

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Road traffic injuries



Road traffic injuries cause considerable economic losses to individuals, their families, and to nations as a whole. These losses arise from the cost of treatment as well as lost productivity for those

killed or disabled by their injuries, and for family members who need to take time off work or school to care for the injured. Road traffic crashes cost most countries 3% of their gross domestic product.

Speeding

- An increase in average speed is directly related both to the likelihood of a crash occurring and to the severity of the consequences of the crash. For example, every 1% increase in mean speed produces a 4% increase in the fatal crash risk and a 3% increase in the serious crash risk.
- The risk of death for pedestrians hit by car fronts rises rapidly (4.5 times from 50 km/h to 65 km/h).
- In car-to-car side impacts the fatality risk for car occupants is 85% at 65 km/h.

Driving under the influence of alcohol and other psychoactive substances

- Driving under the influence of alcohol and any psychoactive substance or drug increases the risk of a crash that results in death or serious injuries.
- In the case of drink-driving, the risk of a road traffic crash starts at low levels of blood alcohol concentration (BAC) and increases significantly when the driver's BAC is ≥ 0.04 g/dl.
- In the case of drug-driving, the risk of incurring a road traffic crash is increased to differing degrees depending on the psychoactive drug used. For example, the risk of a fatal crash occurring among those who have used amphetamines is about 5 times the risk of someone who hasn't.

Distracted driving

There are many types of distractions that can lead to impaired driving. The distraction caused by mobile phones is a growing concern for road safety.

<https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>

EPI WEEK 50



Syndromic Surveillance

Accidents

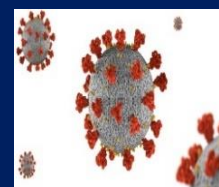
Violence

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Class 1 Notifiable Events

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Dengue Fever

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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 - 47 to 50 of 2023

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													
47	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
48	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
49	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
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

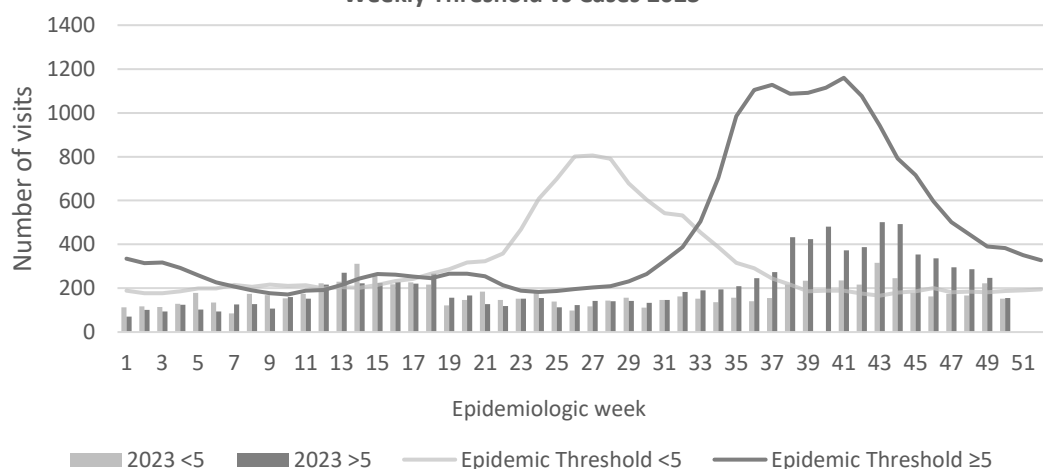
REPORTS FOR SYNDROMIC SURVEILLANCE

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 2023



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



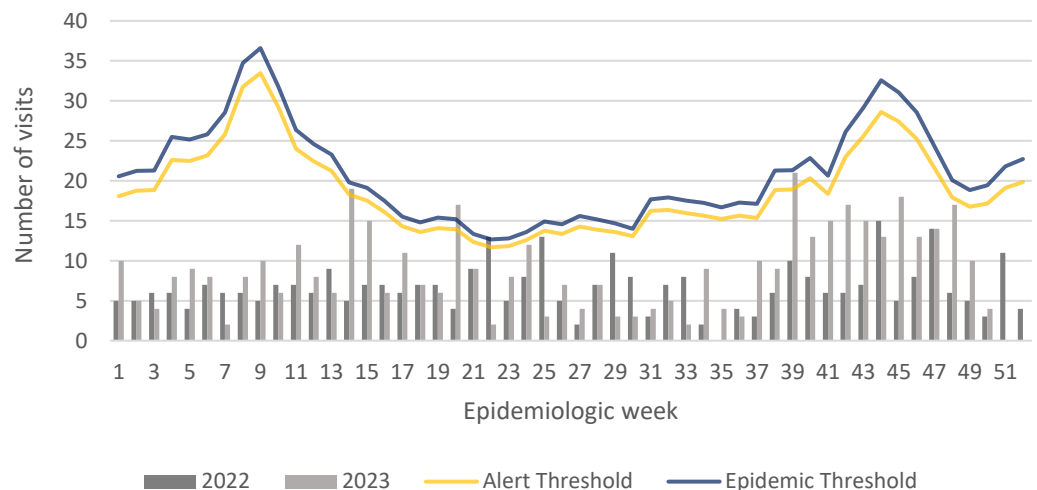
SENTINEL REPORT- 78 sites. Automatic reporting

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).



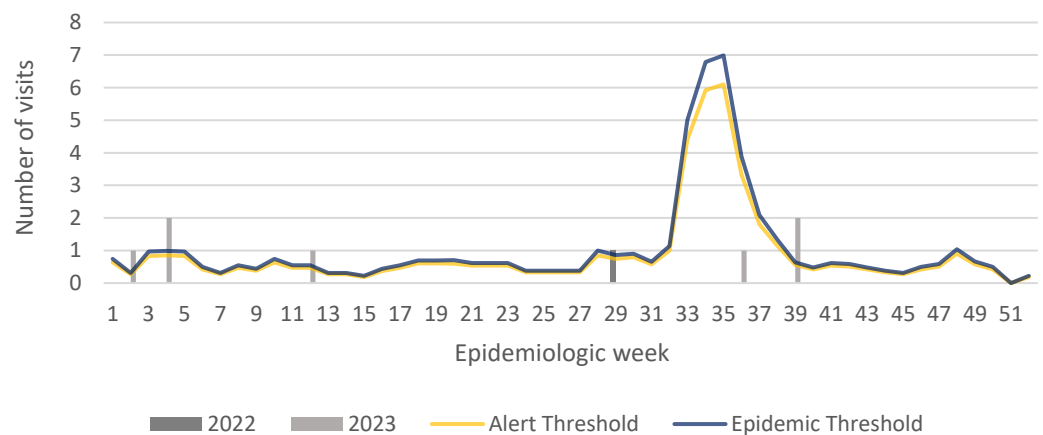
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms
2022 and 2023 vs. Weekly Threshold: Jamaica**

**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 2022 and 2023 vs Weekly Threshold; Jamaica

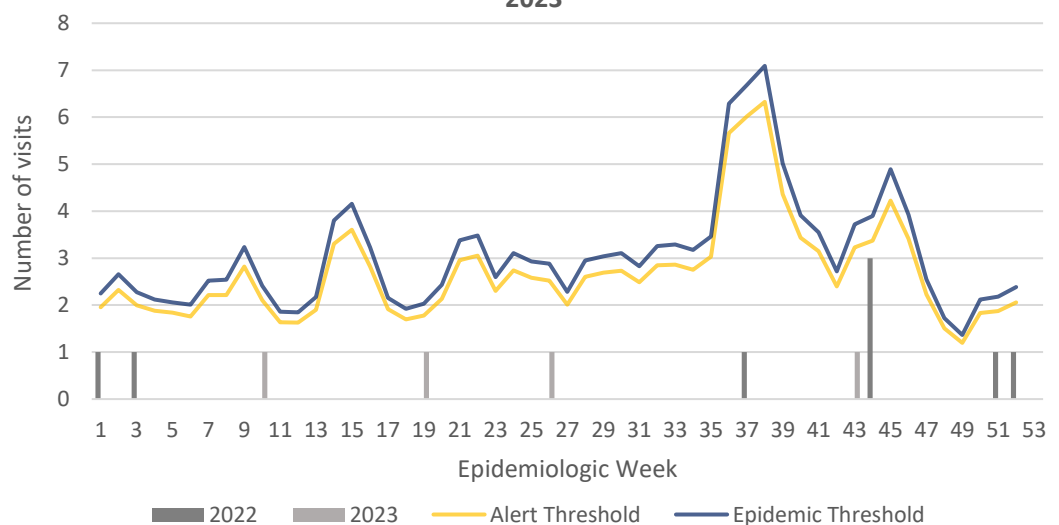
**FEVER AND JAUNDICE**

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.



Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2022 and 2023



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NOTIFICATIONS-
All clinical
sites



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



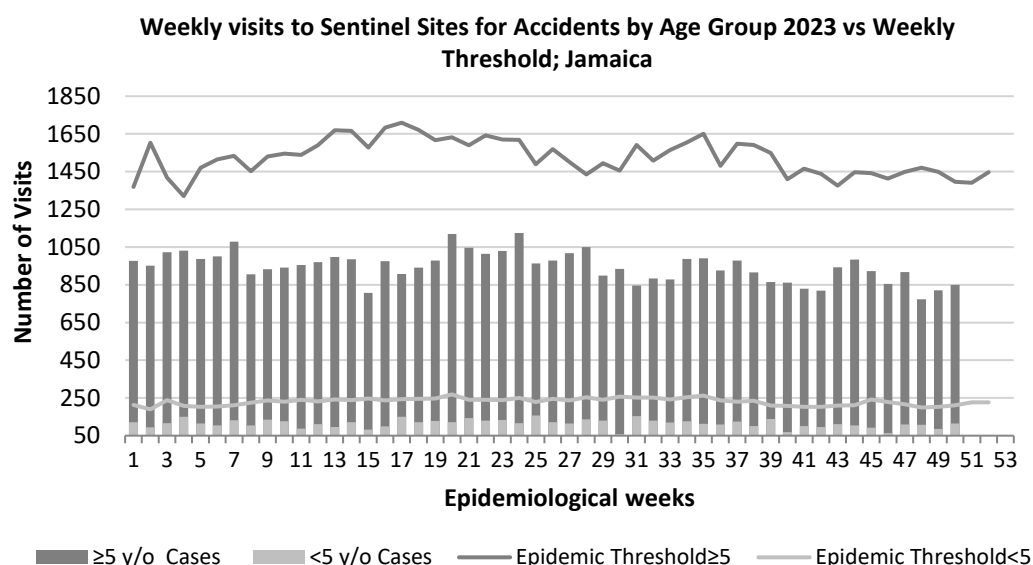
**HOSPITAL
ACTIVE
SURVEILLANCE-**
30 sites. Actively
pursued



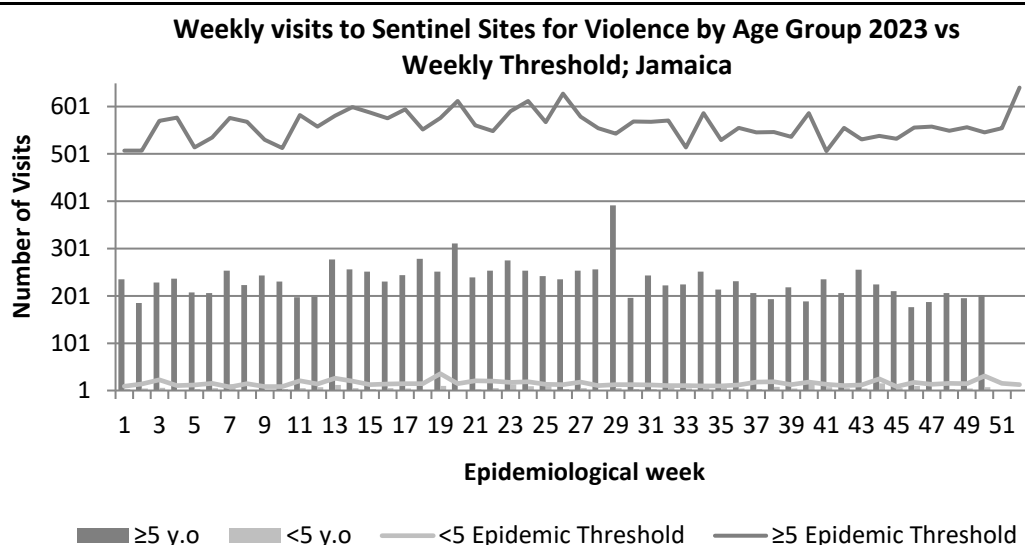
**SENTINEL
REPORT-** 78 sites.
Automatic reporting

ACCIDENTS

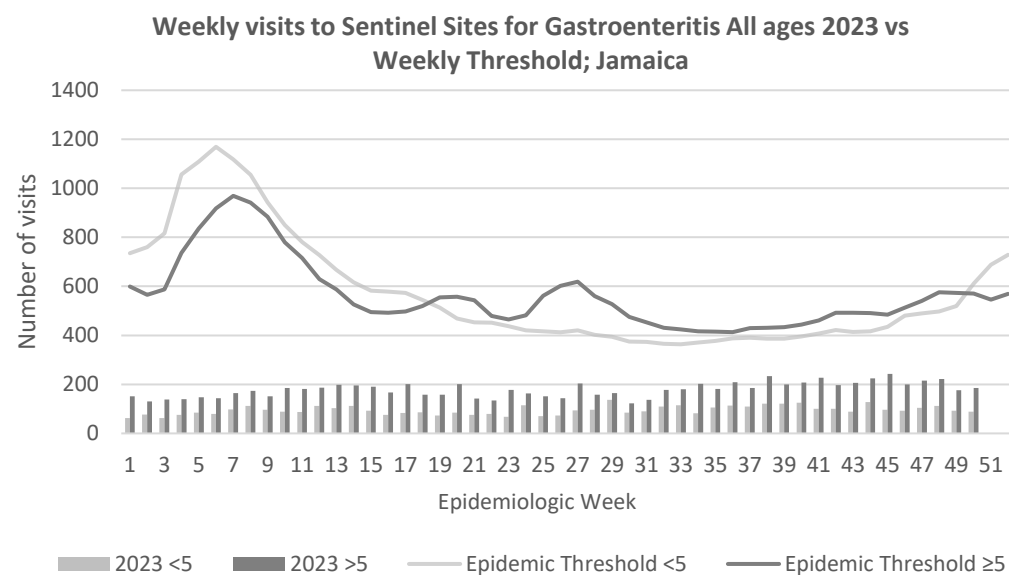
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

**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
sites



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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.	
		CLASS 1 EVENTS	CURRENT YEAR 2023	PREVIOUS YEAR 2022		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		353 ^β	194 ^β	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.	
	Cholera		0	0		
	Dengue Hemorrhagic Fever ^γ		See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)		3822	55611		
	Hansen’s Disease (Leprosy)		0	1		
	Hepatitis B		54	31		
	Hepatitis C		25	2		
	HIV/AIDS		N/A	N/A		
	Malaria (Imported)		3	2		
	Meningitis		29	18		
	Monkeypox		3	18		
EXOTIC/ UNUSUAL	Plague		0	0	^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.	
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		NA- Not Available
	Congenital Rubella Syndrome		0	0		
	Congenital Syphilis		0	0		
	Fever and Rash	Measles	0	0		
		Rubella	0	0		
	Maternal Deaths ^δ		53	63		
	Ophthalmia Neonatorum		129	125		
	Pertussis-like syndrome		0	0		
	Rheumatic Fever		0	0		
	Tetanus		0	2		
	Tuberculosis		58	46		
	Yellow Fever		0	0		
	Chikungunya ^ε		0	0		
	Zika Virus ^θ		0	0		



5 NOTIFICATIONS-
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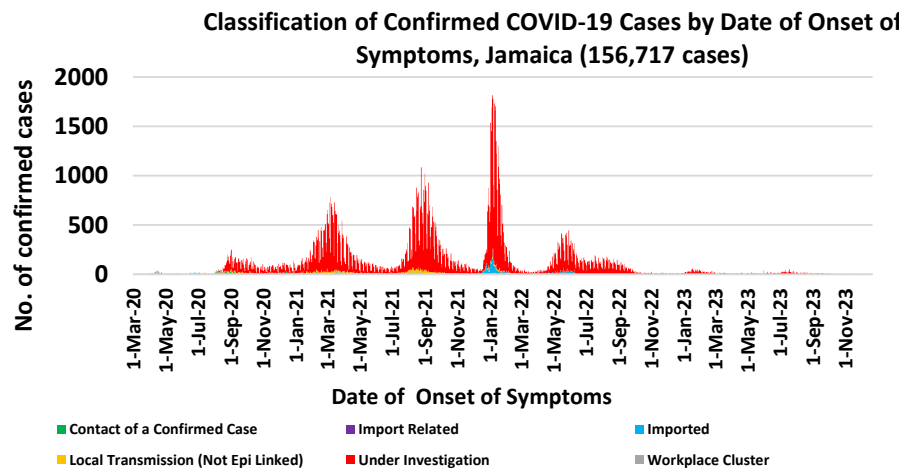


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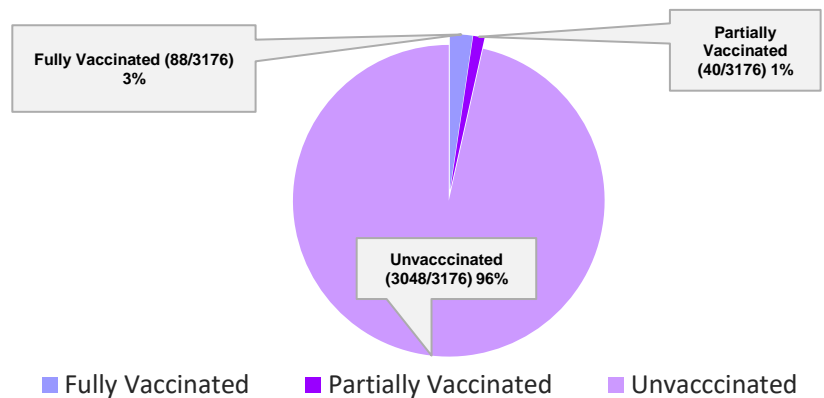
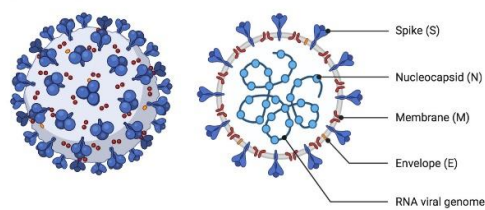
COVID-19 Surveillance Update

March 10, 2020 – EW 50, 2023

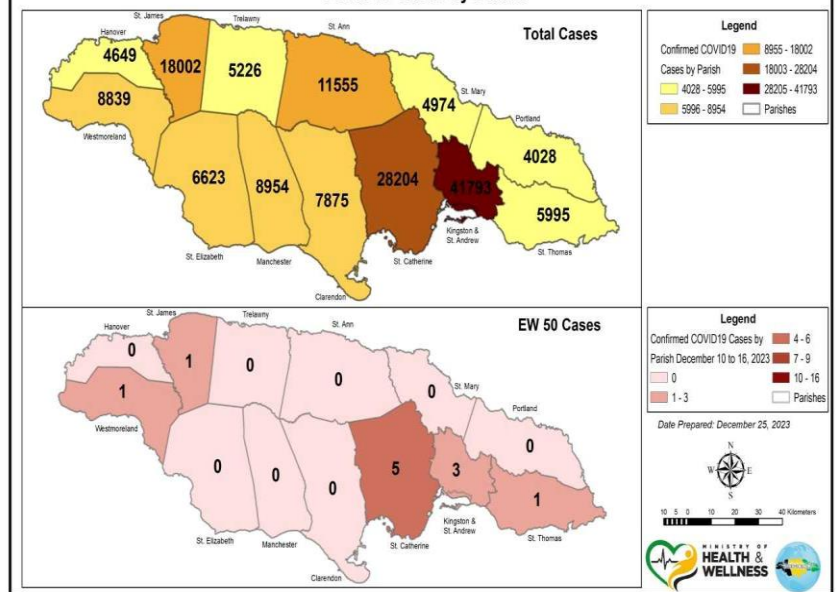
CASES	EW 50	Total
Confirmed	11	156717
Females	4	90319
Males	7	66395
Age Range	43 days old to 90 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		

**COVID-19 Outcomes**

Outcomes	EW 50	Total
ACTIVE *2 weeks*		19
DIED – COVID Related	0	3738
Died - NON COVID	0	349
Died - Under Investigation	0	259
Recovered and discharged	0	103226
Repatriated	0	93
Total		156717
*Vaccination programme March 2021 – YTD * Total as at current Epi week		

**3176 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 EW47-EW50**

Epi Week	Confirmed Cases	Deaths
47	61,620	250
48	245,168	1021
49	430,266	1311
50	437,100	1400
Total (4weeks)	1,174,154	3,982

COVID19 Cases by Parish

6 NOTIFICATIONS-
All clinical
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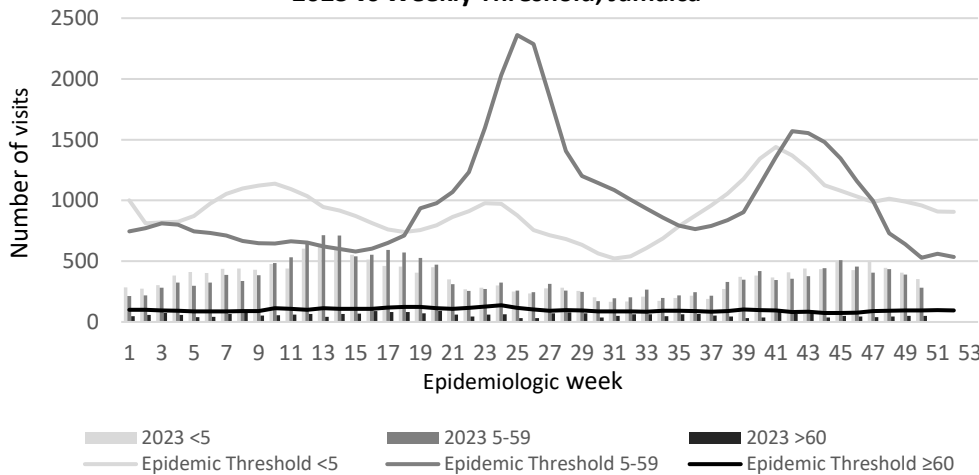
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 50

December 10 – December 16, 2023 Epidemiological Week 50

	EW 50	YTD
SARI cases	1	556
Total Influenza positive Samples	1	226
Influenza A	1	62
H3N2	0	1
H1N1pdm09	1	60
Not subtyped	0	1
Influenza B	0	164
B lineage not determined	0	2
B Victoria	0	162
Parainfluenza	0	1
Adenovirus	0	2
RSV	0	27

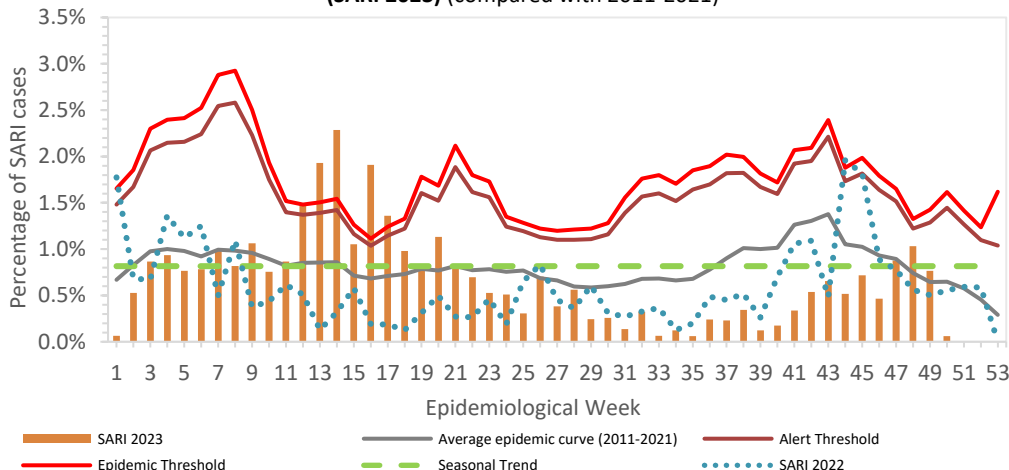
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages
2023 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 50, one (1) SARI admissions were reported.

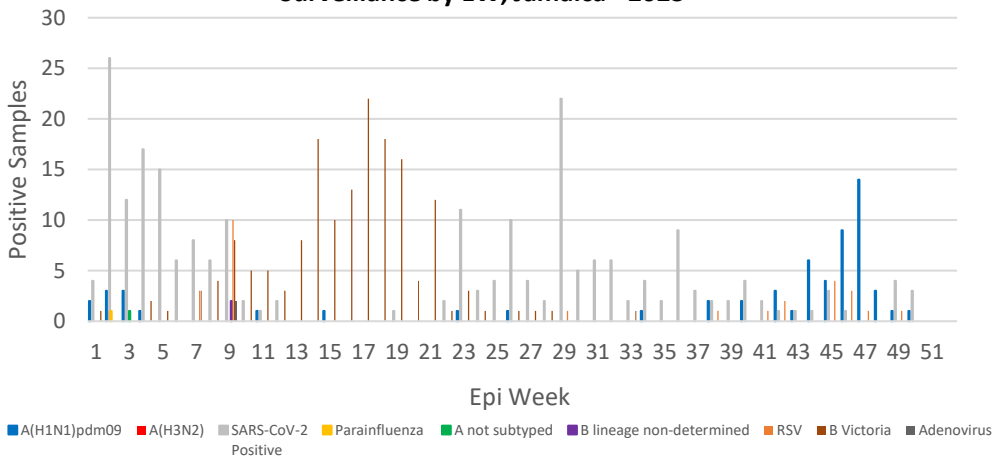
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2023) (compared with 2011-2021)



Caribbean Update EW 50

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. RSV activity, after an increase in previous weeks, has experienced a decline in the last three EWs. SARS-CoV-2 activity continues to decrease, reaching low levels in the last EW. Cases of ILI and SARI have been declining in the last four EWs, with a higher proportion of SARI cases associated with influenza. Belize has experienced a significant decrease in influenza activity in the last two EWs, remaining at moderate levels. The Dominican Republic continues to have elevated RSV activity, although decreasing in the last four EWs. 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.

Distribution of Influenza and Other Respiratory Viruses Under Surveillance by EW, Jamaica - 2023



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All clinical
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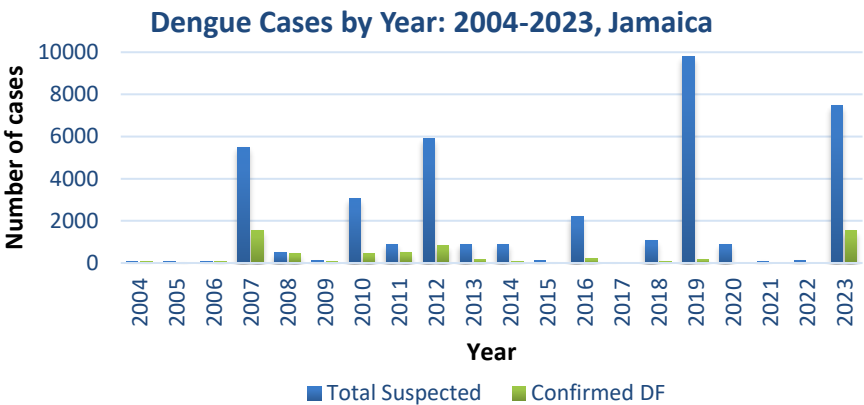
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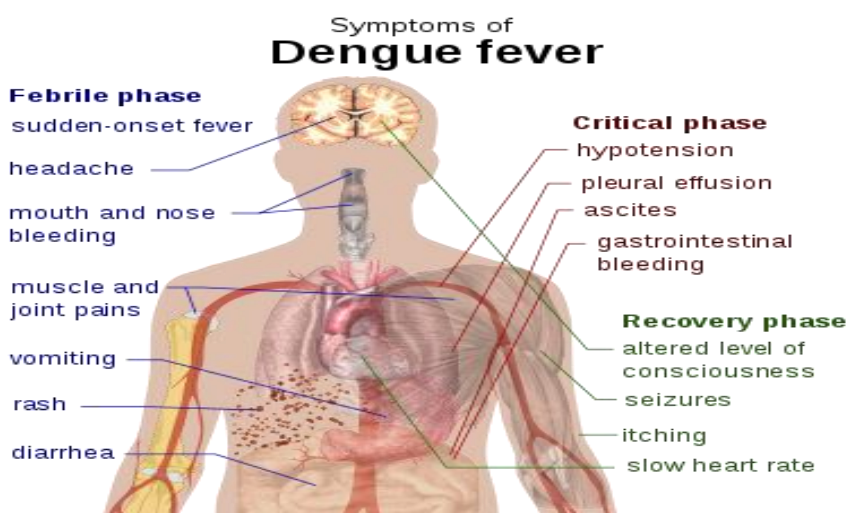
Dengue Bulletin

December 10 – December 16, 2023 Epidemiological Week 50 Epidemiological Week 50



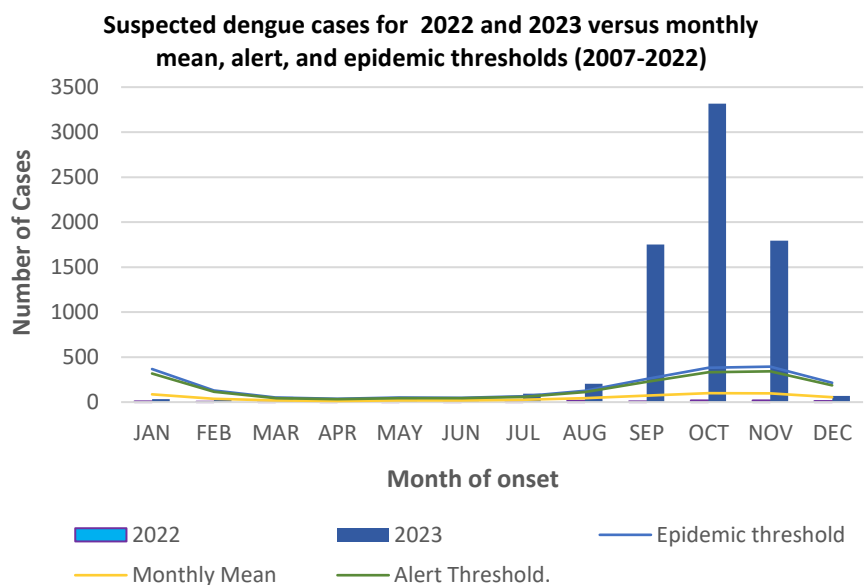
Reported suspected and confirmed dengue with symptom onset in week 50 of 2023

	2023*	
	EW 50	YTD
 Total Suspected & Confirmed Dengue Cases	10	7470
Lab Confirmed Dengue cases	1	1534
CONFIRMED Dengue Related Deaths	0	5



Points to note:

- *Figure as at December 28, 2023
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



8 NOTIFICATIONS-
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RESEARCH PAPER

Abstract

NHRC_22_O4

The Prevalence of Anaemia in Jamaicans 15 Years and Older

Grant A¹, Younger-Coleman N², McFarlane S², Francis D³, Tulloch-Reid M², Davidson T¹, Ferguson T², Webster-Kerr K¹, Wilks R²

¹Ministry of Health, Kingston, Jamaica, ²Caribbean Institute for Health Research, Mona, Kingston 7, ³School of Health and Human Performance, Georgia College and State University, Milledgeville, GA, USA

Background: Iron deficiency is a common cause of anaemia and is associated with increased maternal and perinatal morbidity, cognitive impairment and decreased economic productivity. However, there are limited data on anaemia in the Jamaican population.

Objective: To estimate the prevalence of anemia in Jamaicans aged ≥ 15 years.

Methods: The Jamaica Health and Lifestyle Survey (JHLS III) was a cross-sectional nationally representative survey conducted in 2016/17 involving 2,807 participants. WHO criteria were used to define anaemia (<13 g/dl-males; <12 g/dl-females) and classify severity as mild (11-12.9 g/dl-males; 11-11.9 g/dl-females), moderate (8-10.9 g/dl-both sexes) and severe (<8 g/dl-both sexes). Iron deficiency was defined as serum ferritin <15 μ g/ml. Statistical analysis yielded weighted prevalence estimates, accounting for survey design.

Results: Anaemia prevalence % (95% CI) was: 17.6% (14.0, 21.7) overall, 9.5% (6.5, 13.8) in males, and 25.0% (20.4, 30.2) in females. For males, anaemia prevalence was highest in elderly men, while for women it was highest in women of reproductive age. Anaemia severity in the population was: 11.5% (8.5, 15.3) mild, 5.3% (4.0, 6.9) moderate and 0.8% (0.4, 1.7) severe. Iron deficiency was present in 9.9% (8.4, 11.7), and was higher in women 17.8% (14.8, 21.3) vs. men 1.9% (8.4, 11.7), ($p < 0.01$).

Conclusion: Anaemia affects approximately one fifth of the population and may be higher among women of reproductive age and older individuals. The negative impact on birth and other outcomes makes this a public health concern. Data from the JHLS III provides baseline information for tracking global targets to be attained by 2025.



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9 NOTIFICATIONS-
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