

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Mental Health



Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in. Mental health is a basic human right. And it is crucial to personal, community and socio-economic development.

### Concepts in mental health

Mental health is more than the absence of mental disorders. It exists on a complex continuum, which is experienced differently from one person to the next, with varying degrees of difficulty and distress and potentially very different social and clinical outcomes. Mental health conditions include mental disorders and psychosocial disabilities as well as other mental states associated with significant distress, impairment in functioning, or risk of self-harm. People with mental health conditions are more likely to experience lower levels of mental well-being, but this is not always or necessarily the case.

### Determinants of mental health

Throughout our lives, multiple individual, social and structural determinants may combine to protect or undermine our mental health and shift our position on the mental health continuum. Individual psychological and biological factors such as emotional skills, substance use and genetics can make people more vulnerable to mental health problems.

Exposure to unfavourable social, economic, geopolitical and environmental circumstances – including poverty, violence, inequality and environmental deprivation – also increases people's risk of experiencing mental health conditions.

Risks can manifest themselves at all stages of life, but those that occur during developmentally sensitive periods, especially early childhood, are particularly detrimental. For example, harsh parenting and physical punishment is known to undermine child health and bullying is a leading risk factor for mental health conditions.

<https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>

## EPI WEEK 01



Syndromic Surveillance

Accidents

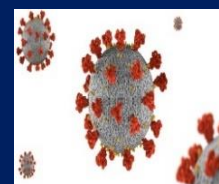
Violence

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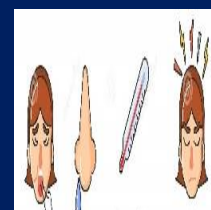
Class 1 Notifiable Events

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COVID-19

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Dengue Fever

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Research Paper

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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 - 50, 2023 to 1 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
2023 - 2024													
50	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
51	On Time	On Time	On Time	Late (W)	On Time	Late (W)	Late (W)	Late (W)	Late (W)	On Time	Late (W)	Late (W)	Late (W)
52	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time
1	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

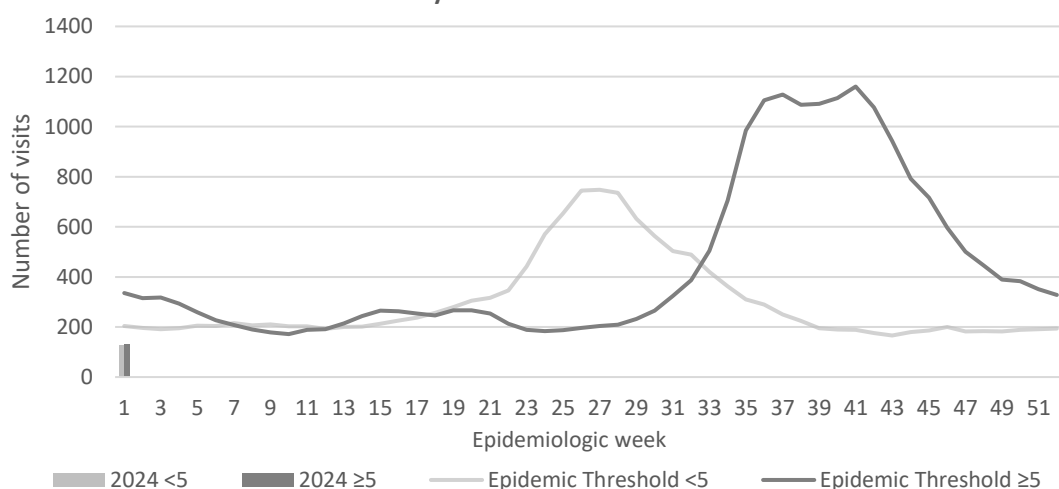
## REPORTS FOR SYNDROMIC SURVEILLANCE

## UNDIFFERENTIATED FEVER

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



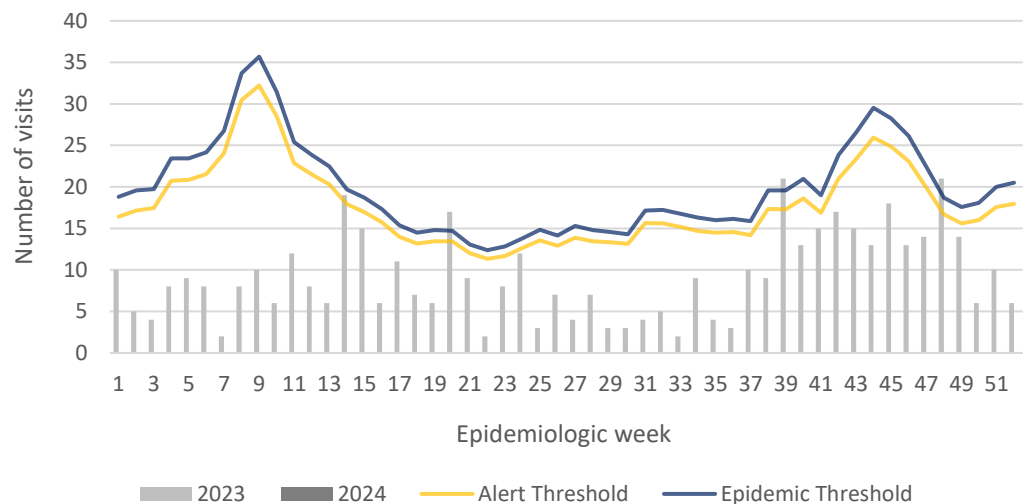
SENTINEL REPORT- 78 sites. Automatic reporting

**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).



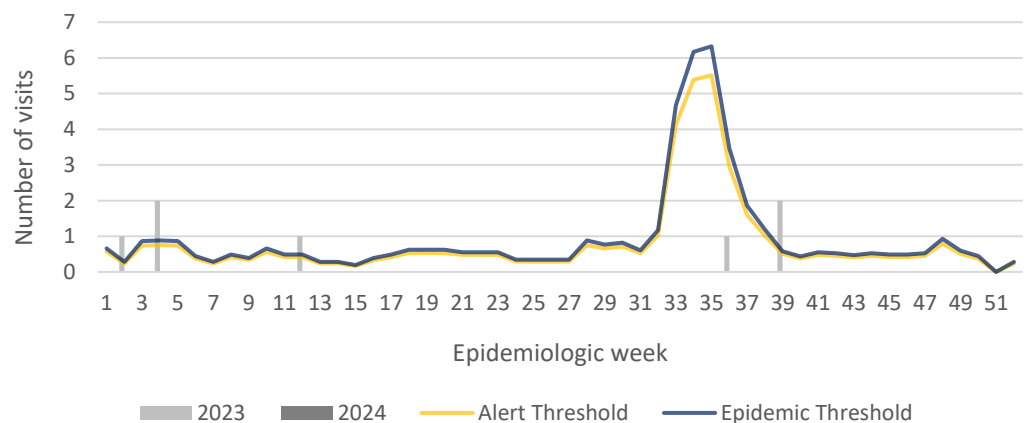
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms  
2023 and 2024 vs. Weekly Threshold: Jamaica**

**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.



**Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2023 and 2024 vs Weekly Threshold; Jamaica**

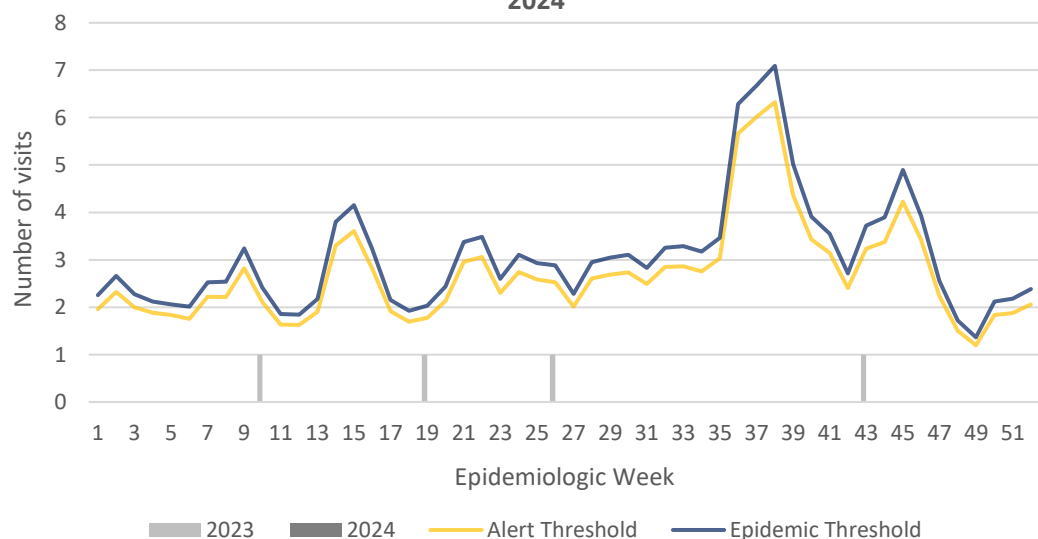
**FEVER AND JAUNDICE**

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.



**Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2023 and 2024**



**3 NOTIFICATIONS-**  
All clinical  
sites



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



**HOSPITAL  
ACTIVE  
SURVEILLANCE-**  
30 sites. Actively  
pursued



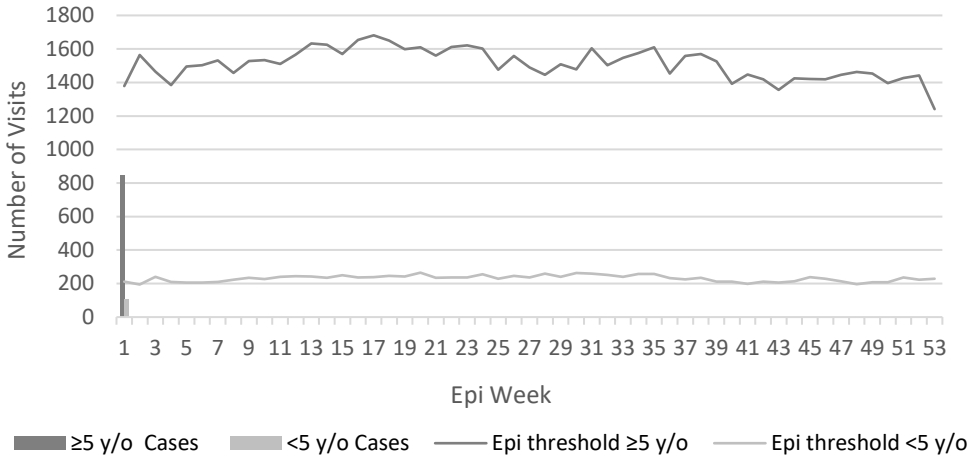
**SENTINEL  
REPORT-** 78 sites.  
Automatic reporting

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

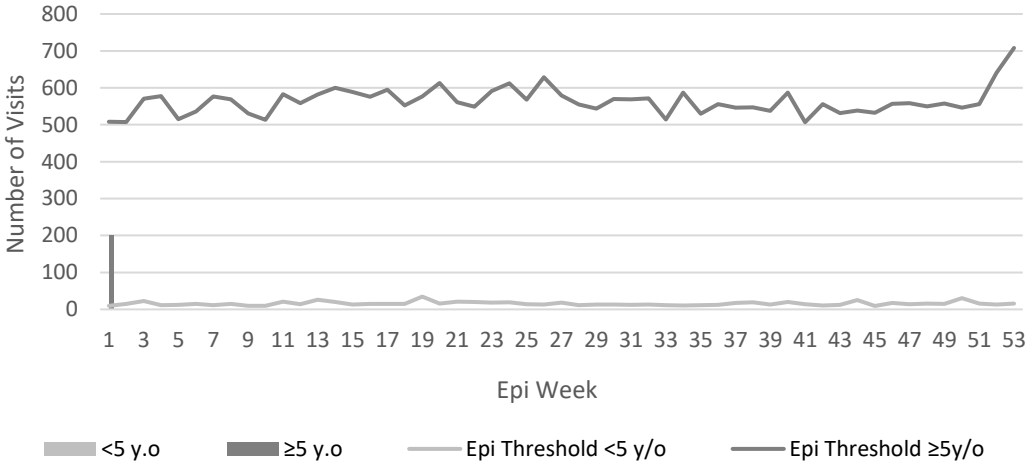


VIOLENCE

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

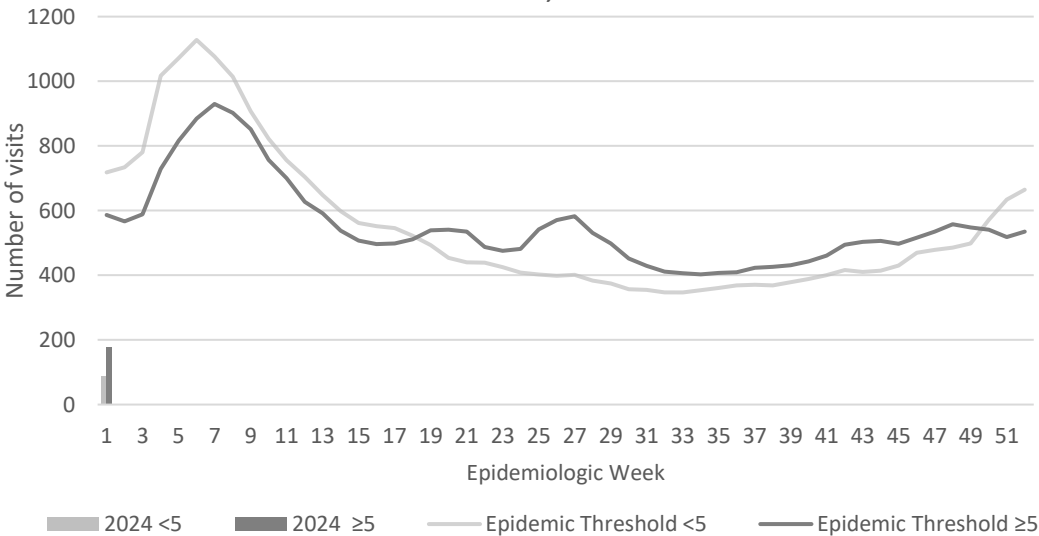


GASTROENTERITIS

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



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

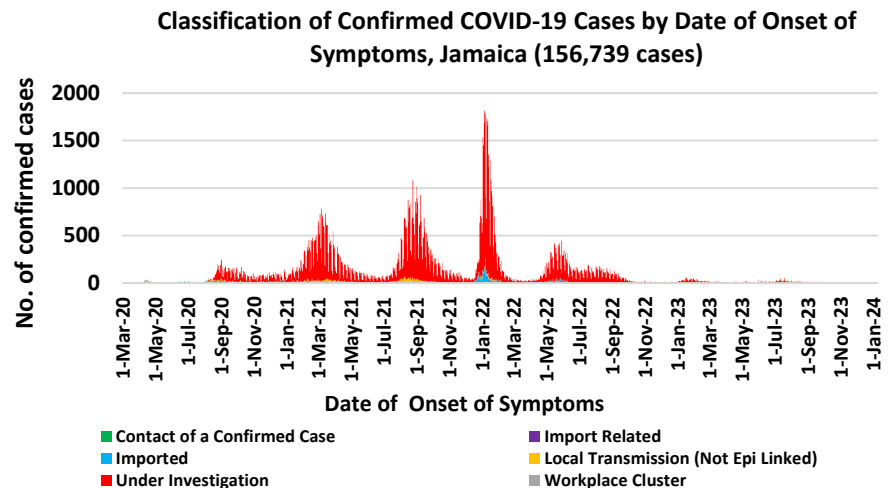
CLASS ONE NOTIFIABLE EVENTS					Comments	
			Confirmed YTD <sup>α</sup>		AFP Field Guides from WHO indicate that for an effective surveillance system, detection rates for AFP should be 1/100,000 population under 15 years old (6 to 7) cases annually.	
	CLASS 1 EVENTS		CURRENT YEAR 2024	PREVIOUS YEAR 2023		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		3	8 <sup>β</sup>	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.	
	Cholera		0	0		
	Dengue Hemorrhagic Fever <sup>γ</sup>		See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)		11	113	<sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;	
	Hansen’s Disease (Leprosy)		0	0		
	Hepatitis B		0	0		
	Hepatitis C		0	0		
	HIV/AIDS		NA	NA		
	Malaria (Imported)		0	0		
	Meningitis		0	1		<sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.
	Monkeypox		0	0		
Plague		0	0			
EXOTIC/ UNUSUAL					<sup>ε</sup> CHIKV IgM positive cases <sup>θ</sup> Zika PCR positive cases	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0		<sup>β</sup> Updates made to prior weeks.
	Neonatal Tetanus		0	0		
	Typhoid Fever		0	0		
	Meningitis H/Flu		0	0		
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>		2	1		
	Ophthalmia Neonatorum		1	0		
	Pertussis-like syndrome		0	0		
	Rheumatic Fever		0	0		
	Tetanus		0	0		
	Tuberculosis		0	0		
	Yellow Fever		0	0		
	Chikungunya <sup>ε</sup>		0	0	NA- Not Available	
	Zika Virus <sup>θ</sup>		0	0		



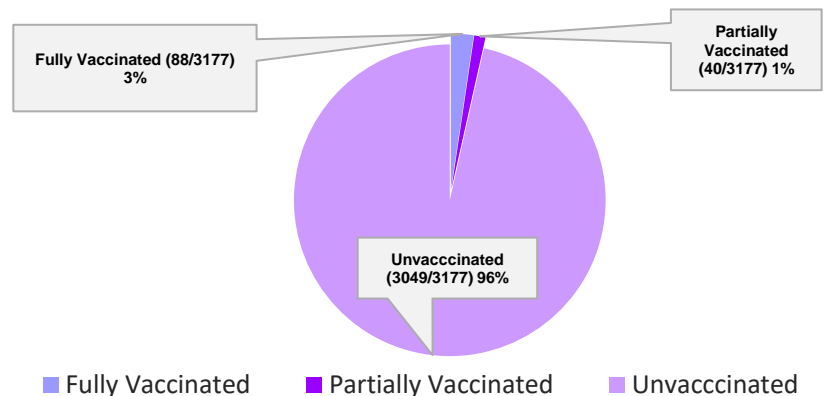
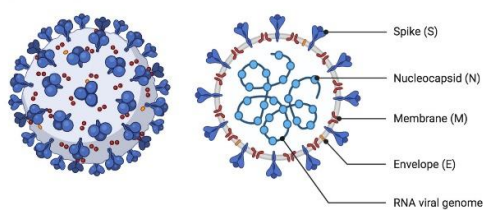
**COVID-19 Surveillance Update**

March 10, 2020 – EW 01, 2024

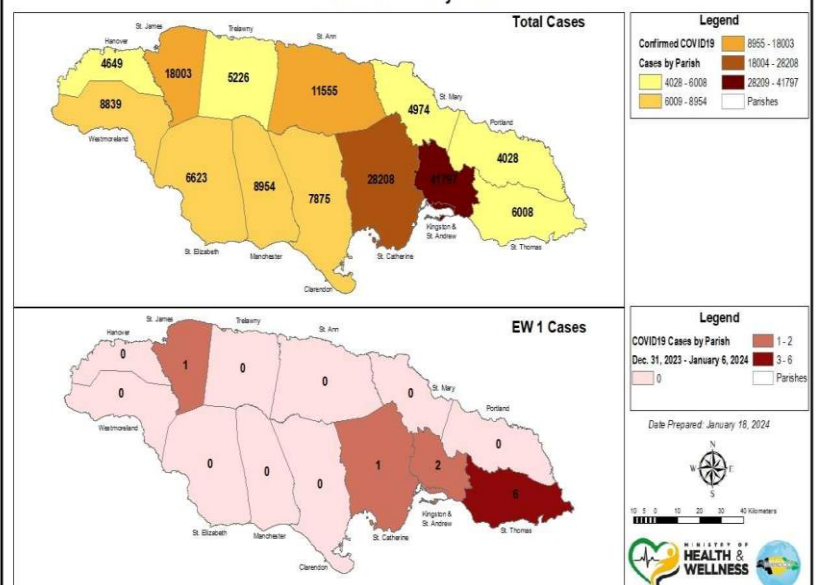
CASES	EW 01	Total
Confirmed	10	156739
Females	8	90333
Males	2	66403
Age Range	6 months old to 86 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		

**COVID-19 Outcomes**

Outcomes	EW 01	Total
ACTIVE *2 weeks*		10
DIED – COVID Related	0	3739
Died - NON COVID	0	349
Died - Under Investigation	0	259
Recovered and discharged	0	103226
Repatriated	0	93
Total		156739
*Vaccination programme March 2021 – YTD * Total as at current Epi week		

**3177 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 50,2023-EW 1,2024**

Epi Week	Confirmed Cases	Deaths
50	381,700	3200
51	352,800	2700
52	252,400	2000
1	126,900	828
Total (4weeks)	1,113,800	8,728

**COVID19 Cases by Parish**

**6 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

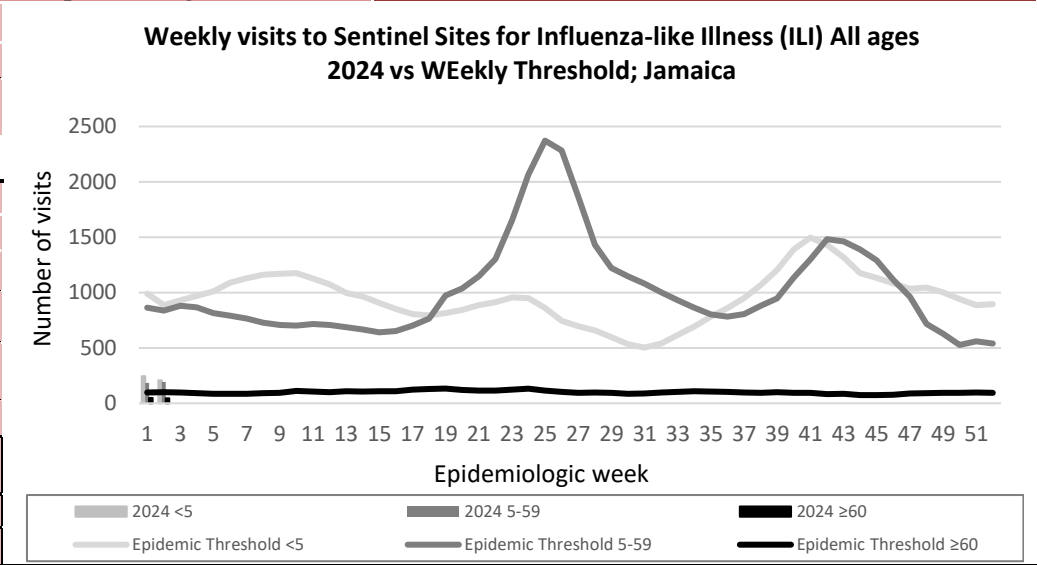
NATIONAL SURVEILLANCE UNIT

INFLUENZA REPORT

December 31, 2023 – January 06, 2024 Epidemiological Week 01

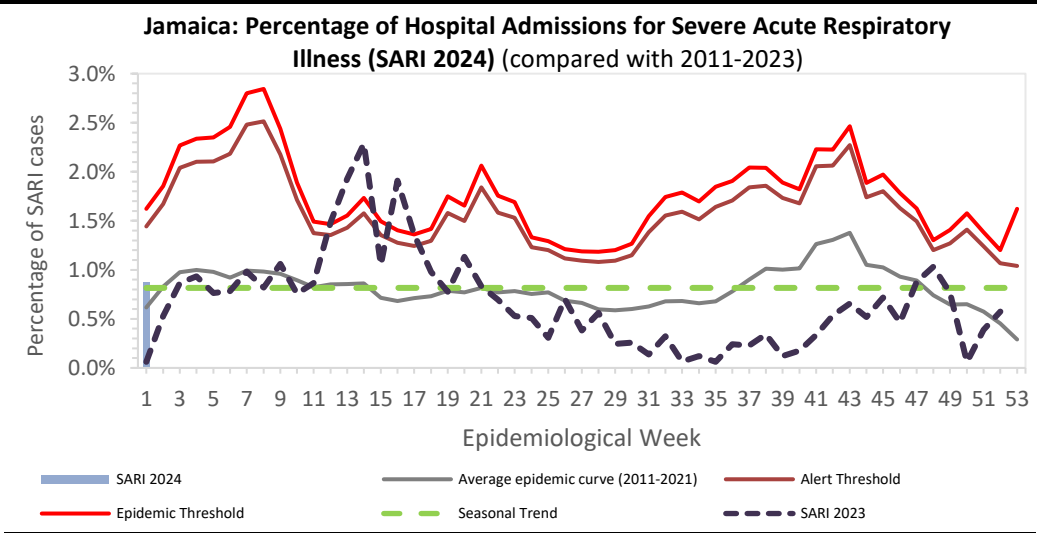
EW 1

	EW 01	YTD
SARI cases	13	13
Total Influenza positive Samples	2	2
Influenza A	2	2
H3N2	0	0
H1N1pdm09	2	2
Not subtyped	0	0
Influenza B	0	0
B lineage not determined	0	0
B Victoria	0	0
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	0



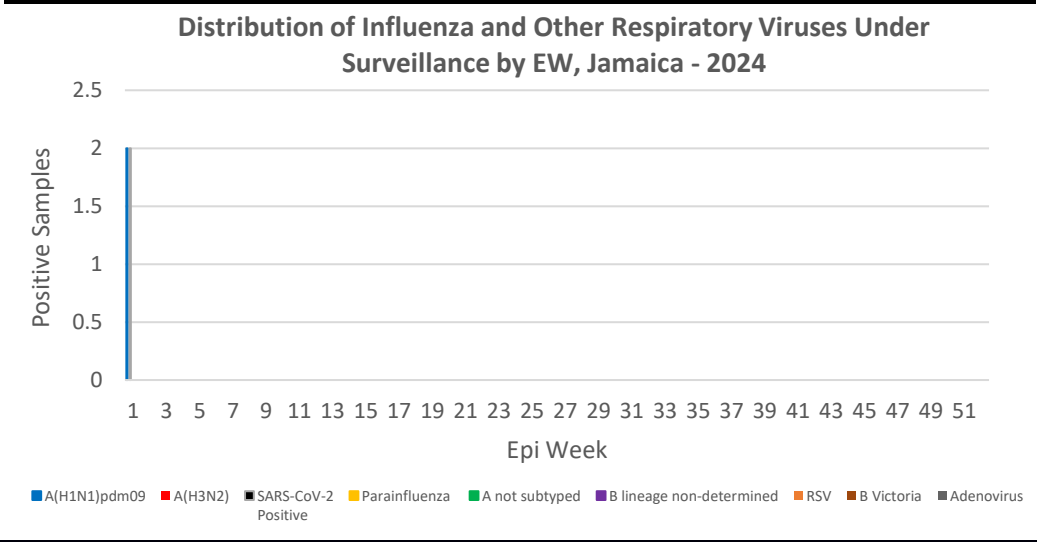
**Epi Week Summary**

During EW 01, thirteen (13) SARI admissions were reported.



**Caribbean Update EW 1**

**Caribbean:** Influenza activity has fluctuated at moderate levels over the last four EWs. During this period, the predominant viruses have been influenza A(H1N1)pdm09, followed by influenza A(H3N2) and, to a lesser extent, influenza B/Victoria.. Haiti continues to experience epidemic SARI activity in the last four EWs, with epidemic positivity rates for influenza and a decrease in SARS-CoV-2 to low levels in the last EW. In Jamaica, SARS-CoV-2 activity has slightly increased, accompanied by a pronounced rise in RSV activity in the last four EWs, with epidemic levels of pneumonia and acute respiratory infection. Saint Lucia continues to experience high levels of SARS-CoV-2 activity and an increase in RSV and influenza activity, with declining SARI activity above the moderate activity threshold. In Barbados, influenza activity remains at intermediate and rising levels, RSV activity remains at intermediate levels and has decreased in the last three EWs, while SARS-CoV-2 activity continues to decrease at low levels.



Dengue Bulletin

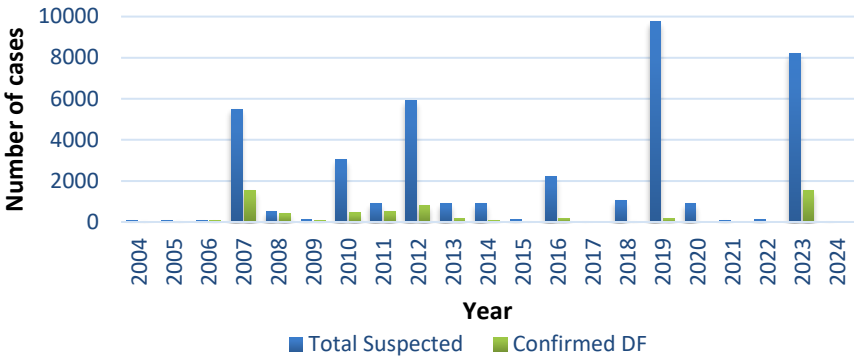
December 31, 2023 – January 06, 2024

Epidemiological Week 01


Epidemiological Week 01



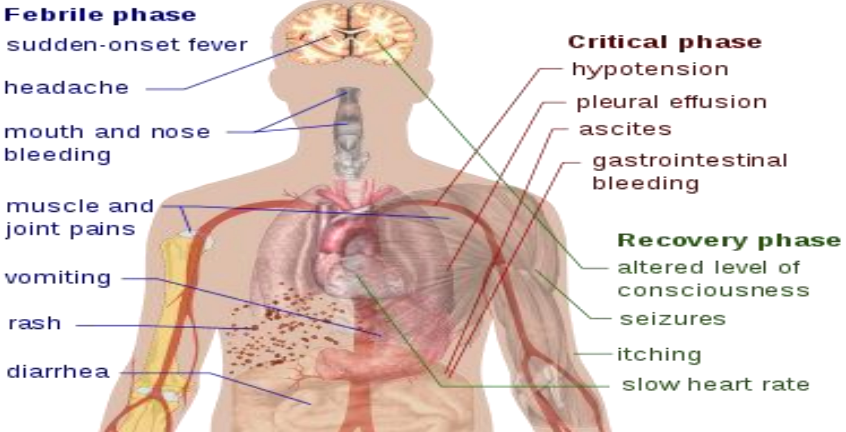
Dengue Cases by Year: 2004-2024, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 01 of 2024

	2024*	
	EW 01	YTD
 Total Suspected & Confirmed Dengue Cases	33	33
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

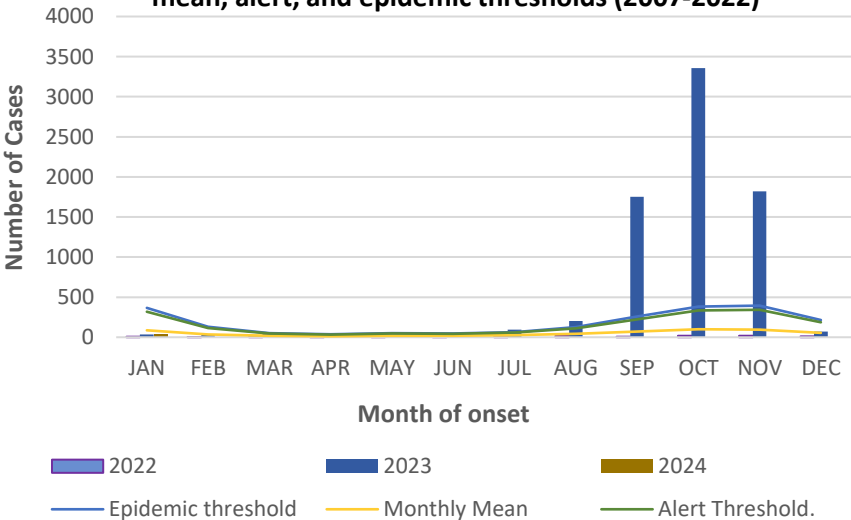
Symptoms of Dengue fever



Points to note:

- \*Figure as at January 17, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

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





# RESEARCH PAPER

## Abstract

### Risk Factors Associated with Glaucoma and Cataract among Patients Attending an Eye Clinic in Jamaica

Deborah Dietrich<sup>1</sup>, Kenneth James<sup>2</sup>, Donald Cameron-Swab<sup>3</sup>, Paul Singh<sup>1</sup>, Marsha-Lyn McKoy<sup>1</sup>

<sup>1</sup>Department of Basic Medical Sciences, Pharmacology Section, The University of the West Indies, Mona, Kingston 7, Jamaica.

<sup>2</sup>Department of Community Health and Psychiatry, The University of the West Indies, Mona, Kingston 7, Jamaica.

<sup>3</sup>Department of Ophthalmology, University Hospital of the West Indies, Mona, Kingston 7, Jamaica.

## Objectives:

To determine association between demographic, medical and social variables and glaucoma and cataract in a Jamaican patient population.

## Methods:

A descriptive cross-sectional study was done at the University Hospital of the West Indies Eye Clinic, where data was extracted from 370 randomly selected files of patients who attended the clinic between January and March 2017. Data extracted included demographic data and patient medical history. Ethical approval was obtained from the UHWI/UWI/FMS Ethics Committee. Statistical analyses were performed using SPSS Statistics software. To determine association between variables, Chi-squared tests and Spearman's correlation analyses were done,  $p < 0.05$  indicating statistical significance.

## Results:

Glaucoma (45.4%) and cataract (33.8%) were the most frequently reported chronic ocular diseases, and the cases increased with age ( $p < 0.001$ ). More females than males presented with glaucoma and cataract. Statistically significant associations were found between glaucoma and a patient history of cataract or pterygium ( $p < 0.007$ ); while cataract was significantly associated with a patient history of physical trauma or retinopathy ( $p < 0.047$ ). In relation to coexisting non-ocular conditions, cataract was significantly associated with hypertension, diabetes mellitus and hypercholesterolemia ( $p < 0.001$ ); while glaucoma was associated with hypertension ( $p < 0.001$ ). Family histories of hypertension, sickle cell disease, glaucoma or blindness were significantly associated with the presence of glaucoma ( $p < 0.05$ ), but not with cataract ( $p > 0.1$ ). Glaucoma and cataract were not significantly associated with alcohol drinking or smoking.

**Conclusion:** A significant association was found between presence of glaucoma and presence of cataract. Hypertension was significantly associated with glaucoma and cataract; higher frequencies being associated with glaucoma and cataract.



The Ministry of Health and Wellness  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: surveillance@moh.gov.jm



9 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  
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