WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Rheumatoid Arthritis

Rheumatoid arthritis (RA) is a chronic disease that causes inflammation around the body and commonly presents with pain in the joints.Untreated, RA can cause severe damage to the joints and their surrounding tissue. It can lead to heart, lung or nervous system problems.

Common symptoms include chronic pain, stiffness, tenderness, heat and swelling in the joints. RA can make it hard to move and perform daily activities.The causes of rheumatoid arthritis are unknown. Risk factors include smoking, obesity and exposure to air pollution. Women and older people have a higher risk of developing RA.

If diagnosed timely, symptoms and disease progression can be controlled with pharmacological treatment, and optimal functioning can be maintained through rehabilitation (including the use of assistive products). In cases with severe joint damage, surgical procedures, including joint replacement, may help to restore movement or manage pain, and maintain physical function.

Treatment and management

Rheumatoid arthritis is not curable. Management of rheumatoid arthritis often involves different health workers, who contribute to a rehabilitative strategy tailored to a person's needs and preferences.Early diagnosis and management can reduce symptoms, slow the disease and prevent disability. In some cases, the disease can go into remission.

Therapeutic approaches help to improve and maintain joint mobility and muscle strength, to reduce and cope with pain, and to increase exercise capacity and the ability to perform daily activities.

Assistive technologies (e.g., orthosis, assistive products for self-care) help people to protect their joints and to perform meaningful activities independently.

Medicines to reduce inflammation, pain and swelling may include:

- non-steroidal anti-inflammatory drugs (NSAIDs)
- glucocorticoids
- disease-modifying antirheumatic drugs (DMARDs)
- biological agents.

https://www.who.int/news-room/fact-sheets/detail/rheumatoid-arthritis

EPI WEEK 30

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 – 27 to 30 of 2023

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

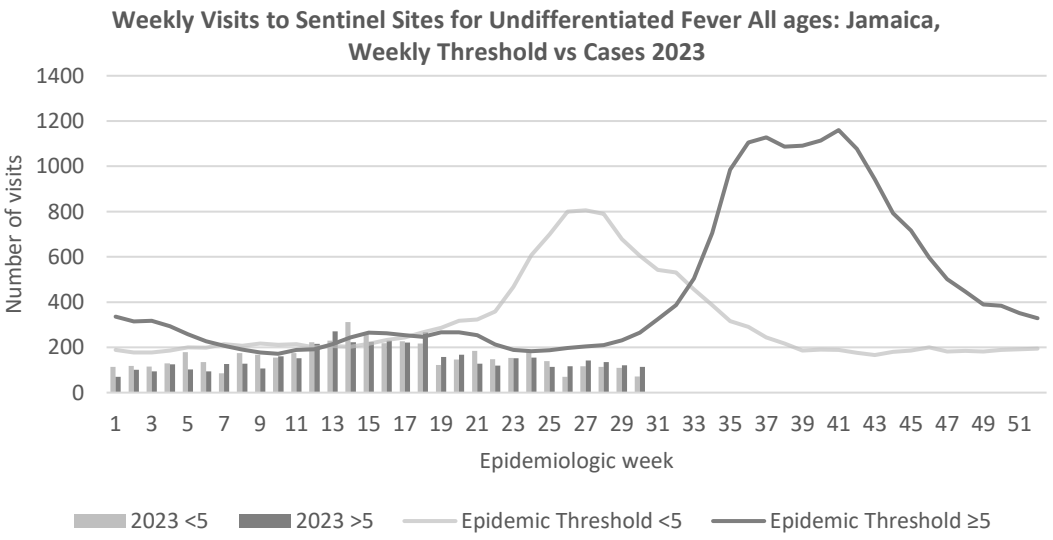
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
27	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
28	Late (T)	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
29	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
30	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 >38^0C /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



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

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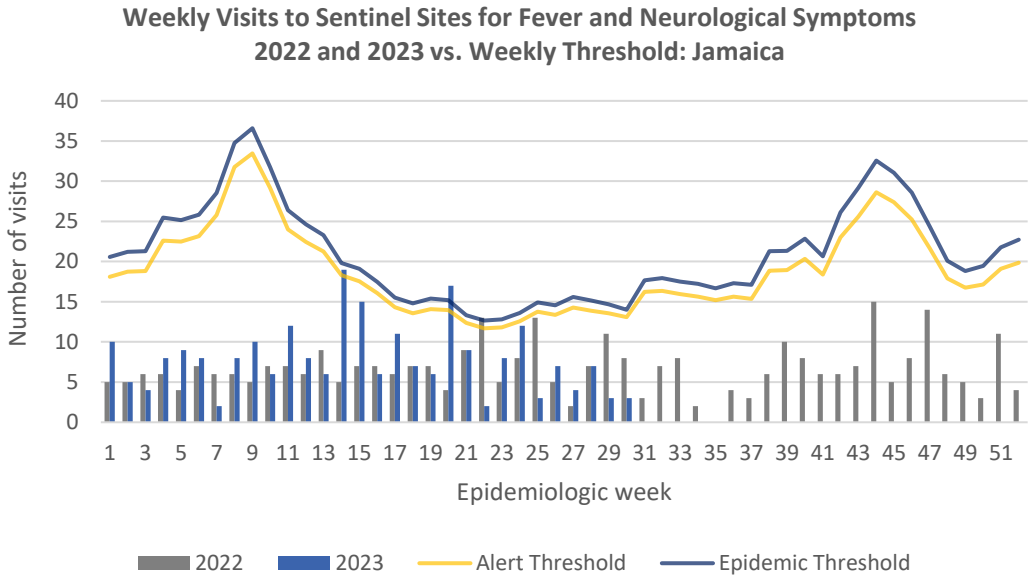
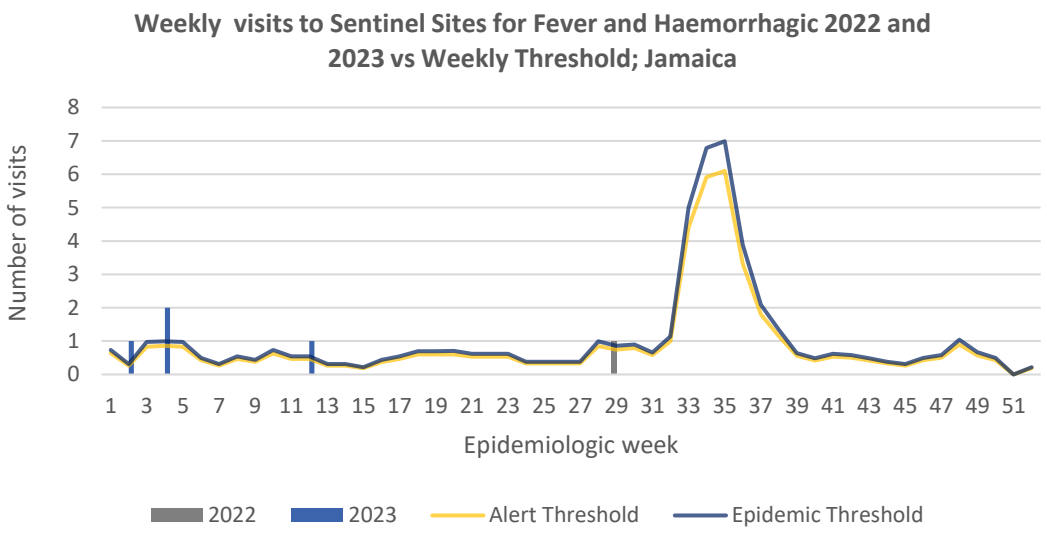
FEVER AND NEUROLOGICAL

Temperature of >38^{0}C /100.4^{0}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).



FEVER AND HAEMORRHAGIC

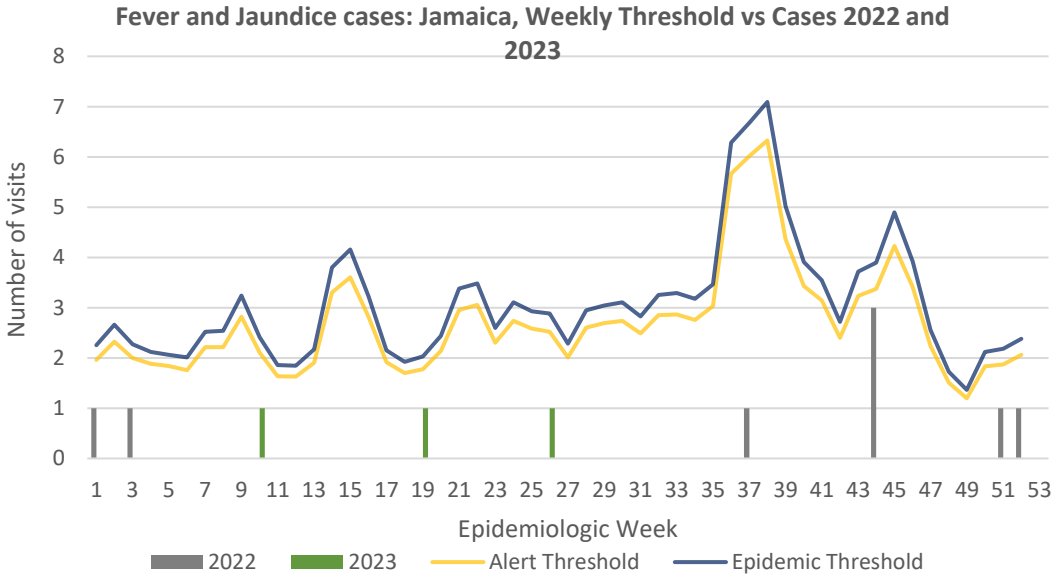
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE

Temperature of >38^0C /100.4^0F (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.



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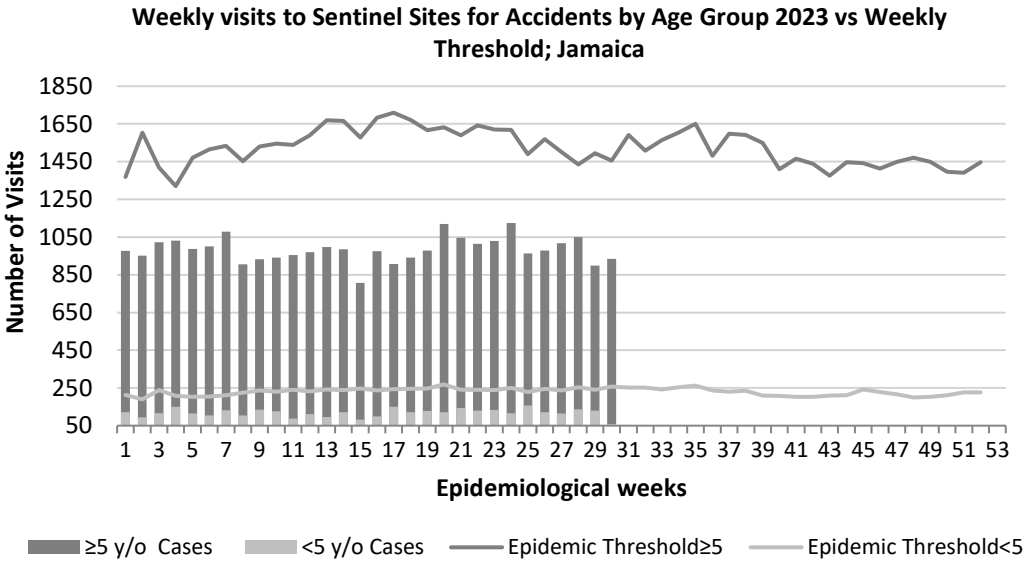
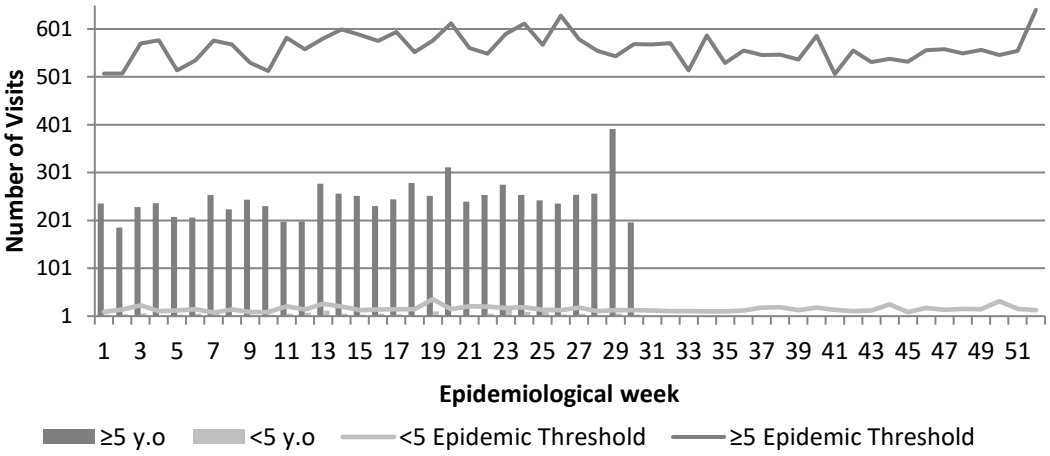
ACCIDENTS

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



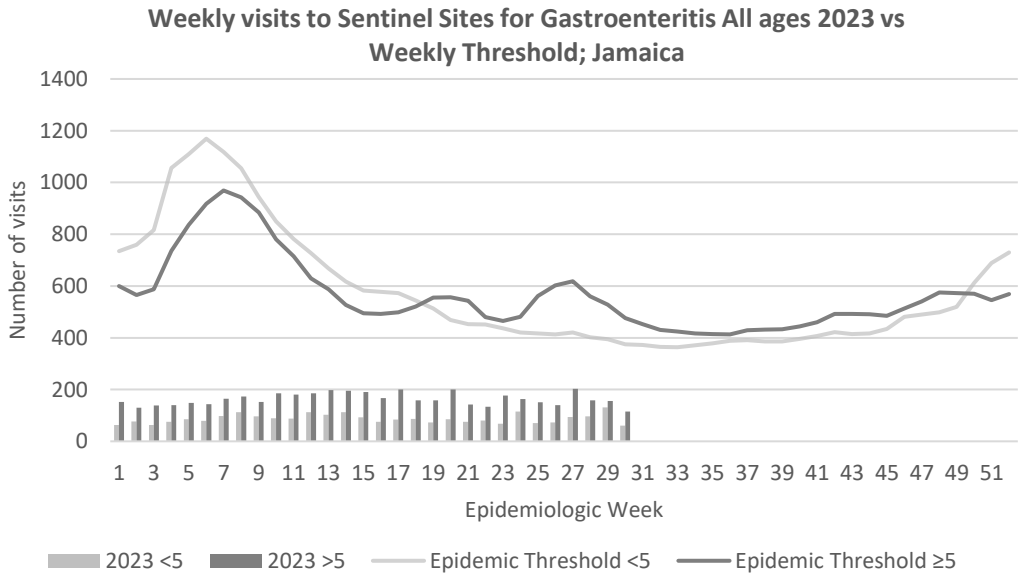
VIOLENCE

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.



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CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS		Confirmed YTD[α] CURRENT YEAR 2023	Confirmed YTD[α] PREVIOUS YEAR 2022
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		192[β]	130[β]
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		3147	49502
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		37	8
	Hepatitis C		15	2
	HIV/AIDS		N/A	N/A
	Malaria (Imported)		3	0
	Meningitis (Clinically confirmed)		19	13
	Monkeypox		3	2
EXOTIC/ UNUSUAL	Plague		0	0
H IGH 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[δ]		27	46
	Ophthalmia Neonatorum		74	48
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	2
	Tuberculosis		19	13
	Yellow Fever		0	0
	Chikungunya[ε]		0	0
	Zika Virus[θ]		0	0

Comments

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.

[ε] CHIKV IgM positive cases

[θ] Zika PCR positive cases

[β] Updates made to prior weeks in 2020.

[α] Figures are cumulative totals for all epidemiological weeks year to date.

NA- Not Available

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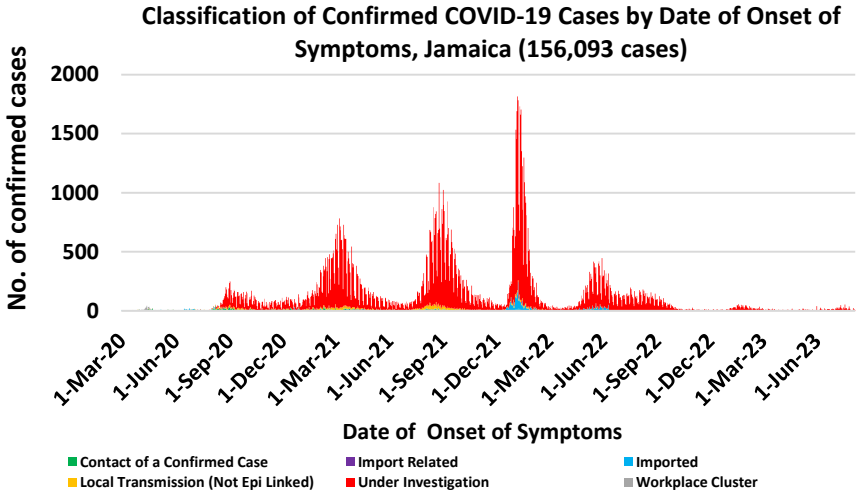
COVID-19 Surveillance Update

March 10, 2020 – EW 30, 2023

CASES	EW 30	Total
Confirmed	138	156093
Females	61	89990
Males	77	66100
Age Range	60 days old to 92 years	1 day to 108 years

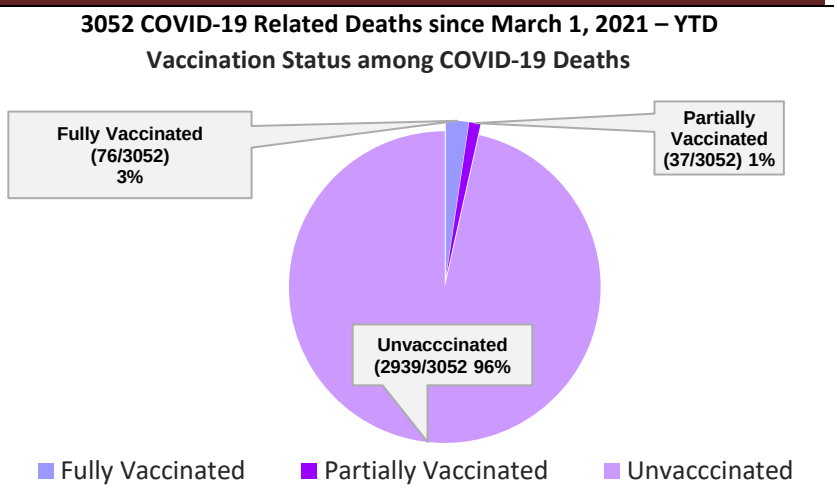
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases



COVID-19 Outcomes

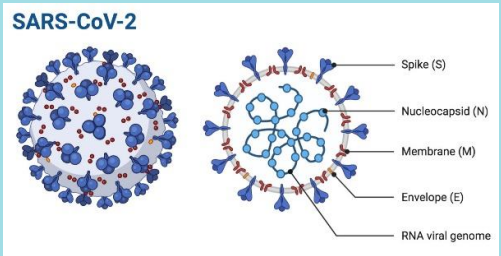
Outcomes	EW 30	Total
ACTIVE *past 2 weeks*		319
DIED – COVID Related	0	3614
Died - NON COVID	0	320
Died - Under Investigation	0	292
Recovered and discharged	27	103138
Repatriated	0	93
Total		156093

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



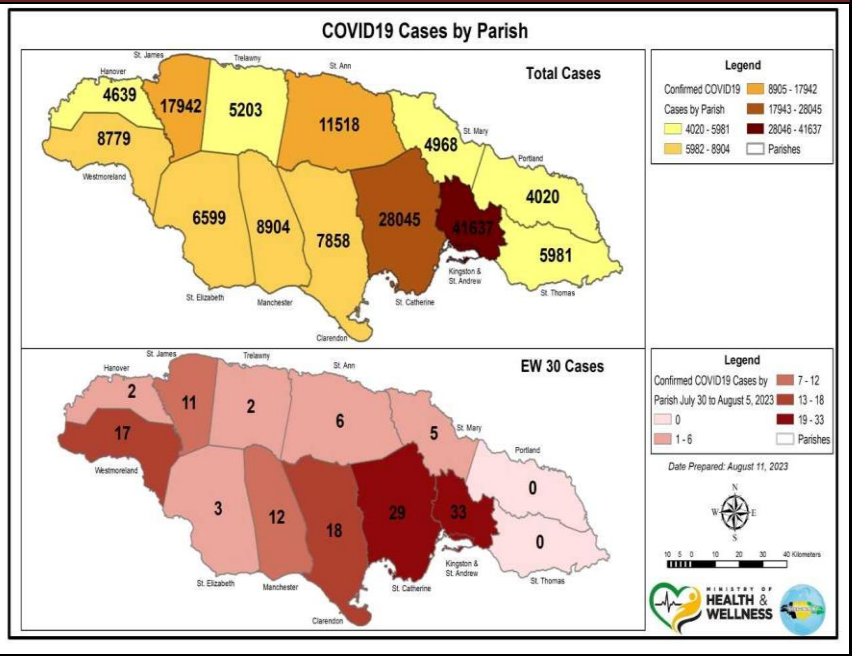
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW27-EW30

Epi Week	Confirmed Cases	Deaths
27	217,834	664
28	270,109	647
29	331,308	674
30	672,959	575
Total (4weeks)	**1,492,210**	**2560**



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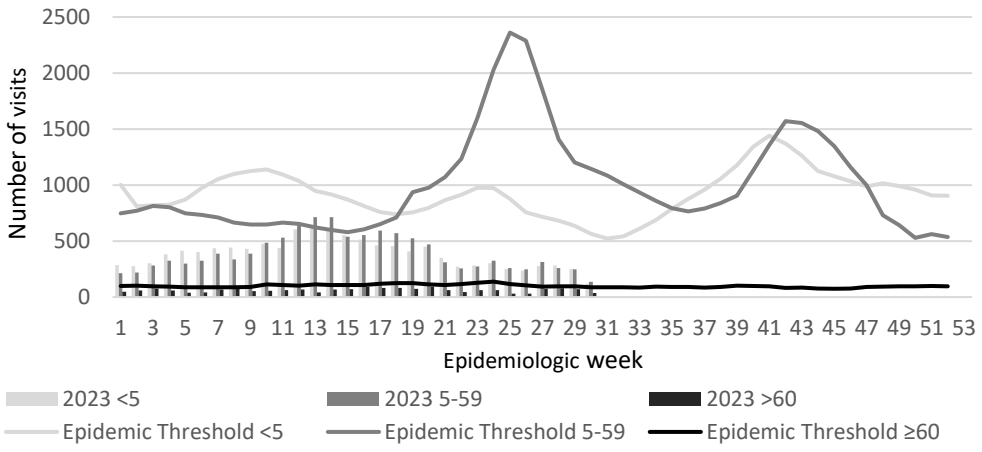
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 30

July 23 – July 29, 2023 Epidemiological Week 30

	EW 30	*YTD*
SARI cases	**4**	**422**
Total Influenza positive Samples	**0**	**168**
Influenza A	**0**	**15**
H3N2	0	1
H1N1pdm09	0	13
Not subtyped	0	1
Influenza B	**0**	**137**
B lineage not determined	**0**	**2**
B Victoria	**0**	**135**
Parainfluenza	**0**	**1**
Adenovirus	**0**	**2**
RSV	**0**	**13**

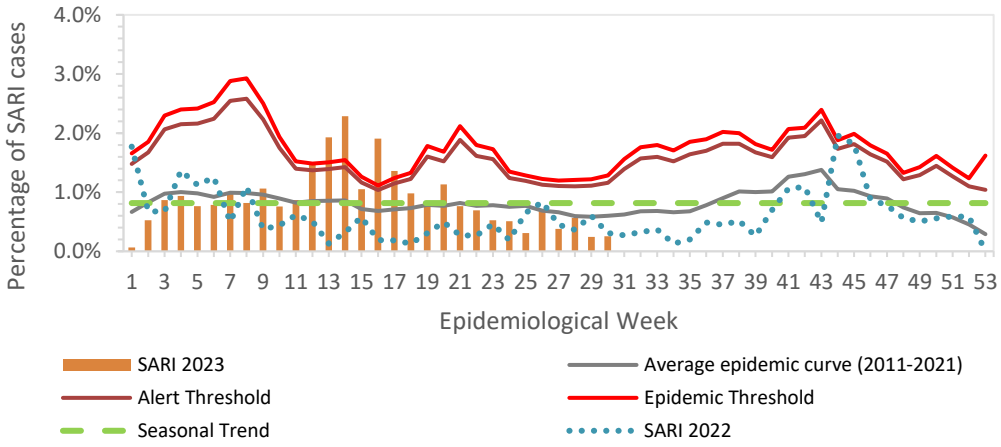
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2023 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 30, four (4) SARI admissions were reported.

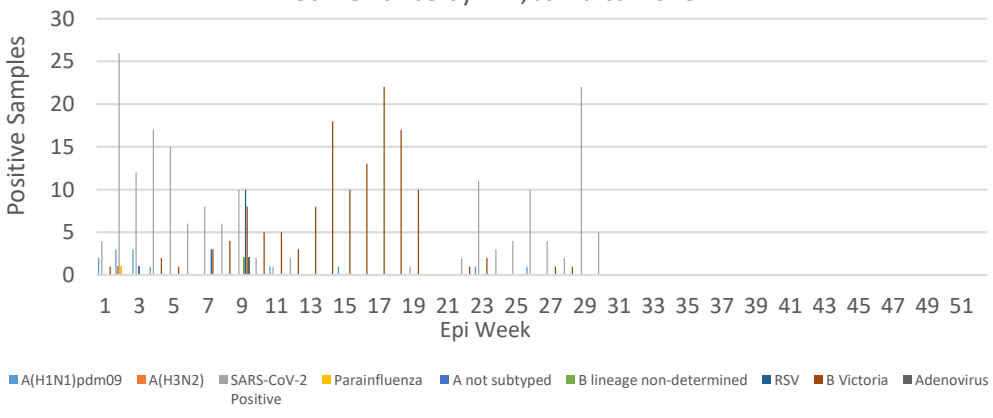
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2023) (compared with 2011-2021)



Caribbean Update EW 30

Caribbean: After an increase in previous weeks, influenza activity has shown a fluctuating trend, now at moderate levels of activity. During the last 4 EWs, the predominant influenza viruses have been B/Victoria, with a lesser circulation of influenza A, mainly A(H1N1)pdm09. RSV activity has remained low. SARS-CoV-2 activity has increased in the recent EWs and is currently at intermediate circulation levels. ILI and SARI cases, after an increase due to positive SARS-CoV-2 and influenza cases in the previous EWs, have shown a decreasing trend in the last 4 EWs.

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



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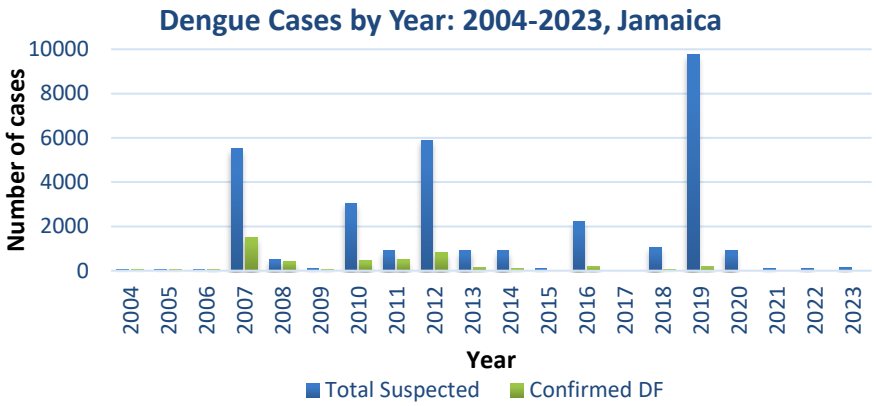
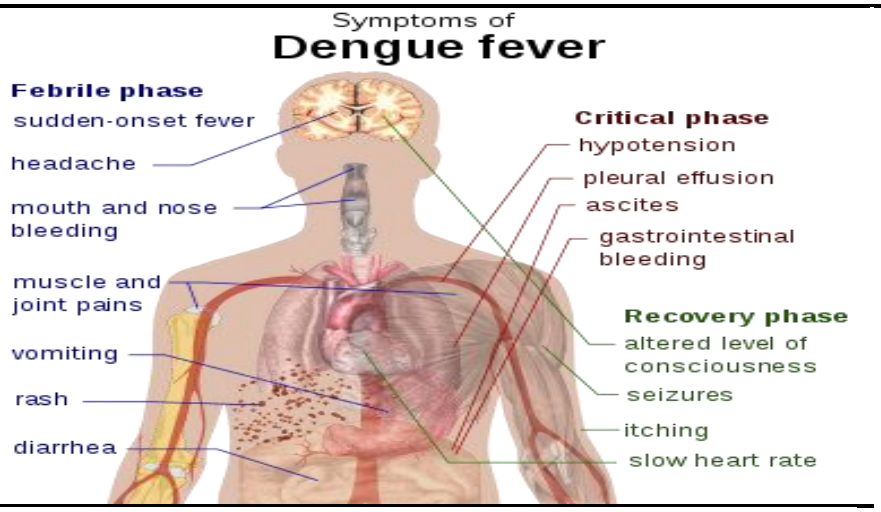
Dengue Bulletin

July 23 – July 29, 2023 Epidemiological Week 30 | Epidemiological Week 30



Reported suspected and confirmed dengue with symptom onset in week 30 of 2023

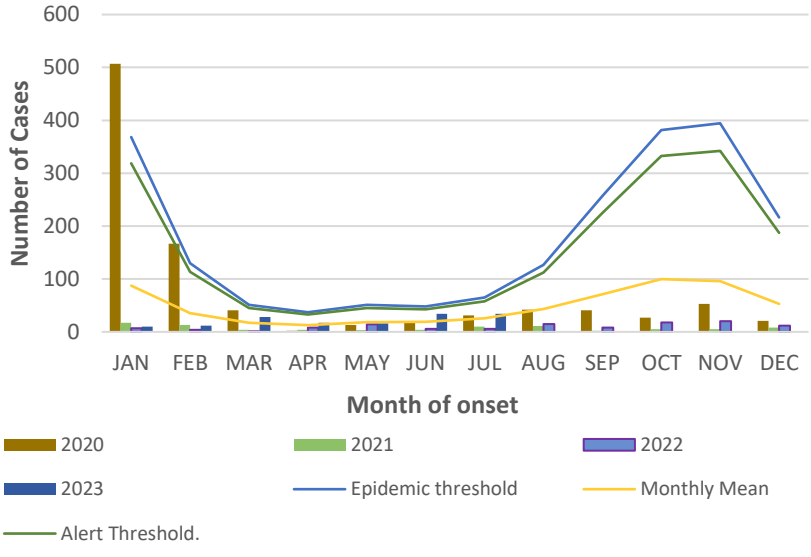
	2023*	
	EW 30	YTD
Total Suspected Dengue Cases	7	151
Lab Confirmed Dengue cases	0	9
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at July 29, 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)



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RESEARCH PAPER

Abstract

Knowledge, Attitudes, and Practices on the Control of the Dengue Vector in Selected Parishes in Jamaica

Tanya Barclay, Mickhail Benjamin, Najaee Brown, Janine Chattoo, Sabrina DaCosta, Tiffany Francis, Errol Gordon, Bryton Kinlock, Kameisha Maynard, Tyler Narsingh, Matthew Preston, Shemara Rhoden, Reneice Scott, Javon Smith, Shanelle Thomas, Dr. Norman Waldron, Deidre- Symone Wills

University of the West Indies, Mona

INTRODUCTION: Dengue is an arboviral infection transmitted through female mosquito bites, contributing to morbidity and mortality globally, regionally, and locally. Dengue has re-emerged in Jamaica, totaling 339 suspected and confirmed cases including six deaths from January 1st to 21st 2019.

METHODS: A cross-sectional study of Jamaican adults registered at Healthcare Centres was done, employing a Systematic Random Sampling strategy to administer 150 Interviewer-Assisted Questionnaires.

RESULTS: A composite score ranging from 0-10 was used to measure the mean knowledge of Dengue transmission, where participants had a mean score of 7.2 (S.D=1.3). Statistical significance with regards to age (p=.030) and educational level (p=.004) was present. A composite score ranging from 5-25 was used to determine participants' attitude towards Dengue vector control and prevention. The mean attitude score was 21.7 (SD 3.0), with no statistically significant difference in socioeconomic and demographic characteristics. Most participants (89.3%) utilize Dengue vector prevention methods.

CONCLUSION: Despite the limitations encountered, the findings suggest that there is good knowledge of & attitude to the Dengue virus and transmission in Jamaica. Even though persons were not knowledgeable about the signs and symptoms of Dengue, majority utilized effective preventative and control methods. Certainly, these findings may serve as a template for further in-depth research as well as health promotion & education of the public to aid in the prevention of future Dengue outbreaks.

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