

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Vectors and Vector-Borne Diseases



Vectors are living organisms that can transmit infectious pathogens between humans, or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later transmit it into a new host, after the pathogen has replicated. Often, once a vector becomes infectious, they are capable of transmitting the pathogen for the rest of their life during each subsequent bite/blood meal.

#### Vector-borne diseases

Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors. Every year there are more than 700,000 deaths from diseases such as malaria, dengue, schistosomiasis, human African trypanosomiasis, leishmaniasis, Chagas disease, yellow fever, Japanese encephalitis and onchocerciasis. A crucial element in reducing the burden of vector-borne diseases is behavioural change. WHO works with partners to provide education and improve public awareness, so that people know how to protect themselves and their communities from mosquitoes, ticks, bugs, flies and other vectors. Access to water and sanitation is a very important factor in disease control and elimination. WHO works together with many different government sectors to improve water storage, sanitation, thereby helping to control these diseases at the community level.

<https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases>

## EPI WEEK 52



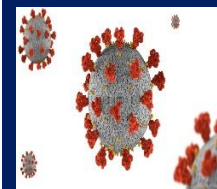
- Syndromic Surveillance  
- Accidents  
- Violence

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 - 49 to 52 of 2022

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

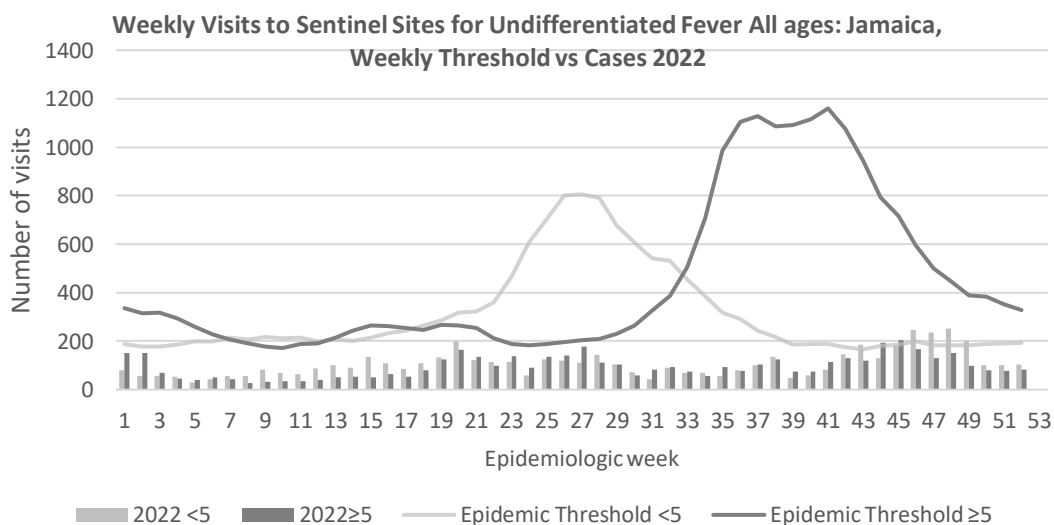
**KEY:**  
**Yellow** - late submission on Tuesday  
**Red** - late submission after Tuesday


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												
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
52	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

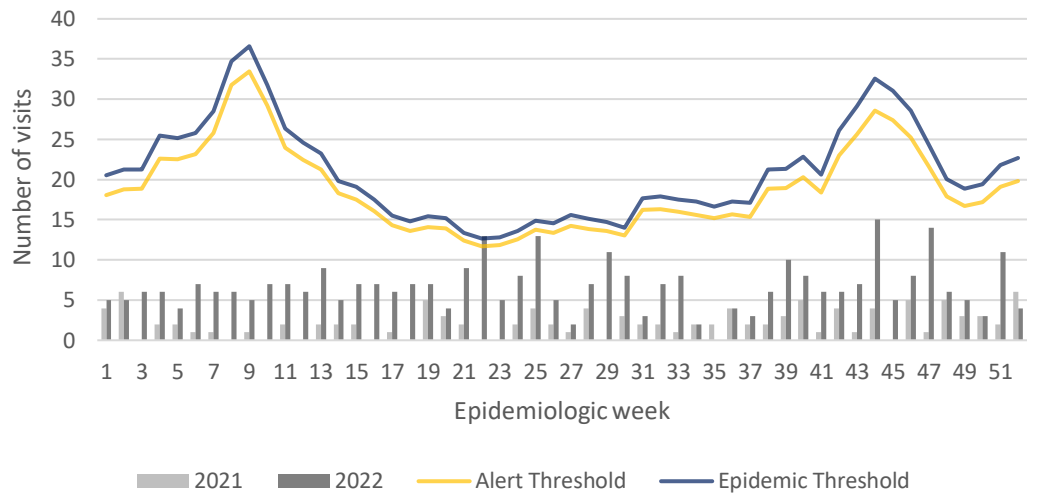
 **SENTINEL REPORT-** 78 sites. Automatic reporting

**FEVER AND NEUROLOGICAL**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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 2021 and 2022 vs. Weekly Threshold: Jamaica**

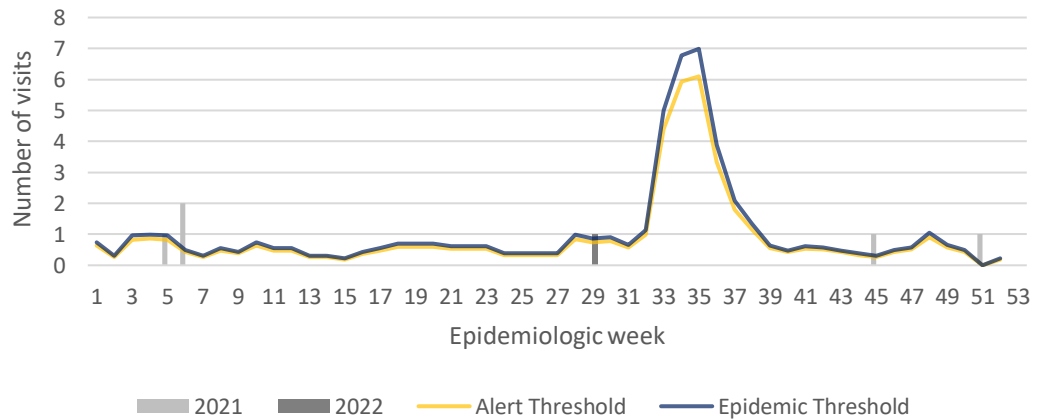


**FEVER AND HAEMORRHAGIC**

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 2021 and 2022 vs Weekly Threshold; Jamaica**



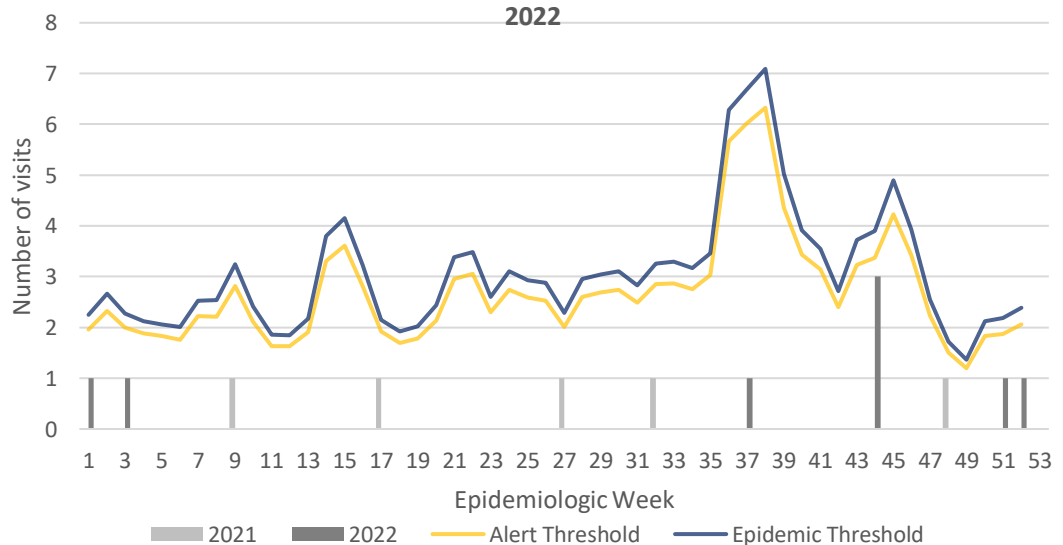
**FEVER AND JAUNDICE**

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 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



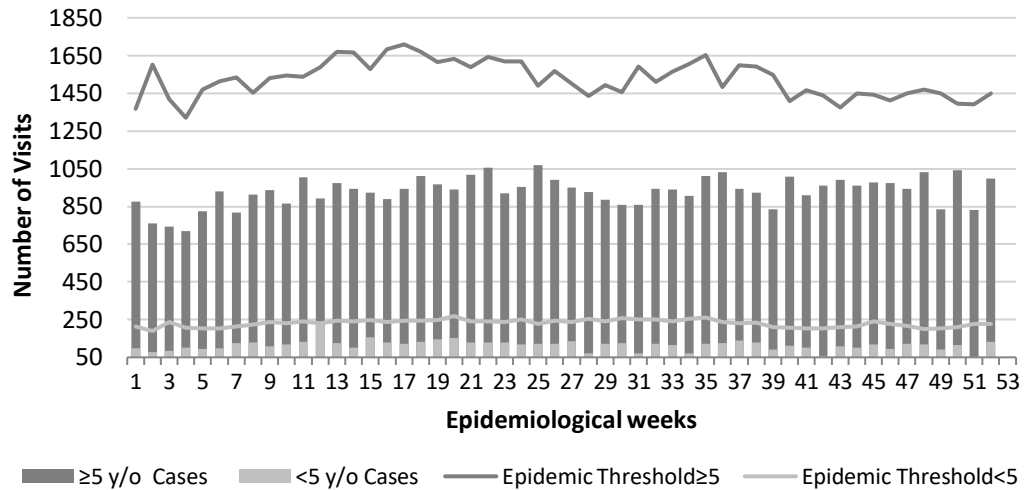
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

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



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

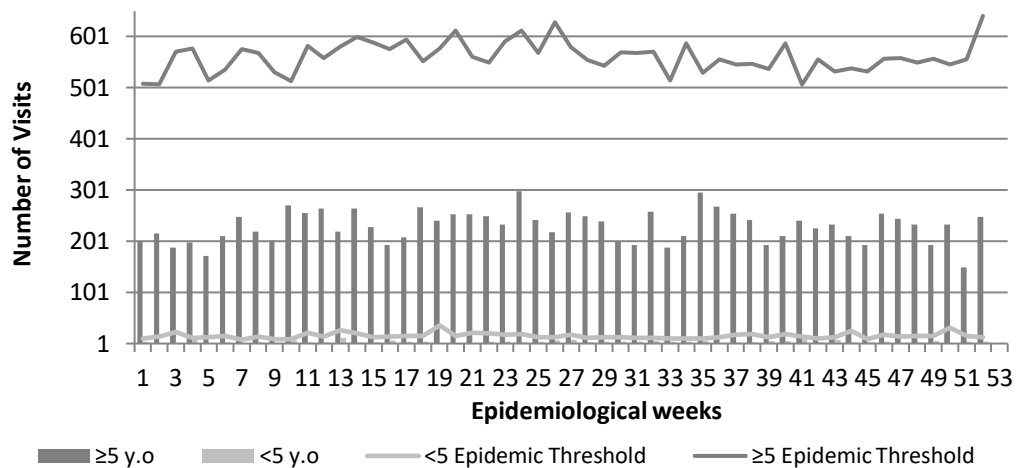


**VIOLENCE**

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**

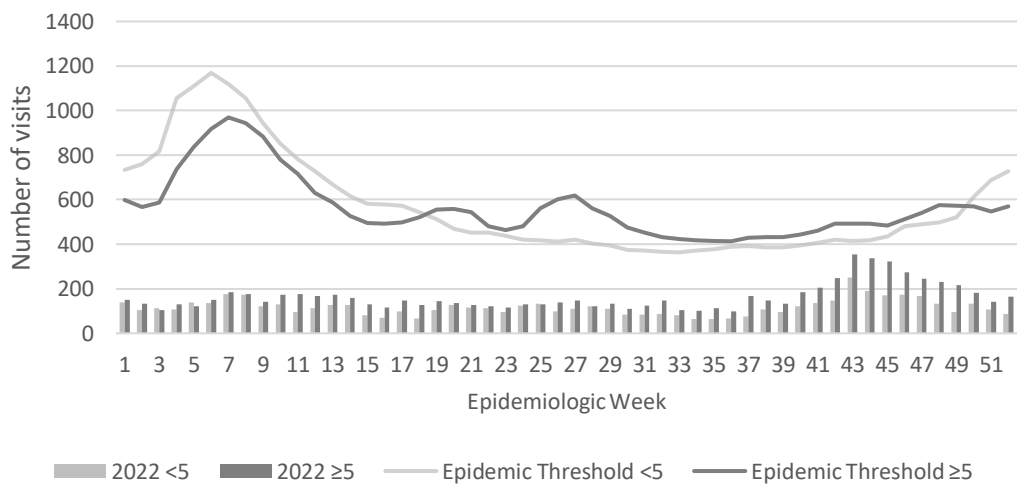


**GASTROENTERITIS**

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



**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 <sup>α</sup>		
		CURRENT YEAR 2022	PREVIOUS YEAR 2021	
NATIONAL/INTERNATIONAL INTEREST	Accidental Poisoning	196 <sup>β</sup>	188 <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;  <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.
	Cholera	0	0	
	Dengue Hemorrhagic Fever <sup>γ</sup>	See Dengue page below	See Dengue page below	
	COVID-19 (SARS-CoV-2)	55710	83809	
	Hansen’s Disease (Leprosy)	0	0	
	Hepatitis B	10	6	
	Hepatitis C	4	4	
	HIV/AIDS	NA	NA	
	Malaria (Imported)	0	0	
	Meningitis (Clinically confirmed)	19	39	
	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 <sup>δ</sup>	59	85	
	Ophthalmia Neonatorum	48	40	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	0	
	Tetanus	2	0	
	Tuberculosis	48	38	
Yellow Fever	0	0		
Chikungunya <sup>ε</sup>	0	0		
Zika Virus <sup>θ</sup>	0	0		

NA- Not Available

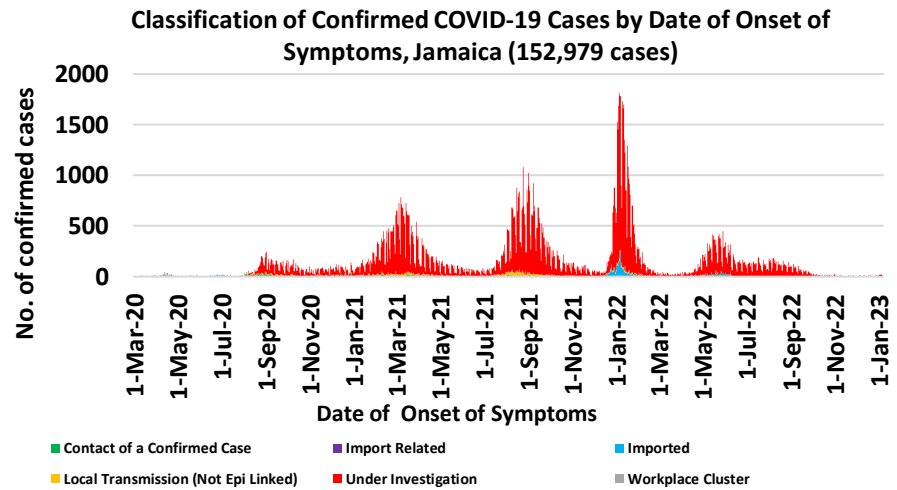
 <p><b>5 NOTIFICATIONS-</b> All clinical sites</p>	 <p><b>INVESTIGATION REPORTS-</b> Detailed Follow up for all Class One Events</p>	 <p><b>HOSPITAL ACTIVE SURVEILLANCE-</b> 30 sites. Actively pursued</p>	 <p><b>SENTINEL REPORT-</b> 78 sites. Automatic reporting</p>
--	--	--	--

# COVID-19 Surveillance Update

March 10, 2020 – EW 52, 2022

CASES	EW 52	Total
Confirmed	56	152979
Females	29	88271
Males	27	64705
Age Range	1 day old to 99 years	1 day to 108 years

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

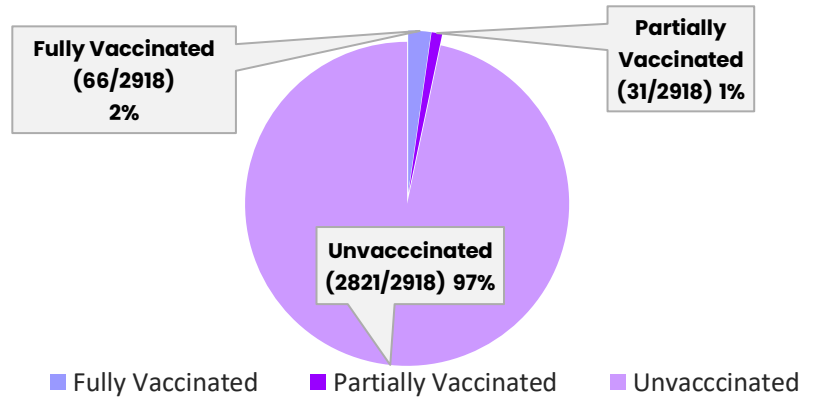


## COVID-19 Outcomes

Outcomes	EW 52	Total
ACTIVE *past 2 weeks*		104
DIED – COVID Related	0	3465
Died - NON COVID	0	296
Died - Under Investigation	0	354
Recovered and discharged	8	102116
Repatriated	0	93
Total		152979

\*Vaccination programme March 2021 – YTD

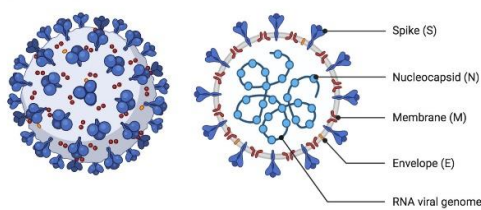
## 2918 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

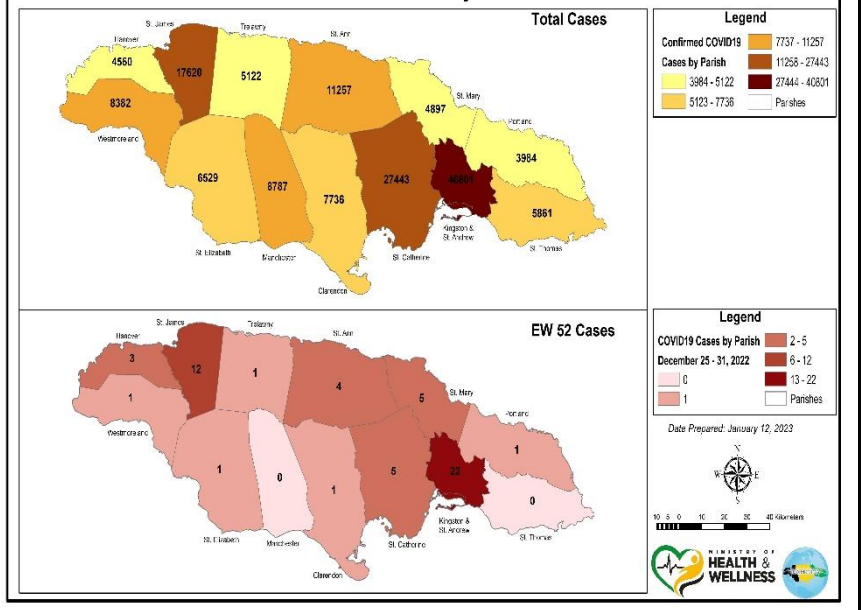
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW49-EW52

Epi Week	Confirmed Cases	Deaths
49	3,853,338	10,891
50	2,518,720	7918
51	2,240,797	8576
52	2,968,938	11,444
<b>Total (4weeks)</b>	<b>11,581,793</b>	<b>38,829</b>

### COVID-19 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

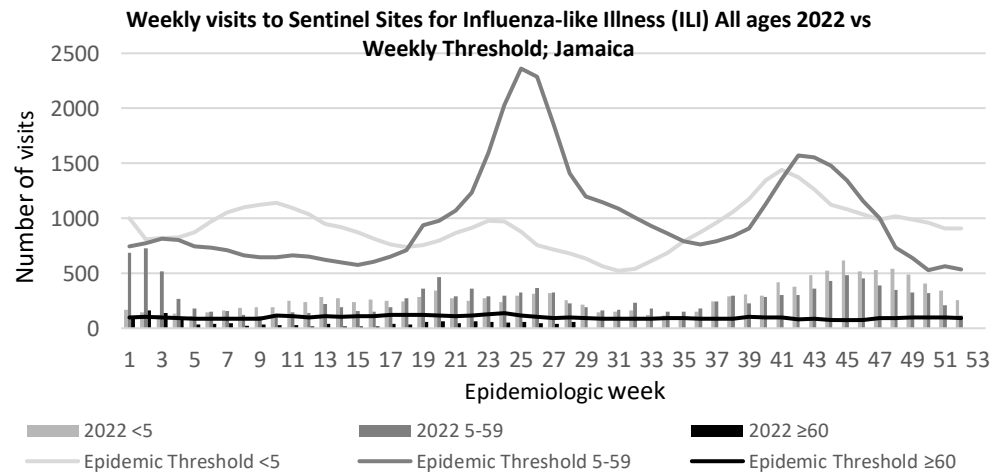
**SENTINEL REPORT-** 78 sites. Automatic reporting

# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 52*

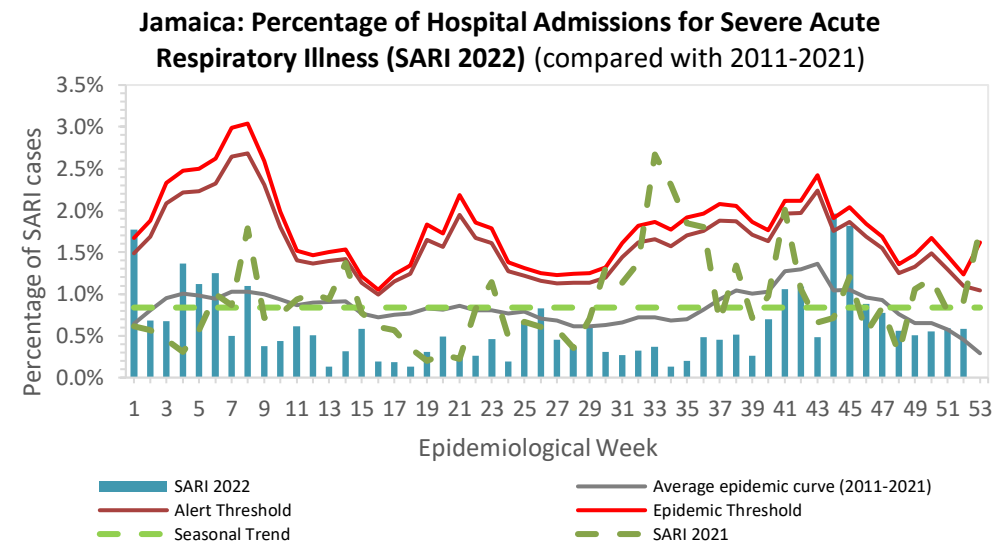
December 25– December 31, 2022 Epidemiological Week 52

	<i>EW 52</i>	<i>YTD</i>
SARI cases	5	513
Total Influenza positive Samples	0	68
Influenza A	0	67
H3N2	0	56
H1N1pdm09	0	11
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	1



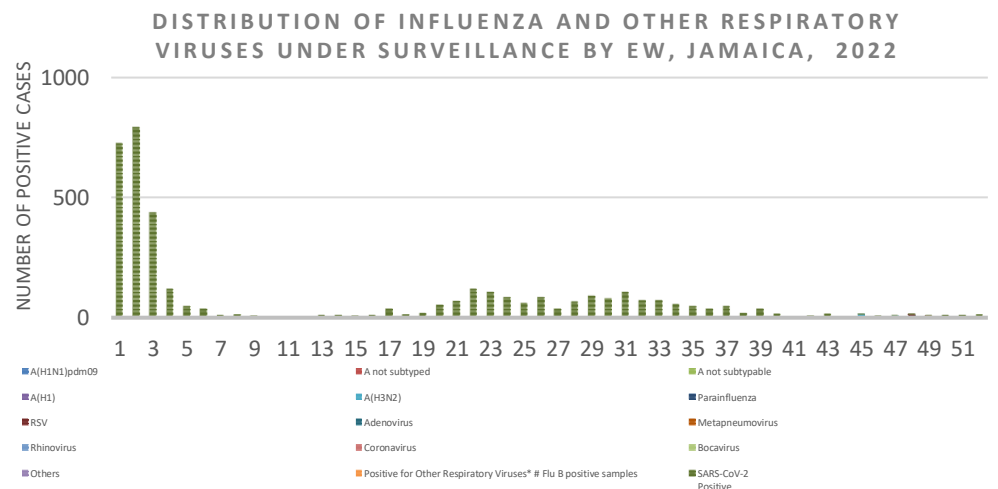
### Epi Week Summary

During EW 52 five (5) SARI admissions were reported.



### Caribbean Update EW 52

**Caribbean:** Influenza activity was moderate in the subregion with A(H3N2) virus predominance and A(H1N1)pdm09 co-circulation. The Dominican Republic reported increased influenza activity with influenza A(H3N2) circulation. SARS-CoV-2 activity remained low overall; however, Haiti and Dominica have shown increased COVID-19 activity, while Jamaica registered increased RSV activity.



**7 NOTIFICATIONS-**  
All clinical sites



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



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

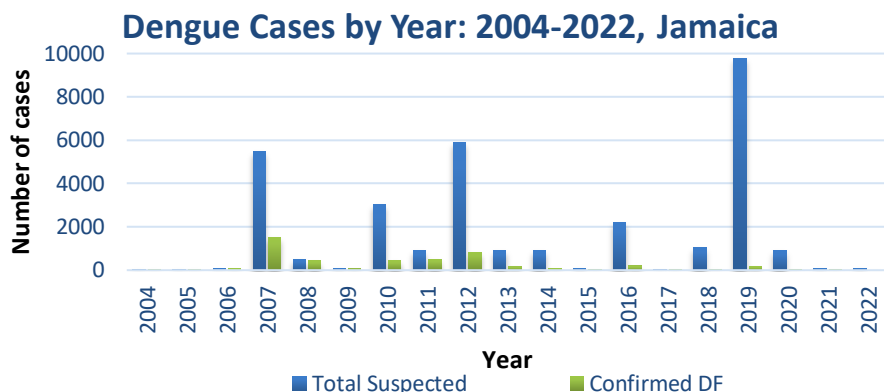


**SENTINEL REPORT-** 78 sites. Automatic reporting

# Dengue Bulletin

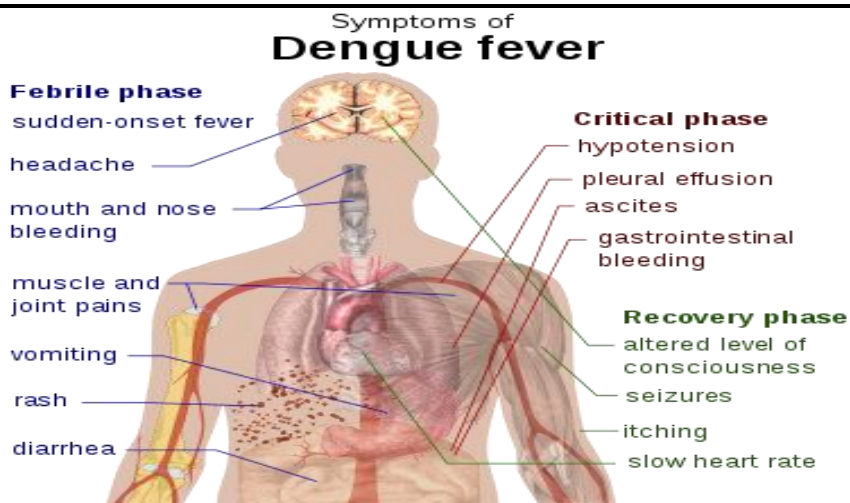
December 25- December 31, 2022 Epidemiological Week 52

Epidemiological Week 52



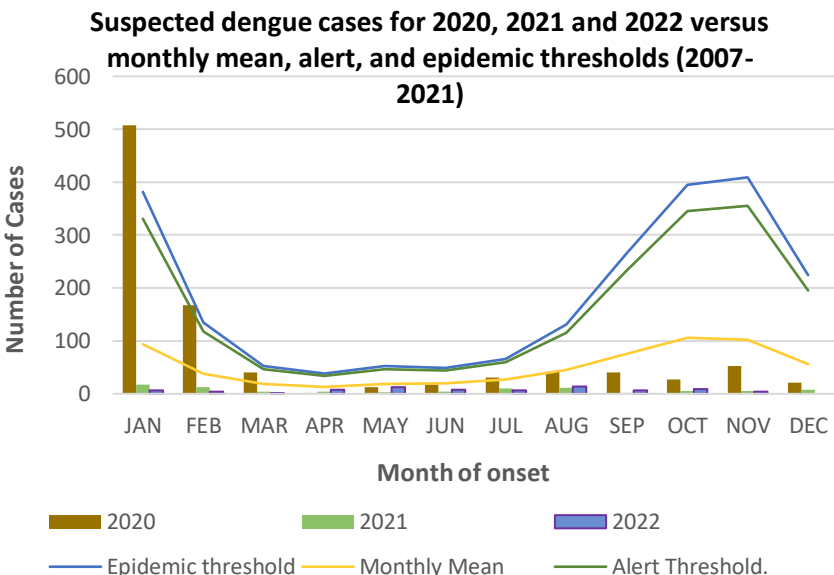
## Reported suspected and confirmed dengue with symptom onset in week 52 of 2022

	2022*	
	EW 52	YTD
Total Suspected Dengue Cases	0	100
Lab Confirmed Dengue cases	0	0
<b>CONFIRMED</b> Dengue Related Deaths	0	0



### Points to note:

- \*Figure as at Dec 31, 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*

### **Our women are hurting: Chronic Psycho-social Effects of Child Sexual Abuse among Jamaican Women**

**Authors:** Kenisha Nelson <sup>1,2</sup>; Karyl Powell-Booth <sup>1,2</sup>; Roxanne Harvey <sup>1,2</sup>; Christine Fray <sup>1,2</sup>;

<sup>1</sup> None in Three Research Centre Jamaica; <sup>2</sup> University of Technology, Jamaica.

**Introduction:** Globally, one in three females experience gender-based violence (GBV). Child sexual abuse (CSA), a form of GBV, is a prevalent and significant problem in Jamaica, yet there are few empirical studies documenting survivors' experiences of child abuse and its impact on well-being. The None-in-Three Research Centre Jamaica's focus is to investigate female survivors' experience of CSA.

**Aim:** The aim of this paper is to understand the psycho-social effects of CSA among adult female survivors in Jamaica.

**Method:** Fifteen in-depth interviews were conducted among female survivors of CSA. All respondents were either self-referred or contacted through relevant agencies or institutions. Participants were 18 years and older. A thematic analysis was conducted to identify and develop emerging themes.

**Results:** The average age when abuse occurred was 9 years old, and abuse occurred between ages 4-15 years. Major themes emerging from the interviews included experiences of feelings of guilt, confusion, memory loss, dissociation, shame, low self-esteem, and self-blame. Some respondents experienced depressive symptoms following the abuse and also reported suicidal behaviours as well as interpersonal relationship problems throughout their lives.

**Conclusion:** Childhood sexual abuse is a significant problem in Jamaica, which has long term adverse psychosocial effects on survivors. Implications of the findings will be discussed.



The Ministry of Health and Wellness  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: surveillance@moh.gov.jm



9 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