

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Sodium Reduction



The burden of unhealthy diets constitutes a major public health and development challenge worldwide. Urgent action is required to modify the over-production and over-consumption of foods and beverages that do not have a healthy nutritional profile, mainly industry manufactured food. Of greatest concern is excess consumption of sodium, sugars and unhealthy fats, particularly trans-fatty acids (trans fats) and saturated fatty acids, and low consumption of whole grains, pulses, vegetables and fruits. In many high-income countries, and increasingly in low- and middle-income countries, a significant proportion of sodium in the diet comes from processed foods. An estimated 1.89 million deaths each year are associated with consuming too much sodium, a well-established cause of raised blood pressure and increased risk of cardiovascular disease.

Reducing sodium intake is one of the most cost-effective ways to improve health and reduce the burden of noncommunicable diseases, as it can avert a large number of cardiovascular events and deaths at very low total programme costs. WHO recommends a number of sodium-related best buy policies as practical actions that countries should undertake promptly to prevent cardiovascular disease and its associated costs. These include lowering of sodium content in foods; implementing front-of-pack labelling; mass media campaigns; and public food.

Recommendations for salt reduction

For adults, WHO recommends less than 2000 mg/day of sodium (equivalent to less than 5 g/day salt (just under a teaspoon). For children aged 2–15 years, WHO recommends adjusting the adult dose downward based on their energy requirements. This recommendation for children does not address the period of exclusive breastfeeding (0–6 months) or complementary feeding with continued breastfeeding (6–24 months).

All salt that is consumed should be iodized (fortified with iodine), which is essential for healthy brain development in the foetus and young child and optimizing people's mental function in general.

Retrieved from WHO on 13/Feb-/24

<https://www.who.int/news-room/fact-sheets/detail/salt-reduction>

EPI WEEK 05



Syndromic Surveillance

Accidents

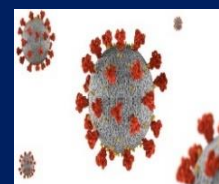
Violence

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Class 1 Notifiable Events

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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 – 2 to 5 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													
2	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
3	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
4	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
5	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time

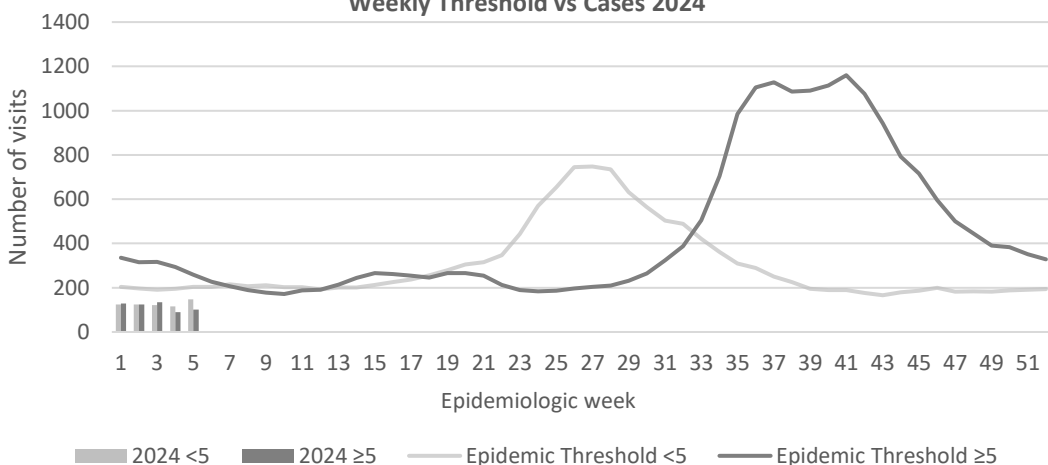
REPORTS FOR SYNDROMIC SURVEILLANCE

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 2024



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



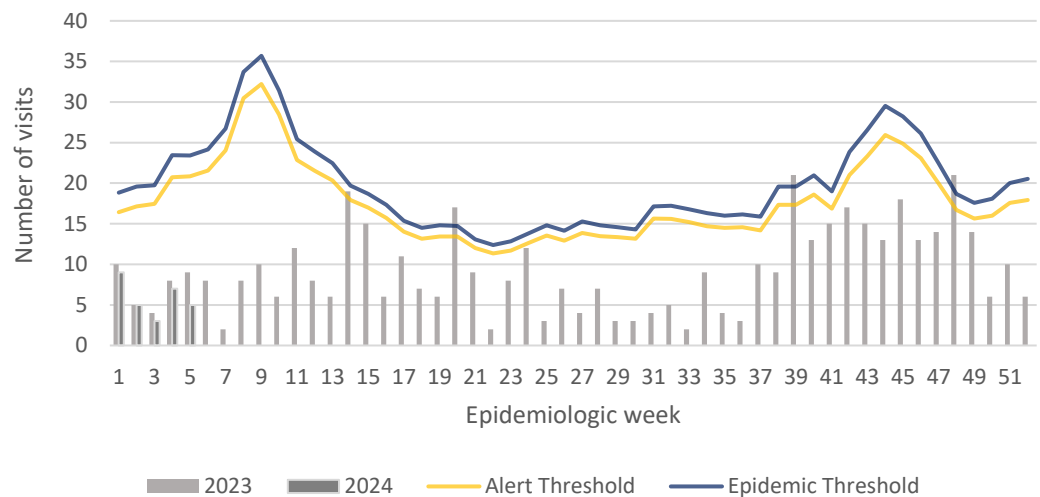
SENTINEL REPORT- 78 sites. Automatic reporting

FEVER AND NEUROLOGICAL

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



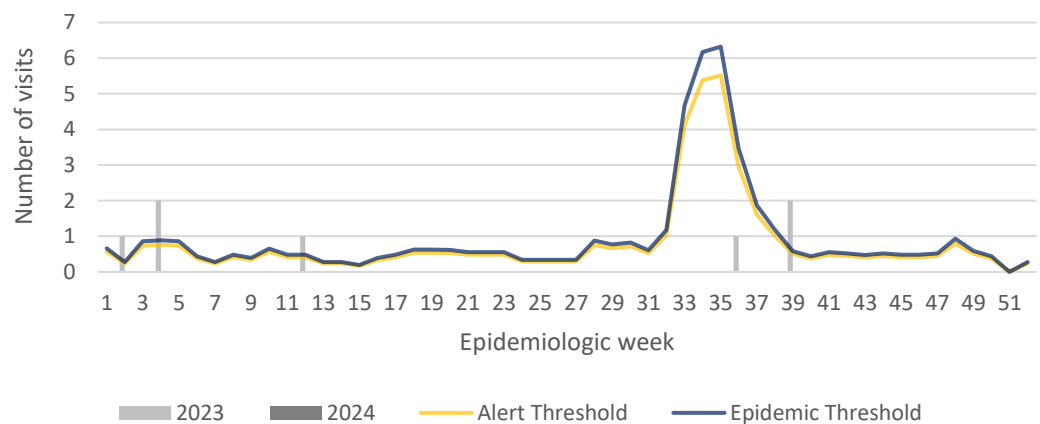
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms
2023 and 2024 vs. Weekly Threshold: Jamaica**

**FEVER AND HAEMORRHAGIC**

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

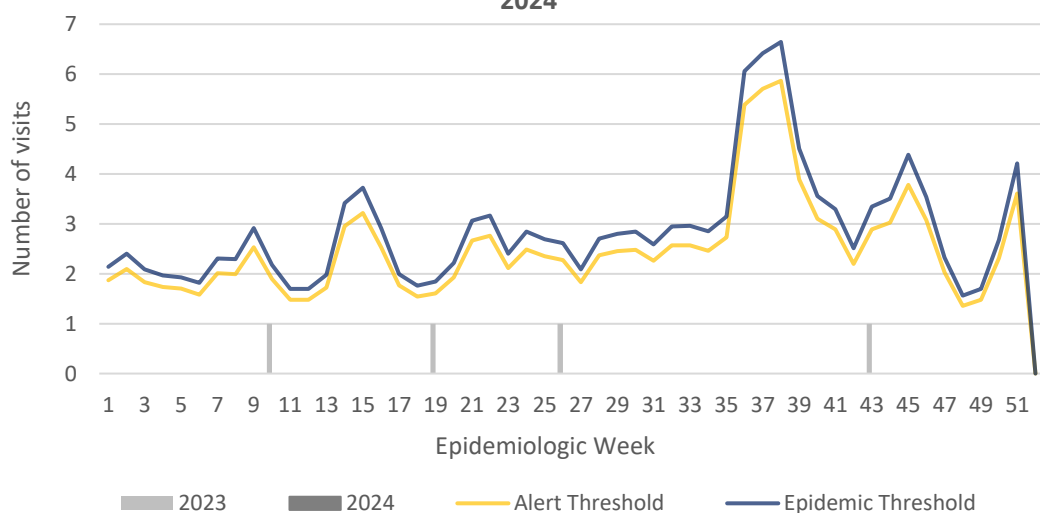
**FEVER AND JAUNDICE**

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



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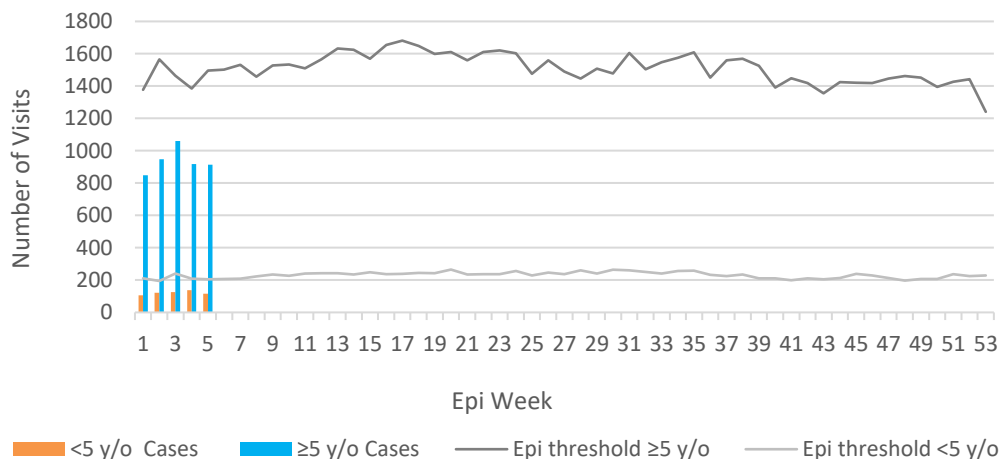
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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



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

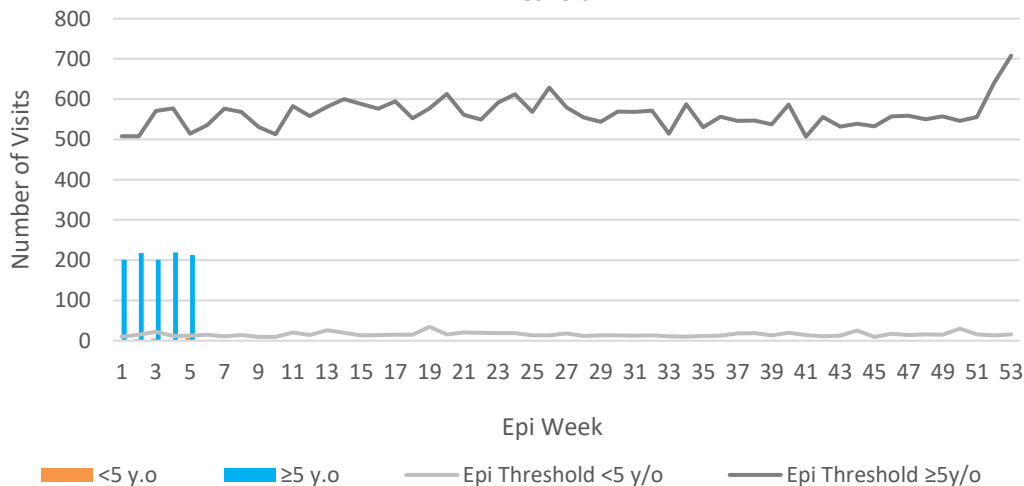


VIOLENCE

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

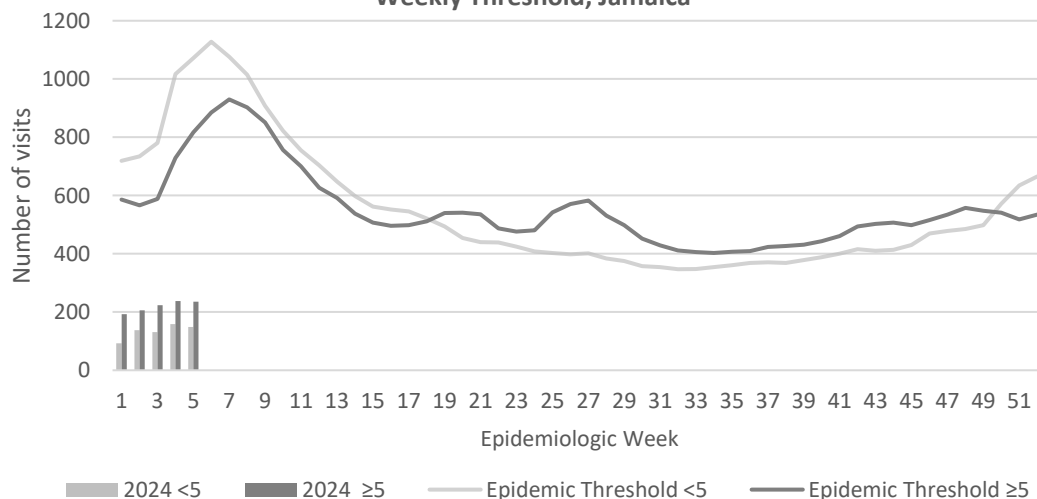


GASTROENTERITIS

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



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SENTINEL
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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 2024	PREVIOUS YEAR 2023	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		27 ^β	31 ^β	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Cholera		0	0	
	Dengue Hemorrhagic Fever ^γ		See Dengue page below	See Dengue page below	^γ Dengue Hemorrhagic Fever data include Dengue related deaths;
	COVID-19 (SARS-CoV-2)		88	1047	
	Hansen’s Disease (Leprosy)		0	0	^δ Figures include all deaths associated with pregnancy reported for the period.
	Hepatitis B		0	7	
	Hepatitis C		0	3	^ε CHIKV IgM positive cases
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	^θ Zika PCR positive cases
	Meningitis		0	6	
	Monkeypox		0	0	^β Updates made to prior weeks.
EXOTIC/ UNUSUAL	Plague		0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	^α Figures are cumulative totals for all epidemiological weeks year to date.
	Neonatal Tetanus		0	0	
	Typhoid Fever		0	0	NA- Not Available
	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		4	5	
	Ophthalmia Neonatorum		11	9	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		0	3	
	Yellow Fever		0	0	
Chikungunya ^ε		0	0		
Zika Virus ^θ		0	0		



5 NOTIFICATIONS-
All clinical
sites



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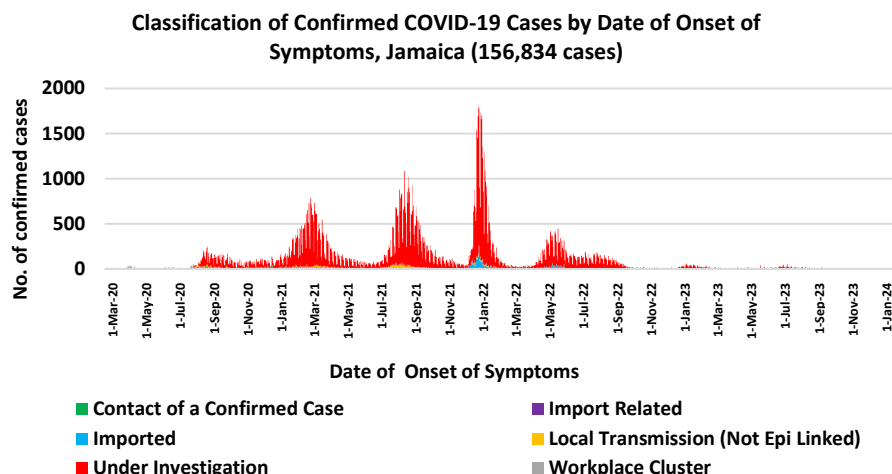
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COVID-19 Surveillance Update

March 10, 2020 – EW 05, 2024

CASES	EW 05	Total
Confirmed	21	156834
Females	14	90388
Males	7	66443
Age Range	84 days old to 87 years	1 day to 108 years

* 3 positive cases had no gender specification
 * PCR or Antigen tests are used to confirm cases



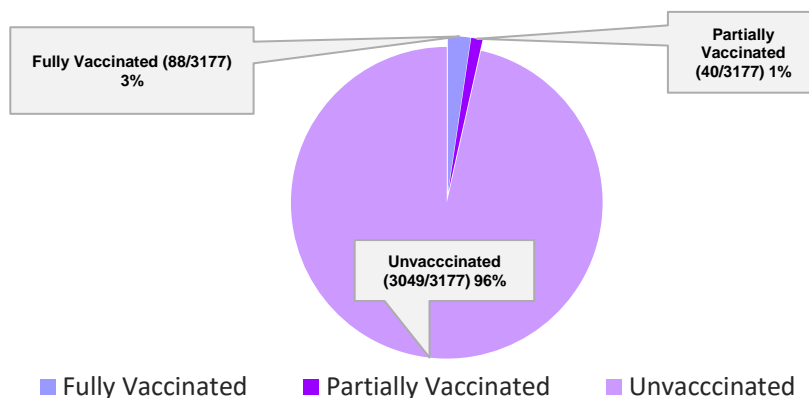
COVID-19 Outcomes

Outcomes	EW 05	Total
ACTIVE *2 weeks*		47
DIED – COVID Related	0	3739
Died - NON COVID	0	352
Died - Under Investigation	0	260
Recovered and discharged	0	103226
Repatriated	0	93
Total		156834

*Vaccination programme March 2021 – YTD

* Total as at current Epi week

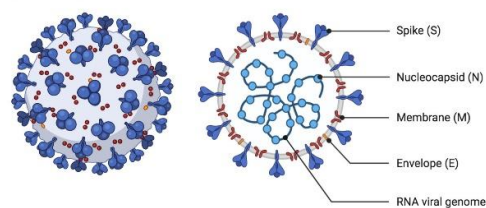
3177 COVID-19 Related Deaths since March 1, 2021 – YTD
Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

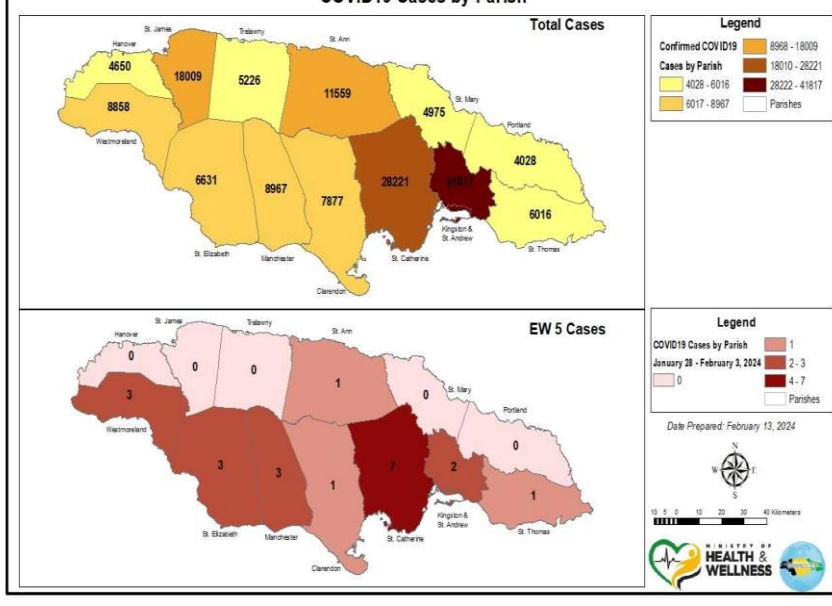
SARS-CoV-2



COVID-19 WHO Global Statistics EW 2-5, 2024

Epi Week	Confirmed Cases	Deaths
2	182,300	3,400
3	149,400	3,000
4	100,700	1800
5	77, 800	1, 400
Total (4weeks)	510,200	9,600

COVID19 Cases by Parish



6 NOTIFICATIONS-

All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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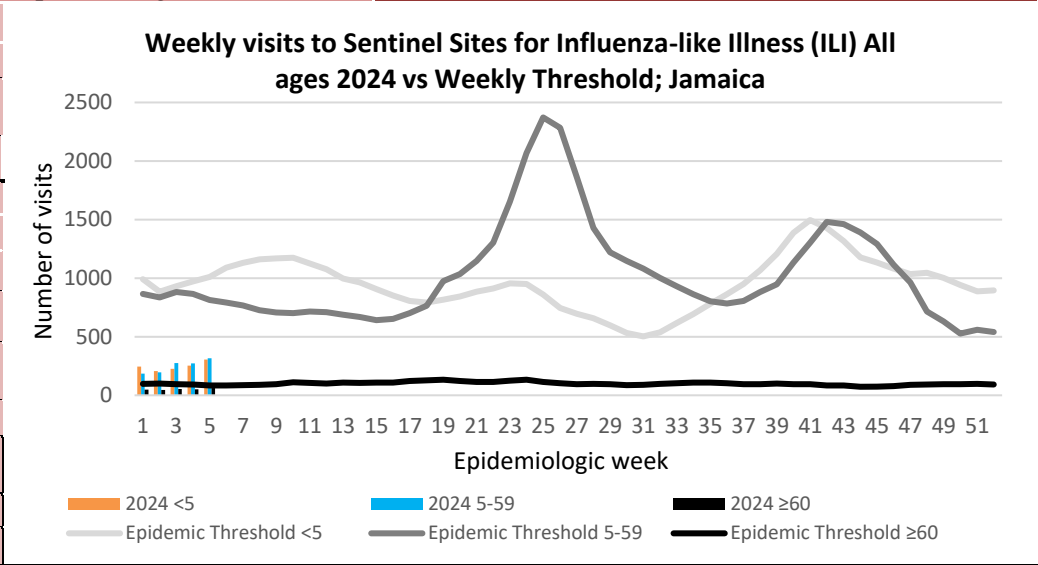
NATIONAL SURVEILLANCE UNIT

INFLUENZA REPORT

January 28, 2024 – February 3, 2024 Epidemiological Week 05

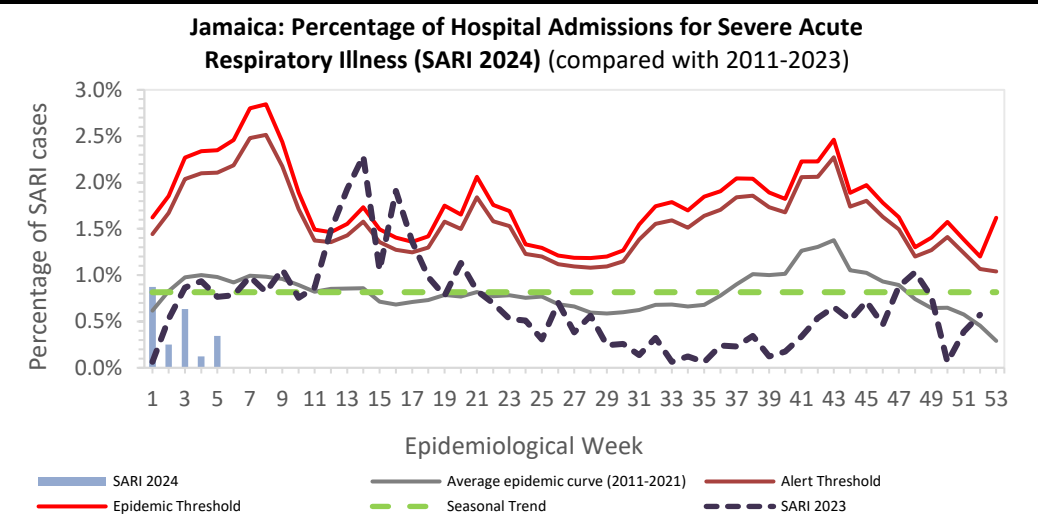
EW 5

	EW 05	YTD
SARI cases	6	35
Total Influenza positive Samples	3	19
Influenza A	3	19
H3N2	0	7
H1N1pdm09	3	12
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	7



Epi Week Summary

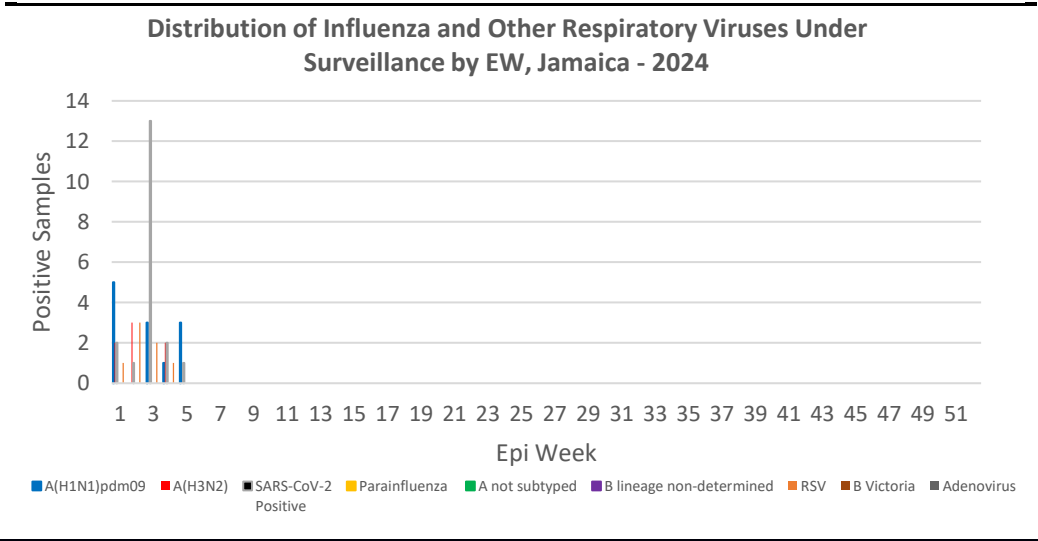
During EW 05, six (6) SARI admissions were reported.



Caribbean Update EW 5

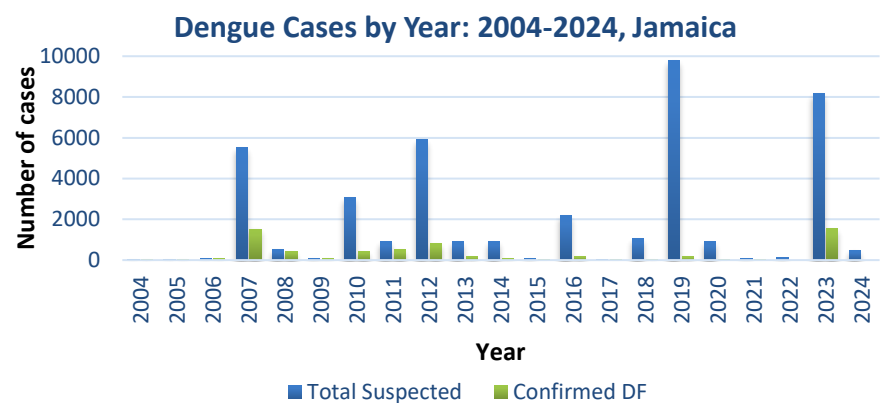
Caribbean:ILI cases have shown an increase in the last four weeks associated with an increase in positive influenza cases, while SARI cases have remained on the decline. Influenza activity has decrease in the last four EWs, reaching low circulation levels. During the last four EWs, the predominant viruses have been type A (H1N1) pdm09, followed by A(H3N2) and, to a lesser extent, B/Victoria. RSV activity has remained at low levels. SARS-CoV-2 activity has remained at high levels although showing a decrease in trend. By countries: Elevated influenza activity has been observed in Jamiaca. Elevated SARS- CoV-2 activity has been observed in Belize, the Dominican Republic, Dominica, Jamaica, Barbados, the Cayman Islands and Guyana.

(adopted from PAHO Respiratory viruses weekly report)




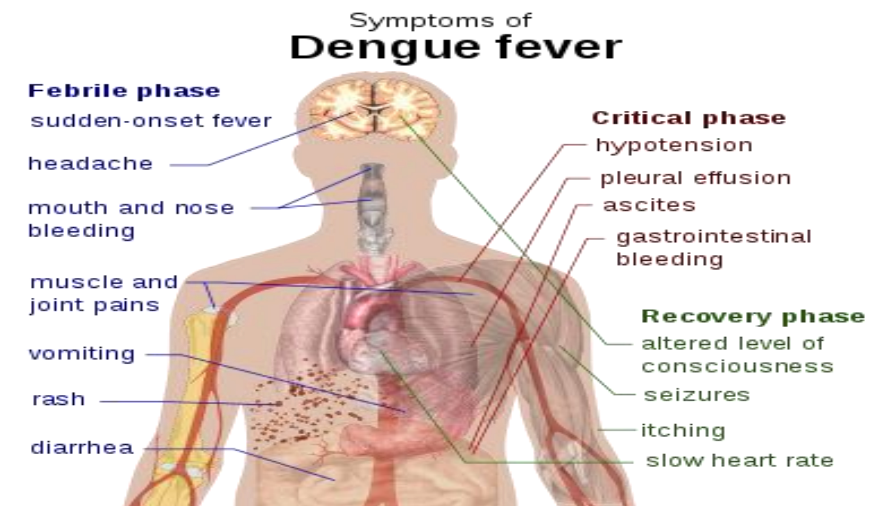
Dengue Bulletin

January 28, 2024 – February 03, 2024 Epidemiological Week 05

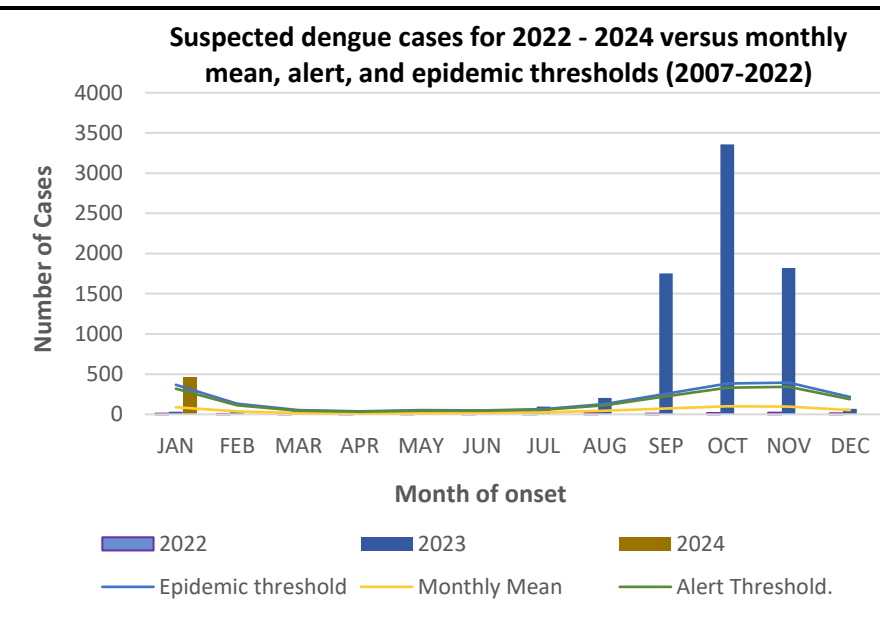


Reported suspected, probable and confirmed dengue with symptom onset in week 05 of 2024

	2024*	
	EW 05	YTD
 Total Suspected , Probable & Confirmed Dengue Cases	7	457
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 February 10 , 2024
 - Only PCR positive dengue cases are reported as confirmed.
 - IgM positive cases are classified as presumed dengue.



RESEARCH PAPER

Abstract

THE EPIDEMIOLOGY OF OSTEOMYELITIS IN THE SICKLE CELL POPULATION OF JAMAICA

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Indies

Introduction: Knowing the most likely causative organism causing osteomyelitis in the sickle cell population is crucial in implementing empirical therapy; the most common causative organism varies globally.

Objectives: To determine the epidemiology of culture proven osteomyelitis in patients who attended the Sickle Cell Unit (SCU) from 2008- 2018, in particular, to determine the most common organisms and whether there was an association of the causal organism with patient location or disease severity.

Methods: Ethical approval was obtained from The University of the West Indies Ethics Committee. The charts of all eligible patients were examined. The gender, age, address of individuals and the site of the osteomyelitis and causative organism were extracted. Polyostotic episodes and those which required greater than 42 days of antibiotics were deemed severe. Data were analyzed using SPSS; associations were assessed using the Pearson Chai- Squared Test.

Results: Forty three patients met the inclusion criteria; 26 males and 17 females with the mean age being 16.5 years (Range 1-60). St. Catherine was the most common parish. The most prevalent organisms included Salmonella (42%), Staphylococcus Aureus (26%) and Enterobacter (12%). Commonly affected sites included the Tibia (44%), Humerus (26%) and Femur (16%), 7% were severe. There was no association between the causal organism and patient location ($p=0.196$) or disease severity ($p=0.367$).

Conclusion: Salmonella was the most common organism causing osteomyelitis in persons attending the SCU. Specific education of patients in avoidance of exposure to this organism may be helpful.



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