

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.

Type 1 diabetes

Type 1 diabetes (previously known as insulin-dependent, juvenile or childhood-onset) is characterized by deficient insulin production and requires daily administration of insulin. In 2017 there were 9 million people with type 1 diabetes; the majority of them live in high-income countries. Neither its cause nor the means to prevent it are known

Type 2 diabetes

Type 2 diabetes (formerly called non-insulin-dependent, or adult-onset) results from the body's ineffective use of insulin. More than 95% of people with diabetes have type 2 diabetes. This type of diabetes is largely the result of excess body weight and physical inactivity. Until recently, this type of diabetes was seen only in adults but it is now also occurring increasingly frequently in children.

Gestational diabetes

Gestational diabetes is hyperglycaemia with blood glucose values above normal but below those diagnostic of diabetes. Gestational diabetes occurs during pregnancy. Women with gestational diabetes are at an increased risk of complications during pregnancy and at delivery. These women and possibly their children are also at increased risk of type 2 diabetes in the future. Gestational diabetes is diagnosed through prenatal screening, rather than through reported symptoms.

Impaired glucose tolerance and impaired fasting glycaemia

Impaired glucose tolerance (IGT) and impaired fasting glycaemia (IFG) are intermediate conditions in the transition between normality and diabetes. People with IGT or IFG are at high risk of progressing to type 2 diabetes, although this is not inevitable.

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

EPI WEEK 42



SYNDROMES

PAGE 2



CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

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 -39 to 42 of 2022

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

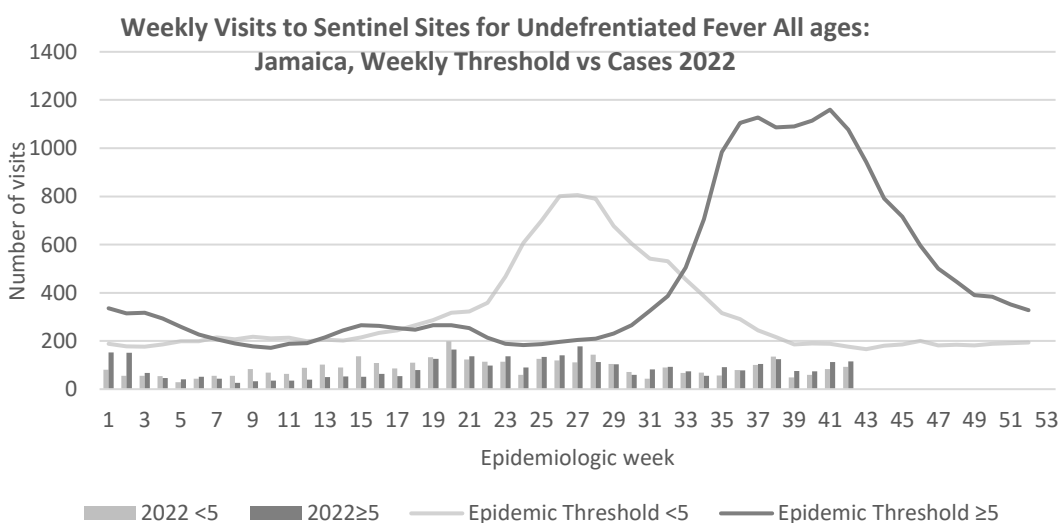
Red - late submission after Tuesday

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													
39	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
40	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time
41	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)
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

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.



2 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



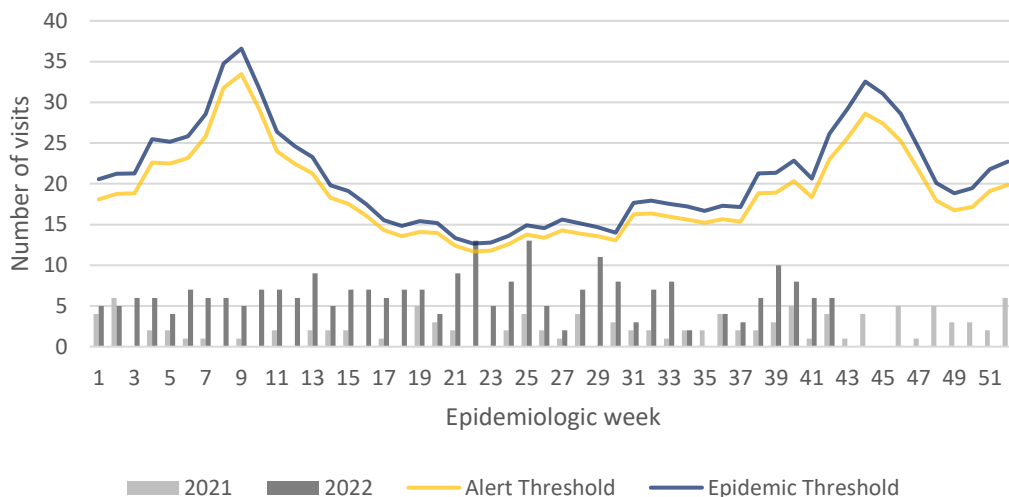
SENTINEL
REPORT- 78 sites.
Automatic reporting

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).



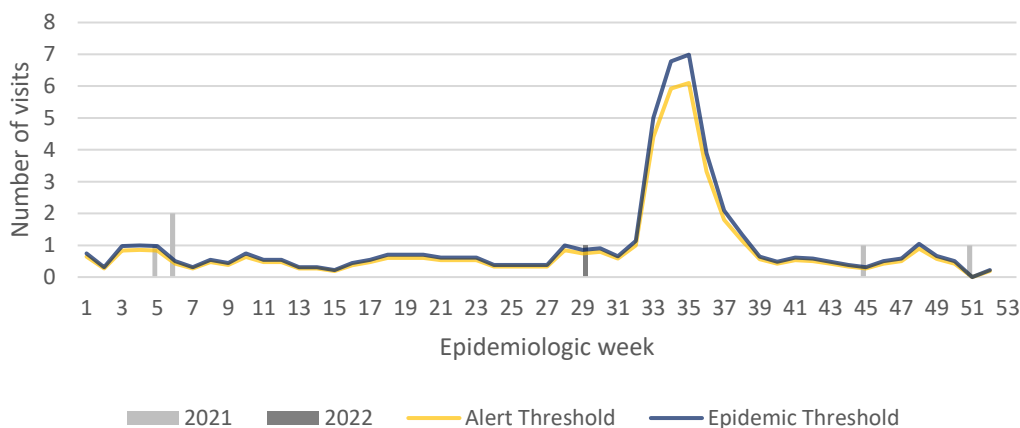
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms
2021 and 2022 vs. Weekly Threshold: Jamaica**

**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 2021 and 2022 vs Weekly Threshold; Jamaica

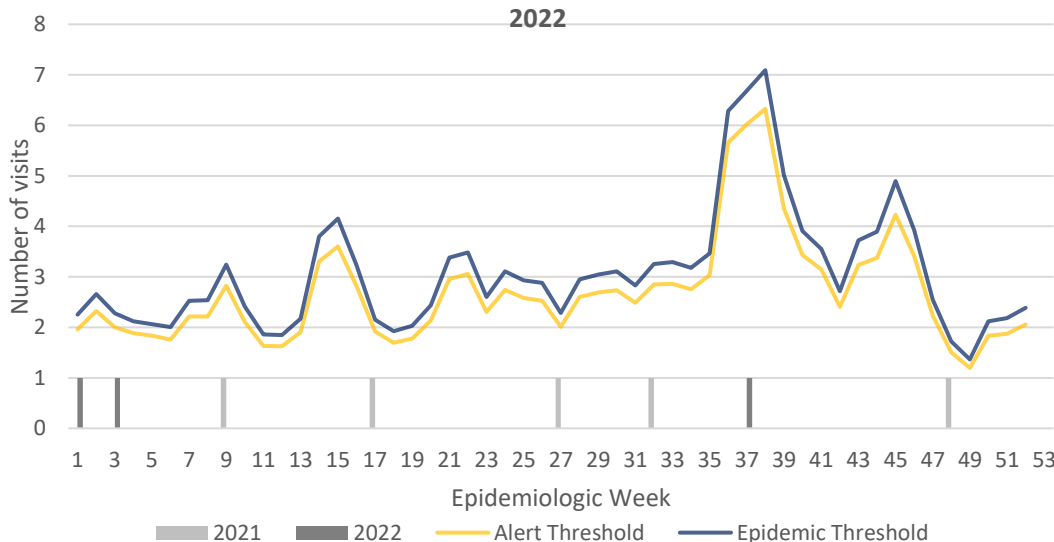
**FEVER AND JAUNDICE**

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 2021 and 2022



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



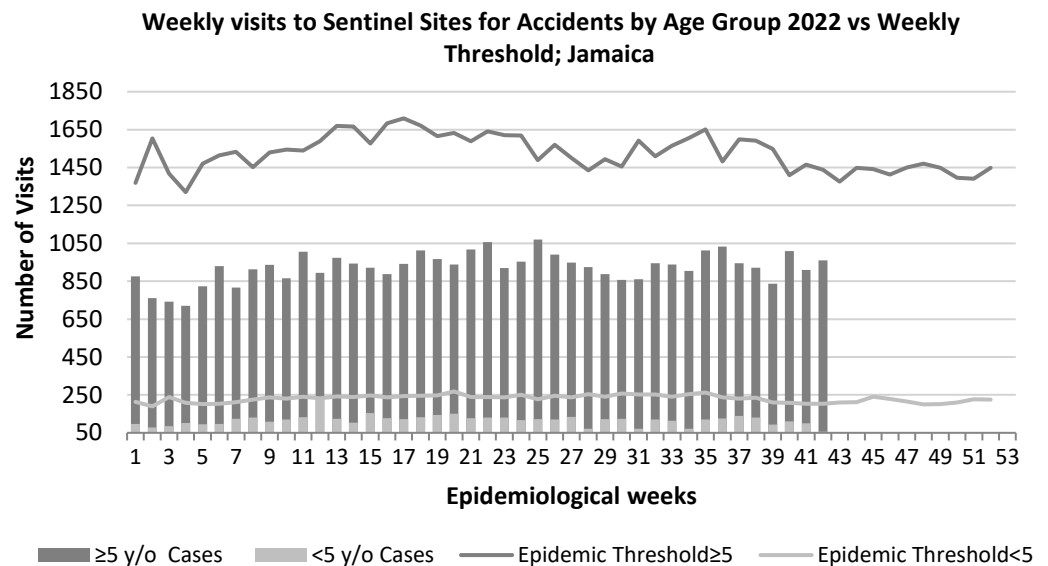
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

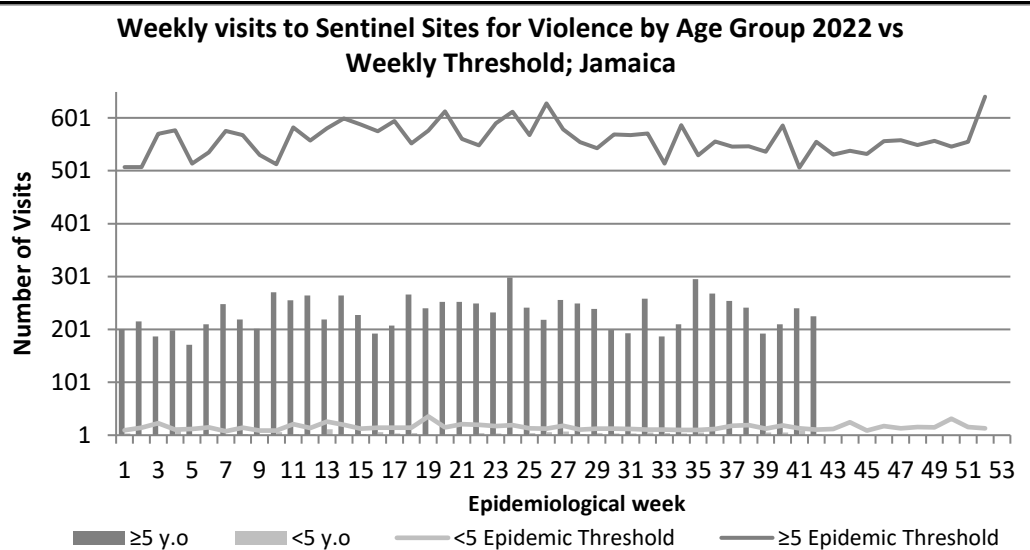
ACCIDENTS

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



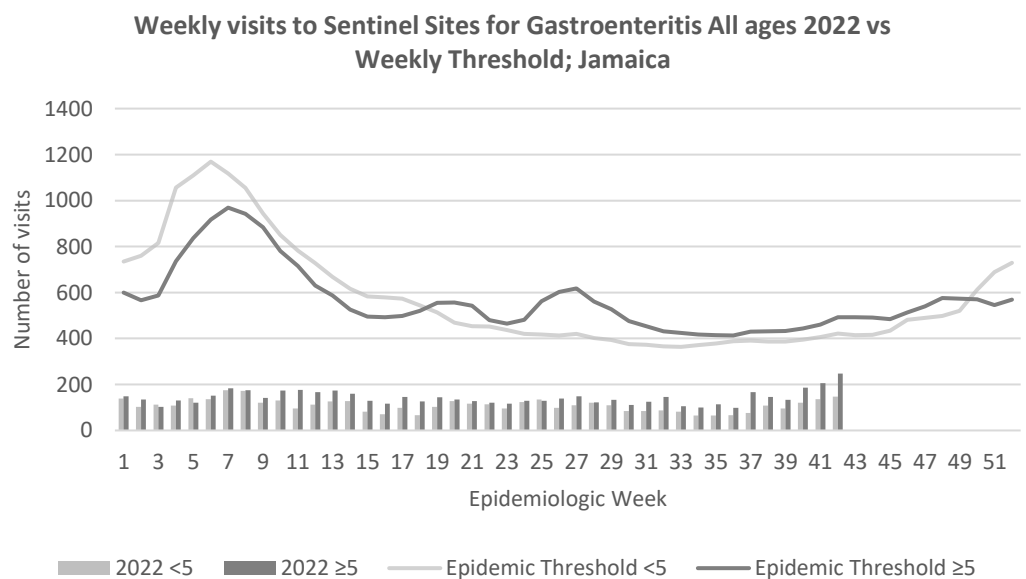
VIOLENCE

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.



4 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

CLASS ONE NOTIFIABLE EVENTS					Comments
			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.
	CLASS 1 EVENTS		CURRENT YEAR 2022	PREVIOUS YEAR 2021	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		167 ^β	147 ^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	^γ Dengue Hemorrhagic Fever data include Dengue related deaths;
	COVID-19 (SARS-CoV-2)		55141	75225	
	Hansen’s Disease (Leprosy)		0	0	^δ Figures include all deaths associated with pregnancy reported for the period.
	Hepatitis B		8	6	
	Hepatitis C		2	4	^ε CHIKV IgM positive cases
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	^θ Zika PCR positive cases
	Meningitis (Clinically confirmed)		17	34	
	Monkeypox		15	NA	^β Updates made to prior weeks in 2020.
EXOTIC/ UNUSUAL	Plague		0	0	
HIGH 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		54	73	
	Ophthalmia Neonatorum		48	40	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		34	34	
Yellow Fever		0	0	NA- Not Available	
	Chikungunya ^ε		0		0
	Zika Virus ^θ		0	0	



5 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued

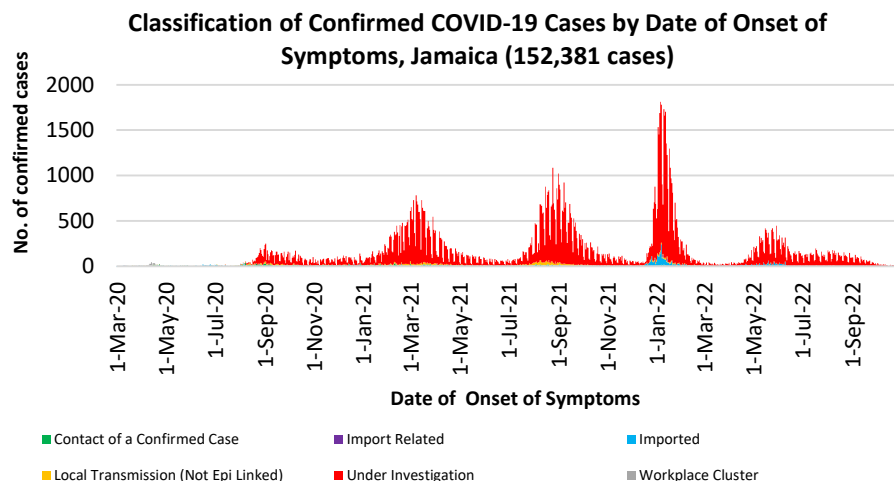


SENTINEL
REPORT- 78 sites.
Automatic reporting

COVID-19 Surveillance Update

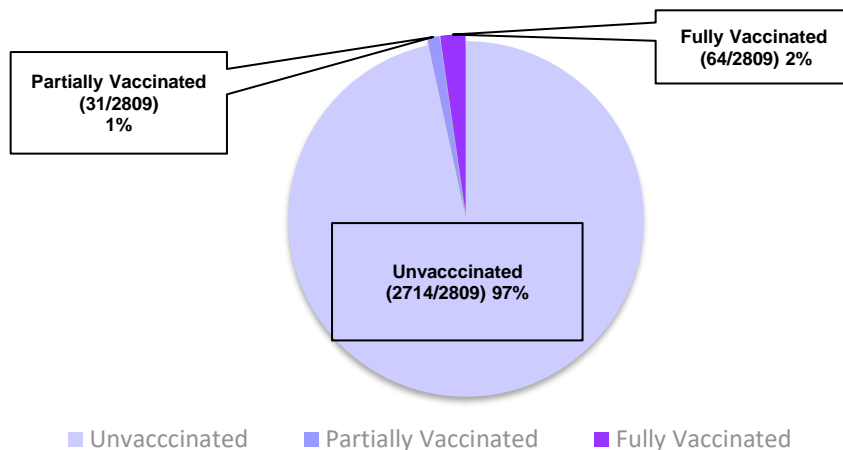
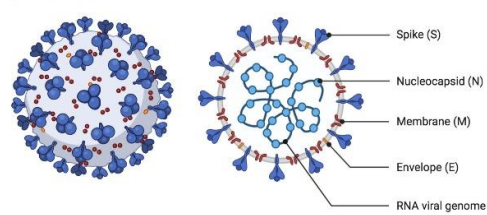
March 10, 2020 – EW 42, 2022

CASES	EW 42	Total
Confirmed	72	152381
Females	35	87923
Males	37	64455
Age Range	11 months–94 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		

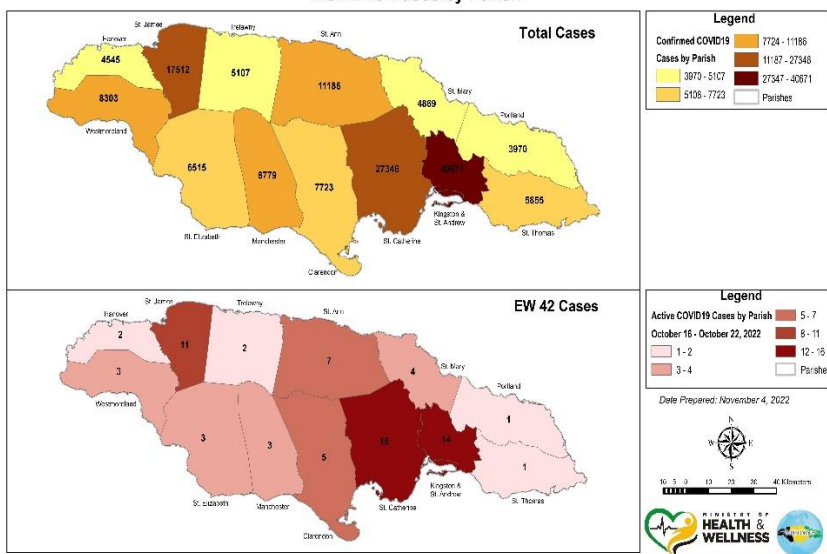
**COVID-19 Outcomes**

Outcomes	EW 42	Total
ACTIVE *past 2 weeks*		129
DIED – COVID Related	1	3351
Died - NON COVID	0	289
Died - Under Investigation	1	267
Recovered and discharged	26	101133
Repatriated	0	93
Total		152381

*Vaccination programme March 2021 – YTD

**2809 COVID-19 Related Deaths since March 12021 – 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 EW39-EW42**

Epi Week	Confirmed Cases	Deaths
39	3,168,282	10,944
40	3,201,622	9,962
41	2,805,405	8948
42	2,465,861	9671
Total (4weeks)	11,641,170	39,525

COVID19 Cases by Parish

6 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



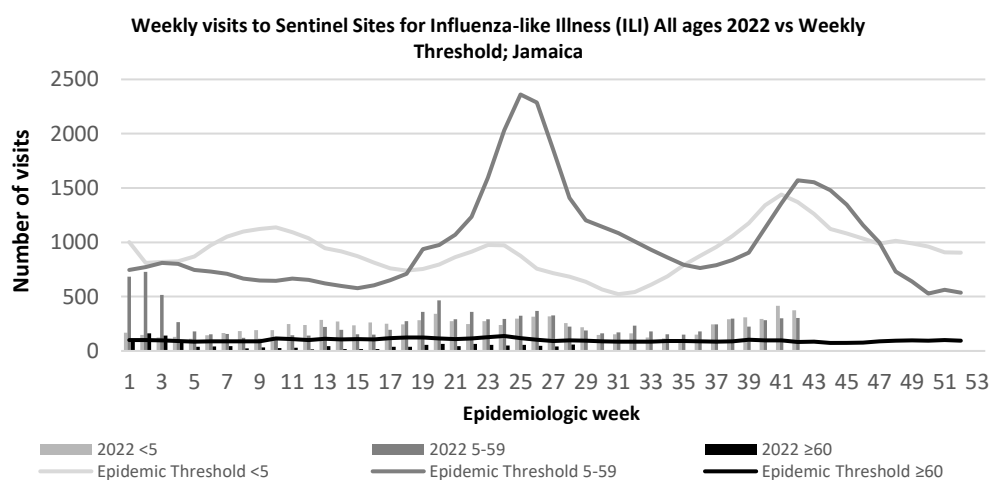
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 42

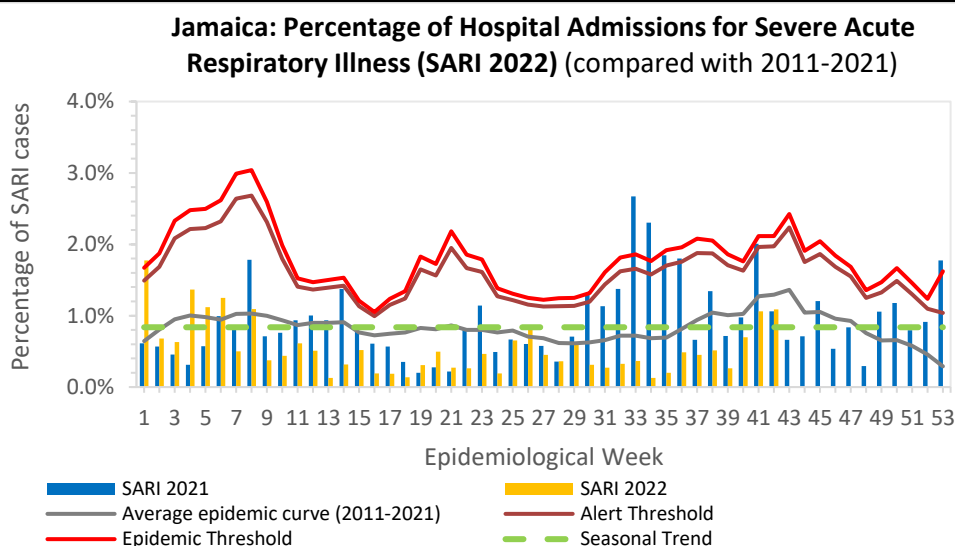
October 16 – October 22, 2022 Epidemiological Week 42

	EW 42	YTD
SARI cases	18	362
Total Influenza positive Samples	0	22
Influenza A	0	22
H3N2	0	21
H1N1pdm09	0	1
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0



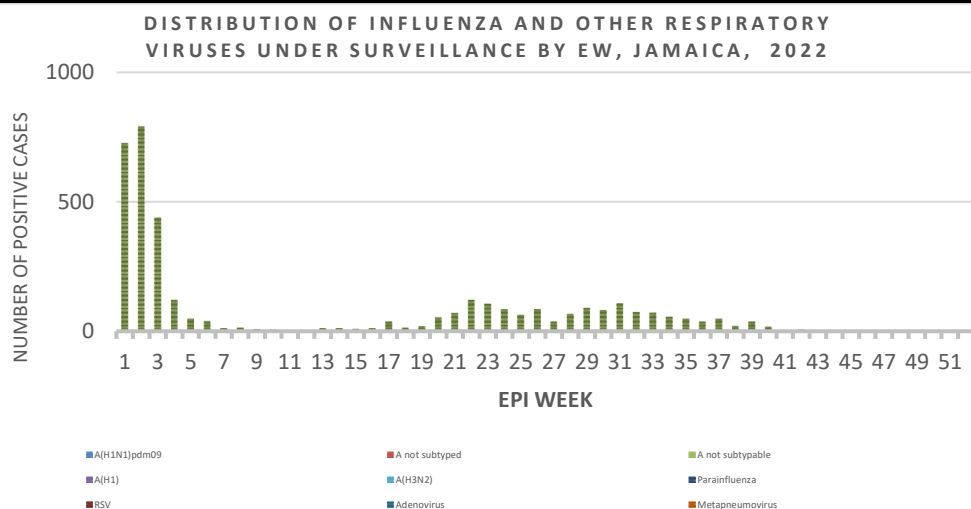
Epi Week Summary

During EW 42 eighteen (18) SARI admissions were reported.



Caribbean Update EW 42

Caribbean: Influenza activity remained low across the subregion, predominating the influenza A(H3N2) virus circulation. In Haiti, SARS-CoV-2 activity continues elevated



7 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

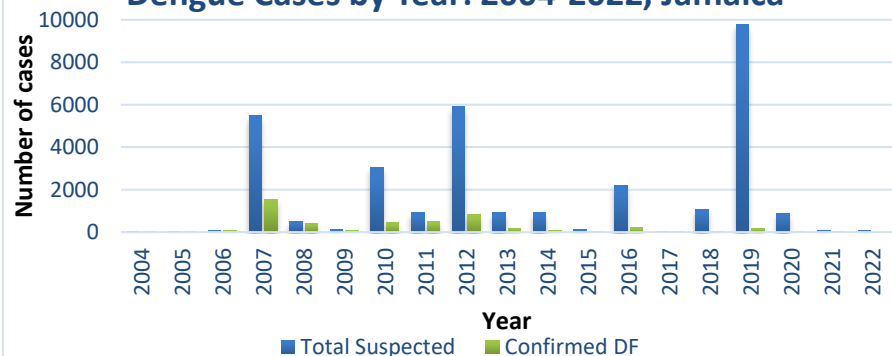
Dengue Bulletin

October 16- October 22, 2022 Epidemiological Week 42

Epidemiological Week 42



Dengue Cases by Year: 2004-2022, Jamaica



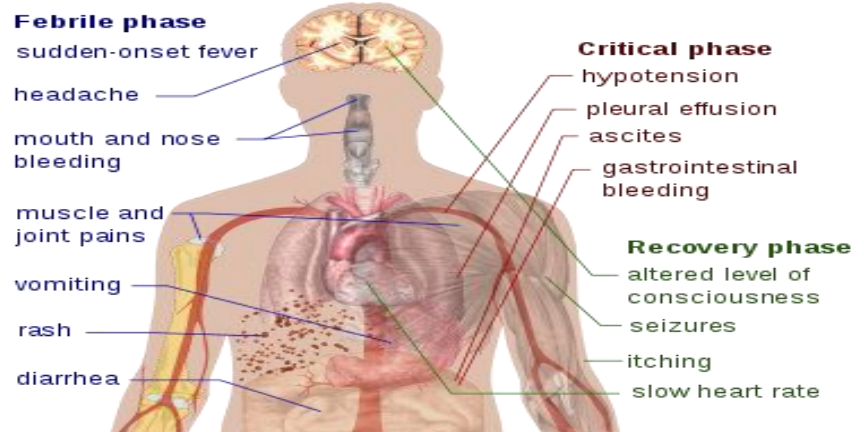
Reported suspected and confirmed dengue with symptom onset in week 42 of 2022

	2022*	
	EW 42	YTD
Total Suspected Dengue Cases	0	69
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

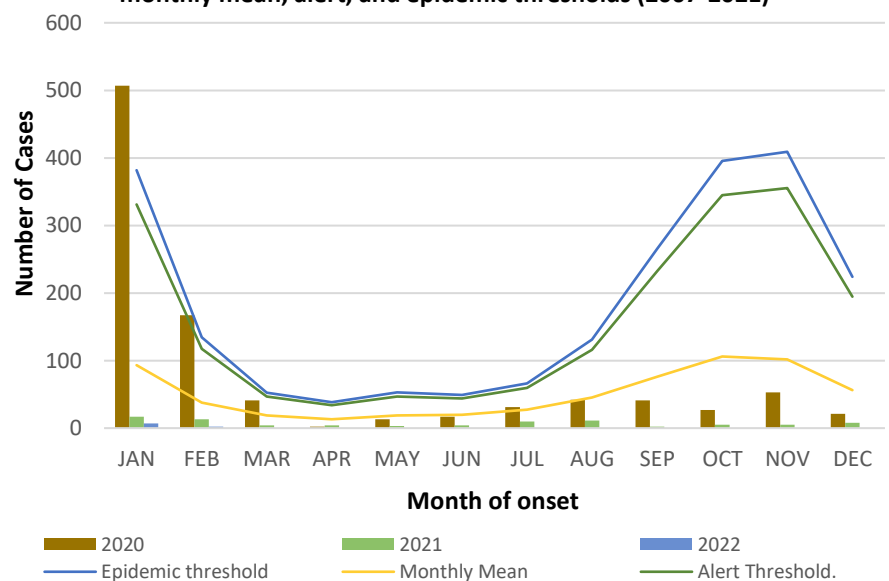
Points to note:

- *Figure as at Oct 22, 2022
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Symptoms of Dengue fever



Suspected dengue cases for 2020, 2021 and 2022 versus monthly mean, alert, and epidemic thresholds (2007-2021)



8 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

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.



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



9 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