

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Breast Cancer Treatment



People with an abnormal breast lump should seek medical care, even if the lump does not hurt. Most breast lumps are not cancer. Breast lumps that are cancerous are more likely to be successfully treated when they are small and have not spread to nearby lymph nodes.

Breast cancers may spread to other areas of the body and trigger other symptoms. Often, the most common first detectable site of spread is to the lymph nodes under the arm although it is possible to have cancer-bearing lymph nodes that cannot be felt. Over time, cancerous cells may spread to other organs including the lungs, liver, brain and bones. Once they reach these sites, new cancer-related symptoms such as bone pain or headaches may appear.

Treatment

Treatment for breast cancer depends on the subtype of cancer and how much it has spread outside of the breast to lymph nodes (stages II or III) or to other parts of the body (stage IV).

Doctors combine treatments to minimize the chances of the cancer coming back (recurrence). These include:

surgery to remove the breast tumour radiation therapy to reduce recurrence risk in the breast and surrounding tissues medications to kill cancer cells and prevent spread, including hormonal therapies, chemotherapy or targeted biological therapies.

Treatments for breast cancer are more effective and are better tolerated when started early and taken to completion.

Surgery may remove just the cancerous tissue (called a lumpectomy) or the whole breast (mastectomy). Surgery may also remove lymph nodes to assess the cancer's ability to spread.

Radiation therapy treats residual microscopic cancers left behind in the breast tissue and/or lymph nodes and minimizes the chances of cancer recurring on the chest wall.

Advanced cancers can erode through the skin to cause open sores (ulceration) but are not necessarily painful. Women with breast wounds that do not heal should seek medical care to have a biopsy performed.

<https://www.who.int/news-room/fact-sheets/detail/breast-cancer>

EPI WEEK 39



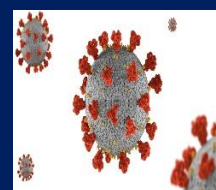
- Syndromic Surveillance
- Accidents
- Violence

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 - 36 to 39 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													
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)
37	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time
38	On Time	On Time	Late (W)	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
39	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

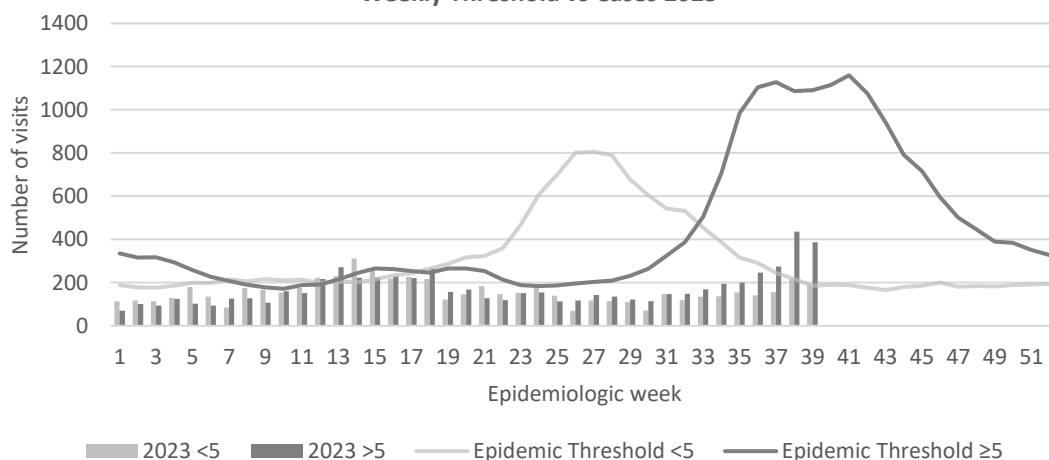
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

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



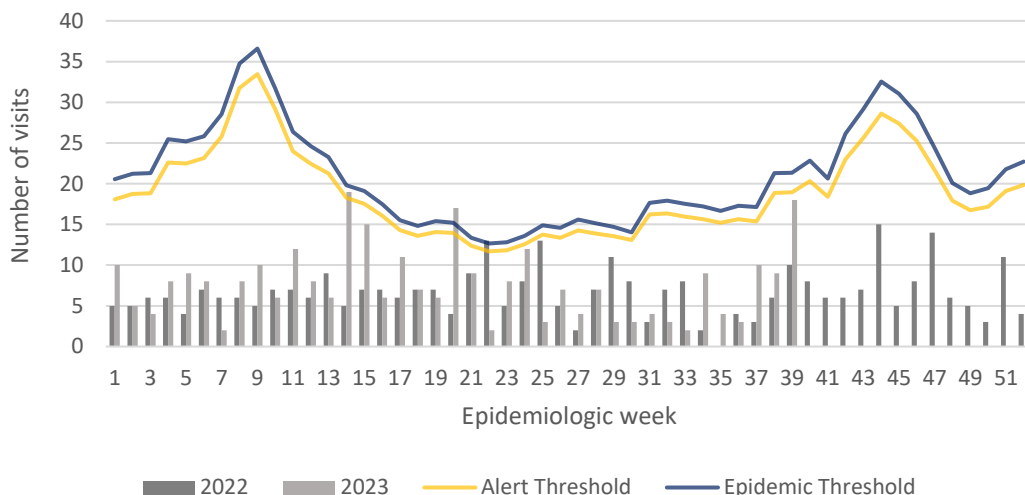
SENTINEL REPORT- 78 sites. Automatic reporting

FEVER AND NEUROLOGICAL

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



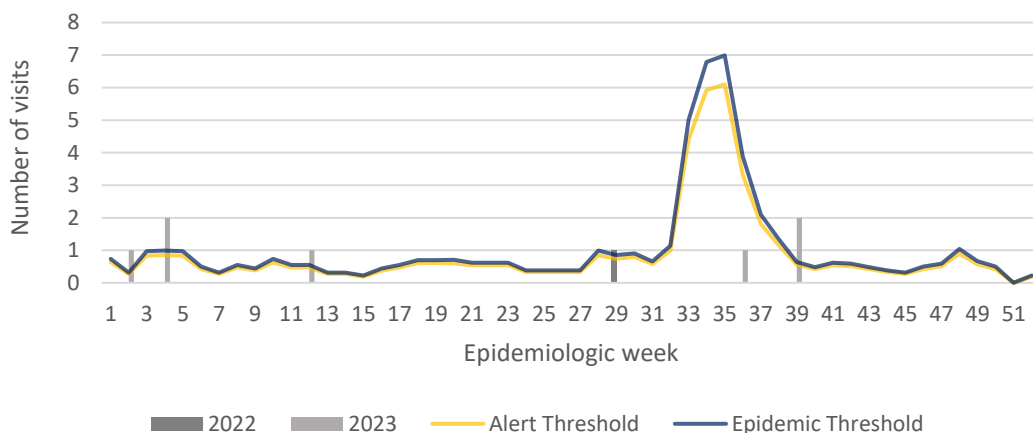
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms
2022 and 2023 vs. Weekly Threshold: Jamaica**

**FEVER AND HAEMORRHAGIC**

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

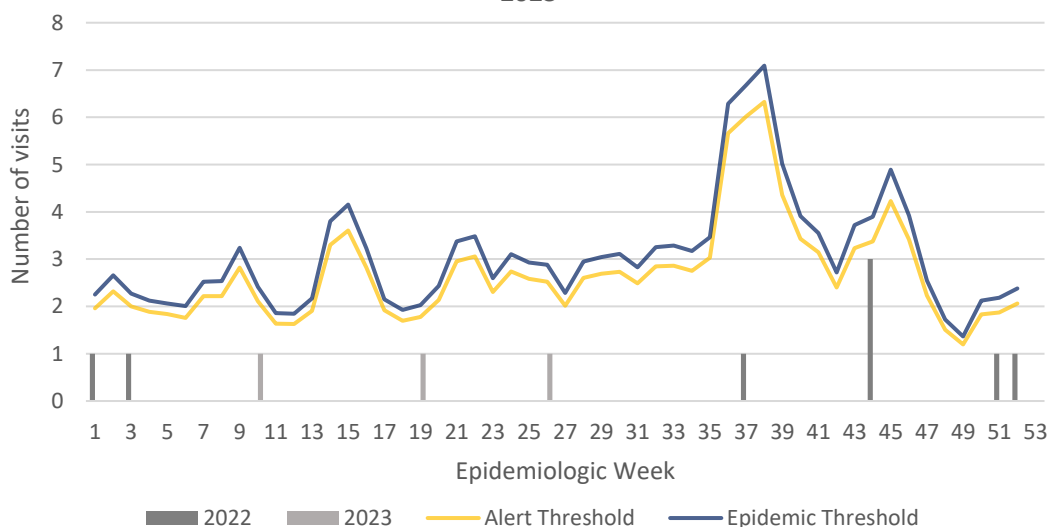
**FEVER AND JAUNDICE**

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



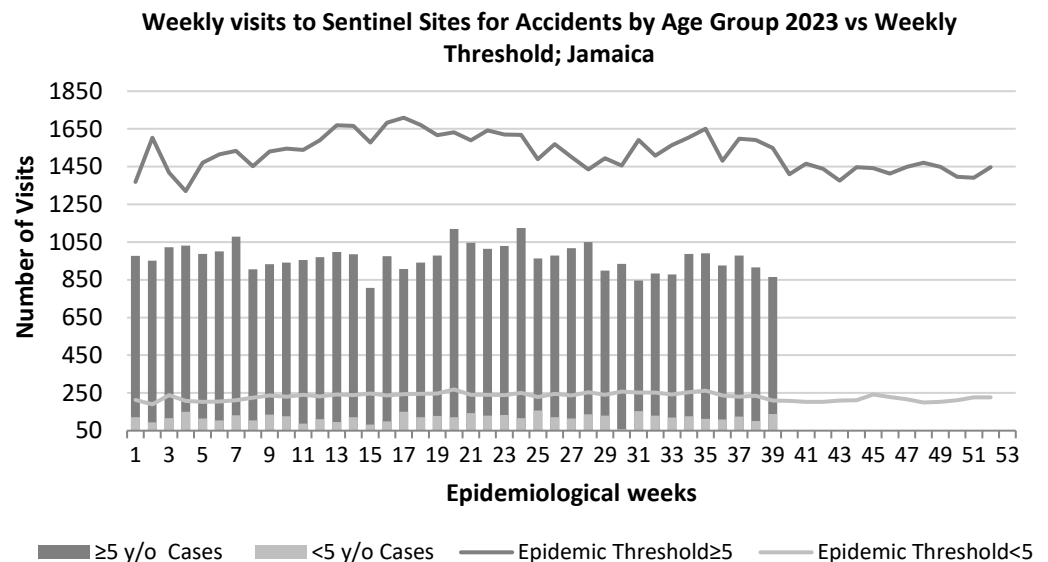
**HOSPITAL
ACTIVE
SURVEILLANCE-**
30 sites. Actively
pursued



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

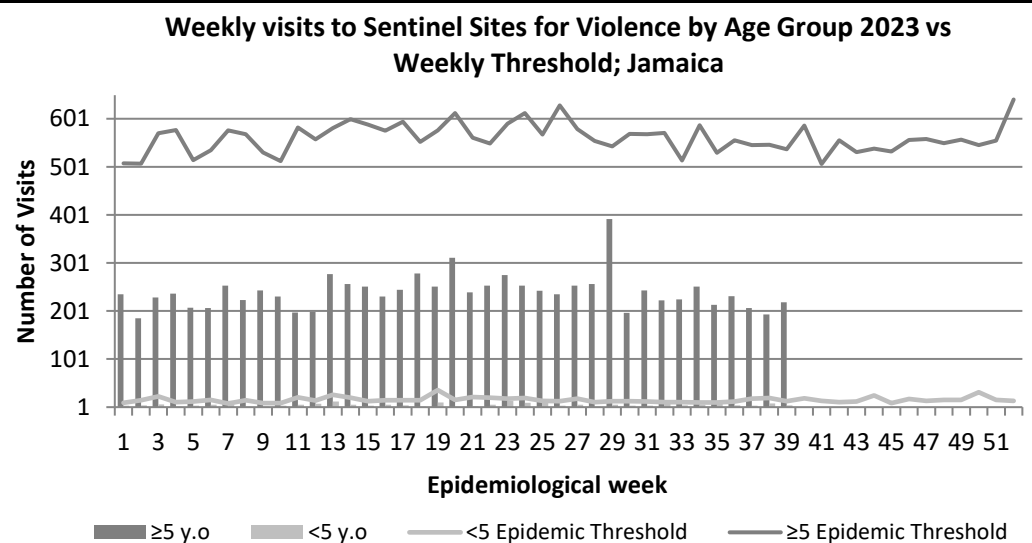
ACCIDENTS

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



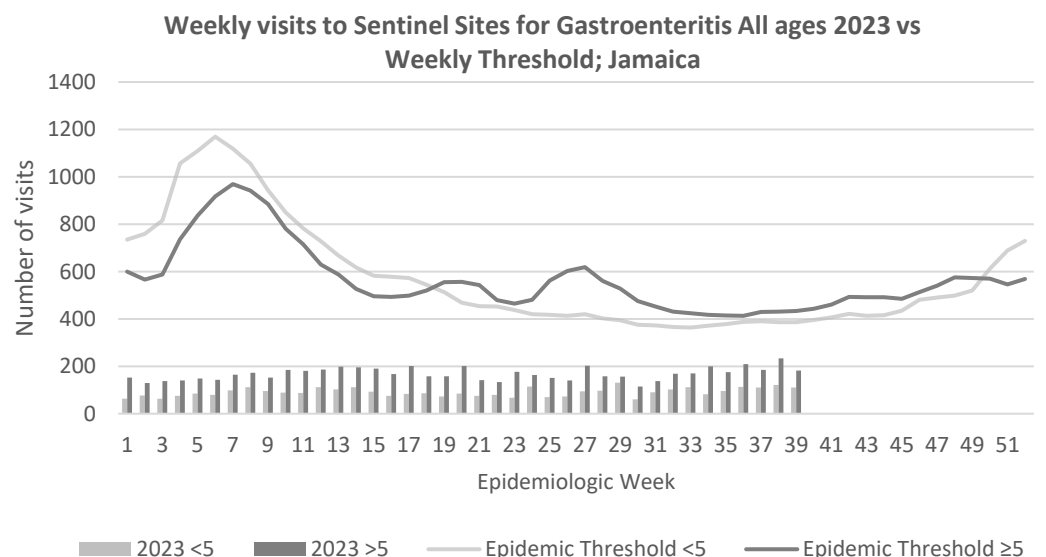
VIOLENCE

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
	CLASS 1 EVENTS	Confirmed YTD ^α		
		CURRENT YEAR 2023	PREVIOUS YEAR 2022	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	257 ^β	167 ^β	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.
	Cholera	0	0	
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	COVID-19 (SARS-CoV-2)	3690	54880	
	Hansen's Disease (Leprosy)	0	0	^γ Dengue Hemorrhagic Fever data include Dengue related deaths;
	Hepatitis B	47	26	
	Hepatitis C	24	2	^δ Figures include all deaths associated with pregnancy reported for the period.
	HIV/AIDS	N/A	N/A	
	Malaria (Imported)	3	2	^ε CHIKV IgM positive cases
	Meningitis	24	18	
	Monkeypox	3	14	^θ Zika PCR positive cases
EXOTIC/ UNUSUAL	Plague	0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	^β Updates made to prior weeks.
	Neonatal Tetanus	0	0	
	Typhoid Fever	0	0	^α Figures are cumulative totals for all epidemiological weeks year to date.
	Meningitis H/Flu	0	0	
SPECIAL PROGRAMMES	AFP/Polio	0	0	NA- Not Available
	Congenital Rubella Syndrome	0	0	
	Congenital Syphilis	0	0	
	Fever and Rash	Measles	0	
		Rubella	0	
	Maternal Deaths ^δ	39	57	
	Ophthalmia Neonatorum	105	68	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	0	
	Tetanus	0	2	
	Tuberculosis	34	33	
	Yellow Fever	0	0	
	Chikungunya ^ε	0	0	
	Zika Virus ^θ	0	0	



5 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued

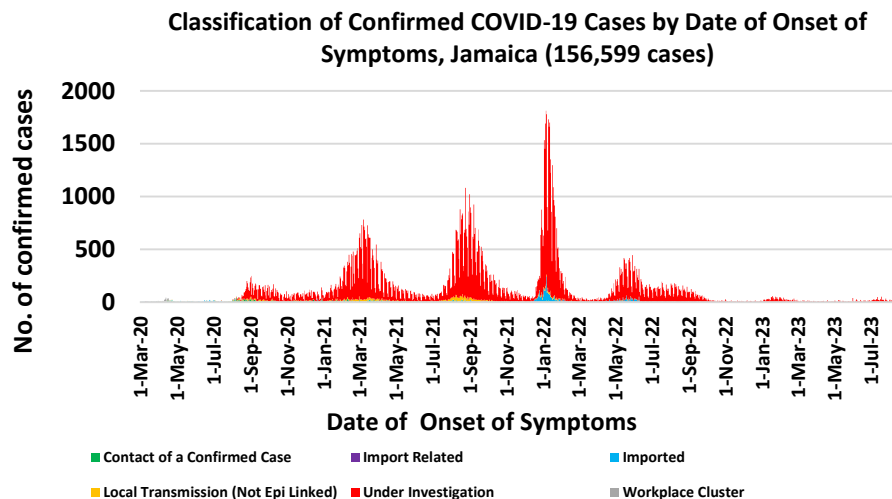


SENTINEL
REPORT- 78 sites.
Automatic reporting

COVID-19 Surveillance Update

March 10, 2020 – EW 39, 2023

CASES	EW 39	Total
Confirmed	54	156599
Females	21	90260
Males	33	66336
Age Range	9 months old to 88 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		

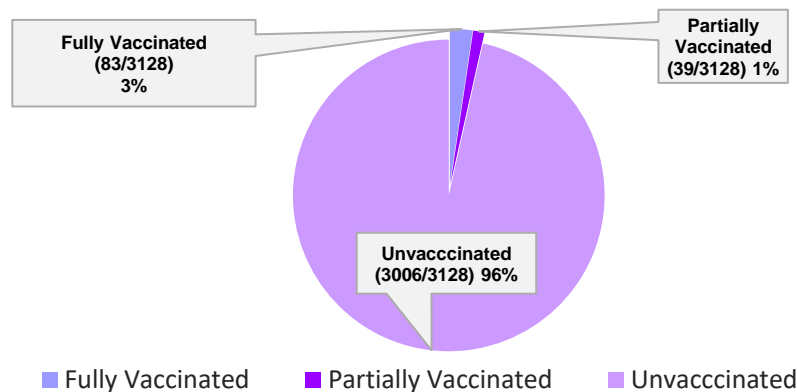


COVID-19 Outcomes

Outcomes	EW 39	Total
ACTIVE *2 weeks*		96
DIED – COVID Related	0	3690
Died - NON COVID	0	341
Died - Under Investigation	0	267
Recovered and discharged	3	103207
Repatriated	0	93
Total		156599

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

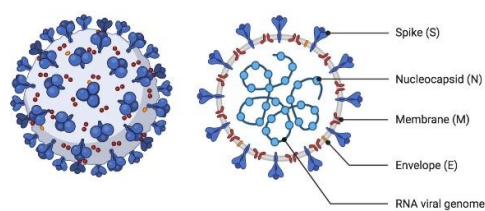
3128 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

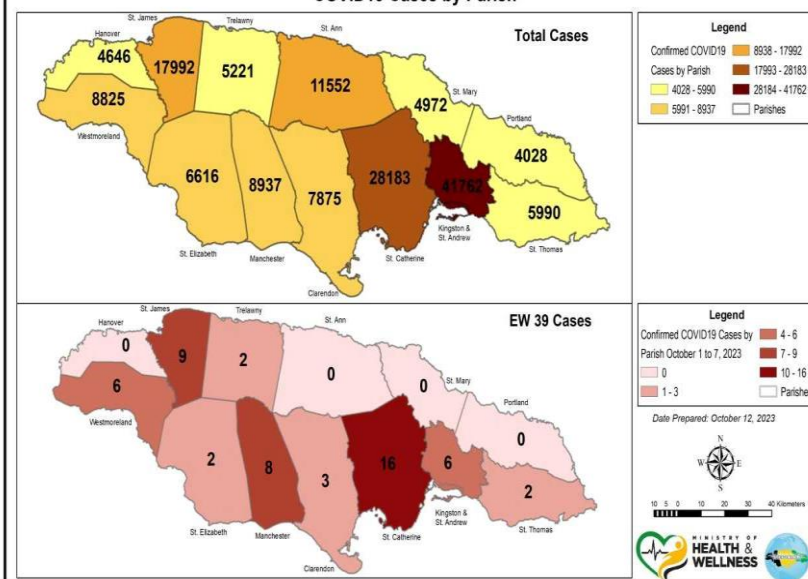
SARS-CoV-2



COVID-19 WHO Global Statistics EW36-EW39

Epi Week	Confirmed Cases	Deaths
36	128,207	497
37	136,776	521
38	88,864	355
39	124,444	968
Total (4weeks)	478,291	2,341

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

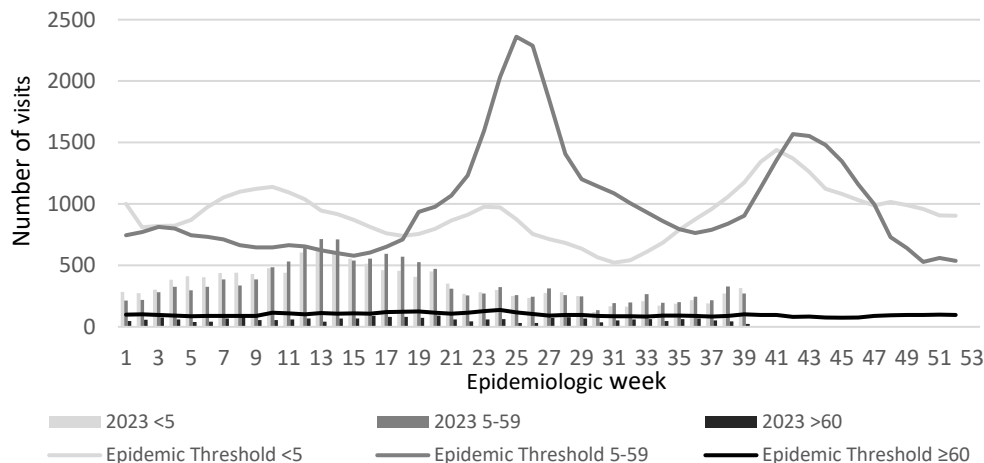
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 39

September 24 – September 30, 2023 Epidemiological Week 39

	EW 39	YTD
SARI cases	2	450
Total Influenza positive Samples	0	181
Influenza A	0	17
H3N2	0	1
H1N1pdm09	0	15
Not subtyped	0	1
Influenza B	0	164
B lineage not determined	0	2
B Victoria	0	162
Parainfluenza	0	1
Adenovirus	0	2
RSV	0	14

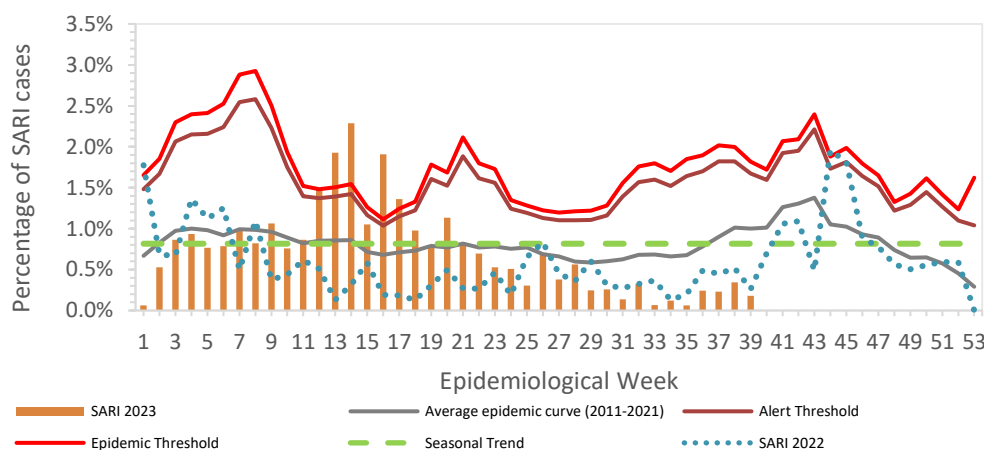
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages
2023 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 39, two(2) SARI admissions were reported.

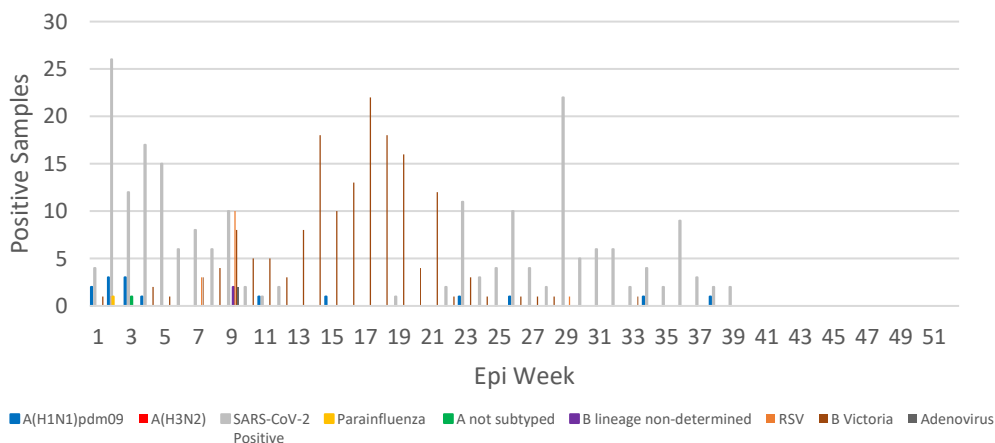
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2023) (compared with 2011-2021)



Caribbean Update EW 39

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

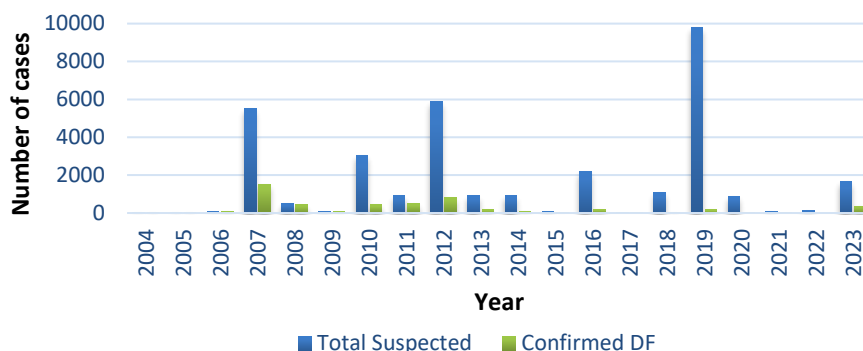
Dengue Bulletin

September 24– September 30, 2023 Epidemiological Week 39

Epidemiological Week 39



Dengue Cases by Year: 2004-2023, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 39 of 2023

	2023*	
	EW 39	YTD
Total Suspected & Confirmed Dengue Cases	271	1649
Lab Confirmed Dengue cases	50	370
CONFIRMED Dengue Related Deaths	0	0

Symptoms of Dengue fever

Febrile phase

sudden-onset fever

headache

mouth and nose bleeding

muscle and joint pains

vomiting

rash

diarrhea

Critical phase

hypotension

pleural effusion

ascites

gastrointestinal bleeding

Recovery phase

altered level of consciousness

seizures

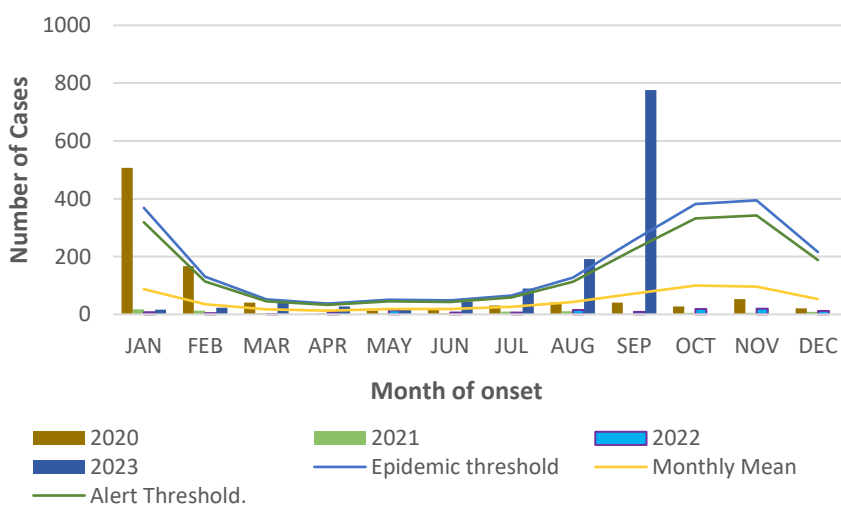
itching

slow heart rate

Points to note:

- *Figure as at September 30, 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

NHRC_22_O4

The Prevalence of Anaemia in Jamaicans 15 Years and Older

Grant A¹, Younger-Coleman N², McFarlane S², Francis D³, Tulloch-Reid M², Davidson T¹, Ferguson T², Webster-Kerr K¹, Wilks R²

¹Ministry of Health, Kingston, Jamaica, ²Caribbean Institute for Health Research, Mona, Kingston 7, ³School of Health and Human Performance, Georgia College and State University, Milledgeville, GA, USA

Background: Iron deficiency is a common cause of anaemia and is associated with increased maternal and perinatal morbidity, cognitive impairment and decreased economic productivity. However, there are limited data on anaemia in the Jamaican population.

Objective: To estimate the prevalence of anemia in Jamaicans aged ≥ 15 years.

Methods: The Jamaica Health and Lifestyle Survey (JHLS III) was a cross-sectional nationally representative survey conducted in 2016/17 involving 2,807 participants. WHO criteria were used to define anaemia (<13 g/dl-males; <12 g/dl-females) and classify severity as mild (11-12.9 g/dl-males; 11-11.9 g/dl-females), moderate (8-10.9 g/dl-both sexes) and severe (<8 g/dl-both sexes). Iron deficiency was defined as serum ferritin <15 μ g/ml. Statistical analysis yielded weighted prevalence estimates, accounting for survey design.

Results: Anaemia prevalence % (95% CI) was: 17.6% (14.0, 21.7) overall, 9.5% (6.5, 13.8) in males, and 25.0% (20.4, 30.2) in females. For males, anaemia prevalence was highest in elderly men, while for women it was highest in women of reproductive age. Anaemia severity in the population was: 11.5% (8.5, 15.3) mild, 5.3% (4.0, 6.9) moderate and 0.8% (0.4, 1.7) severe. Iron deficiency was present in 9.9% (8.4, 11.7), and was higher in women 17.8% (14.8, 21.3) vs. men 1.9% (8.4, 11.7), ($p < 0.01$).

Conclusion: Anaemia affects approximately one fifth of the population and may be higher among women of reproductive age and older individuals. The negative impact on birth and other outcomes makes this a public health concern. Data from the JHLS III provides baseline information for tracking global targets to be attained by 2025.



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