WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Tuberculosis

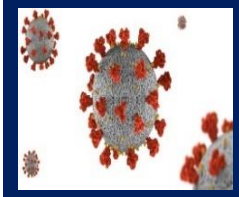
TB is an infectious bacterial disease caused by Mycobacterium *tuberculosis*, which most commonly affects the lungs. It is transmitted from person to person through the air.

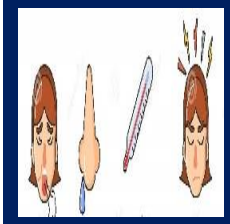
The symptoms of active TB include cough, chest pains, weakness, weight loss, fever and night sweats. In healthy people, infection often does not cause symptoms, because the person's immune system acts to wall off the bacteria.

- In 2022, tuberculosis became the second leading infectious disease killer globally after COVID-19. It was also the main cause of death among people living with HIV and one of the leading causes of antimicrobial resistance-related deaths.
- Globally, an estimated 10.6 million people became ill with TB, and 1.3 million died from TB; of these, 167,000 were co-infected with HIV.
- In the Americas, in 2022, 325,000 new TB cases were estimated and 239,987 (74%) were notified, which was 4% more than in 2021.
- Estimated deaths for the region were 35,000, of which 11,000 corresponded to TB/HIV co-infection.
- A total of 5,136 cases of MDR/MDR-TB were diagnosed. Of these, 90% started treatment.
- The End TB Strategy aims to end the global TB epidemic and is linked to the Sustainable Development Goals (SDGs) under three high-level indicators: reduce the number of TB deaths by 95% compared to 2015, reduce new cases by 90% between 2015 and 2035, and ensure that no family faces catastrophic costs due to TB.

Taken from PAHO website on 22/ Mar/2024
https://www.paho.org/en/topics/tuberculosis

EPI WEEK 10





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SENTINEL SYNDROMIC SURVEILLANCE

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 – 7 to 10 of 2024

Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.

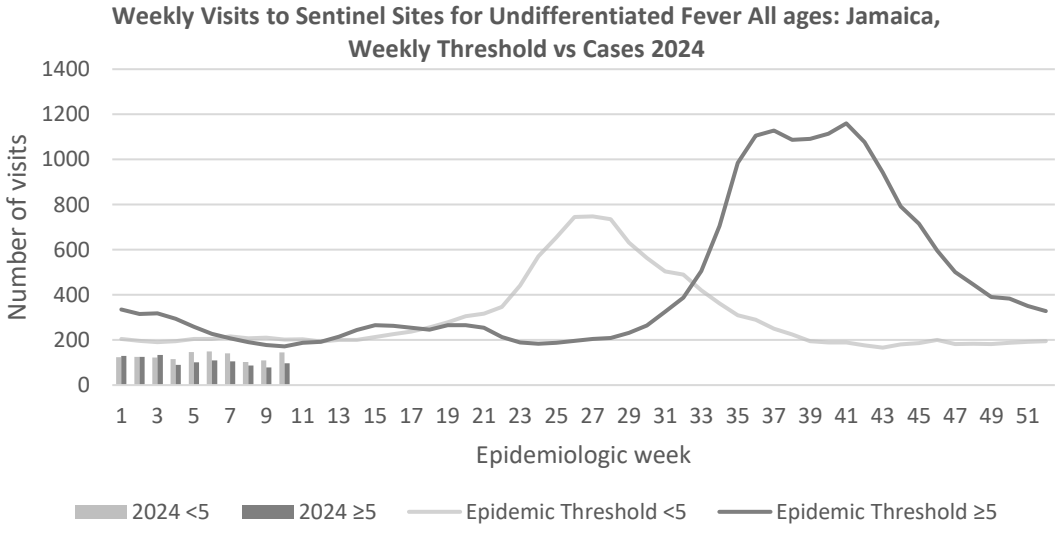
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
7	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time
8	On Time	On Time	On Time	Late (T)	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time
9	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
10	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of >38^0C /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



NOTIFICATIONS- All clinical sites

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HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

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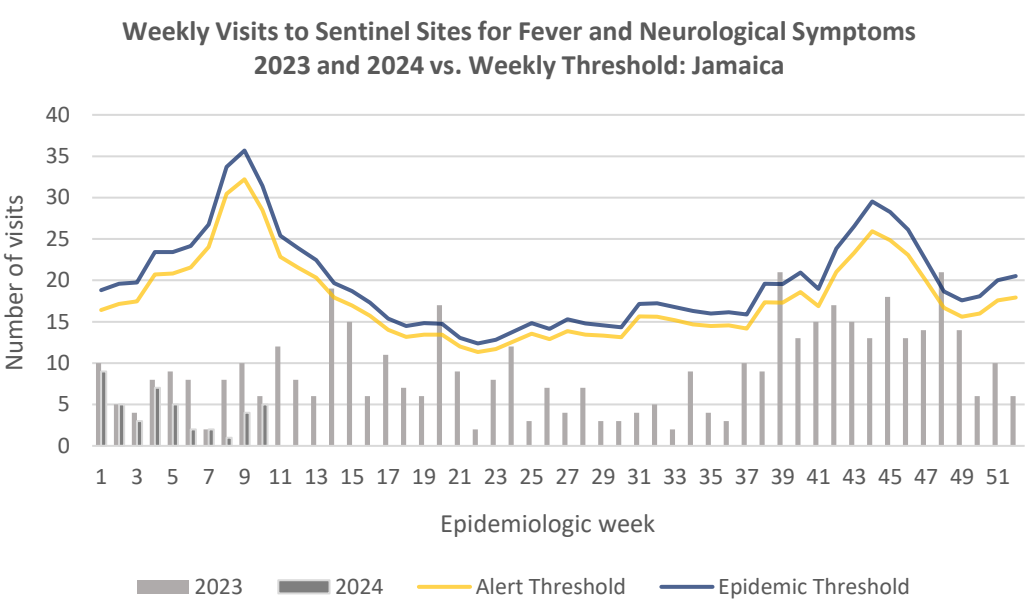
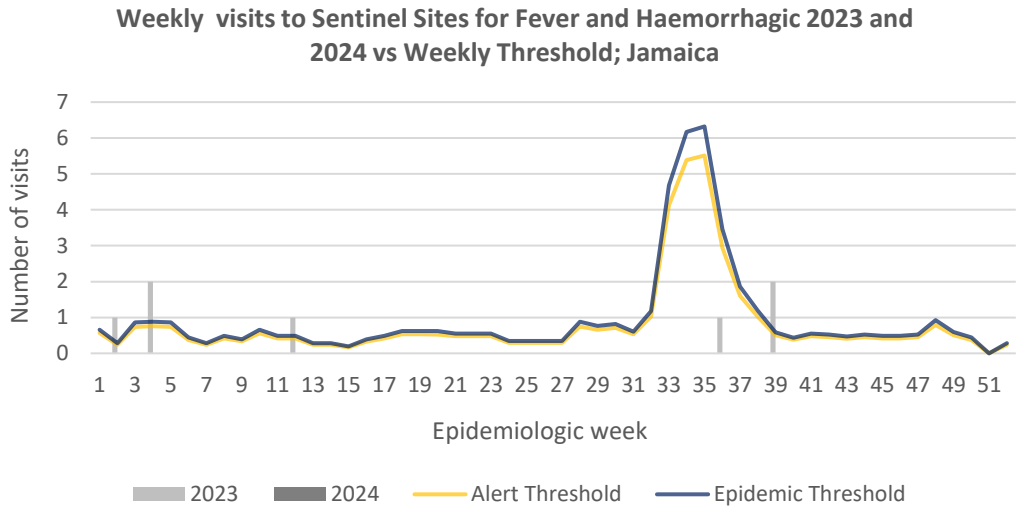
FEVER AND NEUROLOGICAL

Temperature of >38^{0}C /100.4^{0}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

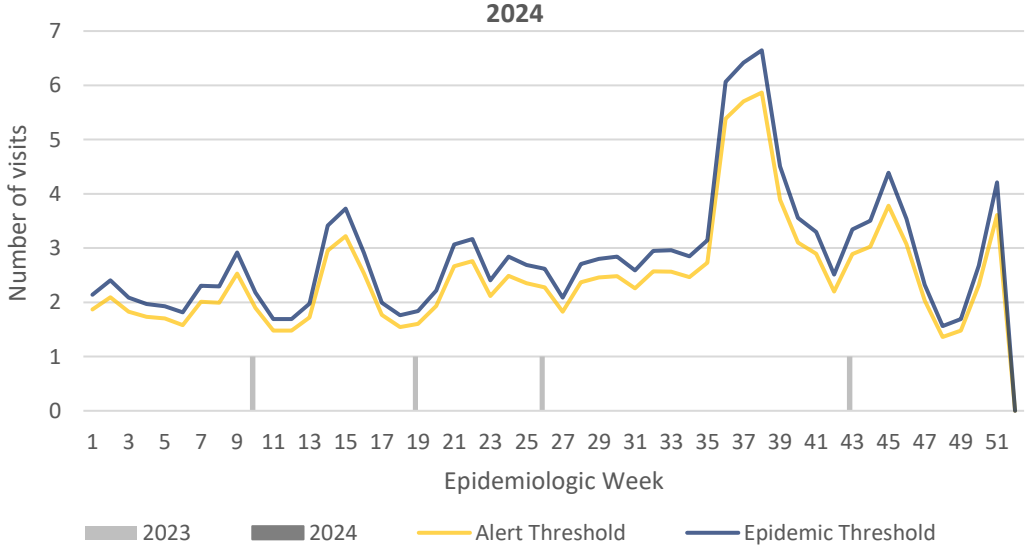
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE

Temperature of >38^0C /100.4^0F (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.



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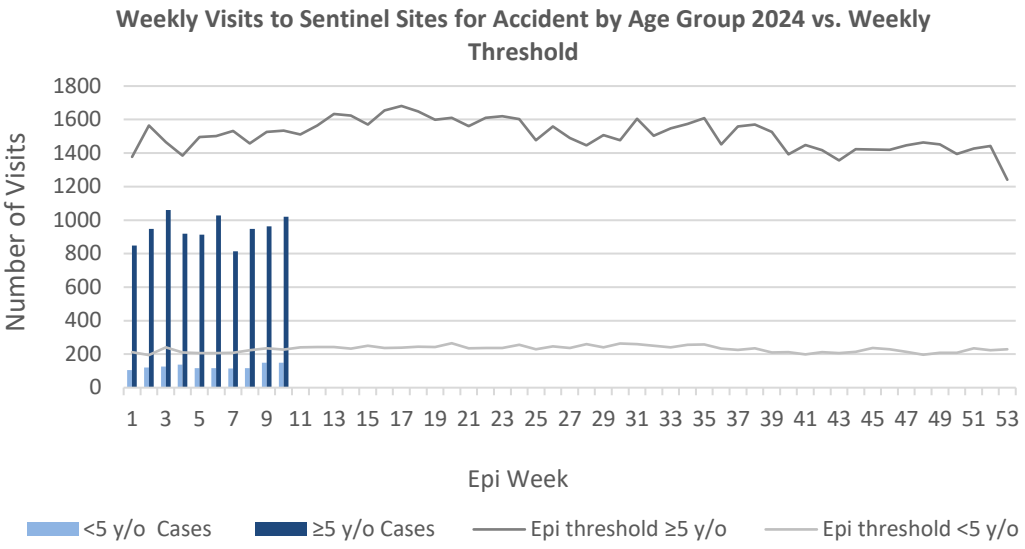
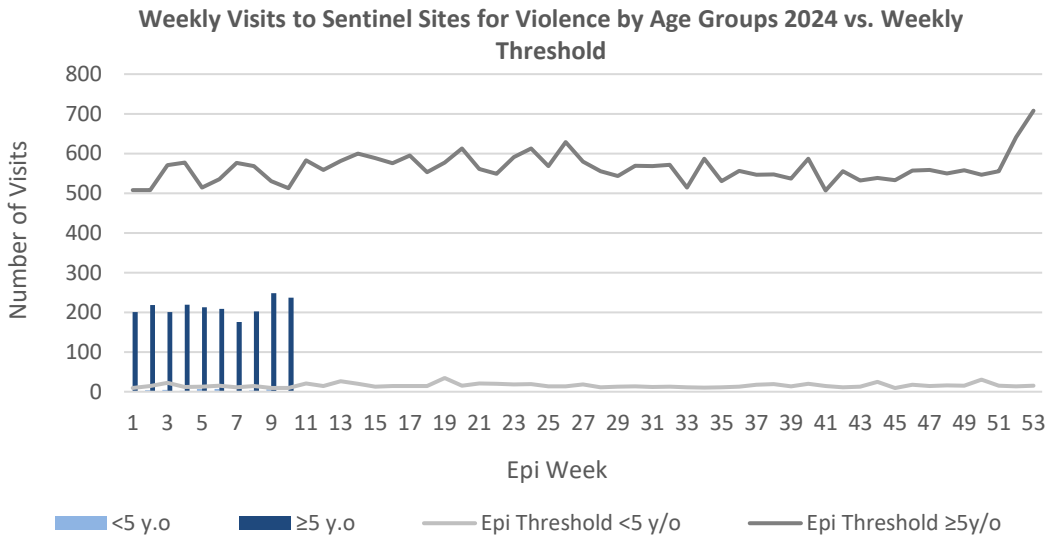
ACCIDENTS

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



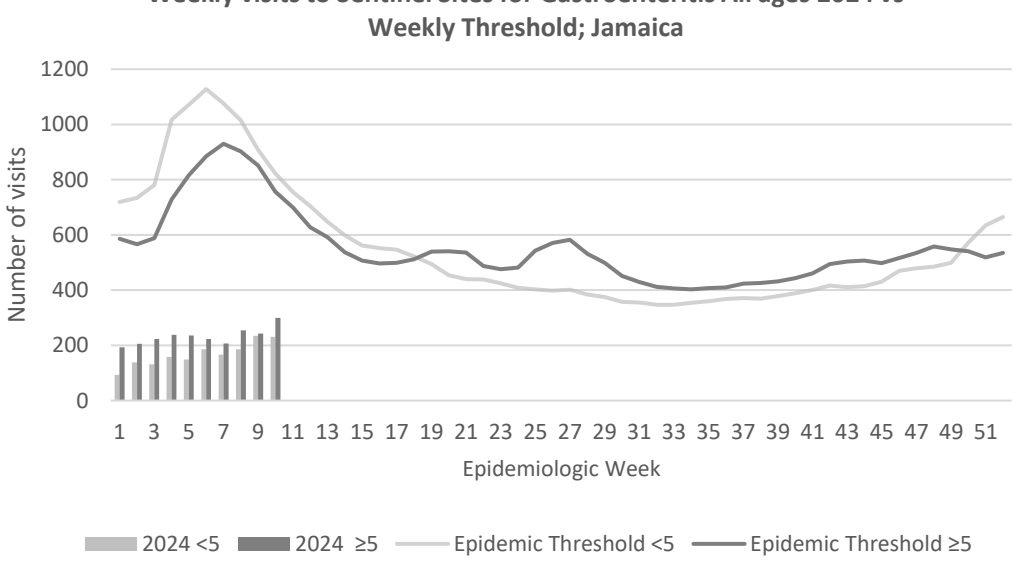
VIOLENCE

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.



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CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS		Confirmed YTD[α] CURRENT YEAR 2024	PREVIOUS YEAR 2023
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		53[β]	63[β]
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		148	1601
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	17
	Hepatitis C		0	6
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		5	10
	Monkeypox		0	2
EXOTIC/ UNUSUAL	Plague		0	0
H IGH 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
	Congenital Rubella Syndrome		0	0
	Congenital Syphilis		0	0
	Fever and Rash	Measles	0	0
		Rubella	0	0
	Maternal Deaths[δ]		8	8
	Ophthalmia Neonatorum		20	33
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		1	19
	Yellow Fever		0	0
	Chikungunya[ε]		0	0
	Zika Virus[θ]		0	0

Comments

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.

[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.

NA- Not Available

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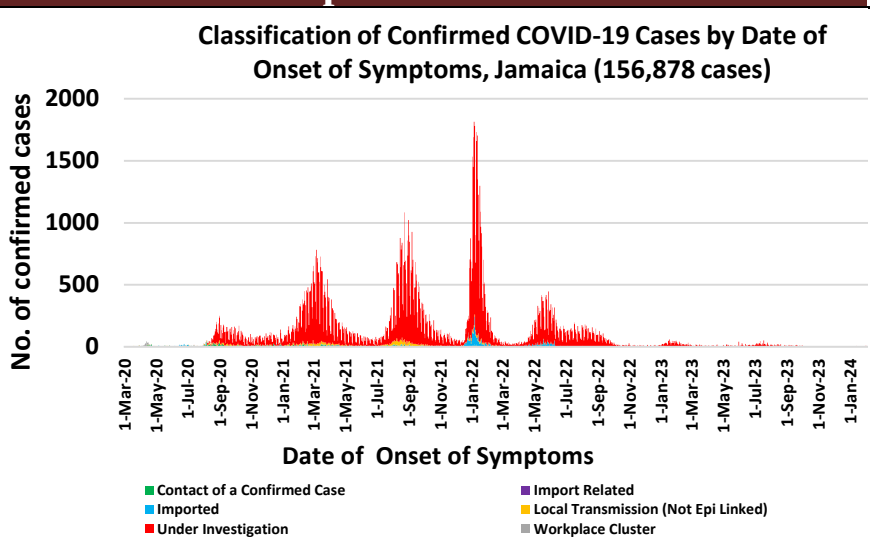
COVID-19 Surveillance Update

CASES	EW 10	Total
Confirmed	6	156878
Females	3	90410
Males	3	66465
Age Range	1 year to 87 years	1 day to 108 years

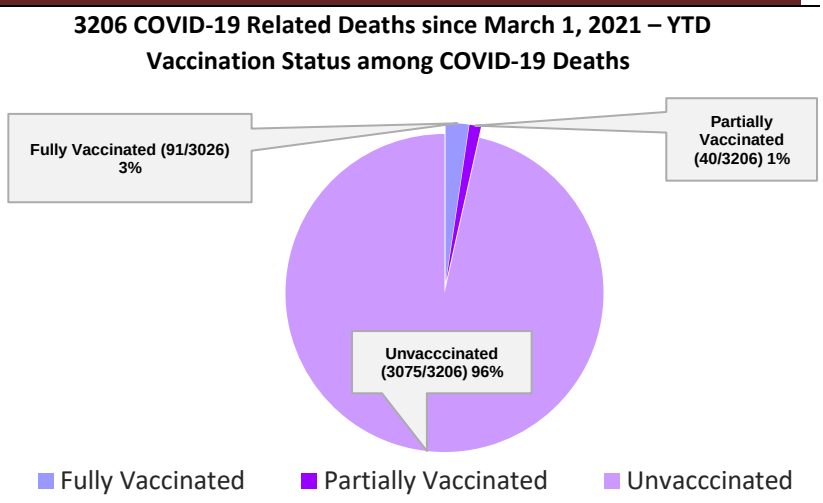
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

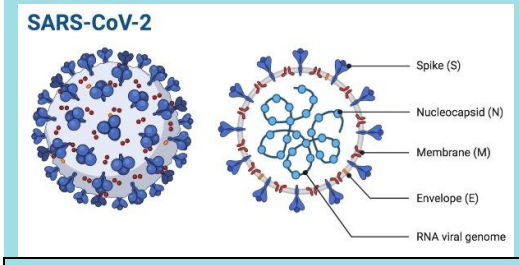
Outcomes	EW 10	Total
ACTIVE *2 weeks*		20
DIED – COVID Related	0	3768
Died - NON COVID	0	363
Died - Under Investigation	0	228
Recovered and discharged	0	103226
Repatriated	0	93
Total		156878

*Vaccination programme March 2021 – YTD
* Total as at current Epi week



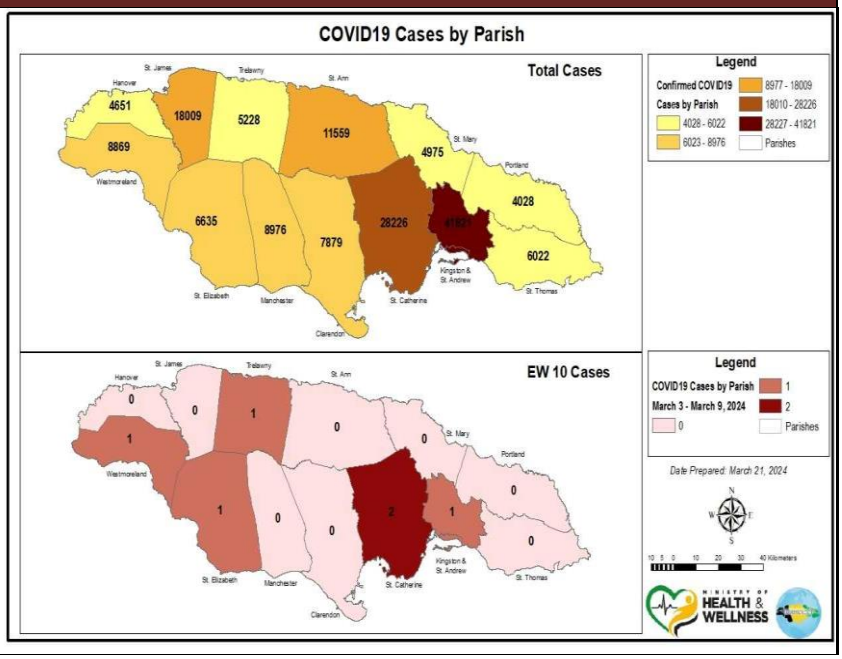
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 7-10, 2024

Epi Week	Confirmed Cases	Deaths
7	98, 500	2,000
8	86, 400	1,700
9	70,100	1, 400
10	61,900	1,100
Total (4weeks)	**316, 900**	**6, 200**



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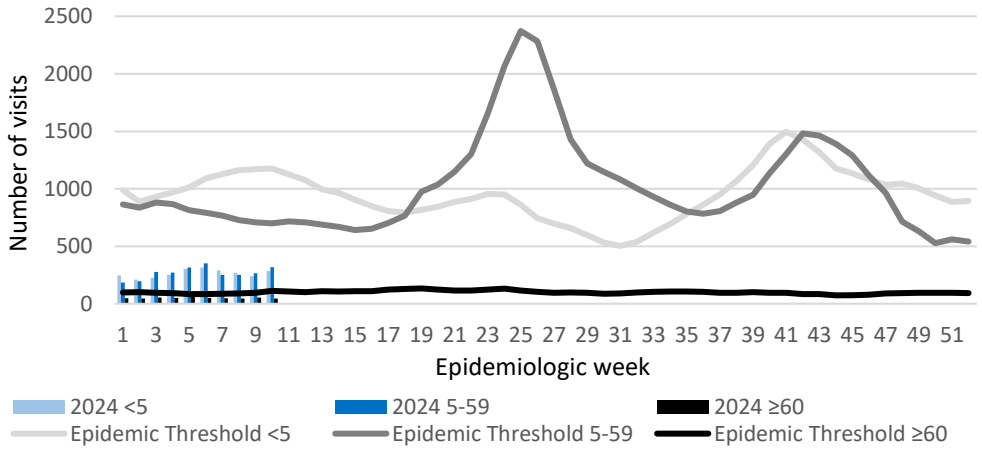
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 10

March 3, 2024 – March 9, 2024 Epidemiological Week 10

	EW 10	*YTD*
SARI cases	8	74
Total Influenza positive Samples	**0**	**35**
Influenza A	**0**	**35**
H3N2	0	10
H1N1pdm09	0	25
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	15

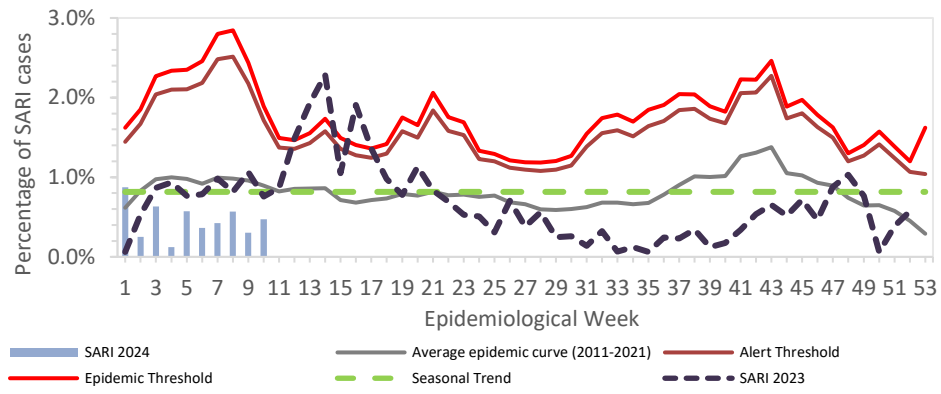
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 10, eight (8) SARI admissions were reported.

Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2024) (compared with 2011-2023)

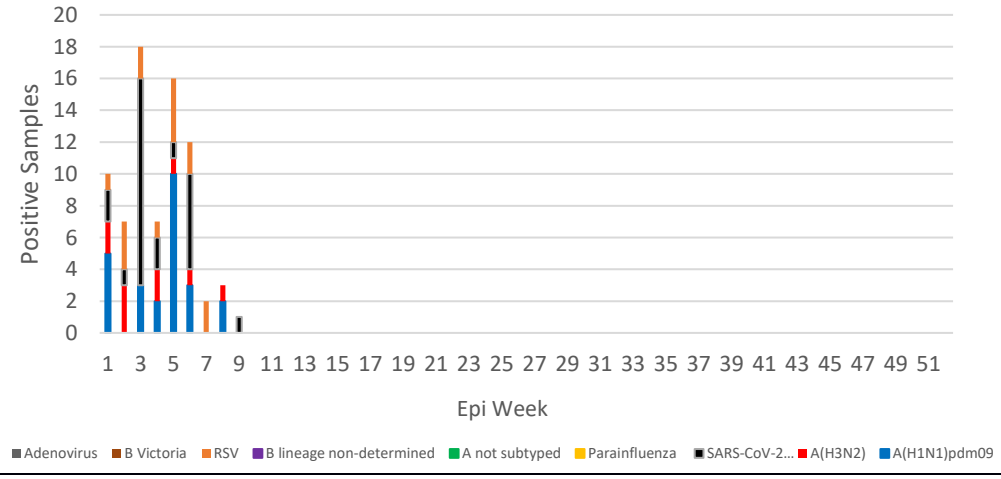


Caribbean Update EW 10

Caribbean: Following a previous increase ,ILI cases have decreased in the last four weeks, mostly due to influenza. SARI cases have also continued their decline ,primarily attributed to influenza. Influenza activity has decreased over the last four EWs, reaching low circulation levels. Predominant viruses during this period have been A(H1N1) pdm09 and A(H3N2), with lesser circulation of B/Victoria. RSV activity has remained low, and SARS-CoV-2 activity has decreased to low levels. By countries : Suriname has observed increased influenza activity, while elevated SARS-CoV-2 activity has been noted in Dominica , Haiti, Saint Lucia, Barbados , and Guyana.

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

Distribution of Influenza and Other Respiratory Viruses Under Surveillance by EW, Jamaica - 2024



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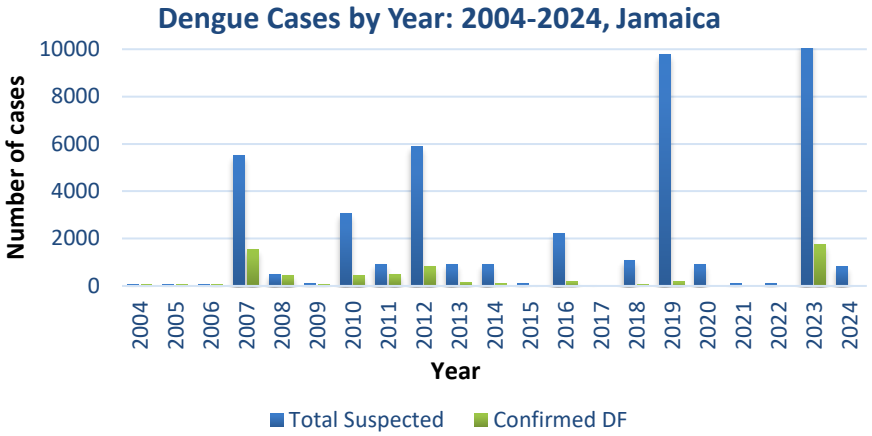
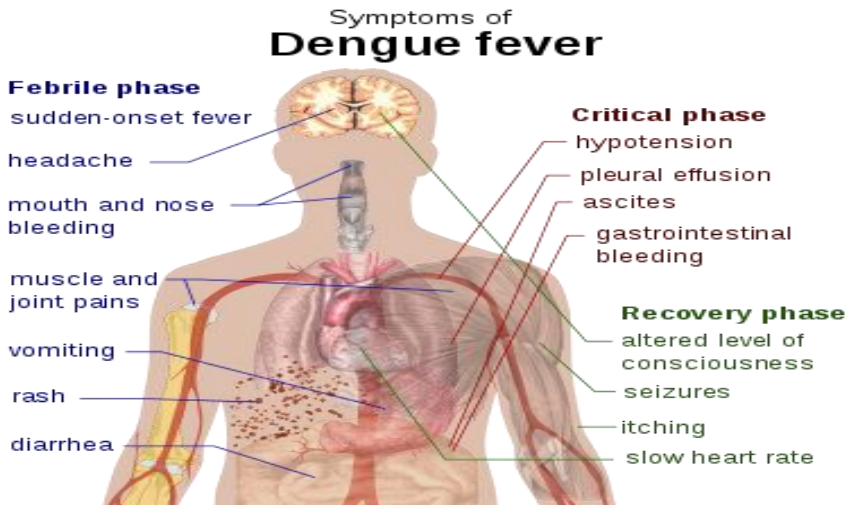
Dengue Bulletin

March 3, 2024 – March 9, 2024 Epidemiological Week 10 | Epidemiological Week 10



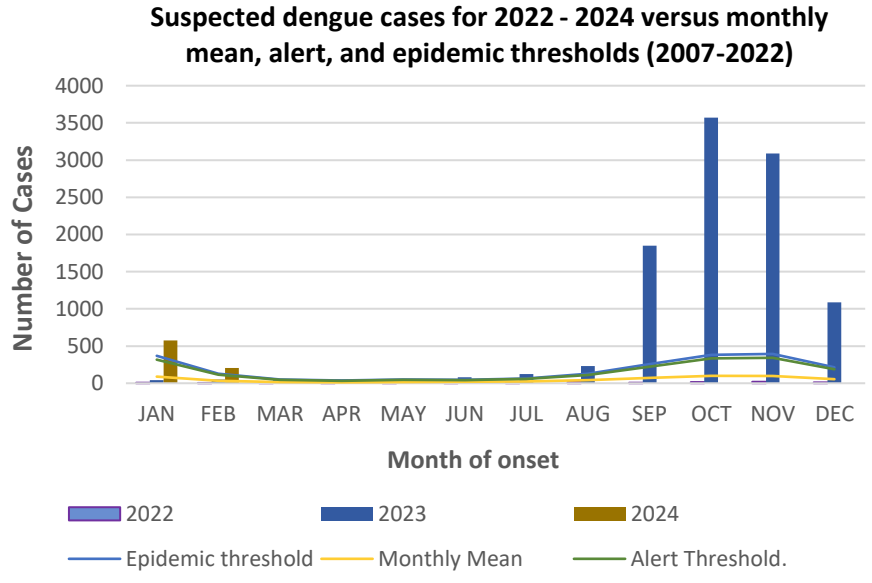
Reported suspected, probable and confirmed dengue with symptom onset in week 10 of 2024

	2024*	
	EW 10	YTD
Total Suspected , Probable & Confirmed Dengue Cases	11	815
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 March 20, 2024**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as presumed dengue.**



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RESEARCH PAPER

Abstract

NHRC_22_P19

Prevalence and determinants of non-barrier contraceptive use among women in Westmoreland, Jamaica.

Gayle H[1], BlakeA.L.[2], Brewster M[3], Asnani M[4]

[1]University of the West Indies, Mona, Jamaica, [2]Epidemiology Research Unit, Caribbean Institute for Health Research, Mona, Jamaica, [3]Department of Community Health and Psychiatry, University of the West Indies, Mona, Jamaica , [4]Sickle Cell Unit, Caribbean Institute for Health Research, Mona, Jamaica

Objectives: To determine the prevalence of non-barrier contraceptive usage in women in Westmoreland and to examine determinants that influence its usage.

Methods: A cross-sectional study design was employed across five randomly selected health centres in Westmoreland. Quota sampling was done, 243 non-pregnant women aged 16-49 years, were sampled. The questionnaire consisted of 3 parts: demographics, reproductive history and access to contraception. Data were analysed using SPSS-v.20 software and summarized as means and proportions. Bivariate analysis, Pearson's chi squared tests and logistic regressions were done. Ethics permissions were obtained.

Results: There were a total of 215 parous and 28 nulliparous women. The mean age for the sample was 30.2±9.1 years. The mean age of coitarche was 16.4 ± 2.1 years, mean age of contraception initiation was 18.9±3.5 years and mean age of first pregnancy 19.2±3.8 years. Unintentional last pregnancy rate =63.7%. The prevalence of non-barrier contraception use was 53% but was 21% in nulligravid women. Parous women were 8.5 times more likely to use non-barrier contraception than nulligravid women (OR 8.5, CI 2.6-27.3; $p<0.01$). No significant associations were found between, religion, union status, employment status, residence and non-barrier contraception use.

Conclusion: The study revealed high prevalence of non-barrier contraception among parous women, and low rates among nulligravid. Parity was found to be a determinant for non-barrier use. It demonstrated high rates of unplanned pregnancies and that many women used contraception for the first time, after being pregnant at least once. It emphasizes the need to increase family planning education, particularly to nulligravid women.

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