

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Travel and Health – Part 1



Travellers may encounter various health risks during travel. The risks can depend on many things, including the health of the traveller, the type of travel, and the destination. Health risks can come from factors such as changes in temperature and humidity, air pollution, issues of safety and security, access to health and dental care services and products, exposure to infectious diseases, access to safe food and water, sanitation and hygiene standards, availability of facilities and equipment for disabled people, and local laws and customs.

International travel can be stressful. Travellers may be away from family and friends and may need to adjust to foreign cultures and languages. Coping with high levels of stress may cause physical, social and psychological problems. Changes to the circadian rhythm (e.g. jet lag) and sleep deprivation can trigger seizures in people with epilepsy, provoke migraine attacks and cause more behavioural symptoms in people living with dementia.

International travel can be stressful. Travellers may be away from family and friends and may need to adjust to foreign cultures and languages. Coping with high levels of stress may cause physical, social and psychological problems. Changes to the circadian rhythm (e.g. jet lag) and sleep deprivation can trigger seizures in people with epilepsy, provoke migraine attacks and cause more behavioural symptoms in people living with dementia.

All individuals planning travel should seek information or advice on potential health risks before they travel. It is important for travellers to understand how best to avoid or minimize these risks, take appropriate preventive measures, and exercise necessary precautions before, during and after travel. Travellers should prepare themselves in several ways before departure. First, it is important to gather information about the potential health risks early in the planning stage. Travellers should also be aware of differences in local laws and customs, including those relating to substance use and sexual relationships.

Travellers should visit a travel clinic, preferably 4–8 weeks before departure or earlier, but it’s useful even if it’s very close to the departure date. There may be additional considerations for certain groups of travellers, including infants and young children, pregnant and breastfeeding women, older people, people with disabilities, and those who have underlying health conditions, including mental, neurological and substance use conditions.

Travellers are strongly advised to obtain comprehensive travel insurance as a matter of routine and to declare any underlying health conditions to their travel insurers. Sufficient medical supplies, including prescribed medications, should be carried to cover the duration of the trip, including possible delays and change of plans. Toiletries should also be carried in sufficient quantity for the entire duration of the trip unless their availability at the travel destination is assured.

Taken from WHO website on 03/October/2024

[https://www.who.int/health-topics/travel-and-health#tab=tab\\_1](https://www.who.int/health-topics/travel-and-health#tab=tab_1)

[https://www.who.int/health-topics/travel-and-health#tab=tab\\_2](https://www.who.int/health-topics/travel-and-health#tab=tab_2)

## EPI WEEK 38



Syndromic Surveillance

Accidents

Violence

Pages 2-4



Class 1 Notifiable Events

Page 5



COVID-19

Page 6



Influenza

Page 7



Dengue Fever

Page 8



Research Paper

Page 9

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 – 35 to 38 of 2024

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
2024													
35	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
36	On Time	late (w)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
37	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
38	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

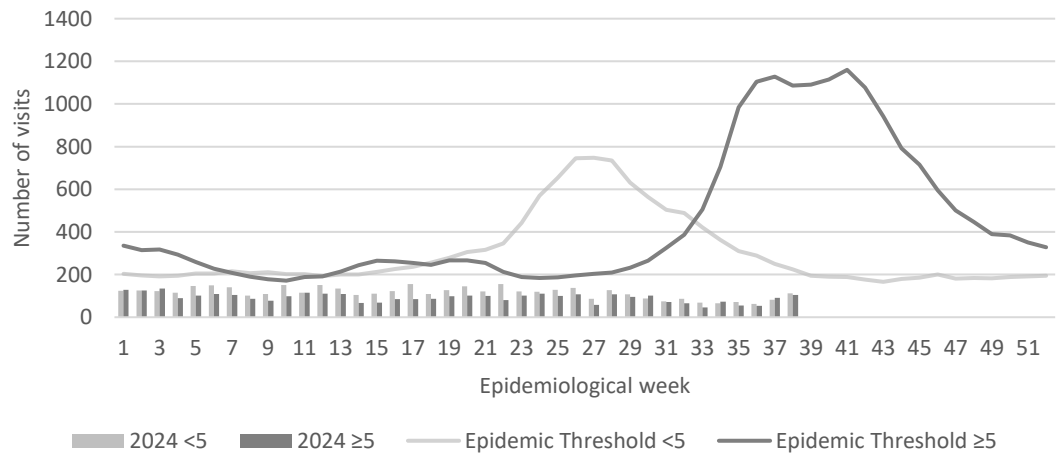
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of >38°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 2024



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



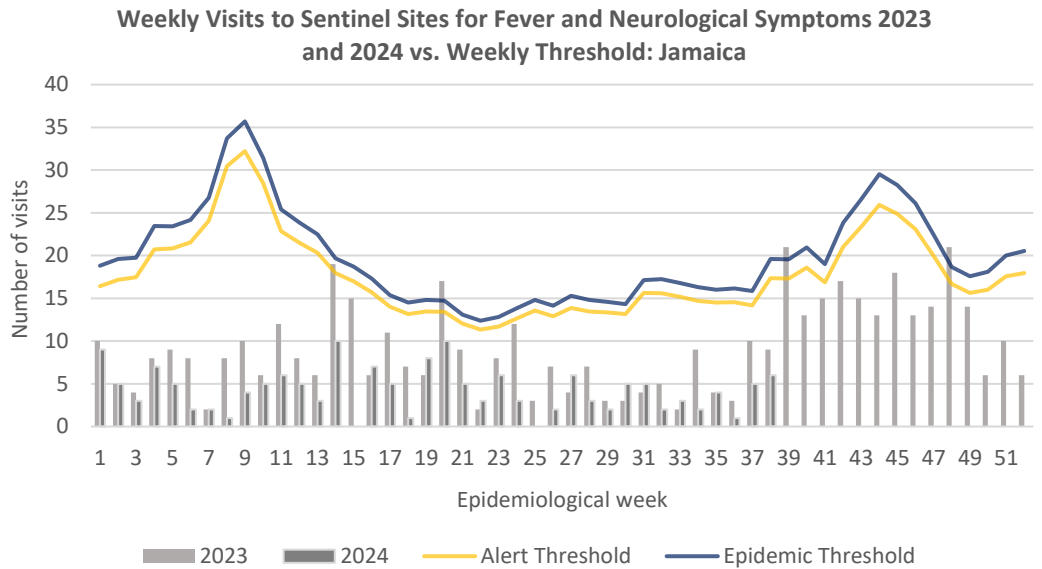
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

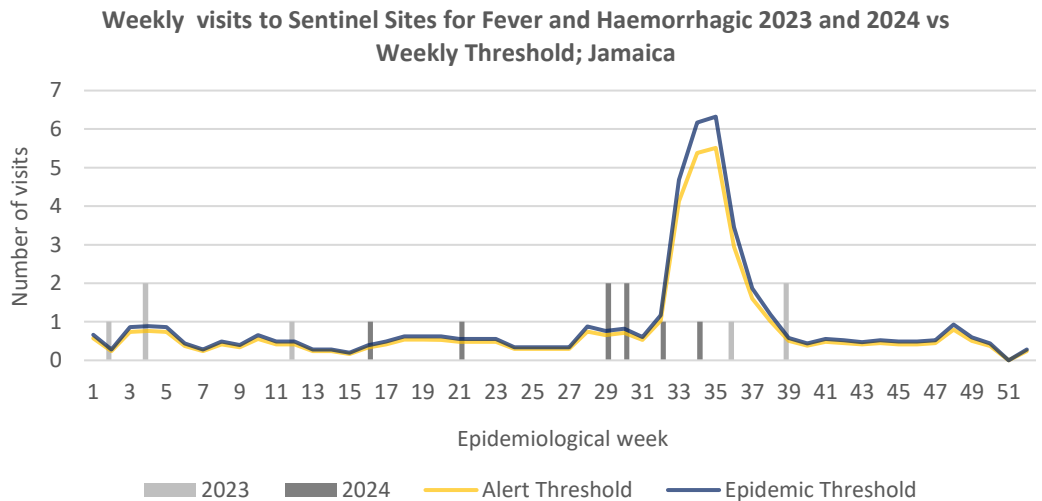
**FEVER AND NEUROLOGICAL**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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**

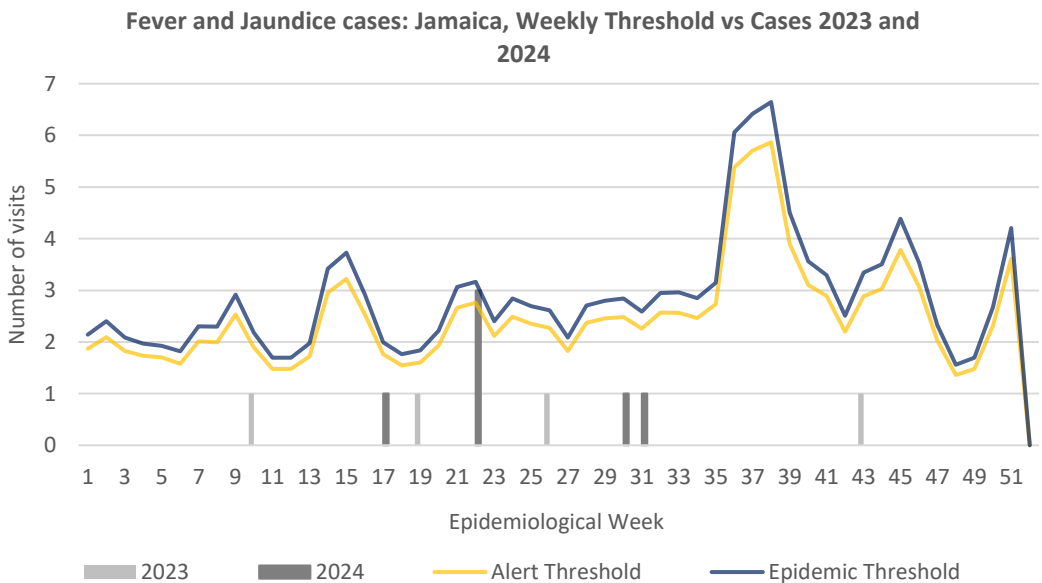
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



**FEVER AND JAUNDICE**

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



**3 NOTIFICATIONS-**  
All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



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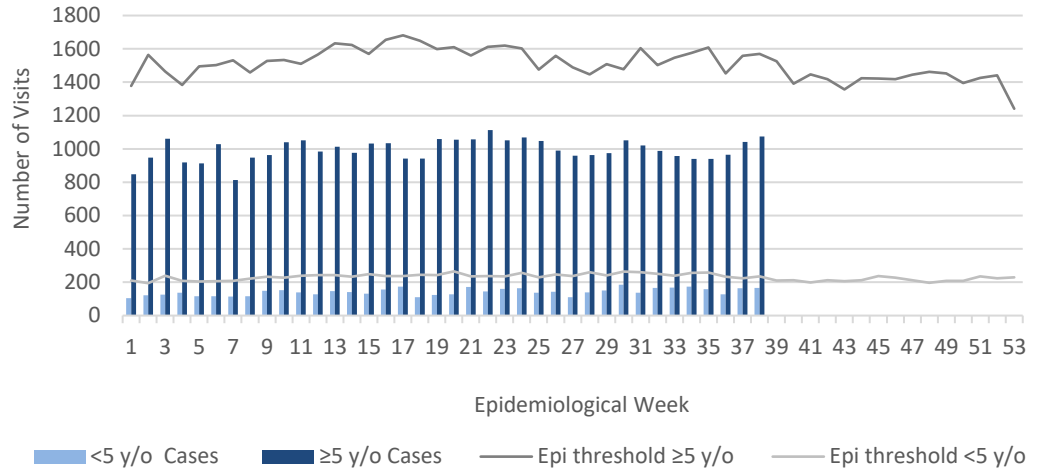


### ACCIDENTS

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



Weekly Visits to Sentinel Sites for Accident by Age Group 2024 vs. Weekly Threshold

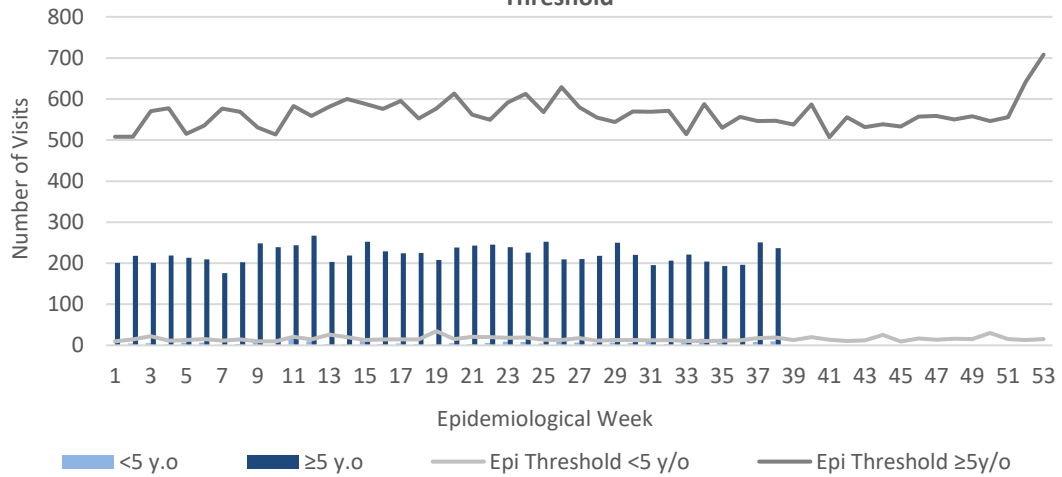


### VIOLENCE

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



Weekly Visits to Sentinel Sites for Violence by Age Groups 2024 vs. Weekly Threshold

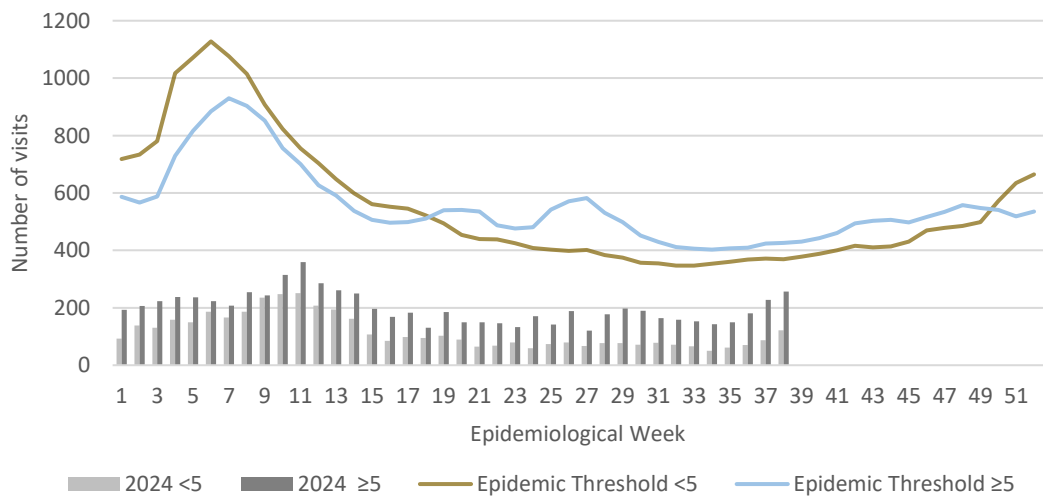


### GASTROENTERITIS

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



Weekly visits to Sentinel Sites for Gastroenteritis All ages 2024 vs Weekly Threshold; Jamaica



4 NOTIFICATIONS- All clinical sites



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CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD <sup>α</sup>		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.	
		CURRENT YEAR 2024	PREVIOUS YEAR 2023		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	206 <sup>β</sup>	278 <sup>β</sup>	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.  <sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;  <sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.	
	Cholera	0	0		
	Severe Dengue <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	651	3656		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	16	50		
	Hepatitis C	3	26		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	2	3		
	Meningitis	9	21		
	Monkeypox	0	3		
EXOTIC/ UNUSUAL	Plague	0	0	<sup>ε</sup> CHIKV IgM positive cases <sup>θ</sup> Zika PCR positive cases  <sup>β</sup> Updates made to prior weeks.	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0		
	Neonatal Tetanus	0	0		
	Typhoid Fever	0	0		
	Meningitis H/Flu	1	2		
SPECIAL PROGRAMMES	AFP/Polio	0	0	<sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths <sup>δ</sup>	44	41		
	Ophthalmia Neonatorum	103	102		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	22	53		
	Yellow Fever	0	0		
	Chikungunya <sup>ε</sup>	0	0		
Zika Virus <sup>θ</sup>	0	0			

NA- Not Available



**5 NOTIFICATIONS-**  
All clinical sites



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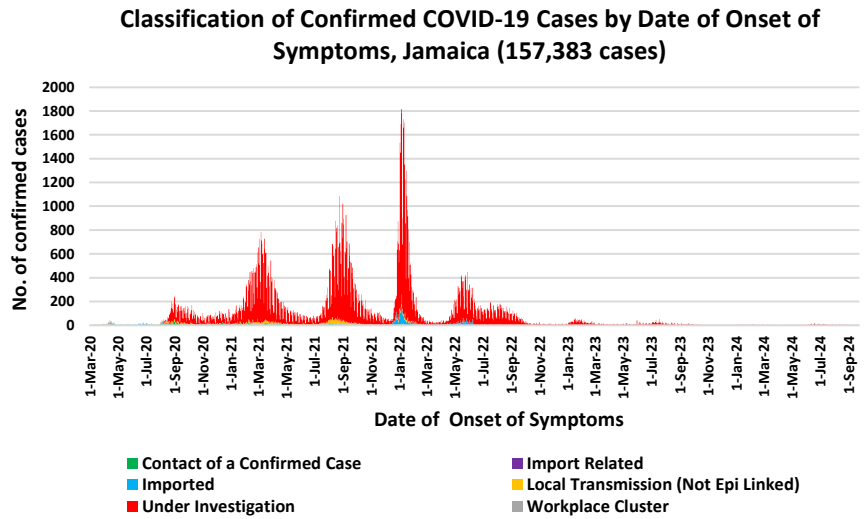


**SENTINEL REPORT-** 78 sites. Automatic reporting

# COVID-19 Surveillance Update

CASES	EW 38	Total
Confirmed	5	157383
Females	2	90685
Males	3	66695
Age Range	2 years to 74 years old	1 day to 108 years

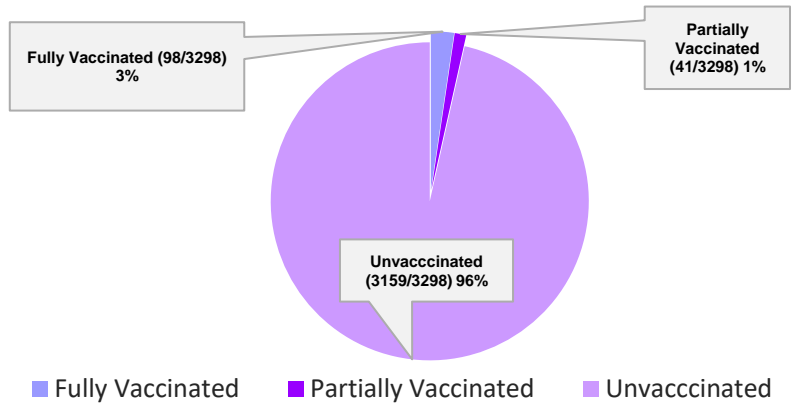
\* 3 positive cases had no gender specification  
 \* PCR or Antigen tests are used to confirm cases  
 \* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



## COVID-19 Outcomes

Outcomes	EW 38	Total
ACTIVE *2 weeks*		17
DIED – COVID Related	0	3862
Died - NON COVID	0	382
Died - Under Investigation	0	151
Recovered and discharged	0	103226
Repatriated	0	93
Total		157383

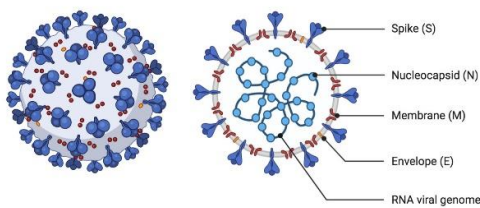
## 3298 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

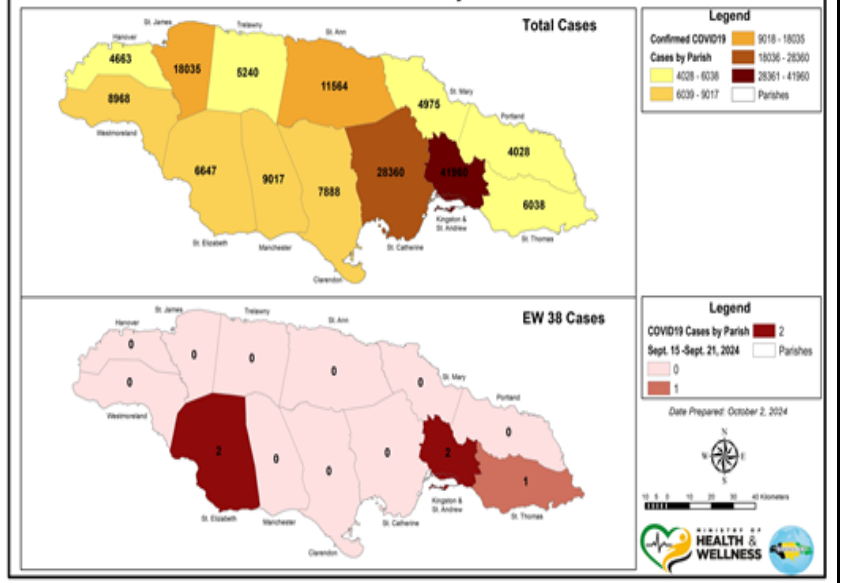
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW 35-38, 2024

Epi Week	Confirmed Cases	Deaths
35	62600	1400
36	63900	1500
37	65700	1300
38	74400	1100
<b>Total (4weeks)</b>	<b>266600</b>	<b>5300</b>

### COVID19 Cases by Parish



6 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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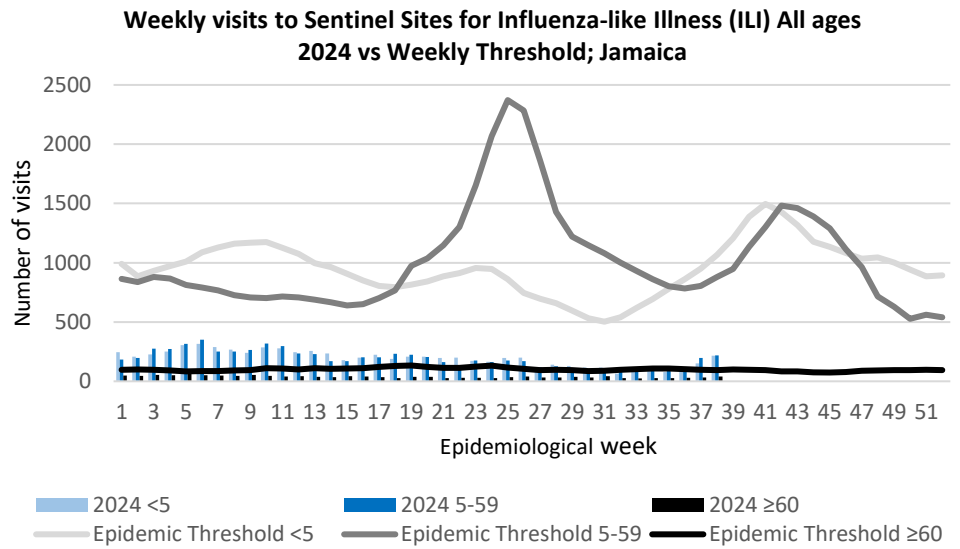
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# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 38

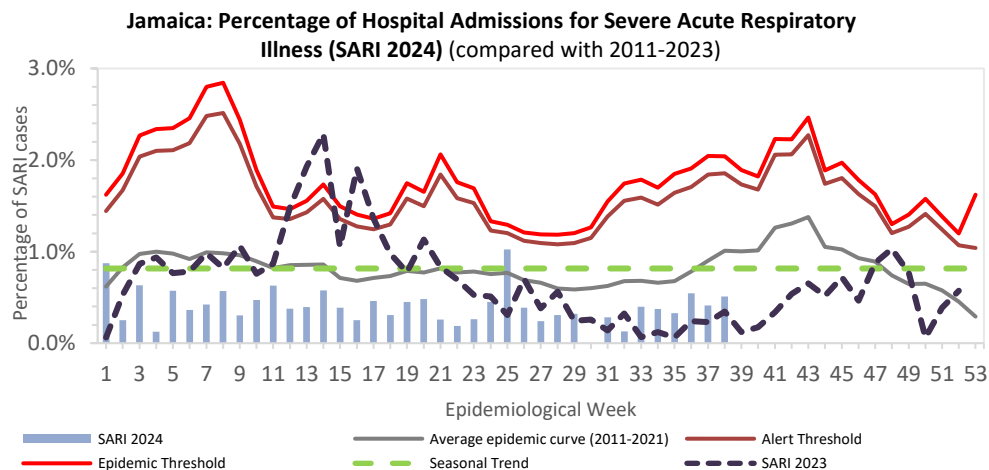
September 15, 2024 – September 21, 2024 Epidemiological Week 38

	EW 38	YTD
SARI cases	8	241
<b>Total Influenza positive Samples</b>	<b>0</b>	<b>143</b>
<b>Influenza A</b>	<b>0</b>	<b>138</b>
H3N2	0	38
H1N1pdm09	0	100
Not subtyped	0	0
<b>Influenza B</b>	<b>0</b>	<b>5</b>
B lineage not determined	0	0
B Victoria	0	5
<b>Parainfluenza</b>	<b>0</b>	<b>0</b>
<b>Adenovirus</b>	<b>0</b>	<b>0</b>
<b>RSV</b>	<b>2</b>	<b>41</b>



## Epi Week Summary

During EW 38, eight (8) SARI admissions were reported.

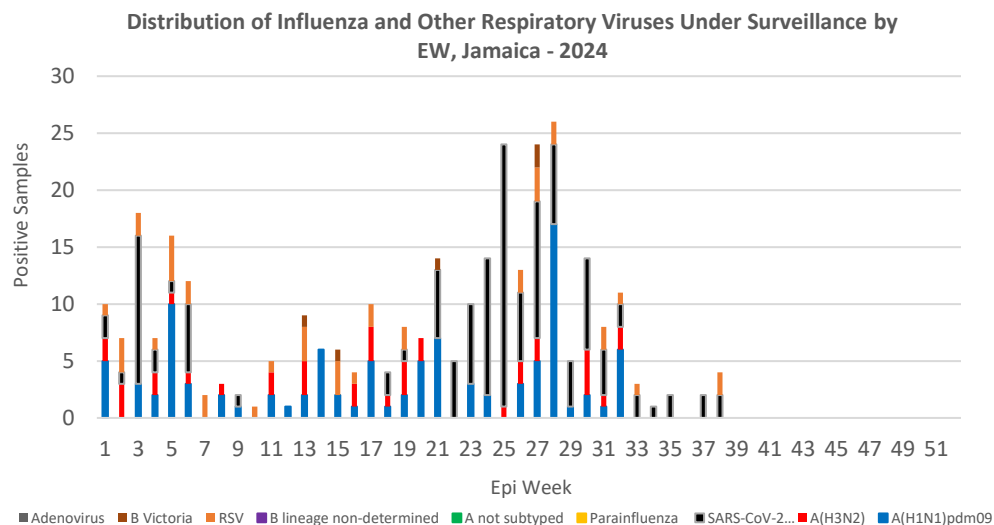


## Caribbean Update EW 38

**Caribbean:** ILI cases have maintained a declining trend associated with a higher proportion of positive influenza cases. SARI cases have remained low, with most positive cases associated with SARS-CoV-2. Influenza activity has shown a slight increase over the last EW, with A(H3N2) being predominant, followed by A(H1N1)pdm09. RSV activity has remained low and SARS-CoV-2 activity remains high compared to previous waves, though with a declining trend.

**By country:** In the last four EW, influenza activity has been observed in Belize, the Dominican Republic, Suriname, the Cayman Islands and Guyana. Additionally, SARS-CoV-2 activity has been recorded in Haiti, Jamaica, Saint Lucia Suriname, Barbados, the Cayman Islands, Guyana, and Saint Vincent and the Grenadines. RSV activity has also been detected in the Dominican Republic and Guyana.

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



7 NOTIFICATIONS- All clinical sites



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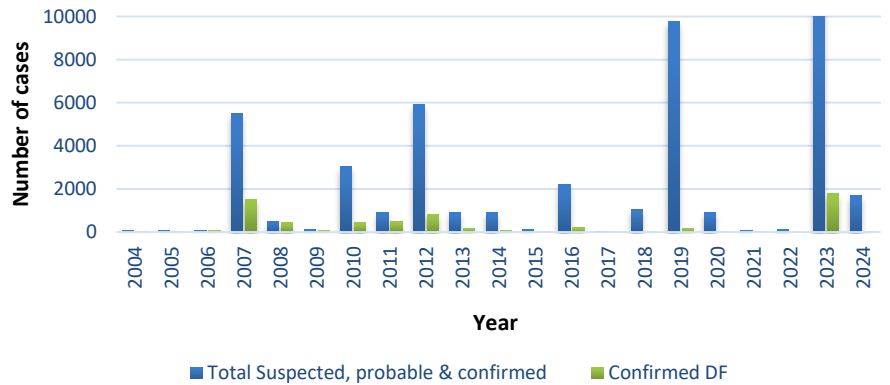
# Dengue Bulletin

September 15, 2024 – September 21, 2024 Epidemiological Week 38

Epidemiological Week 38



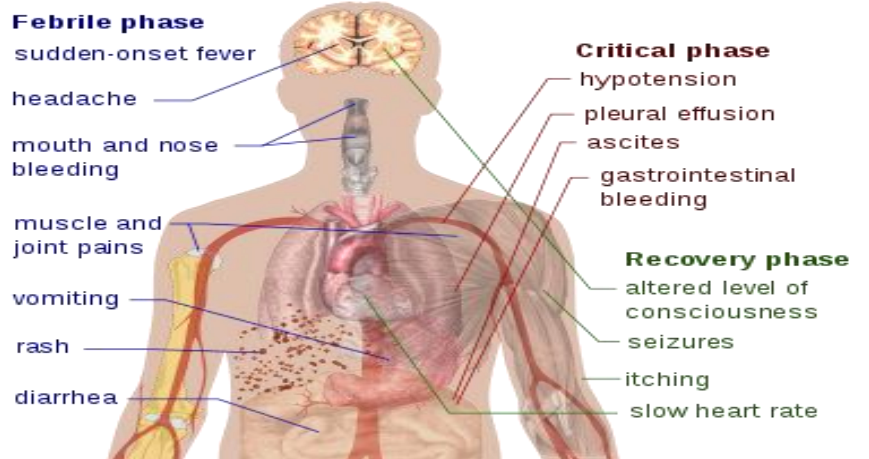
Dengue Cases by Year: 2004-2024, Jamaica



## Reported suspected, probable and confirmed dengue with symptom onset in week 38 of 2024

	2024*	
	EW 38	YTD
Total Suspected, Probable & Confirmed Dengue Cases	4	1703
Lab Confirmed Dengue cases	0	41
CONFIRMED Dengue Related Deaths	0	2

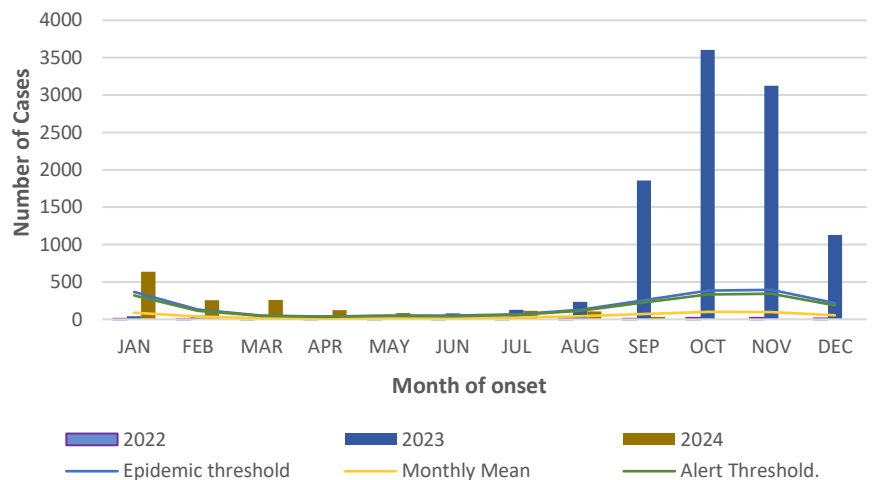
## Symptoms of Dengue fever



### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at October 2, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected, probable and confirmed dengue cases for 2022 - 2024 versus monthly mean, alert, and epidemic thresholds (2007-2022)



8 NOTIFICATIONS- All clinical sites



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# RESEARCH PAPER

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## Abstract

### Social Support and Risk for Cognitive Impairment among Community-Dwelling Older Persons in Jamaica

Donaldson-Davis, K<sup>1</sup>, Willie-Tyndale, D<sup>1</sup>, Edwards, T<sup>1</sup>, McKoy-Davis J<sup>1</sup>, Chin-Bailey C<sup>2</sup>, James, K<sup>2</sup>, Eldemire-Shearer, D<sup>1</sup>

<sup>1</sup>Mona Ageing and Wellness Centre, University of the West Indies, Mona, Jamaica, <sup>2</sup>Department of Community Health and Psychiatry, University of the West Indies, Mona, Jamaica

**Objective:** To describe social support among older Jamaicans by Mini-Mental Status Examination (MMSE) scores.

**Methods:** A nationally representative survey was conducted in 2012 among persons  $\geq 60$  years ( $n = 2,943$ ). MMSE scores were available for 2,782 participants. Number of children alive, quality of relationship with children, source of main physical and emotional support, caregiver presence and number of visiting contacts were used as indicators of social support. MMSE scores  $<20$  were categorized as low. Logistic regression, incorporating demographic and support variables, was used to identify factors associated with low MMSE scores.

**Results:** One-tenth of persons with low MMSE scores had no children and 8.9% of persons with low scores rated relationships with their children as poor or non-existent. The plurality of persons considered themselves their main physical and emotional support. Seventy-three percent of persons with low scores had no caregiver. Older age, female gender and  $\leq$  primary education level were associated with low MMSE scores. High quality relationships with children were less likely among the lower MMSE score category [OR 0.69, 95% CI: 0.517 – 0.919]. Persons with caregivers were more likely to be in the lower score category [OR 2.2, 95% CI: 1.6 – 3.1].

**Conclusion:** Low MMSE scores are associated with increased risk of cognitive impairment. Many community-dwelling older persons at risk for cognitive impairment lack adequate social support. Persons with low MMSE scores should receive close clinical surveillance, and be prioritized for community based social support interventions. Programmes incentivizing caregiving could benefit cognitively impaired older persons.



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9 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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