

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Disability and Health

### What is disability?

**Disability** is a difficulty in functioning as experienced by an individual with a health condition in interaction with contextual factors.

World Health Organization

### Key facts

- Over 1 billion people live with some form of disability.
- The number of people with disability are dramatically increasing. This is due to demographic trends and increases in chronic health conditions, among other causes.

- Almost everyone is likely to experience some form of disability – temporary or permanent – at some point in life.
- People with disability are disproportionately affected during the COVID-19 pandemic.
- When people with disability access health care, they often experience stigma and discrimination, and receive poor quality services.
- There is an urgent need to scale up disability inclusion in all levels of the health system, particularly primary health care.

### Overview

Disability refers to the interaction between individuals with a health condition (e.g., cerebral palsy, Down syndrome and depression) and personal and environmental factors (e.g., negative attitudes, inaccessible transportation and public buildings, and limited social supports).

Over 1 billion people are estimated to experience disability. This corresponds to about 15% of the world's population, with up to 190 million (3.8%) people aged 15 years and older having significant difficulties in functioning, often requiring health care services. The number of people experiencing disability is increasing due to a rise in chronic health conditions and population ageing. Disability is a human rights issue, with people with disability being subject to multiple violations of their rights, including acts of violence, abuse, prejudice and disrespect because of their disability, which intersects with other forms of discrimination based on age and gender, among other factors. People with disability also face barriers, stigmatization and discrimination when accessing health and health-related services and strategies. Disability is a development priority because of its higher prevalence in lower-income countries and because disability and poverty reinforce and perpetuate one another.

## EPI WEEK 15



SYNDROMES

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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 - 12 to 15 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													
12	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)
13	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
14	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time
15	On Time	On Time	Late (W)	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

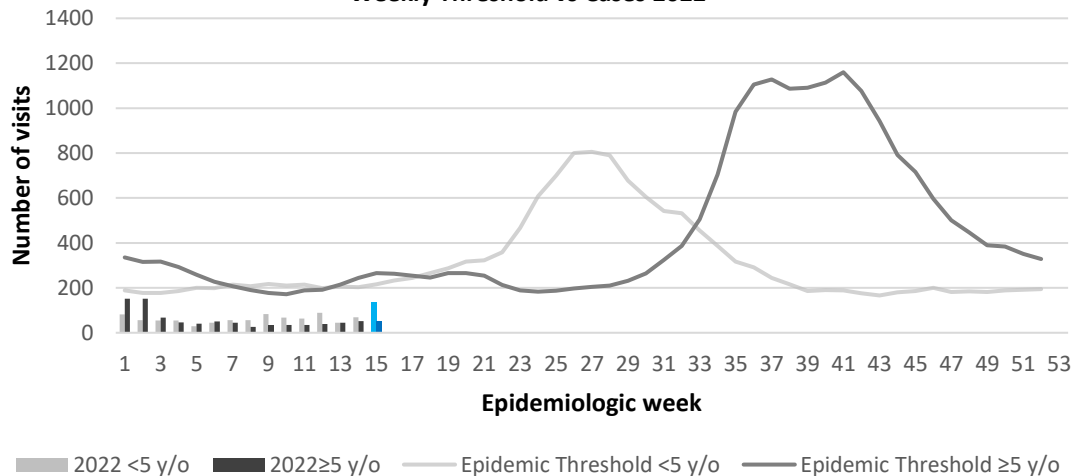
UNDIFFERENTIATED FEVER

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



**KEY**  
 VARIATIONS OF BLUE SHOW CURRENT WEEK

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



**2 NOTIFICATIONS-** All clinical sites

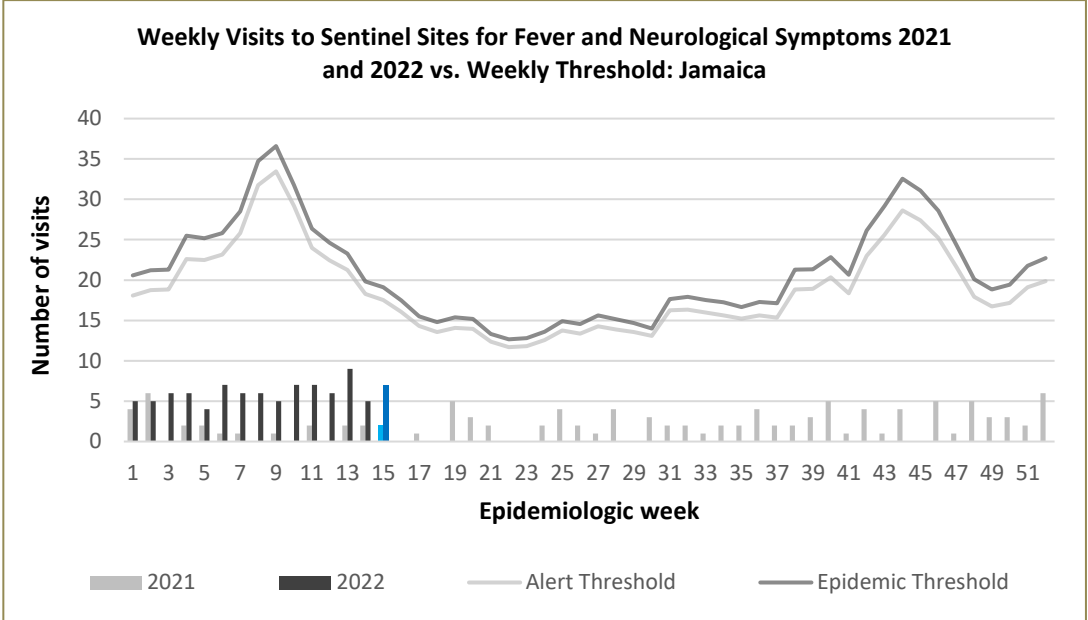
**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events

**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued

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

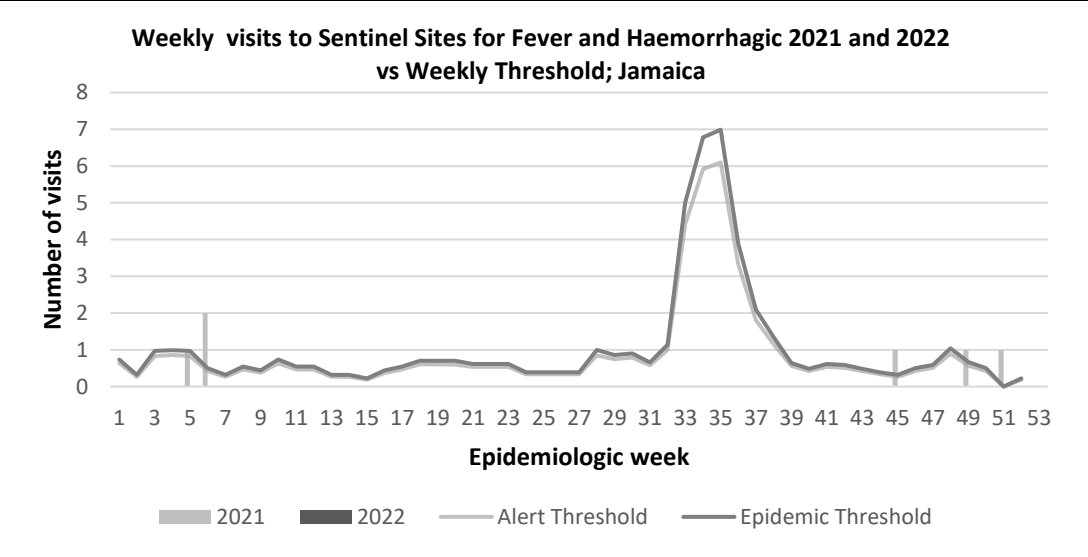
**FEVER AND NEUROLOGICAL**

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



**FEVER AND HAEMORRHAGIC**

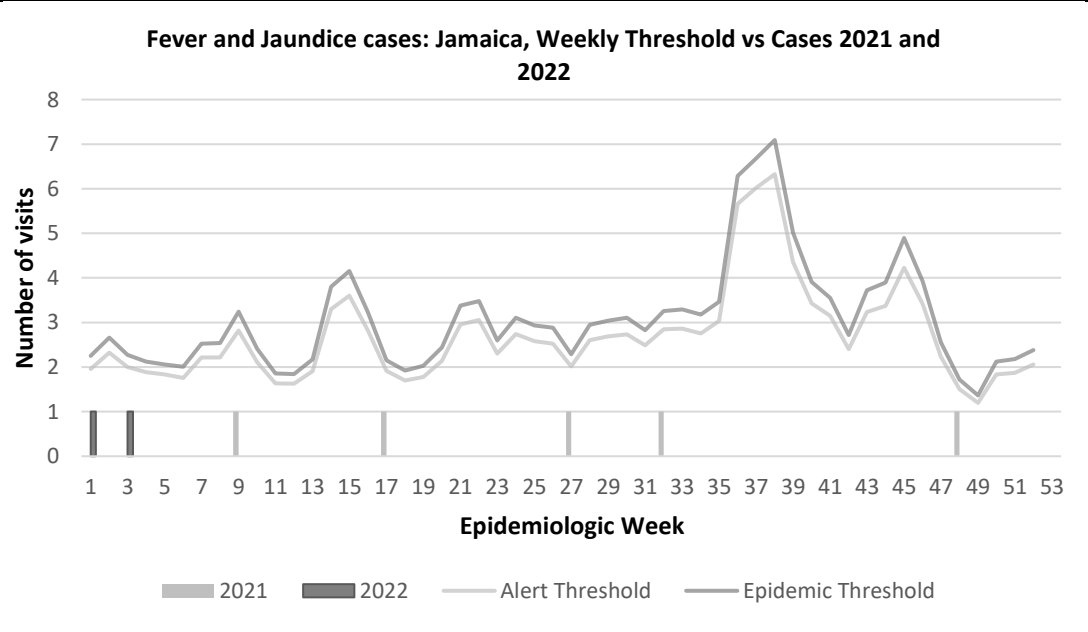
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



**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.



**3 NOTIFICATIONS-** All clinical sites

**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events

**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued

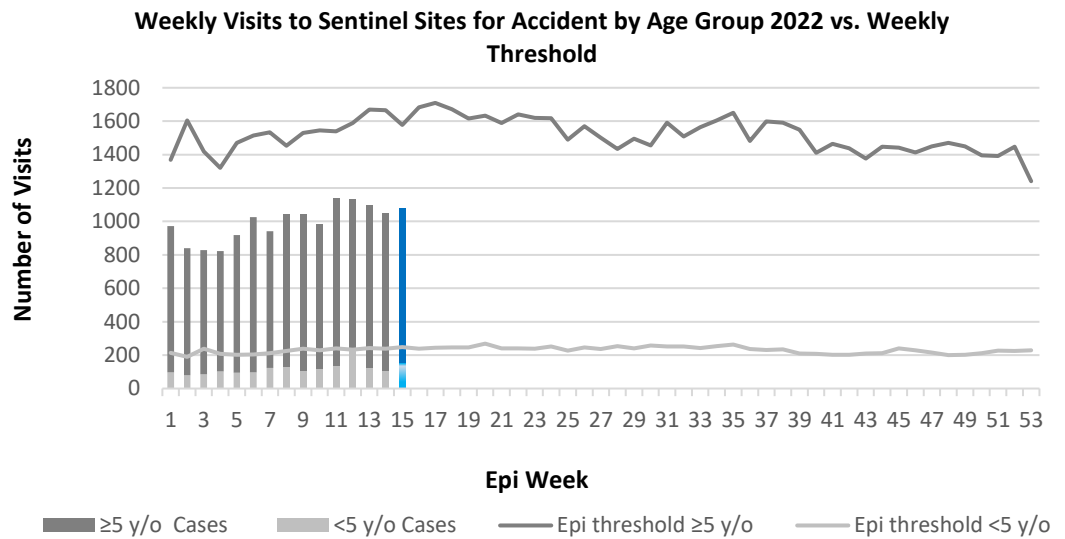
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

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

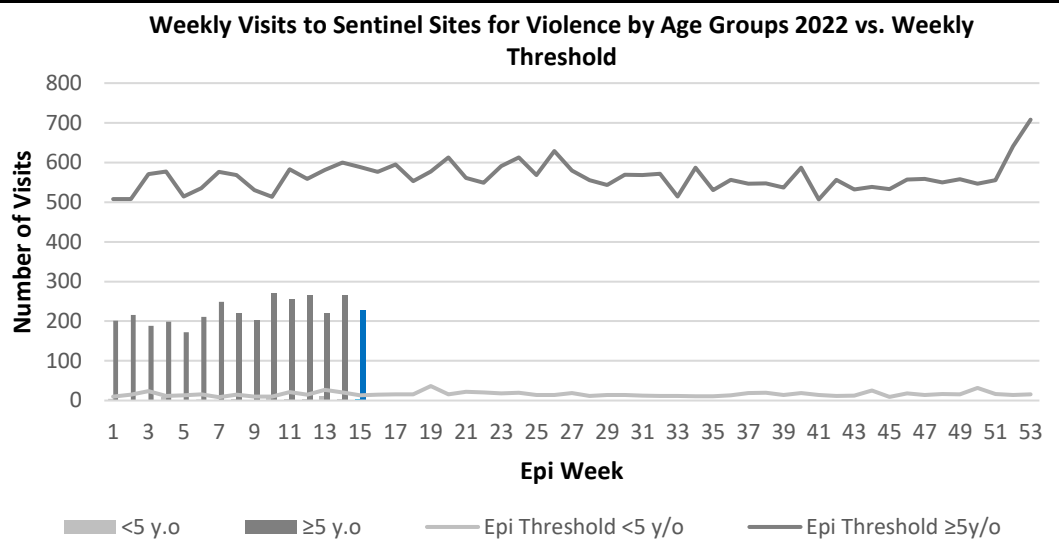
**KEY**

VARIATIONS OF BLUE SHOW CURRENT WEEK



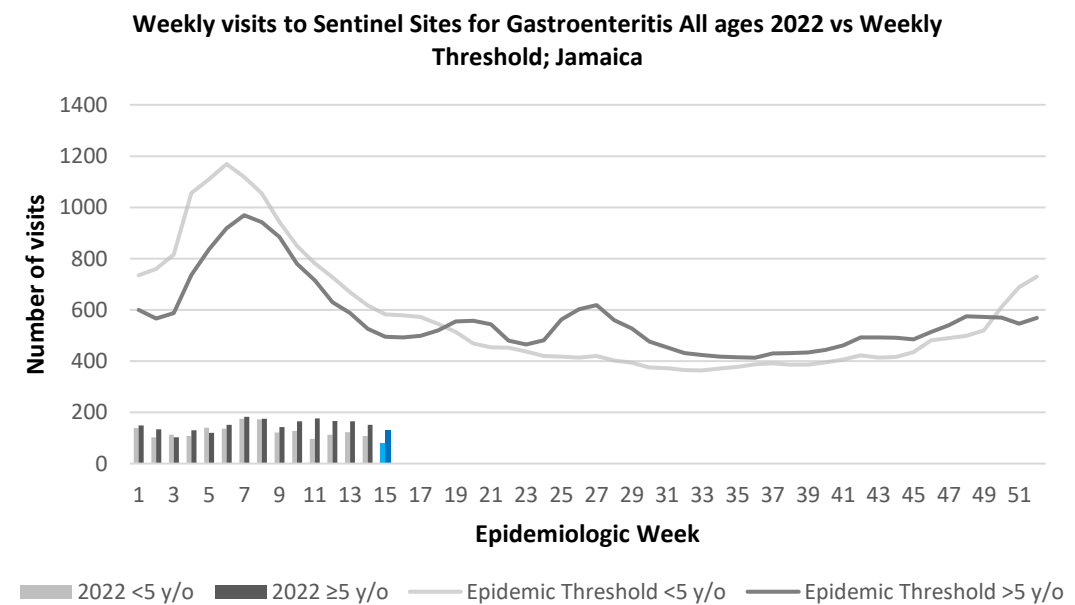
**VIOLENCE**

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



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CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD <sup>α</sup>			
		CURRENT YEAR 2022	PREVIOUS YEAR 2021		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	42 <sup>β</sup>	35 <sup>β</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.  Pertussis-like syndrome and Tetanus are clinically confirmed classifications.  <sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;	
	Cholera	0	0		
	Dengue Hemorrhagic Fever <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	32139	31107		
	Hansen's Disease (Leprosy)	0	0		
	Hepatitis B	3	4		
	Hepatitis C	1	2		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	6	3		
EXOTIC/ UNUSUAL	Plague	0	0	<sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.  <sup>ε</sup> CHIKV IgM positive cases <sup>θ</sup> Zika PCR positive cases  <sup>β</sup> Updates made to prior weeks in 2020.  <sup>α</sup> 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 <sup>δ</sup>	12	15		
	Ophthalmia Neonatorum	29	25		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
Tuberculosis	10	16			
Yellow Fever	0	0			
Chikungunya <sup>ε</sup>	0	0	NA- Not Available		
Zika Virus <sup>θ</sup>	0	0			



5 NOTIFICATIONS-  
All clinical sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



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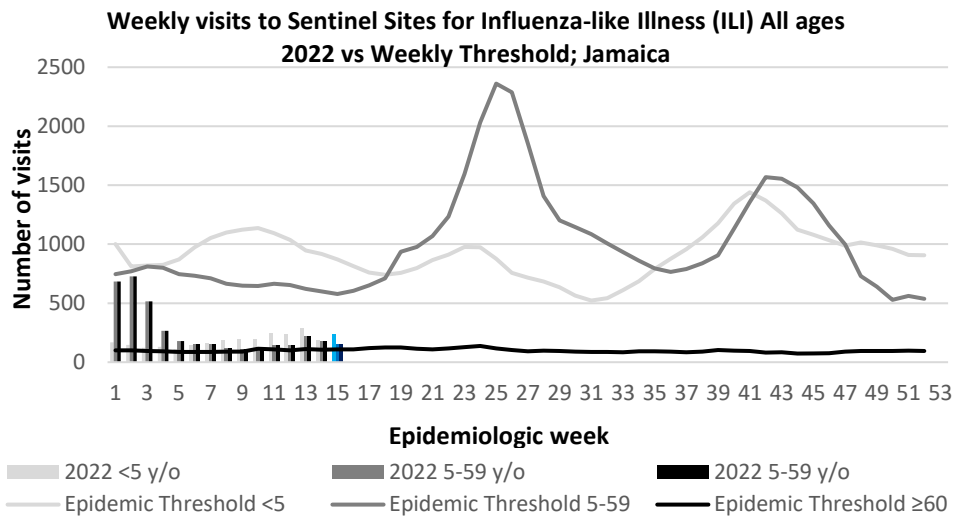
SENTINEL  
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# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 15*

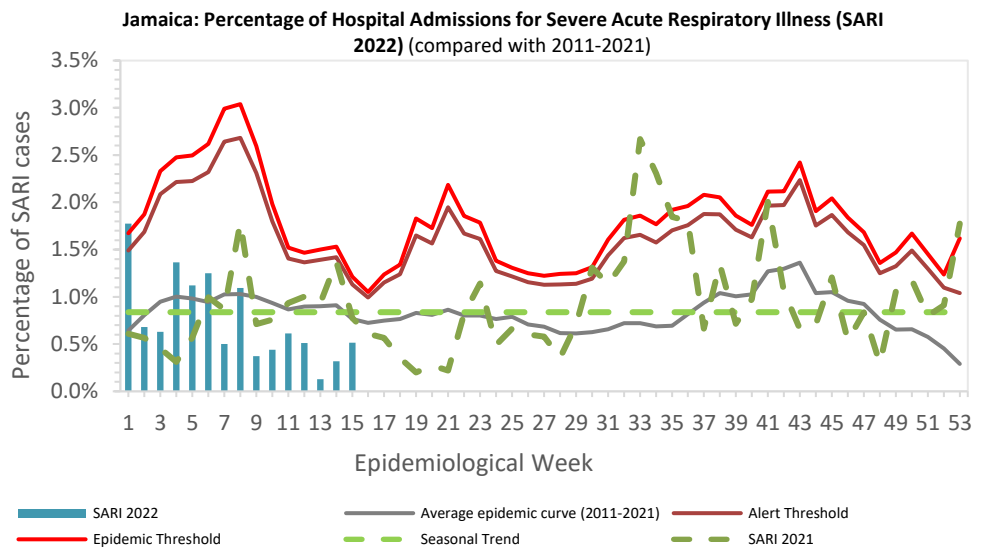
April 10– 16, 2022 Epidemiological Week 15

	<i>EW 15</i>	<i>YTD</i>
SARI cases	8	175
<b>Total Influenza positive Samples</b>	<i>0</i>	<i>0</i>
<b>Influenza A</b>	<i>0</i>	<i>0</i>
H3N2	<i>0</i>	<i>0</i>
H1N1pdm09	<i>0</i>	<i>0</i>
Not subtyped	<i>0</i>	<i>0</i>
<b>Influenza B</b>	<i>0</i>	<i>0</i>
<b>Parainfluenza</b>	<i>0</i>	<i>0</i>



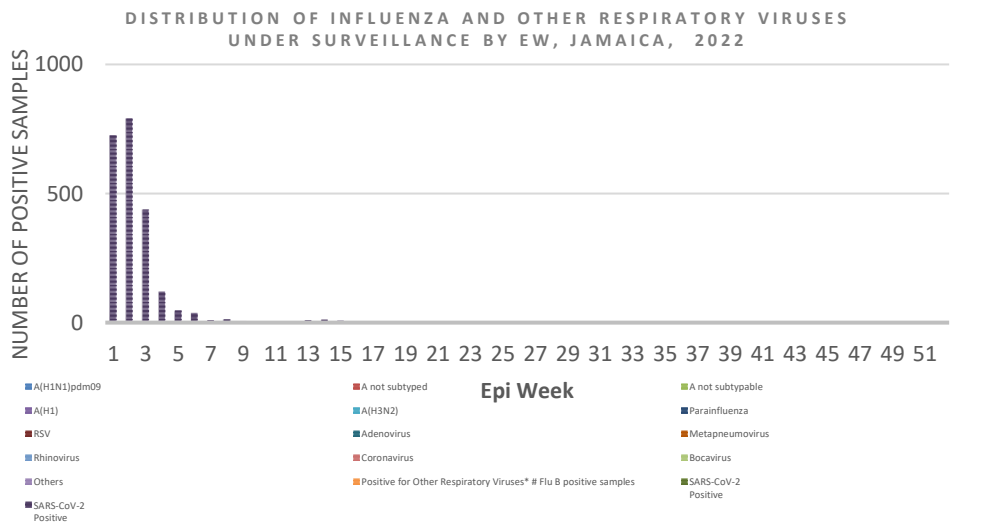
### Epi Week Summary

During EW 15, eight (8) SARI admissions were reported.



### Caribbean Update EW 15

**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

**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events

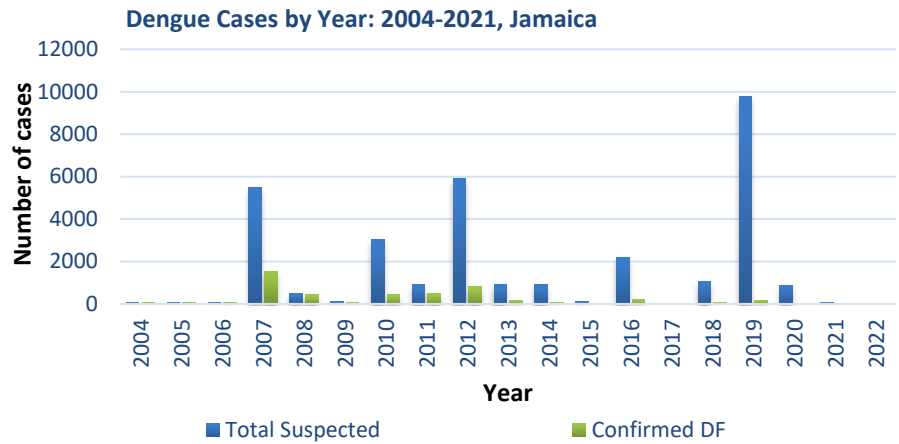
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# Dengue Bulletin

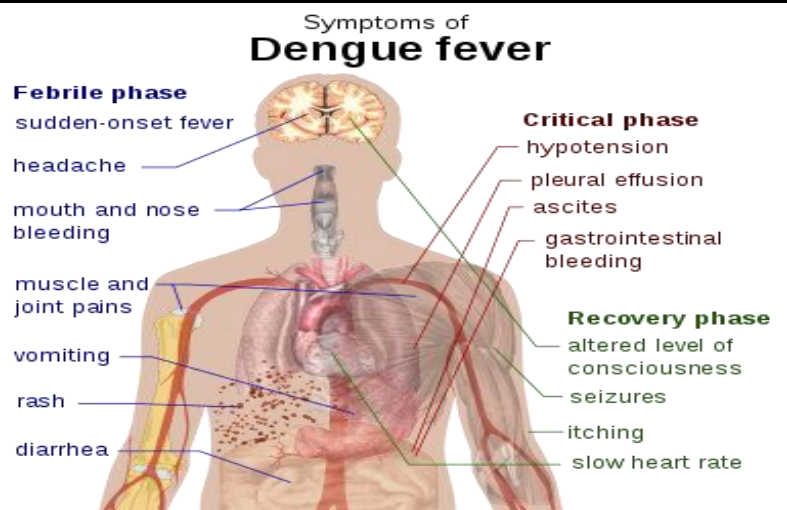
April 10 – 16, 2022 Epidemiological Week 15

Epidemiological Week 15



## Reported suspected and confirmed dengue with symptom onset in week 15 of 2022

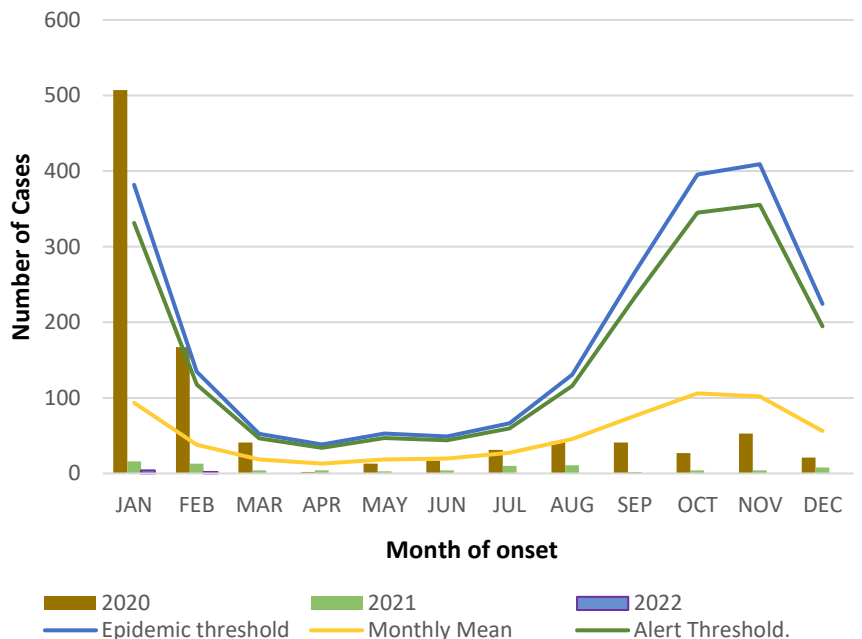
	2022*	
	EW 15	YTD
Total Suspected Dengue Cases	0	6
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



### Points to note:

- \*Figure as at April 5, 2022
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

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



**7 NOTIFICATIONS-**  
All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued



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# RESEARCH PAPER

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## Abstract

### *The use of breadfruit-based media to improve the turnaround time and identification of fungal specimen.*

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- Objective:** To determine the effectiveness of a breadfruit-based media (BFM) for the enhancement of sporulation, growth and identification of fungal pathogens; a feat that would improve the turnaround time currently observed at the mycology laboratory at the University of the West Indies (UWI).
- Methods:** The BFM was pre-prepared using sterile techniques and inoculated with a total of 25 previously identified fungal clinical isolates (eg. *Trichophyton* spp., *Fusarium* spp, *Chaetominum* spp, *Bipolaris* sp, *Curvalaria* sp, and *Aspergillus flavus*). For the purposes of quality control ATCC strains of *E. coli* and *Candida albicans* were inoculated unto the media following standard microbiological procedures. All 27 species were also inoculated unto other standard media in use in the laboratory to allow for observation and comparison of the key features ie: enhancements to growth rate, sporulation characteristics, texture, colour etc. The isolates from resulting cultures were then identified using routine mycological tests. The observer was blinded as to the type of media in use.
- Results:** All 27 species of organisms grew within 18-48 hours and showed enhanced characteristic features.
- Conclusion:** Breadfruit, a sustainable Jamaican food staple, when prepared appropriately, can be used to supplement media for enhanced fungal isolation and identification. BFM proved to be a superior media that facilitated improved turnaround time, positioning itself as a possible industrial asset to the health sector. Further studies are needed to assess its capacity for improved isolation and identification of bacterial pathogens.



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8 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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