

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

HEALTHY DIET



A healthy diet helps protect against malnutrition in all its forms and is a foundation for health and development. It also helps to prevent non-communicable diseases including diabetes, cardiovascular diseases, some cancers and other conditions linked to obesity. Together with a

lack of physical activity, an unhealthy diet is one of the leading global risks to health.

Evidence shows the benefits of a diet high in fruit, vegetables, legumes, nuts and grains, but lower in salt, free sugars and fats, particularly saturated and trans fats. Developing a healthy diet begins early in life with breastfeeding and educational initiatives for young children and parents. These benefits are reflected in higher educational outcomes, productivity and lifelong health.



However, there are many ways in which a healthy diet can be inaccessible, particularly in low- and middle-income countries and in situations with high rates of food insecurity such as armed conflict. Around the world, an estimated 2 billion people lack access to safe, nutritious and sufficient food. The proliferation of highly processed food, rapid unplanned urbanization and changing lifestyles has also contributed to more people eating unhealthy diets high in energy, fats, free sugars and salt.

https://www.who.int/health-topics/healthy-diet#tab=tab_1

EPI WEEK 48



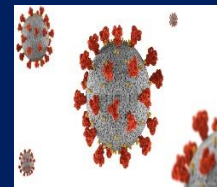
- Syndromic Surveillance
- Accidents
- Violence

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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 - 45 to 48 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												
45	On Time	On Time	Late (T)	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
46	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
47	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
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

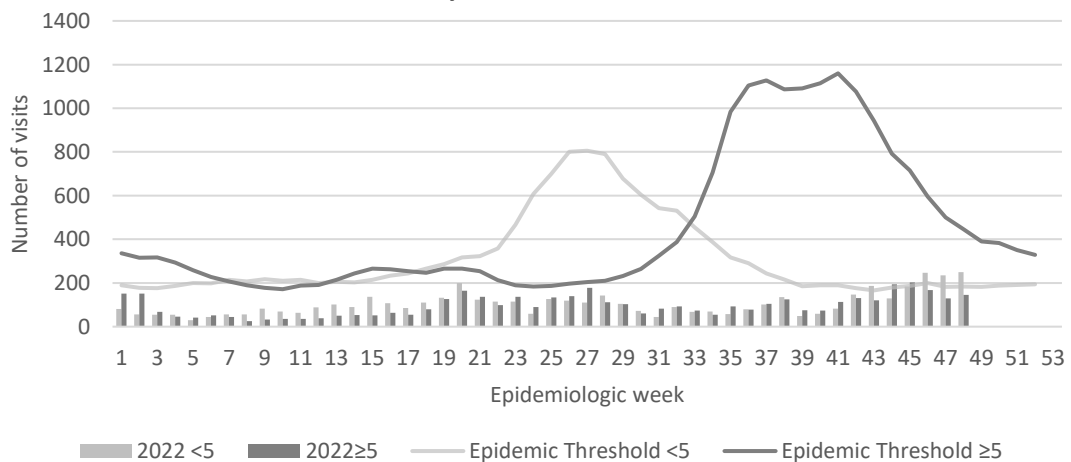
REPORTS FOR SYNDROMIC SURVEILLANCE


UNDIFFERENTIATED FEVER

Temperature of >38°C /100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.




Weekly Visits to Sentinel Sites for Undifferentiated Fever All Ages: Jamaica, Weekly Threshold vs Cases 2022



 2 NOTIFICATIONS- All clinical sites

 INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

 HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

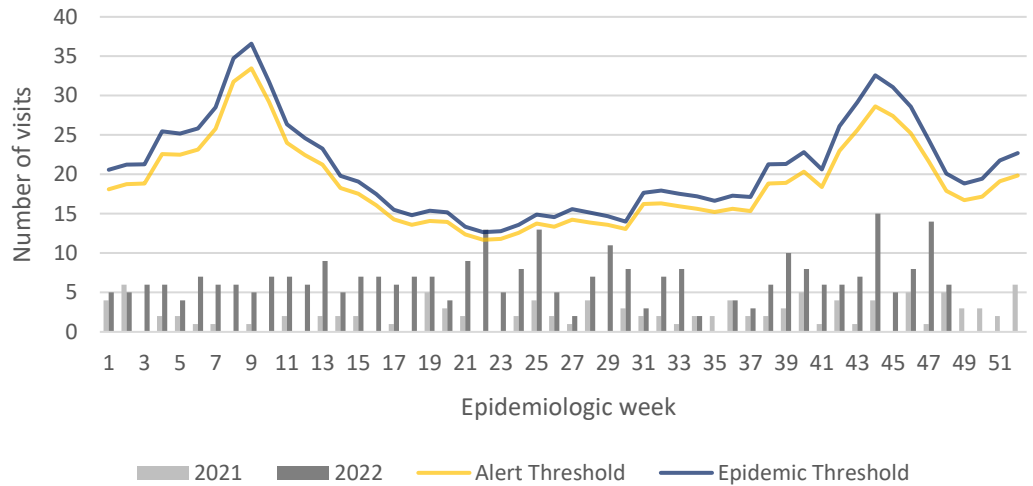
 SENTINEL REPORT- 78 sites. Automatic reporting

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

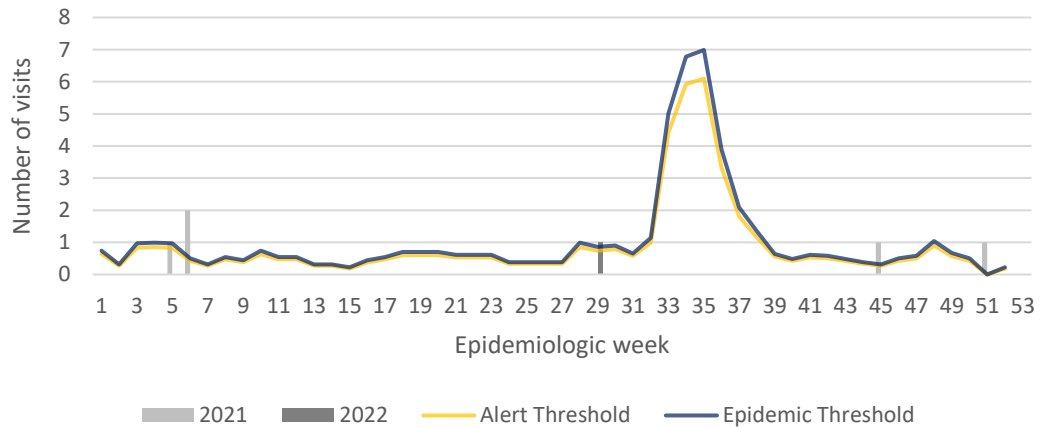


FEVER AND HAEMORRHAGIC

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



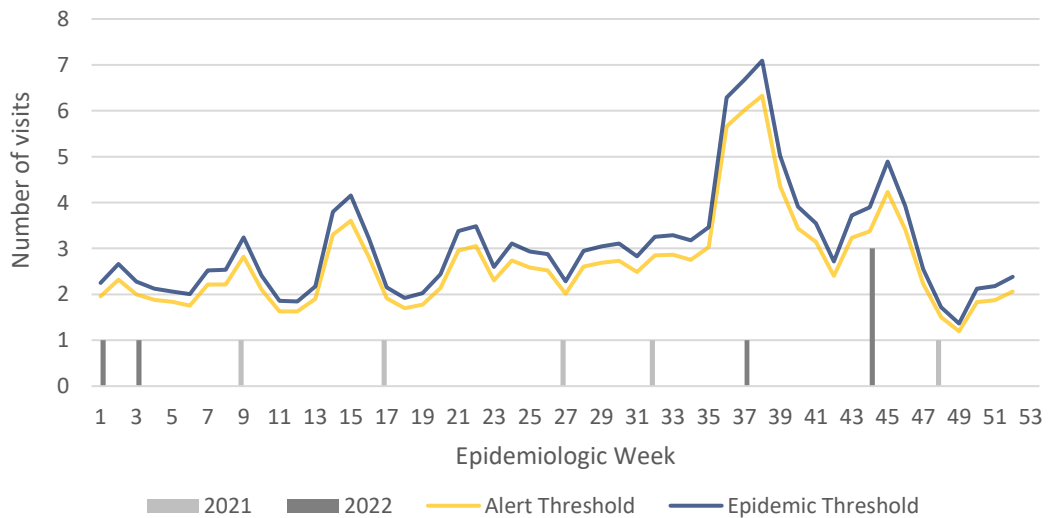
FEVER AND JAUNDICE

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



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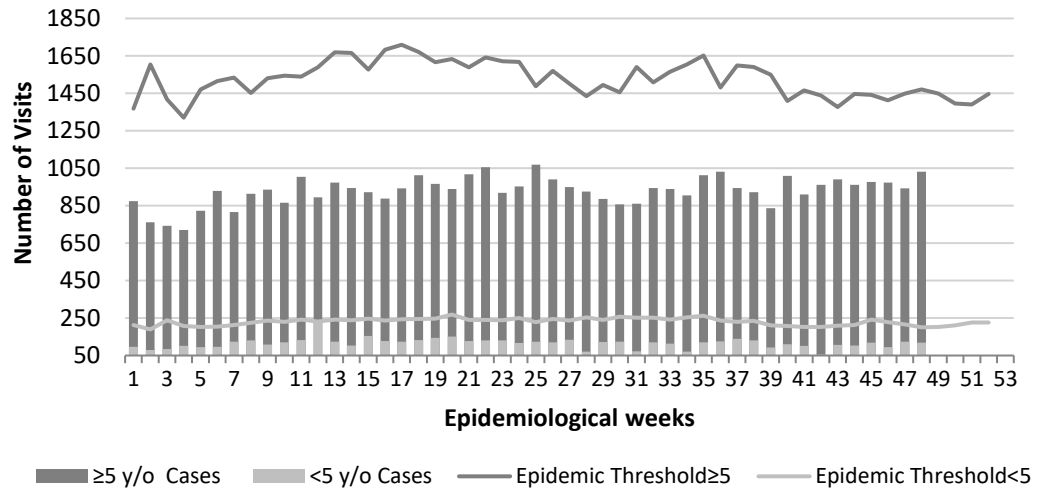
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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



Weekly visits to Sentinel Sites for Accidents by Age Group 2022 vs Weekly Threshold; Jamaica

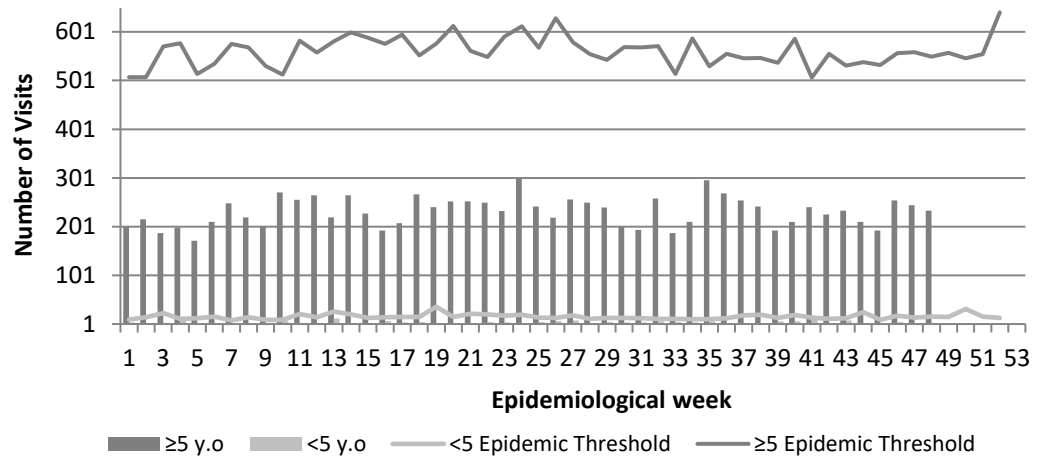


VIOLENCE

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 2022 vs Weekly Threshold; Jamaica

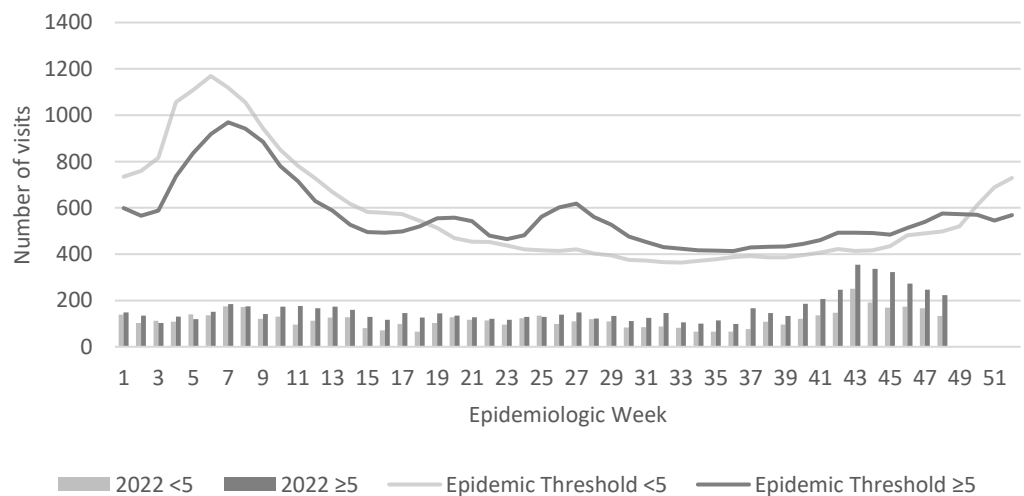


GASTROENTERITIS

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 2022 vs Weekly Threshold; Jamaica



4 NOTIFICATIONS-
All clinical sites



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CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD ^α			
		CURRENT YEAR 2022	PREVIOUS YEAR 2021		
NATIONAL/INTERNATIONAL INTEREST	Accidental Poisoning	196 ^β	168 ^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. ^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.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	55508	78263		
	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)	18	34		
	Monkeypox	18	NA		
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	59	81		
	Ophthalmia Neonatorum	48	40		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	2	0		
	Tuberculosis	45	38		
Yellow Fever	0	0			
Chikungunya ^ε	0	0			
Zika Virus ^θ	0	0	NA- Not Available		

 5 NOTIFICATIONS- All clinical sites

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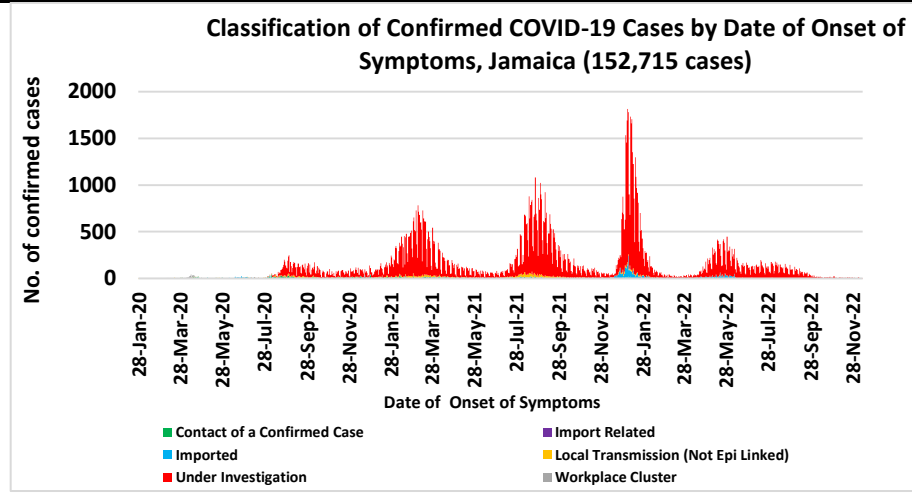
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COVID-19 Surveillance Update

March 10, 2020 – EW 48, 2022

CASES	EW 48	Total
Confirmed	52	152715
Females	28	88104
Males	24	64608
Age Range	2 months – 92 years	1 day to 108 years

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

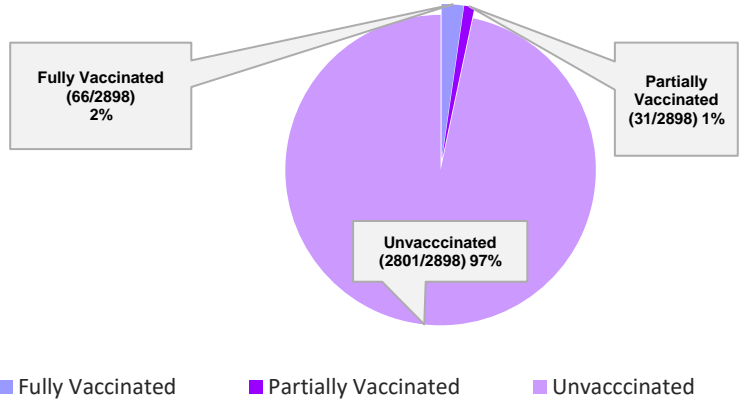


COVID-19 Outcomes

Outcomes	EW 48	Total
ACTIVE *past 2 weeks*		107
DIED – COVID Related	0	3452
Died - NON COVID	0	295
Died - Under Investigation	0	349
Recovered and discharged	3	101964
Repatriated	0	93
Total		152715

*Vaccination programme March 2021 – YTD

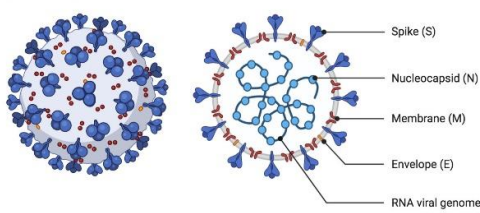
2898 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

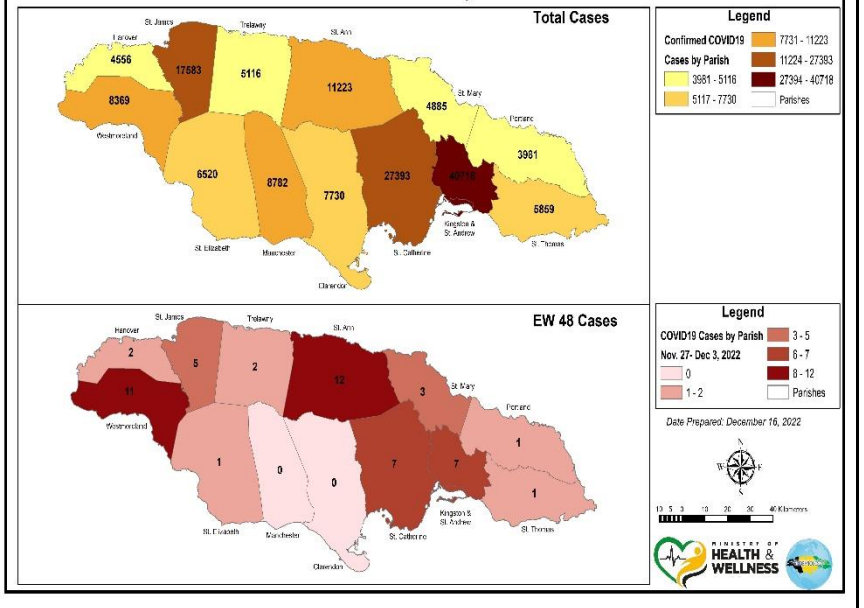
SARS-CoV-2



COVID-19 WHO Global Statistics EW45-EW48

Epi Week	Confirmed Cases	Deaths
45	2,533,370	8,071
46	2,746,939	8533
47	3,010,501	7981
48	3,455,814	10,077
Total (4weeks)	11,746,624	34,662

COVID19 Cases by Parish



6 NOTIFICATIONS-
All clinical sites



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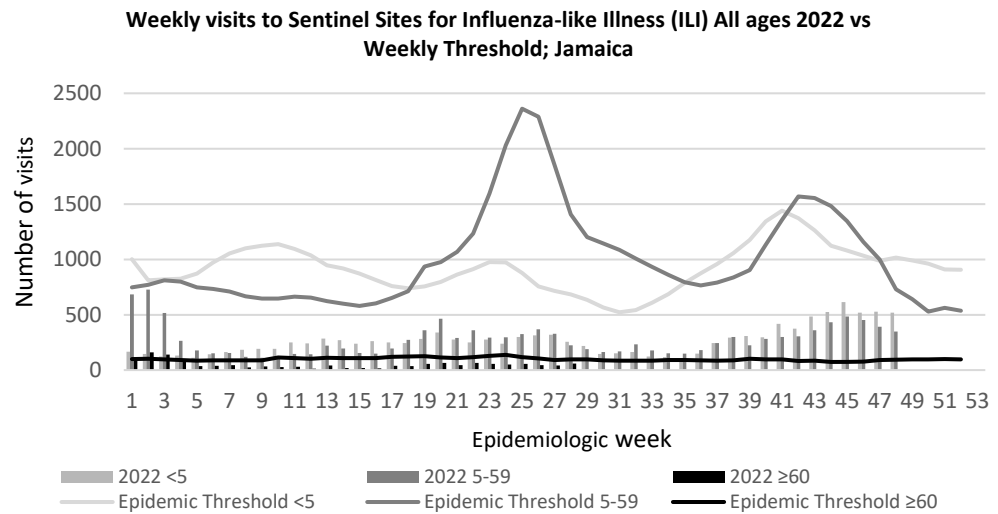


NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 48

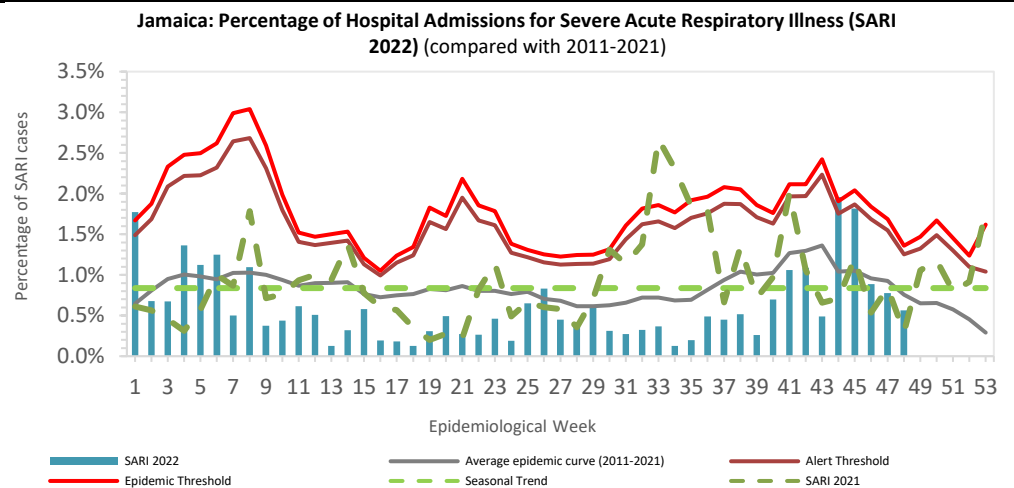
November 27– December 3, 2022 Epidemiological Week 48

	<i>EW 48</i>	<i>YTD</i>
SARI cases	9	480
Total Influenza positive Samples	0	54
Influenza A	0	54
H3N2	2	47
H1N1pdm09	1	7
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0



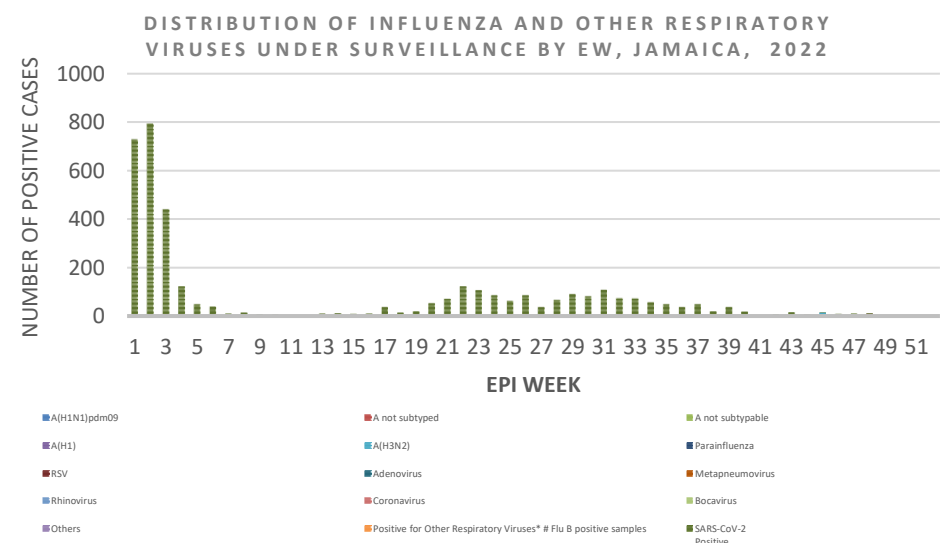
Epi Week Summary

During EW 48 nine (9) SARI admissions were reported.



Caribbean Update EW 48

Caribbean: Influenza activity continues moderate across the subregion with A(H3N2) virus predominance. In contrast, SARS-CoV-2 activity remained low. In addition, the Dominican Republic and Puerto Rico have shown increased influenza activity but continue at low-intensity levels, while Guadeloupe and Martinique recorded increased RSV activity.



7 NOTIFICATIONS-
All clinical sites



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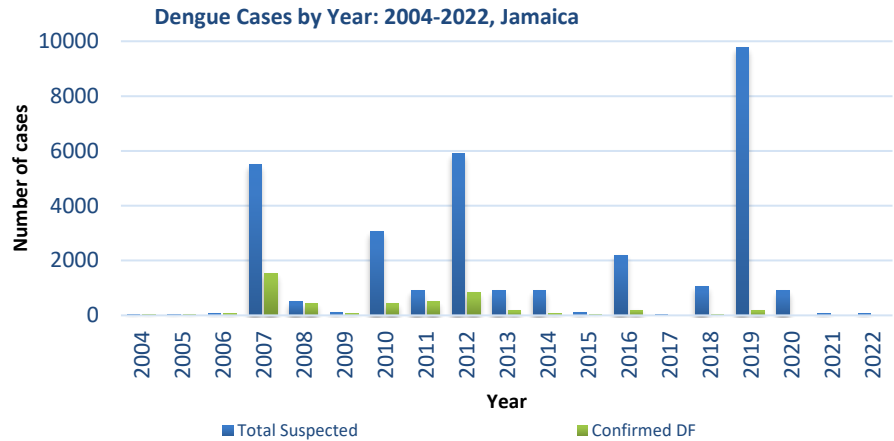


SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

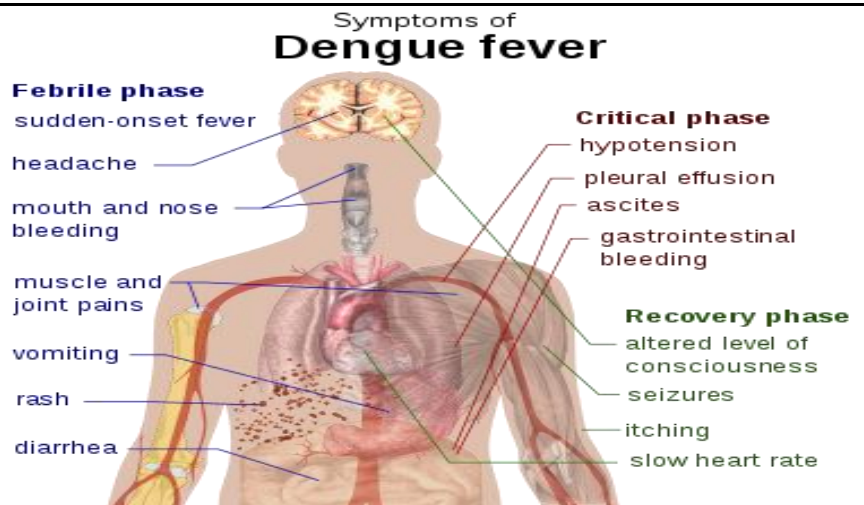
November 27- December 3, 2022 Epidemiological Week 48

Epidemiological Week 48



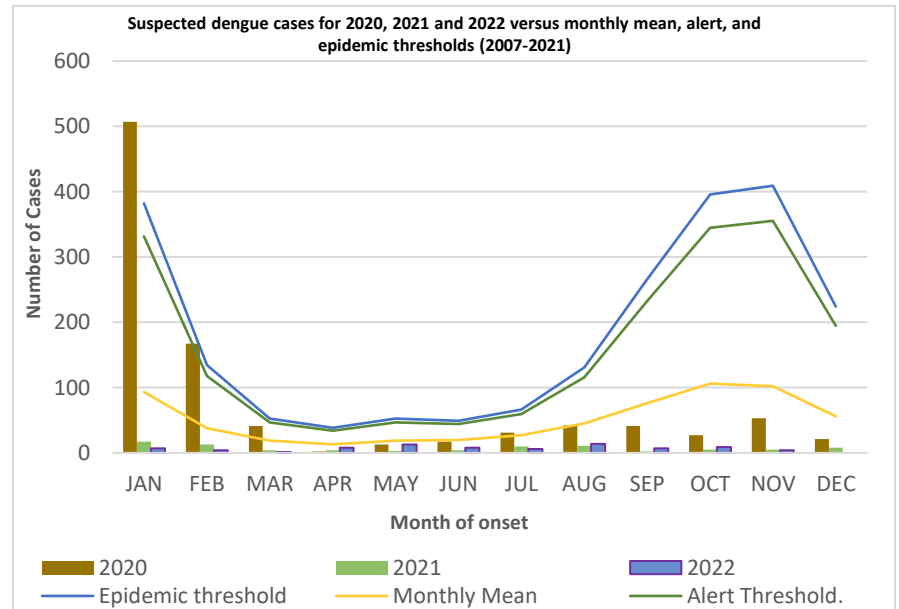
Reported suspected and confirmed dengue with symptom onset in week 48 of 2022

	2022*	
	EW 48	YTD
Total Suspected Dengue Cases	0	81
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at Dec 3, 2022
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



8 NOTIFICATIONS-
All clinical sites

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RESEARCH PAPER

Abstract

Entada gigas: Underutilized Plant for Food and Nutrition from an Indigenous Community in Jamaica

*Foster S R, Randle M M, Bozra D, Riley C K, Watson C T
Scientific Research Council, Kingston, Jamaica*

Background: *Entada gigas* (cacao) is a leguminous plant used by the Accompong maroons from St. Elizabeth, Jamaica, for medicinal and nutritional purposes. The plant seeds contain high protein levels, but are underutilized due to the anti-nutrients present.

Objectives: The effects of three processing methods (soaking, cooking and autoclaving) on proximate composition, anti-nutritional compounds and mineral content of *E. gigas* seeds collected were investigated.

Methods: Qualitative and quantitative evaluations of active phytochemical constituents, proximate and mineral analyses were performed on differentially processed *E. gigas* seed extracts using standard assays.

Results: Nutritional composition of mature *E. gigas* seeds corresponds with most edible legumes containing per 100 g edible portion: carbohydrate 50-55 g, protein 21-26 g, fat 15-20 g, crude fibre 5.3 g, and moisture 4.4 -5.9 g. Essential minerals including calcium (84.87 mg/L), iron (3.24 mg/L), potassium (793 mg/L), magnesium (112 mg/L), manganese (0.94 mg/L), sodium (7.24 mg/L) and zinc (1.49 mg/L) were also detected. Flavonoids, glycosides, steroids, terpenoids, saponins, tannins and phenols were among the phytochemicals present. Anti-nutritional substances present in the raw seeds, were effectively diminished after soaking for 21 days without significantly affecting the nutritionally beneficial compounds.

Conclusion: *Entada gigas* has nutritive values, comparable to other plant protein sources. Hence, its utilization is encouraged provided that an appropriate processing method is used to reduce the anti-nutrient content.

(Funded by Scientific Research Council)



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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



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30 sites. Actively
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