

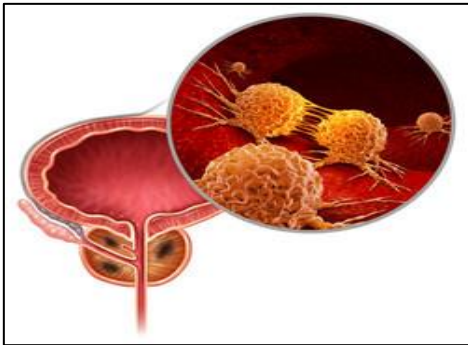
# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

### Prostate Cancer

**Prostate cancer in the Caribbean is taking down our men: access to care and changes in attitude are required**



The high rate of mortality from prostate cancer in the Caribbean poses a huge public health challenge for the area. As we know, non-communicable diseases (NCDs) are a growing challenge globally, as well as in the Caribbean. In fact, the Caribbean has the highest burden of NCDs in the Region of the Americas. Among these chronic diseases, several types of cancers have occupied the top causes of death.

In a recent study, researchers from the Caribbean Public Health Agency and the United States Centers for Disease Control and Prevention found that the rates of death from cervical, breast, prostate, and colon cancer are 2 – 9 times higher in the Caribbean than in the United States. The study also reported that prostate cancer accounted for 18% – 47% of cancer deaths. These figures are alarming considering that prostate cancer can be prevented through lifestyle changes and early detection and treatment.

Clearly, prostate cancer is a serious public health problem in the Caribbean, where its high incidence and mortality rates affect a predominantly Black population with an ancestral, genetic predisposition to the disease. But there are also many cultural and social norms that are proving to be obstacles to prevention and control among Caribbean men.

Caribbean men either do not adequately access health care or only access health care after signs and symptoms become severe. Many suffer in silence. Caribbean men generally have a love/hate relationship with health care. If they are not “sick,” they do not access care; therefore, access to preventative services is decreased. If they are “sick,” then they want care; that is, when signs and symptoms are obvious. This delayed access to care means prostate cancers are less likely to be detected in the early stages. Partially to blame is the “macho” culture that influences Caribbean men to suppress awareness of their bodies and not to show emotions or vulnerabilities. They often avoid seeking care until it becomes urgent. This leads to late detection.

Linked to this macho culture are a fear and avoidance of the digital rectal exam screening. Caribbean men continue to turn a blind eye towards getting tested. The 2007/8 Jamaica Health and Lifestyle Survey showed that as many as 79% of men have never had a physical exam for prostate cancer, and only 13% reported having had one in the past 2 years. While there are numerous non-modifiable risk factors associated with prostate cancer—genetics, age, race, and ethnicity—there are also several risk factors that are modifiable. They include smoking, diet, obesity, and sexually-transmitted infections, among others. Tobacco use is the largest, single contributor to cancer mortality. It causes a considerable number of deaths annually

<https://iris.paho.org/bitstream/handle/10665.2/49162/v42e1172018.pdf?sequence=1&isAllowed=y>

## EPI WEEK 36



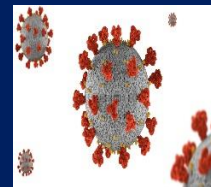
- Syndromic Surveillance  
- Accidents  
- Violence

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**Class 1 Notifiable Events**

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**COVID-19**

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**Influenza**

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**Dengue Fever**

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**Research Paper**

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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 - 33 to 36 of 2023

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
	2023												
33	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
34	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)
35	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
36	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 (T)

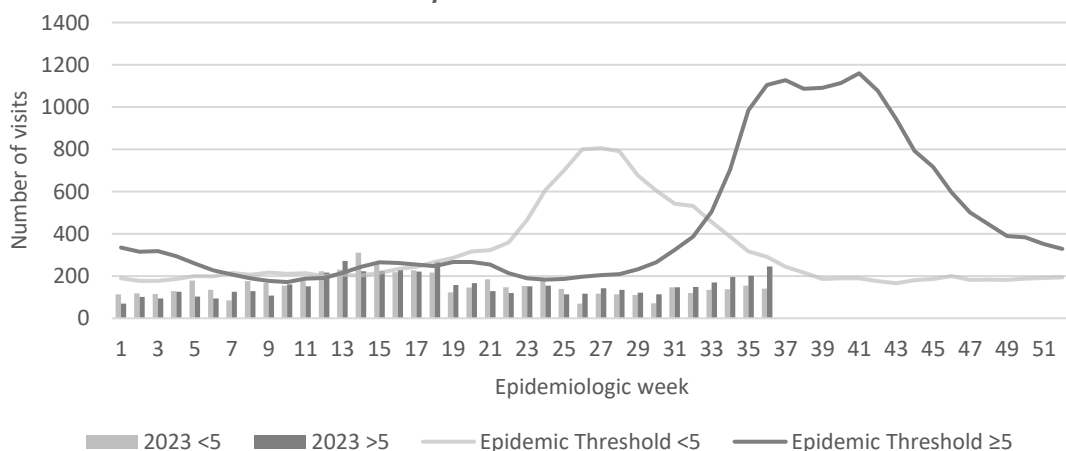
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED 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.



Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2023



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



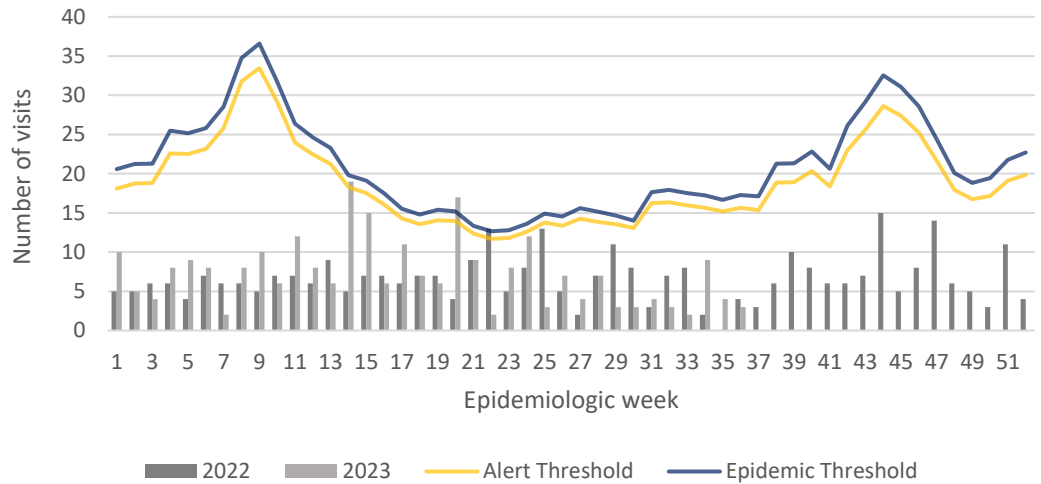
SENTINEL REPORT- 78 sites. Automatic reporting

**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 2022 and 2023 vs. Weekly Threshold: Jamaica**

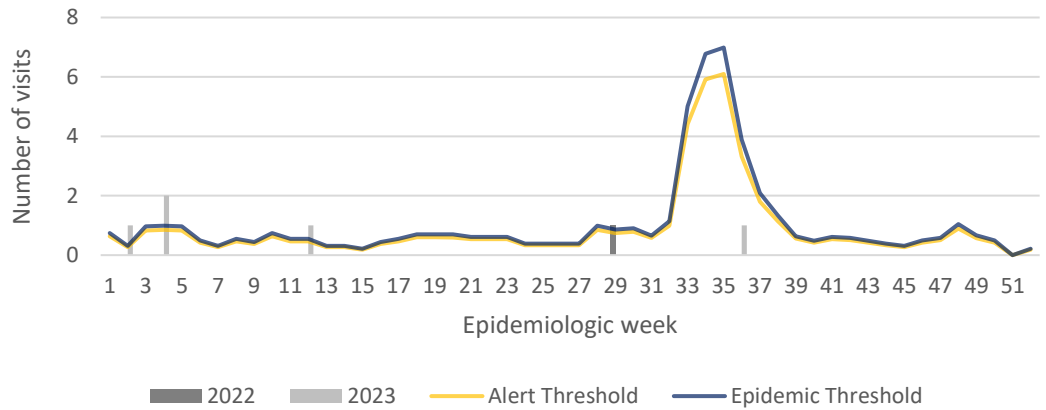


**FEVER AND HAEMORRHAGIC**

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 2022 and 2023 vs Weekly Threshold; Jamaica**



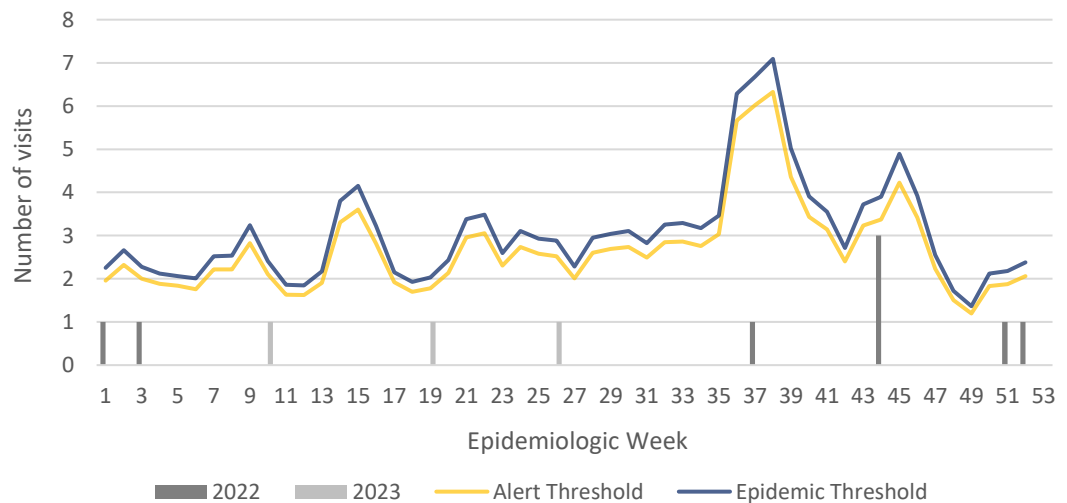
**FEVER AND JAUNDICE**

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 2022 and 2023**



**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

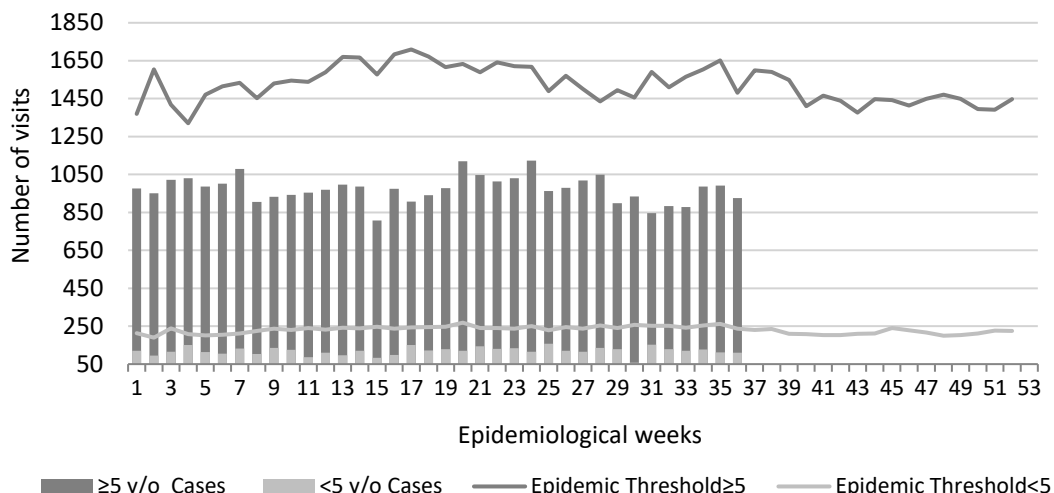


### ACCIDENTS

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 2023 vs Weekly Threshold; Jamaica

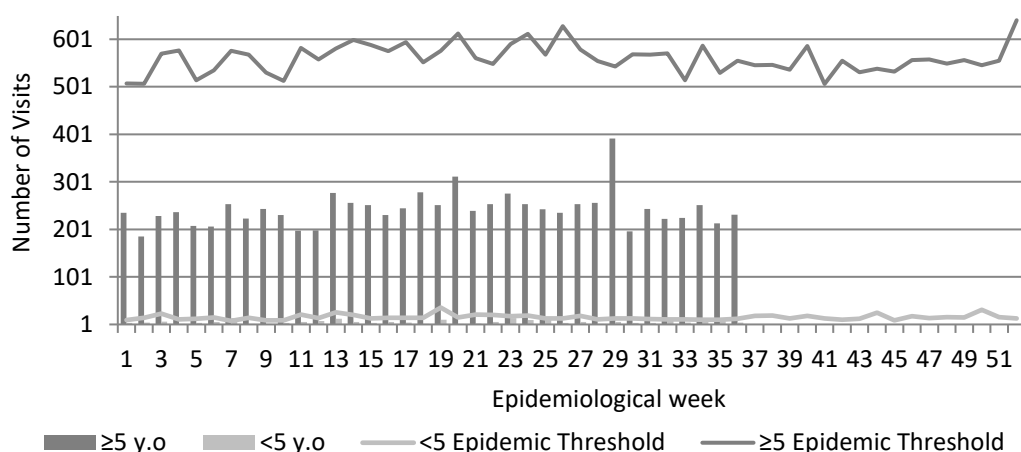


### VIOLENCE

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 2023 vs Weekly Threshold; Jamaica

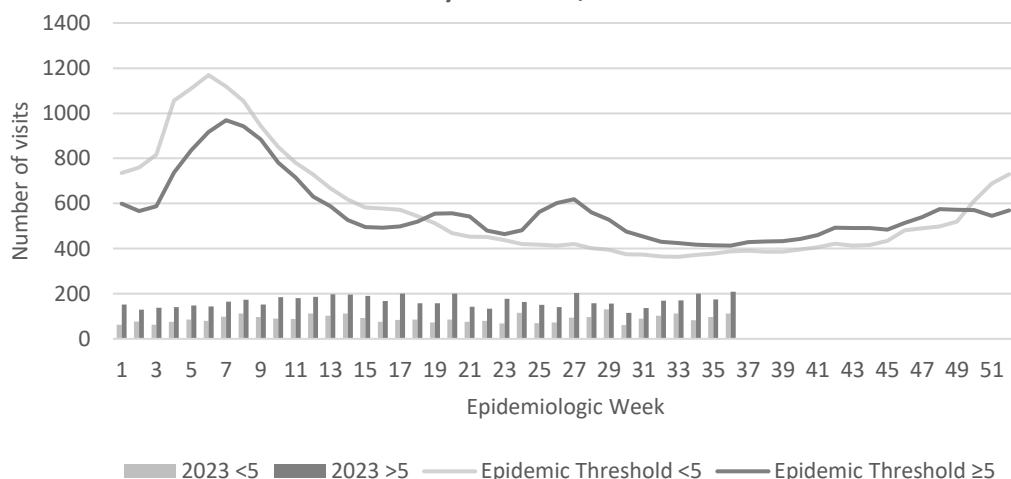


### GASTROENTERITIS


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 2023 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 2023	PREVIOUS YEAR 2022		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	228 <sup>β</sup>	156 <sup>β</sup>	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.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever <sup>γ</sup>	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	3589	53864		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	42	12		
	Hepatitis C	22	2		
	HIV/AIDS	N/A	N/A		
	Malaria (Imported)	3	2		
	Meningitis	21	15		
	Monkeypox	3	13		
EXOTIC/ UNUSUAL	Plague	0	0	<sup>ε</sup> CHIKV IgM positive cases <sup>θ</sup> Zika PCR positive cases <sup>β</sup> Updates made to prior weeks. <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>	36	55		
	Ophthalmia Neonatorum	88	48		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	2		
	Tuberculosis	29	25		
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 up for all Class One Events



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



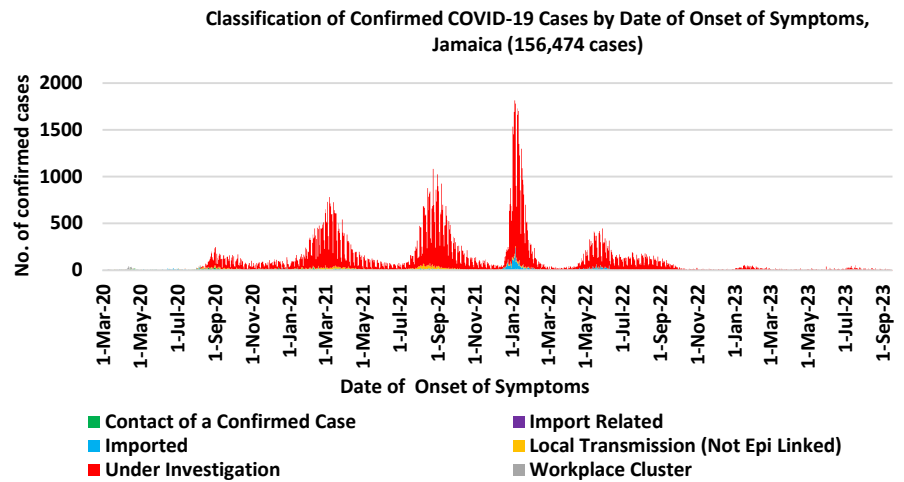
**SENTINEL REPORT-** 78 sites. Automatic reporting

# COVID-19 Surveillance Update

March 10, 2020 – EW 36, 2023

CASES	EW 36	Total
Confirmed	55	156474
Females	35	90207
Males	20	66264
Age Range	6 days old to 97 years	1 day to 108 years

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

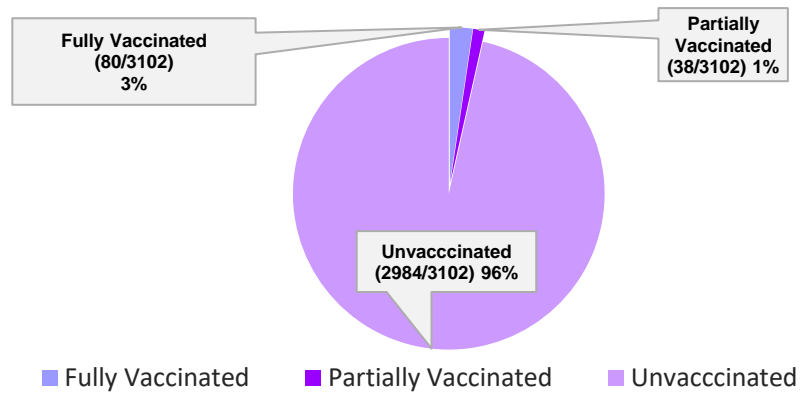


## COVID-19 Outcomes

Outcomes	EW 36	Total
ACTIVE *2 weeks*		96
DIED – COVID Related	0	3664
Died - NON COVID	0	336
Died - Under Investigation	0	270
Recovered and discharged	13	103191
Repatriated	0	93
Total		156474

\*Vaccination programme March 2021 – YTD  
\* Total as at current Epi week

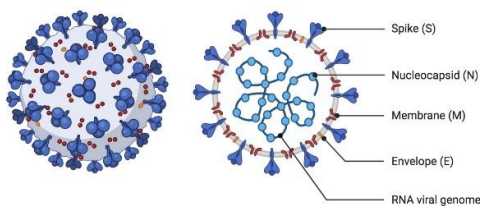
## 3102 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



## COVID-19 Parish Distribution and Global Statistics

### COVID-19 Virus Structure

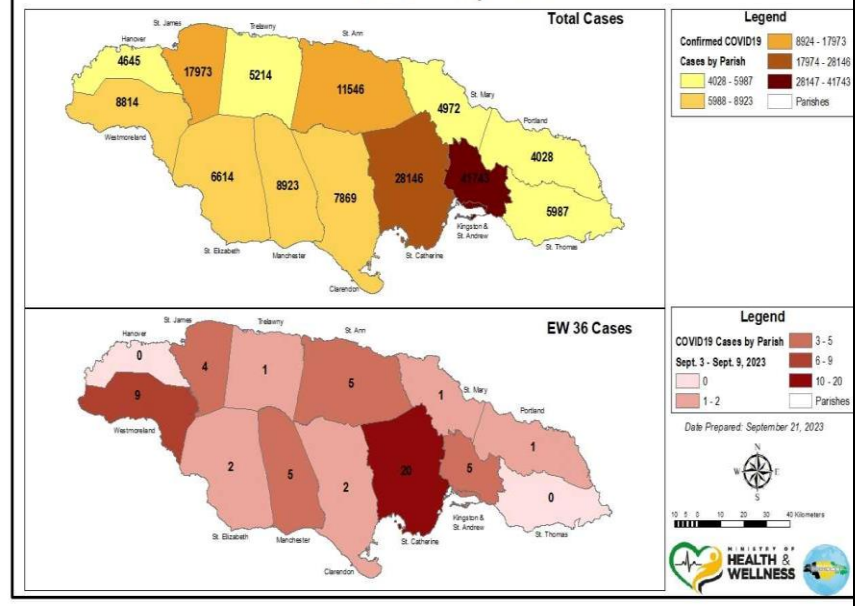
#### SARS-CoV-2



### COVID-19 WHO Global Statistics EW33-EW36

Epi Week	Confirmed Cases	Deaths
33	351, 831	597
34	306, 579	277
35	322, 353	358
36	215, 888	395
Total (4weeks)	1196, 651	1627

### COVID19 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



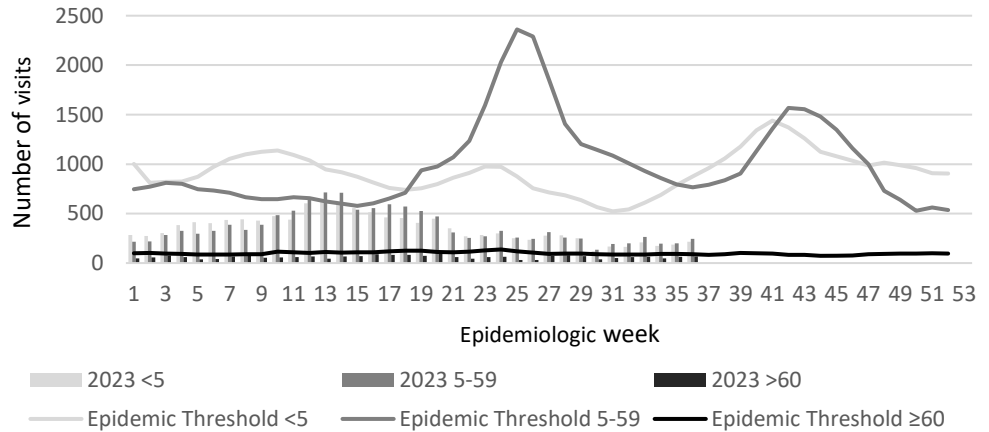
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 36*

September 3 – September 9, 2023 Epidemiological Week 36

	EW 36	YTD
SARI cases	4	438
Total Influenza positive Samples	0	178
<b>Influenza A</b>	<b>0</b>	<b>16</b>
H3N2	0	1
H1N1pdm09	0	14
Not subtyped	0	1
<b>Influenza B</b>	<b>0</b>	<b>162</b>
B lineage not determined	0	2
B Victoria	0	160
<b>Parainfluenza</b>	<b>0</b>	<b>1</b>
<b>Adenovirus</b>	<b>0</b>	<b>2</b>
<b>RSV</b>	<b>0</b>	<b>14</b>

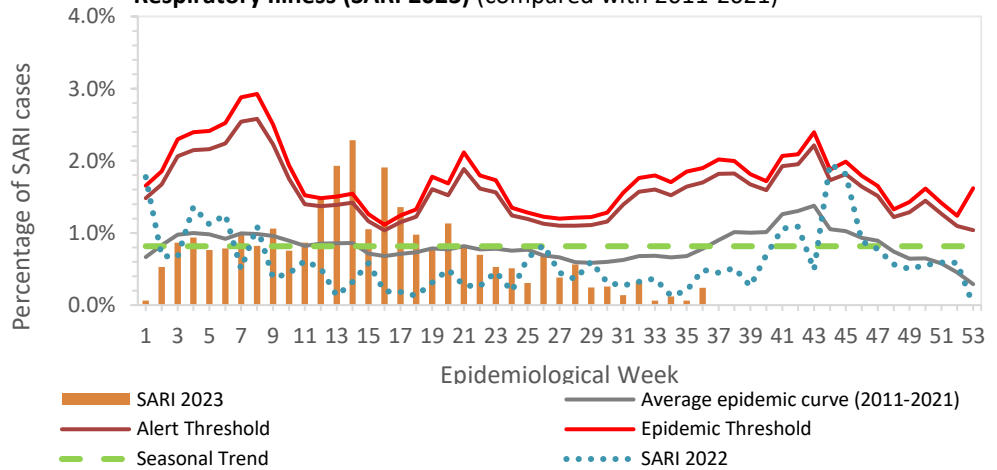
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2023 vs Weekly Threshold; Jamaica



**Epi Week Summary**

During EW 36, four(4) SARI admissions were reported.

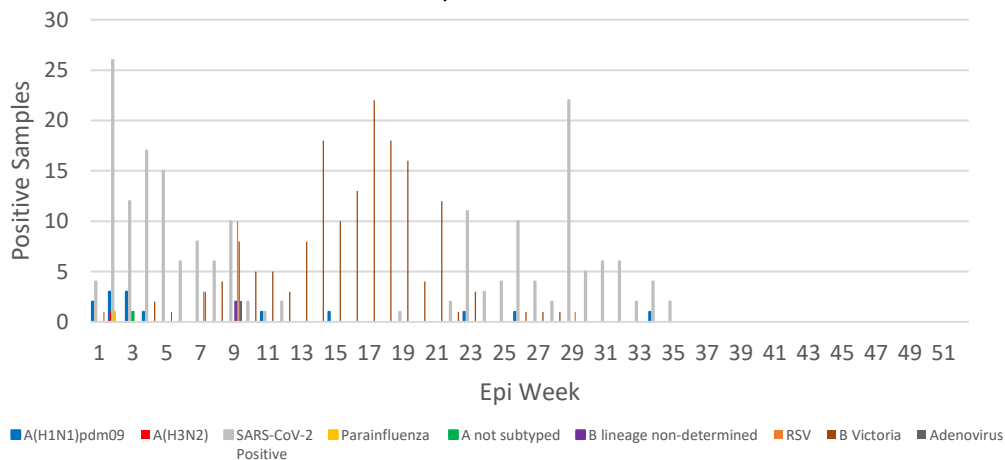
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2023) (compared with 2011-2021)



**Caribbean Update EW 36**

**Caribbean:** Influenza activity continues to exhibit a declining trend over the past 4 EWs. During this period, the predominant influenza viruses have been B/Victoria, with lesser circulation of influenza A, primarily A(H1N1)pdm09. RSV activity has remained low. SARS-CoV-2 activity shows an increasing trend with intermediate to high levels of circulation. ILI and SARI cases have demonstrated a declining trend over the past 4 EWs.

Distribution of Influenza and Other Respiratory Viruses Under Surveillance by EW, Jamaica - 2023



**7 NOTIFICATIONS-**  
All clinical sites

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

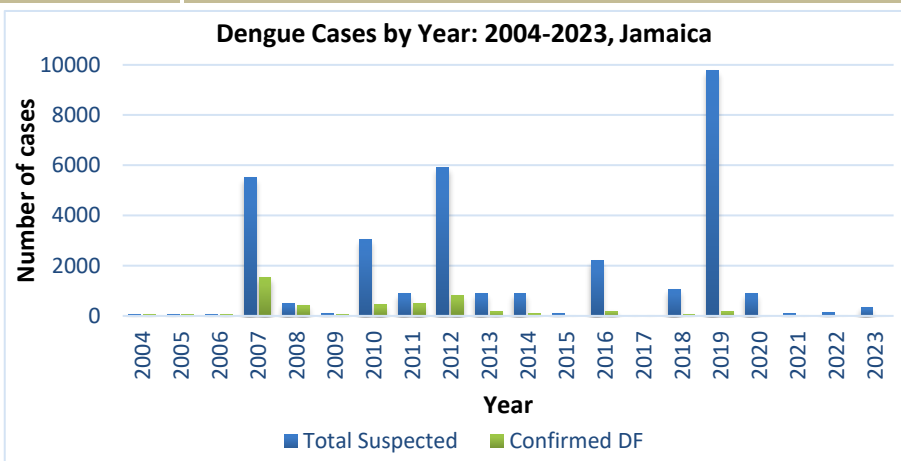
**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued

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


# Dengue Bulletin

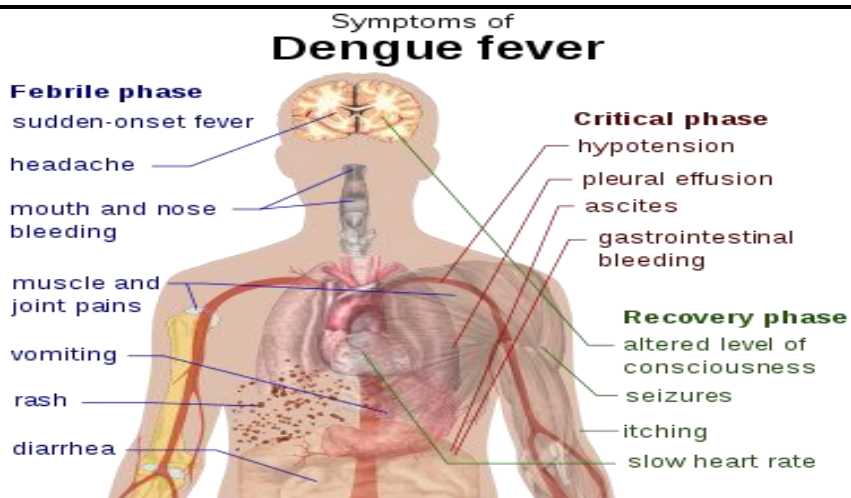
September 3– September 9, 2023 Epidemiological Week 36

Epidemiological Week 36



## Reported suspected and confirmed dengue with symptom onset in week 36 of 2023

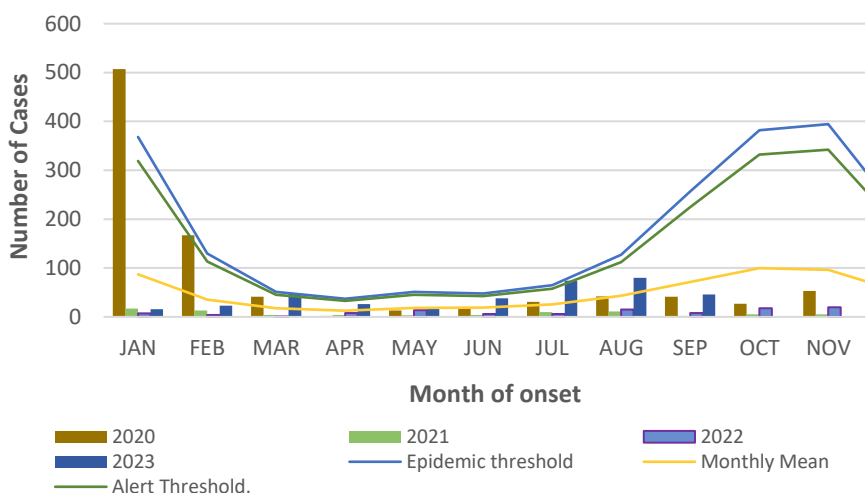
	2023*	
	EW 36	YTD
 Total Suspected Dengue Cases	29	380
Lab Confirmed Dengue cases	4	52
<b>CONFIRMED Dengue Related Deaths</b>	<b>0</b>	<b>0</b>



### Points to note:

- \*Figure as at September 9, 2023
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

### Suspected dengue cases for 2020, 2021, 2022 and 2023 versus monthly mean, alert, and epidemic thresholds (2007-2022)



**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

### THE EPIDEMIOLOGY OF OSTEOMYELITIS IN THE SICKLE CELL POPULATION OF JAMAICA

Dr. Wayne Palmer, Dr. Darren Fray, Professor Knight- Madden, Dr. Andrew Ameerally  
Orthopaedics, Department Of Surgery, Anaesthesia And Intensive Care, University Hospital Of The West Indies

**Introduction:** Knowing the most likely causative organism causing osteomyelitis in the sickle cell population is crucial in implementing empirical therapy; the most common causative organism varies globally.

**Objectives:** To determine the epidemiology of culture proven osteomyelitis in patients who attended the Sickle Cell Unit (SCU) from 2008- 2018, in particular, to determine the most common organisms and whether there was an association of the causal organism with patient location or disease severity.

**Methods:** Ethical approval was obtained from The University of the West Indies Ethics Committee. The charts of all eligible patients were examined. The gender, age, address of individuals and the site of the osteomyelitis and causative organism were extracted. Polyostotic episodes and those which required greater than 42 days of antibiotics were deemed severe. Data were analyzed using SPSS; associations were assessed using the Pearson Chi- Squared Test.

**Results:** Forty three patients met the inclusion criteria; 26 males and 17 females with the mean age being 16.5 years (Range 1-60). St. Catherine was the most common parish. The most prevalent organisms included Salmonella (42%), Staphylococcus Aureus (26%) and Enterobacter (12%). Commonly affected sites included the Tibia (44%), Humerus (26%) and Femur (16%), 7% were severe. There was no association between the causal organism and patient location ( $p=0.196$ ) or disease severity ( $p=0.367$ ).

**Conclusion:** Salmonella was the most common organism causing osteomyelitis in persons attending the SCU. Specific education of patients in avoidance of exposure to this organism may be helpful.



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  
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SENTINEL  
REPORT- 78 sites.  
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