

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Diabetes



Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Insulin is a hormone that regulates blood glucose.

Hyperglycaemia, also called raised blood glucose or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels.

Diagnosis and treatment

Early diagnosis can be accomplished through relatively inexpensive testing of blood glucose. People with type 1 diabetes need insulin injections for survival.

One of the most important ways to treat diabetes is to keep a healthy lifestyle.

Some people with type 2 diabetes will need to take medicines to help manage their blood sugar levels. These can include insulin injections or other medicines. Some examples include:

- metformin
- sulfonylureas
- sodium-glucose co-transporters type 2 (SGLT-2) inhibitors.

Along with medicines to lower blood sugar, people with diabetes often need medications to lower their blood pressure and statins to reduce the risk of complications.

Additional medical care may be needed to treat the effects of diabetes:

- foot care to treat ulcers
- screening and treatment for kidney disease
- eye exams to screen for retinopathy (which causes blindness).

Diabetes is a major cause of blindness, kidney failure, heart attacks, stroke and lower limb amputation.

A healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco use are ways to prevent or delay the onset of type 2 diabetes. Diabetes can be treated and its consequences avoided or delayed with diet, physical activity, medication and regular screening and treatment for complications.

EPI WEEK 43



Syndromic Surveillance

Accidents

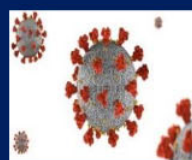
Violence

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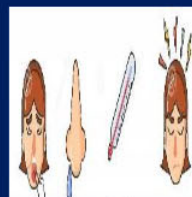
Class 1 Notifiable Events

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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 – 40 to 43 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													
40	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
41	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time
42	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
43	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time

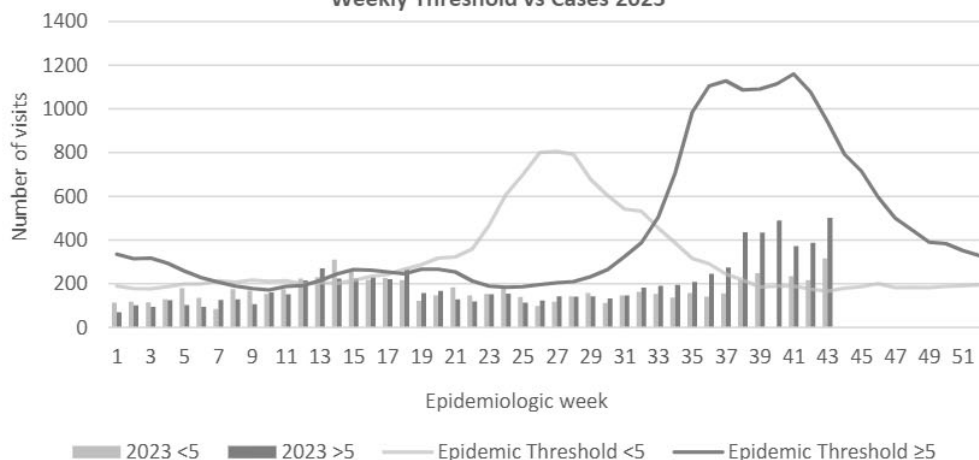
REPORTS FOR SYNDROMIC SURVEILLANCE

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 2023



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



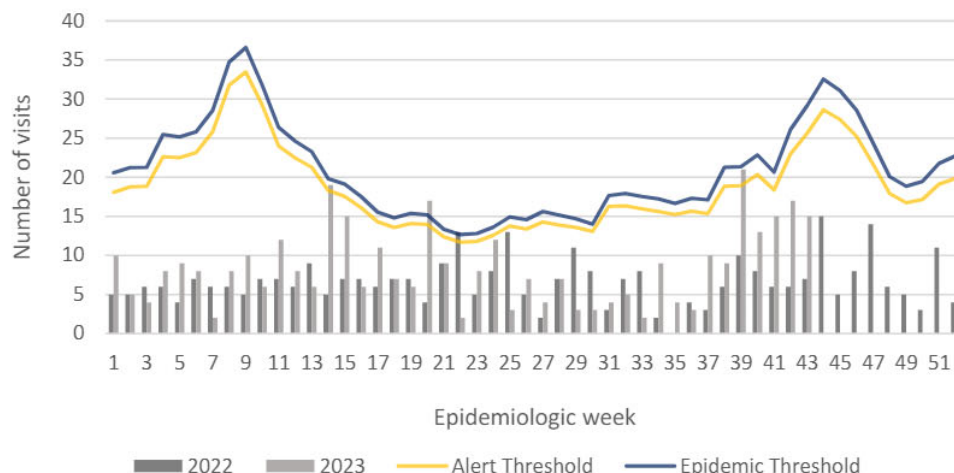
SENTINEL REPORT- 78 sites. Automatic reporting

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).



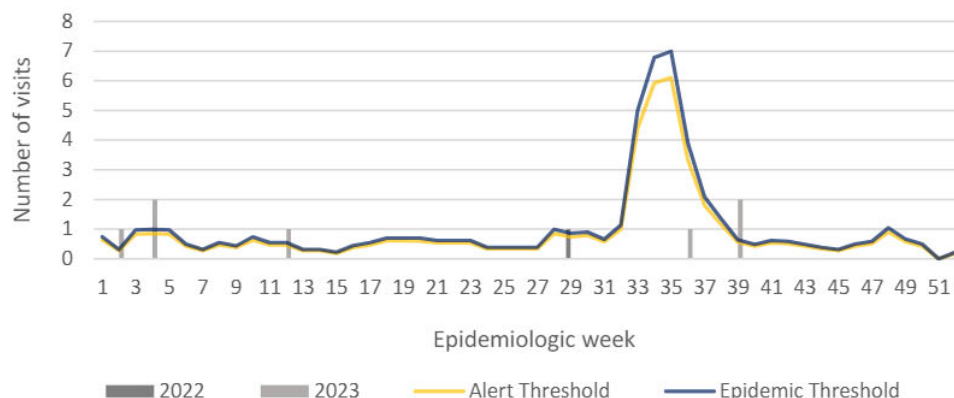
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms
2022 and 2023 vs. Weekly Threshold: Jamaica

**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

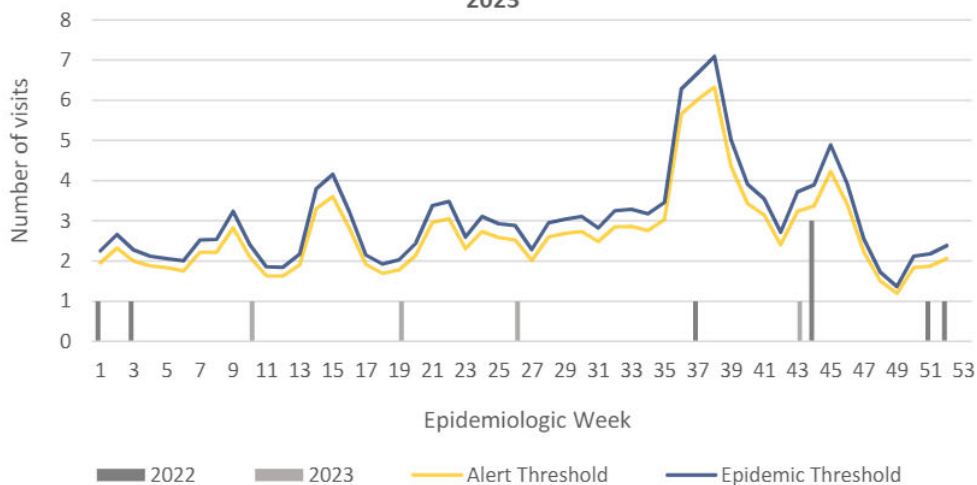
**FEVER AND JAUNDICE**

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



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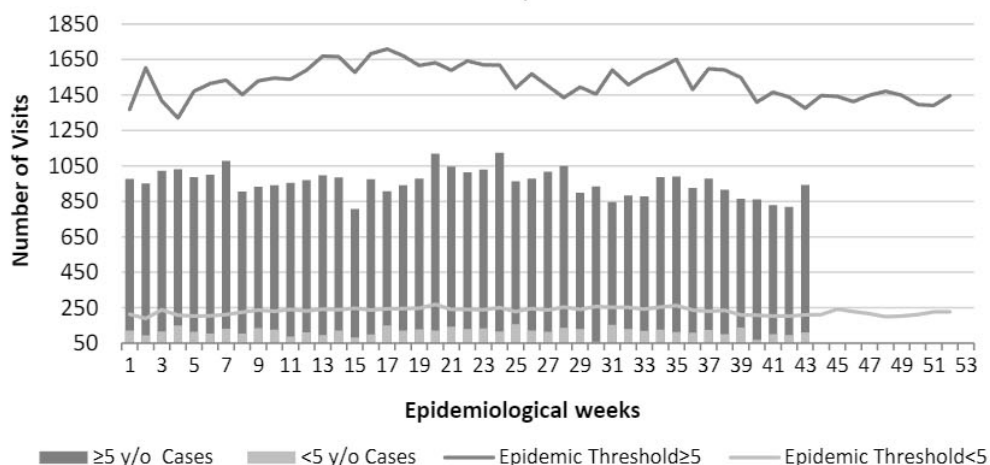


ACCIDENTS

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



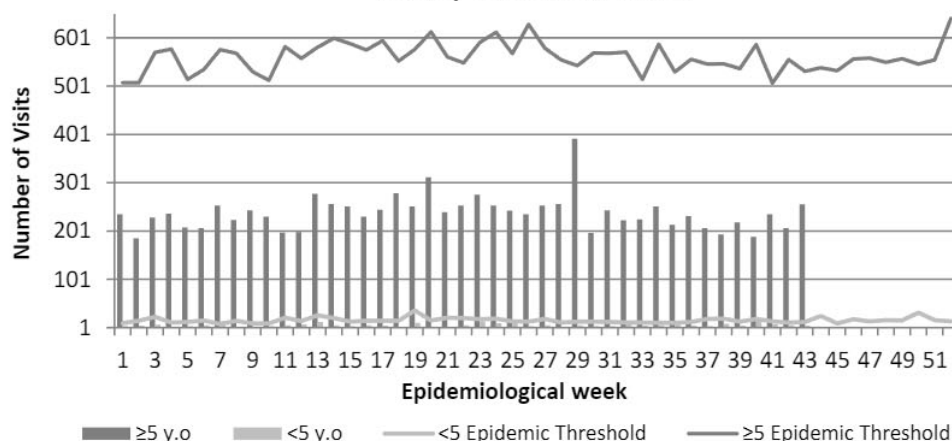
Weekly visits to Sentinel Sites for Accidents by Age Group 2023 vs Weekly Threshold; Jamaica

**VIOLENCE**

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



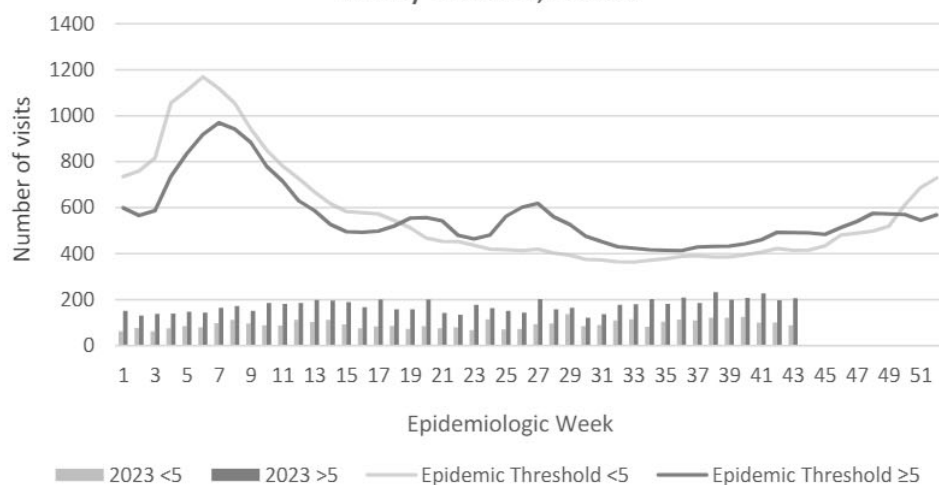
Weekly visits to Sentinel Sites for Violence by Age Group 2023 vs Weekly Threshold; Jamaica

**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 2023 vs Weekly Threshold; Jamaica



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All clinical sites



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CLASS ONE NOTIFIABLE EVENTS				Comments
	CLASS 1 EVENTS	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.
		CURRENT YEAR 2023	PREVIOUS YEAR 2022	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	269 ^β	183 ^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	
	COVID-19 (SARS-CoV-2)	3768	55230	^γ Dengue Hemorrhagic Fever data include Dengue related deaths;
	Hansen's Disease (Leprosy)	0	0	
	Hepatitis B	50	26	
	Hepatitis C	24	2	^δ Figures include all deaths associated with pregnancy reported for the period.
	HIV/AIDS	N/A	N/A	
	Malaria (Imported)	3	2	
	Meningitis	25	18	^ε CHIKV IgM positive cases
	Monkeypox	3	16	
EXOTIC/ UNUSUAL	Plague	0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	^θ Zika PCR positive cases
	Neonatal Tetanus	0	0	
	Typhoid Fever	0	0	
	Meningitis H/Flu	0	0	^β Updates made to prior weeks.
SPECIAL PROGRAMMES	AFP/Polio	0	0	^α Figures are cumulative totals for all epidemiological weeks year to date.
	Congenital Rubella Syndrome	0	0	
	Congenital Syphilis	0	0	
	Fever and Rash	Measles	0	
		Rubella	0	
	Maternal Deaths ^δ	40	59	
	Ophthalmia Neonatorum	106	125	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	0	
	Tetanus	0	2	
	Tuberculosis	37	33	
	Yellow Fever	0	0	
	Chikungunya ^ε	0	0	
	Zika Virus ^θ	0	0	NA- Not Available

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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

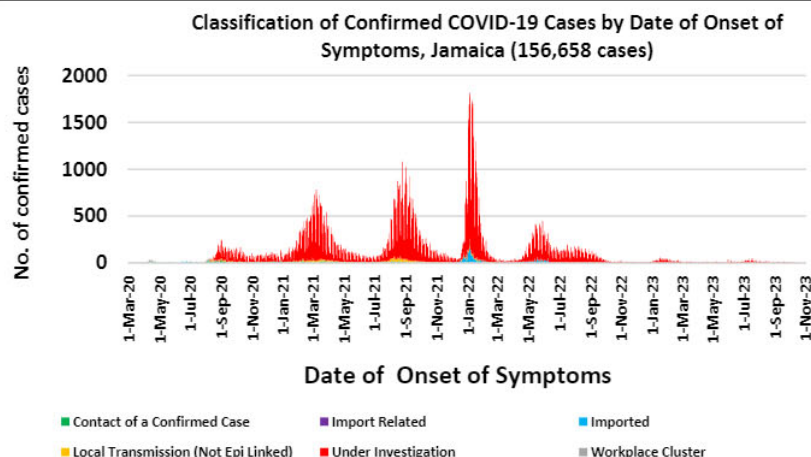


SENTINEL
REPORT- 78 sites.
Automatic reporting

COVID-19 Surveillance Update

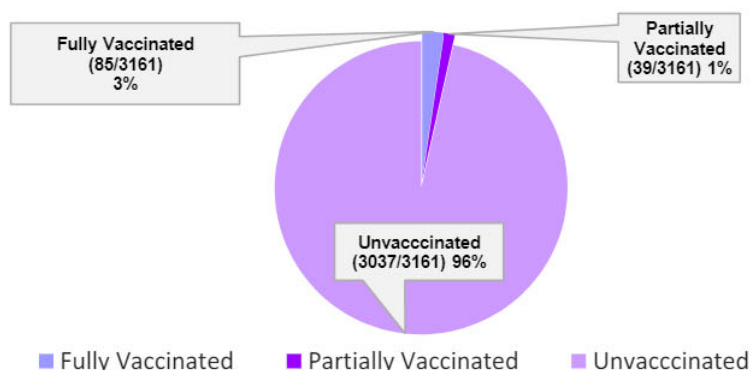
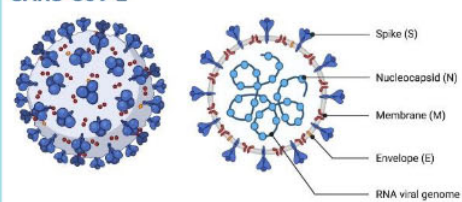
March 10, 2020 – EW 43, 2023

CASES	EW 43	Total
Confirmed	7	156658
Females	5	90289
Males	2	66366
Age Range	3 months old to 81 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		

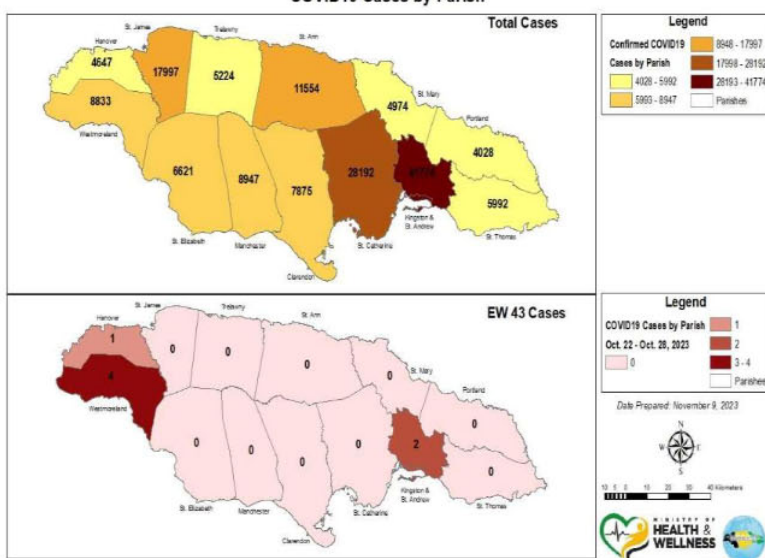
**COVID-19 Outcomes**

Outcomes	EW 43	Total
ACTIVE *2 weeks*		37
DIED – COVID Related	0	3723
Died - NON COVID	0	345
Died - Under Investigation	0	261
Recovered and discharged	2	103218
Repatriated	0	93
Total		156658

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

3161 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 EW40-EW43**

Epi Week	Confirmed Cases	Deaths
40	144,732	1,211
41	113,677	1,863
42	114,830	500
43	77,151	520
Total (4weeks)	450,390	4,094

COVID19 Cases by Parish

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NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-
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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 43

October 22 – October 28, 2023 Epidemiological Week 43

	EW 43	YTD
SARI cases	5	473
Total Influenza positive Samples	0	185
Influenza A	0	21
H3N2	0	1
H1N1pdm09	0	19
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	17

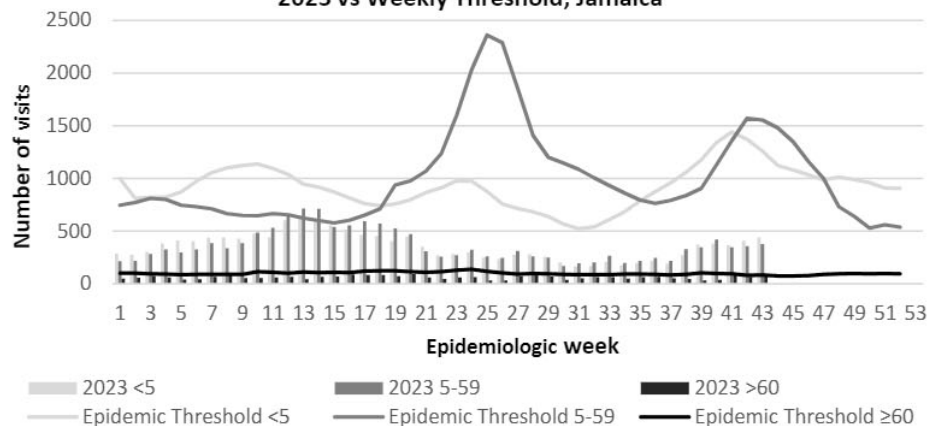
Epi Week Summary

During EW 43, five (5) SARI admissions were reported.

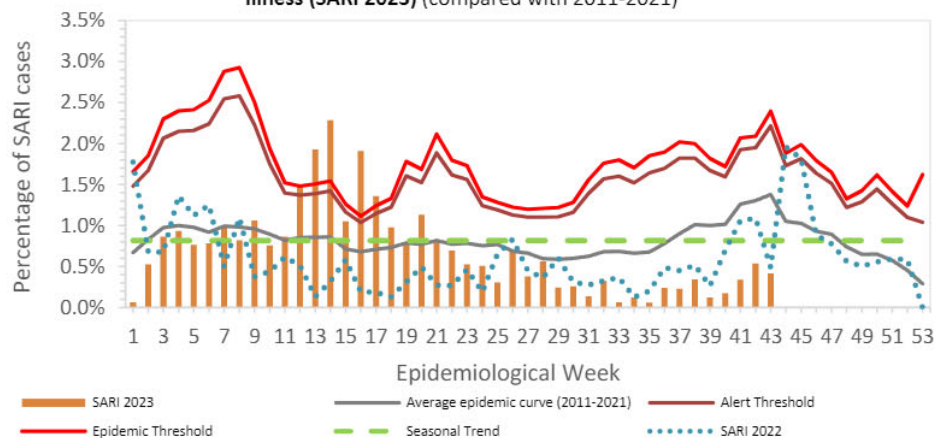
Caribbean Update EW 43

Caribbean: Influenza activity continues to show a decreasing trend in the last four EWs. During this period, the predominant viruses have been influenza B/Victoria, with lesser circulation of influenza A, mainly A(H1N1)pdm09, followed by influenza A(H3N2). RSV activity has remained low, showing a slight increase. SARS-CoV-2 activity has remained at intermediate levels, with a decreasing trend in the last four EWs. Cases of ILI and SARI have shown a decreasing trend in the last four EWs. Barbados, Guyana, Jamaica, and Saint Lucia have maintained high levels of SARS-CoV-2 circulation.

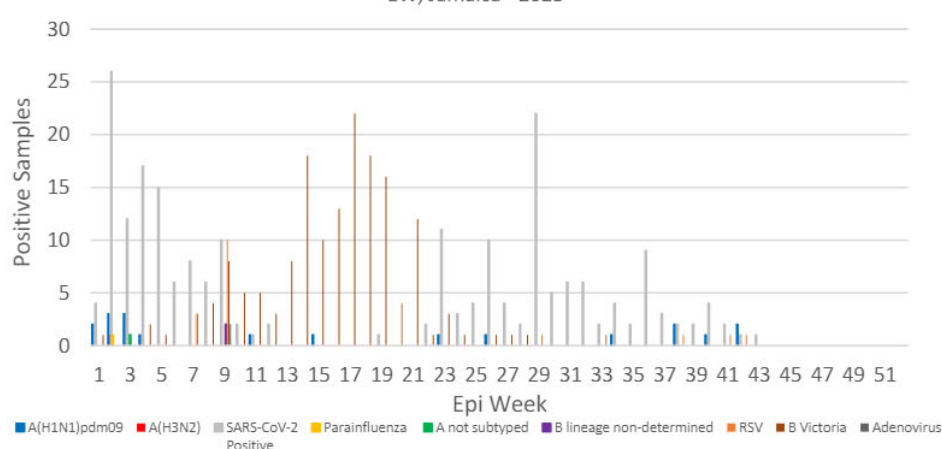
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages
2023 vs Weekly Threshold; Jamaica



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



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



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All clinical sites



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Dengue Bulletin

October 22– October 28, 2023 Epidemiological Week 43

Epidemiological Week 43



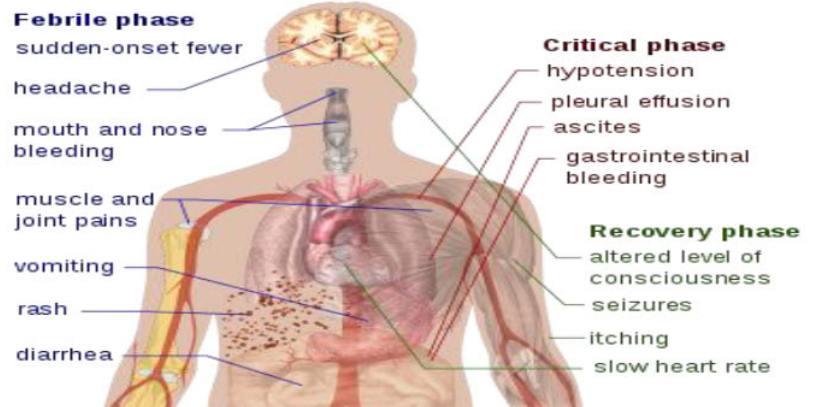
Dengue Cases by Year: 2004-2023, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 43 of 2023

	2023*	
	EW 43	YTD
Total Suspected & Confirmed Dengue Cases	1	2564
Lab Confirmed Dengue cases	0	577
CONFIRMED Dengue Related Deaths	0	2

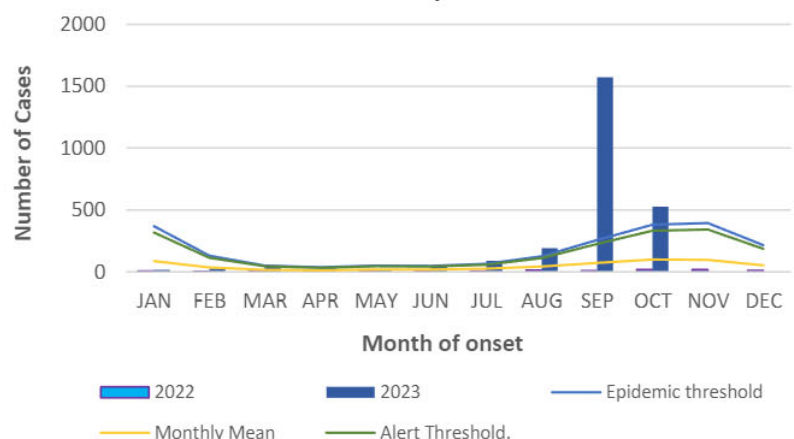
Symptoms of Dengue fever



Points to note:

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

Suspected dengue cases for 2022 and 2023 versus monthly mean, alert, and epidemic thresholds (2007-2022)



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RESEARCH PAPER

Abstract

NHRC_22_P12

Effects of Shift Work on Registered Nurses in a Specialist Hospital in Jamaica

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Objectives:

1. To determine the physical and psychosocial effects on the shiftwork experiences of Registered Nurses
2. To identify the shift with the greatest physical and psychosocial effects on Registered Nurses
3. To determine the categories of Registered Nurses most affected by shiftwork.

Methods: A quantitative descriptive correlational study was conducted among 191 nurses who worked at the Bustamante Hospital for Children. A modified version of the Standard Shiftwork Index questionnaire was used for data collection. Statistical analysis of the data was done using the Statistical Package for Social Sciences (SPSS) software version 23.

Results: Though the nurses all experience physical and psychosocial effect, there was no major significant differences in, type of shift worked or between the category of Registered Nurses. However minimal significant was revealed among the age groups where 47.1% in the 51-60 age group experience low effects as opposed to 47.4% in the 31-40 group that had high effects.

Conclusion: The result of this research indicated that shiftwork affects the nurses, however minimal to no significant differences were seen. This could be due to the fact that the participants have a two weekly rotation schedule which has no prejudice to age or category of staff. Also, all nurses participate in overtime with over 70% of the participants working 50-60 hours per week. Further research is needed to ascertain the severity of the effects of shiftwork and the appropriate measures that can be employed to avert or reduce the effects of shiftwork.



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9 NOTIFICATIONS-
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INVESTIGATION
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