

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Climate Change



Climate change is impacting human lives and health in a variety of ways. It threatens the essential ingredients of good health – clean air, safe drinking water, nutritious food supply and safe shelter – and has the potential to undermine decades of progress in

global health. Between 2030 and 2050, climate change is expected to cause approximately 250 000 additional deaths per year from malnutrition, malaria, diarrhoea and heat stress alone. The direct damage costs to health are estimated to be between US\$ 2–4 billion per year by 2030. Areas with weak health infrastructure – mostly in developing countries – will be the least able to cope without assistance to prepare and respond.

Greenhouse gas emissions that result from the extraction and burning of fossil fuels are major contributors to both climate change and air pollution. Many policies and individual measures, such as transport, food and energy use choices, have the potential to reduce greenhouse gas emissions and produce major health co-benefits, particularly by abating air pollution. The phase out of polluting energy systems, for example, or the promotion of public transportation and active movement, could both lower carbon emissions and cut the burden of household and ambient air pollution, which cause 7 million premature deaths per year.

Climate change is already impacting health in a myriad of ways, including by leading to death and illness from increasingly frequent extreme weather events, such as heatwaves, storms and floods, the disruption of food systems, increases in zoonoses and food-, water- and vector-borne diseases, and mental health issues. Furthermore, climate change is undermining many of the social determinants for good health, such as livelihoods, equality and access to health care and social support structures. These climate-sensitive health risks are disproportionately felt by the most vulnerable and disadvantaged, including women, children, ethnic minorities, poor communities, migrants or displaced persons, older populations and those with underlying health conditions.

In the short to medium term, the health impacts of climate change will be determined mainly by the vulnerability of populations, their resilience to the current rate of climate change and the extent and pace of adaptation. In the longer term, the effects will increasingly depend on the extent to which transformational action is taken now to reduce emissions and avoid the breaching of dangerous temperature thresholds and potential irreversible tipping points.

Taken from WHO website on 24/Jul/2025

https://www.who.int/health-topics/climate-change#tab=tab_1

https://www.who.int/health-topics/climate-change#tab=tab_2

EPI WEEK 28



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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 – 24 to 28 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													
25	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
26	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
27	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
28	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time

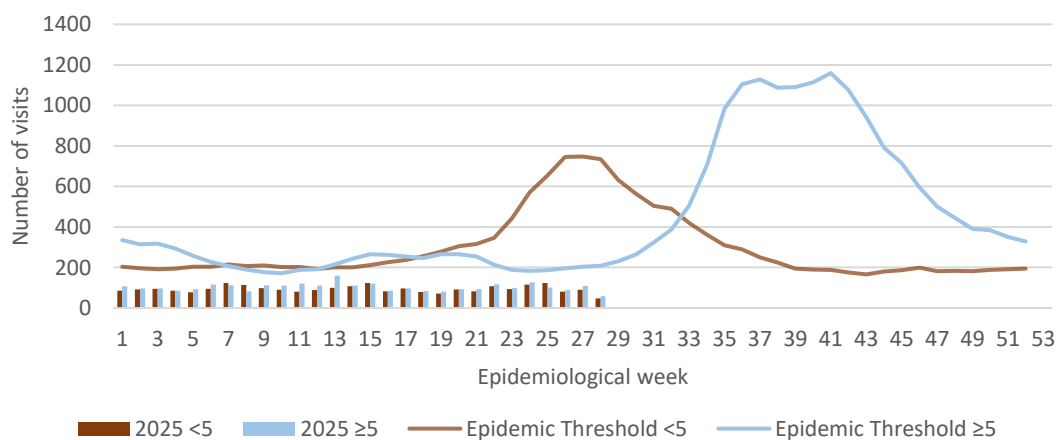
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of $>38^{\circ}\text{C}$ / 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



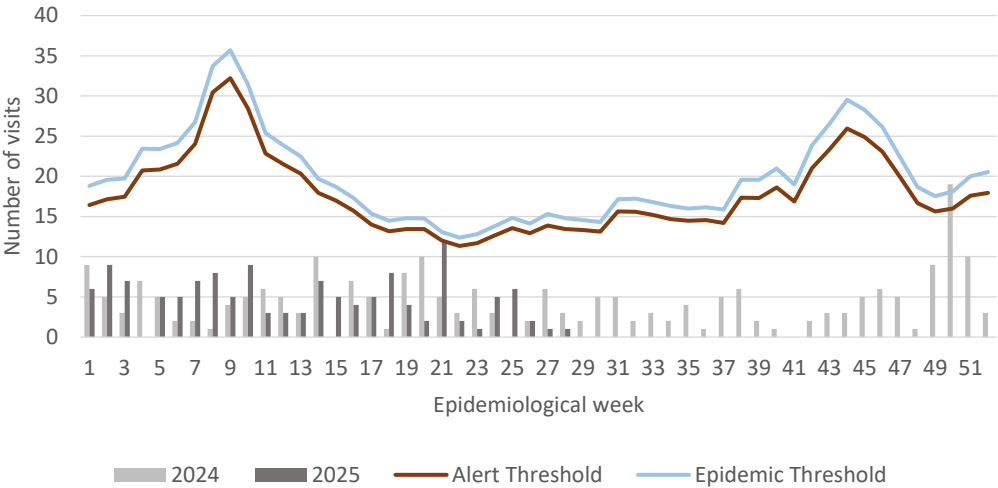
SENTINEL REPORT- 78 sites. Automatic reporting

FEVER AND NEUROLOGICAL

Temperature of $>38^{\circ}\text{C}$ / 100.4°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

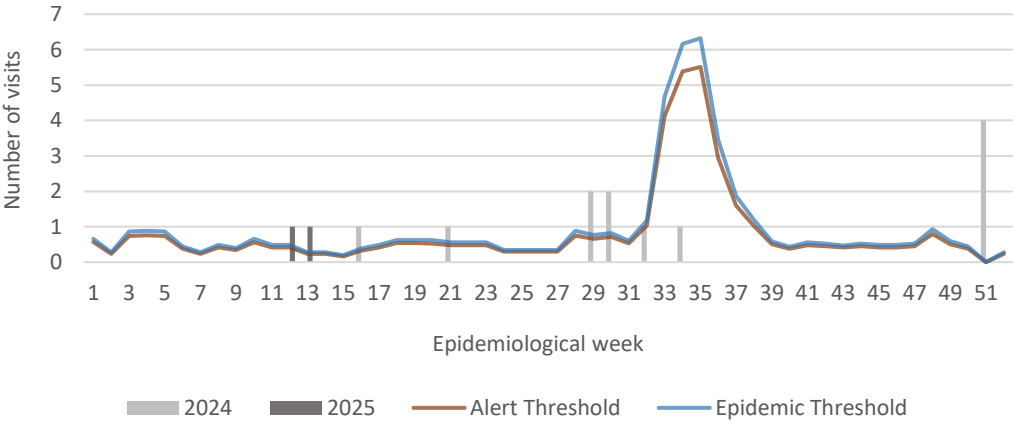


FEVER AND HAEMORRHAGIC

Temperature of $>38^{\circ}\text{C}$ / 100.4°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 symptoms 2024 and 2025 vs Weekly Threshold; Jamaica



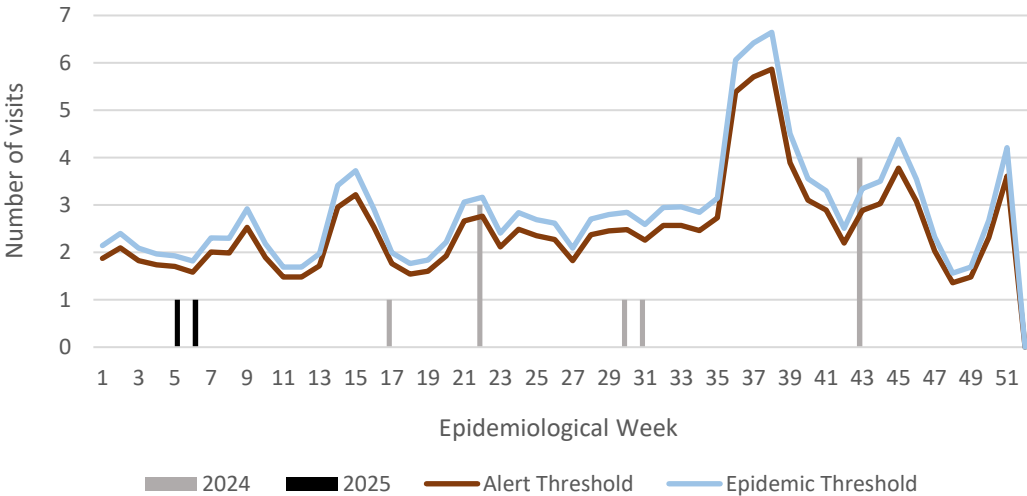
FEVER AND JAUNDICE

Temperature of $>38^{\circ}\text{C}$ / 100.4°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.



Weekly visits for Fever and Jaundice symptoms: Jamaica, Weekly Threshold vs Cases 2024 and 2025



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NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



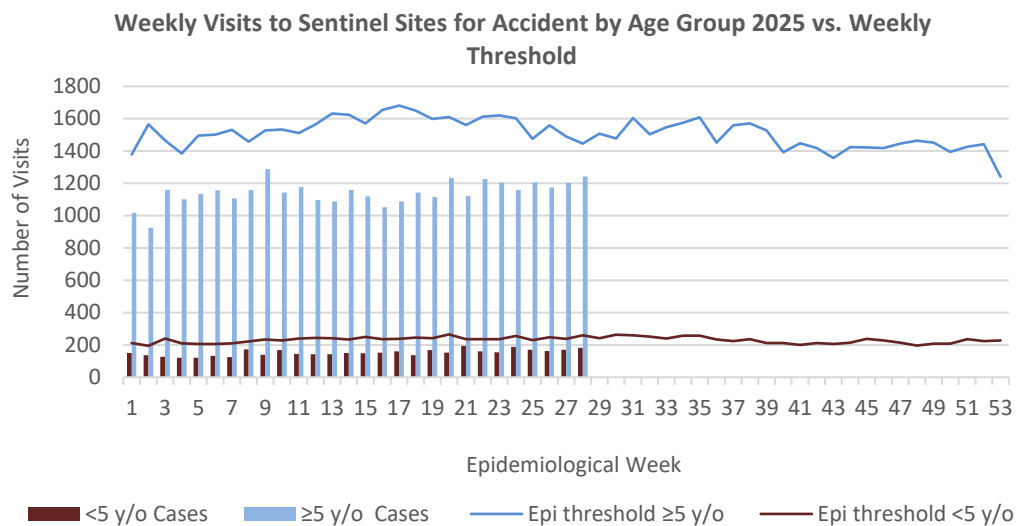
HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
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SENTINEL
REPORT- 78 sites.
Automatic reporting

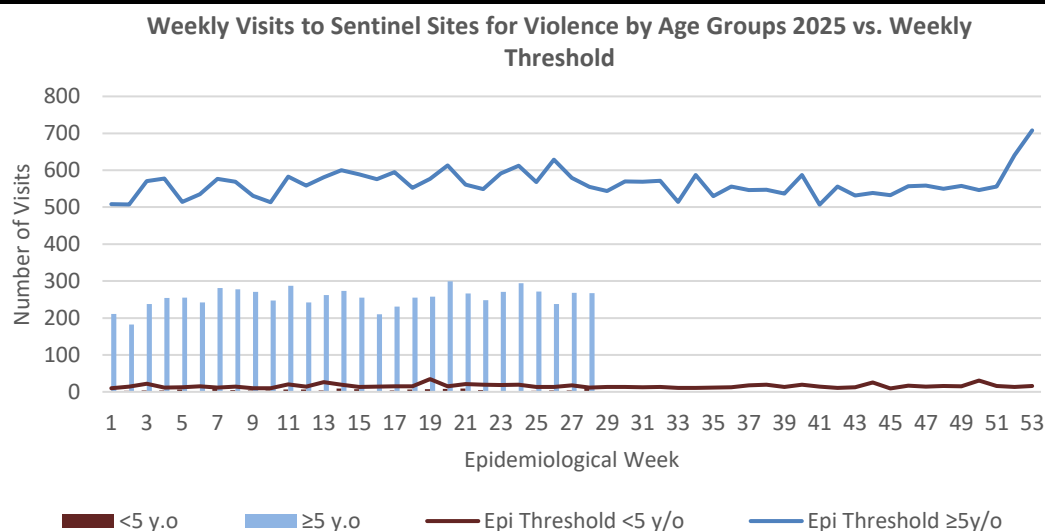
ACCIDENTS

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



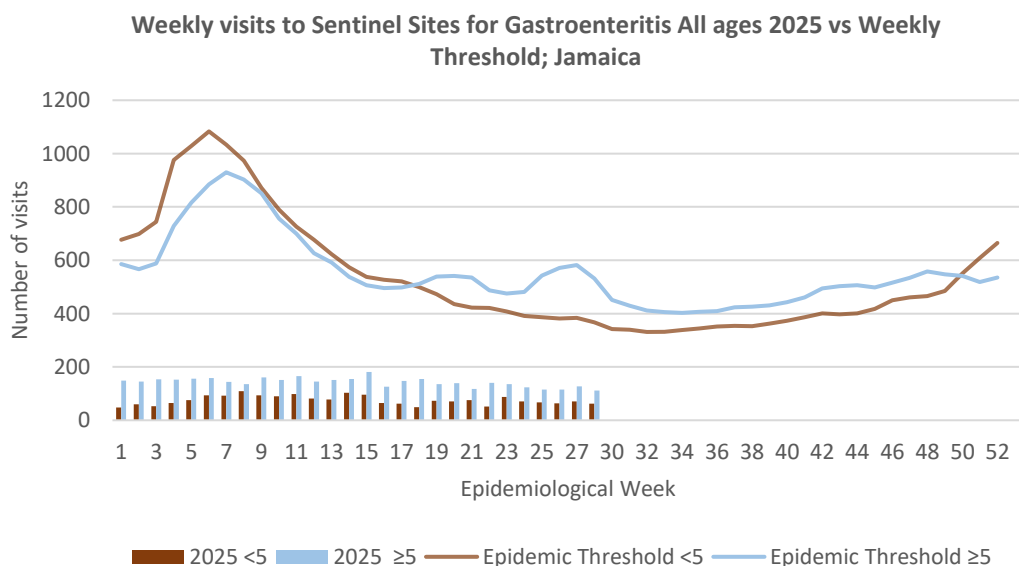
VIOLENCE

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
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CLASS ONE NOTIFIABLE EVENTS					Comments
			Confirmed YTD ^α		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. ^γ 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.
		CLASS 1 EVENTS	CURRENT YEAR 2025	PREVIOUS YEAR 2024	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		64 ^β	214 ^β	
	Cholera		0	0	
	Severe Dengue ^γ		See Dengue page below	See Dengue page below	
	COVID-19 (SARS-CoV-2)		241	473	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		3	25	
	Hepatitis C		1	8	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis		7	12	
	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	
		Rubella	0	0	
	Maternal Deaths ^δ		32	37	
	Ophthalmia Neonatorum		19	104	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		1	0	
	Tuberculosis		21	30	
	Yellow Fever		0	0	
	Chikungunya ^ε		0	0	
	Zika Virus ^θ		0	0	NA- Not Available



5 NOTIFICATIONS-
All clinical
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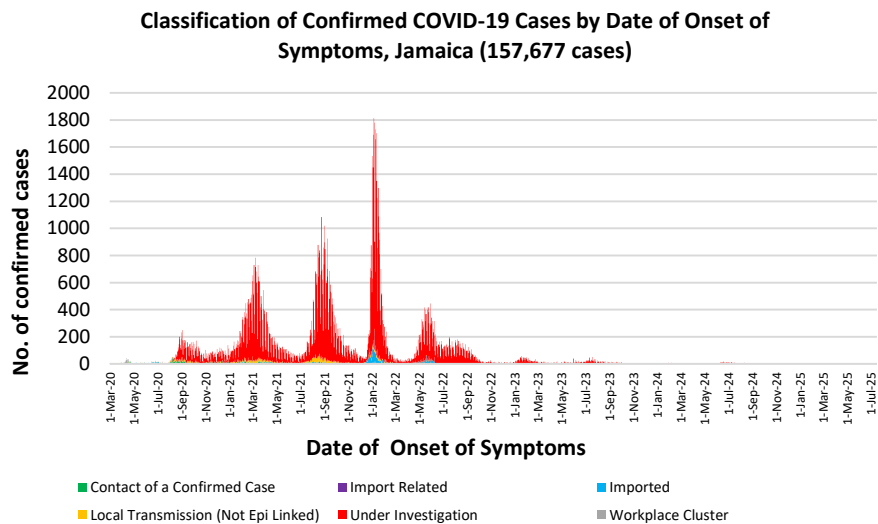
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COVID-19 Surveillance Update

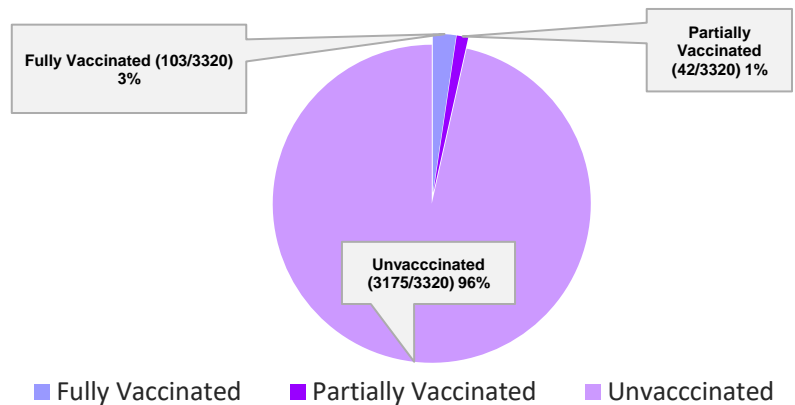
CASES	EW 28	Total
Confirmed	6	157677
Females	5	90848
Males	1	66826
Age Range	12 years to 55 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases * Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.		



COVID-19 Outcomes

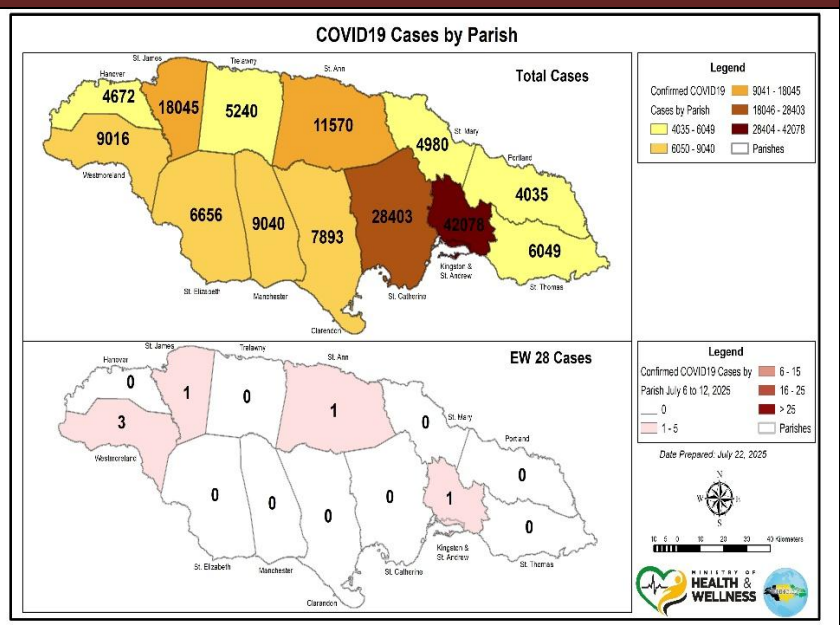
Outcomes	EW 28	Total
ACTIVE *2 weeks*	15	49936
DIED – COVID Related	0	3883
Died - NON COVID	0	397
Died - Under Investigation	0	142
Recovered and discharged	0	103226
Repatriated	0	93
Total		157677
*Vaccination programme March 2021 – YTD * Total as at current Epi week		

3320 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure		
COVID-19 WHO Global Statistics EW 25 -28 2025		
Epi Week	Confirmed Cases	Deaths
25	67,800	280
26	42,300	278
27	32,300	218
28	38,800	183
Total (4weeks)	181,200	959



6 NOTIFICATIONS-
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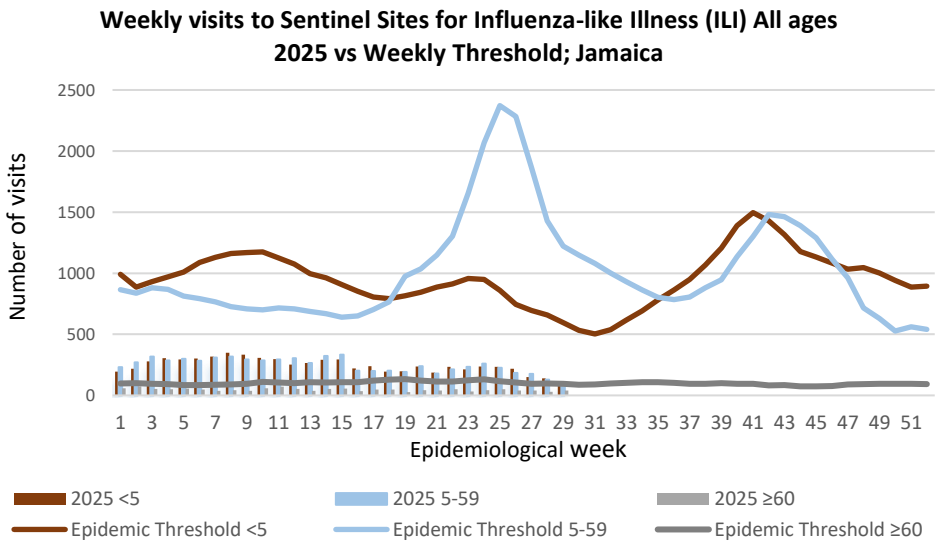
NATIONAL SURVEILLANCE UNIT

INFLUENZA REPORT

July 06, 2025 – July 12, 2025 Epidemiological Week 28

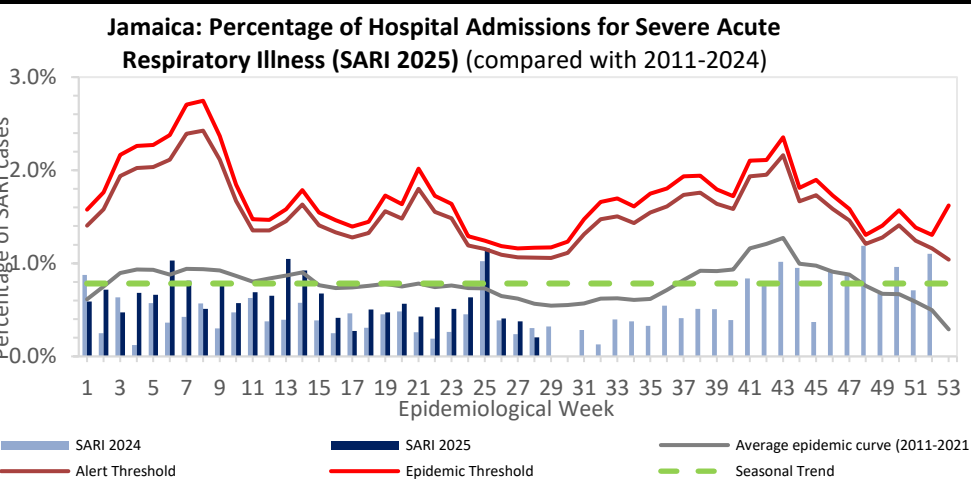
EW 28

	EW 28	YTD
SARI cases	3	264
Total Influenza positive Samples	0	169
Influenza A	0	145
H1N1pdm09	0	78
H3N2	0	67
Not subtyped	0	0
Influenza B	0	24
B lineage not determined	0	0
B Victoria	0	24
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	30



Epi Week Summary

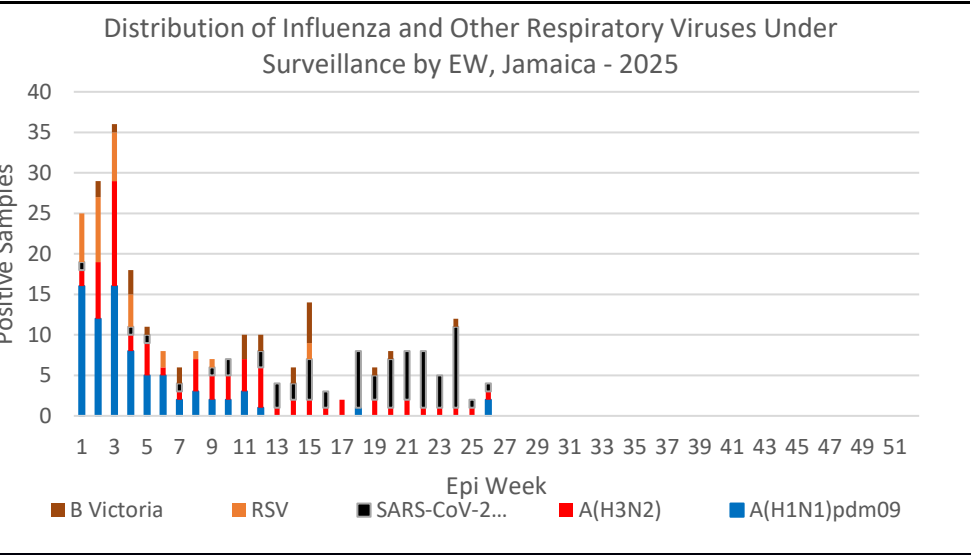
During EW 28, three (3) SARI admissions were reported.



Caribbean Update EW 28

Caribbean: Influenza activity, primarily driven by A(H1N1)pdm09, has increased over recent EW, with a subregional positivity rate of 13.4%. In Haiti, influenza activity continues at epidemic levels. In contrast, activity remains at interseasonal levels in Belize, Cuba, Jamaica and the Dominican Republic. In the Cayman Islands, and Guyana, influenza activity increased compared to the previous EW. RSV circulation is stable across most of the subregion, with a positivity rate of 8.6%. However, Saint Lucia continues to report elevated activity, and Guyana has shown an increase since the last reporting week. In the Dominican Republic, RSV positivity decreased 4.8% compared to the previous EW. SARS-CoV-2 positivity decreased compared to the previous EW, with a subregional positivity rate of 9.1%. Barbados and Guyana reported declining activity, reaching a positivity rate of 16.2% and 4.8% respectively. In Jamaica, SARS-CoV-2 activity continued declining compared to the previous EW, reaching a positivity rate of 2.7%..

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

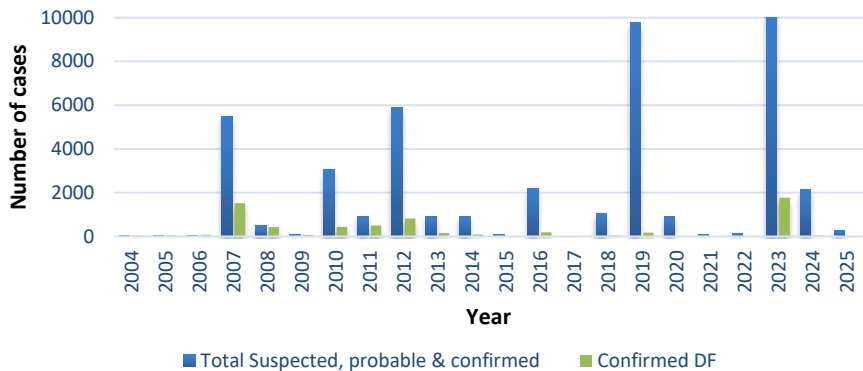


Dengue Bulletin


June 29, 2025 – July 5, 2025 Epidemiological Week 28



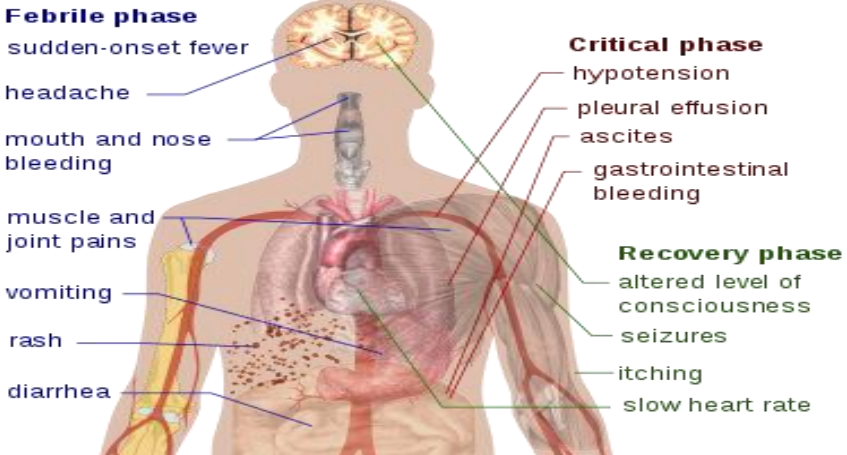
Dengue Cases by Year: 2004-2025, Jamaica



Reported suspected, probable and confirmed dengue with symptom onset in week 28 of 2025

	2025*	
	EW 28	YTD
Total Suspected, Probable & Confirmed Dengue Cases	1	269
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

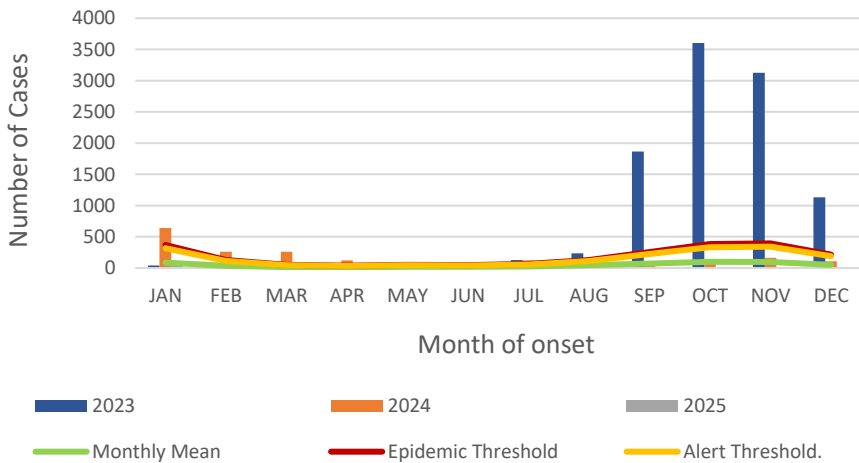
Symptoms of Dengue fever



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at July 24 , 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-O01

Potential years of life lost in Jamaica, 2010 – 2020

Campbell E¹, Harris A¹, Grant A¹, Anderson S¹, Martin-Chen N¹, Webster-Kerr K¹

¹Ministry of Health and Wellness, Jamaica

Aim: To analyze trends in potential years of life lost (PYLL) between 2010 and 2020 in Jamaica.

Methods: National mortality and demographic data were obtained from the Registrar General's Department and Statistical Institute of Jamaica. PYLL was computed as the sum of all deaths at each age multiplied by years of life lost before 75 years per 100,000 population. PYLL was ranked by disease category, calendar year and sex. The relative percentage change was calculated, and chi-square tests used to evaluate trends between 2010 and 2020.

Results: The leading causes of mortality were non-communicable diseases (NCDs; 4,720/100,000), followed by external causes (2,805/100,000). When disaggregated by disease, the highest mean PYLL for 2010-2020 was observed for assault (1,641/100,000) in the overall population and in males (3,086/100,000), versus females (329/100,000). The second-highest PYLL was for human immunodeficiency virus (HIV) overall (547/100,000), and in males (573/100,000). However, HIV was the leading cause of premature death in females (520/100,000), with a significant decrease for both sexes between 2010-2020 (-32%; $p=0.005$). Diabetes had the third-highest PYLL (514/100,000) in the population and in males (553/100,000). It was the second leading cause of premature death in females (509/100,000), with a significant increase in the past decade for both sexes (64%, $p=0.002$). There were significant increases in PYLL from 2010-2020 for NCDs such as hypertensive diseases (91%, $p=0.001$), ischemic heart disease (84%, $p=0.003$) and stroke (44%, $p=0.007$).

Conclusions: This analysis highlights the burden of premature death in Jamaica and suggests that individuals are dying before their life expectancy.



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9 NOTIFICATIONS-
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