WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Rabies

Rabies is a viral zoonotic disease that causes progressive and fatal inflammation of the brain and spinal cord. Clinically, it has two forms:

1. Furious rabies – characterized by hyperactivity and hallucinations.
2. Paralytic rabies – characterized by paralysis and coma.

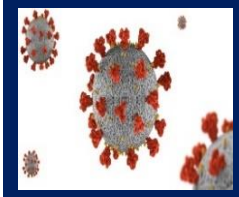
Although fatal once clinical signs appear, rabies is entirely avoidable; vaccines, medicines and technologies have long been available to prevent death from rabies. Nevertheless, rabies still kills tens of thousands of people each year. Of these cases, approximately 99% are acquired from the bite of an infected dog. Dog-mediated human rabies can be eliminated by tackling the disease at its source: infected dogs. Making people aware of how to avoid the bites of rabid dogs, to seek treatment when bitten and to vaccinate animals can successfully disrupt the rabies transmission cycle.

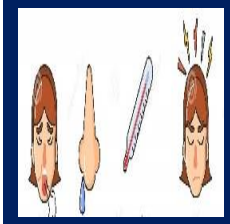
Rabies is estimated to cause 59 000 human deaths annually in over 150 countries, with 95% of cases occurring in Africa and Asia. Due to underreporting and uncertain estimates, this number is likely a gross underestimate. The burden of disease is disproportionally borne by rural poor populations, with approximately half of cases attributable to children under 15 years of age. Early symptoms of a rabies infection can include a fever with pain and unusual or unexplained tingling, pricking or burning sensation (paraesthesia) at the wound site. In later states, the virus spreads to the central nervous system, causing fatal inflammation of the brain and spinal cord. The incubation period of the disease can vary from 1 week to 1 year, though it is typically 2–3 months.

The two types of rabies show different symptoms. Furious rabies causes signs of hyperactivity, excitable behaviour, hydrophobia (fear of water) and sometimes aerophobia (fear of drafts or of fresh air). Death occurs after a few days due to cardio-respiratory arrest. Paralytic rabies, which accounts for about 20% of the total number of human cases, runs a less dramatic and usually longer course than the furious form. Muscles gradually become paralysed, starting at the site of the bite or scratch. A coma slowly develops and eventually death occurs. The paralytic form of rabies is often misdiagnosed, contributing to the under-reporting of the disease.

Taken from WHO website on 08/August/2024
https://www.who.int/health-topics/rabies#tab=tab_1
https://www.who.int/health-topics/rabies#tab=tab_2

EPI WEEK 31





ISSN 0799-3927

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 – 28 to 31 of 2024

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

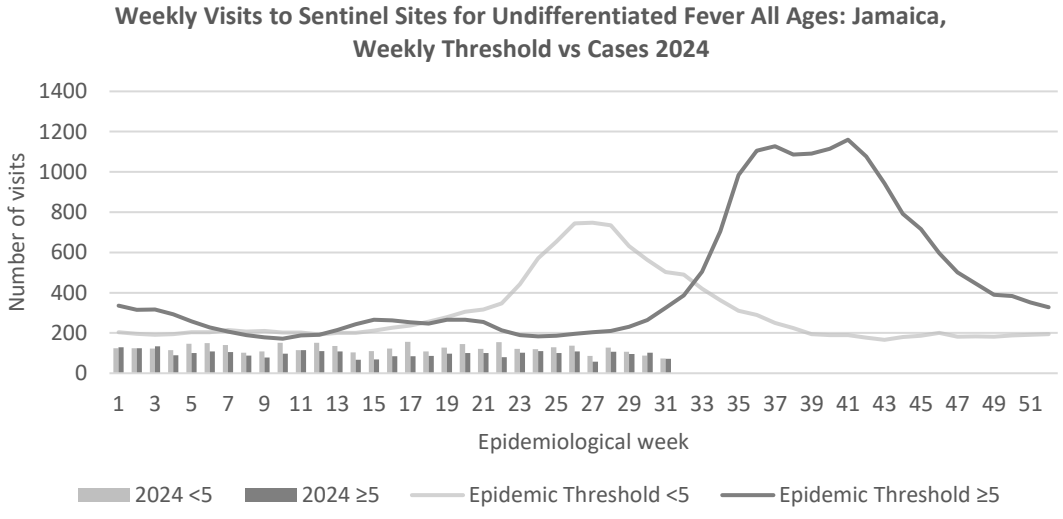
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
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
31	On Time	On Time	On Time	Late (W)	On Time	Late (W)	On Time	Late (W)	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.



2 NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

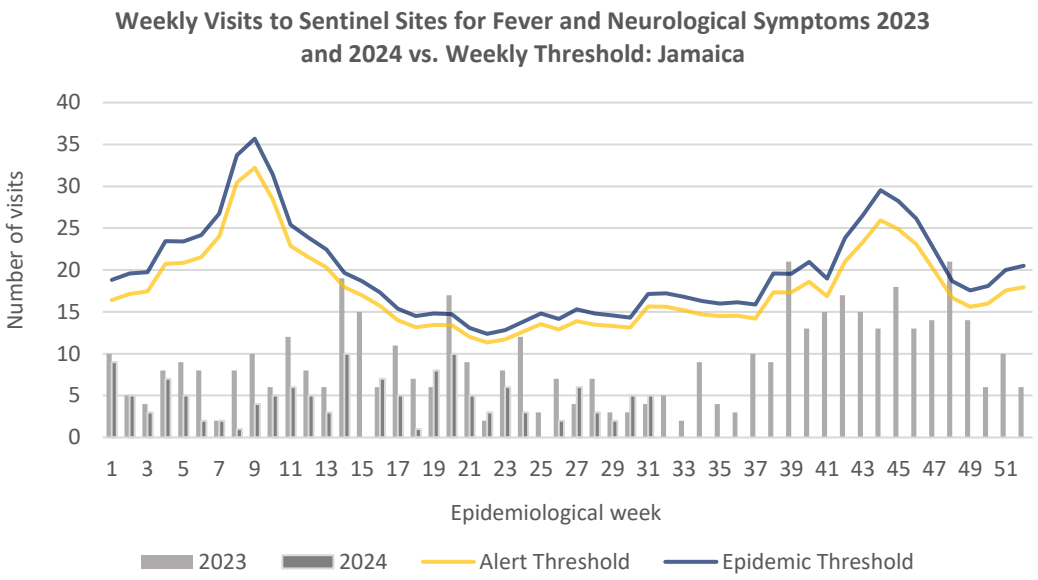
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

ISSN 0799-3927

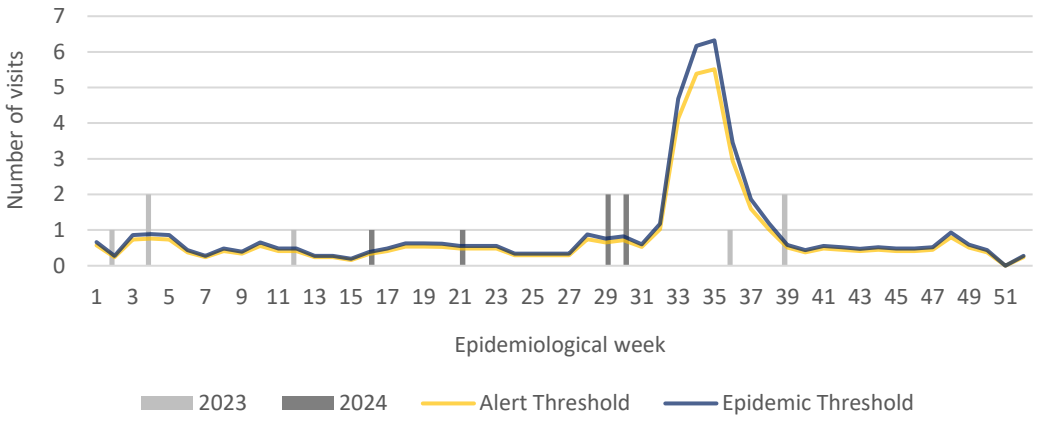
FEVER AND NEUROLOGICAL

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

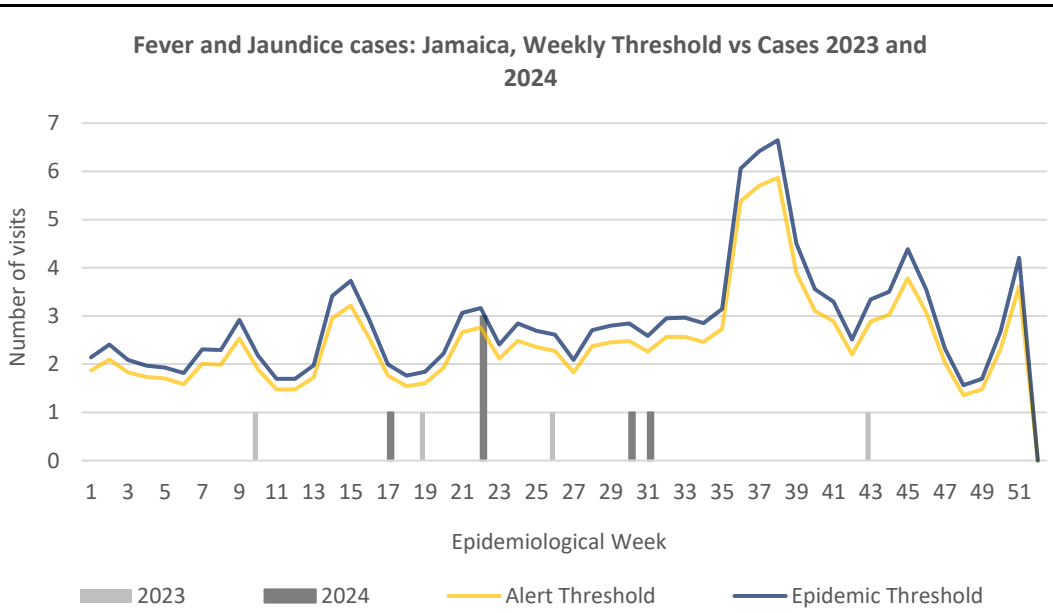
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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.



3 NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

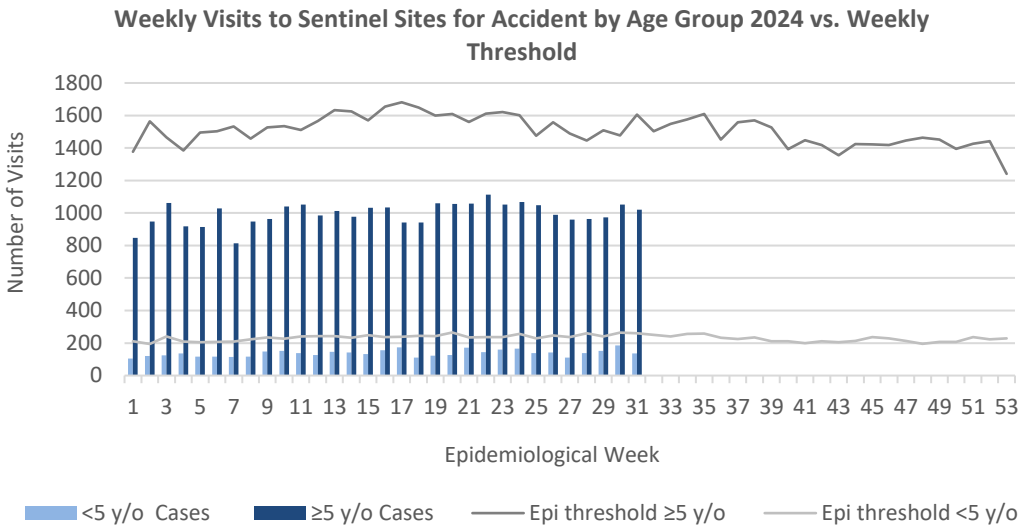
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

ISSN 0799-3927

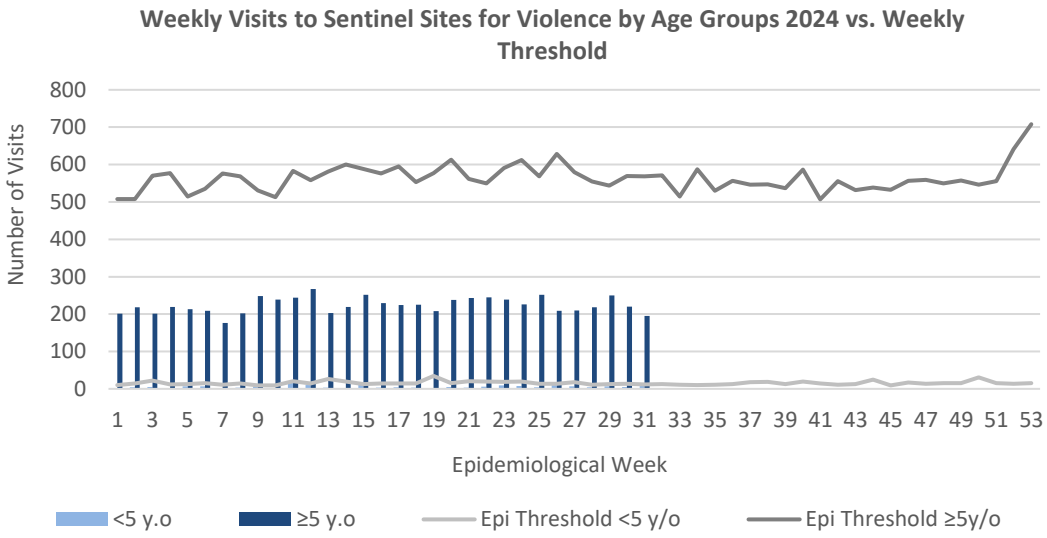
ACCIDENTS

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



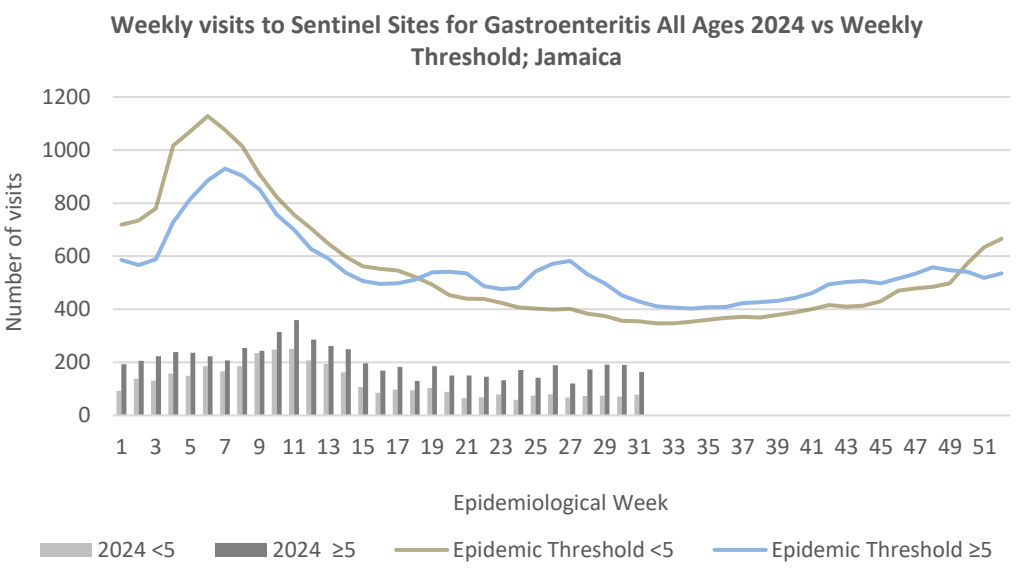
VIOLENCE

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

ISSN 0799-3927

CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS		Confirmed YTD[α] CURRENT YEAR 2024	PREVIOUS YEAR 2023
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		202[β]	226[β]
	Cholera		0	0
	Severe Dengue[Y]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		543	3249
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		10	43
	Hepatitis C		1	24
	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]		41	33
	Ophthalmia Neonatorum		72	86
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		19	40
	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

NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

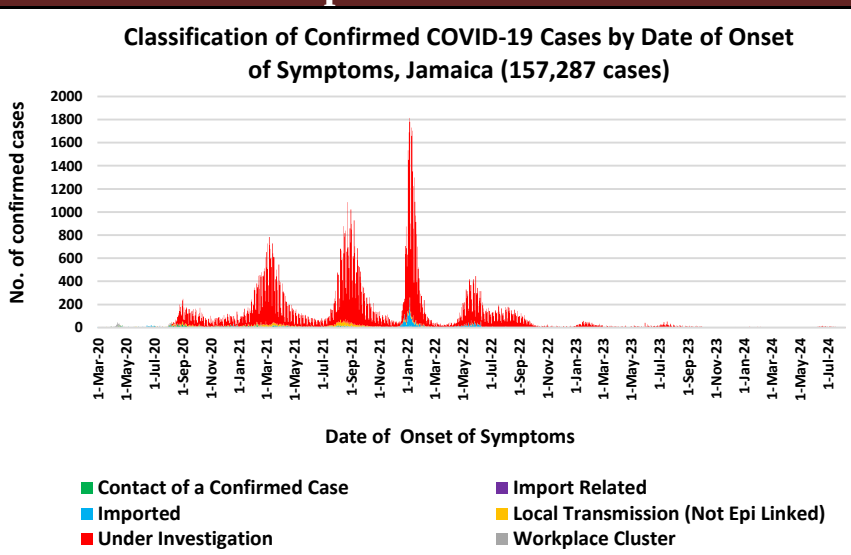
SENTINEL REPORT- 78 sites. Automatic reporting

ISSN 0799-3927

COVID-19 Surveillance Update

CASES	EW 31	Total
Confirmed	14	157287
Females	7	90642
Males	8	66642
Age Range	1 year to 94 years old	1 day to 108 years

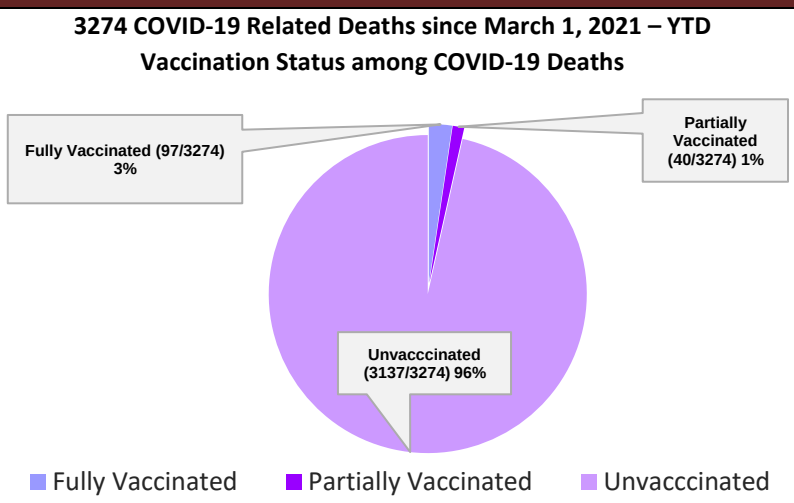
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

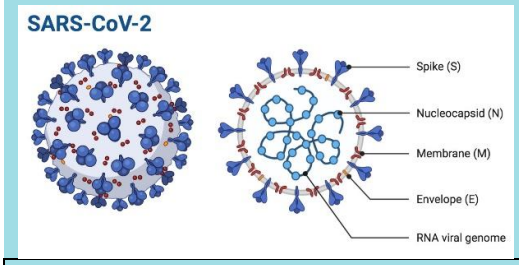
Outcomes	EW 31	Total
ACTIVE *2 weeks*		43
DIED – COVID Related	0	2837
Died - NON COVID	0	377
Died - Under Investigation	0	168
Recovered and discharged	0	103226
Repatriated	0	93
Total		157287

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



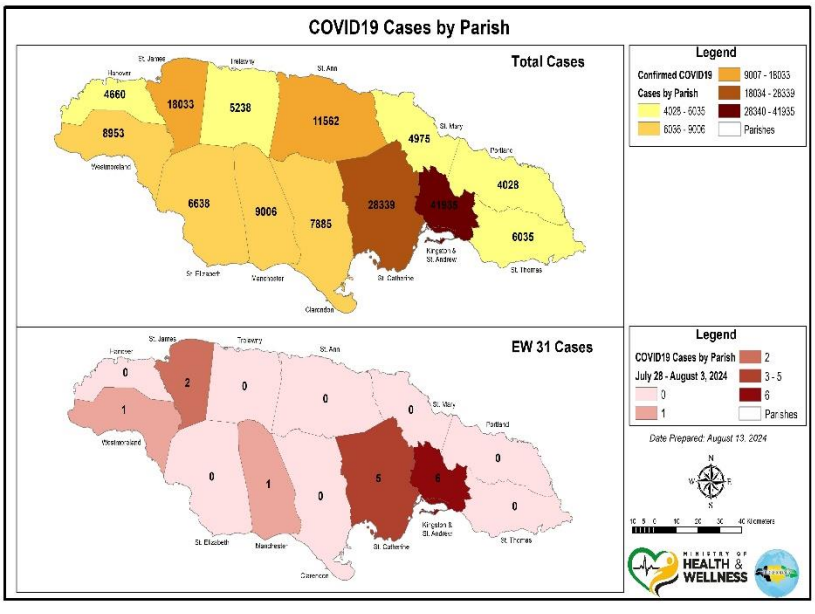
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 28-31, 2024

Epi Week	Confirmed Cases	Deaths
28	41800	697
29	46600	713
30	52100	775
31	53900	789
Total (4weeks)	**194400**	**2974**



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

August 16, 2024 ISSN 0799-3927

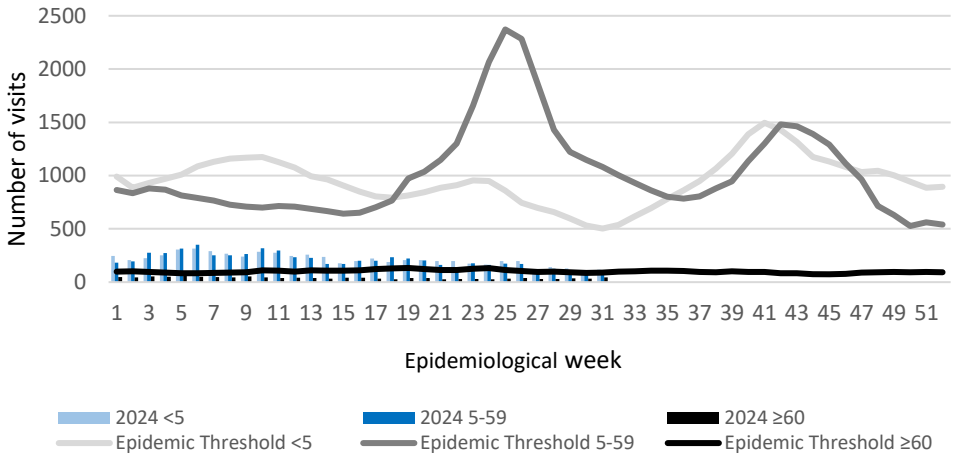
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 31

July 28, 2024 – August 3, 2024 Epidemiological Week 31

	EW 31	*YTD*
SARI cases	4	198
Total Influenza positive Samples	**0**	**113**
Influenza A	**0**	**108**
H3N2	0	31
H1N1pdm09	0	77
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	32

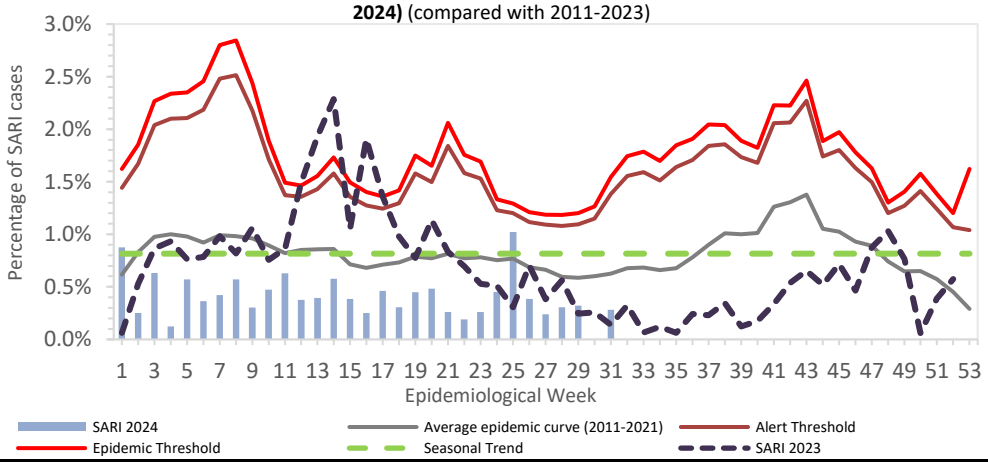
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 31, four (4) SARI admissions were reported.

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



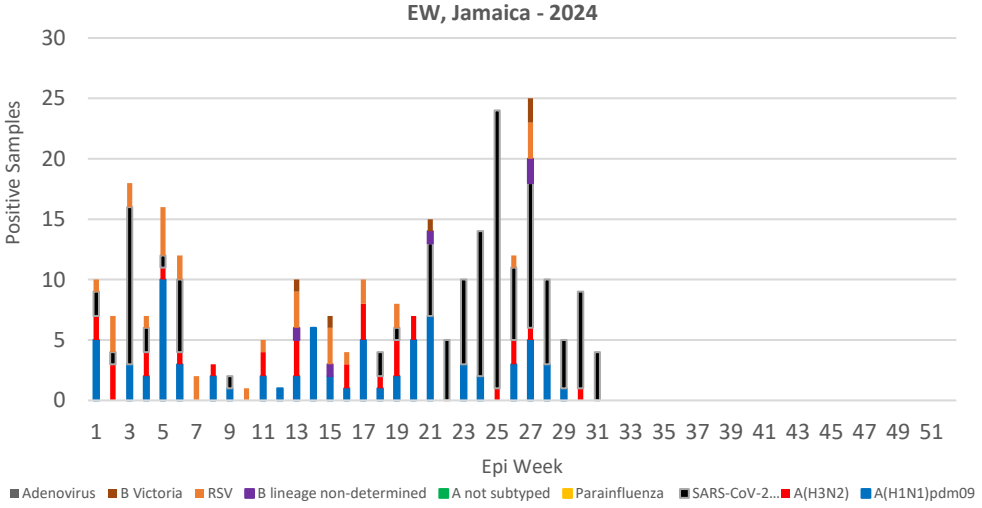
Caribbean Update EW 31

Caribbean: Over the past four EW, ILI cases have risen, linked to a higher proportion of positive influenza cases, While SARI cases have remained low. Influenza activity has fluctuated at moderate levels during the past four EW, with type A(H3N2) being predominant, followed by A(H1N1)pdm09. RSV activity has remained low, while SARS-CoV-2 activity continues to be stable at high levels.

By country: In the last four EW, influenza activity has been reported in Belize, the Dominican Republic, Jamaica, the Cayman Islands, and Guyana. Additionlly, SARS-CoV-2 activity has been recorded in Belize, Jamaica, Saint Lucia, Suriname, Barbados, Guyana, the Cayman Islands 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



7 NOTIFICATIONS- All clinical sites

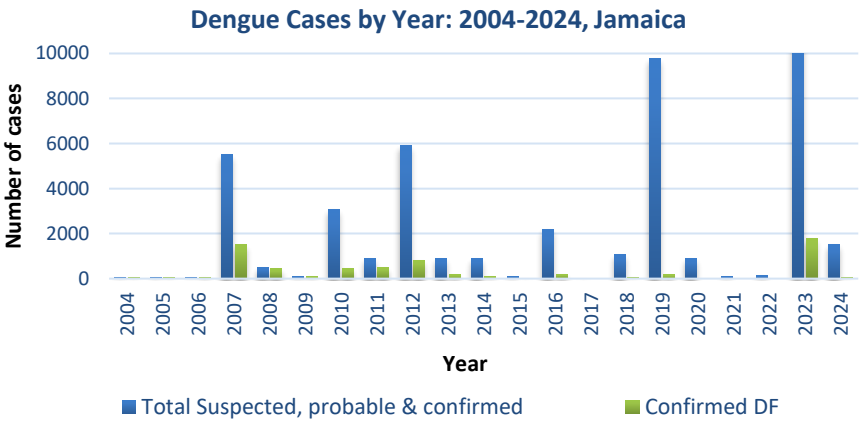
INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

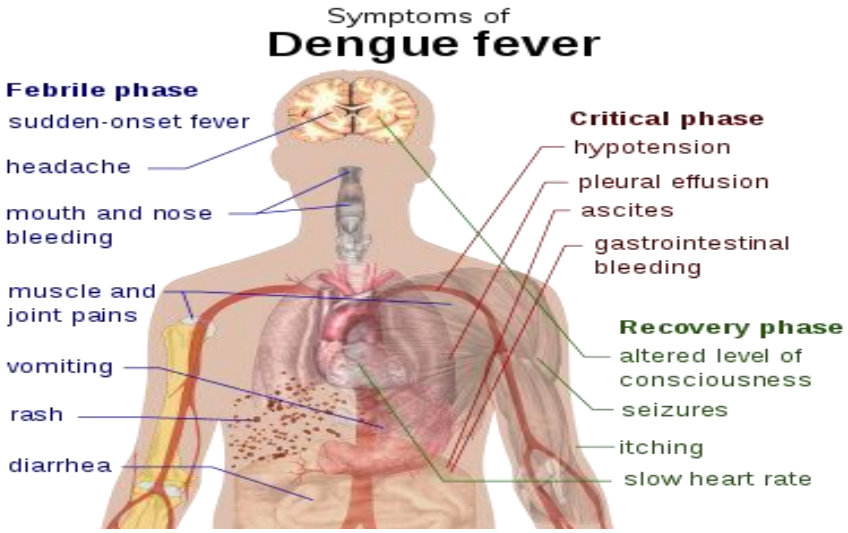
Dengue Bulletin

July 28, 2024 – August 3, 2024 Epidemiological Week 31 | Epidemiological Week 31



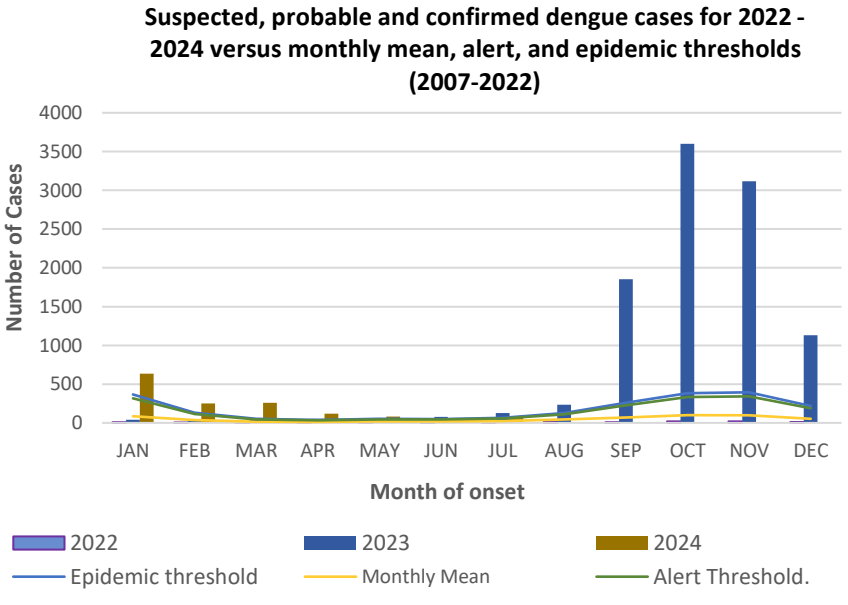
Reported suspected, probable and confirmed dengue with symptom onset in week 31 of 2024

	2024*	
	EW 31	YTD
Total Suspected, Probable & Confirmed Dengue Cases	2	1497
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 14, 2024**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as presumed dengue.**



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-23-O11

Food marketing and health promotion exposures in Jamaican primary and secondary schools

Findlay L[1], Homi Levee L[2], Gray Brown A[1], Soares-Wynter S[1]

[1]Caribbean Institute for Health Research, The University of the West Indies, Kingston, Jamaica, [2]The University of the West Indies Global Campus, Kingston, Jamaica

Objectives: To assess food and beverage industry (FB) marketing, and health promotions (HP) exposures in Jamaican schools.

Methods: All occurrences of FB marketing (including reported donations) and HP elements were captured during an environmental audit of 54 primary and secondary schools located in Kingston in 2022. Photographs of elements (n=241) were coded to describe product categories and marketing techniques utilized. Data were presented as frequencies and means, with tests for differences using Chi-square and student's t-test ($p<0.05$).

Results: Overall, there were 29.3 elements per school, with all schools displaying HP and 48 (89%) having FB marketing. FB donations were received by 35 (65%) schools (2.5 per school), mostly for school meals (19, 35%), education (15, 28%), and foodservice equipment (12, 22%). FB branded foodservice equipment was present in 41 (76%) schools. Photographed elements described COVID-19 or sanitation protocols (129, 54%), healthy or mixed-quality foods (13, 5%) and healthy lifestyle behaviours (6, 2%), and unhealthy foods (86, 36%). The latter comprised mostly non-essential foods (42, 17%), sweetened beverages (34, 14%) and fast foods (10, 4%); with most located near tuck-shops (72, 73%). Of the 99 FB elements, most had company logos (97, 98%), appeals to flavour/texture (52, 50%) and coolness/fun (26, 25%). There were 63 (61%) of elements with child appealing techniques, with an average of 3.2 per element.

Conclusion: Children in Jamaican schools are exposed to unhealthy FB marketing especially at sale locations and via industry donations. Including food marketing safeguards in a comprehensive school nutrition policy is recommended.

The Ministry of Health and Wellness
15 Knutsford Boulevard, Kingston 5, Jamaica
Tele: (876) 633-7924
Email: surveillance@moh.gov.jm