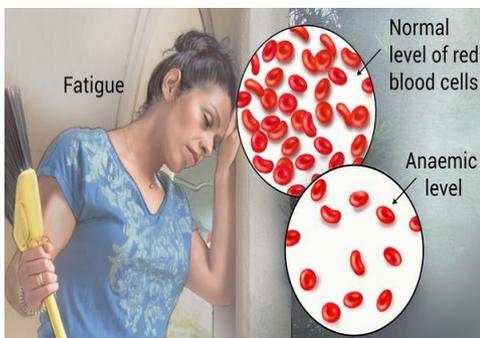


WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Anaemia



Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. It mainly affects women and children. Anaemia occurs when there isn't enough haemoglobin

in the body to carry oxygen to the organs and tissues. The population groups most vulnerable to anaemia include children under 5 years of age, particularly infants and children under 2 years of age, menstruating adolescent girls and women, and pregnant and postpartum women.

Anaemia may be caused by several factors: nutrient deficiencies, inadequate diet (or the inadequate absorption of nutrients), infections, inflammation, chronic diseases, gynaecological and obstetric conditions, and inherited red blood cell disorders. Iron deficiency, primarily due to inadequate dietary iron intake, is considered the most common nutritional deficiency leading to anaemia. Deficiencies in vitamin A, folate, vitamin B12 and riboflavin can also result in anaemia due to their specific roles in the synthesis of haemoglobin and/or erythrocyte production. Additional mechanisms include nutrient losses (e.g. blood loss from parasitic infections, haemorrhage associated with childbirth, or menstrual loss), impaired absorption, low iron stores at birth, and nutrient interactions affecting iron bioavailability.

Infections can be another important cause of anaemia, depending on the local burden of infectious diseases, such as malaria, tuberculosis, HIV and parasitic infections. Infections can impair nutrient absorption and metabolism (e.g. malaria, ascariasis) or can cause nutrient loss (e.g. schistosomiasis, hookworm infection). Many different chronic conditions can cause inflammation and lead to anaemia of inflammation or anaemia of chronic disease. HIV infection causes anaemia through a wide range of mechanisms including ineffective production or excessive destruction of red blood cells, blood loss, and side effects of the drug treatment.

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

EPI WEEK 19



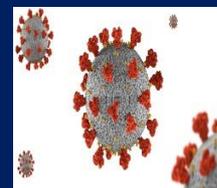
- Syndromic Surveillance
- Accidents
- Violence

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 - 16 to 19 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												
16	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
17	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
18	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
19	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

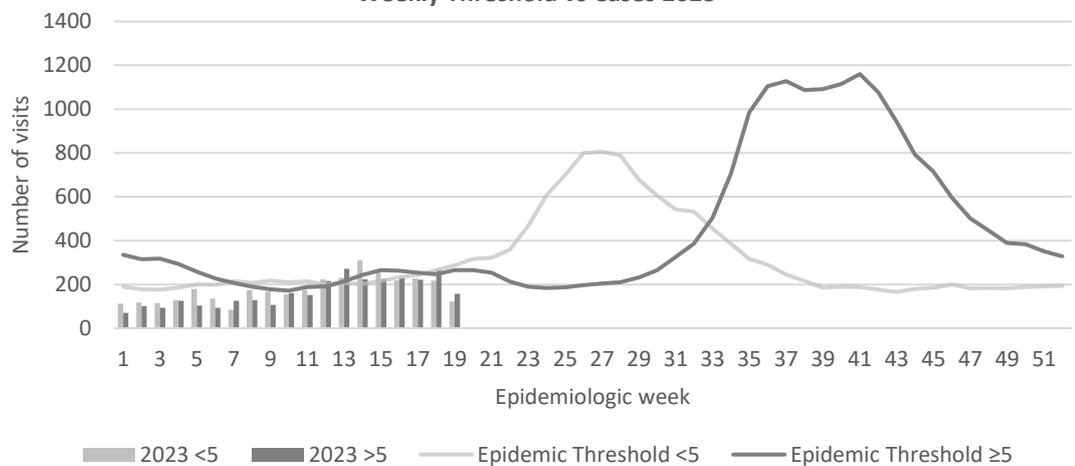
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

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



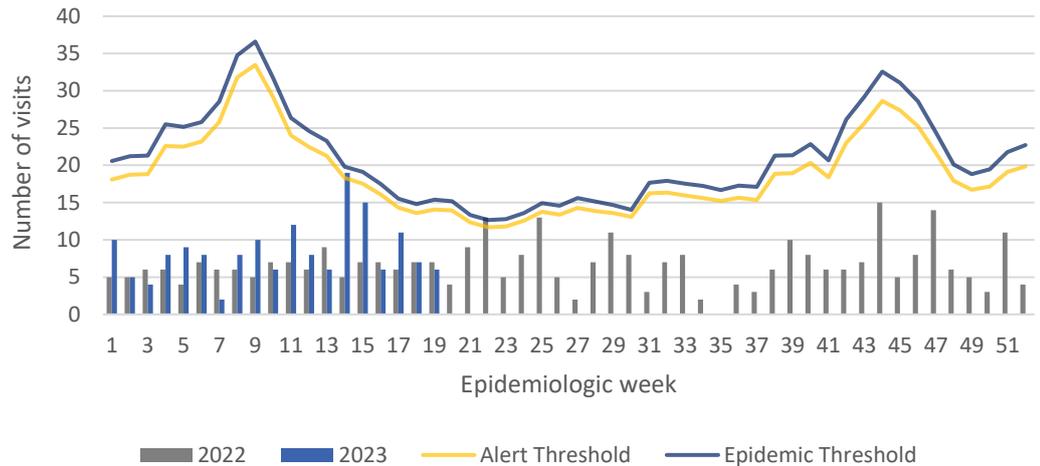
SENTINEL REPORT- 78 sites. Automatic reporting

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

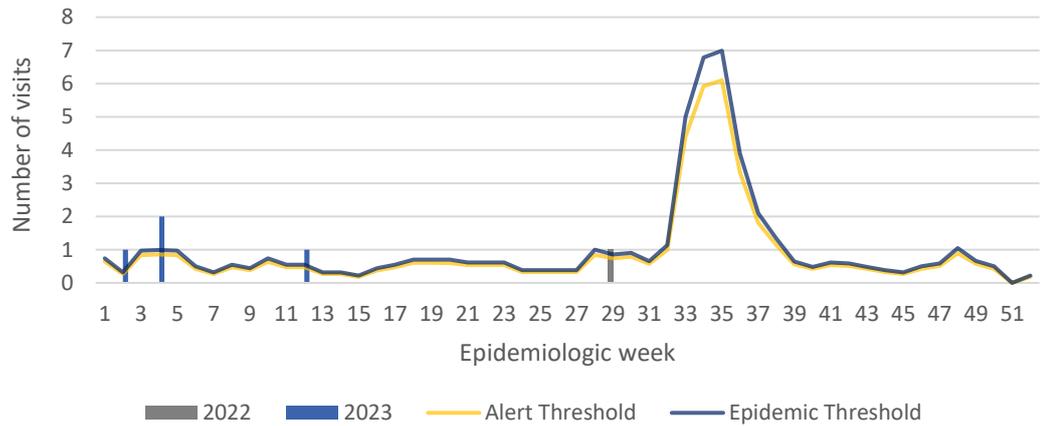


FEVER AND HAEMORRHAGIC

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



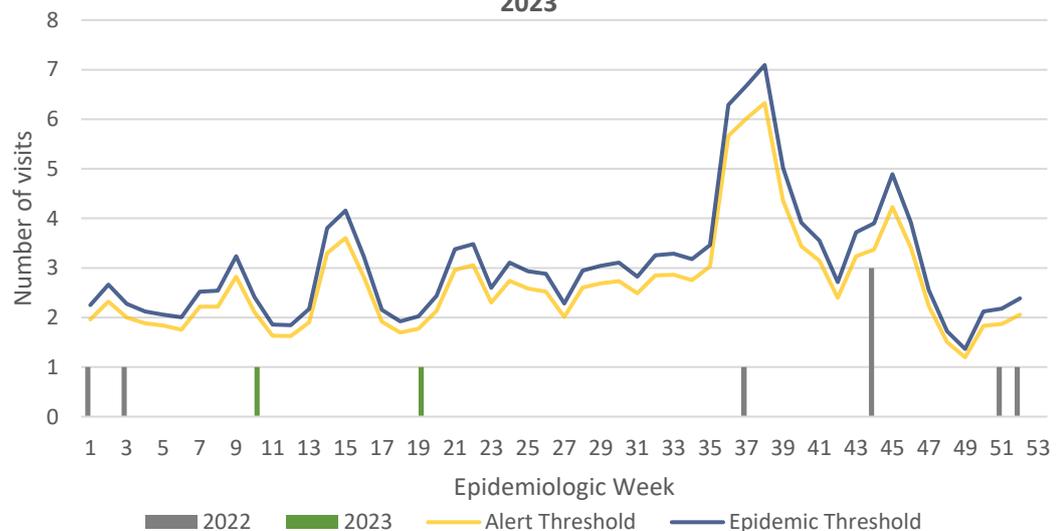
FEVER AND JAUNDICE

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

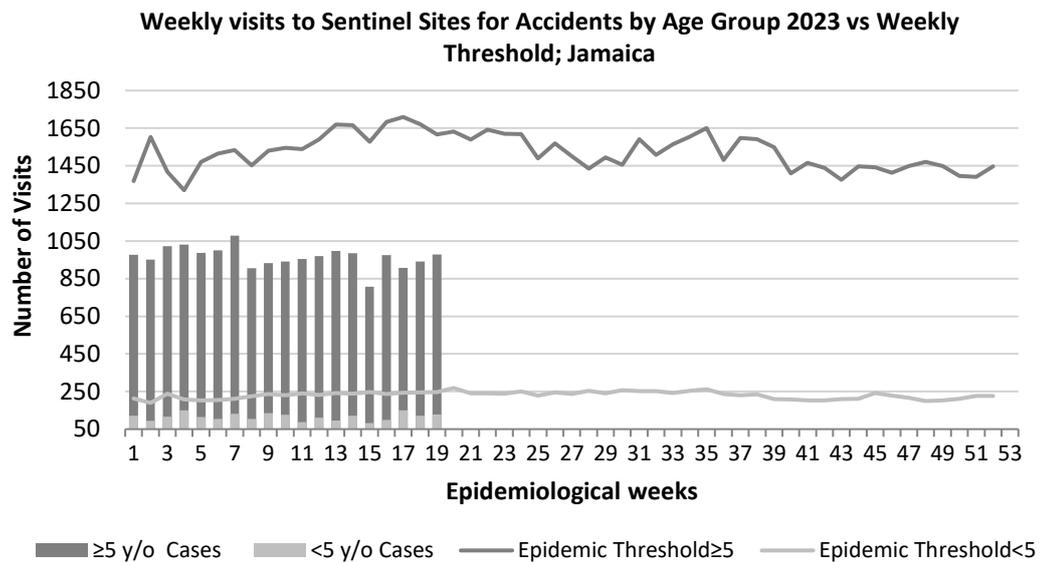


SENTINEL REPORT- 78 sites. Automatic reporting



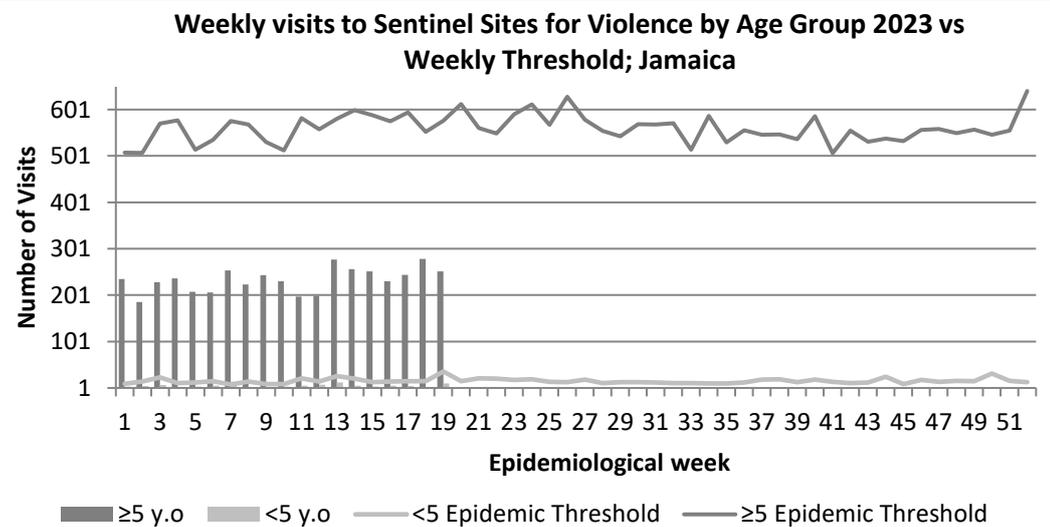
ACCIDENTS

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



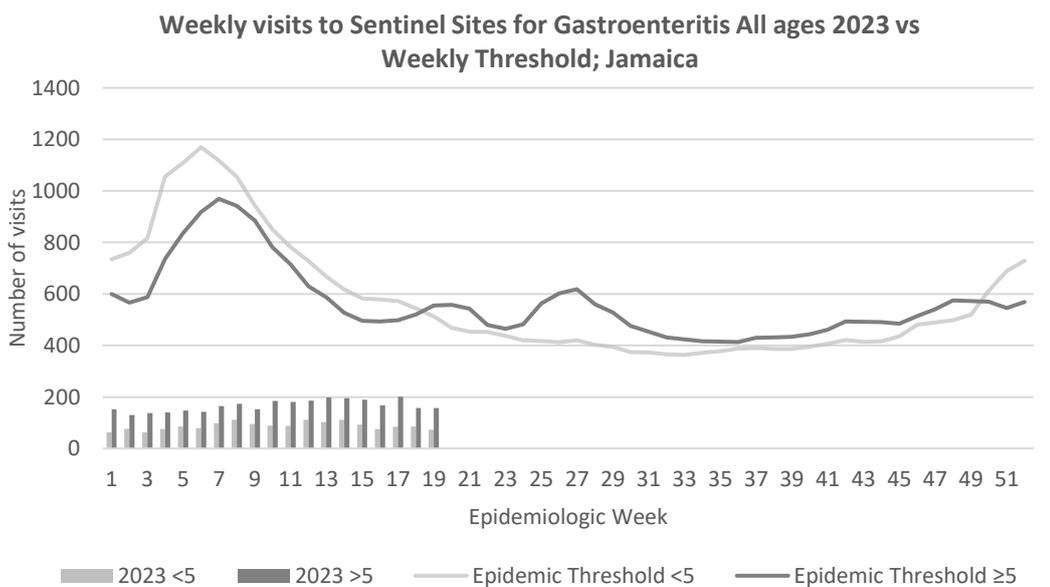
VIOLENCE

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	124 ^β	91 ^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. Pertussis-like syndrome and Tetanus are clinically confirmed classifications. ^γ Dengue Hemorrhagic Fever data include Dengue related deaths; ^δ Figures include all deaths associated with pregnancy reported for the period.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	2054	36110		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	22	6		
	Hepatitis C	8	2		
	HIV/AIDS	N/A	N/A		
	Malaria (Imported)	1	0		
	Meningitis (Clinically confirmed)	12	9		
	Monkeypox	3	N/A		
EXOTIC/ UNUSUAL	Plague	0	0	^ε CHIKV IgM positive cases ^θ Zika PCR positive cases ^β Updates made to prior weeks in 2020.	
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	^α Figures are cumulative totals for all epidemiological weeks year to date.	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths ^δ	17	25		
	Ophthalmia Neonatorum	42	47		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	2		
	Tuberculosis	10	13		
	Yellow Fever	0	0		
	Chikungunya ^ε	0	0		
Zika Virus ^θ	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

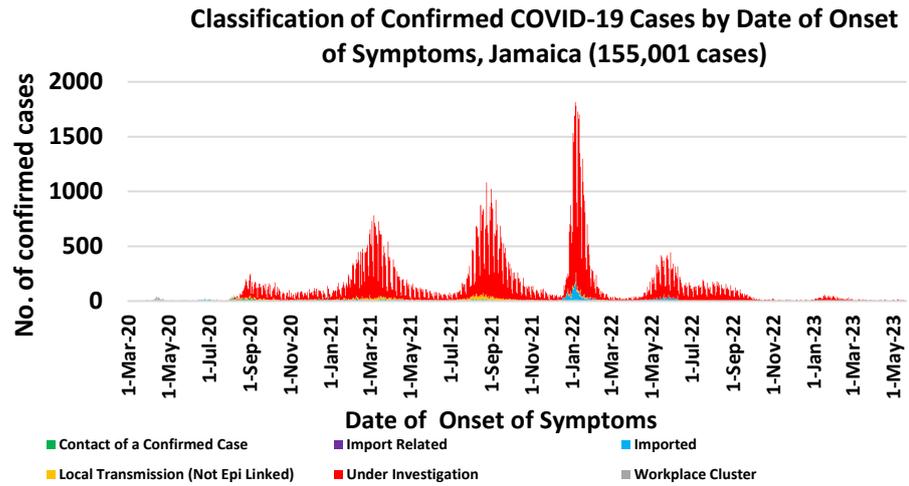


SENTINEL REPORT- 78 sites. Automatic reporting

COVID-19 Surveillance Update

March 10, 2020 – EW 19, 2023

CASES	EW 19	Total
Confirmed	60	155001
Females	39	89408
Males	21	65590
Age Range	3 months to 91 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		



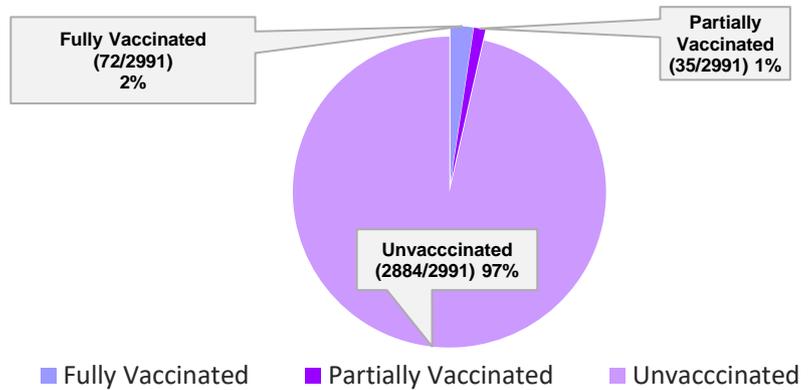
COVID-19 Outcomes

Outcomes	EW 19	Total
ACTIVE *past 2 weeks*		110
DIED – COVID Related	1	3549
Died - NON COVID	0	301
Died - Under Investigation	0	345
Recovered and discharged	4	102964
Repatriated	0	93
Total		155001

*Vaccination programme March 2021 – YTD

2991 COVID-19 Related Deaths since March 1, 2021 – YTD

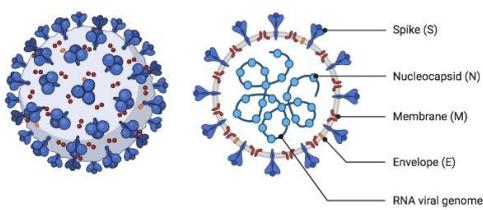
Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

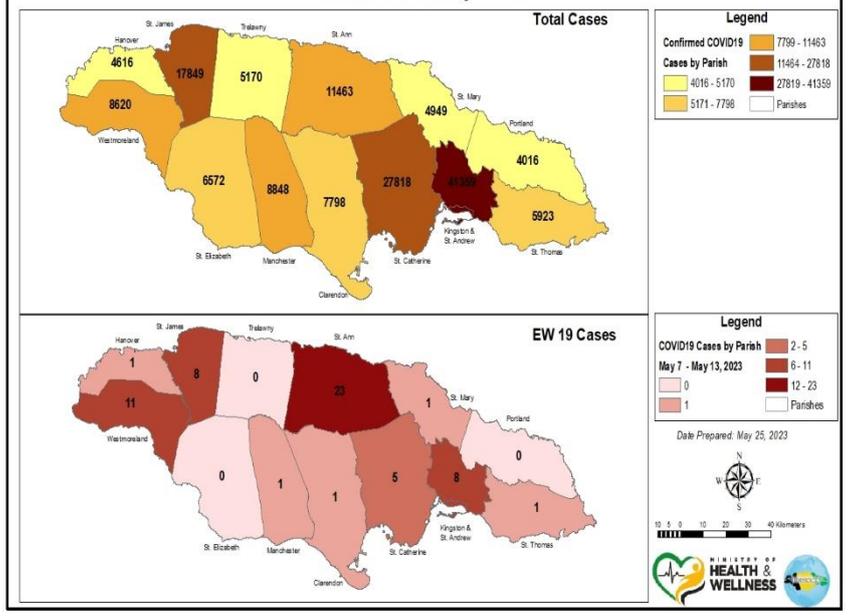
SARS-CoV-2



COVID-19 WHO Global Statistics EW16-EW19

Epi Week	Confirmed Cases	Deaths
16	689,720	4407
17	617,010	4167
18	559,589	4434
19	424,032	1977
Total (4weeks)	2,290,351	14,985

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



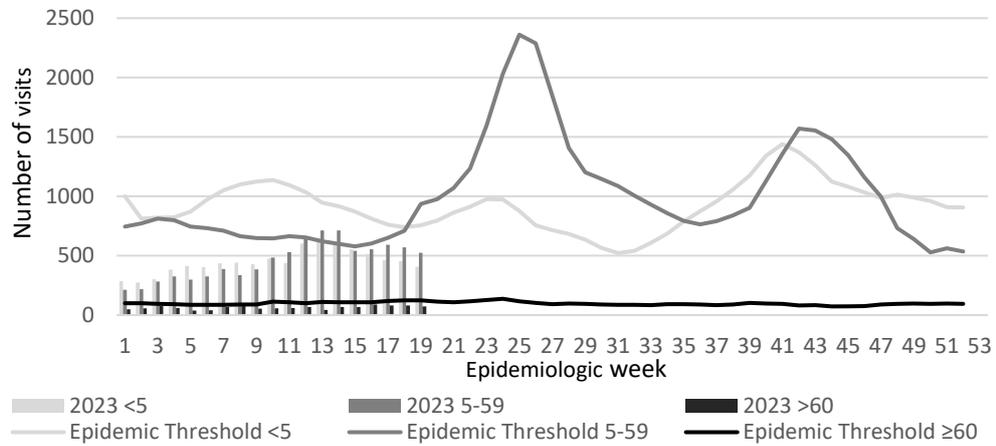
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 19

May 7 – May 13, 2023 Epidemiological Week 19

	<i>EW 19</i>	<i>YTD</i>
SARI cases	13	326
Total Influenza positive Samples	0	82
Influenza A	0	13
H3N2	0	1
H1N1pdm09	0	11
Not subtyped	0	1
Influenza B	0	69
B lineage not determined	0	2
B Victoria	0	67
Parainfluenza	0	1
Adenovirus	0	2
RSV	0	13

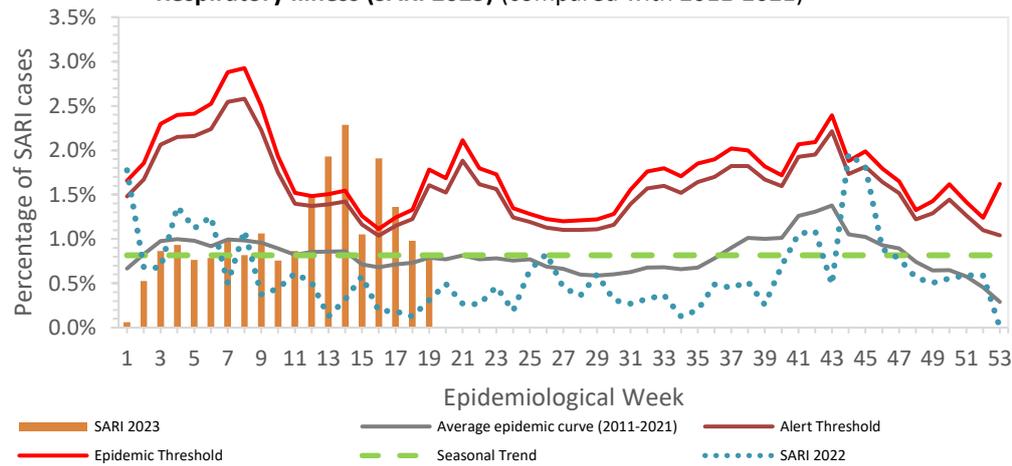
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2023 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 19, thirteen (13) SARI admissions were reported.

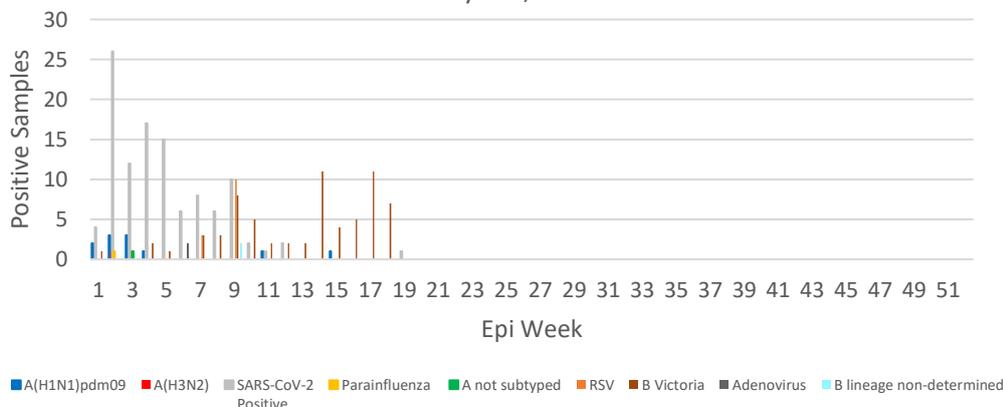
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2023) (compared with 2011-2021)



Caribbean Update EW 19

Caribbean: Influenza activity has shown a rise in recent weeks with medium levels of activity. During the last 4 EW, the predominant influenza viruses have been B/Victoria, with less circulation of influenza A (mostly A(H1N1)pdm09). RSV activity has remained low. SARSCoV- 2 activity has shown a decrease and is currently at low levels of circulation.

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



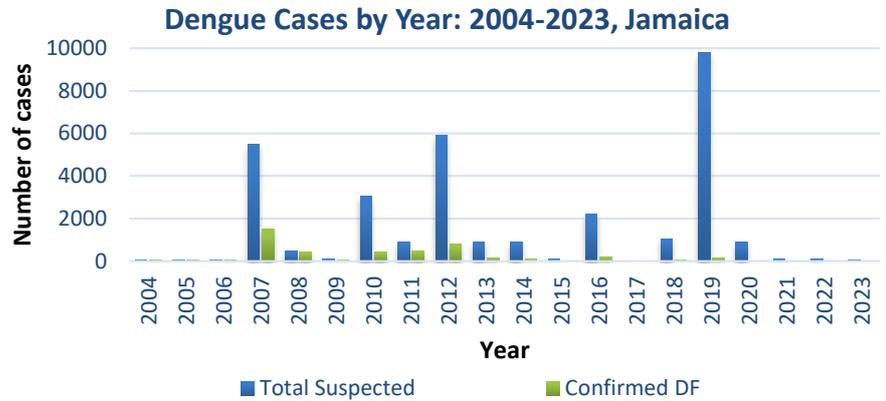
SENTINEL REPORT- 78 sites. Automatic reporting



Dengue Bulletin

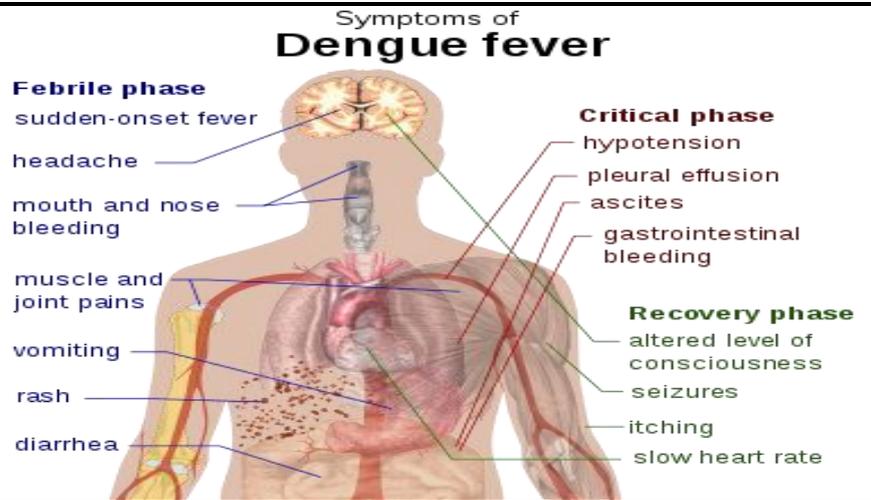
May 7 – May 13, 2023 Epidemiological Week 19

Epidemiological Week 19



Reported suspected and confirmed dengue with symptom onset in week 19 of 2023

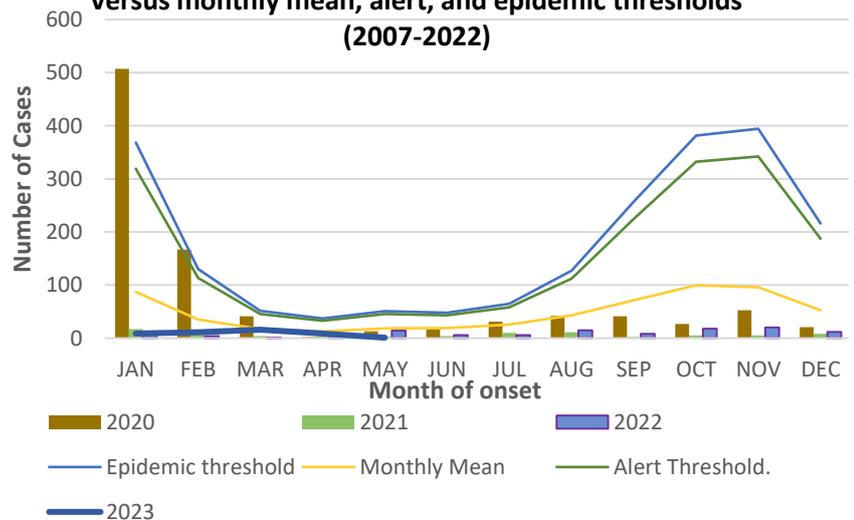
	2023*	
	EW 19	YTD
 Total Suspected Dengue Cases	1	46
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at May 13, 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

Title: Paternal Parenting and Depressive Symptoms in Adolescents

Author: Nickiesha Natasha Passard

Corresponding Author: Nickiesha Natasha Passard (Nickiesha.Passard@utech.edu.jm)

Institution: The University of Technology, Jamaica

Objectives

This current research seeks to examine the relationship between adolescents' perception of paternal parenting and self-reported depressive symptoms. Hence, this study aimed to answer the following research questions: 1) What is the degree of nurturance, monitoring and discipline adolescents perceive they receive from their paternal parent? 2) Which paternal parenting style is most prevalent in Jamaica? 3) Which paternal parenting style is associated with higher levels of depressive symptoms among Jamaican adolescents? and 4) Which paternal parenting style is associated with lower levels of depressive symptoms among Jamaican adolescents?

Method

Stratified random sampling technique was used to obtain participants from three traditional high schools in Jamaica (Merl Grove High, Calabar High and Camperdown High). A total of 120 fourth form students participated in this study.

Results

The results revealed that the majority of the sample (56.7%) reported that their paternal parent's style of parenting as being highly authoritative. Authoritarian paternal parenting style was associated with a higher level of depressive symptoms while authoritative paternal parenting style was associated with a lower level of depressive symptoms.

Conclusion

It may be deduced that the majority of the fathers in Jamaica are effective in their style and dimensions of parenting. However while most fathers appear to be parenting in a healthy manner, there is still need for concern for those adolescents who are exposed to authoritarian and permissive parenting since the style of parenting used has the potential to impact children's emotional health.



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 9 NOTIFICATIONS-
All clinical
sites

 INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events

 HOSPITAL
ACTIVE
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30 sites. Actively
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 SENTINEL
REPORT- 78 sites.
Automatic reporting