

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Hypertension



Hypertension (high blood pressure) is when the pressure in your blood vessels is too high (140/90 mmHg or higher). It is common but can be serious if not treated. People with high blood pressure may not feel symptoms. The only way to know is to get your blood pressure checked. Things that increase the risk of having high blood pressure include:

- older age
- genetics
- being overweight or obese
- not being physically active
- high-salt diet
- drinking too much alcohol

Lifestyle changes like eating a healthier diet, quitting tobacco and being more active can help lower blood pressure. Some people may still need to take medicines.

Blood pressure is written as two numbers. The first (systolic) number represents the pressure in blood vessels when the heart contracts or beats. The second (diastolic) number represents the pressure in the vessels when the heart rests between beats. Hypertension is diagnosed if, when it is measured on two different days, the systolic blood pressure readings on both days is ≥ 140 mmHg and/or the diastolic blood pressure readings on both days is ≥ 90 mmHg.

Risk Factors

Modifiable risk factors include unhealthy diets (excessive salt consumption, a diet high in saturated fat and trans fats, low intake of fruits and vegetables), physical inactivity, consumption of tobacco and alcohol, and being overweight or obese. Non-modifiable risk factors include a family history of hypertension, age over 65 years and co-existing diseases such as diabetes or kidney disease. Lifestyle changes can help lower high blood pressure. These include:

- eating a healthy, low-salt diet
- losing weight
- being physically active
- quitting tobacco.

Retrieved from WHO on 23/ Feb/2024

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

EPI WEEK 06



Syndromic Surveillance

Accidents

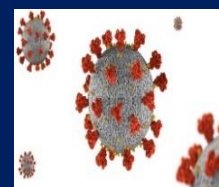
Violence

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Class 1 Notifiable Events

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Dengue Fever

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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 – 3 to 6 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													
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
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

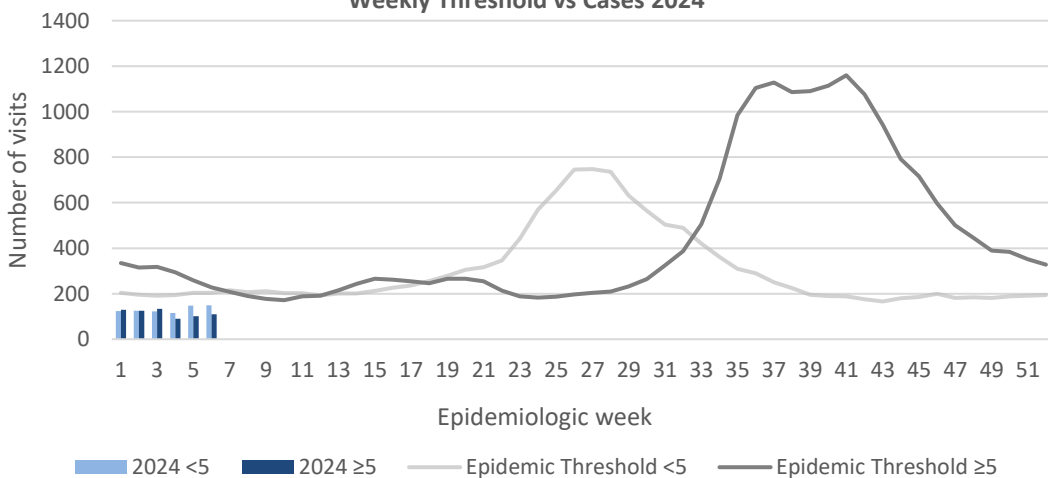
REPORTS FOR SYNDROMIC SURVEILLANCE

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



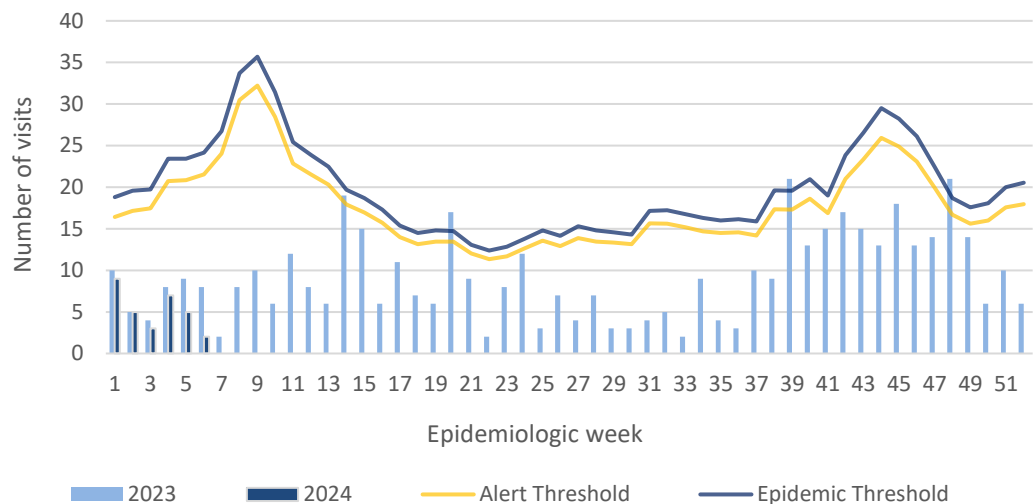
SENTINEL REPORT- 78 sites. Automatic reporting

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).



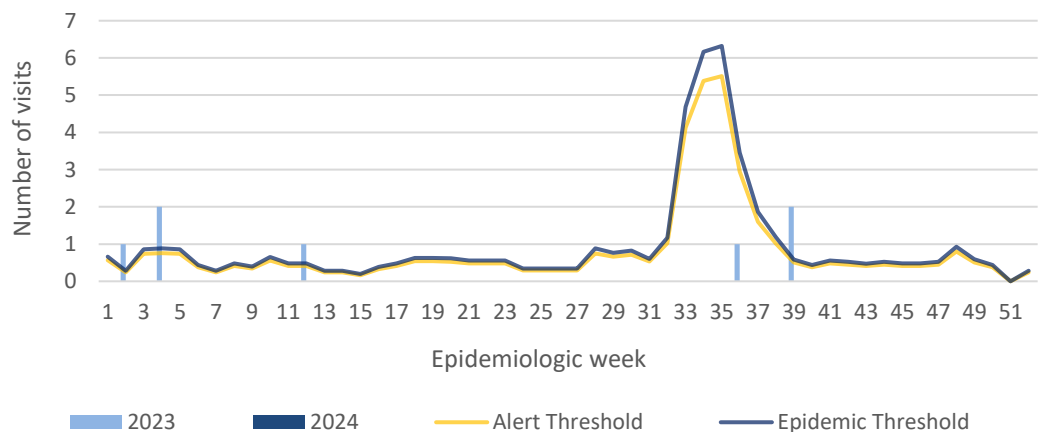
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms
2023 and 2024 vs. Weekly Threshold: Jamaica

**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

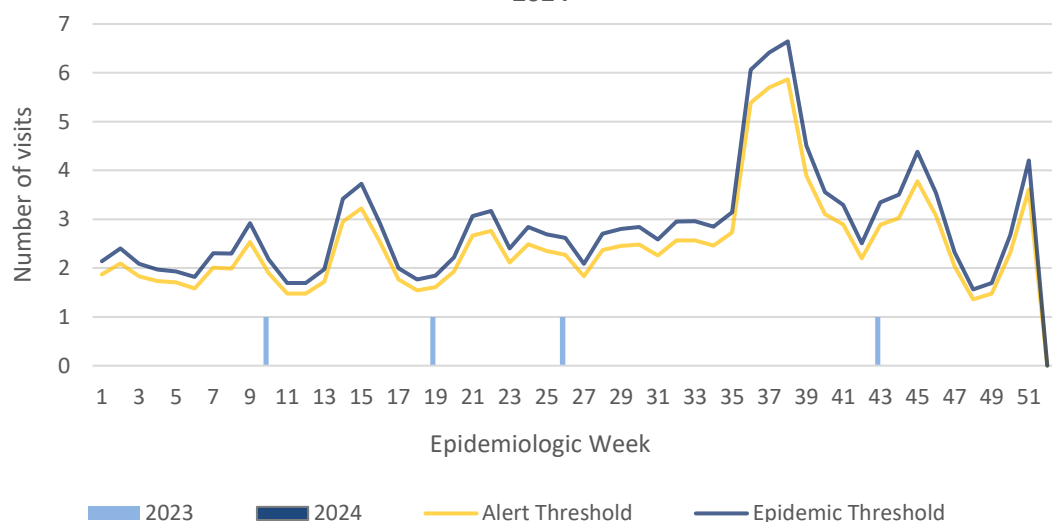
**FEVER AND JAUNDICE**

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
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HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



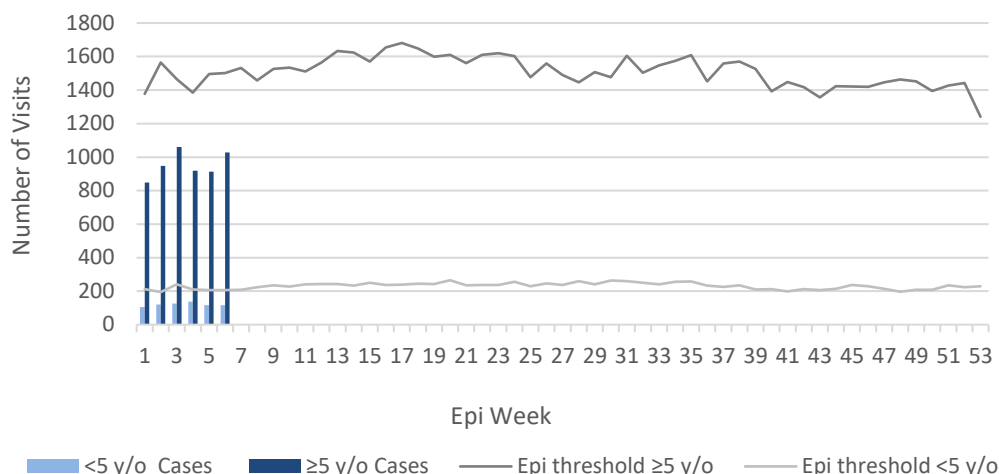
SENTINEL
REPORT- 78 sites.
Automatic reporting

ACCIDENTS

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



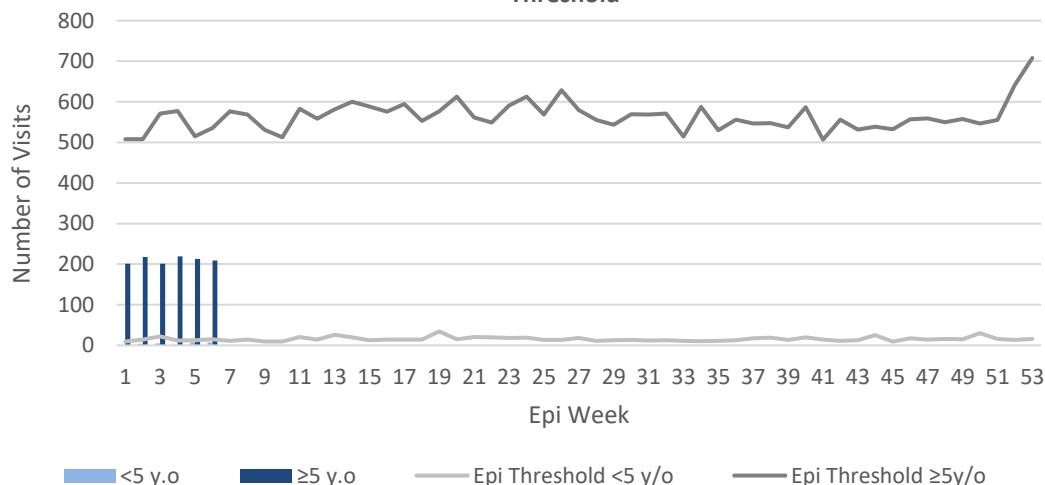
Weekly Visits to Sentinel Sites for Accident by Age Group 2024 vs. Weekly Threshold

**VIOLENCE**

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



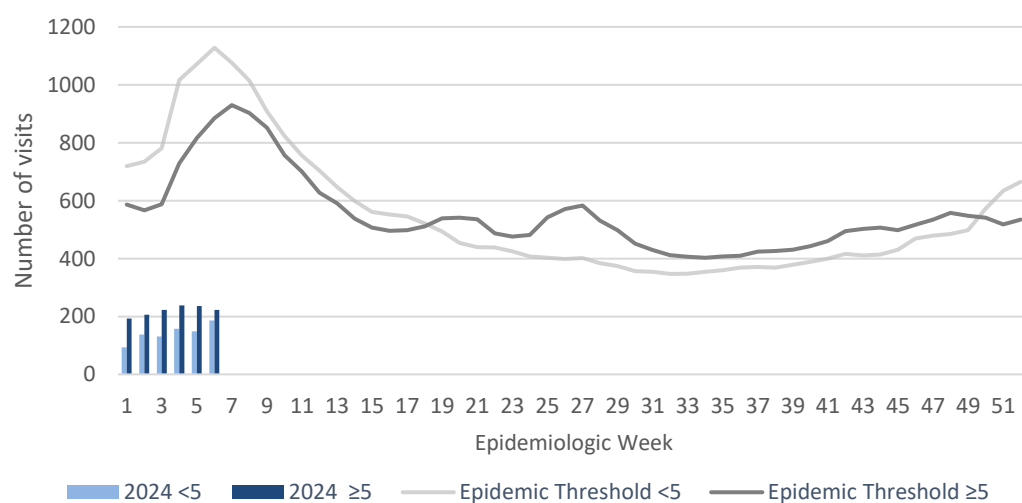
Weekly Visits to Sentinel Sites for Violence by Age Groups 2024 vs. Weekly Threshold

**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-
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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	39 ^β	38 ^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.
	Cholera	0	0	
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	COVID-19 (SARS-CoV-2)	110	1205	
	Hansen's Disease (Leprosy)	0	0	γ Dengue Hemorrhagic Fever data include Dengue related deaths;
	Hepatitis B	0	7	
	Hepatitis C	0	4	δ Figures include all deaths associated with pregnancy reported for the period.
	HIV/AIDS	NA	NA	
	Malaria (Imported)	0	0	ε CHIKV IgM positive cases
	Meningitis	0	6	
	Monkeypox	0	0	θ Zika PCR positive cases
EXOTIC/ UNUSUAL	Plague	0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	β Updates made to prior weeks.
	Neonatal Tetanus	0	0	
	Typhoid Fever	0	0	α Figures are cumulative totals for all epidemiological weeks year to date.
	Meningitis H/Flu	0	0	
SPECIAL PROGRAMMES	AFP/Polio	0	0	NA- Not Available
	Congenital Rubella Syndrome	0	0	
	Congenital Syphilis	0	0	
	Fever and Rash	Measles	0	
		Rubella	0	
	Maternal Deaths ^δ	4	5	
	Ophthalmia Neonatorum	14	13	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	0	
	Tetanus	0	0	
	Tuberculosis	1	9	
	Yellow Fever	0	0	
	Chikungunya ^ε	0	0	
	Zika Virus ^θ	0	0	



5 NOTIFICATIONS-
All clinical
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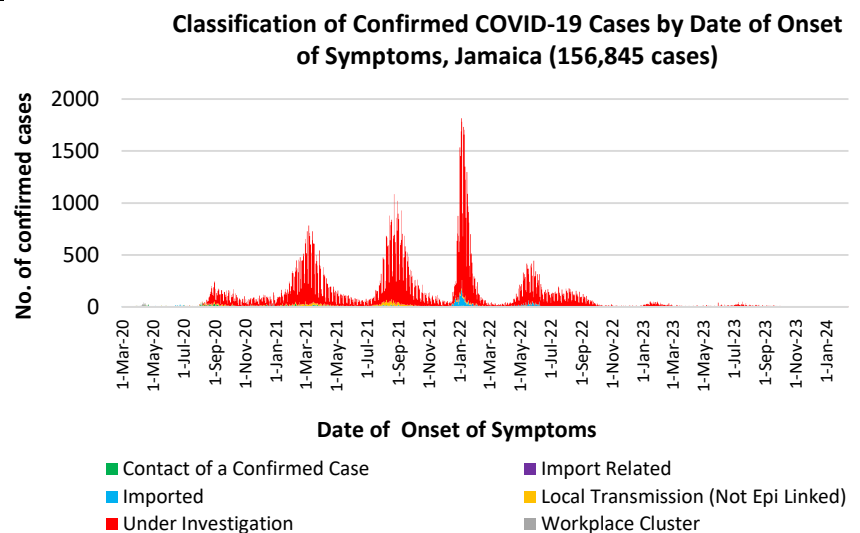
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COVID-19 Surveillance Update

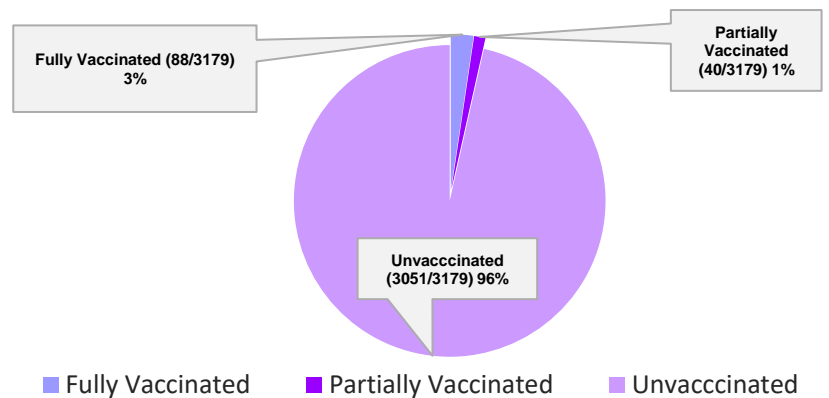
CASES	EW 06	Total
Confirmed	24	156845
Females	15	90393
Males	9	66449
Age Range	1 year to 91 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases * Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.		



COVID-19 Outcomes

Outcomes	EW 06	Total
ACTIVE *2 weeks*		45
DIED – COVID Related	0	3741
Died - NON COVID	0	354
Died - Under Investigation	0	257
Recovered and discharged	0	103226
Repatriated	0	93
Total		156845
*Vaccination programme March 2021 – YTD * Total as at current Epi week		

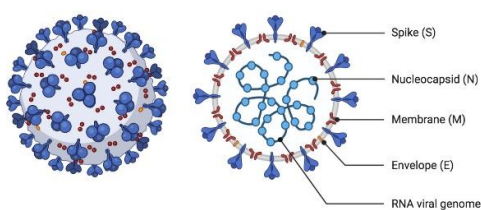
3179 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

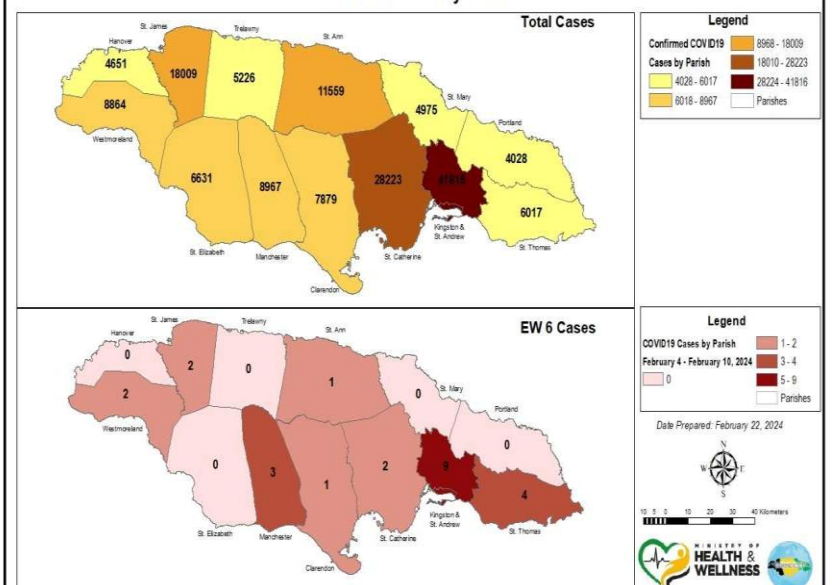
SARS-CoV-2



COVID-19 WHO Global Statistics EW 3-6, 2024

Epi Week	Confirmed Cases	Deaths
3	178,700	3,600
4	130,700	3,000
5	107,600	2,200
6	86,500	1,300
Total (4weeks)	503,500	10,100

COVID19 Cases by Parish



6 NOTIFICATIONS-
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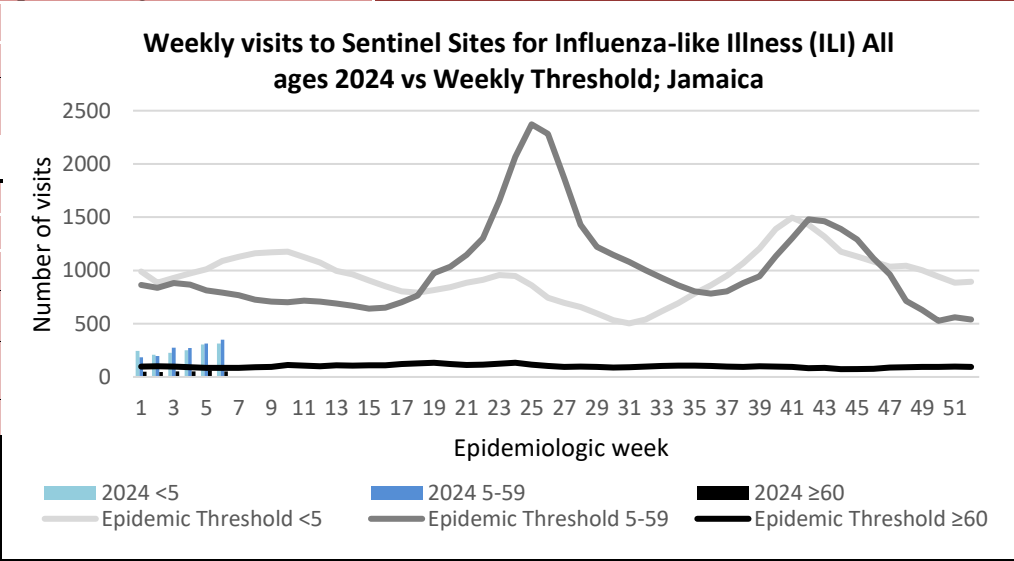
NATIONAL SURVEILLANCE UNIT

INFLUENZA REPORT

February 4, 2024 – February 10, 2024 Epidemiological Week 06

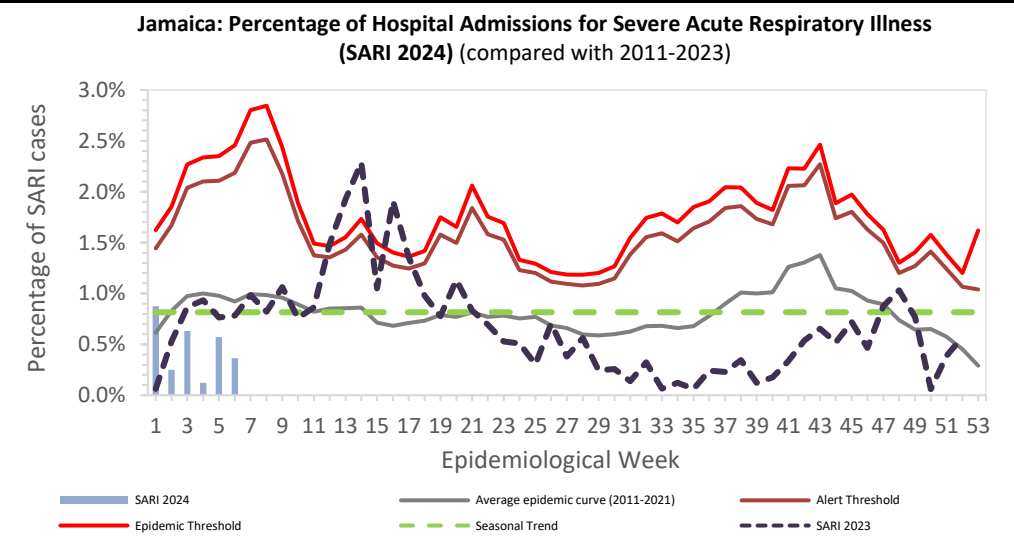
EW 6

	EW 06	YTD
SARI cases	6	45
Total Influenza positive Samples	0	25
Influenza A	0	25
H3N2	0	8
H1N1pdm09	0	17
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	1	11



Epi Week Summary

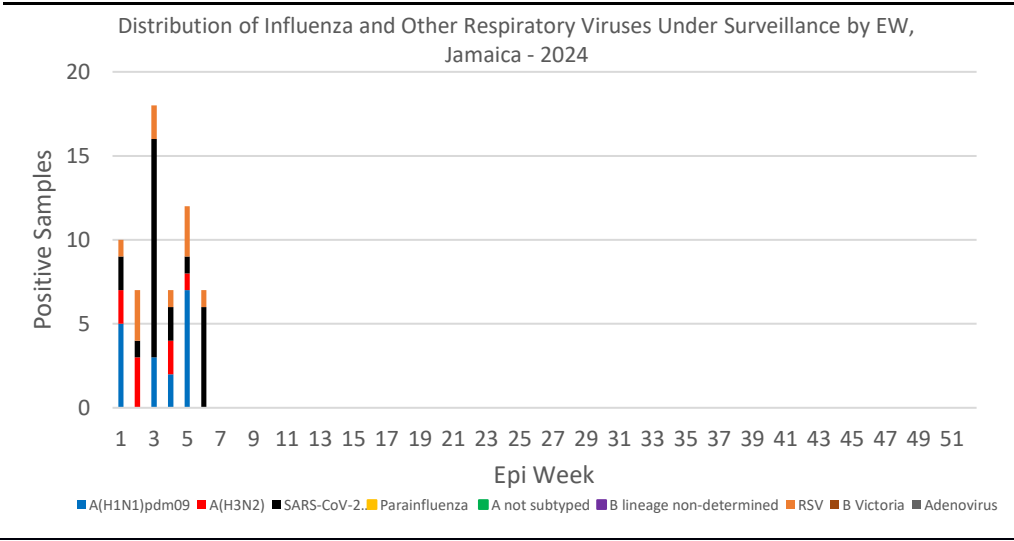
During EW 06, six (6) SARI admissions were reported.



Caribbean Update EW 6

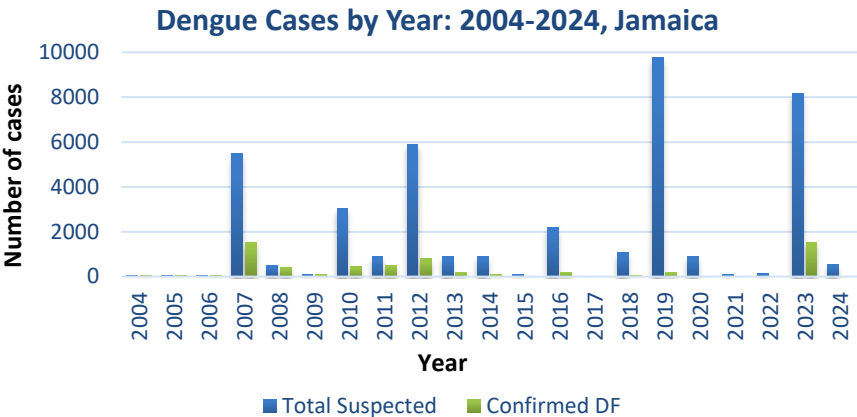
Caribbean:ILI cases have shown an increase in the last four weeks associated with an increase in positive cases of influenza, while SARI cases have remained in decline, with the majority associated with SARS-CoV-2 followed by influenza. Influenza activity has decreased in the last four EWs, reaching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

(adopted from PAHO Respiratory viruses weekly report)

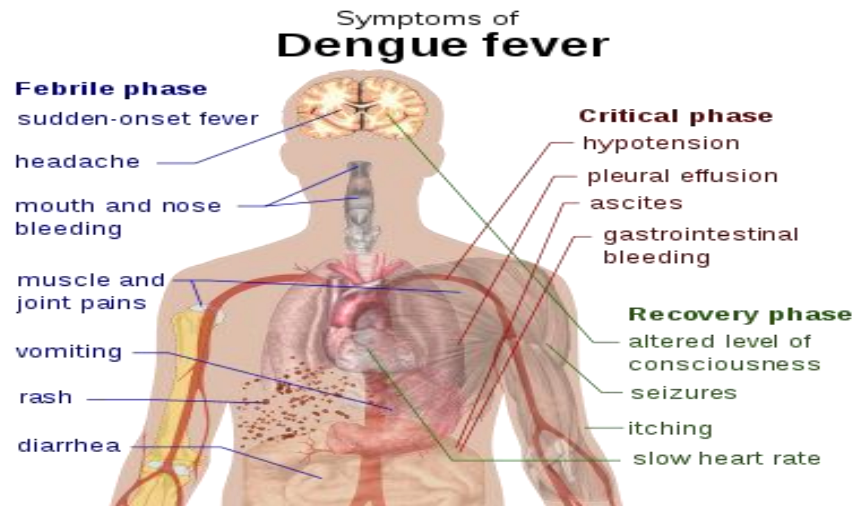


Dengue Bulletin

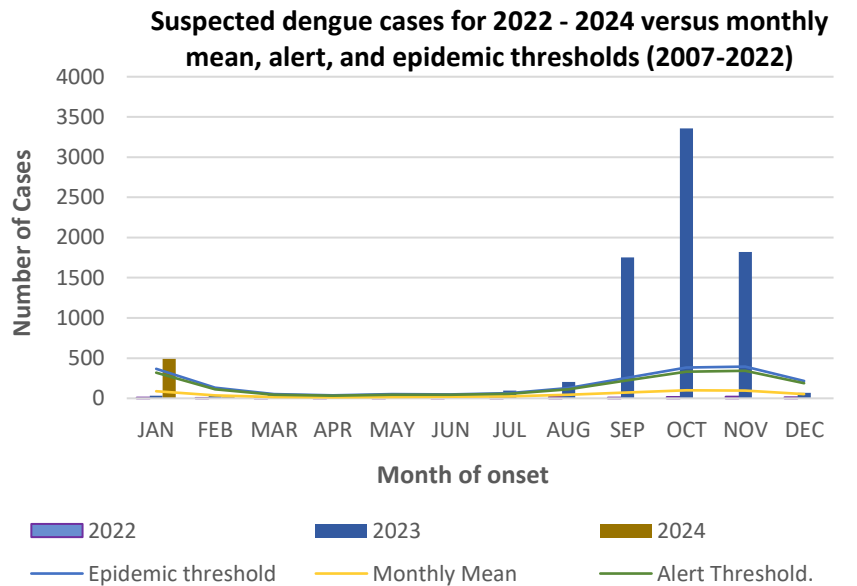
February 04, 2024 – February 10, 2024 Epidemiological Week 06 | Epidemiological Week 06



Reported suspected, probable and confirmed dengue with symptom onset in week 06 of 2024		
	2024*	
	EW 06	YTD
Total Suspected , Probable & Confirmed Dengue Cases	18	553
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 22 , 2024
 - Only PCR positive dengue cases are reported as confirmed.
 - IgM positive cases are classified as presumed dengue.



RESEARCH PAPER

Abstract

NHRC_22_P12

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

Hylton Levy, N.¹, Waite, M.², Chisholm Ford, S.²

¹University Hospital of the West Indies, Jamaica

²The UWI School of Nursing, Mona, Jamaica

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.



The Ministry of Health and Wellness
24-26 Grenada Crescent
Kingston 5, Jamaica
Tele: (876) 633-7924
Email: surveillance@moh.gov.jm



9 NOTIFICATIONS-
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