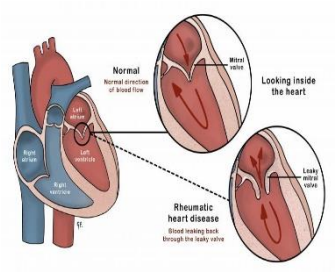
WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Rheumatic Heart Disease



How is rheumatic heart disease treated?

There is no cure for rheumatic heart disease and the damage to the heart valves are permanent. Patients with severe rheumatic heart disease will often require surgery to replace or repair the damages valve or valves. Depending on the severity of disease, medication may also be needed to treat symptoms of heart failure or heart rhythm abnormalities. Medications which thin the blood to reduce the risk of blood clots may also be needed. In the case of serious disease surgery may be required to repair or replace the heart valves. This is often not available in low-income settings, or when it is available the costs may be too high if not covered as part of national health plans, putting families under increased financial strain.

Rheumatic heart disease is preventable.

Since rheumatic heart disease results from rheumatic fever, an important strategy is to prevent rheumatic fever from occurring. Treatment of strep throat with appropriate antibiotics will prevent rheumatic fever. Once a patient has been identified as having had rheumatic fever, it is important to prevent additional streptococcal infections as this could cause a further episode of rheumatic fever and additional damage to the heart valves. The strategy to prevent additional streptococcal infection is to treat the patient with antibiotics over a long period of time. The antibiotic treatment that is most effective in preventing further infection is benzathine penicillin G, which is given by intramuscular injection every 3-4 weeks over many years.

For countries where rheumatic heart disease is endemic, the main strategies for prevention, control and elimination include: improving standards of living; expanding access to appropriate care; ensuring a consistent supply of quality-assured antibiotics for primary and secondary prevention; and planning, developing and implementing feasible programmes for prevention and control of rheumatic heart disease, supported by adequate monitoring and surveillance, as an integrated component of national health systems responses.

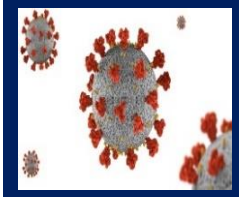
Challenges

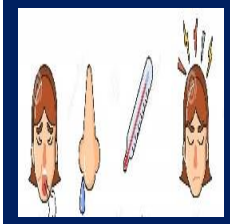
Rheumatic heart disease can be prevented by effective management of streptococcal sore throat, however treatment at this early stage is often not achieved. Families may not have the time or money to access a healthcare facility, or may not seek care due to low awareness of the potential risk of untreated 'strep throat'. Healthcare workers may also not have the necessary knowledge to appropriately diagnose and manage a 'strep throat'. If left untreated, rheumatic fever may then ensue.

Currently a large proportion of those suffering rheumatic heart disease are not diagnosed, or are diagnosed at a late stage when damage to the heart is very severe. Rheumatic heart disease remains the leading cause of maternal cardiac complications in pregnancy. In many rheumatic heart disease-endemic countries there is little or no access to life-saving heart valve surgery. Measures to halt the progression to severe rheumatic heart disease require long-term treatments and a well-functioning health system to deliver this service.

Taken from WHO wedsite on 07/ Mar/2024
https://www.who.int/news-room/fact-sheets/detail/rheumatic-heart-disease

EPI WEEK 08





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 – 5 to 8 of 2024

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

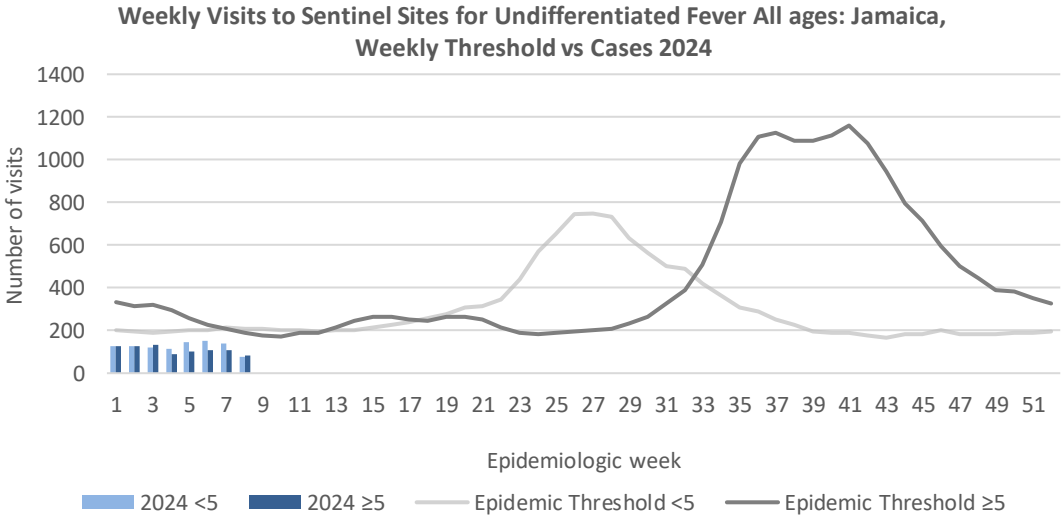
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
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
6	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
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

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

SENTINEL REPORT- 78 sites. Automatic reporting

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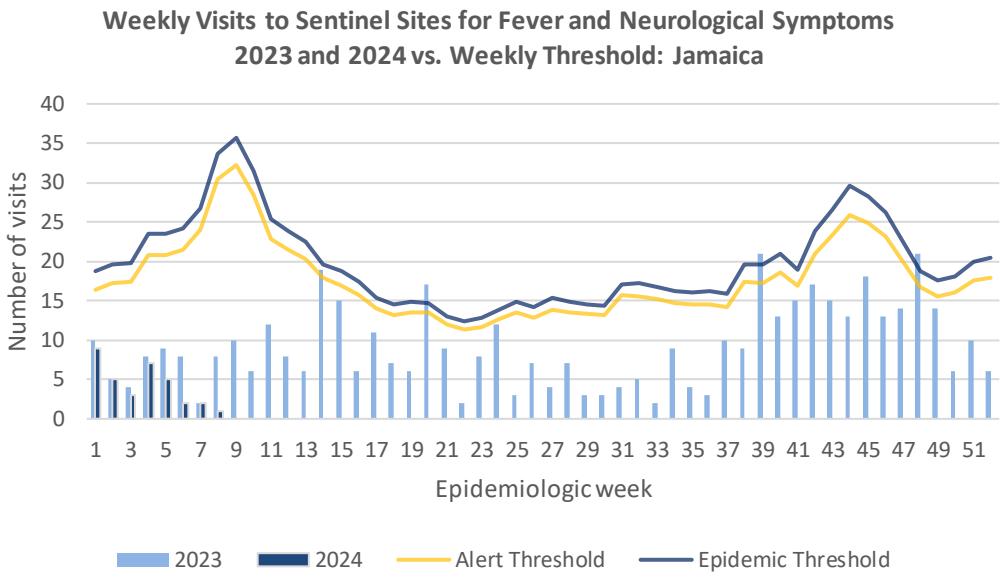
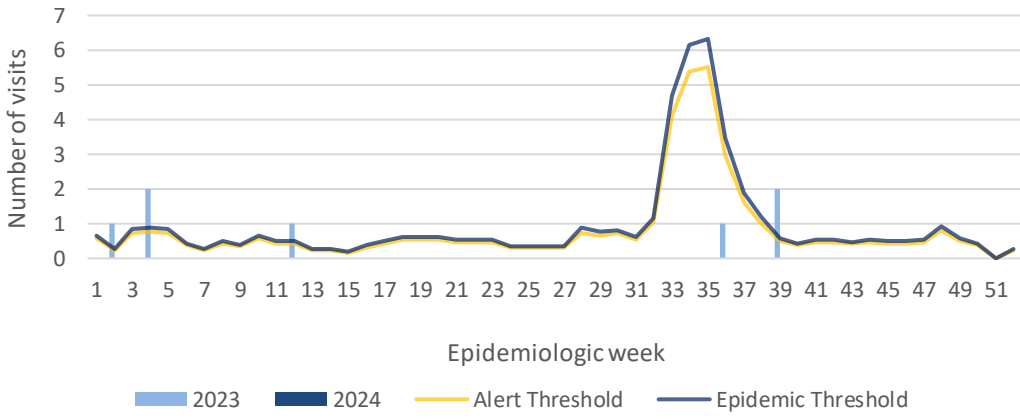
FEVER AND NEUROLOGICAL

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

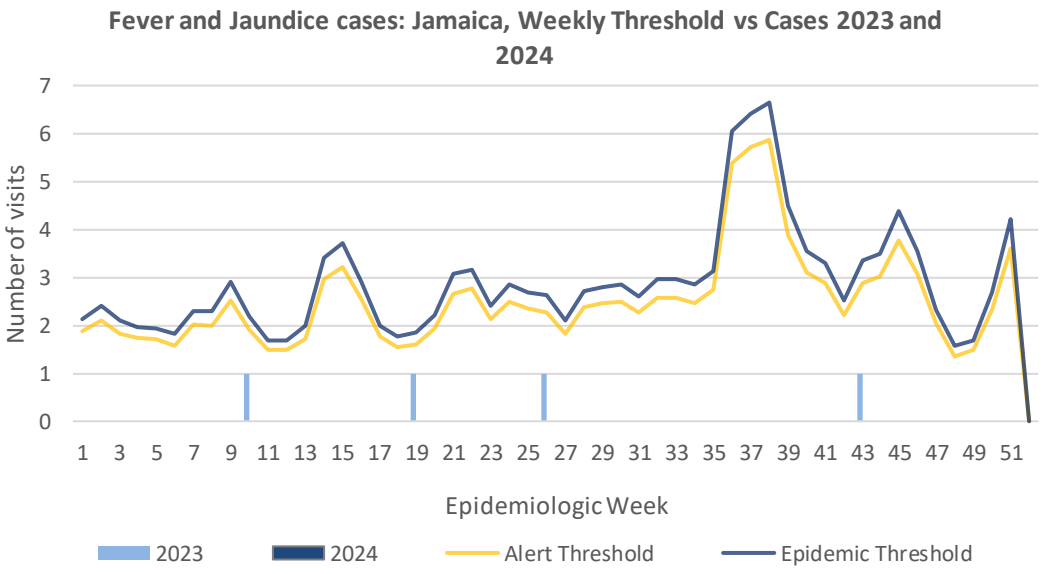
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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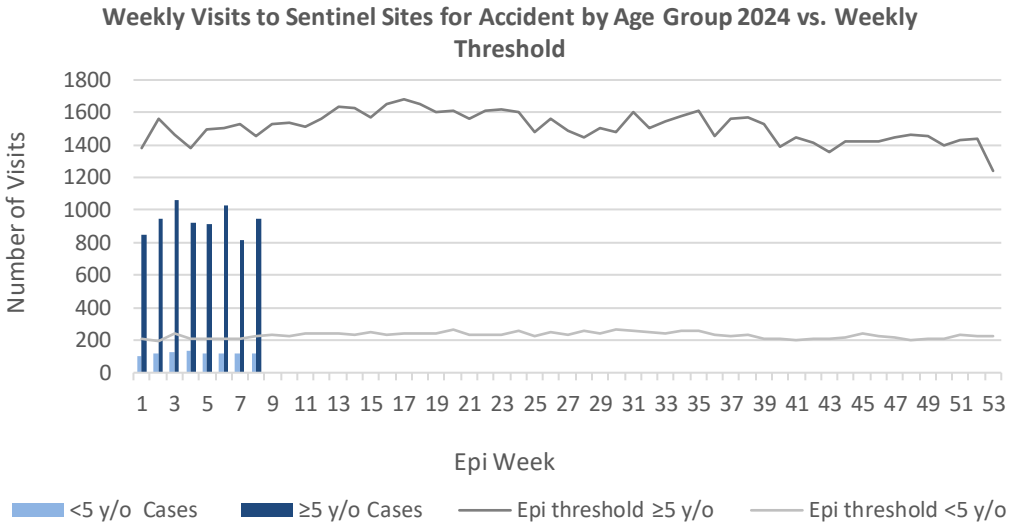
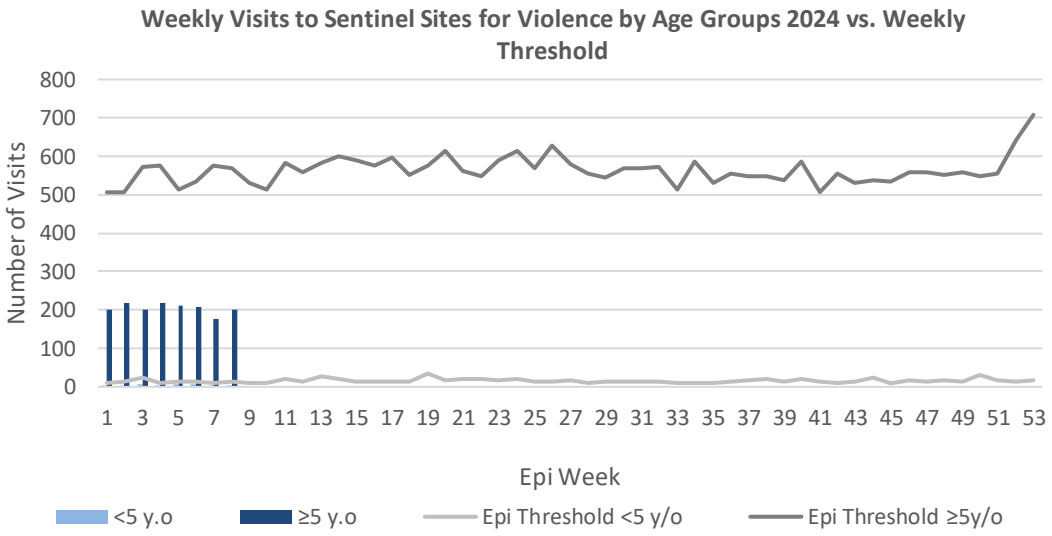
ACCIDENTS

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



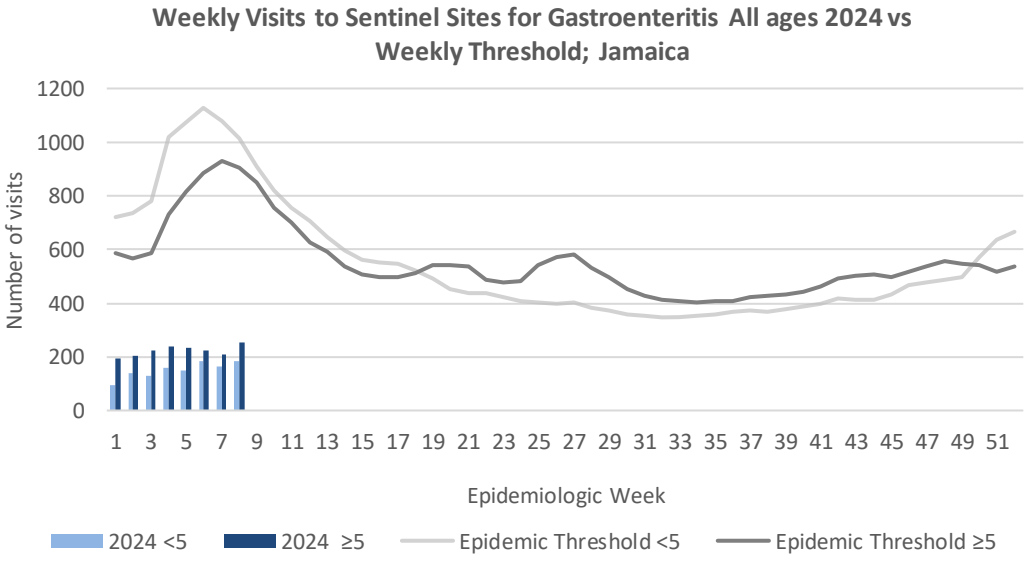
VIOLENCE

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		46[β]	53[β]
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		131	1454
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	12
	Hepatitis C		0	5
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		1	8
	Monkeypox		0	1
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]		5	6
	Ophthalmia Neonatorum		14	31
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		1	11
	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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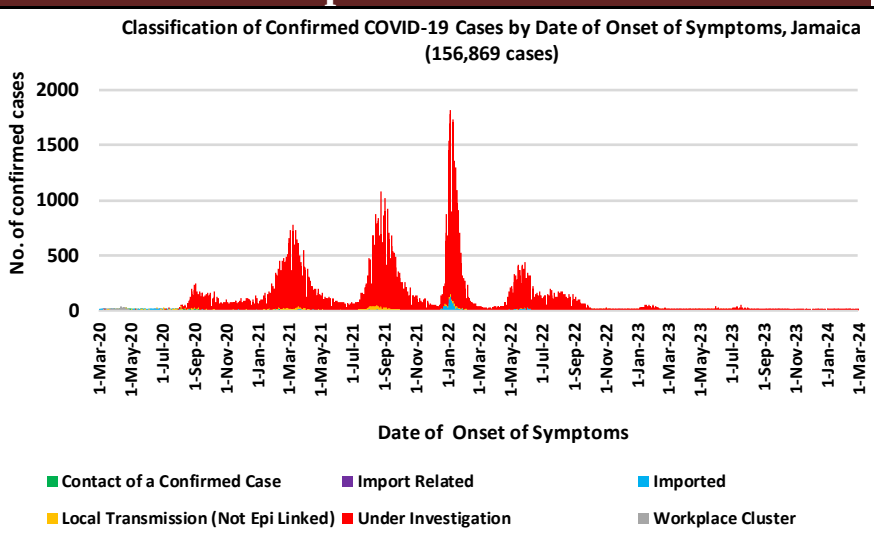
COVID-19 Surveillance Update

CASES	EW 08	Total
Confirmed	11	156869
Females	7	90405
Males	4	66461
Age Range	3 months to 91 years	1 day to 108 years

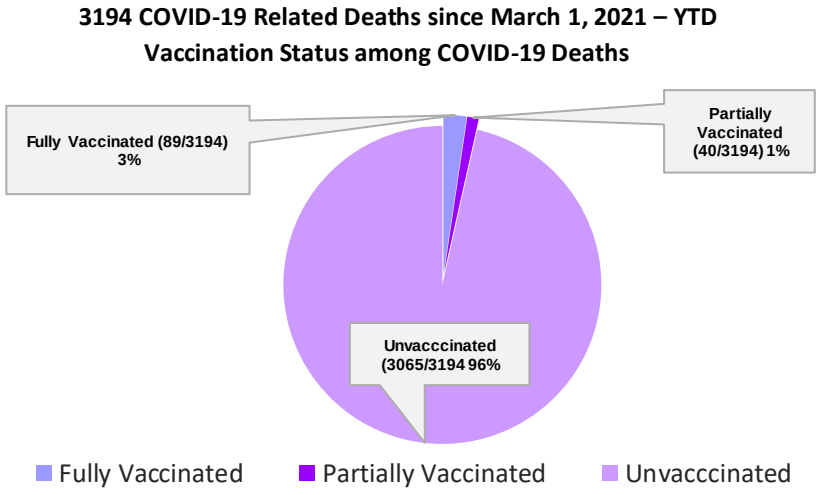
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

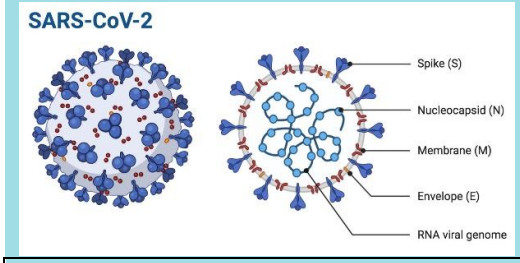
Outcomes	EW 08	Total
ACTIVE *2 weeks*		23
DIED – COVID Related	0	3756
Died - NON COVID	0	359
Died - Under Investigation	0	241
Recovered and discharged	0	103226
Repatriated	0	93
Total		156869

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



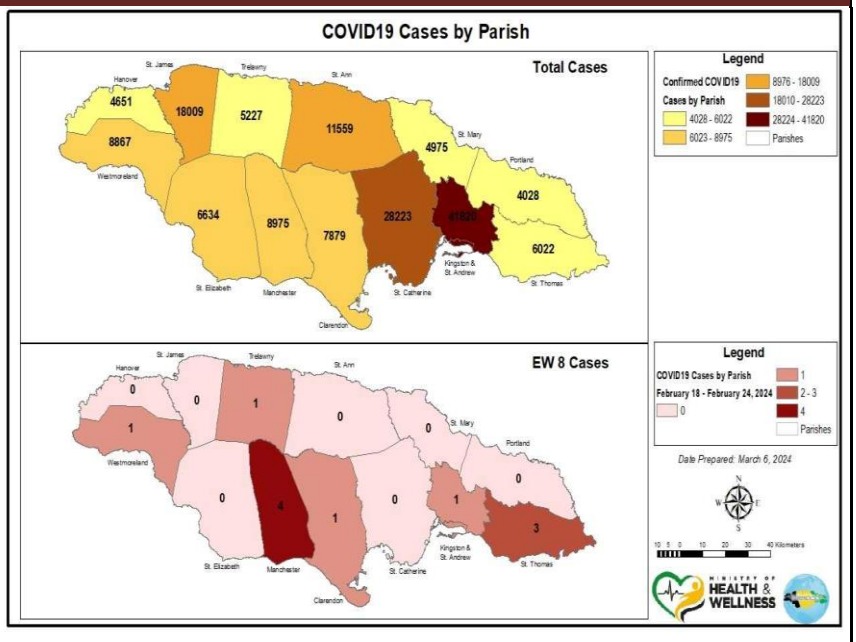
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 5-8, 2024

Epi Week	Confirmed Cases	Deaths
5	115, 500	2, 800
6	98, 500	2, 300
7	86, 400	1, 800
8	75, 700	1, 300
Total (4weeks)	**376, 100**	**8, 200**



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March 8 , 2024 ISSN 0799-3927

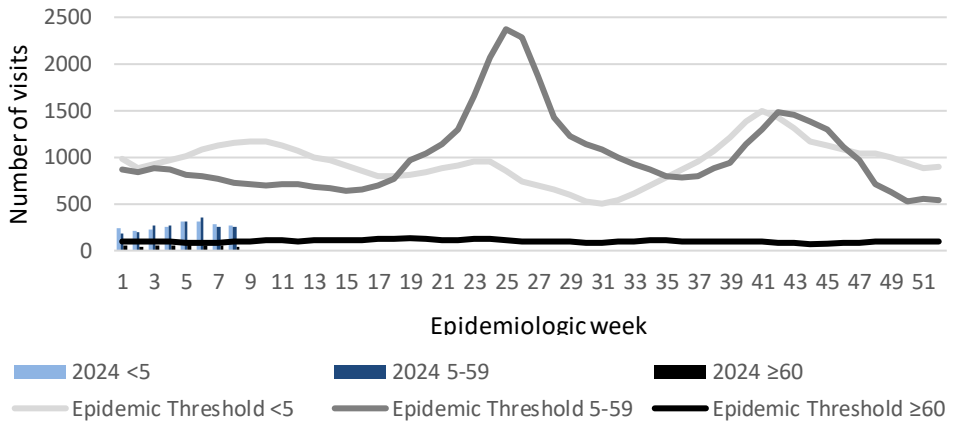
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 8

February 18, 2024 – February 24, 2024 Epidemiological Week 08

	EW 08	*YTD*
SARI cases	9	61
Total Influenza positive Samples	**0**	**33**
Influenza A	**1**	**33**
H3N2	0	10
H1N1pdm09	0	23
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

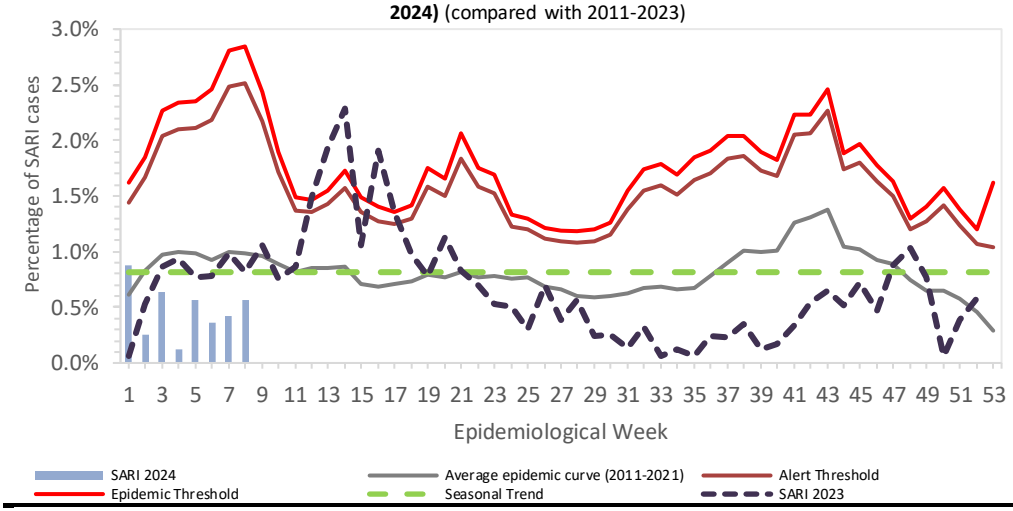
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 08, nine (9) SARI admissions were reported.

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

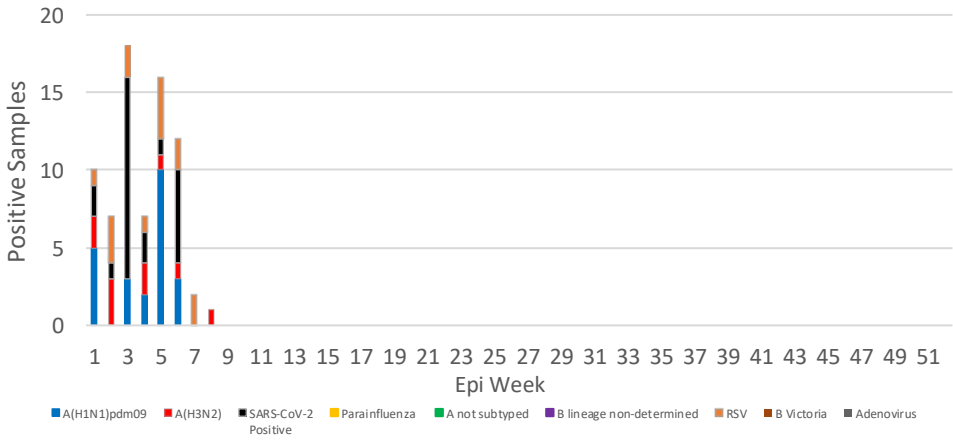


Caribbean Update EW 8

Caribbean: ILI cases have remained steady at high levels in the last four weeks associated with an increase in positive influenza and SARS-CoV-2 cases, while SARI cases have remained on the decline. Influenza activity has increase 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 decreasing trend. By countries: Elevated influenza activity has been observed in Belize and Surmaine. Elevated SARS-CoV-2 activity has been observed in Belize, Jamaica, The Cayman Islands 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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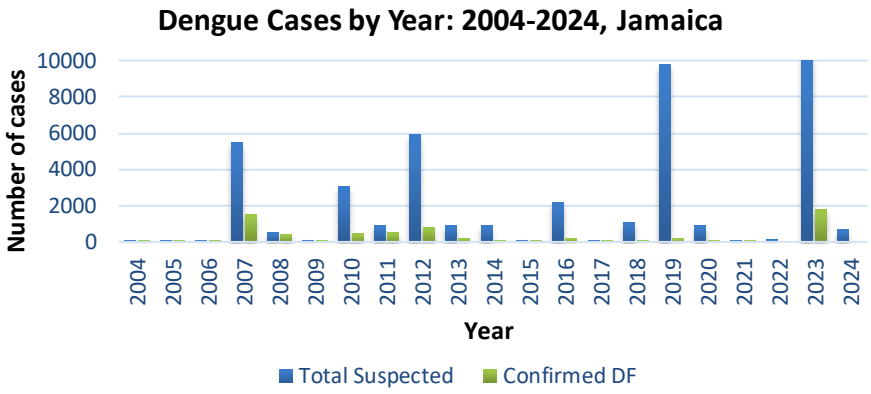
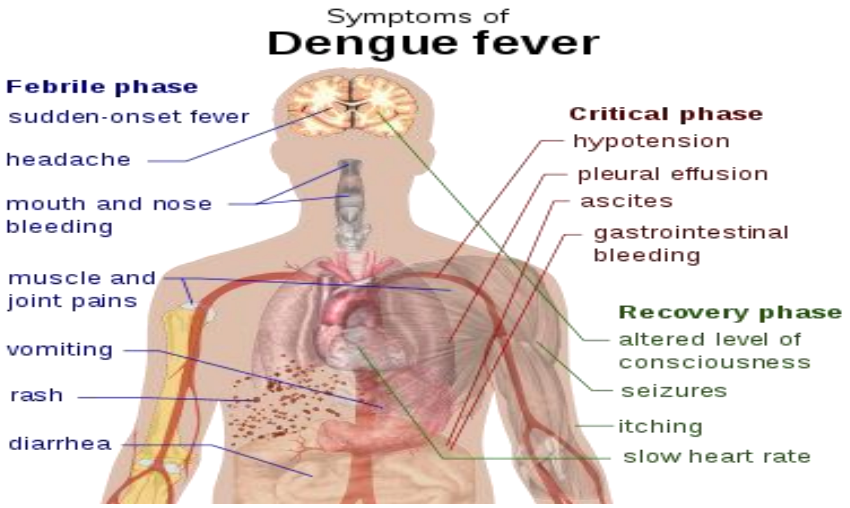
Dengue Bulletin

February 18, 2024 – February 24, 2024 Epidemiological Week 08 | Epidemiological Week 08



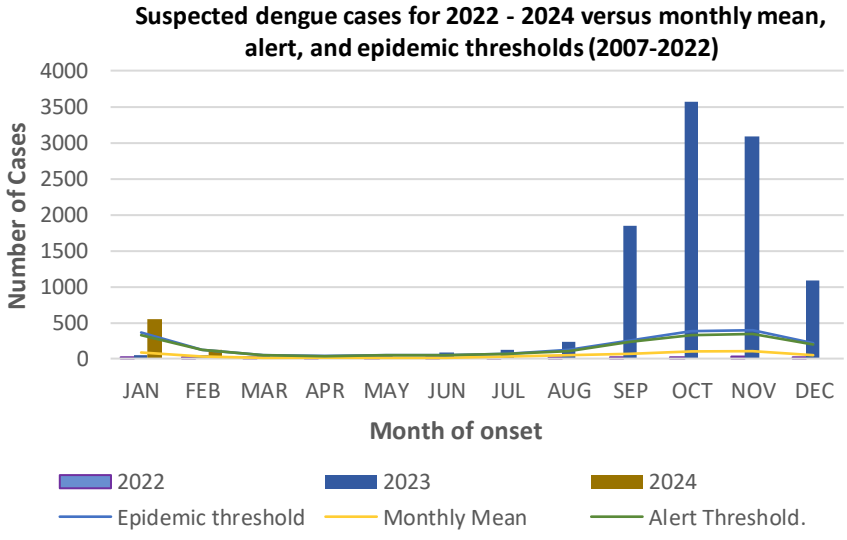
Reported suspected, probable and confirmed dengue with symptom onset in week 08 of 2024

	2024*	
	EW 08	YTD
Total Suspected , Probable & Confirmed Dengue Cases	2	689
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 8, 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_P15

Surgical procedures in the elderly at the University Hospital of the West Indies between 2016 and 2021

Toppin P[1], Reid S[1], Roberts P[1], Tennant I[1], Eldemire-Shearer D[2]

[1]Department of Surgery, Radiology, Anaesthesia and Intensive Care, University of the West Indies, Mona, [2]Department of Community Health and Psychiatry, University of the West Indies, Mona

Objectives: To evaluate changes in the pattern of elderly patients undergoing surgery at the UHWI between 2016 and 2021, emphasising the effect of the SARS-COV-2 pandemic.

Methods: Data were extracted from the database in the main operating theatre of the UHWI. Cases done between January 1, 2016, and December 31, 2021, were included. The post-pandemic period was defined as after February 2020. Patients over 64 years were classified as elderly, and those older than 79 as very elderly. Categorical data were compared using the Chi-squared test and continuous data using the Wilcoxon rank sum test.

Results: 21,972 cases were included, 16,872 in the pre-pandemic period and 5,913 in the post-pandemic. Elderly and very elderly patients made up 23% and 5.4 % of the patients, respectively. There was a fall in the number of cases done post-pandemic. However, the proportion of elderly and very elderly patients did not change ($p = 0.14$, $p = 0.15$ respectively). The percentage of elderly patients undergoing emergency surgery increased (33% to 43%, $p < 0.01$) post-pandemic. The percentage of elderly female patients also increased post-pandemic (53% to 56%, $p = 0.03$). The number of hernia repairs done post-pandemic fell significantly, amputations, colectomies and hip replacements remained common especially in patients over 79.

Conclusion: The elderly and very elderly form a disproportionately large subset of surgical patients at the UHWI, and the SARS-COV-2 pandemic significantly impacted this group. The overall number, sex and procedure distribution changed post-pandemic.

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