

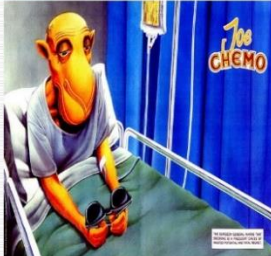
# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Tobacco

### EFFECTS OF TOBACCO USE

- ☐ Acute bronchitis
- ☐ Chronic bronchitis
- ☐ Pneumonia
- ☐ Emphysema
- ☐ Cardiovascular disease (hypertension and stroke)
- ☐ Cancer
- ☐ Periodontal disease
- ☐ Osteoporosis



### Key facts

- Tobacco kills up to half of its users.
- Tobacco kills more than 8 million people each year. More than 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to second-hand smoke.

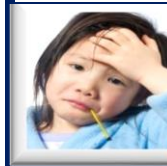
- Over 80% of the world's 1.3 billion tobacco users live in low- and middle-income countries.

### Key measures to reduce the demand for tobacco

- Second-hand smoke kills
- Second-hand smoke is the smoke that fills enclosed spaces when people burn tobacco products such as cigarettes, bidis and water-pipes.
- There is no safe level of exposure to second-hand tobacco smoke, which causes more than 1.2 million premature deaths per year and serious cardiovascular and respiratory diseases.
- Almost half of children regularly breathe air polluted by tobacco smoke in public places, and 65 000 die each year from illnesses attributable to second-hand smoke.
- In infants, it raises the risk of sudden infant death syndrome. In pregnant women, it causes pregnancy complications and low birth weight.
- Smoke-free laws protect the health of non-smokers and are popular, as they do not harm business and they encourage smokers to quit.



## EPI WEEK 37



SYNDROMES

PAGE 2



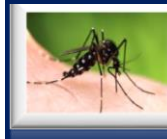
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

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

## 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. Wednesdays (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													
34	Late (W)	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)	Late (T)
35	Late (W)	On Time	On Time	Late (W)	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	Late (W)	Late (W)
36	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	Late (W)	Late (W)
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

## REPORTS FOR SYNDROMIC SURVEILLANCE

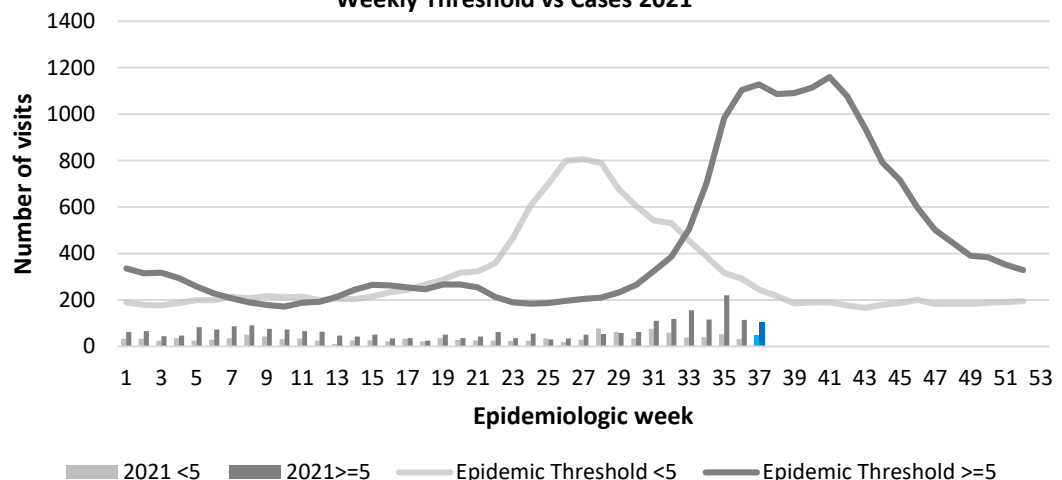
## FEVER

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



**KEY**  
VARIATIONS OF BLUE  
SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2021



2 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
30 sites. Actively  
pursued



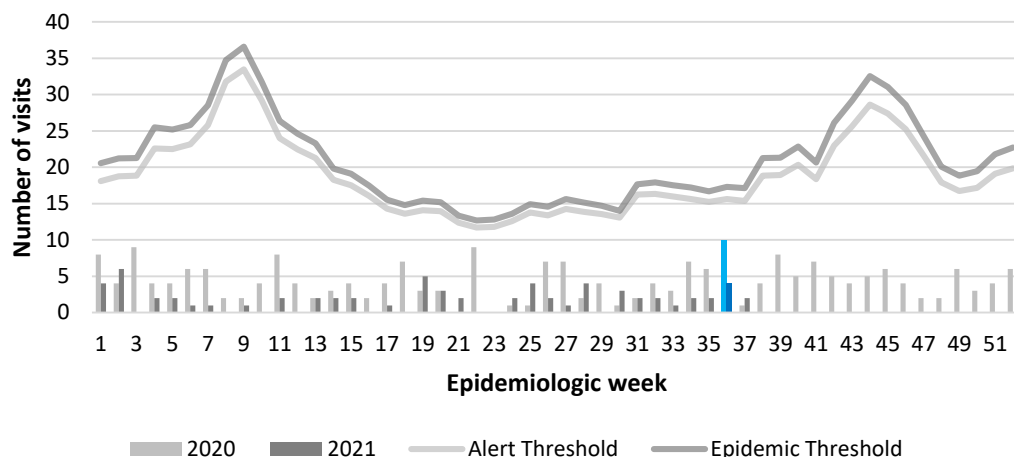
SENTINEL  
REPORT- 78 sites.  
Automatic reporting

**FEVER AND NEUROLOGICAL**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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).



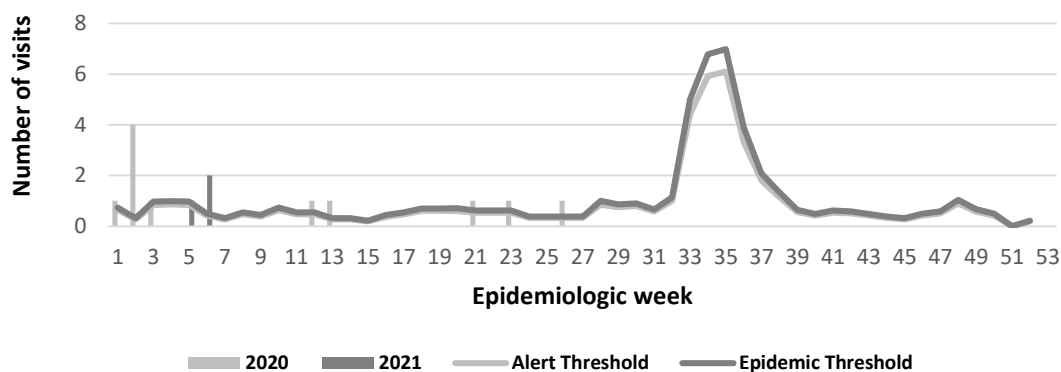
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2020 and 2021 vs. Weekly Threshold: Jamaica**

**FEVER AND HAEMORRHAGIC**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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**

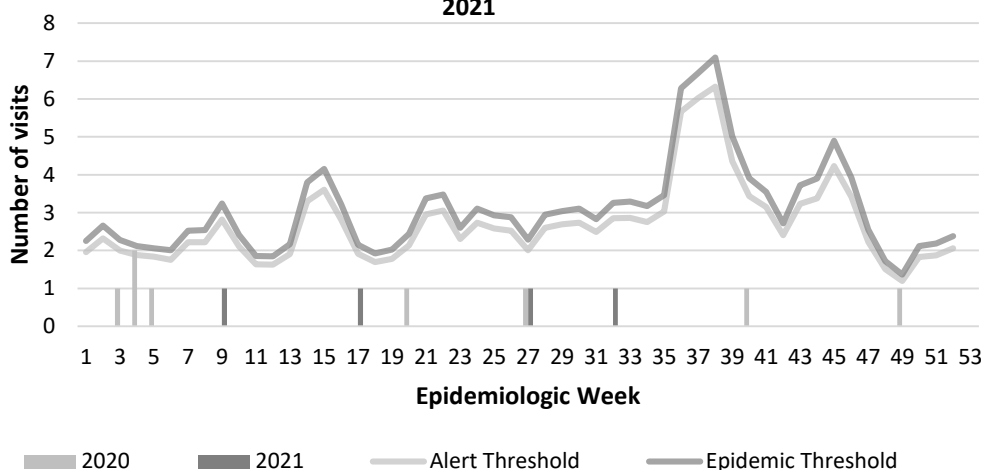
**FEVER AND JAUNDICE**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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



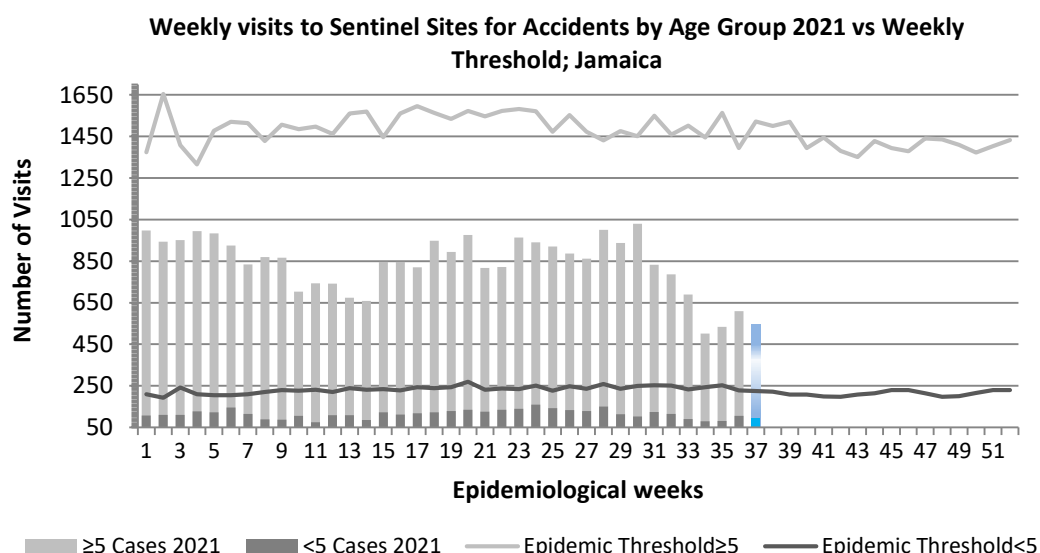
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

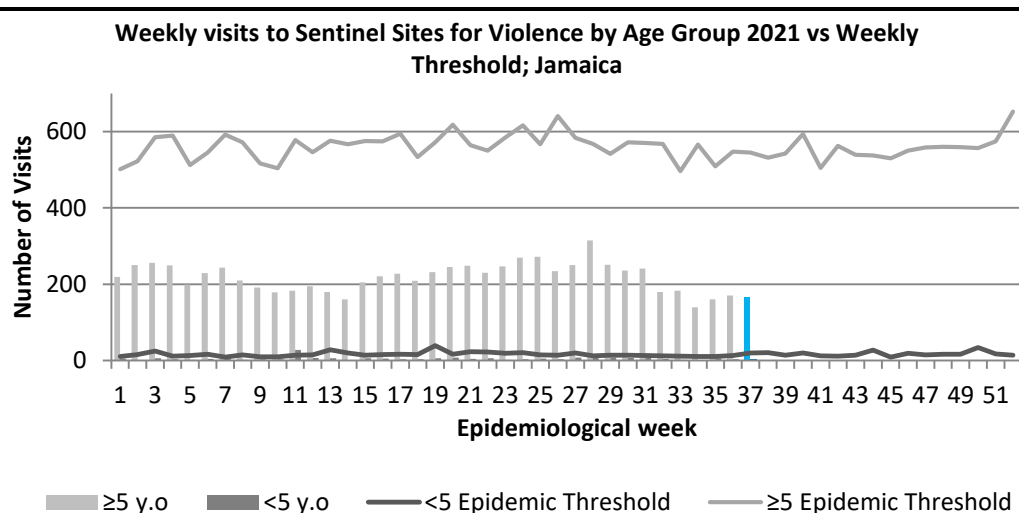
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

**KEY**

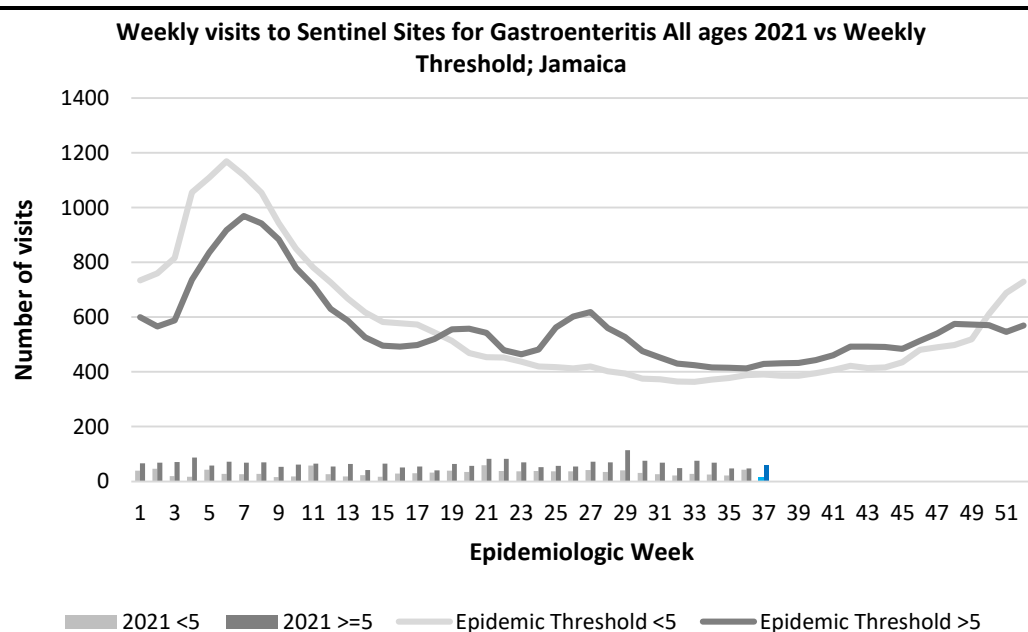
**VARIATIONS OF BLUE SHOW CURRENT WEEK**

**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 <sup>α</sup>		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 2021	PREVIOUS YEAR 2020	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		85	82 <sup>β</sup>	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Cholera		0	0	
	Dengue Hemorrhagic Fever <sup>γ</sup>		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	<sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	<sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.
	Neonatal Tetanus		0	0	
	Typhoid Fever		0	0	
	Meningitis H/Flu		0	0	
SPECIAL PROGRAMMES	AFP/Polio		0	0	<sup>ε</sup> CHIKV IgM positive cases
	Congenital Rubella Syndrome		0	0	<sup>θ</sup> Zika PCR positive cases
	Congenital Syphilis		0	0	<sup>β</sup> Updates made to prior weeks in 2020.
	Fever and Rash	Measles	0	0	
		Rubella	0	0	
	Maternal Deaths <sup>δ</sup>		39	29	<sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.
	Ophthalmia Neonatorum		0	38	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		34	29	
	Yellow Fever		0	0	
	Chikungunya <sup>ε</sup>		0	0	
	Zika Virus <sup>θ</sup>		0	0	NA- Not Available



5 NOTIFICATIONS-  
All clinical sites



INVESTIGATION  
REPORTS- Detailed Follow  
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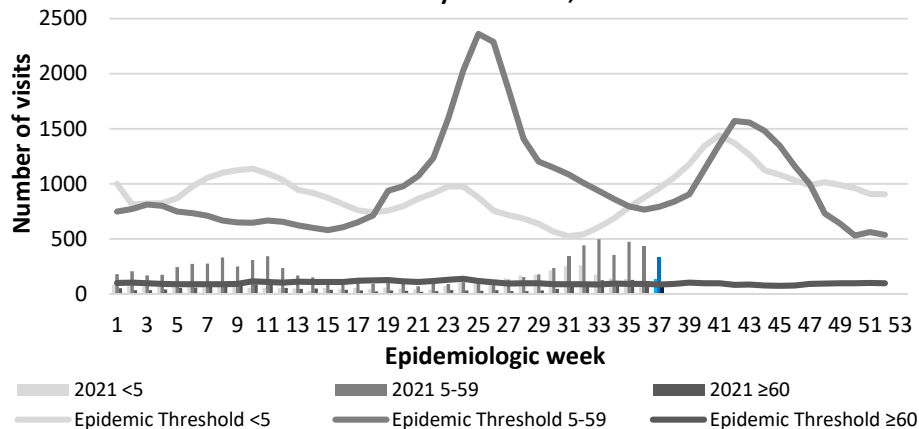
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

## EW 37

September 12 - 18, 2021 Epidemiological Week 37

	EW 37	YTD
SARI cases	10	4487
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

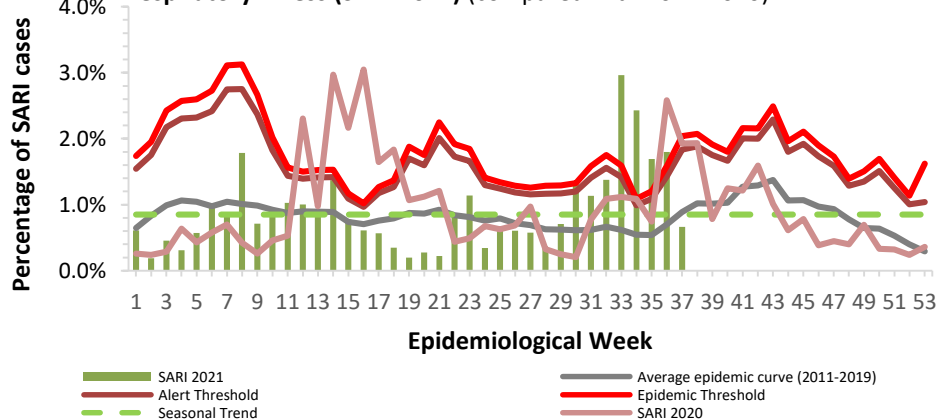
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages  
2021 vs Weekly Threshold; Jamaica



### Epi Week Summary

During EW 37, 10 (ten) SARI admissions were reported.

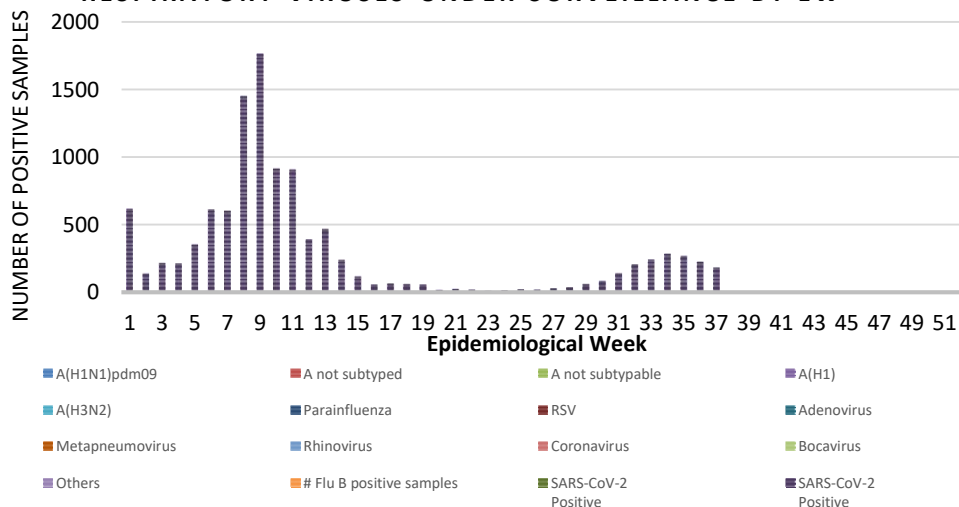
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2021) (compared with 2011-2020)



### Caribbean Update EW 37

**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.

DISTRIBUTION OF INFLUENZA AND OTHER RESPIRATORY VIRUSES UNDER SURVEILLANCE BY EW



6 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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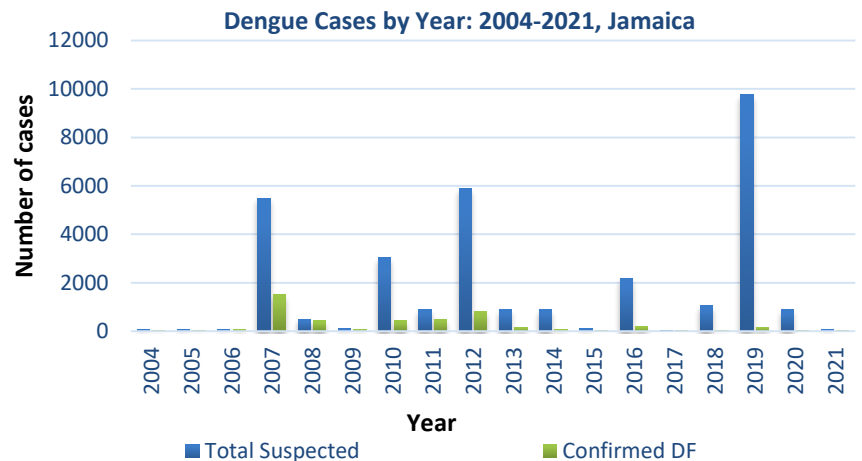
SENTINEL  
REPORT- 78 sites.  
Automatic reporting



# Dengue Bulletin

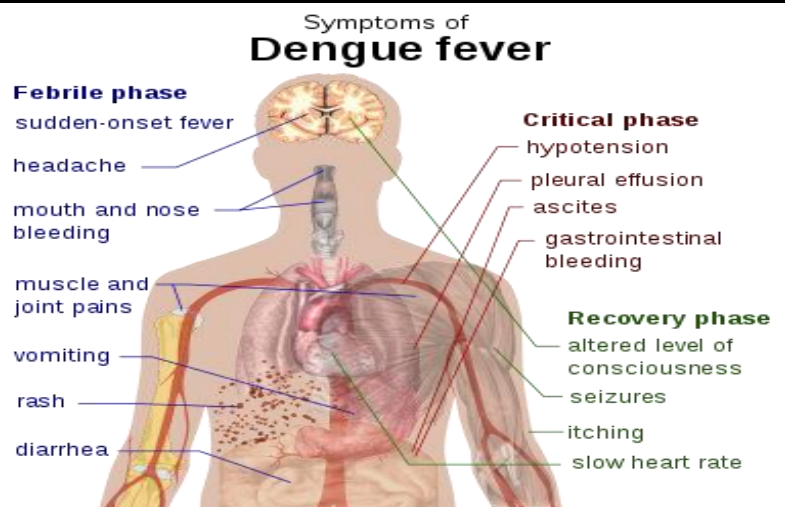
September 12 - 18, 2021 Epidemiological Week 37

Epidemiological Week 37



## Reported suspected and confirmed dengue with symptom onset in week 37 of 2021

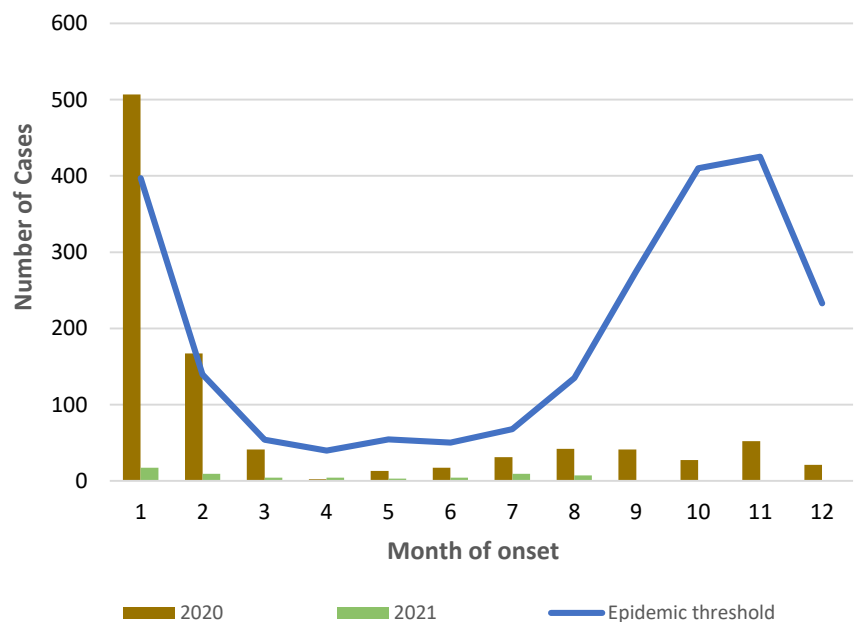
	2021*	
	EW 37	YTD
Total Suspected Dengue Cases	0	53
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0



### Points to note:

- \*Figure as at September 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

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# RESEARCH PAPER

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## 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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Email: surveillance@moh.gov.jm



8 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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