

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Influenza (avian and other zoonotic)



Animal influenza viruses are distinct from human seasonal influenza viruses and do not easily transmit between humans. However, zoonotic influenza viruses - animal influenza viruses that may occasionally infect humans through direct or indirect contact - can cause disease in humans ranging from a mild illness to death.

Birds are the natural hosts for avian influenza viruses. After an outbreak of A(H5N1) virus in 1997 in poultry in Hong Kong SAR, China, since 2003, this avian and other influenza viruses have spread from Asia to Europe and Africa. In 2013, human infections with the influenza A(H7N9) virus were reported in China.

Most swine influenza viruses do not cause disease in humans, but some countries have reported cases of human infection from certain swine influenza viruses. Close proximity to infected pigs or visiting locations where pigs are exhibited has been reported for most human cases, but some limited human-to-human transmission has occurred.

Just like birds and pigs, other animals such as horses and dogs, can be infected with their own influenza viruses (canine influenza viruses, equine influenza viruses, etc.).

Avian, swine and other zoonotic influenza infections in humans may cause disease ranging from mild upper respiratory infection (fever and cough) to rapid progression to severe pneumonia, acute respiratory distress syndrome, shock and even death.

Gastrointestinal symptoms such as nausea, vomiting and diarrhea has been reported more frequently in A(H5N1) infection. Conjunctivitis has also been reported in influenza A(H7).

Disease features such as the incubation period, severity of symptoms and clinical outcome varies by the virus causing infection but mainly manifests with respiratory symptoms.

Taken from WHO website on 31 October/2024

https://www.who.int/health-topics/influenza-avian-and-other-zoonotic#tab=tab_1
https://www.who.int/health-topics/influenza-avian-and-other-zoonotic#tab=tab_2

EPI WEEK 42



Syndromic Surveillance

Accidents

Violence

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Class 1 Notifiable Events

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COVID-19

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Influenza

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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 – 39 to 42 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													
39	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
40	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
41	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
42	On Time	On Time	On Time	Late (T)	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time

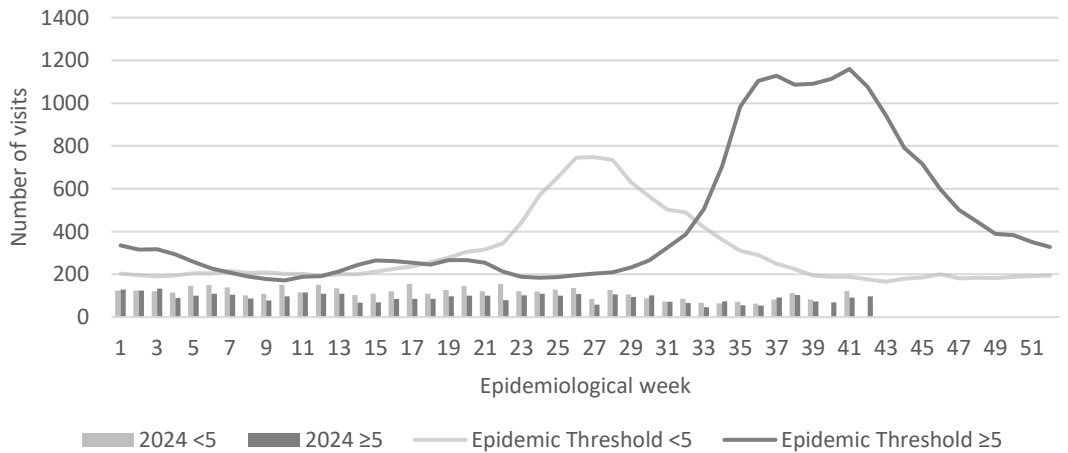
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of >38°C /100.4°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 2024



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



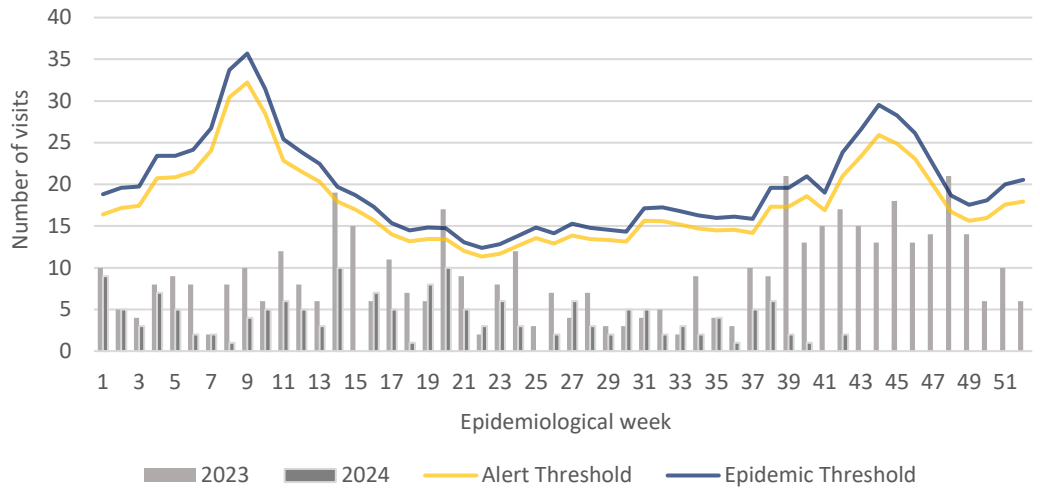
SENTINEL REPORT- 78 sites. Automatic reporting

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 2023 and 2024 vs. Weekly Threshold: Jamaica

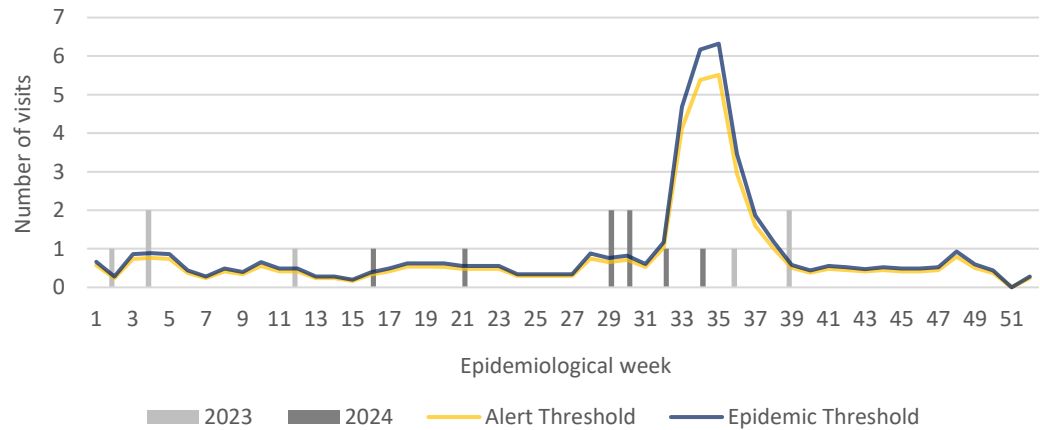


FEVER AND HAEMORRHAGIC

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 2023 and 2024 vs Weekly Threshold; Jamaica



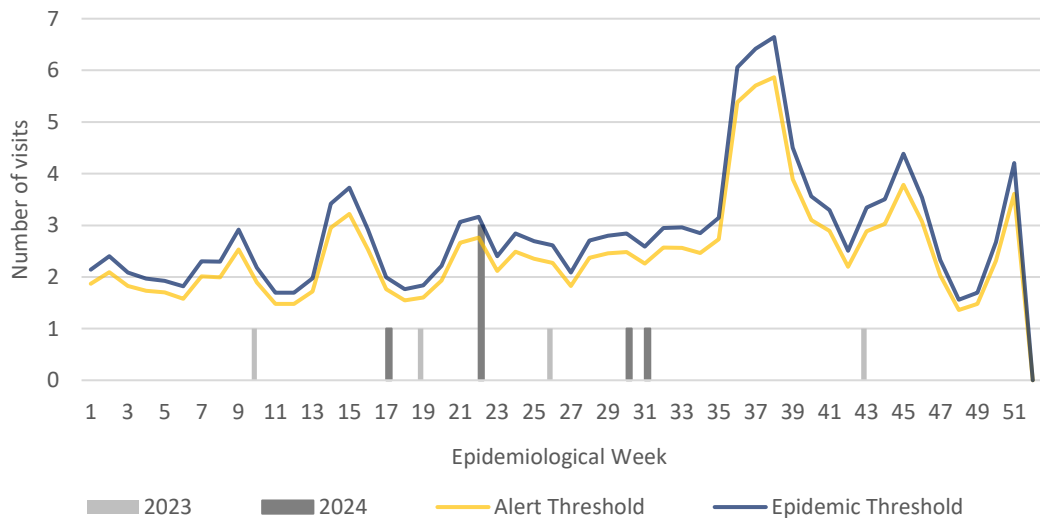
FEVER AND JAUNDICE

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 2023 and 2024



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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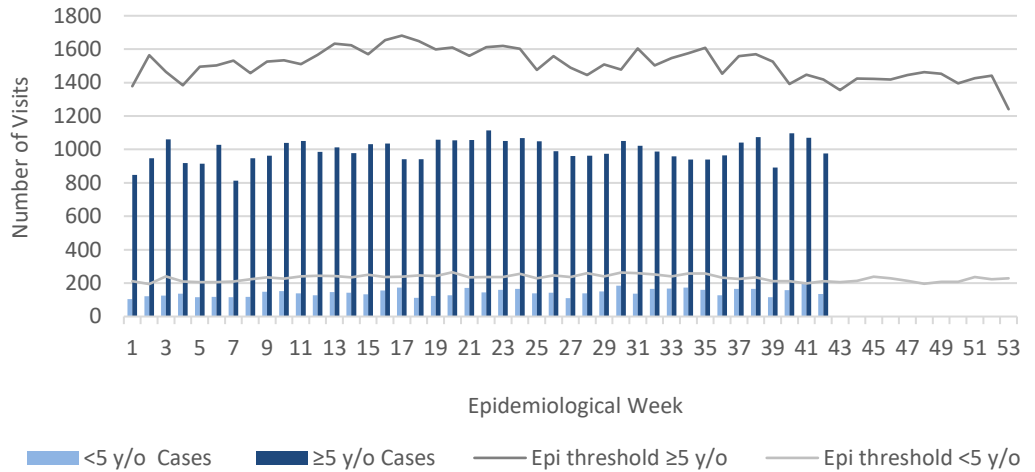


ACCIDENTS

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



Weekly Visits to Sentinel Sites for Accident by Age Group 2024 vs. Weekly Threshold

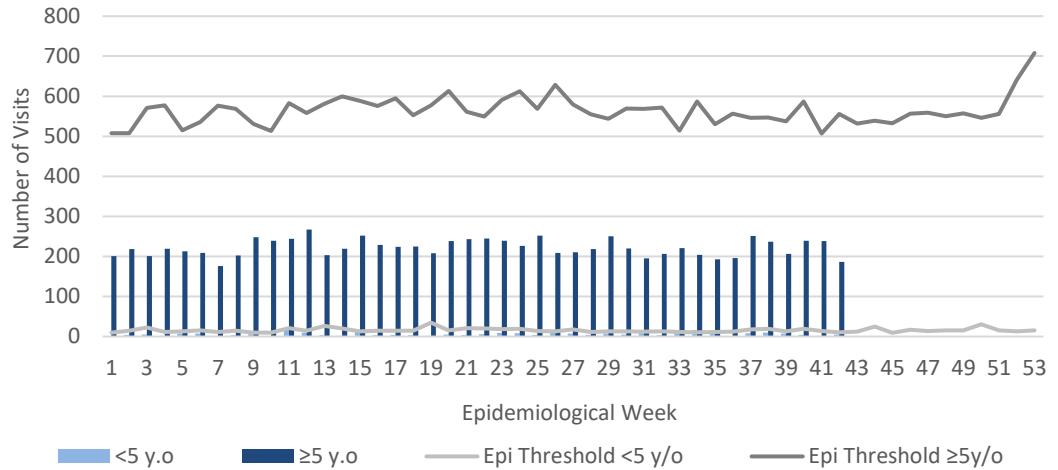


VIOLENCE

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



Weekly Visits to Sentinel Sites for Violence by Age Groups 2024 vs. Weekly Threshold

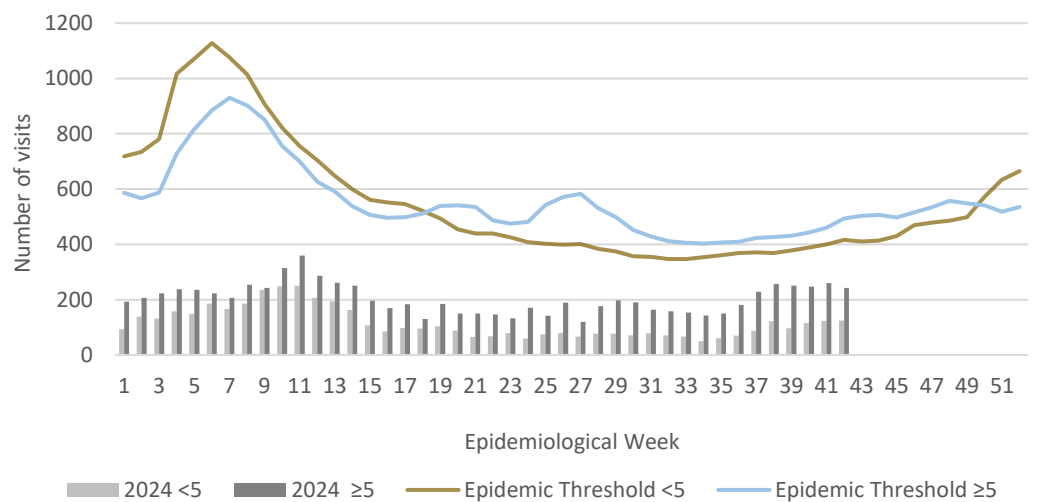


GASTROENTERITIS

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



Weekly visits to Sentinel Sites for Gastroenteritis All ages 2024 vs Weekly Threshold; Jamaica



4 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD ^α		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.	
		CURRENT YEAR 2024	PREVIOUS YEAR 2023		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	216 ^β	323 ^β	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		
	Severe Dengue ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	679	3766		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	17	54		
	Hepatitis C	3	27		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	2	3		
	Meningitis	12	25		
	Monkeypox	0	3		
EXOTIC/ UNUSUAL	Plague	0	0	^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.	
HIGH 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	49	45		
	Ophthalmia Neonatorum	103	132		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	28	56		
	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



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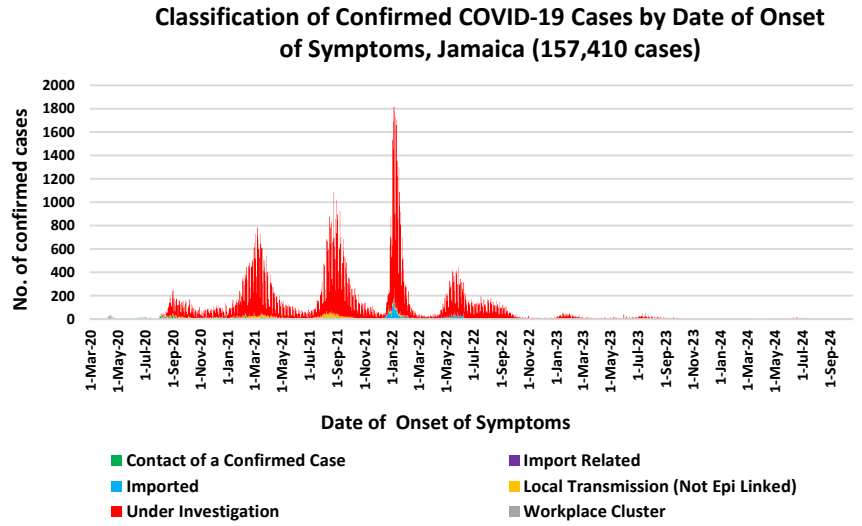


SENTINEL REPORT- 78 sites. Automatic reporting

COVID-19 Surveillance Update

CASES	EW 42	Total
Confirmed	7	157410
Females	3	90698
Males	4	66709
Age Range	1 day to 73 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.

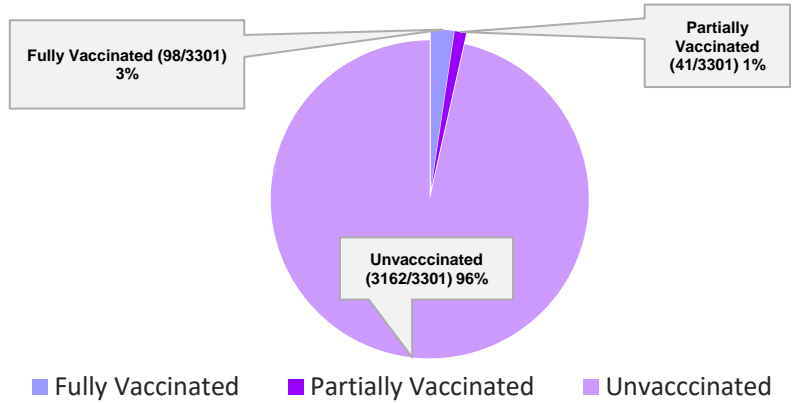


COVID-19 Outcomes

Outcomes	EW 42	Total
ACTIVE *2 weeks*		15
DIED – COVID Related	0	3865
Died - NON COVID	0	388
Died - Under Investigation	0	154
Recovered and discharged	0	103226
Repatriated	0	93
Total		157410

3301 COVID-19 Related Deaths since March 1, 2021 – YTD

Vaccination Status among COVID-19 Deaths

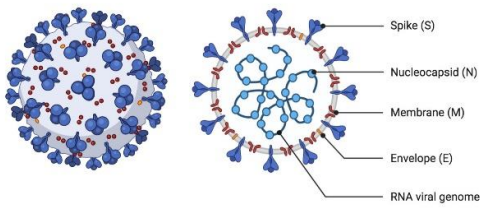


*Vaccination programme March 2021 – YTD
 * Total as at current Epi week

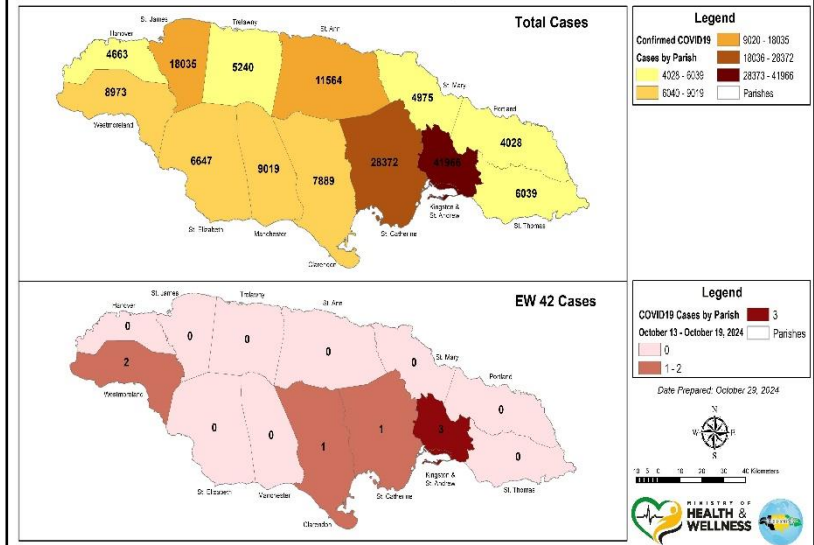
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

SARS-CoV-2



COVID-19 Cases by Parish



COVID-19 WHO Global Statistics EW 39-42, 2024

Epi Week	Confirmed Cases	Deaths
39	85600	1200
40	86300	1200
41	75300	1100
42	69000	778
Total (4weeks)	316200	4278

6 NOTIFICATIONS- All clinical sites



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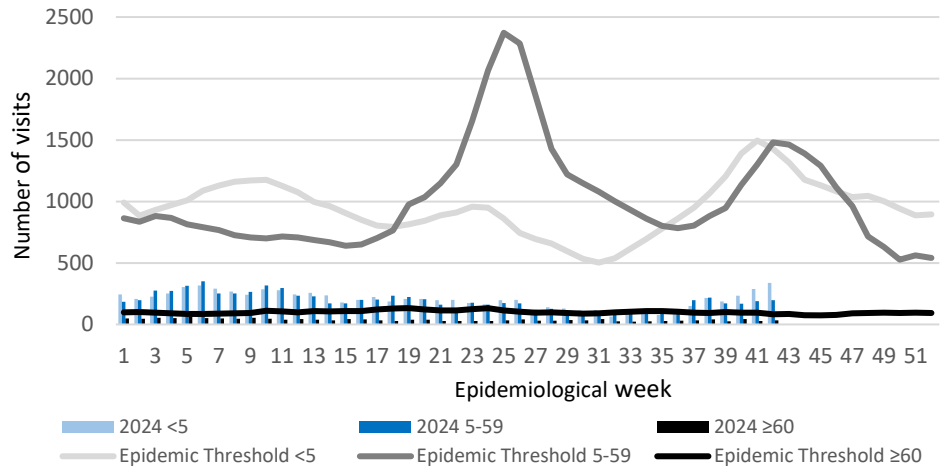
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 42

October 13, 2024 – October 19, 2024 Epidemiological Week 42

	EW 42	YTD
SARI cases	12	280
Total Influenza positive Samples	2	150
Influenza A	2	145
H3N2	0	40
H1N1pdm09	2	105
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	42

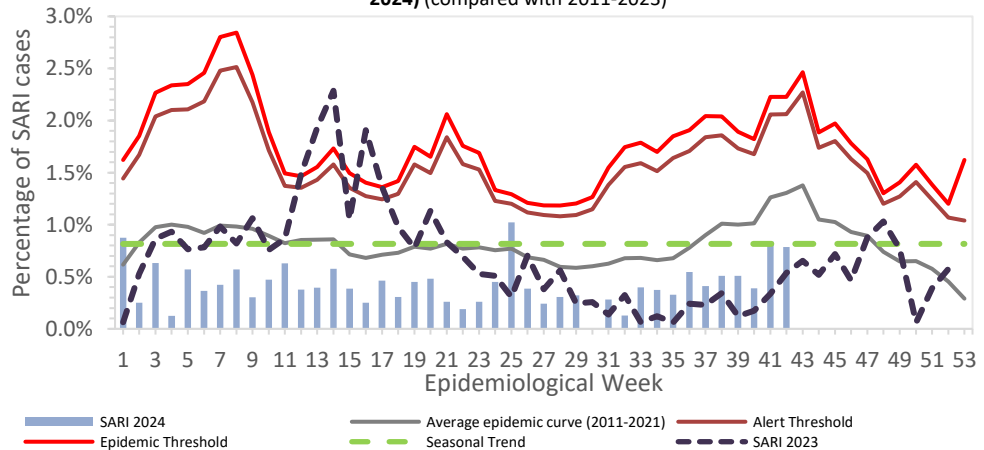
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 42, twelve (12) SARI admissions were reported.

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



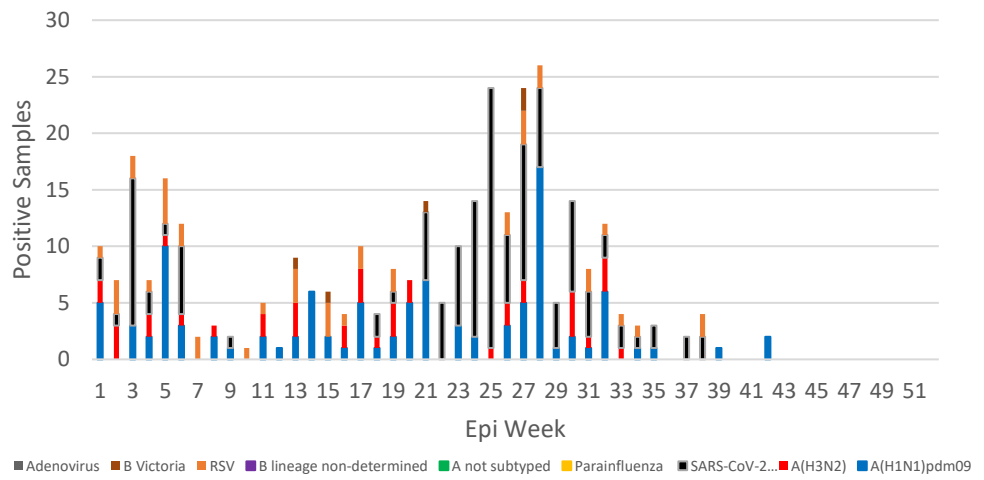
Caribbean Update EW 42

Caribbean: ILI cases have remained low over the last four EW, although there is an increased proportion of positive cases for RSV. SARI cases have followed a downward trend, with most positive cases linked to SARI-CoV-2, which is also declining. Influenza activity remains low, with predominant subtypes A(H3N2) and A(H1N1)pdm09. RSV activity has increased in several countries, while SARS-CoV-2 remains low and is declining.

By country: Over the last four EW, influenza activity has been reported in Belize, Jamaica, the Cayman Islands and Guyana. SARS-CoV-2 activity has been observed in Belize, Haiti, Jamaica, Barbados and Saint Vincent and the Grenadines. RSV activity has been detected in Belize, the Dominican Republic, Jamaica, Barbados, Guyana and Saint Vincent and the Grenadines. In Jamaica, an increase in SARI cases has been observed, exceeding the epidemic threshold with moderate pneumonia levels showing a slight decline. SARS-CoV-2, RSV, and Influenza activity has fluctuated, with influenza surpassing the epidemic threshold.

(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



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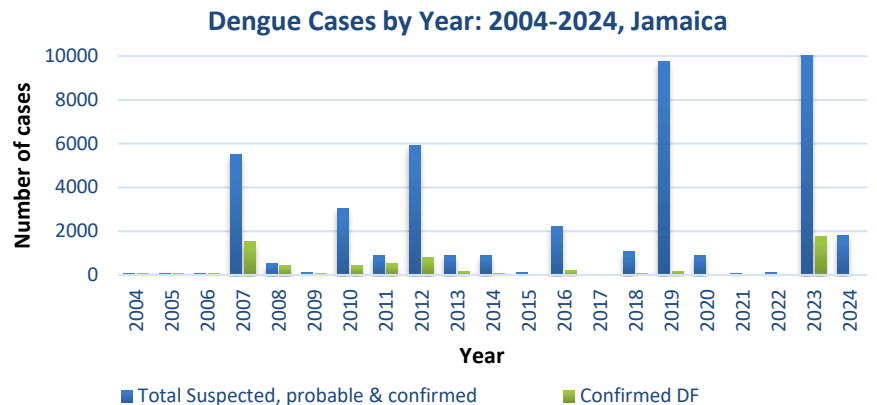
SENTINEL REPORT- 78 sites. Automatic reporting




Dengue Bulletin

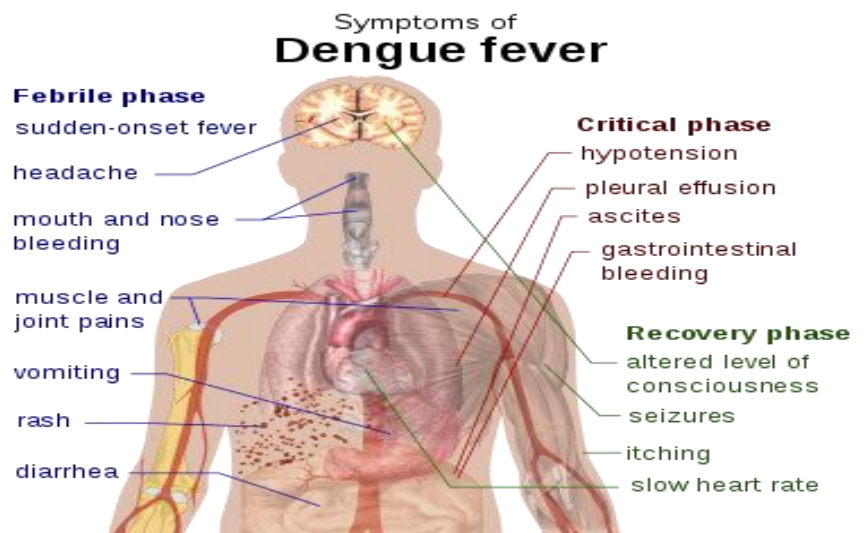
October 13, 2024 – October 19, 2024 Epidemiological Week 42

Epidemiological Week 42



Reported suspected, probable and confirmed dengue with symptom onset in week 42 of 2024

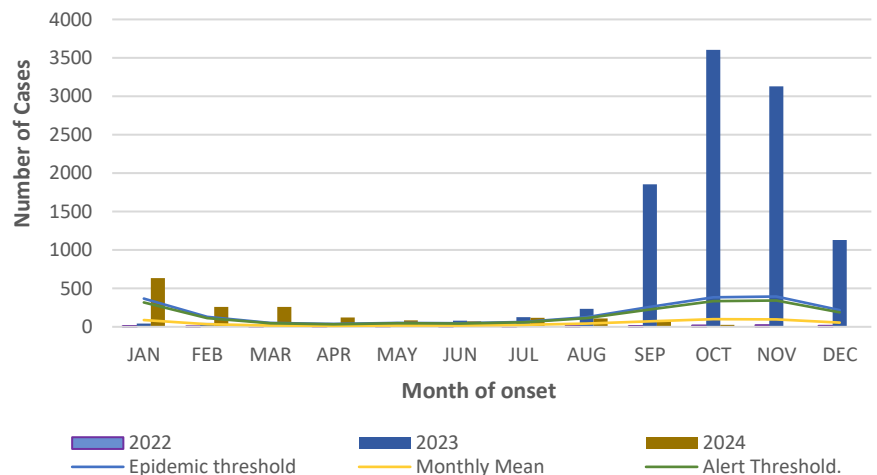
	2024*	
	EW 42	YTD
 Total Suspected, Probable & Confirmed Dengue Cases	6	1797
Lab Confirmed Dengue cases	0	42
CONFIRMED Dengue Related Deaths	0	2



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at October 31, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected, probable and confirmed dengue cases for 2022 - 2024 versus monthly mean, alert, and epidemic thresholds (2007-2022)



8 NOTIFICATIONS-
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RESEARCH PAPER

Abstract

NHRC-23-P01

Patients' perception of the telenutrition service at the Mandeville Regional Hospital

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Objectives: To evaluate patients' level of satisfaction with their virtual nutrition consultation.

Methods: A cross-sectional survey of persons 18 and over, accessed telenutrition service between 2020 to 2023 and contact information is available in the nutrition clinic database. Analysis of telephone administered questionnaire which elicited demographics, and a five-point Likert scale ranging from (5) "Strongly agree" to (1) "Strongly disagree" about participants personal experience and satisfaction with using telenutrition services was used to fulfil the aim of the study. Descriptive analyses of categorical variables using counts and percentages. Participants consent was obtained from a "yes" or "no" response, after the data collector read the description of the study at the beginning of the telephone survey.

Results: Majority (100%) confirmed their ability to talk easily to their healthcare provider during their consultation. 79 % of respondents indicated an overall strong satisfaction with the service, and 21 % expressed satisfaction.

Conclusion: The majority of respondents were satisfied with the quality of the telenutrition service and indicated that they would recommend the service to others. Telenutrition has proved to be a viable means of delivering clinical nutrition care services.



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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



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