

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Lead Poisoning



### Key facts

- Lead is a cumulative toxicant that affects multiple body systems and is particularly harmful to young children.
- Lead in the body is distributed to the brain, liver, kidney and bones. It is stored in the teeth and bones, where it accumulates over time. Human exposure is usually assessed through the measurement of lead in blood.

- Lead in bone is released into blood during pregnancy and becomes a source of exposure to the developing fetus.
- There is no level of exposure to lead that is known to be without harmful effects.
- Lead exposure is preventable.

### Sources and routes of exposure

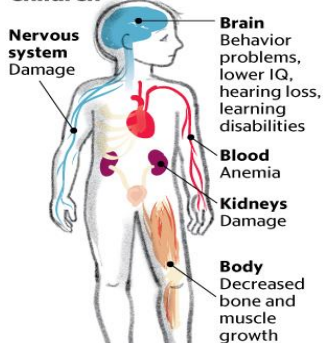
People can become exposed to lead through occupational and environmental sources. This mainly results from: inhalation of lead particles generated by burning materials containing lead, for example during smelting, recycling, stripping leaded paint and using leaded aviation fuel; and ingestion of lead-contaminated dust, water (from leaded pipes) and food (from lead-glazed or lead-soldered containers).

An additional source of exposure is the use of certain types of traditional medicines and cosmetics. High levels of lead have, for example, been reported in certain types of kohl, as well as in some traditional medicines used in countries such as India, Mexico and Viet Nam. Consumers should therefore take care only to buy and use regulated products.

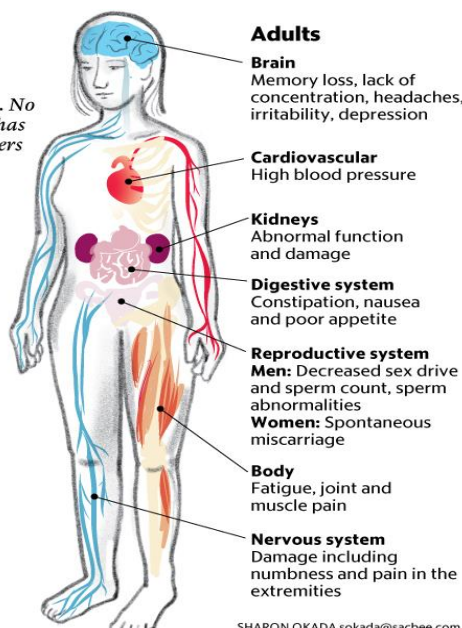
### Lead exposure

*Although often without obvious symptoms, lead exposure can affect nearly every part of the human body. No safe level of lead in the bloodstream has been determined by the federal Centers for Disease Control and Prevention.*

#### Children



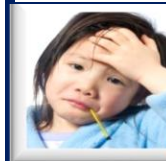
#### Adults



Sources: Centers for Disease Control and Prevention; National Institutes of Health

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## EPI WEEK 2



SYNDROMES

PAGE 2



CLASS 1 DISEASES

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INFLUENZA

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GASTROENTERITIS

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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 - 51, 2021 to 2 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													
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	Late (T)	Late (T)	Late (T)	On Time	On Time	On Time	On Time	On Time
1	On Time	Late (T)	Late (T)	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time
2	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

## REPORTS FOR SYNDROMIC SURVEILLANCE

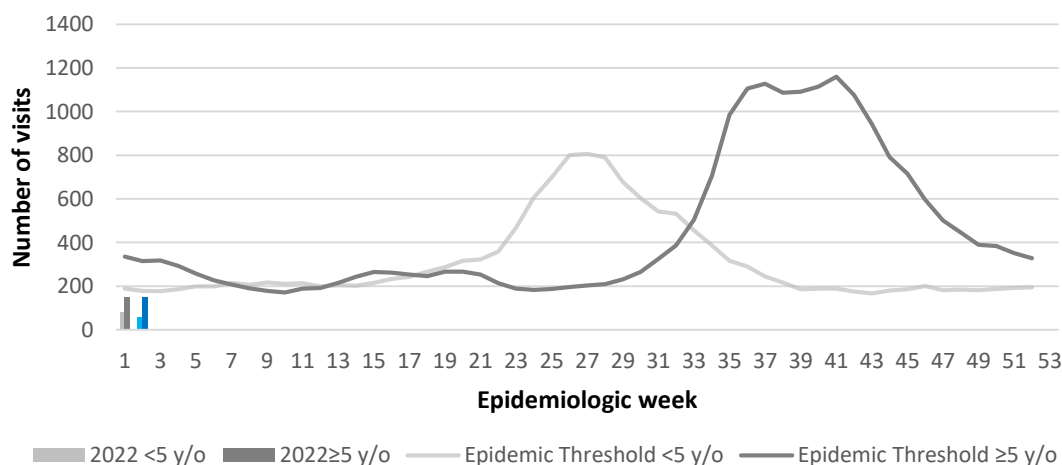
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



## KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK

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



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



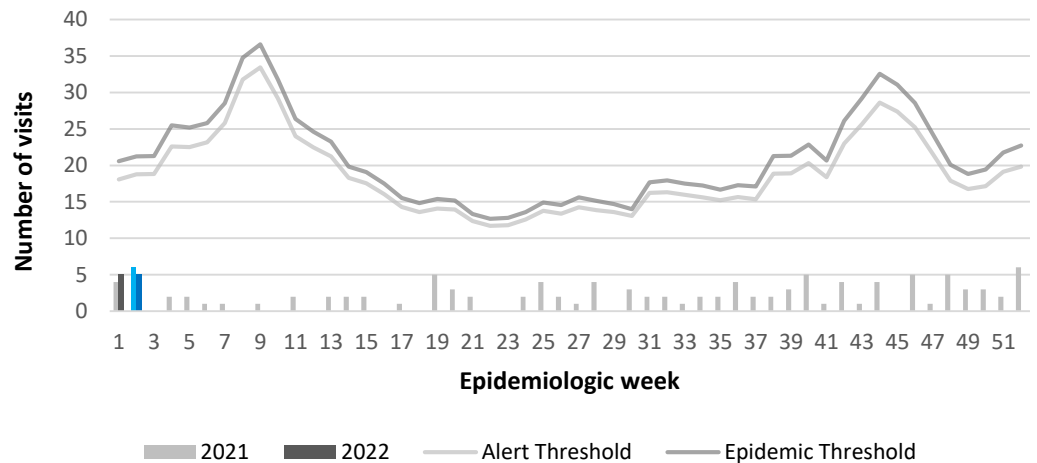
SENTINEL REPORT- 78 sites. Automatic reporting

**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).



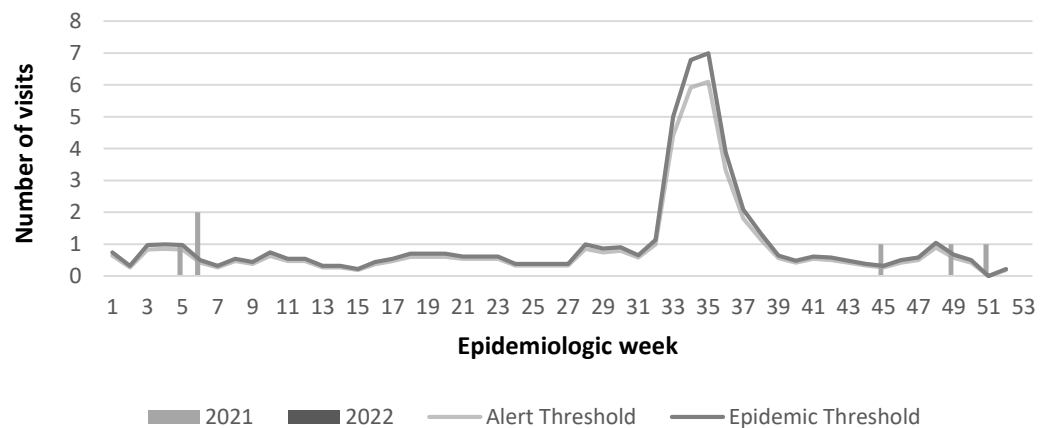
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2021 and 2022 vs. Weekly Threshold: Jamaica**

**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**

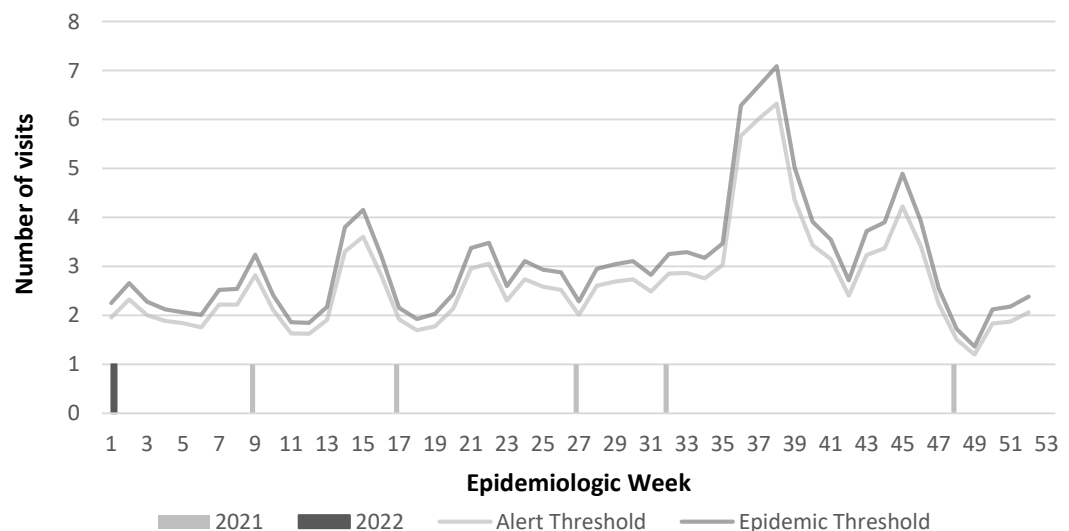
**FEVER AND JAUNDICE**

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**

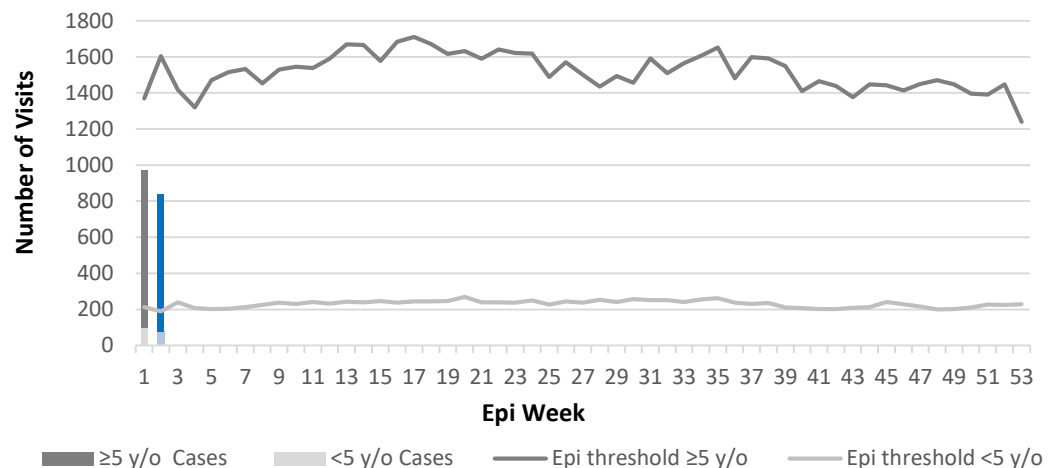
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

**KEY**

**VARIATIONS OF BLUE SHOW CURRENT WEEK**



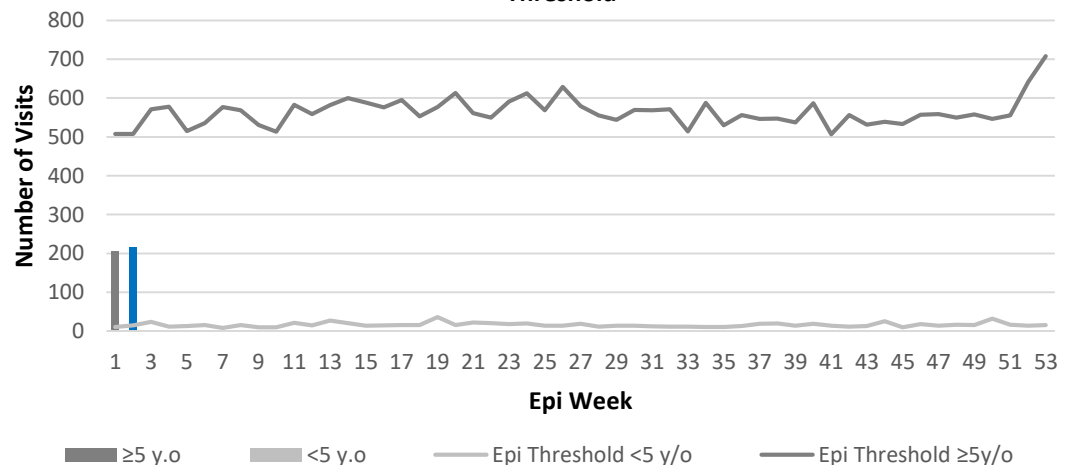
**Weekly Visits to Sentinel Sites for Accident by Age Group 2022 vs. Weekly Threshold**

**VIOLENCE**

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



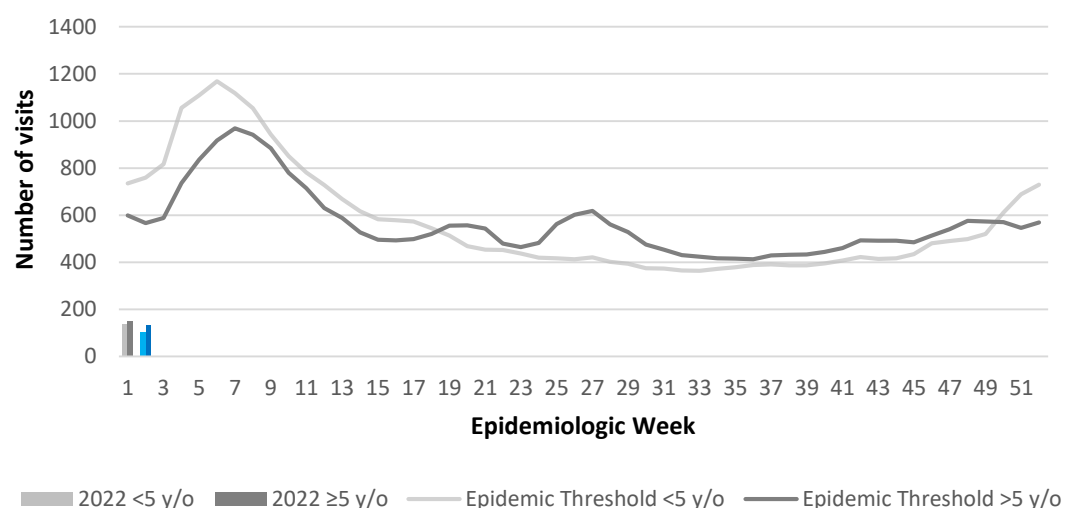
**Weekly Visits to Sentinel Sites for Violence by Age Groups 2022 vs. Weekly Threshold**

**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>		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.
		CURRENT YEAR 2022	PREVIOUS YEAR 2021	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	0	5 <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	
	COVID-19 (SARS-CoV-2)	18995	1302	
	Hansen's Disease (Leprosy)	0	0	
	Hepatitis B	0	0	
	Hepatitis C	0	0	
	HIV/AIDS	NA	NA	
	Malaria (Imported)	0	0	
	Meningitis (Clinically confirmed)	0	1	
EXOTIC/ UNUSUAL	Plague	0	0	<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.
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	
		Rubella	0	
	Maternal Deaths <sup>δ</sup>	4	2	
	Ophthalmia Neonatorum	4	2	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	0	
	Tetanus	0	0	
	Tuberculosis	0	1	
	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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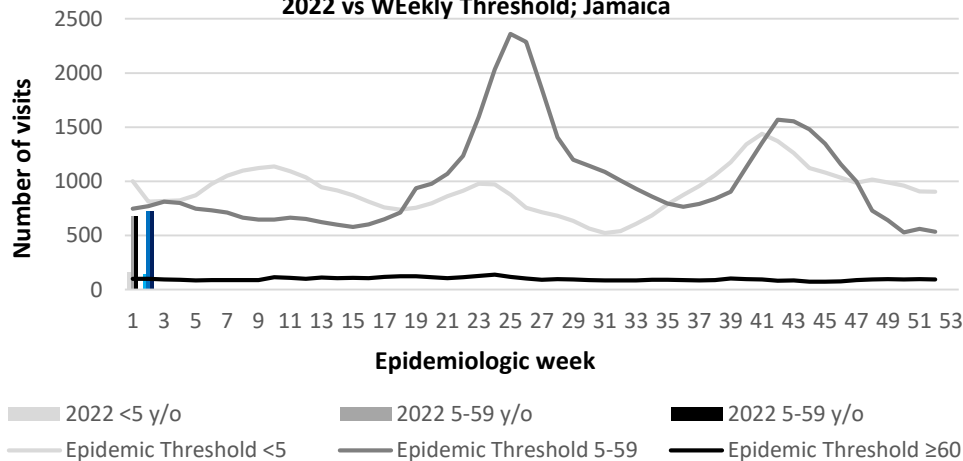
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

## EW 2

January 9– 15, 2022 Epidemiological Week 2

	EW 2	YTD
SARI cases	11	40
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

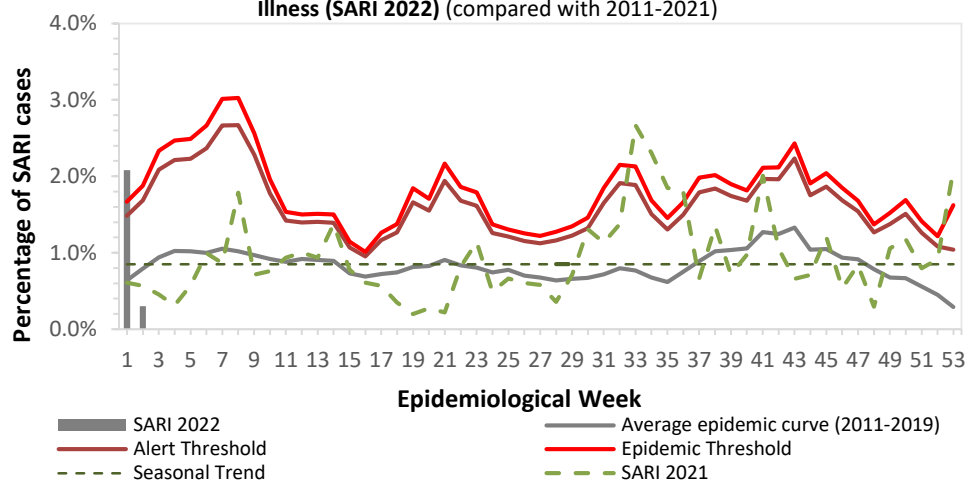
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages  
2022 vs WEEKly Threshold; Jamaica



### Epi Week Summary

During EW 2, eleven (11) SARI admissions were reported.

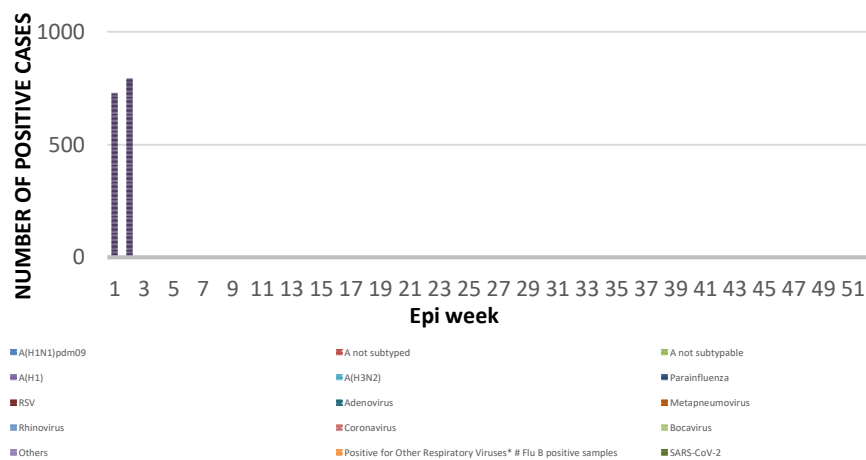
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2022) (compared with 2011-2021)



### Caribbean Update EW 2

**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, JAMAICA, 2022



6 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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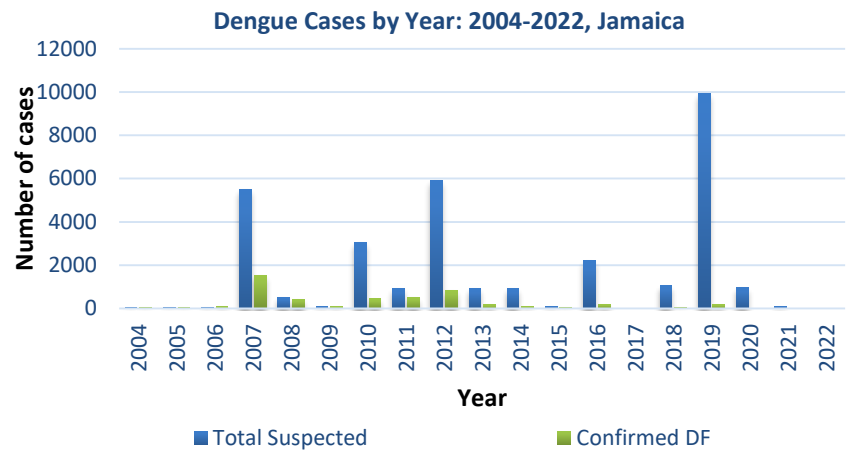


SENTINEL  
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# Dengue Bulletin

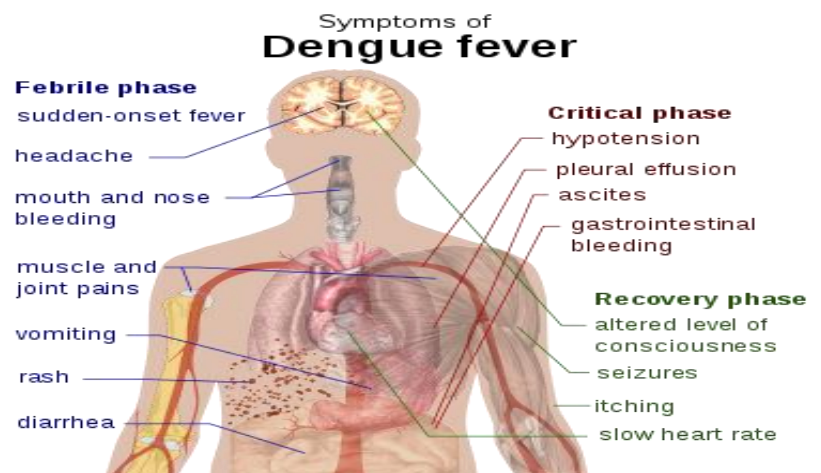
January 9- 15, 2022 Epidemiological Week 2

Epidemiological Week 2



## Reported suspected and confirmed dengue with symptom onset in week 2 of 2022

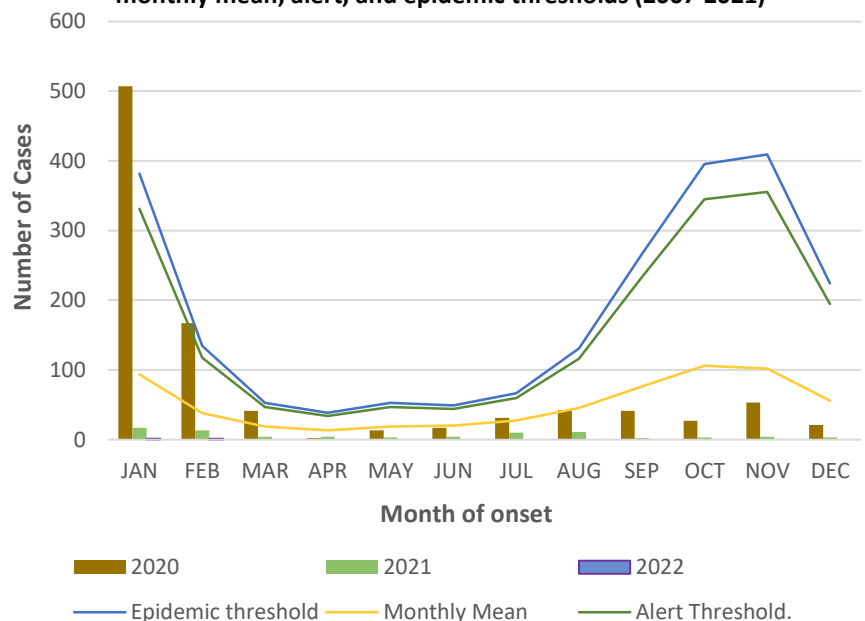
	2022*	
	EW 2	YTD
Total Suspected Dengue Cases	0	0
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



### Points to note:

- \*Figure as at January 13, 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



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

# RESEARCH PAPER

## Abstract

### Knowledge of Prostate Cancer Screening among Males Age 40 Years and Over Attending Health Centres in Selected Parishes in Jamaica

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<sup>2</sup>Department of Community Health & Psychiatry, Faculty of Medical Sciences, The University of the West Indies, Mona, Jamaica

**Aim:** To determine the level of knowledge of prostate cancer and prostate cancer screening tests among males 40 years and older attending health centres in St. Ann, St. Catherine, St. Mary, Trelawny and Westmoreland.

#### Objectives:

To describe the prevalence of prostate cancer and determine the level of knowledge of prostate cancer risk factors, signs and symptoms and knowledge of prostate cancer screening

**Method:** In this cross-sectional study (n=150), participants were randomly selected from the registered males 40 years and older attending health centres across the five (5) selected parishes in Jamaica. Information was obtained through an 85-item interviewer-administered questionnaire. The questions used measured the knowledge of prostate cancer across several concepts were summed to form a composite score and the mean score and standard deviation calculated. Data analysis was aided by use of the program PSPP. A p value of < .05 was considered statistically significant.

**Results:** The sample of 150 participants had a 10.7% prevalence of prostate cancer. There was no significant difference in the mean knowledge scores of risk factors ( $p = .885$ ), signs and symptoms ( $p = .262$ ) and knowledge of screening test and procedures ( $p = .262$ ) regarding prostate cancer, among men across all age groups.

**Conclusion:** The study revealed no statistically significant difference in mean scores for knowledge of prostate cancer and screening practices among men in the various age groups. This was far from the expected view of age being a determinant of knowledge for prostate cancer.



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8 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
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