

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Foodborne Diseases



Over 200 diseases are caused by eating food contaminated with bacteria, viruses, parasites or chemical substances such as heavy metals. This growing public health problem causes considerable socioeconomic impact though strains on health-care systems lost productivity, and harming tourism and trade. These diseases contribute significantly to the global burden of disease and mortality.

Foodborne diseases are caused by contamination of food and occur at any stage of the food production, delivery and consumption chain. They can result from several forms of environmental contamination including pollution in water, soil or air, as well as unsafe food storage and processing.

Foodborne diseases encompass a wide range of illnesses from diarrhoea to cancers. Most present as gastrointestinal issues, though they can also produce neurological, gynaecological and immunological symptoms. Diseases causing diarrhoea are a major problem in all countries of the world, though the burden is carried disproportionately by low- and middle-income countries and by children under 5 years of age

Every year, nearly one in 10 people around the world fall ill after eating contaminated food, leading to over 420 000 deaths. Children are disproportionately affected, with 125 000 deaths every year in people under 5 years of age. The majority of these cases are caused by diarrhoeal diseases. Other serious consequences of foodborne diseases include kidney and liver failure, brain and neural disorders, reactive arthritis, cancer, and death.

Foodborne diseases are closely linked to poverty in low- and middle-income countries but are a growing public health issue around the world. Increasing international trade and longer, more complex food chains increase the risk of food contamination and the transport of infected food products across national borders. Growing cities, climate change, migration and growing international travel compound these issues and expose people to new hazards.

Taken from WHO website on 09/ July /2024

https://www.who.int/health-topics/foodborne-diseases#tab=tab_1

https://www.who.int/health-topics/foodborne-diseases#tab=tab_2

EPI WEEK 26



Syndromic Surveillance

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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 – 23 to 26 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												
23	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
24	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
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

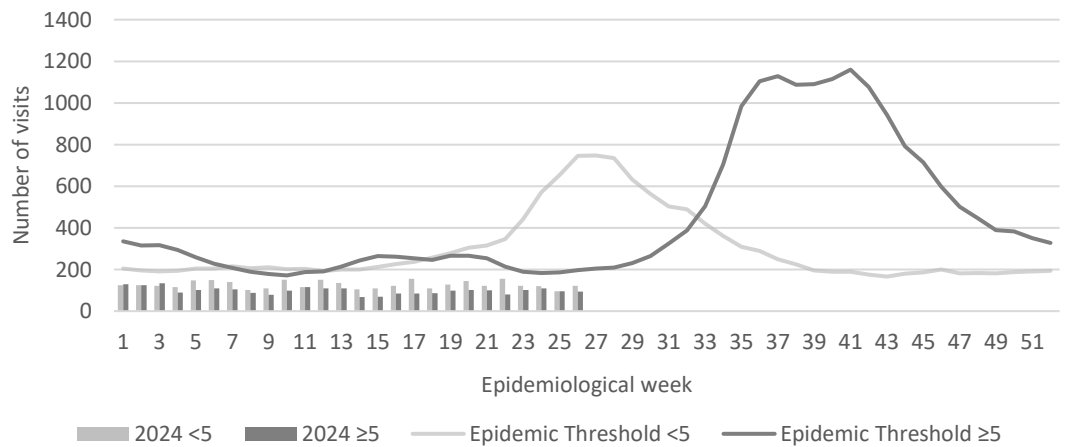
REPORTS FOR SYNDROMIC SURVEILLANCE

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



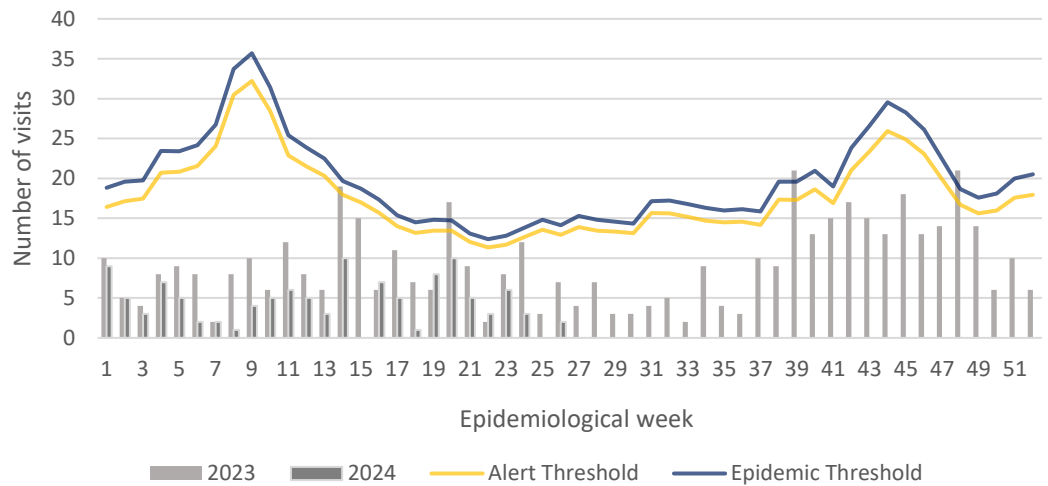
SENTINEL REPORT- 78 sites. Automatic reporting

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

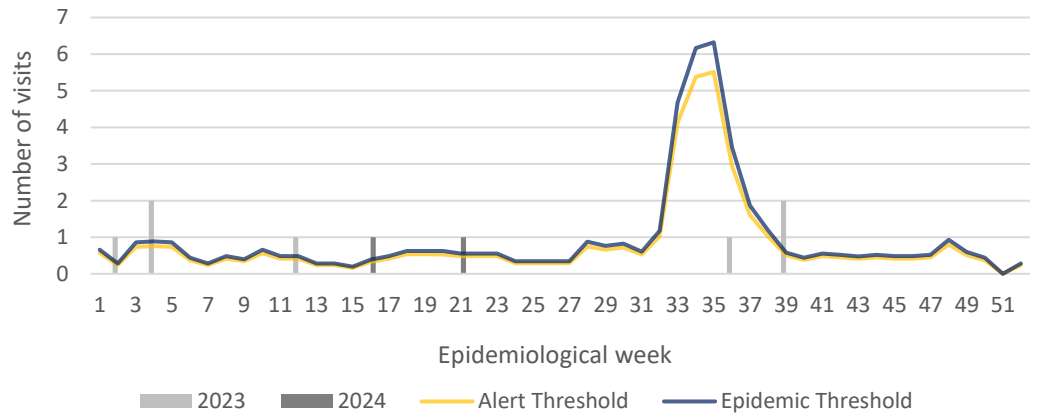


FEVER AND HAEMORRHAGIC

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



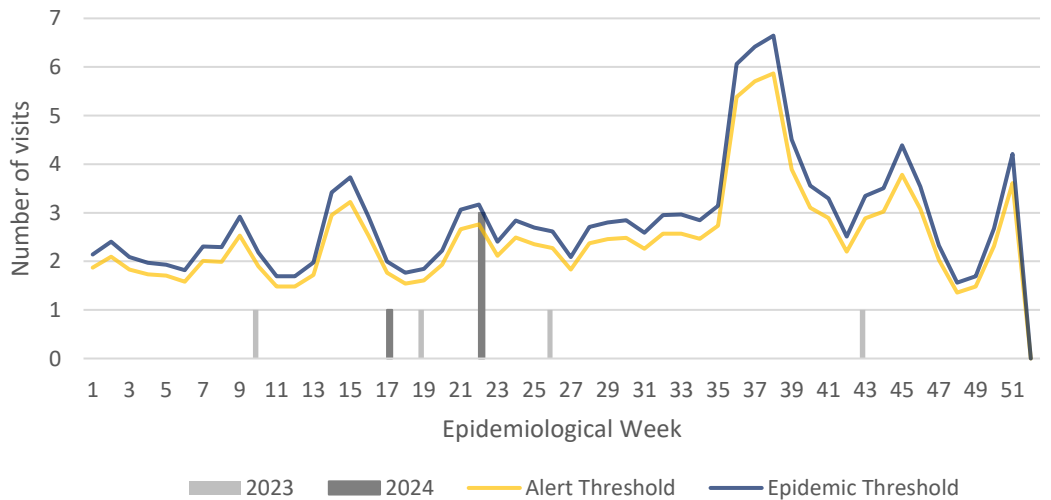
FEVER AND JAUNDICE

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



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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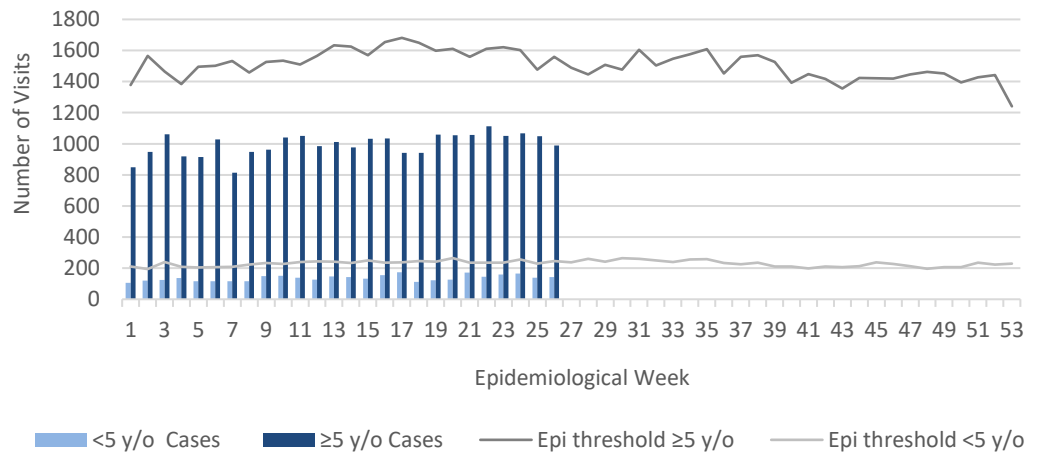


ACCIDENTS

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

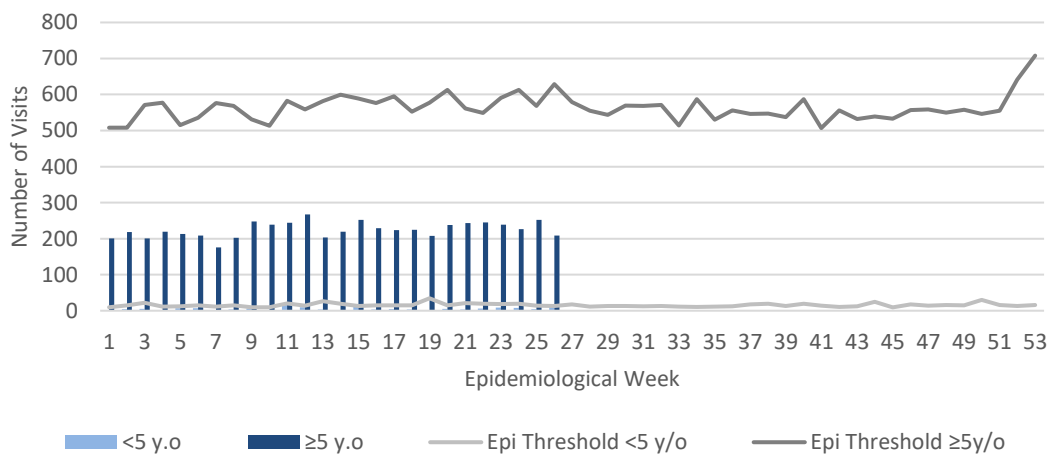


VIOLENCE

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

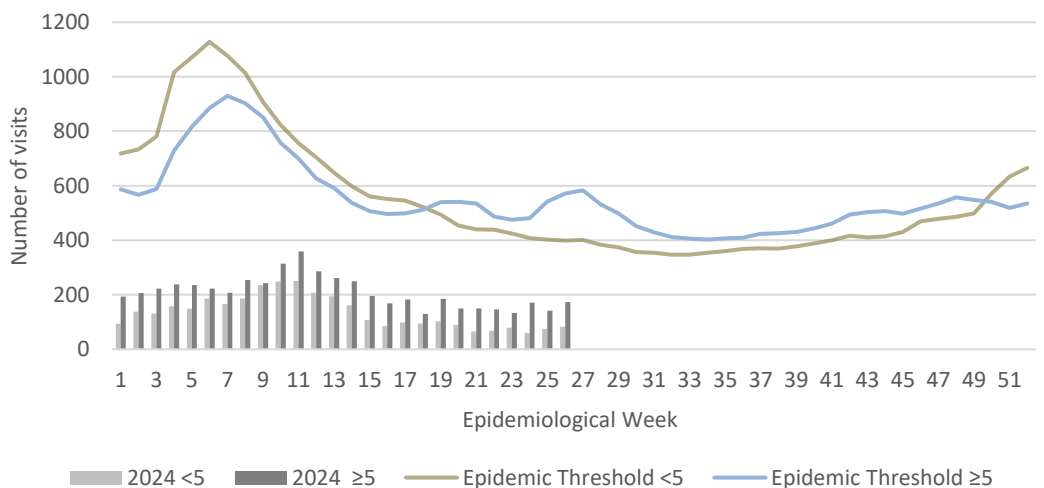


GASTROENTERITIS

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 ^α			
		CURRENT YEAR 2024	PREVIOUS YEAR 2023		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	188 ^β	198 ^β	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.	
	Cholera	0	0		
	Severe Dengue ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	372	2540		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	9	41		
	Hepatitis C	1	20		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	9	17		
	Monkeypox	0	3		
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	1	2		
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	33	28		
	Ophthalmia Neonatorum	71	80		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	10	34		
Yellow Fever	0	0			
Chikungunya ^ε	0	0			
Zika Virus ^θ	0	0	NA- Not Available		



5 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



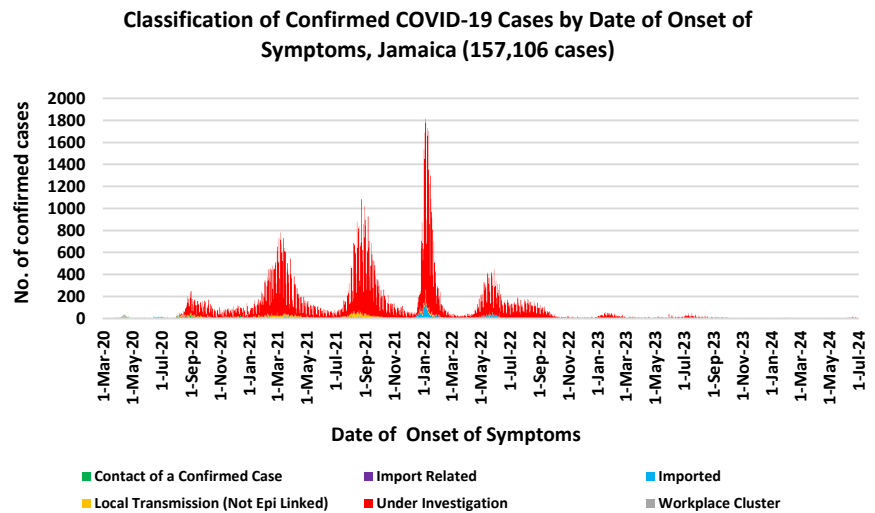
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



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COVID-19 Surveillance Update

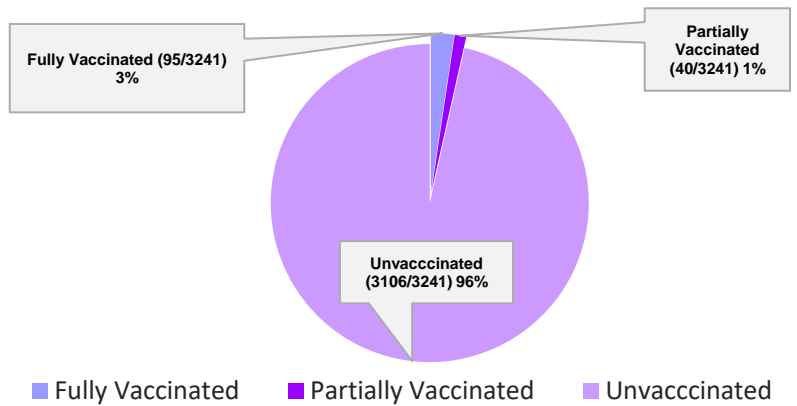
CASES	EW 26	Total
Confirmed	53	157106
Females	32	90530
Males	21	66573
Age Range	22 days to 93 years old	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases * Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.		



COVID-19 Outcomes

Outcomes	EW 26	Total
ACTIVE *2 weeks*		94
DIED – COVID Related	0	3803
Died - NON COVID	0	370
Died - Under Investigation	0	196
Recovered and discharged	0	103226
Repatriated	0	93
Total		157106

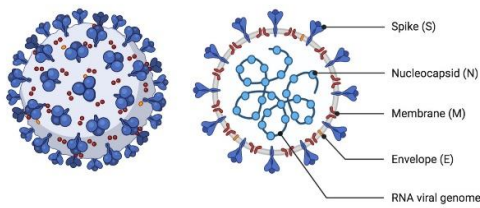
3241 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

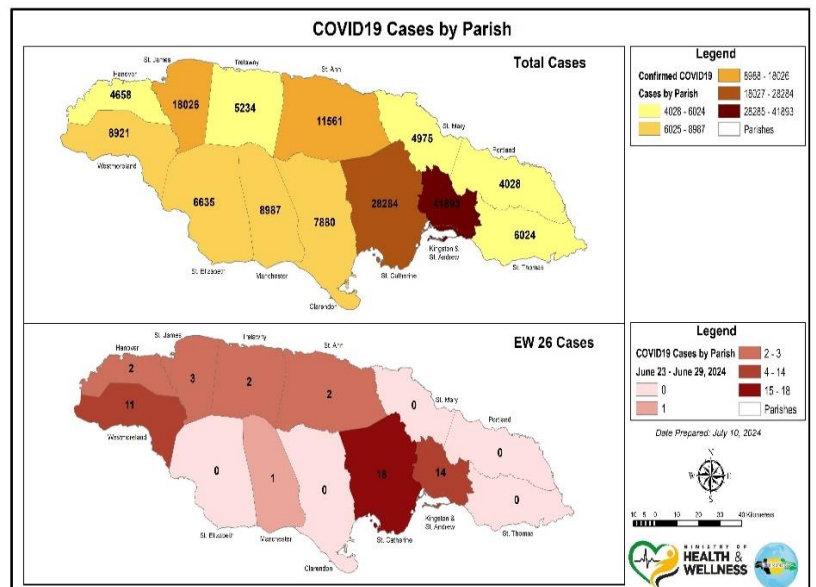
COVID-19 Virus Structure

SARS-CoV-2



COVID-19 WHO Global Statistics EW 23-26, 2024

Epi Week	Confirmed Cases	Deaths
23	33200	445
24	34400	459
25	32500	451
26	27900	494
Total (4weeks)	128000	1849



6 NOTIFICATIONS-
All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

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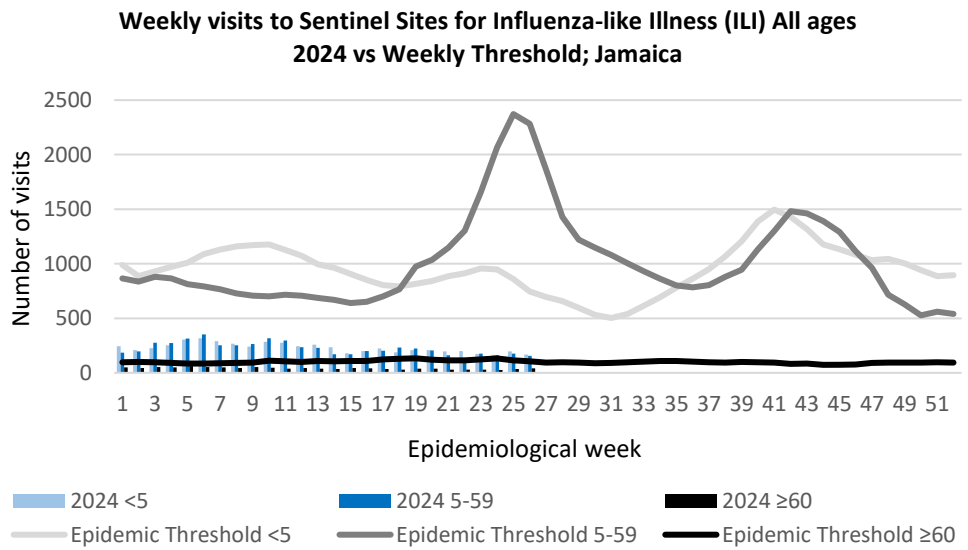


NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 26

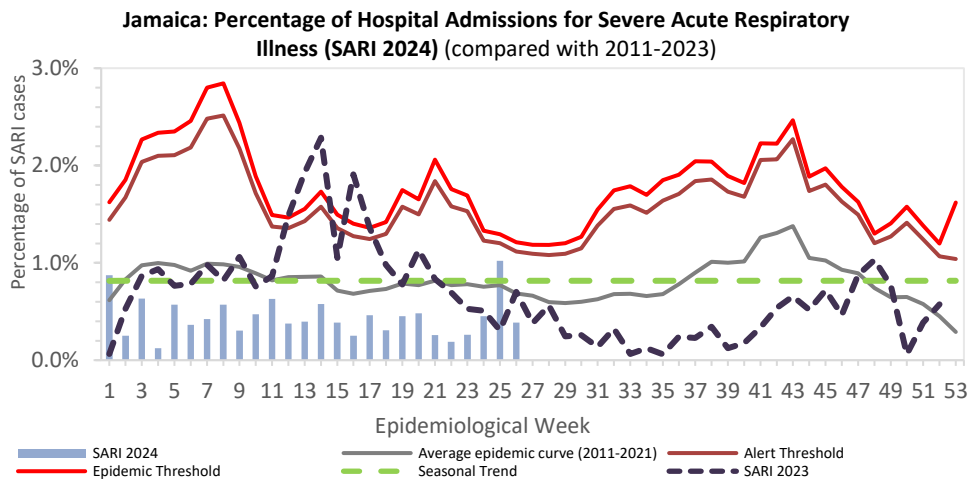
June 23, 2024 – June 29, 2024 Epidemiological Week 26

	EW 26	YTD
SARI cases	6	181
Total Influenza positive Samples	3	96
Influenza A	3	93
H3N2	1	27
H1N1pdm09	2	66
Not subtyped	0	0
Influenza B	0	3
B lineage not determined	0	0
B Victoria	0	3
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	28



Epi Week Summary

During EW 26, six (6) SARI admissions were reported.

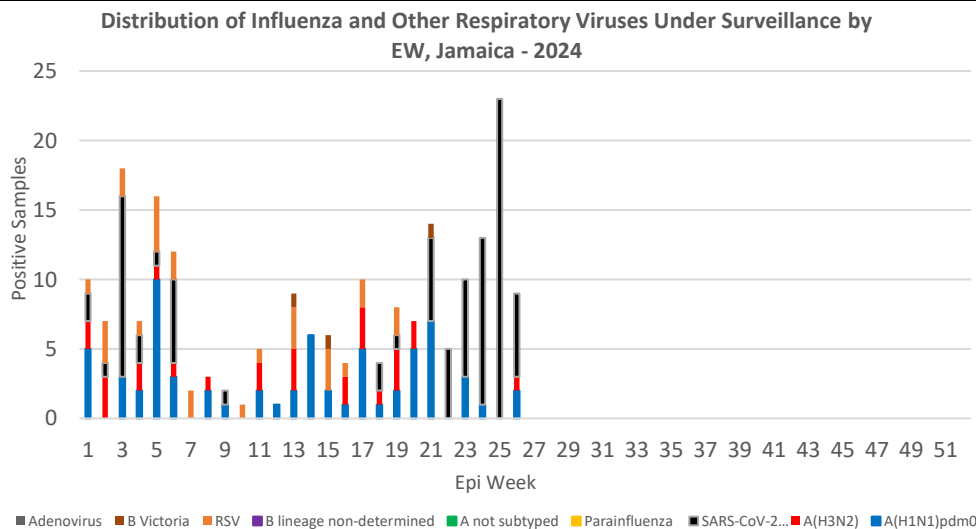


Caribbean Update EW 26

Caribbean: In the last four EWs, ILI cases have increased, associated with a higher proportion of positive cases of SARS-CoV-2 and influenza. On the other hand, although SARI cases have remained at low level, an increase in the count and proportion of positive cases of SARS-CoV-2 and Influenza has been observed. Influenza activity has remained at intermediate levels during the last four EWs. During this period, the predominant viruses have been type A(H3N2), with concurrent circulation of influenza A(H1N1)pdm09. RSV activity has remained at low levels. SARS-CoV-2 activity has shown a marked increase in the last four EWs, reaching high levels compared to previous waves.

By country: Influenza activity has been observed in the last four EWs in the Dominican Republic, Guyana, and the Cayman Islands. SARS-CoV-2 activity was noted in Belize, the Dominican Republic, Jamaica, Suriname, Barbados, Guyana, and the Cayman Islands

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



7 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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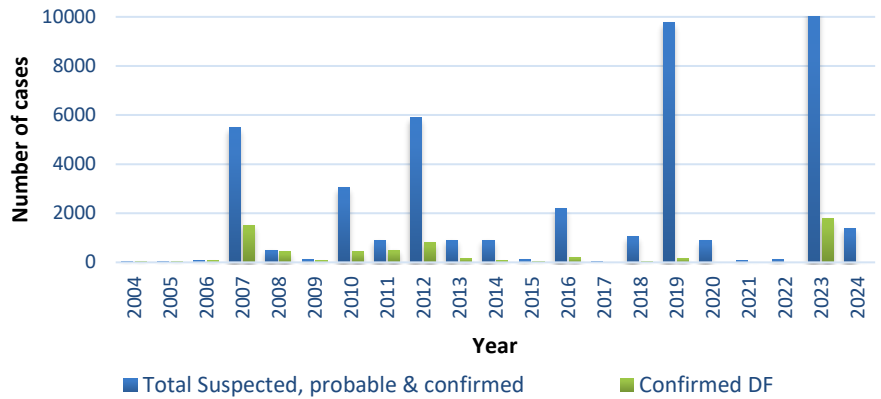
Dengue Bulletin

June 23, 2024 – June 29, 2024 Epidemiological Week 26

Epidemiological Week 26



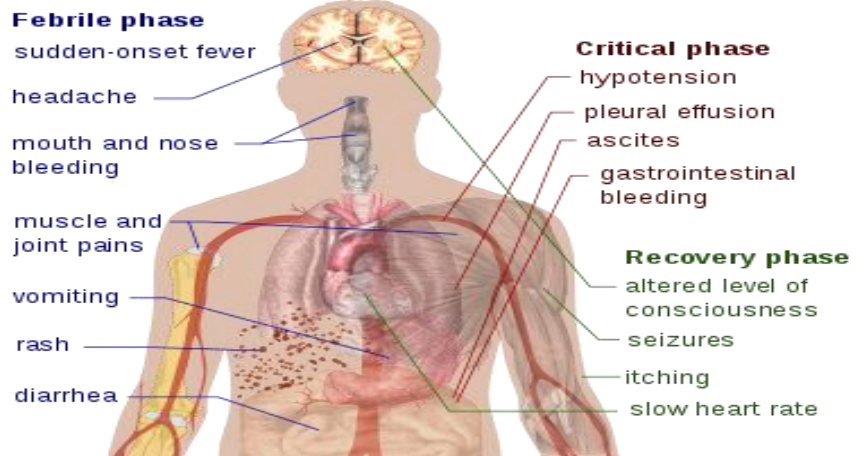
Dengue Cases by Year: 2004-2024, Jamaica



Reported suspected, probable and confirmed dengue with symptom onset in week 26 of 2024

	2024*	
	EW 26	YTD
Total Suspected, Probable & Confirmed Dengue Cases	0	1399
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0

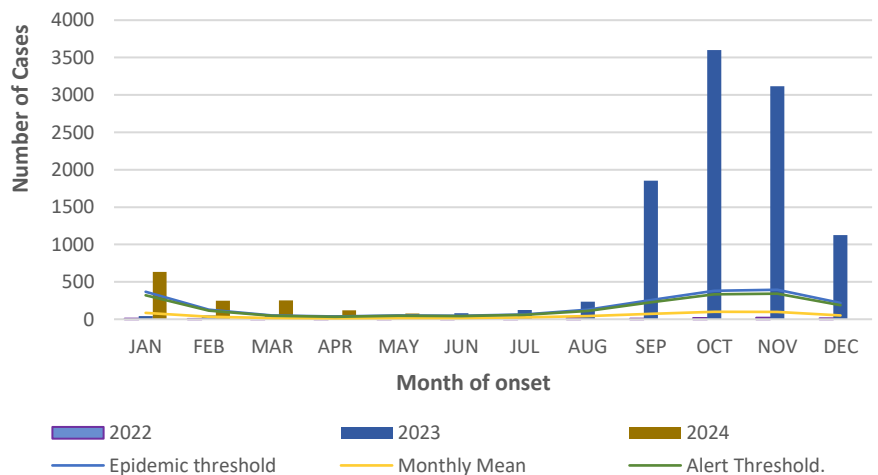
Symptoms of Dengue fever



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at July 9, 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



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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SENTINEL REPORT- 78 sites. Automatic reporting

RESEARCH PAPER

Abstract

NHRC 23-P06

Factors influencing removal of sub-dermal contraceptive implants among Jamaican women

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Introduction: Subdermal contraceptive implants (SDCI) represent less than 1% of the contraceptive method mix in Jamaica, however, the method is increasing in popularity. SBCIs involve delivery of a steroid progestin from polymer capsules or rods placed under the skin. The hormone diffuses out slowly, providing contraceptive effectiveness for 1–5 years. International literature indicates that experience of adverse side effects contributes to early SDCI removal. Are the factors associated with implant removal among Jamaican women similar or different to those observed in other settings?

Objectives: This retrospective study aimed to answer two questions: what factors influence Jamaican women's decision to use SDCIs and what contributes to the decision to remove the method before effectiveness ends?

Methods: Sixty-two women who attended a Jamaica Family Planning Association (JFPA) clinic between January 2016 and December 2022 to request removal of their SDCI were interviewed by telephone in 2022-23 using a questionnaire designed and tested for the study. All the women contacted gave verbal consent to be interviewed. SPSS Version 20 was used to generate the necessary descriptive and inferential statistics.

Results: The long-term protection offered is the reason most women chose the SDCI. Excessive bleeding is the reason the majority of women prematurely removed the method. Women who received only one pre-implantation counselling session were more likely to prematurely remove the method.

Conclusion: Increasing the pre-insertion counselling of women who choose to use the SDCI is likely to reduce premature removal of the method and contribute to their improved sexual and reproductive health.



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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



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