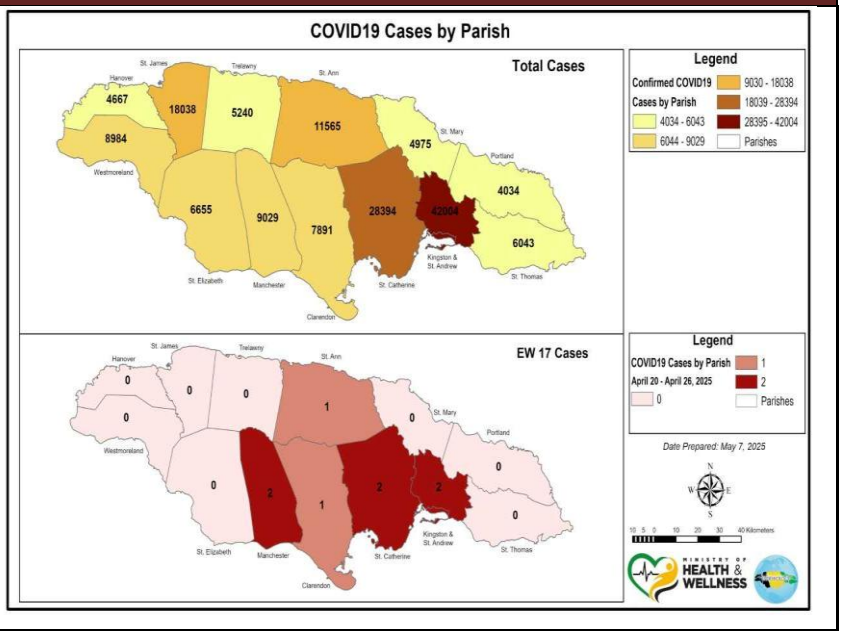


COVID-19 Parish Distribution and Global Statistics



COVID-19 WHO Global Statistics EW 14 -17, 2025

Epi Week	Confirmed Cases	Deaths
14	8800	491
15	7600	398
16	6300	293
17	5100	309
Total (4weeks)	**27800**	**1491**



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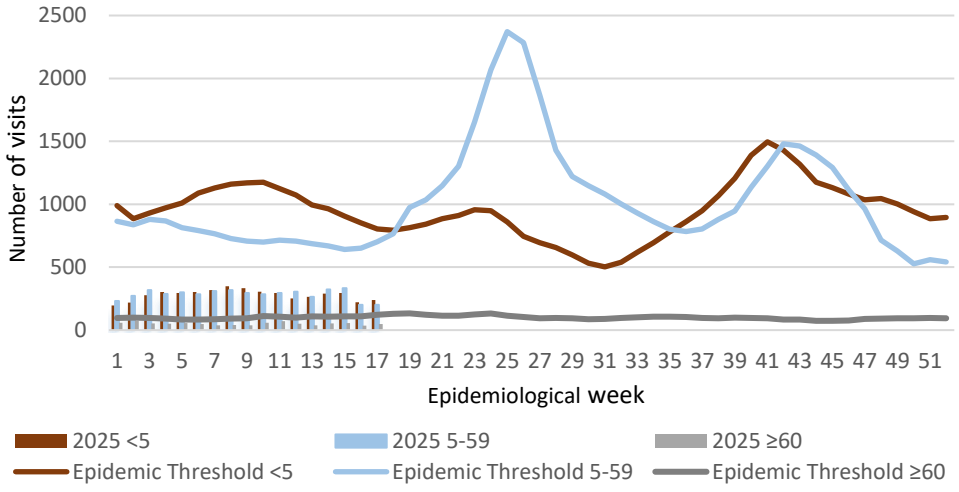
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 17

April 20, 2025 – April 26, 2025 Epidemiological Week 17

	EW 17	*YTD*
SARI cases	3	175
Total Influenza positive Samples	2	143
Influenza A	2	127
H1N1pdm09	0	75
H3N2	2	52
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

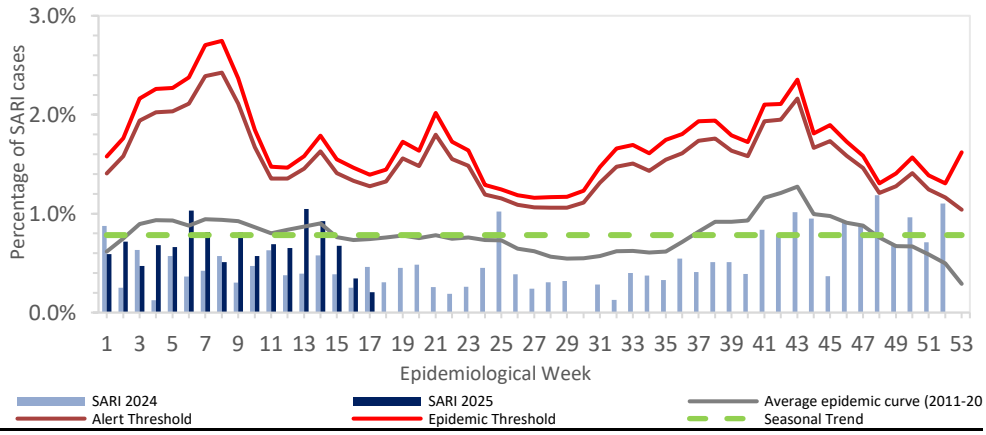
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2025 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 17, three (3) SARI admissions were reported.

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



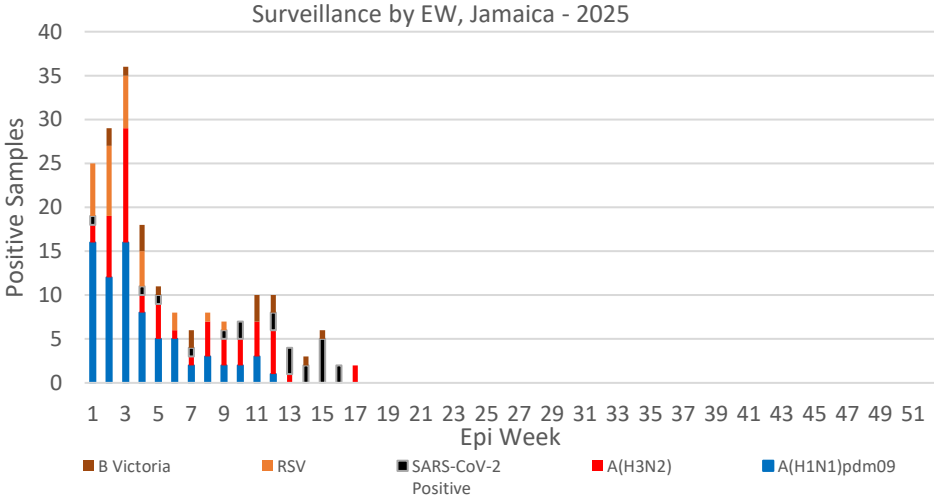
Caribbean Update EW 17

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

By country: Over the past four EW, influenza activity has increased in Belize, the Dominican Republic and Guyana, while it has decreased in Barbados, Suriname, Jamaica, the Cayman Islands, Saint Lucia, and Saint Vincent and the Grenadines. A decline in RSV activity was observed in Belize, Cuba, the Dominican Republic, and Saint Lucia, along with an increase in SARS-CoV detection in Cuba and Jamaica.

(taken from PAHO Respiratory viruses weekly report) And SARS-CoV-2 c

Distribution of Influenza and Other Respiratory Viruses Under Surveillance by EW, Jamaica - 2025



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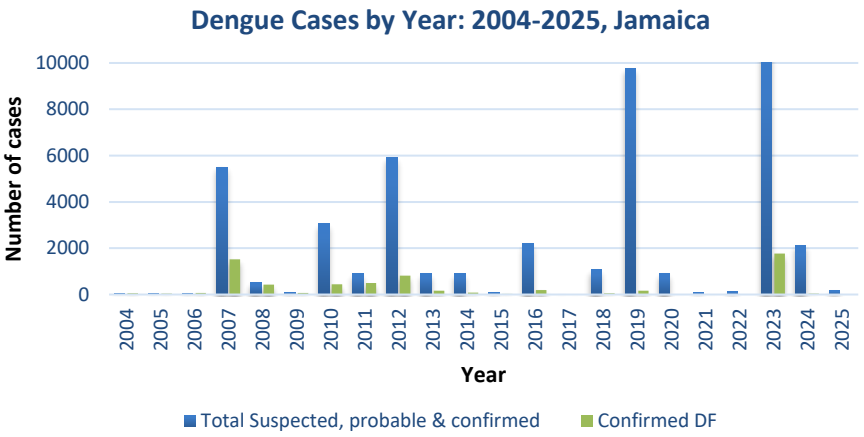
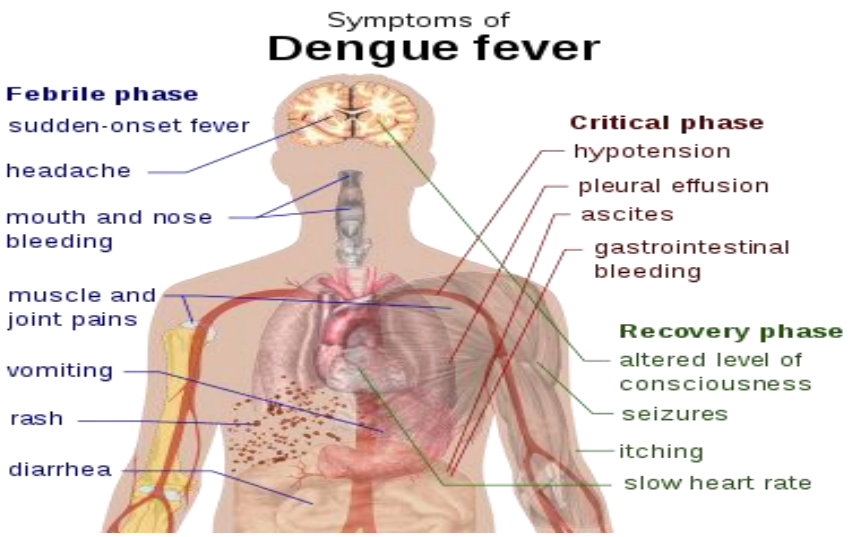
Dengue Bulletin

April 20, 2025 – April 26, 2025 Epidemiological Week 17 | Epidemiological Week 17



Reported suspected, probable and confirmed dengue with symptom onset in week 17 of 2025

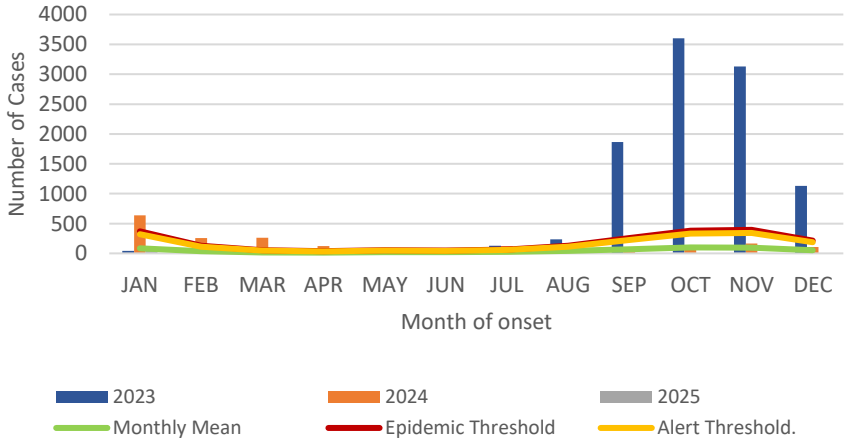
	2025*	
	EW 17	YTD
Total Suspected, Probable & Confirmed Dengue Cases	3	162
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- **Dengue deaths are reported based on date of death.**
- ***Figure as at, May 8, 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)



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RESEARCH PAPER

Abstract

NHRC-23-O14

Association between sleep duration, hypertension and PCOS in women from the UK Biobank: a case control study

Lewis S[1]; James M[1]; Bennett N[1]; Ferguson TS[1]; Younger-Coleman N[1]; Blake A[2]; Rutter MK [3]; Anderson SG[4]

[1]University of the West Indies, Mona, Jamaica, [2]University of the West Indies, Mona, Nassau, The Bahamas [3]University of Manchester, England, [4]University of the West Indies, Cave Hill, Barbados

Objectives: To investigate the association between sleep duration and polycystic ovarian syndrome (PCOS) and the association between sleep duration and hypertension among women from the United Kingdom (UK) Biobank.

Methods: We conducted a case-control study of women aged 40-70 years with and without PCOS from the UK Biobank. Self-reported sociodemographic data, sleep duration and hypertension status were obtained. The association between sleep duration and PCOS and sleep duration and hypertension were assessed using multivariable logistic regression models.

Results: Analyses included 727 women (420 with PCOS, mean age±SD 46.1±5.2 years; 307 without PCOS, mean age±SD 52.2±7.0 years; 93.7% were of White European and 1.4% were of African-Caribbean origin. Short (≤6 hours), adequate (7-8 hours), and long (≥9 hours) sleep duration was reported in 25.0% vs 28.3%; 69.5% vs 68.4%, and 5.5% vs 3.3% of women with vs those without PCOS. Prevalence of hypertension was 20.2% (PCOS) vs. 17.3% (without PCOS). In multivariable models with PCOS as the outcome and adjusted for age, BMI, and hypertension, there was no association between sleep duration and PCOS (OR 1.01, 95%CI 0.68-1.51, p=0.965 for short sleep duration; OR 1.36, 95%CI 0.56-3.32p=0.494 for long sleep duration). PCOS was inversely associated with age and directly associated with BMI. In models with hypertension as the outcome, long sleep duration was independently associated with hypertension (OR: 2.46; 95% CI: 1.1-5.6, p=0.030) after adjusting for age and BMI.

Conclusions: Long sleep duration was an independent risk factor for hypertension in women from the UK Biobank. No association was found between sleep duration and PCOS.

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