WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Chagas Disease

Chagas disease, also known as American trypanosomiasis, is a potentially life-threatening illness caused by the protozoan parasite *Trypanosoma cruzi*. An estimated 6 to 7 million people worldwide are infected with *T. cruzi*.

Chagas disease is found mainly in endemic areas of 21 continental Latin American countries, where it is mostly transmitted when humans come into contact with faeces and/or urine of infected blood-sucking triatomine bugs (vector-borne transmission).

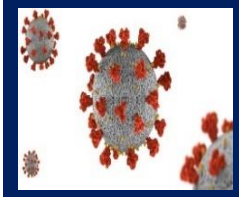
Chagas disease was once entirely confined to the Region of the Americas. In the last decades the epidemiological pattern of the disease changed from a rural to a mostly urban disease, mainly due to population mobility, urbanization and emigration. As a consequence, increased number of cases have been detected in Canada and the United States of America, and in many European and some African, Eastern Mediterranean and Western Pacific countries. Due to the high number of people who remain undiagnosed or untreated, combined with the areas with remaining active transmission, put an estimated 75 million people at risk of infection.

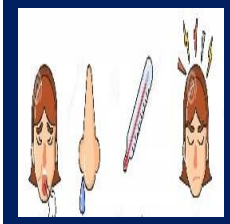
Triatomine bugs typically live in the wall or roof cracks of poorly constructed homes in rural or suburban areas, becoming active at night, biting exposed areas of skin, then defecating close to the bite. The parasites enter the body when: i) the person inadvertently smears the bug's waste into the bite or another skin break, the eyes or the mouth; ii) by consumption of food that has been contaminated with waste from infected triatomine bugs, typically infecting groups of people (causing outbreaks or oral transmission) with a higher frequency of severe disease and number of deaths. Everywhere Chagas disease can be also transmitted through blood or blood product transfusion from infected donors; by congenital (mother to child) transmission during pregnancy or childbirth; by organ transplantation from infected donors; and also by laboratory accidents.

In May 2019, following up on decision of the 72nd World Health Assembly, the World Chagas Disease Day was established to be celebrated on 14 April (the date of the year 1909 when Carlos Chagas diagnosed the first human case of the disease, a two-year-old girl called Berenice).

Taken from WHO website on 08/August/2024
https://www.who.int/health-topics/chagas-disease#tab=tab_1

EPI WEEK 30





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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 – 27 to 30 of 2024

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

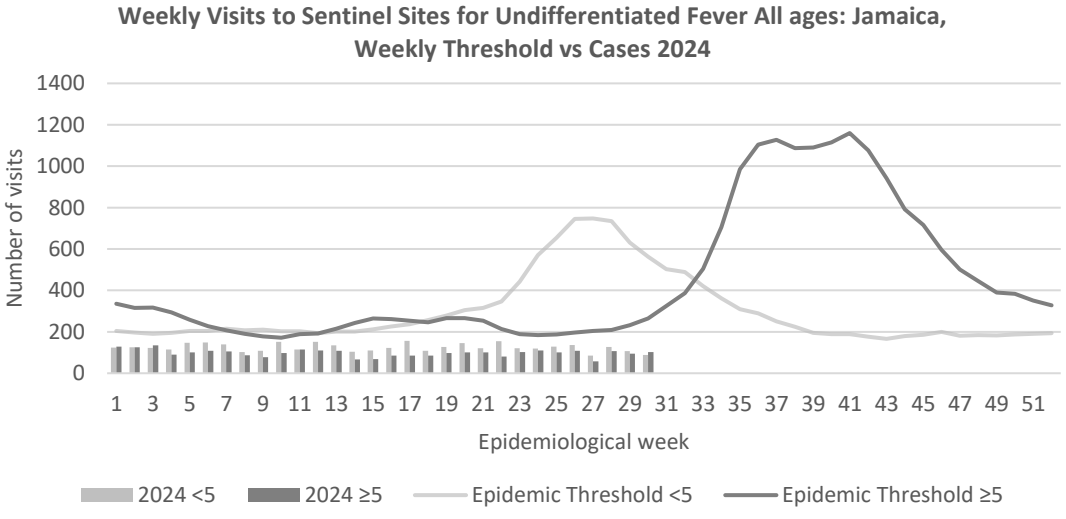
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
27	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
28	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
29	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
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

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HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

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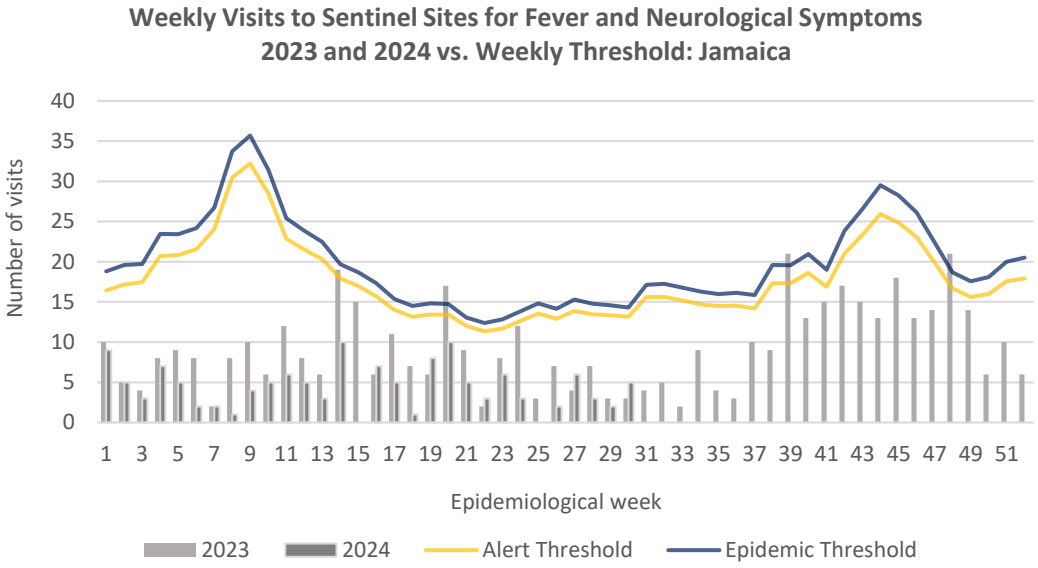
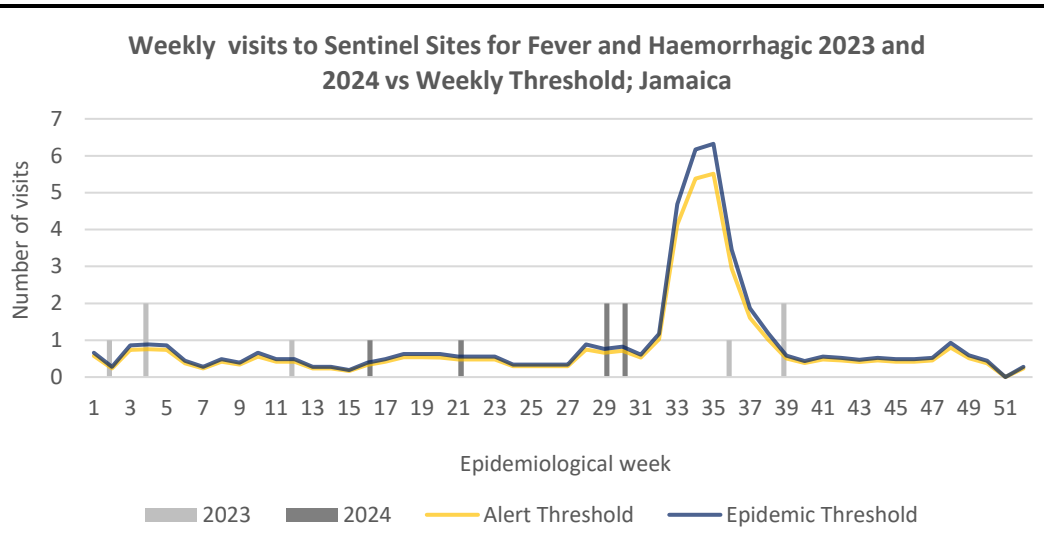
FEVER AND NEUROLOGICAL

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

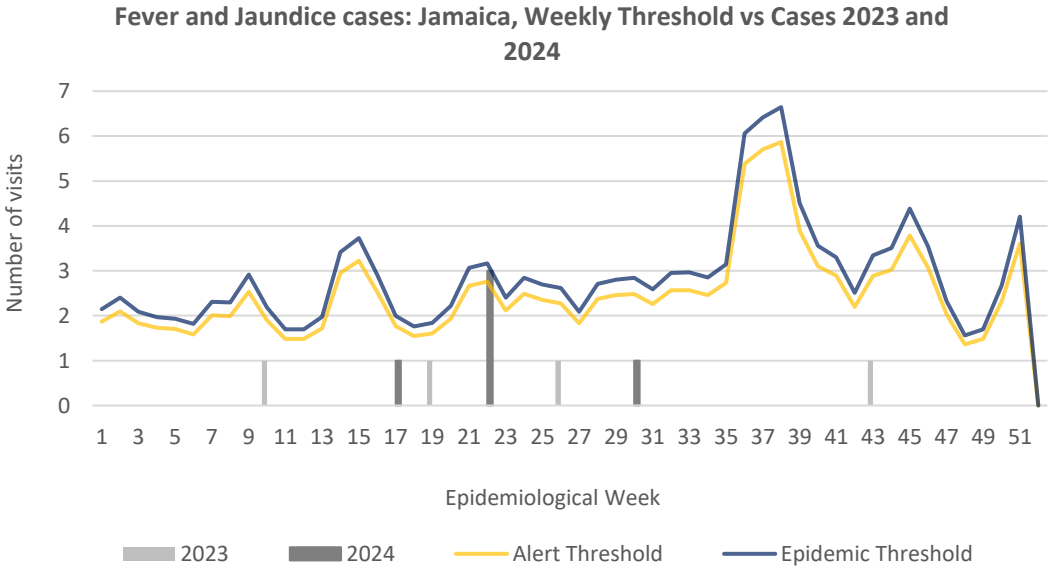
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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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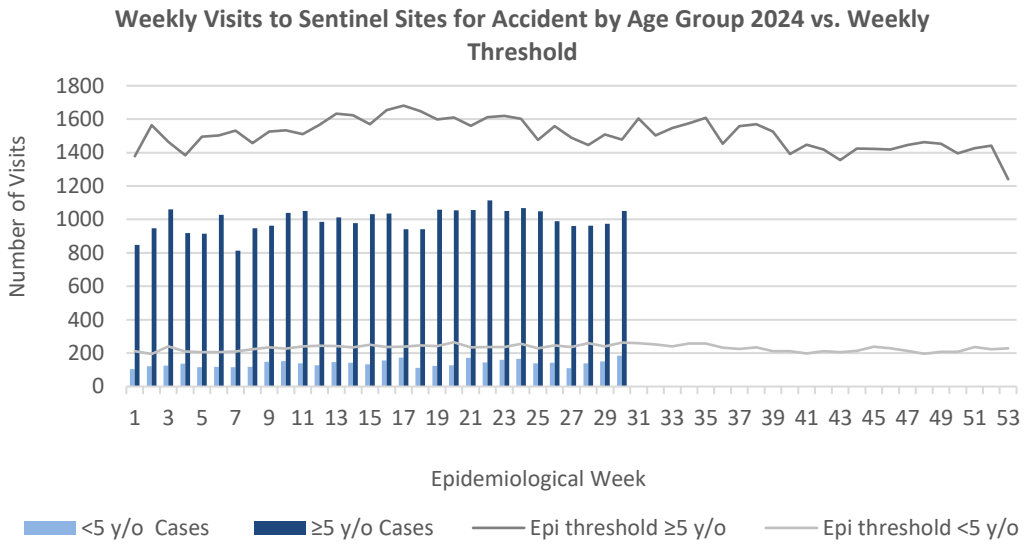
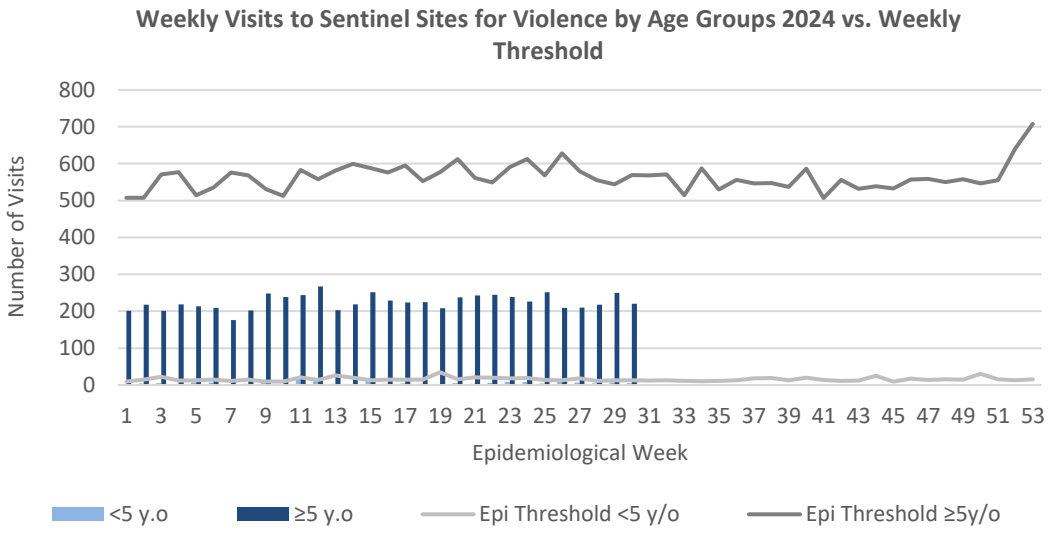
ACCIDENTS

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



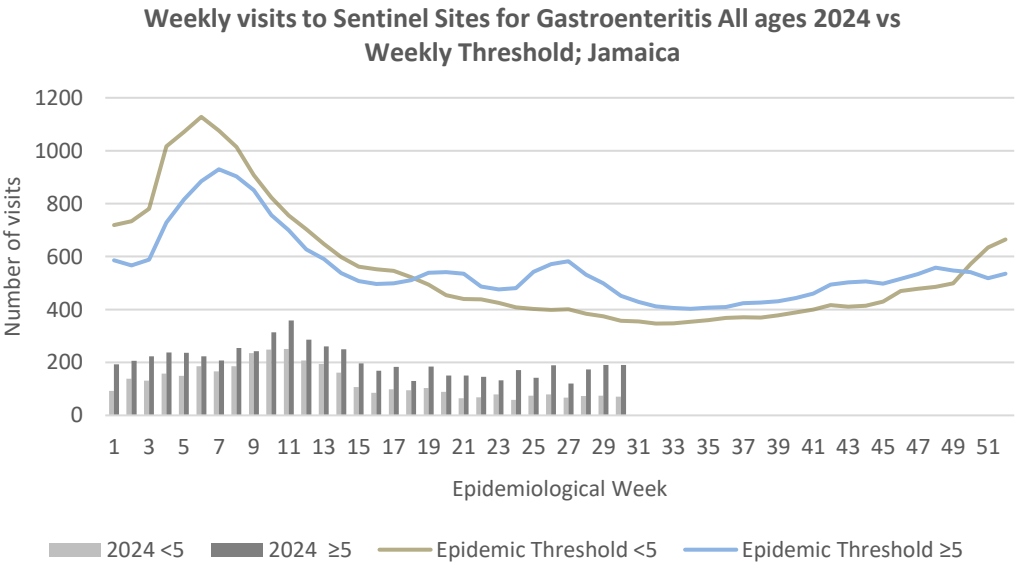
VIOLENCE

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		202[β]	220[β]
	Cholera		0	0
	Severe Dengue[Y]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		523	3158
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		10	43
	Hepatitis C		1	22
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		9	20
	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		1	2
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]		37	31
	Ophthalmia Neonatorum		72	86
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		17	39
	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.

[Y]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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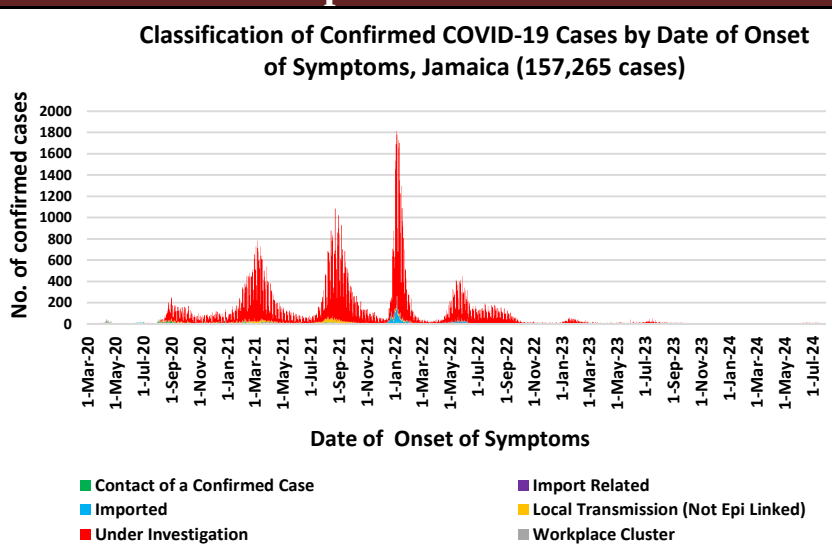
COVID-19 Surveillance Update

CASES	EW 30	Total
Confirmed	28	157265
Females	20	90628
Males	8	66634
Age Range	11 to 93 years old	1 day to 108 years

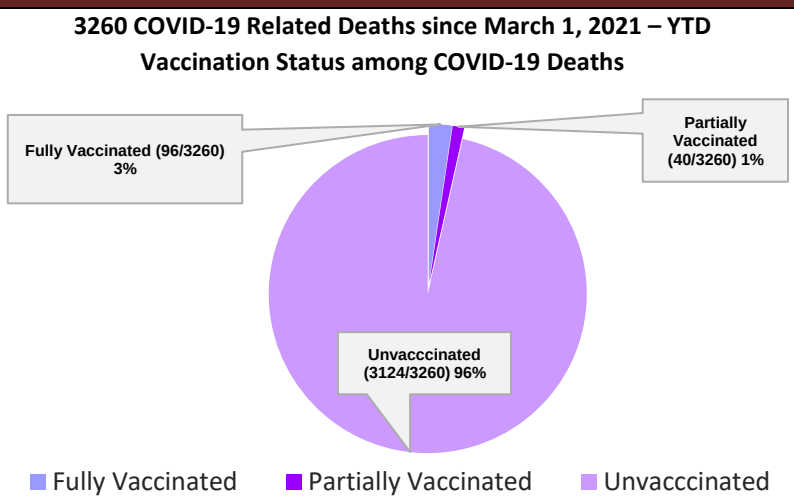
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

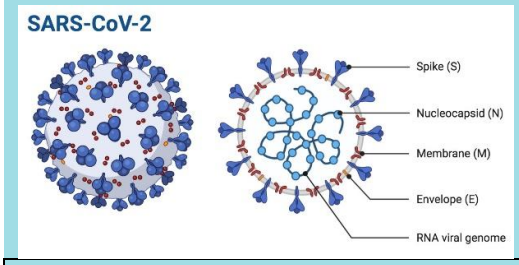
Outcomes	EW 30	Total
ACTIVE *2 weeks*		80
DIED – COVID Related	0	3822
Died - NON COVID	0	374
Died - Under Investigation	0	185
Recovered and discharged	0	103226
Repatriated	0	93
Total		157265

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



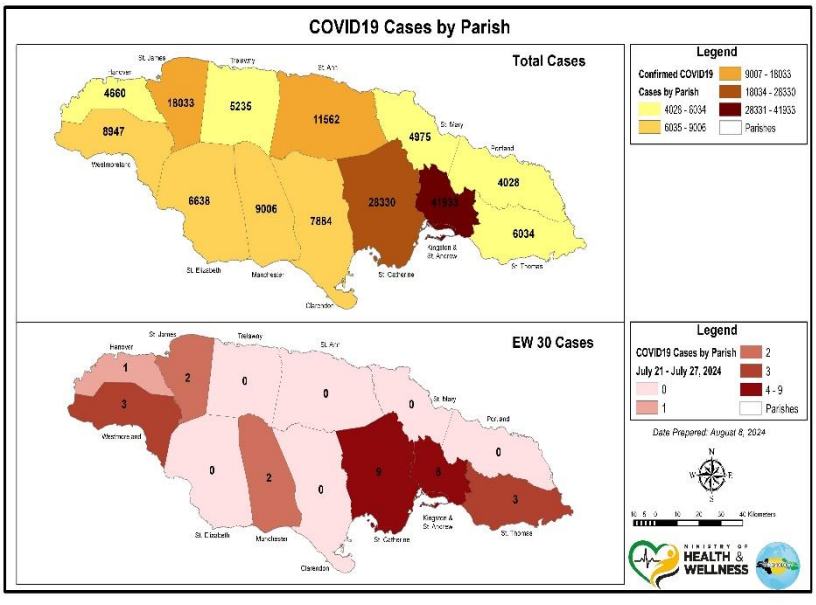
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 27-30, 2024

Epi Week	Confirmed Cases	Deaths
27	43000	612
28	35600	640
29	38300	624
30	38500	612
Total (4weeks)	**155400**	**2488**



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August 09, 2024 ISSN 0799-3927

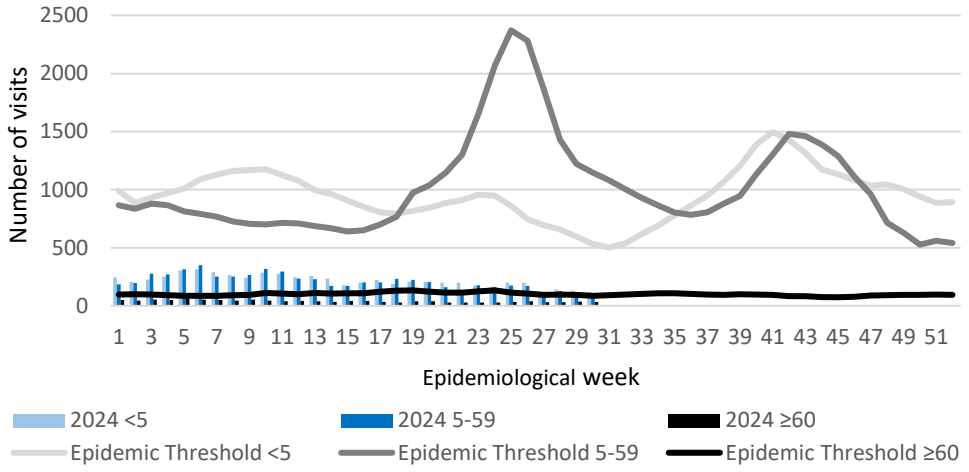
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 30

July 21, 2024 – July 27, 2024 Epidemiological Week 30

	EW 30	*YTD*
SARI cases	0	194
Total Influenza positive Samples	**0**	**105**
Influenza A	**0**	**100**
H3N2	0	30
H1N1pdm09	0	70
Not subtyped	0	0
Influenza B	**0**	**5**
B lineage not determined	0	0
B Victoria	0	5
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	29

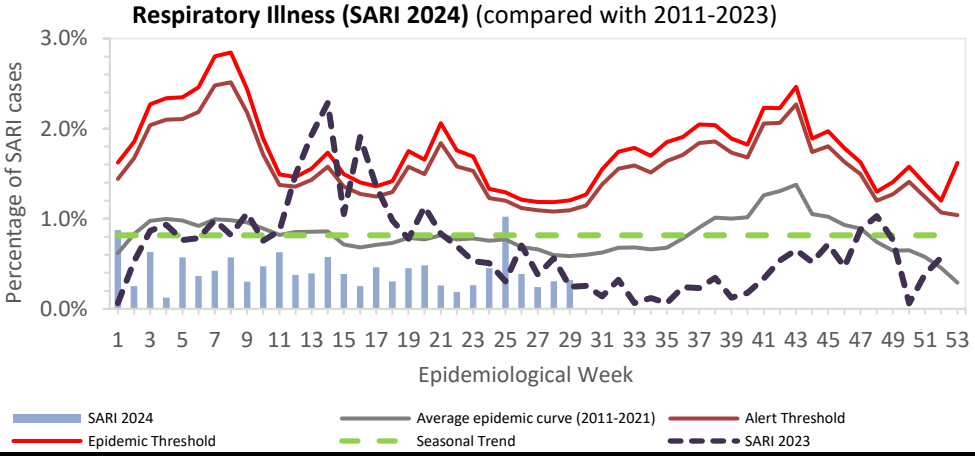
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 30, zero (0) SARI admissions were reported.

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



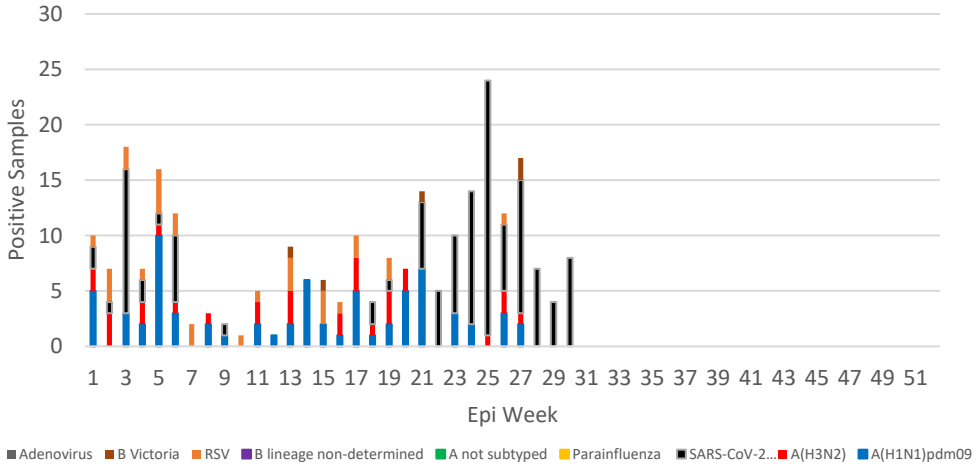
Caribbean Update EW 30

Caribbean: In the last four EWs, ILI cases have increased, accompanied by a higher proportion of positive influenza cases. While SARI cases have remained low, there has been an increase in the proportion of positive SARS-CoV-2 and Influenza cases. Influenza activity has remained at intermediate levels during the last four EWs, with A(H3N2) being predominant, followed by A(H1N1)pdm09. RSV activity has stayed low, while SARS-CoV-2 activity continues to be stable at elevated levels.

By country: In the last four EWs, influenza activity has been reported in Belize, Dominican Republic, Jamaica, the Cayman Islands, and Guyana. SARS –CoV-2 activity was been detected in Belize, the Dominacan Republic, Jamaica, Saint Lucia, Suriname, Barbados, Guyana, the Cayman Islands and Saint Vincent and the Grenadines. RSV activity has been observed in Suriname, Guyana and Saint Vincent and the Grenadines.

(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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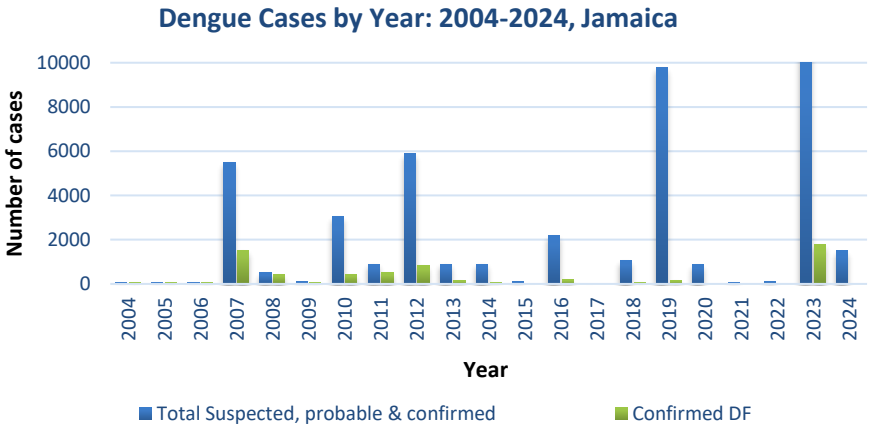
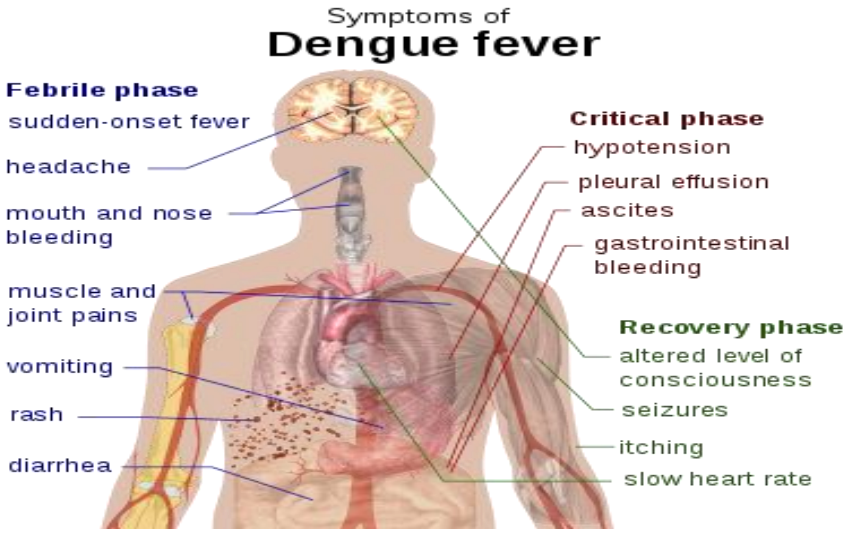
Dengue Bulletin

July 21, 2024 – July 27, 2024 Epidemiological Week 30 | Epidemiological Week 30



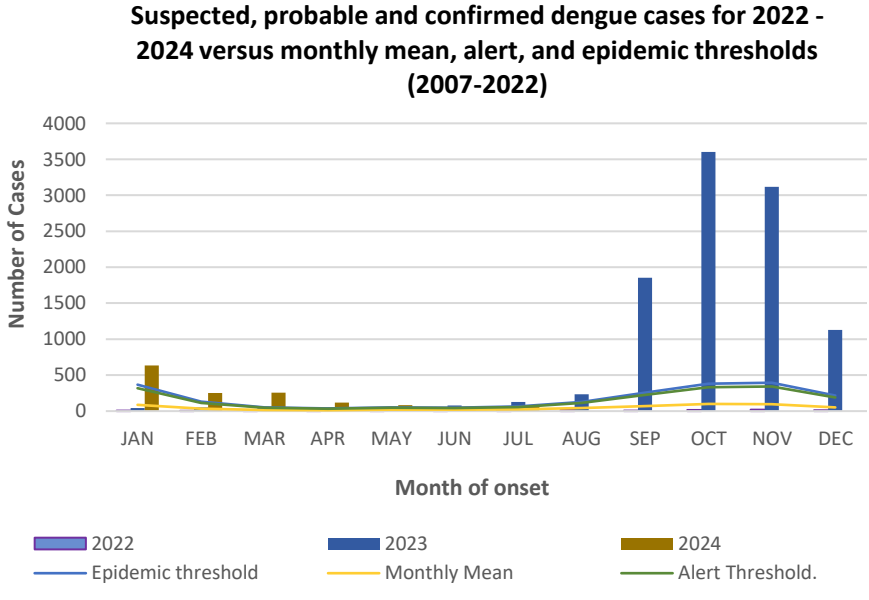
Reported suspected, probable and confirmed dengue with symptom onset in week 30 of 2024

	2024*	
	EW 30	YTD
Total Suspected, Probable & Confirmed Dengue Cases	9	1491
Lab Confirmed Dengue cases	0	10
CONFIRMED Dengue Related Deaths	0	1



Points to note:

- **Dengue deaths are reported based on date of death.**
- ***Figure as at August 7, 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

NHRC-23-O10

Fruit and vegetable intake among Jamaican school-aged children

Gray Brown A[1], Findlay L[1], Soares-Wynter S.[1]

[1]*Caribbean Institute for Health Research, The University of the West Indies, Kingston, Jamaica.*

Objective: To describe the weekday fruit and vegetable intakes of Jamaican school-aged children.

Methods: A cross-sectional survey of children (n=729), aged 7-11 years, from 30 primary schools in Kingston and St. Andrew was conducted in 2019. Fruit and vegetable intakes were reported using a modified 24-hour recall administered by trained nutrition personnel with the aid of food models. Intake estimates were converted to grams and compared to World Health Organization (WHO) requirements. Data were presented as means and frequencies where appropriate.

Results: Fruits and vegetables were consumed by 35% (262) and 52% (377) of children, respectively. Among the consumers, fruits eaten were obtained mostly from home (174, 66%), street vendors (50, 19%), school (45, 17%), or other locations (27, 10%). Vegetables were also obtained from home (229, 61%), school (197, 52%) or other locations (15, 4%). The most frequently reported items were ripe bananas, otaheite apples, and oranges; and cabbage, lettuce, and mixed vegetables (green peas, carrot, corn). Most fruits were consumed at breakfast meals (111, 42%) or as snacks throughout the day (117, 45%). In contrast, vegetables were consumed mostly for lunch (209, 55%) and dinner (203, 54%) meals. The mean amounts consumed were 38.4±63.4g fruits and 76.3±140.8g vegetables, and only 9% of children met their age-specific WHO fruit and vegetable requirement.

Conclusion: Many Jamaican school children report eating fruits and vegetables but intakes are inadequate. A comprehensive school nutrition policy provides a unique opportunity to incorporate fruits and vegetables in school meal programmes.

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