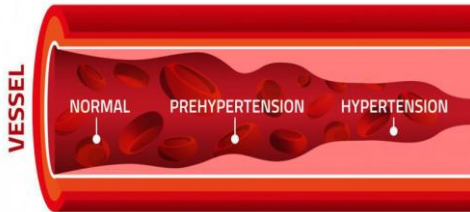


WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Hypertension



Blood pressure is the force exerted by circulating blood against the walls of the body's arteries, the major blood vessels

in the body. Hypertension is when blood pressure is too high. 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 called a "silent killer".

Most people with hypertension are unaware of the problem because it may have no warning signs or symptoms. For this reason, it is essential that blood pressure is measured regularly. 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.

What are the risk factors for hypertension?



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.

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

EPI WEEK 51



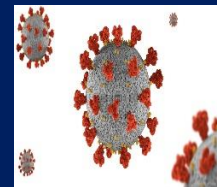
- Syndromic Surveillance
- Accidents
- Violence

Pages 2-4



Class 1 Notifiable Events

Page 5



COVID-19

Page 6



Influenza

Page 7



Dengue Fever

Page 8



Research Paper

Page 9

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 - 48 to 51 of 2022

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

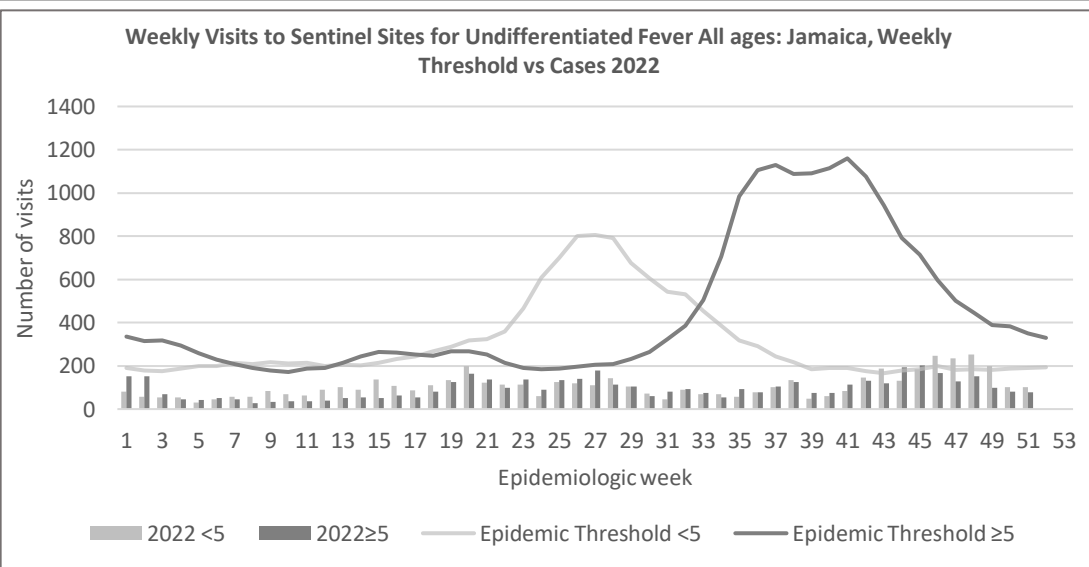
KEY:
Yellow- late submission on Tuesday
Red - late submission after Tuesday

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												
48	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
49	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
50	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
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

REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of >38°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

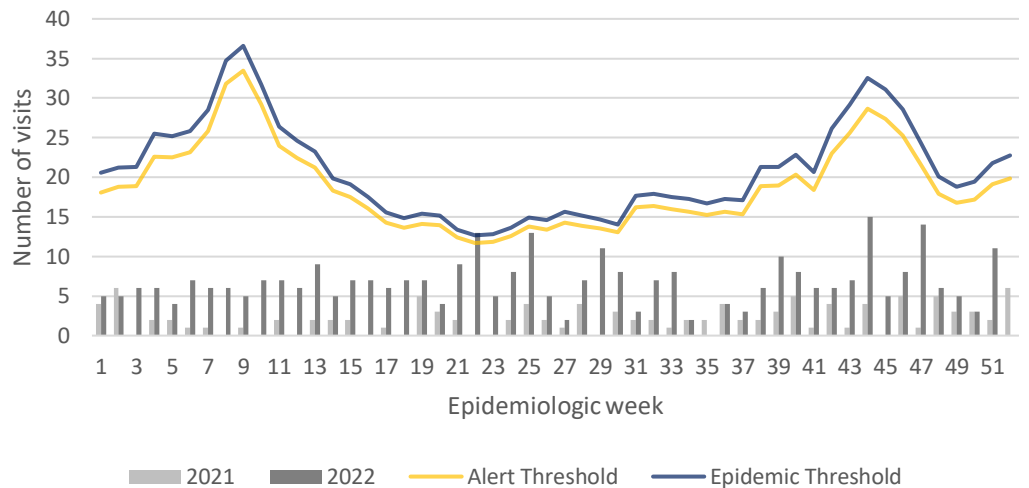
SENTINEL REPORT- 78 sites. Automatic reporting

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

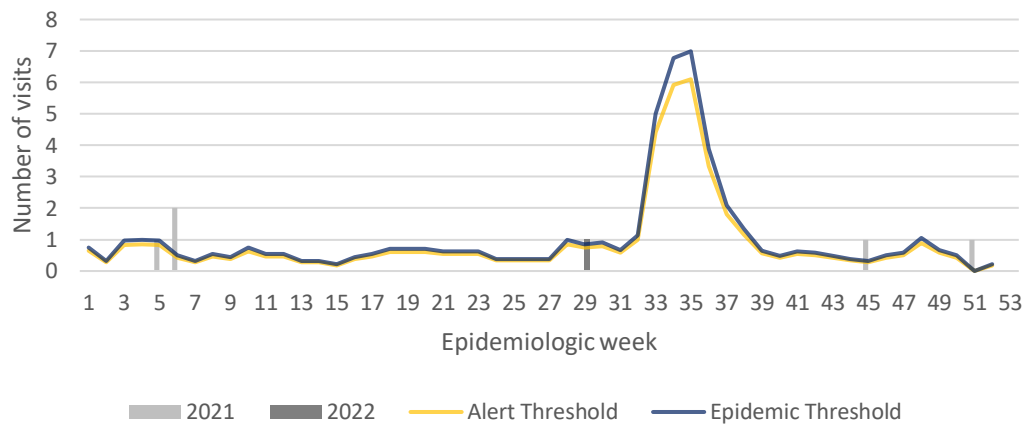


FEVER AND HAEMORRHAGIC

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



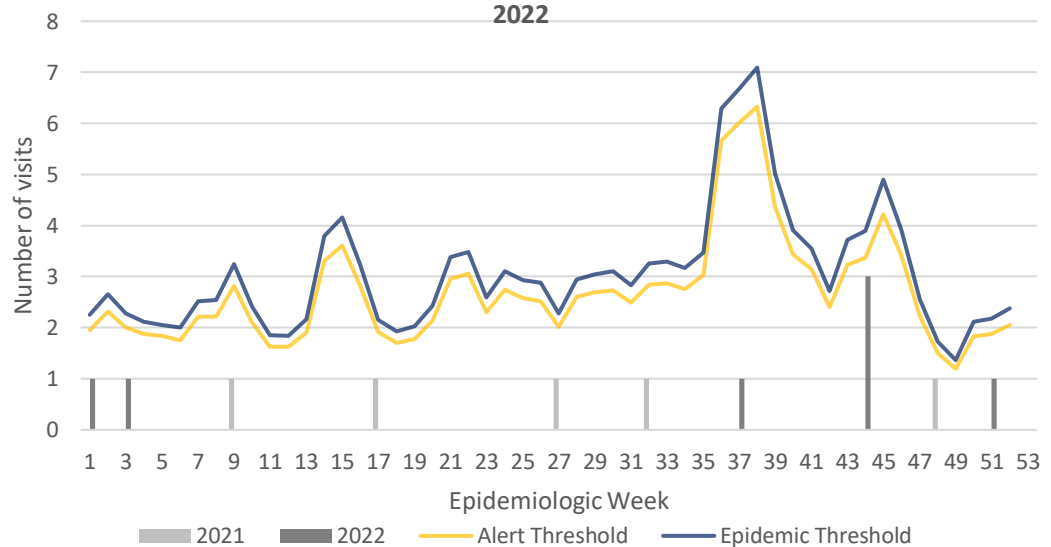
FEVER AND JAUNDICE

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



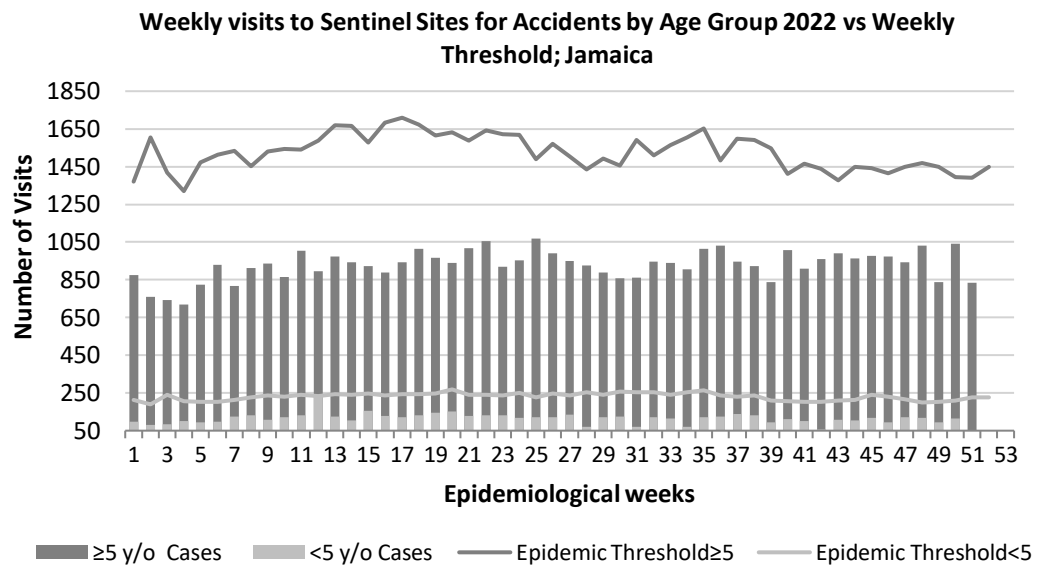
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

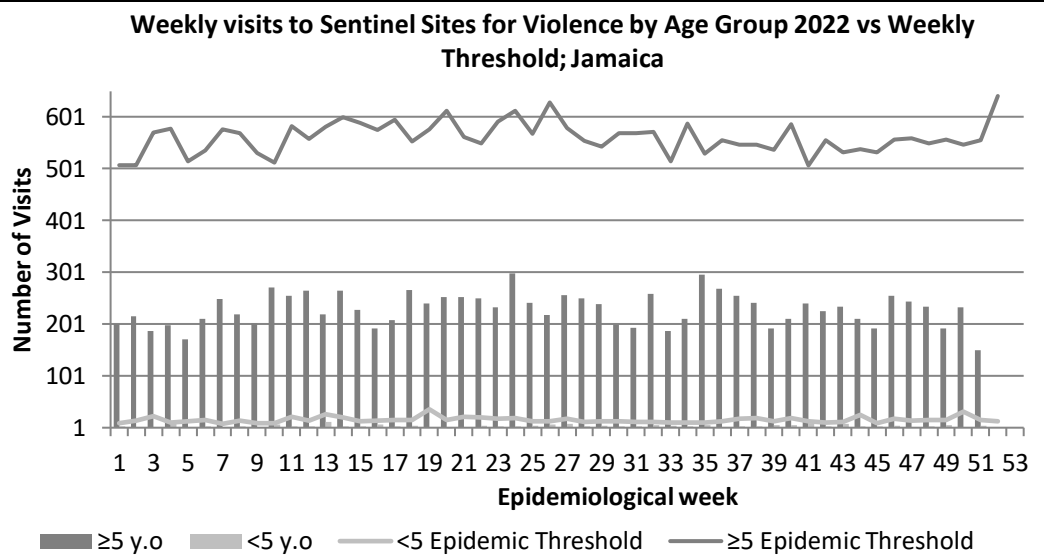
ACCIDENTS

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



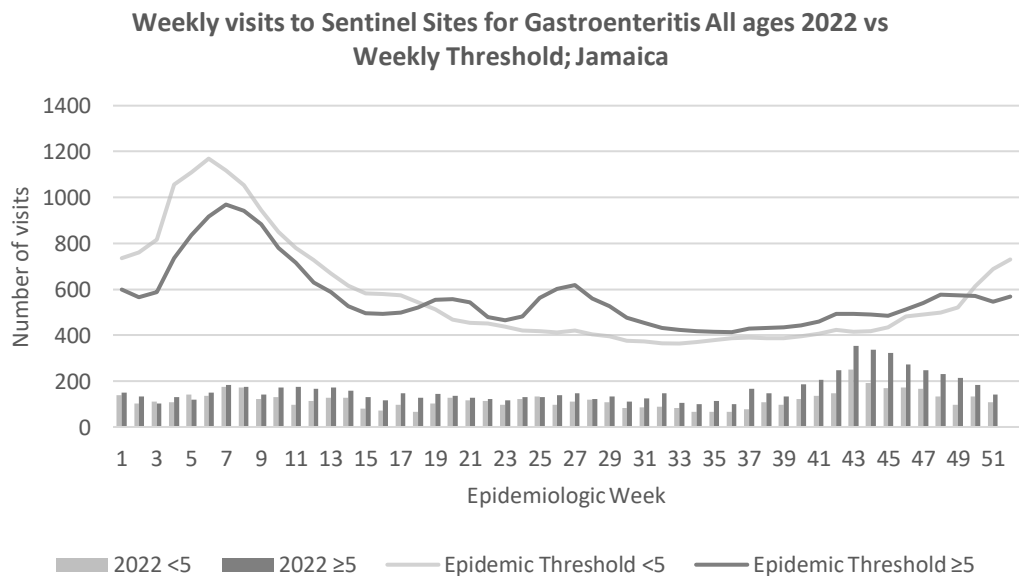
VIOLENCE

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	
	CLASS 1 EVENTS	Confirmed YTD ^α			
		CURRENT YEAR 2022	PREVIOUS YEAR 2021		
NATIONAL/INTERNATIONAL INTEREST	Accidental Poisoning	196 ^β	176 ^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. 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.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	55651	79905		
	Hansen's Disease (Leprosy)	0	0		
	Hepatitis B	8	6		
	Hepatitis C	2	4		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	19	39		
	Monkeypox	18	NA		
EXOTIC/ UNUSUAL	Plague	0	0	^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.	
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	59	82		
	Ophthalmia Neonatorum	48	40		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	2	0		
Tuberculosis	46	38			
Yellow Fever	0	0			
	Chikungunya ^ε	0	0		
	Zika Virus ^θ	0	0	NA- Not Available	

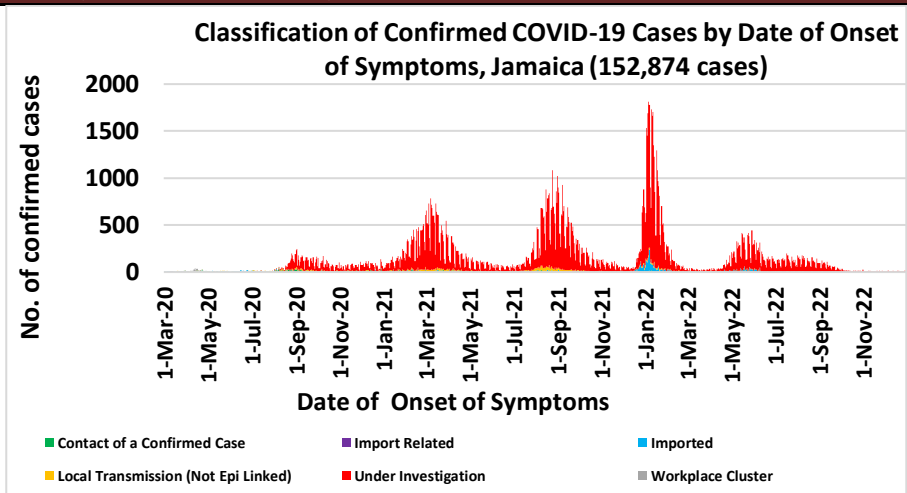
 <p>5 NOTIFICATIONS- All clinical sites</p>	 <p>INVESTIGATION REPORTS- Detailed Follow up for all Class One Events</p>	 <p>HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued</p>	 <p>SENTINEL REPORT- 78 sites. Automatic reporting</p>
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COVID-19 Surveillance Update

March 10, 2020 – EW 51, 2022

CASES	EW 51	Total
Confirmed	48	152874
Females	32	88198
Males	16	64673
Age Range	7 months 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

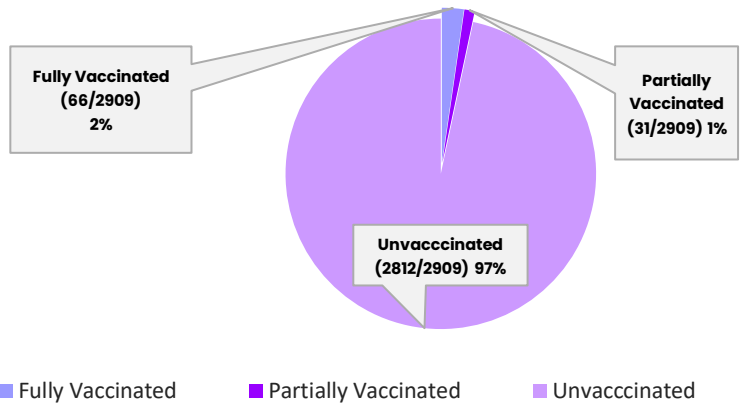


COVID-19 Outcomes

Outcomes	EW 51	Total
ACTIVE *past 2 weeks*		97
DIED – COVID Related	1	3465
Died - NON COVID	0	296
Died - Under Investigation	0	353
Recovered and discharged	7	102069
Repatriated	0	93
Total		152874

*Vaccination programme March 2021 – YTD

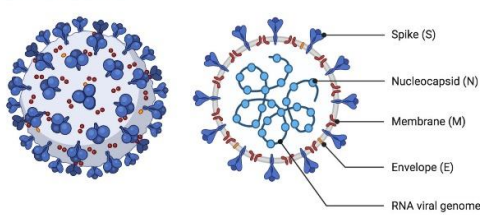
2909 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

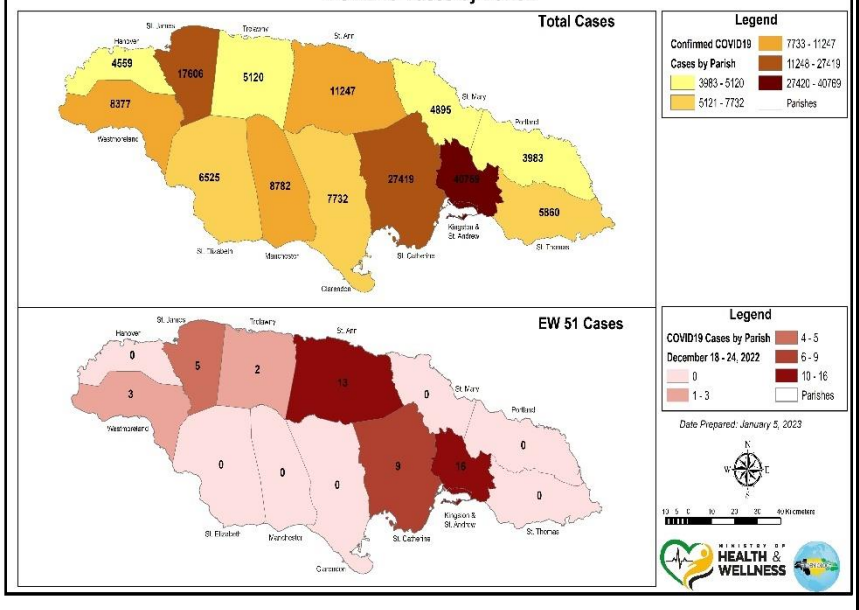
SARS-CoV-2



COVID-19 WHO Global Statistics EW48-EW51

Epi Week	Confirmed Cases	Deaths
48	3,455,814	10,077
49	3,853,338	10,891
50	2,518,720	7918
51	2,240,797	8576
Total (4weeks)	12,068,669	37,462

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



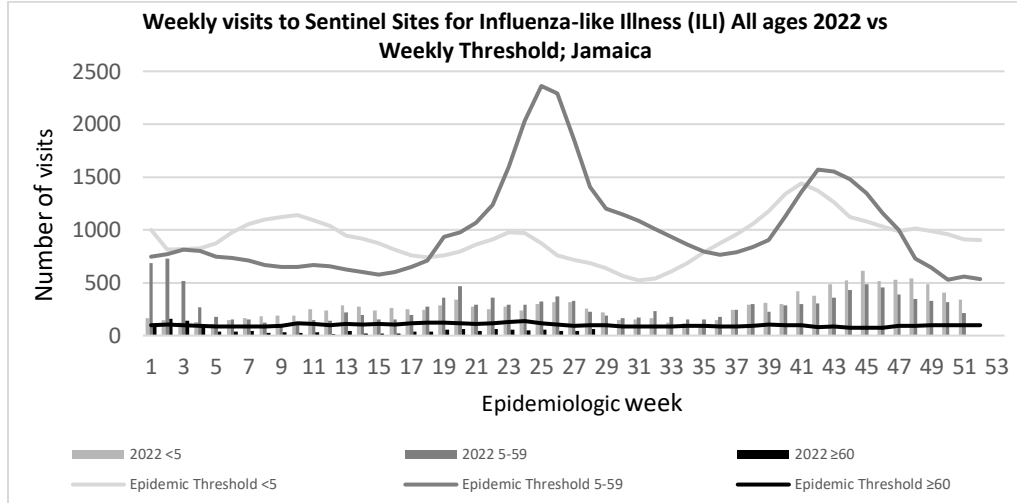
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 51

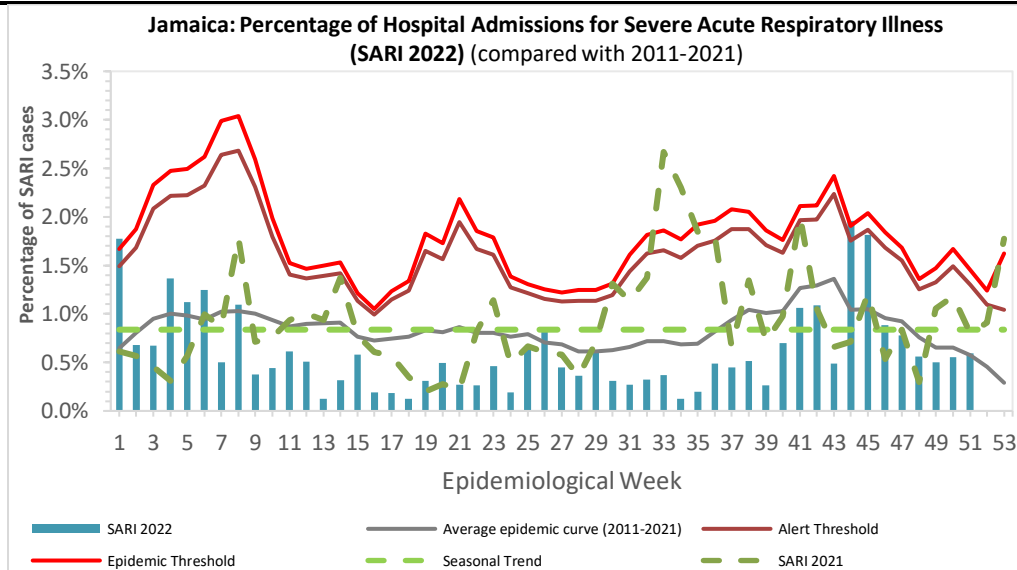
December 18– December 24, 2022 Epidemiological Week 51

	<i>EW 51</i>	<i>YTD</i>
SARI cases	9	508
Total Influenza positive Samples	2	67
Influenza A	0	67
H3N2	1	56
H1N1pdm09	1	11
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	1



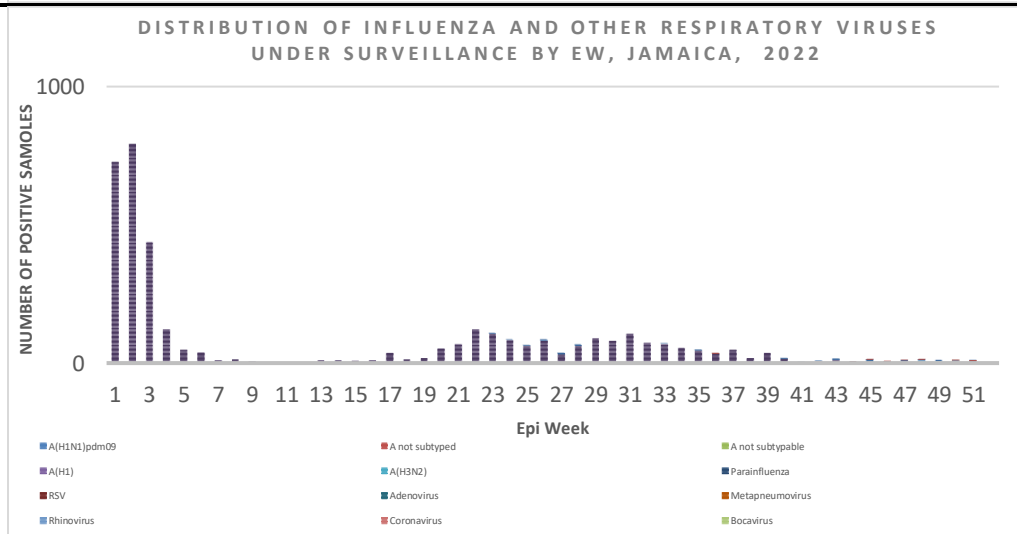
Epi Week Summary

During EW 51 nine (9) SARI admissions were reported.



Caribbean Update EW 51

Caribbean: Influenza activity was moderate across the subregion with A(H3N2) virus predominance and A(H1N1)pdm09 co-circulation. SARS-CoV-2 activity remained low overall. Haiti and Puerto Rico have shown increased influenza activity, at low-intensity levels. Jamaica reported increased activity levels.



7 NOTIFICATIONS-
All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

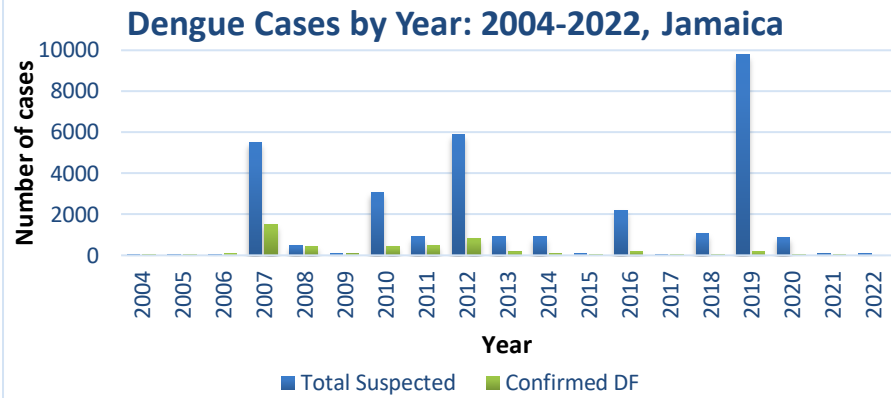
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

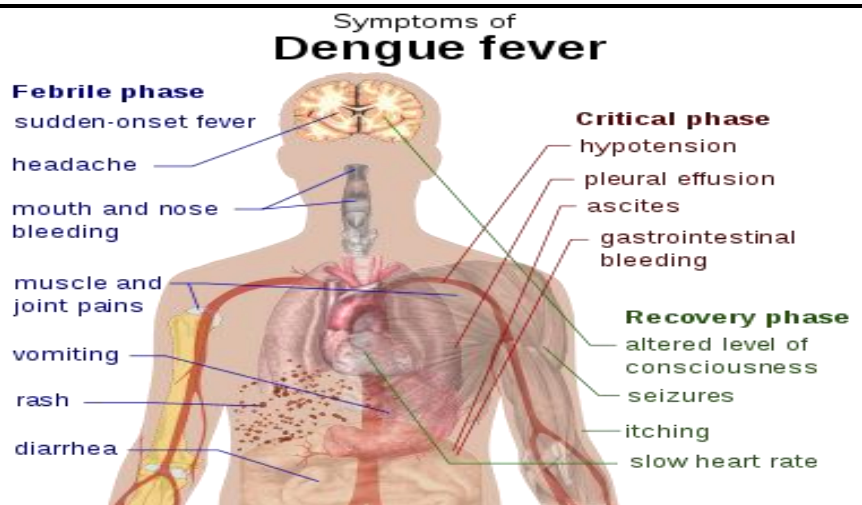
December 18- December 24, 2022 Epidemiological Week 51

Epidemiological Week 51



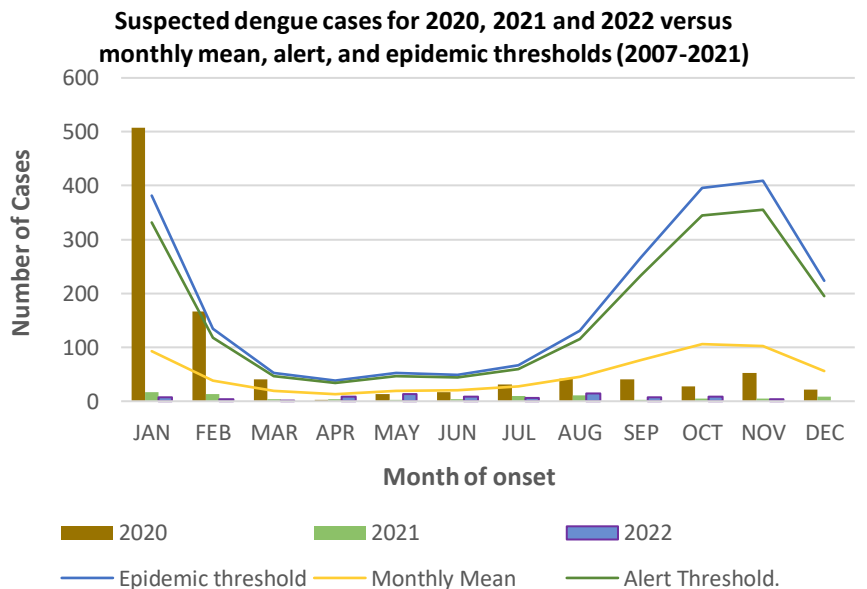
Reported suspected and confirmed dengue with symptom onset in week 51 of 2022

	2022*	
	EW 51	YTD
Total Suspected Dengue Cases	0	100
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at Dec 24, 2022
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



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

Title: Healthy Lifestyle Choices Driven by Taxation

Authors: Fabian B. Lewis, PhD; Georgia Mullings and Sabrina Gordon (Ministry of Finance and Public Service)

Abstract

Consumption of sweetened drinks has risen globally and has proven to be one of the main contributors to obesity and non-communicable diseases. Despite this growing public health concern, there is no excise tax on sweetened drinks in Jamaica as part of an effective health policy strategy to reduce consumption and the resulting ailments associated with it. Furthermore, to our knowledge, no detailed research identifying how taxes on sweetened drinks could be implemented in Jamaica's current tax system exists. Hence, this paper fills a major gap by presenting possible recommendations for a sweetened drinks tax. Various tax options include a tiered Specific SCT regime and a single Specific SCT rate regime. However, we recommended that the Jamaican Government implement a tiered-rate system using a specific tax (in the form of a SCT) on non-alcoholic beverages. Sweetened drinks with up to 5 grams of sugar per 100ml (12g per 237ml) will attract a tax rate of \$0.01 while those greater will attract a rate of \$0.02 per ml. This regime would arguably be ideal for Jamaica as it would allow for products with greater sugar content to be taxed at a higher rate thus encouraging consumers to shift to healthier substitutes.

Keywords: sweetened drinks, non-communicable diseases, tiered rate structure, non-alcoholic beverages, excise tax



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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
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SENTINEL
REPORT- 78 sites.
Automatic reporting