WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Cervical Cancer

Cervical cancer is the fourth most common cancer in women globally with around 660 000 new cases and around 350 000 deaths in 2022. Cervical cancer is caused by persistent infection with the human papillomavirus (HPV). Women living with HIV are 6 times more likely to develop cervical cancer compared to women without HIV. Cervical cancer can be cured if diagnosed at an early stage and treated promptly. Cervical cancer disproportionately affects younger women, and as a result, 20% of children who lose their mother to cancer do so due to cervical cancer.

Causes

Human papillomavirus (HPV) is a common sexually transmitted infection which can affect the skin, genital area and throat. Almost all sexually active people will be infected at some point in their lives, usually without symptoms. In most cases the immune system clears HPV from the body. Persistent infection with high-risk HPV can cause abnormal cells to develop, which go on to become cancer.

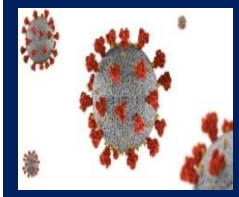
Persistent HPV infection of the cervix (the lower part of the uterus or womb, which opens into the vagina – also called the birth canal) if left untreated, causes 95% of cervical cancers. Typically, it takes 15–20 years for abnormal cells to become cancer, but in women with weakened immune systems, such as untreated HIV, this process can be faster and take 5–10 years. Risk factors for cancer progression include the grade of oncogenicity of the HPV type, immune status, the presence of other sexually transmitted infections, number of births, young age at first pregnancy, hormonal contraceptive use, and smoking.

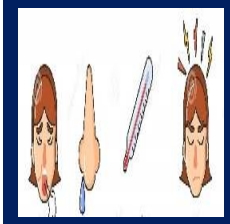
Prevention

Boosting public awareness, access to information and services are key to prevention and control across the life course.Being vaccinated at age 9–14 years is a highly effective way to prevent HPV infection, cervical cancer and other HPV-related cancers.Screening from the age of 30 (25 years in women living with HIV) can detect cervical disease, which when treated, also prevents cervical cancer.At any age with symptoms or concerns, early detection followed by prompt quality treatment can cure cervical cancer.

Taken from WHO website on 12/ Apr/2024
https://www.who.int/news-room/fact-sheets/detail/cervical-cancer

EPI WEEK 13





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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 – 10 to 13 of 2024

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

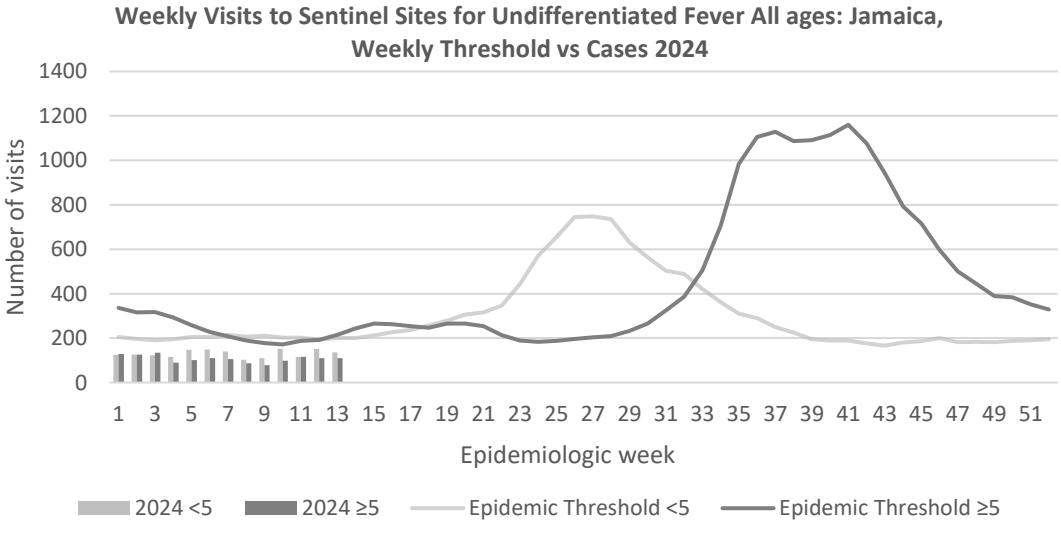
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2024													
10	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time
11	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
12	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
13	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	late (T)	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

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HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

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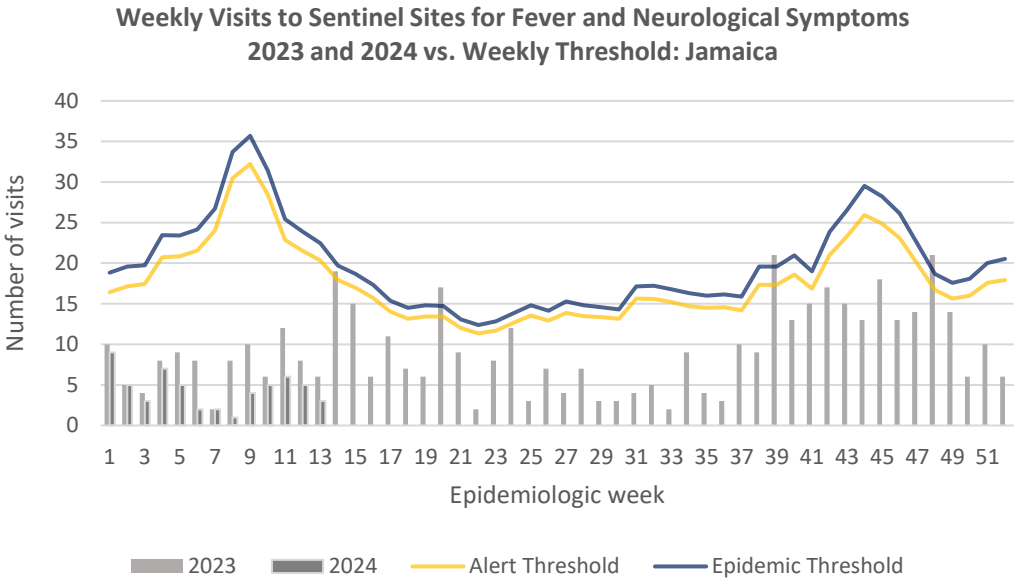
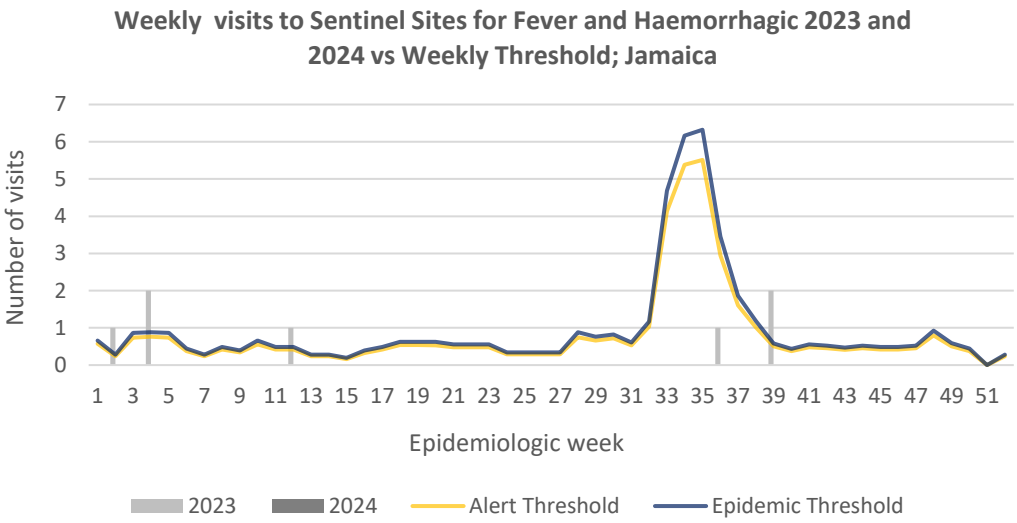
FEVER AND NEUROLOGICAL

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

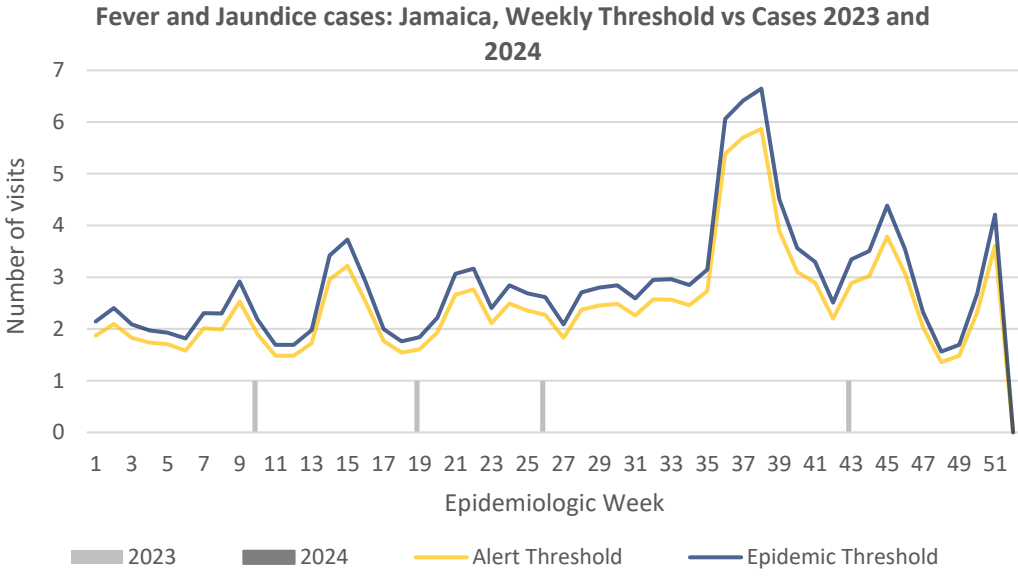
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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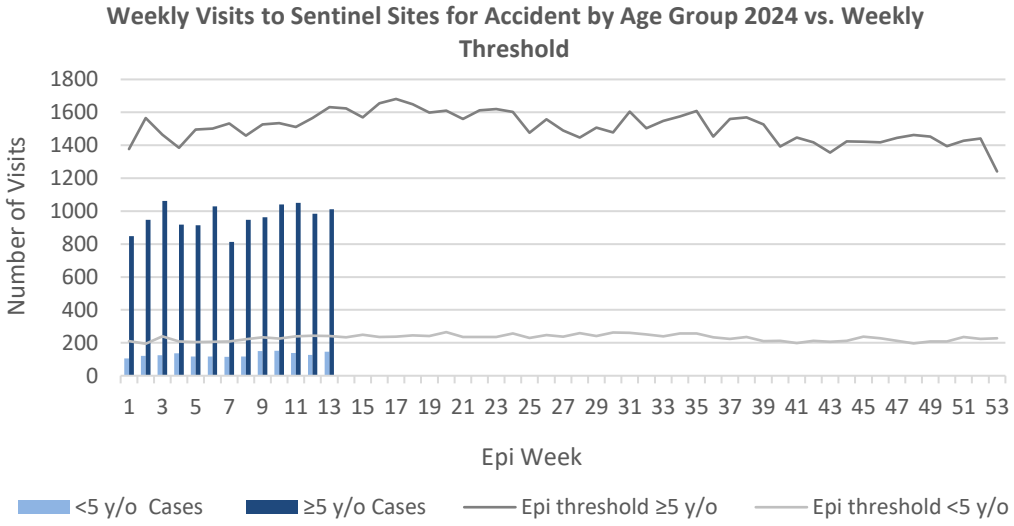
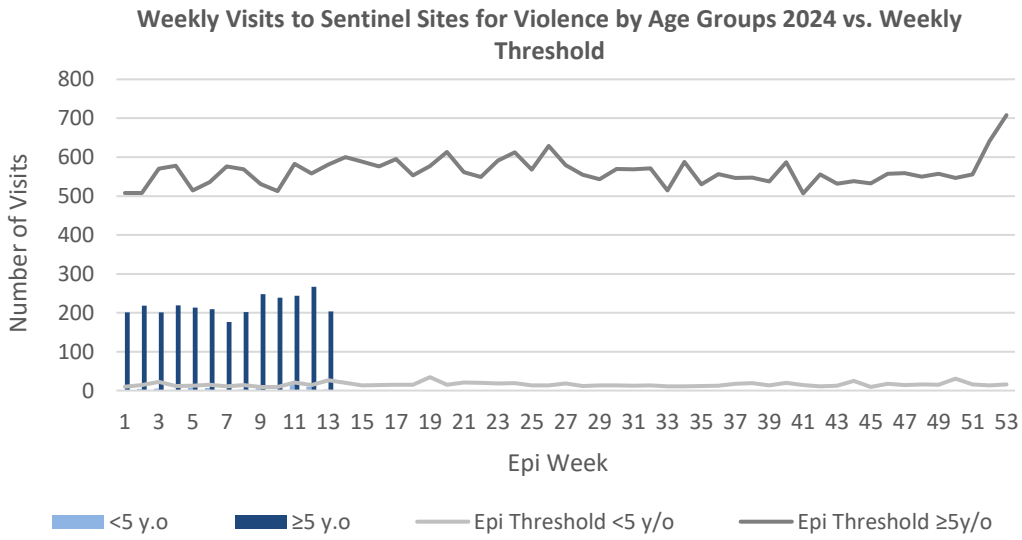
ACCIDENTS

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



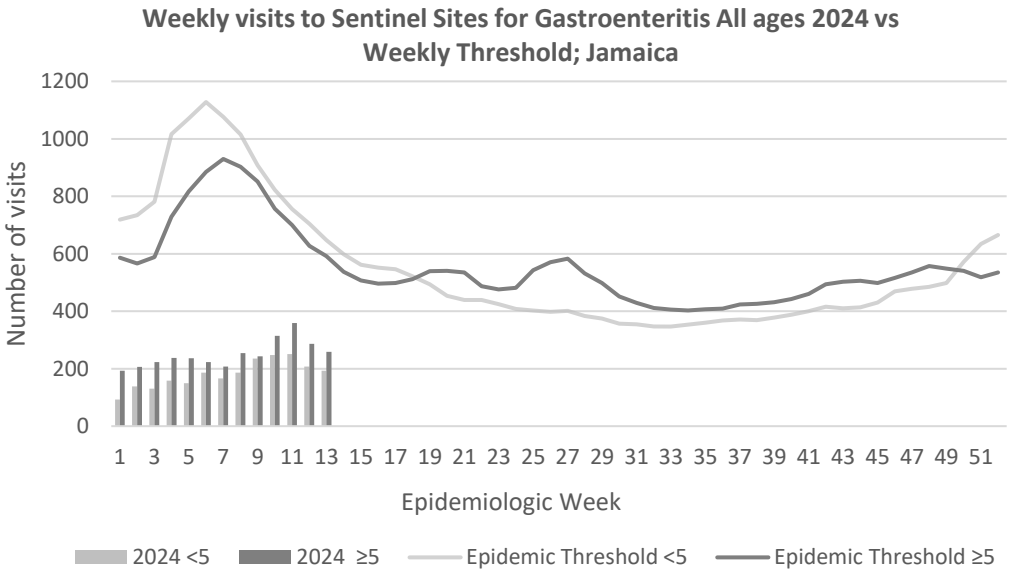
VIOLENCE

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 2024	PREVIOUS YEAR 2023
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		87[β]	81[β]
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		160	1771
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		1	24
	Hepatitis C		0	7
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		5	14
	Monkeypox		0	3
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]		11	12
	Ophthalmia Neonatorum		21	33
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		4	19
	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.

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

NA- Not Available

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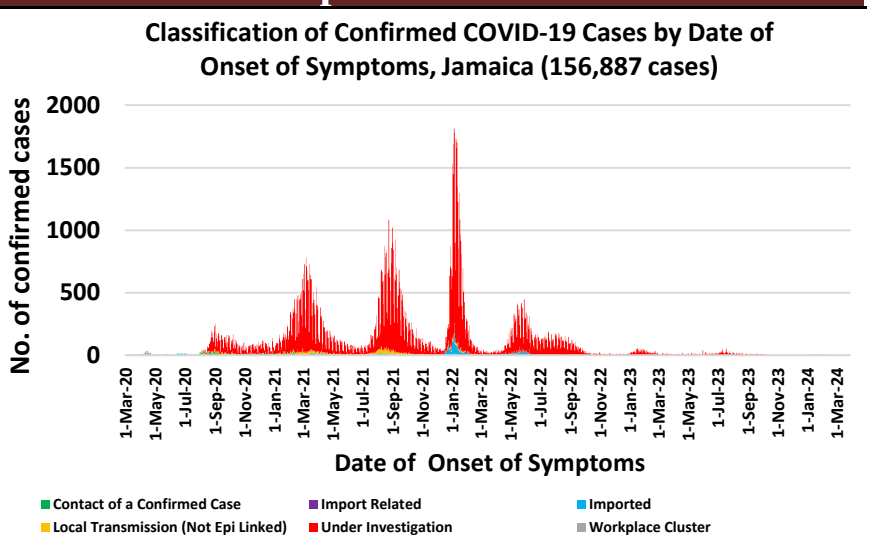
COVID-19 Surveillance Update

CASES	EW 13	Total
Confirmed	4	156887
Females	2	90414
Males	2	66470
Age Range	11 months to 74 years	1 day to 108 years

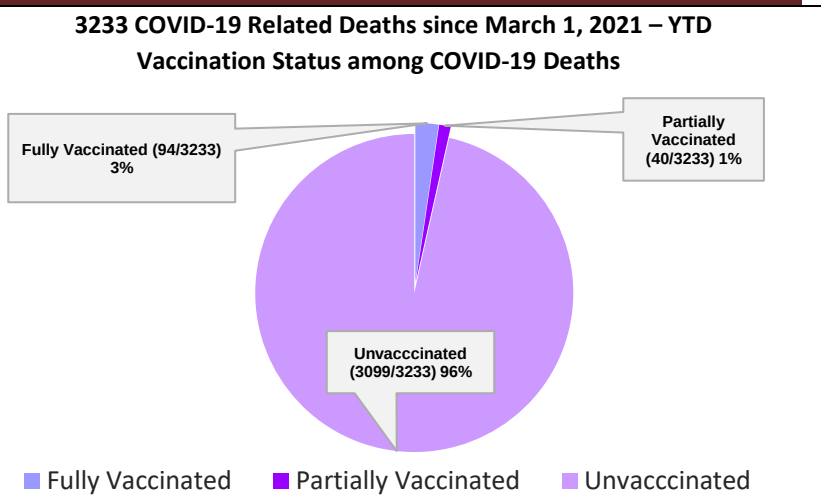
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

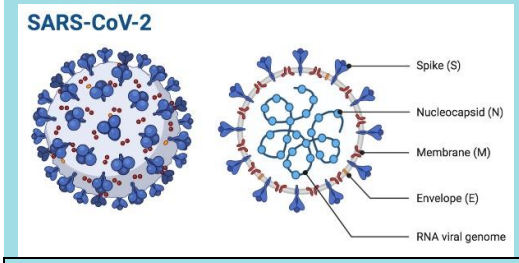
Outcomes	EW 13	Total
ACTIVE *2 weeks*		8
DIED – COVID Related	0	3792
Died - NON COVID	0	368
Died - Under Investigation	0	206
Recovered and discharged	0	103226
Repatriated	0	93
Total		156887

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



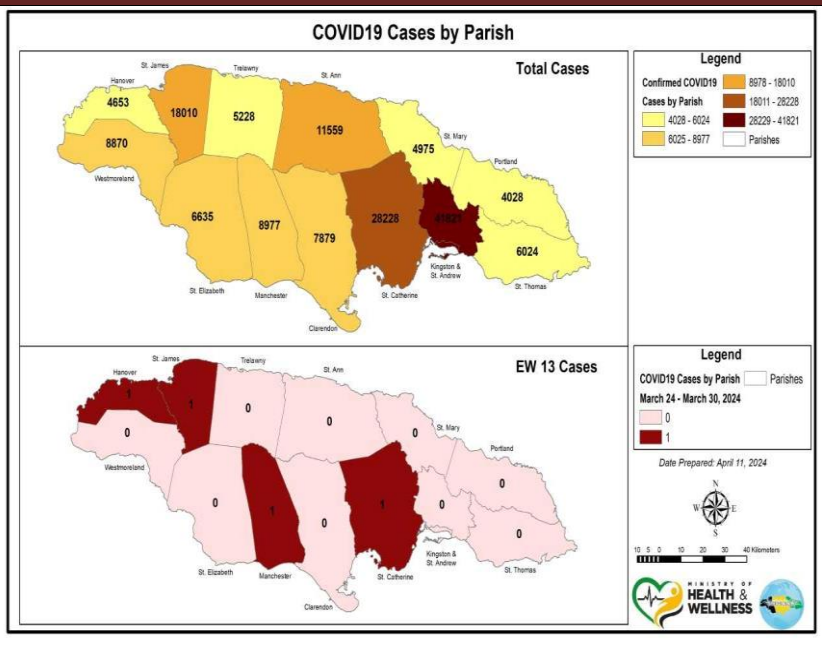
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 10-13, 2024

Epi Week	Confirmed Cases	Deaths
10	69,100	1,600
11	58,300	1,300
12	54,400	1,100
13	42,400	864
Total (4weeks)	**224, 200**	**4, 864**



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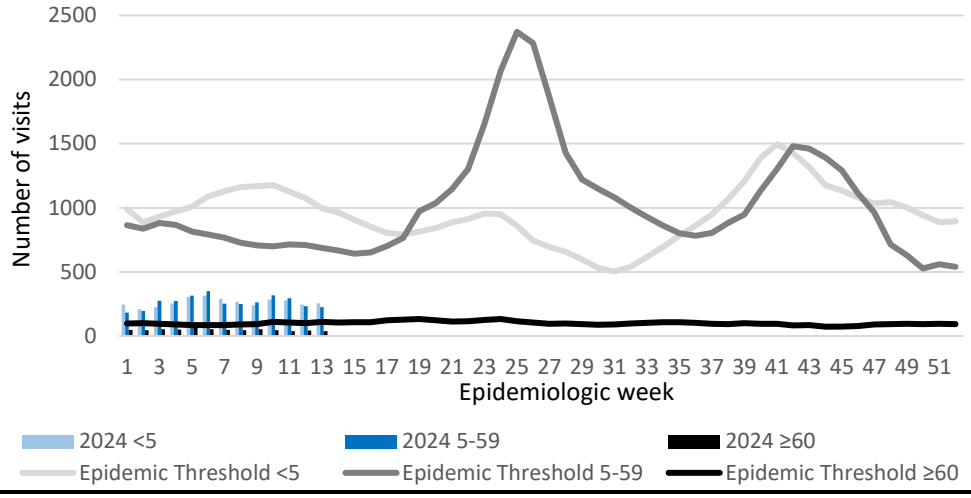
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 13

March 24, 2024 – March 30, 2024 Epidemiological Week 13

	EW 13	*YTD*
SARI cases	6	96
Total Influenza positive Samples	**0**	**39**
Influenza A	**0**	**39**
H3N2	0	11
H1N1pdm09	0	28
Not subtyped	0	0
Influenza B	**0**	**0**
B lineage not determined	0	0
B Victoria	0	0
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	17

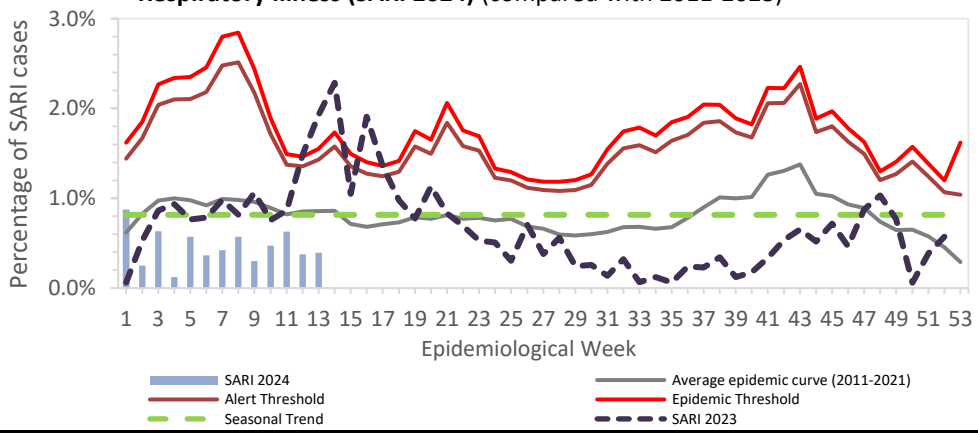
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 13, six (6) SARI admissions were reported.

Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2024) (compared with 2011-2023)

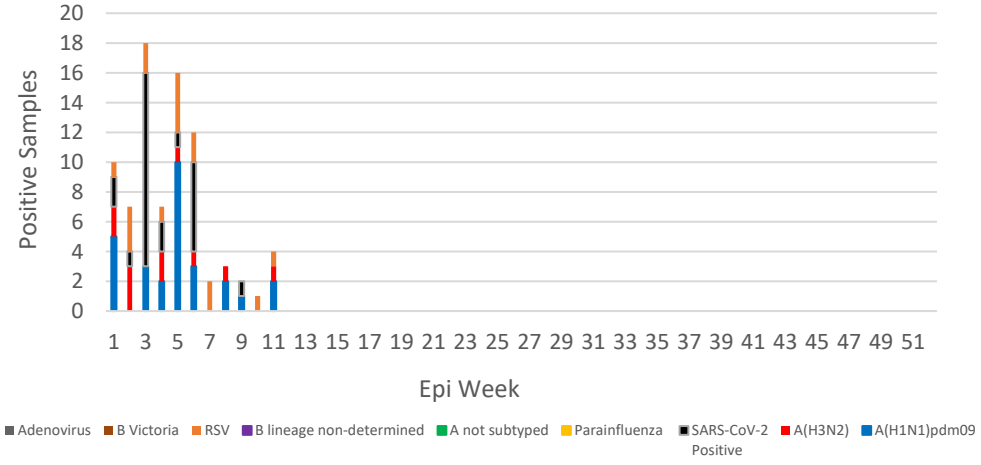


Caribbean Update EW 13

Caribbean: After the increase observed in previous EWs,both ILI and SARI activity have remained low, although showing a slight increase, with majority of positive cases attributable to influenza. Influenza activity has shown a slight increase during this period, reaching intermediate-low levels. In the last four EWs, the predominant influenza viruses have been type A(H1N1) pdm09, with concurrent circulation of A(H3N2), and to a lesser extent, B/Victoria.RSV and SARS-CoV-2 activity have remained at low levels.By country:In El Salvador, SARI activity is around epidemic levels with SARS-CoV-2 circulation at low levels, and influenza acrivity fluctuating around the epidemic threshold. In Guatamala, an increase in ILI and SARI cases associated with an increase in positive influenza cases has been observed, with moderate activity levels.In Honduras, an increase in SARI cases has been observed in the last four EWs, reaching epidemic levels,associated with an increase in positive influenza cases,with activity rising to moderate levels.In Nicaragua, the activity of both RSV,influenza , and SARS-CoV-2 is at low levels.

(taken from PAHO Respiratory viruses weekly report) https://www.paho.org/en/influenza-situation-report

Distribution of Influenza and Other Respiratory Viruses Under Surveillance by EW, Jamaica - 2024



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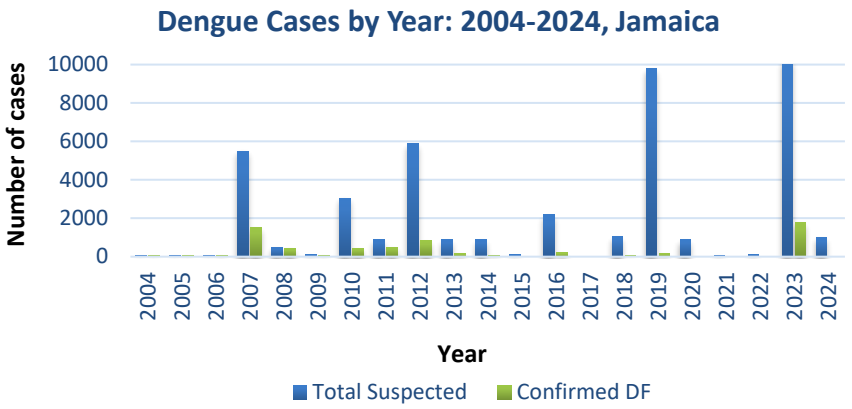
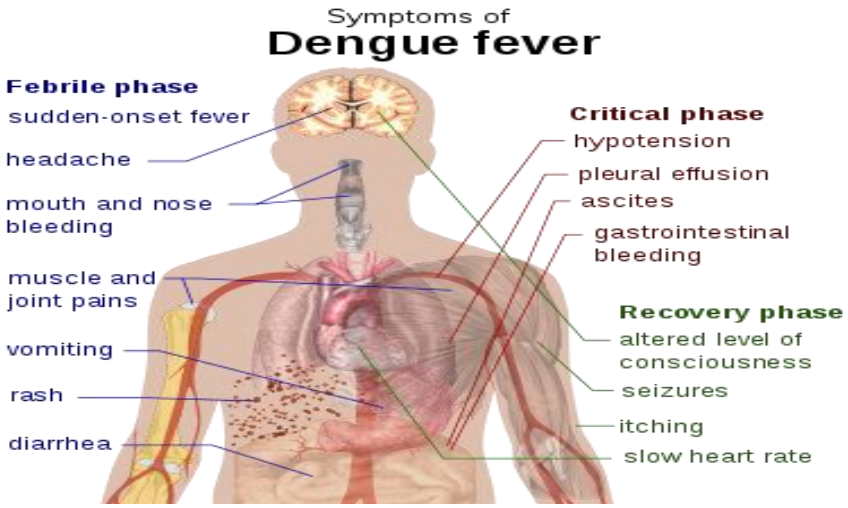
Dengue Bulletin

March 24, 2024 – March 30, 2024 Epidemiological Week 13 | Epidemiological Week 13



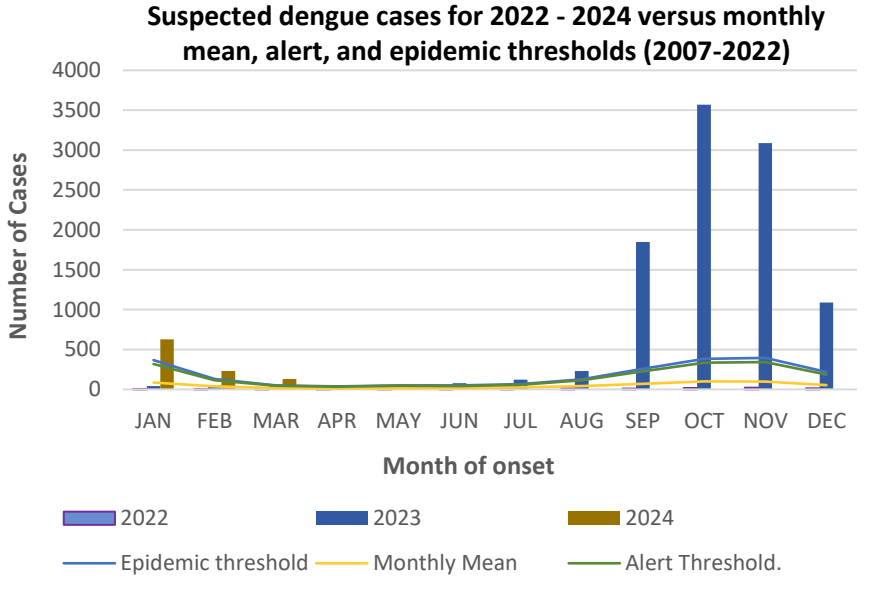
Reported suspected, probable and confirmed dengue with symptom onset in week 13 of 2024

	2024*	
	EW 13	YTD
Total Suspected , Probable & Confirmed Dengue Cases	5	1010
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at April 11, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



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RESEARCH PAPER

Abstract

Entada gigas: Underutilized Plant for Food and Nutrition from an Indigenous Community in Jamaica

Foster S R, Randle M M, Bozra D, Riley C K, Watson C T

Scientific Research Council, Kingston, Jamaica

Background: *Entada gigas* (cacoon) is a leguminous plant used by the Accompong maroons from St. Elizabeth, Jamaica, for medicinal and nutritional purposes. The plant seeds contain high protein levels, but are underutilized due to the anti-nutrients present.

Objectives: The effects of three processing methods (soaking, cooking and autoclaving) on proximate composition, anti-nutritional compounds and mineral content of *E. gigas* seeds collected were investigated.
Methods: Qualitative and quantitative evaluations of active phytochemical constituents, proximate and mineral analyses were performed on differentially processed *E. gigas* seed extracts using standard assays.
Results: Nutritional composition of mature *E. gigas* seeds corresponds with most edible legumes containing per 100 g edible portion: carbohydrate 50-55 g, protein 21-26 g, fat 15-20 g, crude fibre 5.3 g, and moisture 4.4 -5.9 g. Essential minerals including calcium (84.87 mg/L), iron (3.24 mg/L), potassium (793 mg/L), magnesium (112 mg/L), manganese (0.94 mg/L), sodium (7.24 mg/L) and zinc (1.49 mg/L) were also detected. Flavonoids, glycosides, steroids, terpenoids, saponins, tannins and phenols were among the phytochemicals present. Anti-nutritional substances present in the raw seeds, were effectively diminished after soaking for 21 days without significantly affecting the nutritionally beneficial compounds.

Conclusion: *Entada gigas* has nutritive values, comparable to other plant protein sources. Hence, its utilization is encouraged provided that an appropriate processing method is used to reduce the anti-nutrient content.

(Funded by Scientific Research Council)