WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Influenza (Seasonal)

Seasonal influenza is an acute respiratory infection caused by influenza viruses which circulate in all parts of the world.There are 4 types of seasonal influenza viruses, types A, B, C and D. Influenza A and B viruses circulate and cause **seasonal epidemics** of disease.

Influenza A viruses are further classified into subtypes according to the combinations of the hemagglutinin (HA) and the neuraminidase (NA), the proteins on the surface of the virus. Currently circulating in humans are subtype A(H1N1) and A(H3N2) influenza viruses. The A(H1N1) is also written as A(H1N1)pdm09 as it caused the pandemic in 2009 and subsequently replaced the seasonal influenza A(H1N1) virus which had circulated prior to 2009. Only influenza type A viruses are known to have caused pandemics.

Influenza B viruses are not classified into subtypes, but can be broken down into lineages. Currently circulating influenza type B viruses belong to either B/Yamagata or B/Victoria lineage.

Influenza C virus is detected less frequently and usually causes mild infections, thus does not present public health importance.

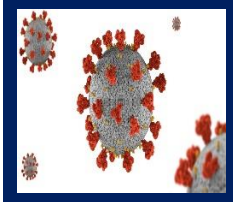
Influenza D viruses primarily affect cattle and are not known to infect or cause illness in people.

Signs and symptoms

Seasonal influenza is characterized by a sudden onset of fever, cough (usually dry), headache, muscle and joint pain, severe malaise (feeling unwell), sore throat and a runny nose. The cough can be severe and can last 2 or more weeks. Most people recover from fever and other symptoms within a week without requiring medical attention. But influenza can cause severe illness or death especially in people at high risk (see below).Illnesses range from mild to severe and even death. Hospitalization and death occur mainly among high risk groups. Worldwide, these annual epidemics are estimated to result in about 3 to 5 million cases of severe illness, and about 290 000 to 650 000 respiratory deaths.The effects of seasonal influenza epidemics in developing countries are not fully known, but research estimates that 99% of deaths in children under 5 years of age with influenza related lower respiratory tract infections are found in developing countries.

https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal)

EPI WEEK 2



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 – 51, 2022 to 2 of 2023

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

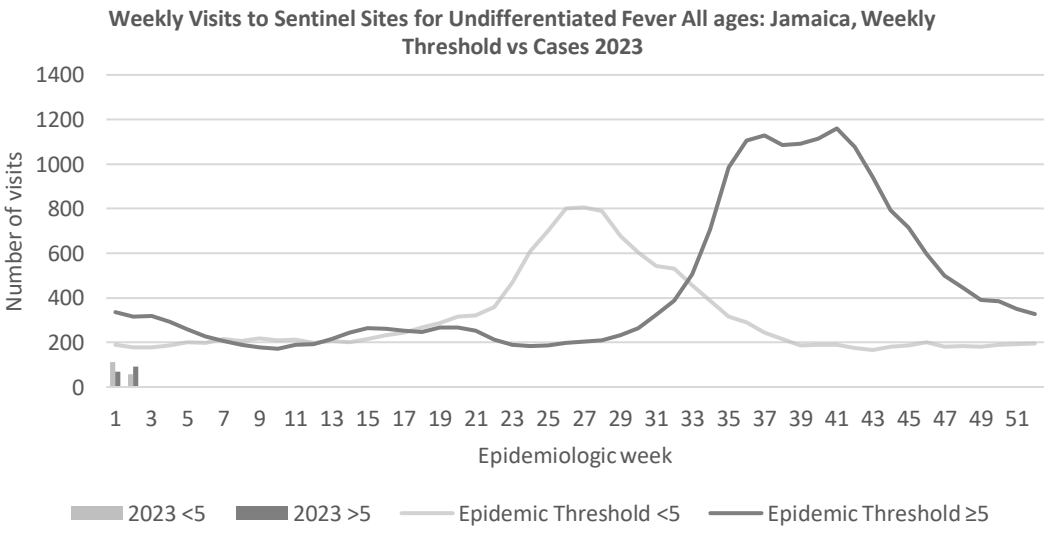
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2022 -2023													
51	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
52	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
1	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
2	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

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

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

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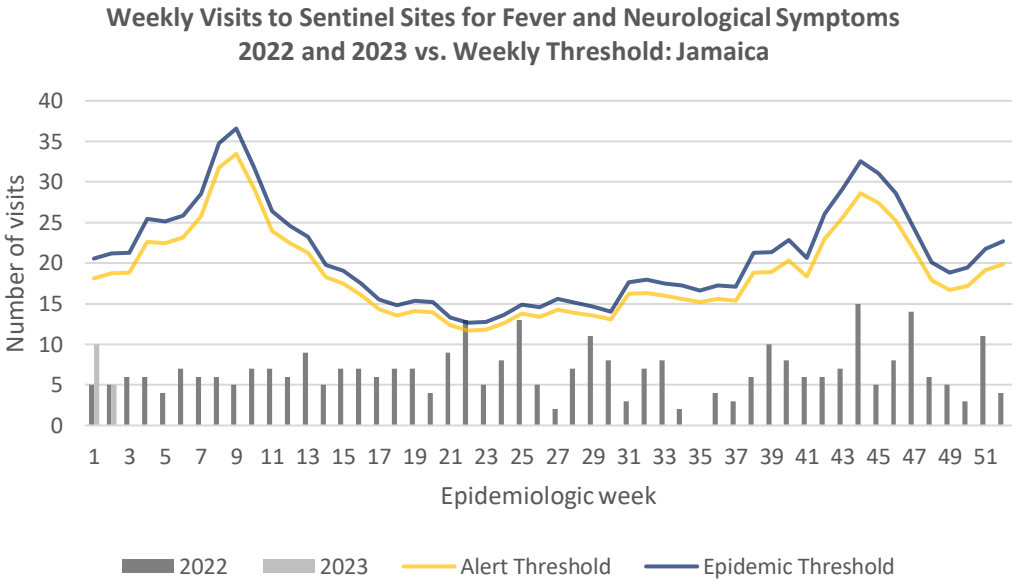
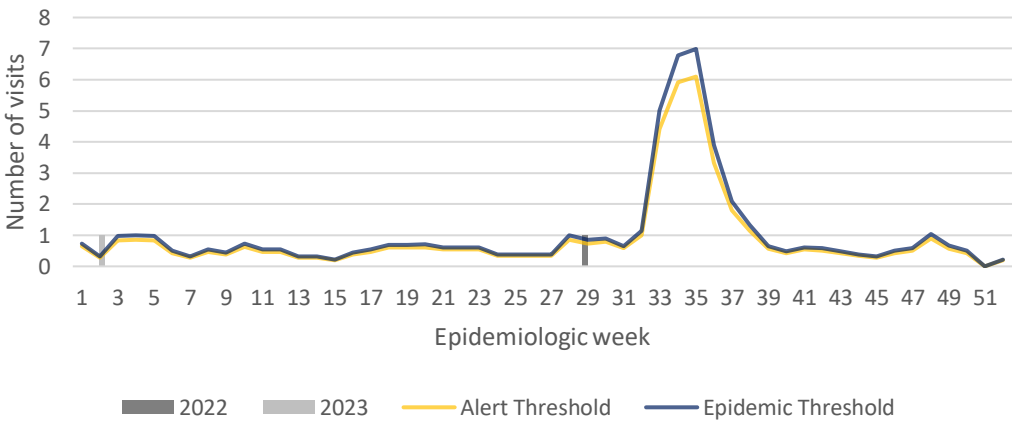
FEVER AND NEUROLOGICAL

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

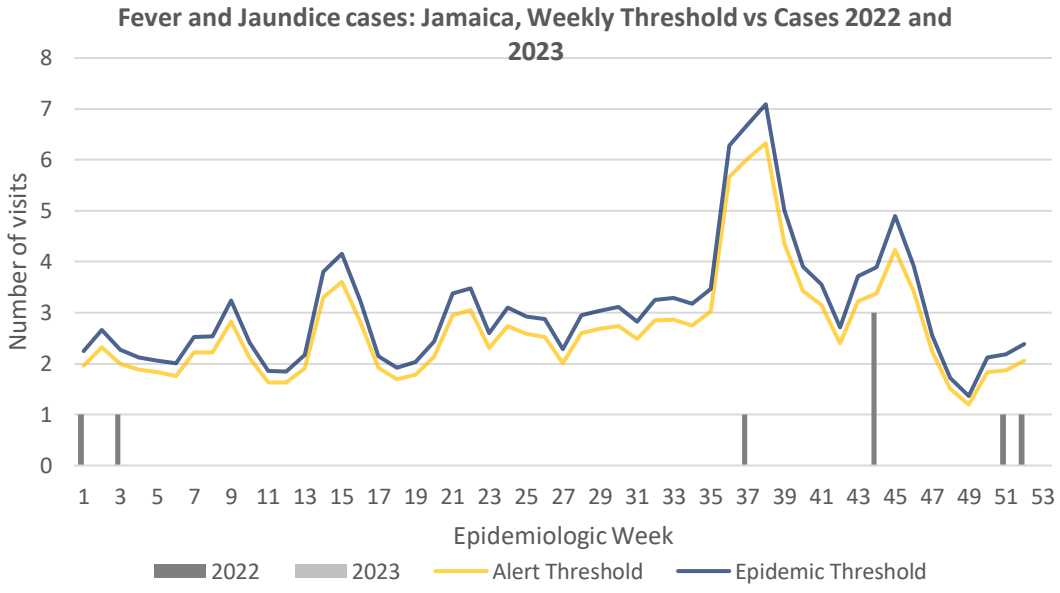
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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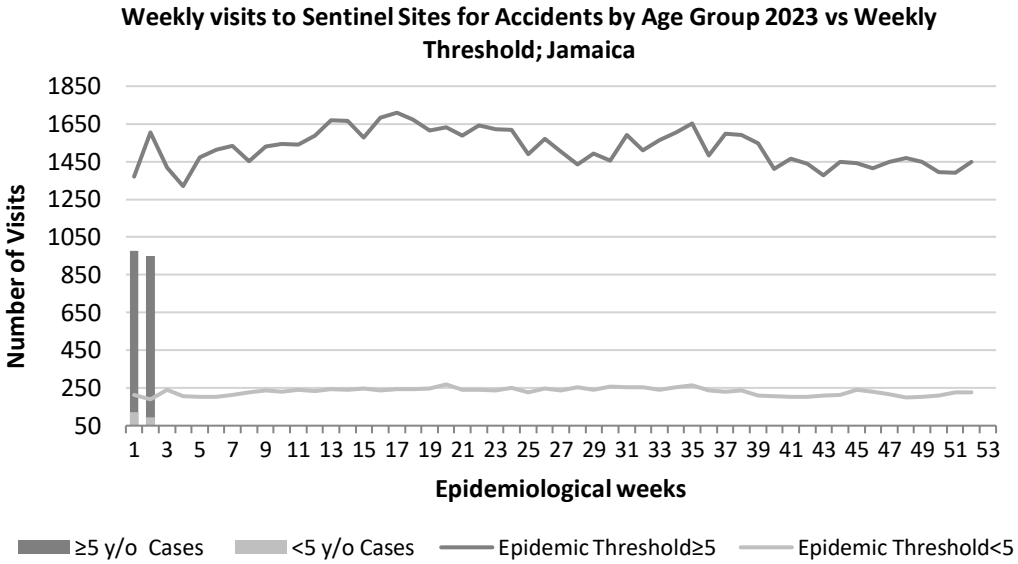
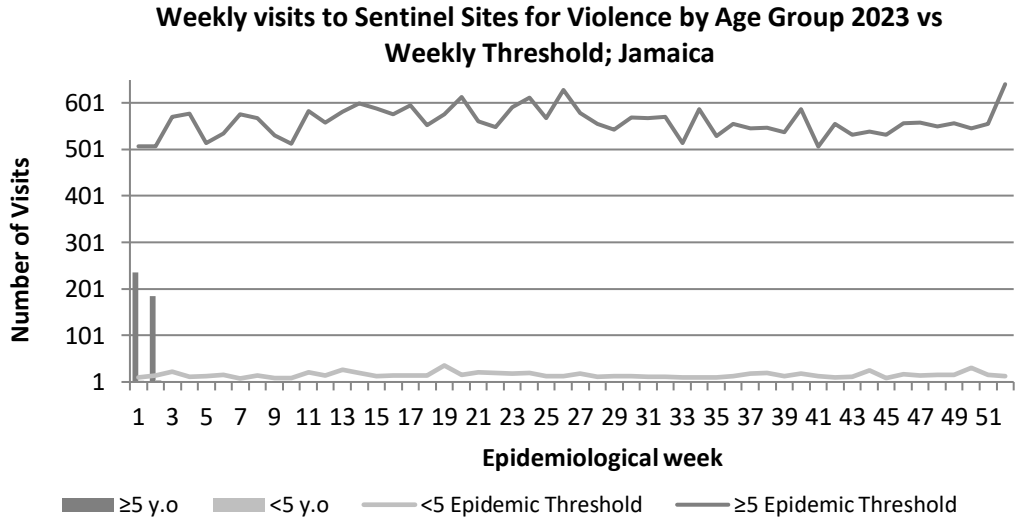
ACCIDENTS

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



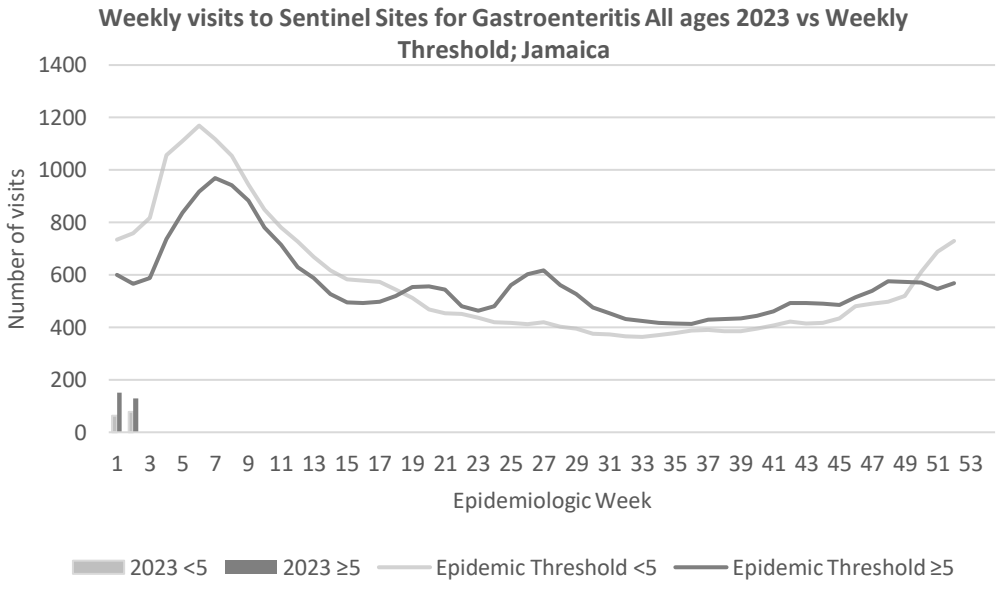
VIOLENCE

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 2023	Confirmed YTD[α] PREVIOUS YEAR 2022
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		6[β]	8[β]
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		265	19004
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	0
	Hepatitis C		0	0
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis (Clinically confirmed)		0	0
	Monkeypox		0	N/A
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]		0	2
	Ophthalmia Neonatorum		0	4
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		0	0
	Yellow Fever		0	0
	Chikungunya[ε]		0	0
	Zika Virus[θ]		0	0

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 in 2020.

[α] Figures are cumulative totals for all epidemiological weeks year to date.

NA- Not Available

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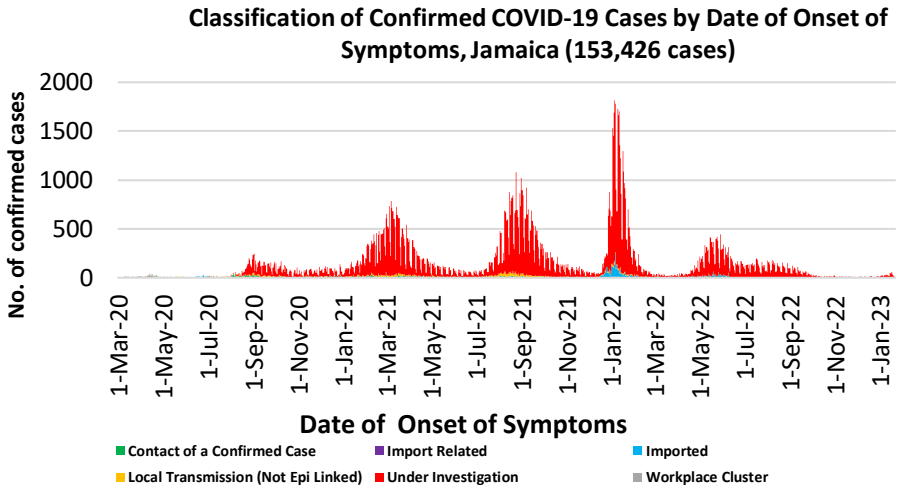
COVID-19 Surveillance Update

March 10, 2020 – EW 2 , 2023

CASES	EW 2	Total
Confirmed	168	153426
Females	90	88511
Males	78	64912
Age Range	61 days old to 92 years	1 day to 108 years

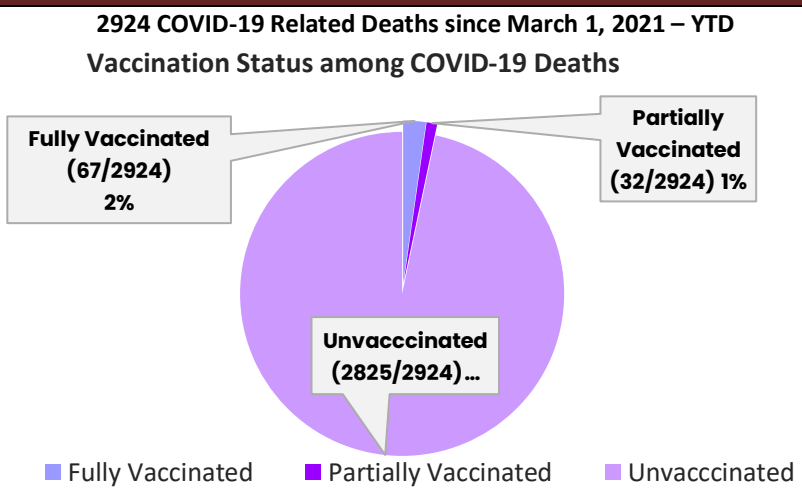
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases



COVID-19 Outcomes

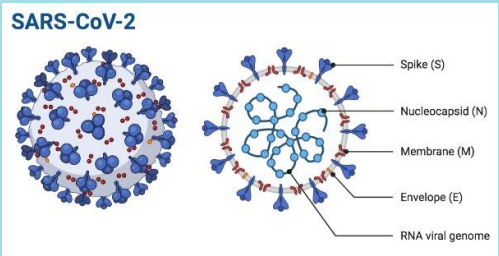
Outcomes	EW 2	Total
ACTIVE *past 2 weeks*		266
DIED – COVID Related	1	3481
Died - NON COVID	0	298
Died - Under Investigation	0	345
Recovered and discharged	23	102212
Repatriated	0	93
Total		153426

*Vaccination programme March 2021 – YTD



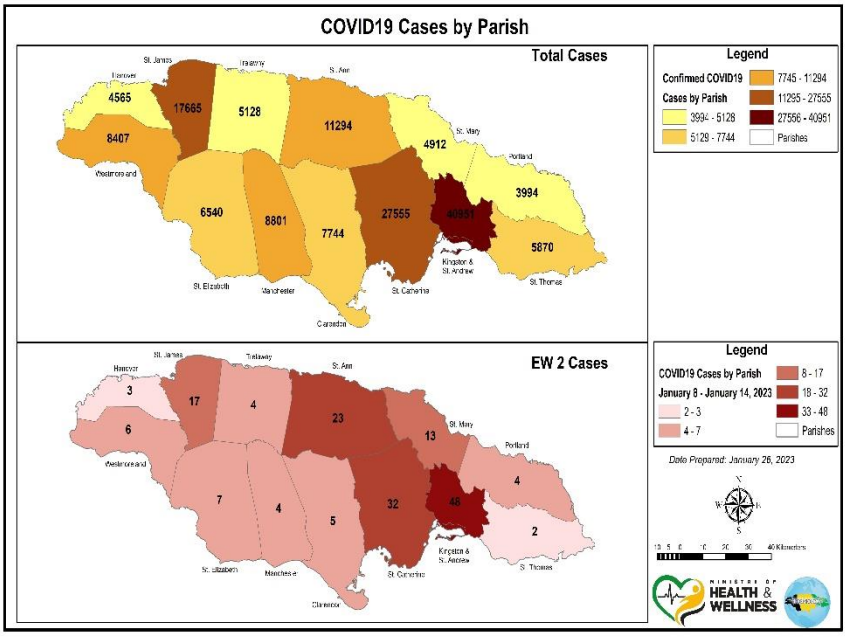
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW51-EW2

Epi Week	Confirmed Cases	Deaths
51	2, 240797	8576
52	2,968,938	11,444
1	2,640,014	12,537
2	1,899,573	12,937
Total (4weeks)	**9,749,322**	**45,494**



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January 27, 2023 ISSN 0799-3927

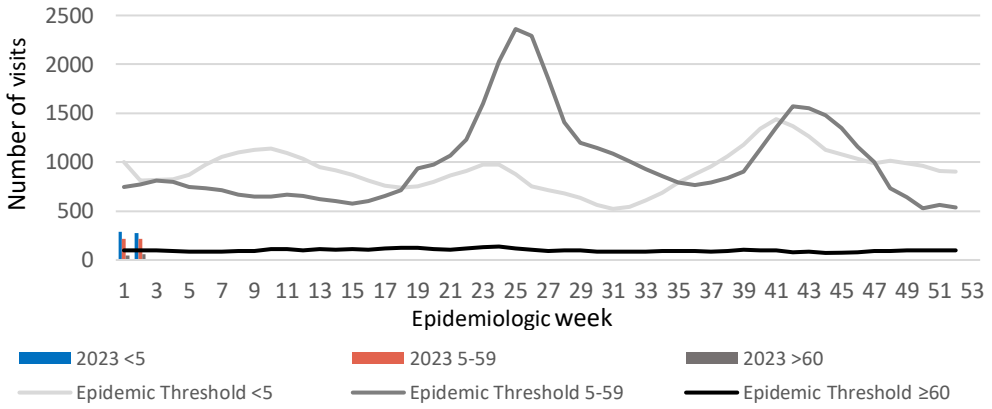
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 2

January 8– January 14, 2023 Epidemiological Week 2

	EW 2	*YTD*
SARI cases	*4*	*5*
Total Influenza positive Samples	*0*	*1*
Influenza A	*0*	*1*
H3N2	*0*	*0*
H1N1pdm09	*0*	*1*
Not subtyped	*0*	*0*
Influenza B	*0*	*0*
Parainfluenza	*0*	*0*

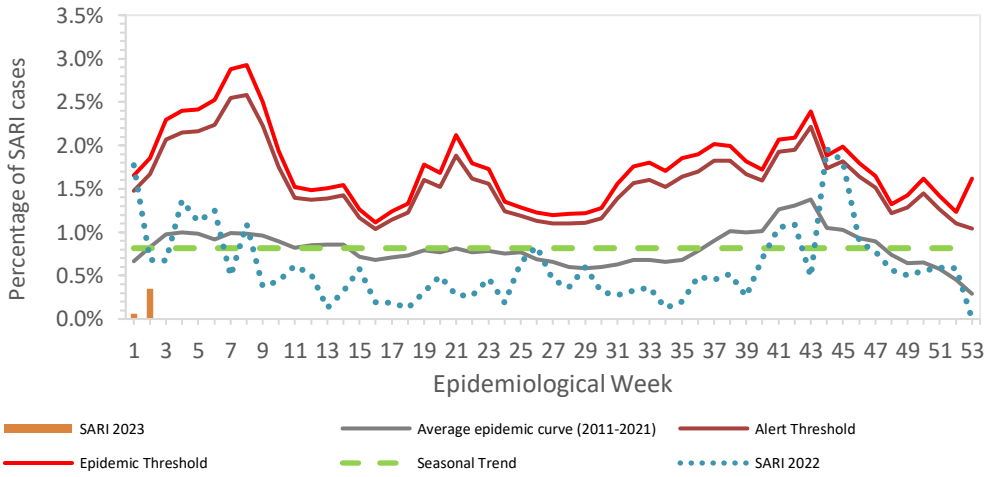
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2023 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 2 four(4) SARI admissions were reported.

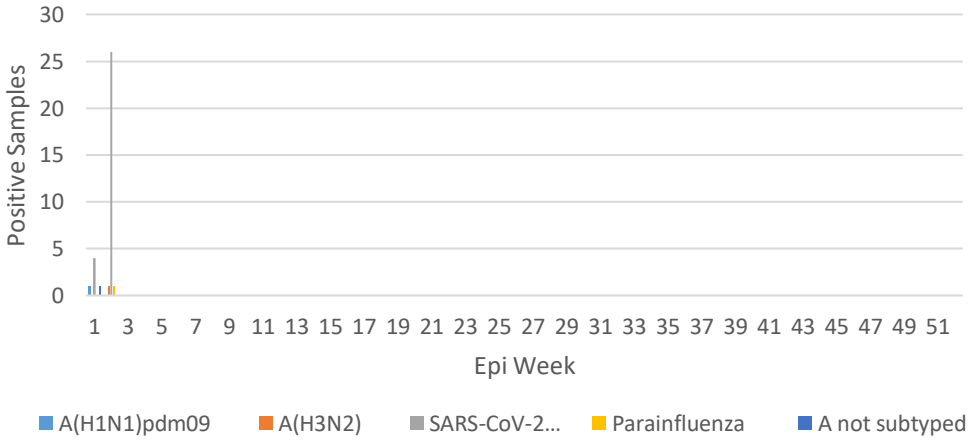
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2022) (compared with 2011-2021)



Caribbean Update EW 2

Caribbean:Influenza activity was moderate in the subregion with A(H3N2) virus predominance, A(H1N1)pdm09, and B/Victoria co-circulated. Influenza percent positivity increased in Belize and Haiti. SARS-CoV-2 activity remained low overall; however, Belize, Haiti, and Jamaica reported increased COVID-19 activity. In addition, RSV activity was increased in Jamaica.

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



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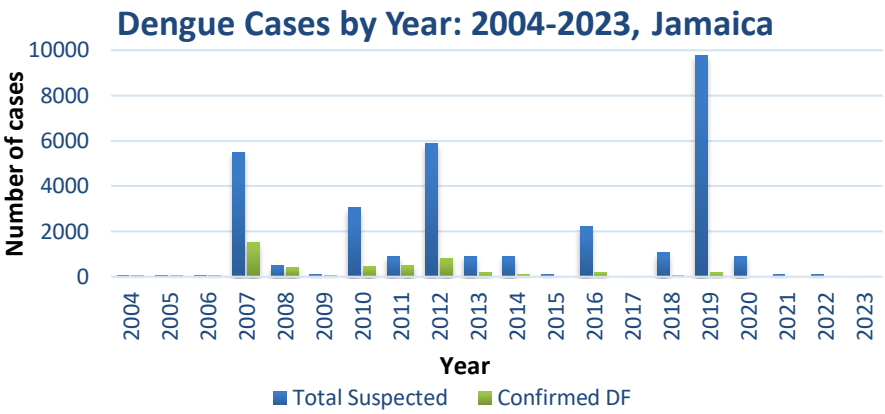
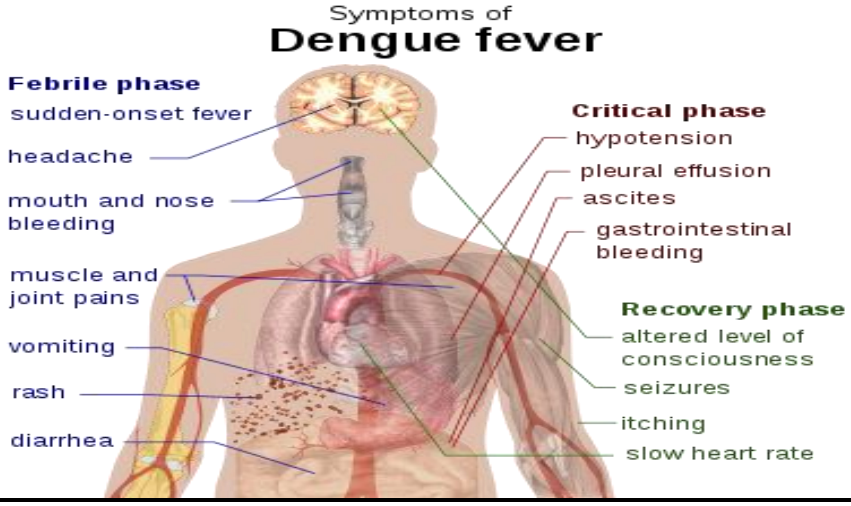
Dengue Bulletin

January 8- January 14, 2023 Epidemiological Week 2 | Epidemiological Week 2



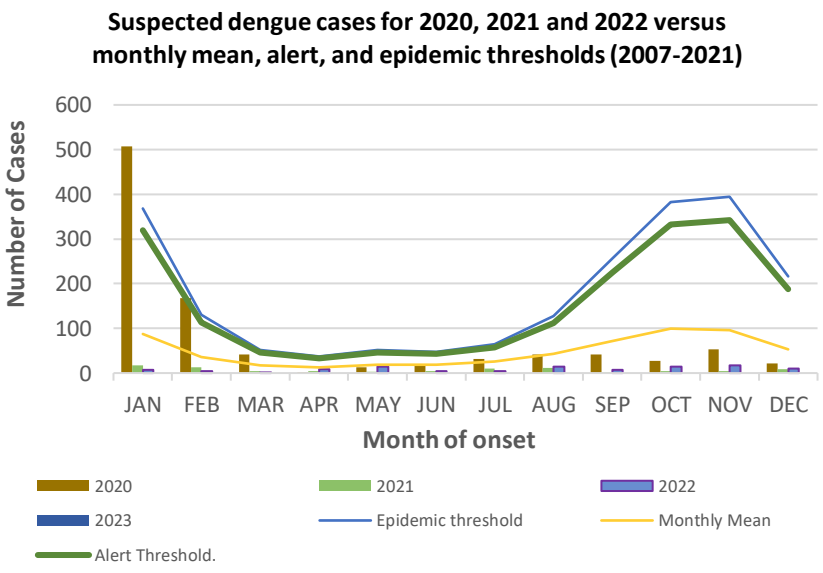
Reported suspected and confirmed dengue with symptom onset in week 2 of 2023

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



Points to note:

- ***Figure as at Jan 14, 2023**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as presumed dengue.**



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RESEARCH PAPER

Abstract

Depression and the Impact on Productivity in the Workplace: Findings from a Jamaican Survey on Depression in the Workplace

Margarett Barnett

Objectives: The World Health Organization predicts the rise of the global burden of depression to become the leading cause of disability by 2030. The study aims to 1) address a gap in the literature in terms of baseline data for assessing the burden and impact of depression in the Jamaican workplace, and 2) quantify the links between depression, cognitive dysfunction, absenteeism and presenteeism by means of the The Work Limitation Questionnaire (WLQ) was developed by Lerner et al., to measure the degree to which health problems interfere with specific aspects of job performance and the productivity impact of these work limitations.

Methods: 300 employed adults in a Jamaican Quasi-government institution have been recruited for the survey. Self-reported answers will be recorded for various demographic variables, diagnosis of depression, number of days taken off for depression (absenteeism), and work performance ratings and behaviours while working with depression (presenteeism). The responses pertaining to absenteeism and presenteeism will be analysed according to the presence or absence of cognitive dysfunction.

Conclusion: Absenteeism causes increased workload for other employees, reduced output, and lost income from hiring temporary workers. In addition, reduced productivity at work, or 'presenteeism', is a major but less acknowledged concern for employers, and may be even more costly than absenteeism. It is hoped that this research will bring to the fore that there is a vital need to improve employees' access to quality treatment preferably through programs based on integrated care models.

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