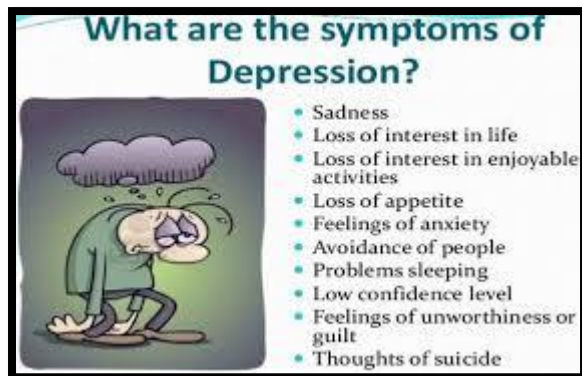


WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Depression



Key facts

- Depression is a common mental disorder. Globally, it is estimated that 5.0% of adults suffer from depression (1).
- Depression is a leading cause of disability worldwide and is a major contributor to the

overall global burden of disease.

- More women are affected by depression than men.
- Depression can lead to suicide.
- There is effective treatment for mild, moderate, and severe depression.

Contributing factors and prevention

Depression results from a complex interaction of social, psychological, and biological factors. People who have gone through adverse life events (unemployment, bereavement, traumatic events) are more likely to develop depression. Depression can, in turn, lead to more stress and dysfunction and worsen the affected person's life situation and the depression itself.

There are interrelationships between depression and physical health. For example, cardiovascular disease can lead to depression and vice versa.

Prevention programmes have been shown to reduce depression. Effective community approaches to prevent depression include school-based programmes to enhance a pattern of positive coping in children and adolescents. Interventions for parents of children with behavioural problems may reduce parental depressive symptoms and improve outcomes for their children. Exercise programmes for older persons can also be effective in depression prevention.

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

EPI WEEK 40



SYNDROMES

PAGE 2



CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

SENTINEL SYNDROMIC SURVEILLANCE

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 - 34 2021 to 37 of 2021

Parish health departments submit reports weekly by 3 p.m. on Tuesdays (T). Reports submitted after 3 p.m. are considered late e.g. Wednesday (W).

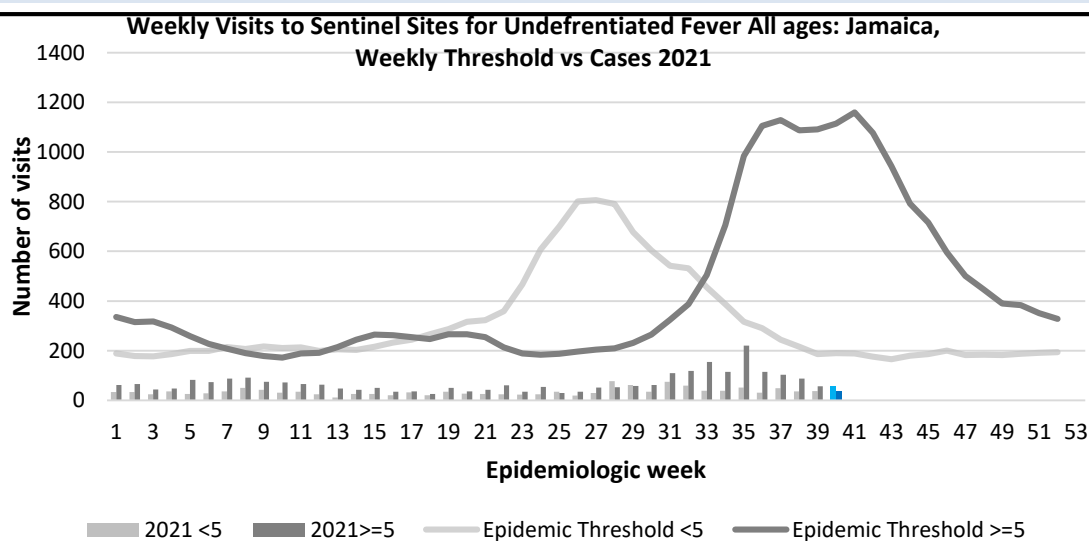
Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2021													
37	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time
38	On Time	On Time	On Time	Late (T)	On Time	On Time	Late (T)	Late (W)	On Time	On Time	On Time	On Time	On Time
39	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	Late (W)
40	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	Late (W)	On Time	On Time	Late (W)	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY
VARIATIONS OF BLUE
SHOW CURRENT WEEK



2 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



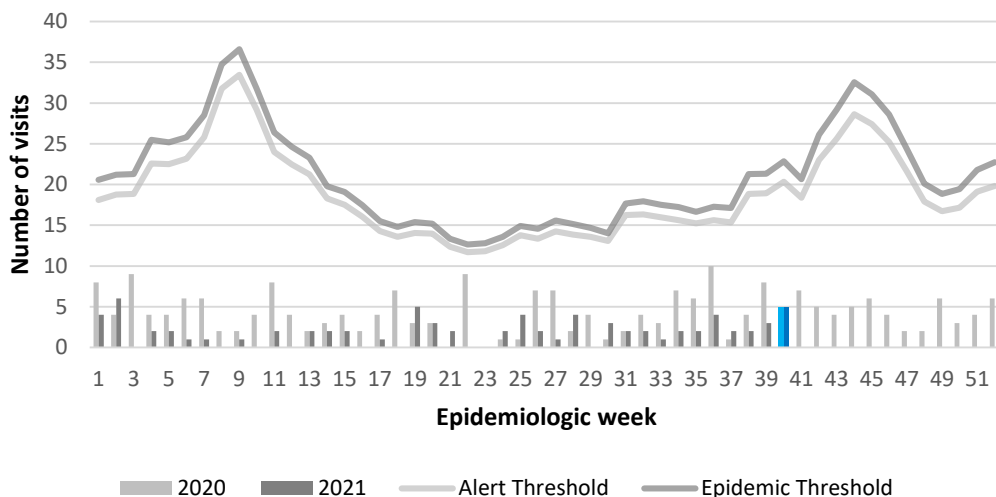
SENTINEL
REPORT- 78 sites.
Automatic reporting

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).



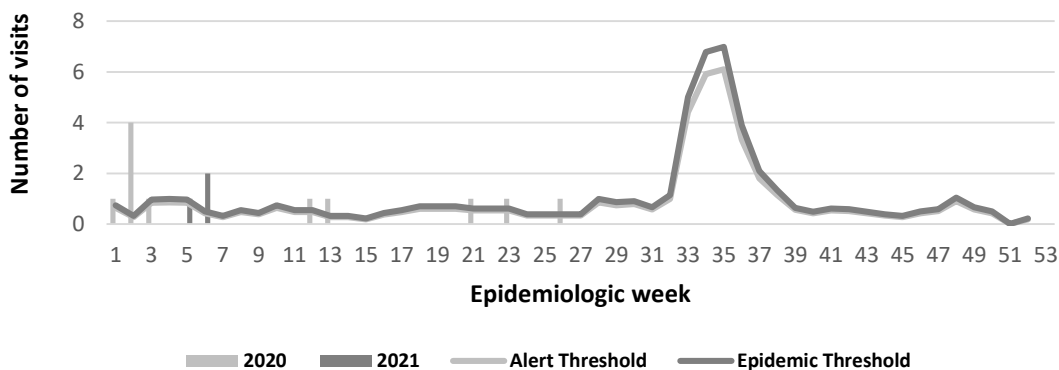
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2020 and 2021 vs. Weekly Threshold: Jamaica

**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 2020 and 2021 vs Weekly Threshold; Jamaica

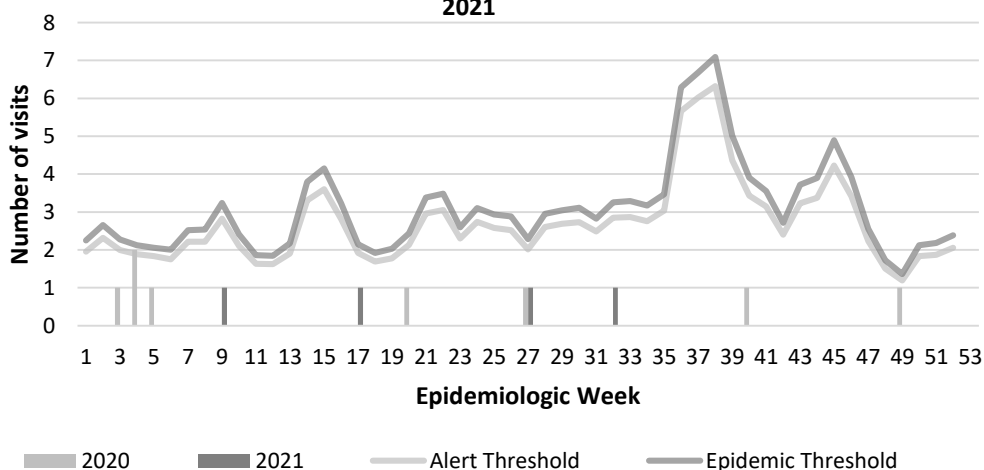
**FEVER AND JAUNDICE**

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 2020 and 2021



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



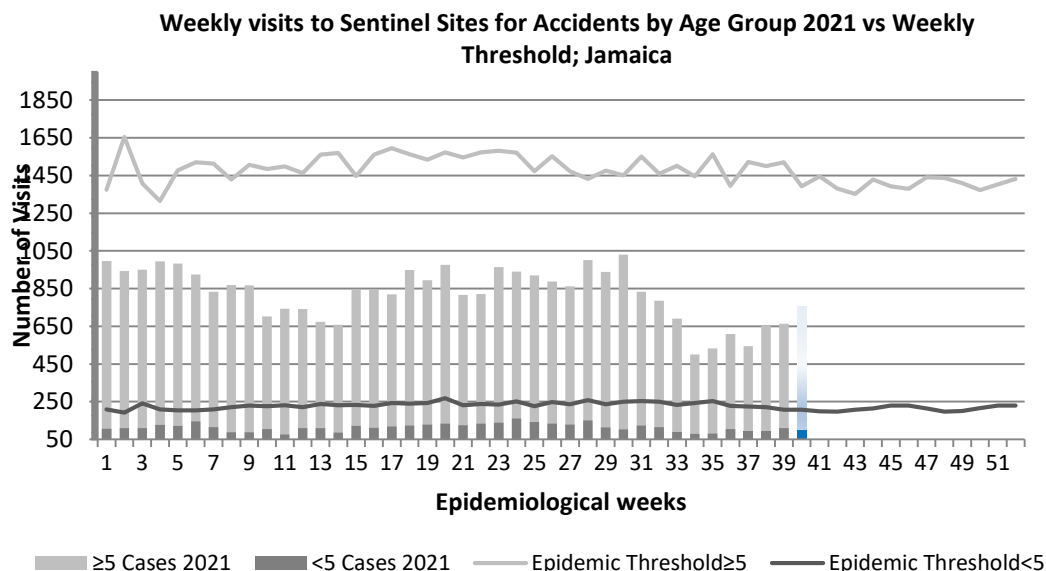
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

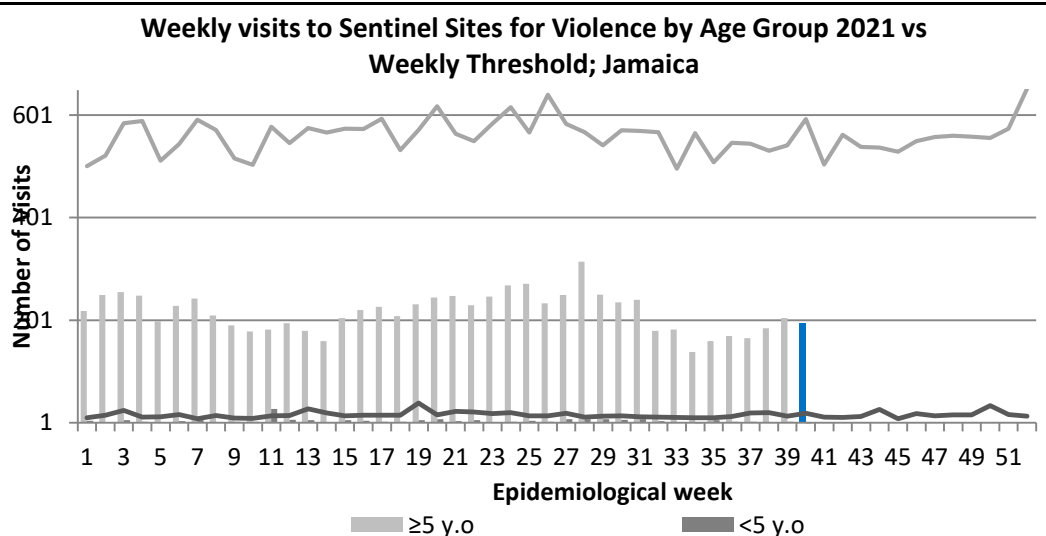
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

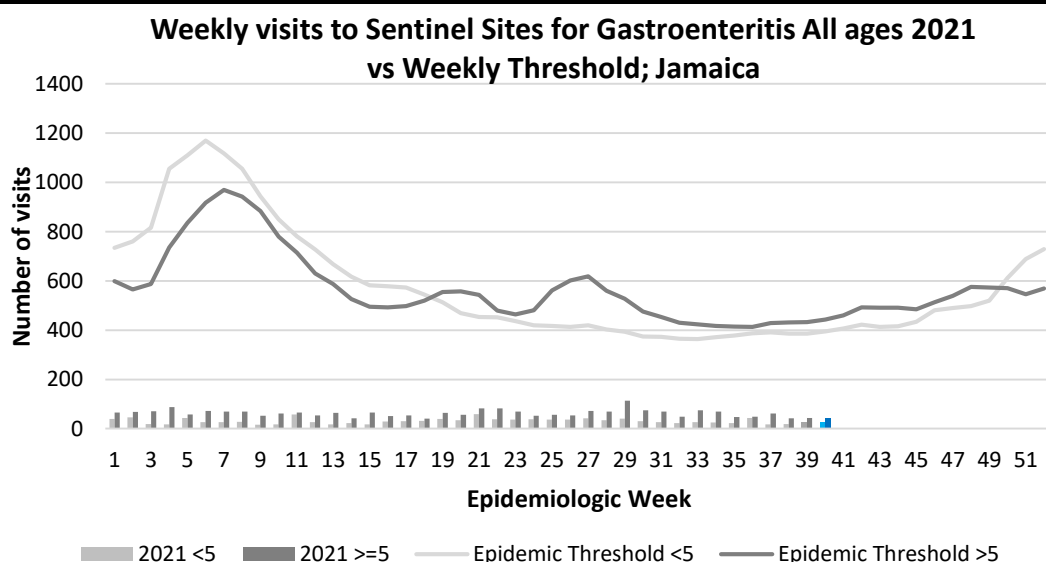
VARIATIONS OF BLUE SHOW CURRENT WEEK

**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		
	CLASS 1 EVENTS		CURRENT YEAR 2021	PREVIOUS YEAR 2020	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		98	82 ^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;
	Cholera		0	0	
	Dengue Hemorrhagic Fever ^γ		See Dengue page below	See Dengue page below	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		2	3	
	Hepatitis C		0	0	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis (Clinically confirmed)		30	1	
EXOTIC/ UNUSUAL	Plague		0	0	^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.
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		51	29	
	Ophthalmia Neonatorum		0	38	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		34	29	
Yellow Fever		0	0		
	Chikungunya ^ε		0	0	NA- Not Available
	Zika Virus ^θ		0	0	



5 NOTIFICATIONS-
All clinical sites



INVESTIGATION
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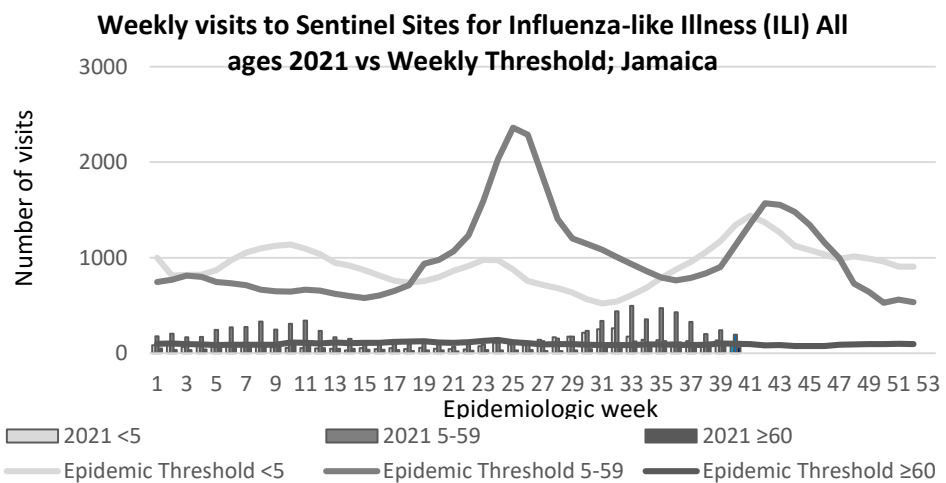
SENTINEL
REPORT- 78 sites.
Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 40

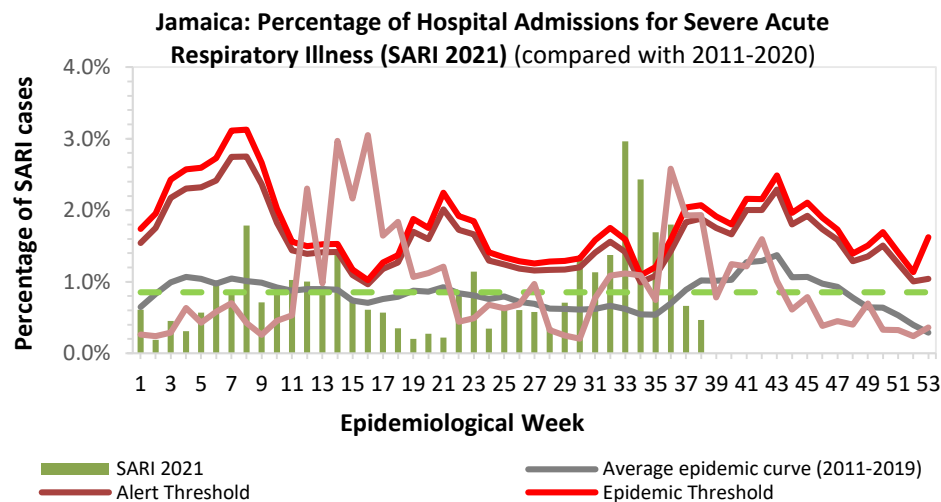
October 3 - 9, 2021 Epidemiological Week 40

	EW 40	YTD
SARI cases	14	529
Total Influenza positive Samples	0	0
Influenza A	0	0
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0



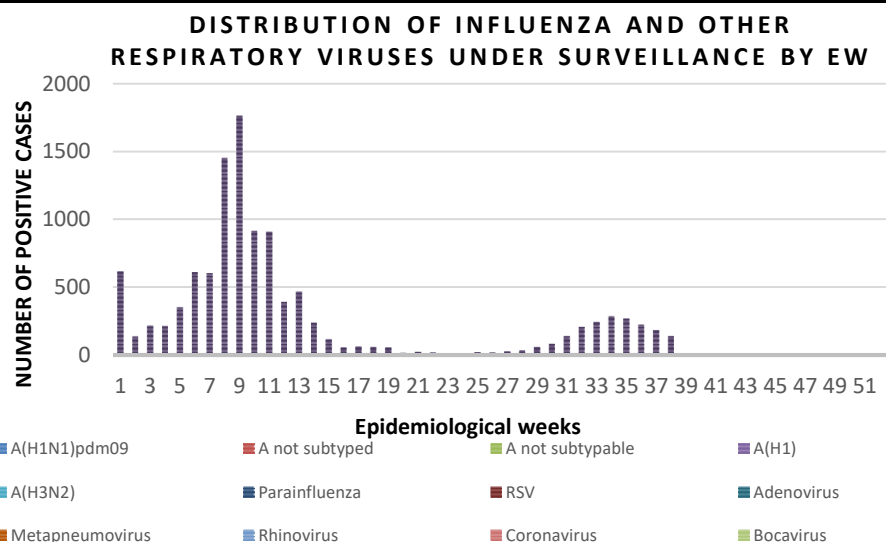
Epi Week Summary

During EW 40, fourteen (14) SARI admissions were reported.



Caribbean Update EW 40

Caribbean: Influenza activity remained low. In Belize, SARS-CoV-2 and RSV detections continued to increase and in Haiti, SARS-CoV-2 activity continued elevated and increasing.



6 NOTIFICATIONS-
All clinical
sites



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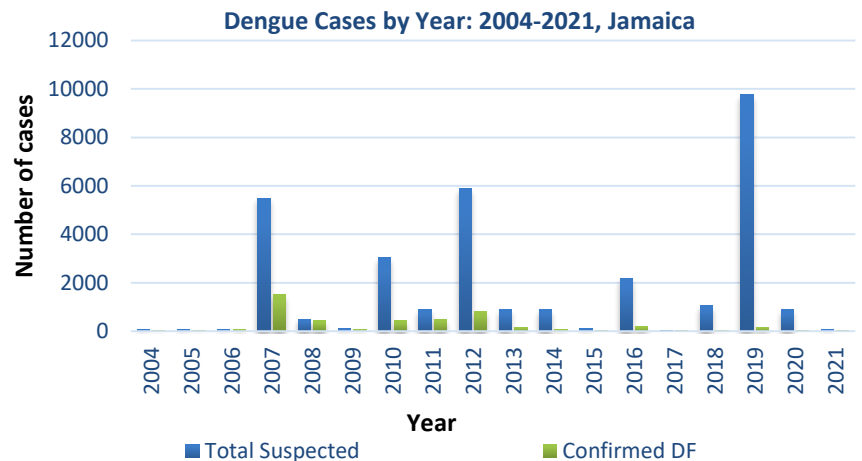


SENTINEL
REPORT- 78 sites.
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Dengue Bulletin

October 3 - 9, 2021 Epidemiological Week 40

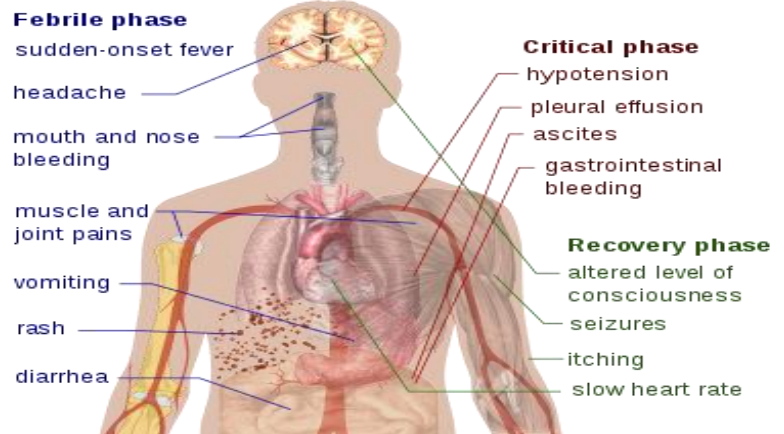
Epidemiological Week 40



Reported suspected and confirmed dengue with symptom onset in week 40 of 2021

	2021*	
	EW 40	YTD
Total Suspected Dengue Cases	0	57
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0

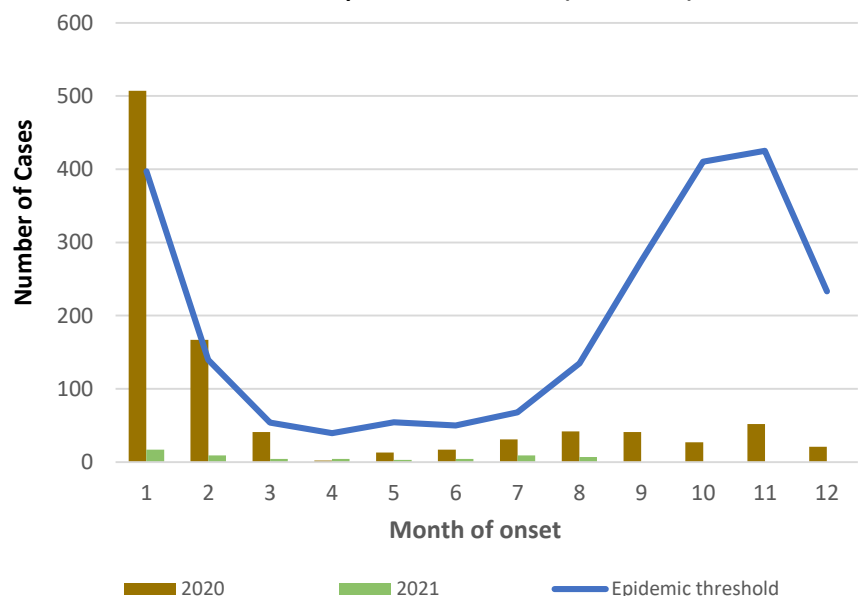
Symptoms of Dengue fever



Points to note:

- *Figure as at October 7, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

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



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

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.



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8 NOTIFICATIONS-
All clinical
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