

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Landslides



Landslides are more widespread than any other geological event, and can occur anywhere in the world. They occur when large masses of soil, rocks or debris move down a slope due to a natural phenomenon or human activity. Mudslides or debris flows are also a common type of fast-moving landslide. Landslides can accompany heavy rains or follow droughts, earthquakes or volcanic eruptions. Areas most vulnerable to landslides include:

- steep terrain, including areas at the bottom of canyons;
- land previously burned by wildfires;
- land that has been modified due to human activity, such as deforestation or construction;
- channels along a stream or river;
- any area where surface runoff is directed or land is heavily saturated.

Between 1998-2017, landslides affected an estimated 4.8 million people and cause more than 18 000 deaths. Climate change and rising temperatures are expected to trigger more landslides, especially in mountainous areas with snow and ice. As permafrost melts, rocky slopes can become more unstable resulting in a landslide.

Landslides can cause high mortality and injuries from rapidly flowing water and debris. The most common cause of death in a landslide is trauma or suffocation by entrapment.

Broken power, water, gas or sewage pipes can also result in injury or illness in the population affected, such as water-borne diseases, electrocution or lacerations from falling debris. People affected by landslides can also have short- and long-term mental health effects due to loss of family, property, livestock or crops.

Landslides can also greatly impact the health system and essential services, such as water, electricity or communication lines.

Taken from WHO website on 20/ June /2024

https://www.who.int/health-topics/landslides#tab=tab_1

https://www.who.int/health-topics/landslides#tab=tab_2

EPI WEEK 23



Syndromic Surveillance

Accidents

Violence

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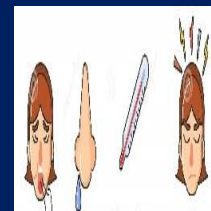
Class 1 Notifiable Events

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Dengue Fever

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Research Paper

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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 – 20 to 23 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												
20	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time
21	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
22	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
23	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

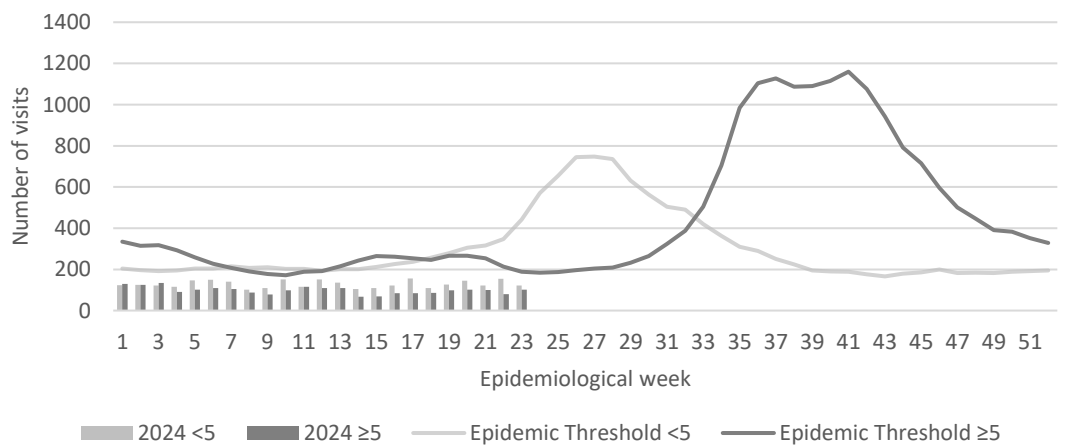
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

Temperature of $>38^{\circ}\text{C}$ / 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



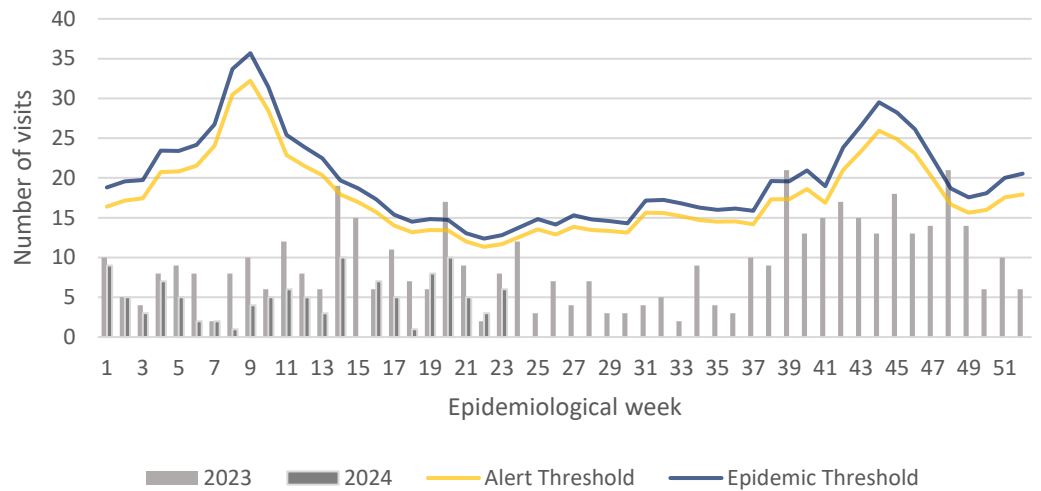
SENTINEL REPORT- 78 sites. Automatic reporting

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

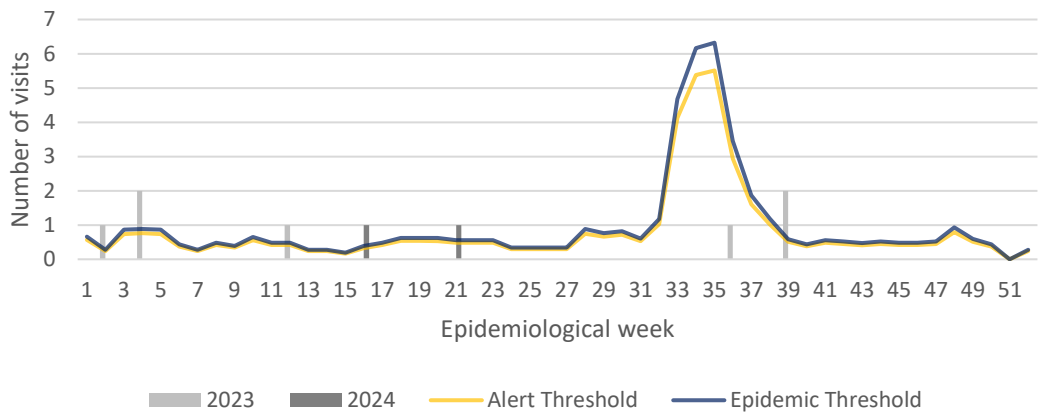


FEVER AND HAEMORRHAGIC

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



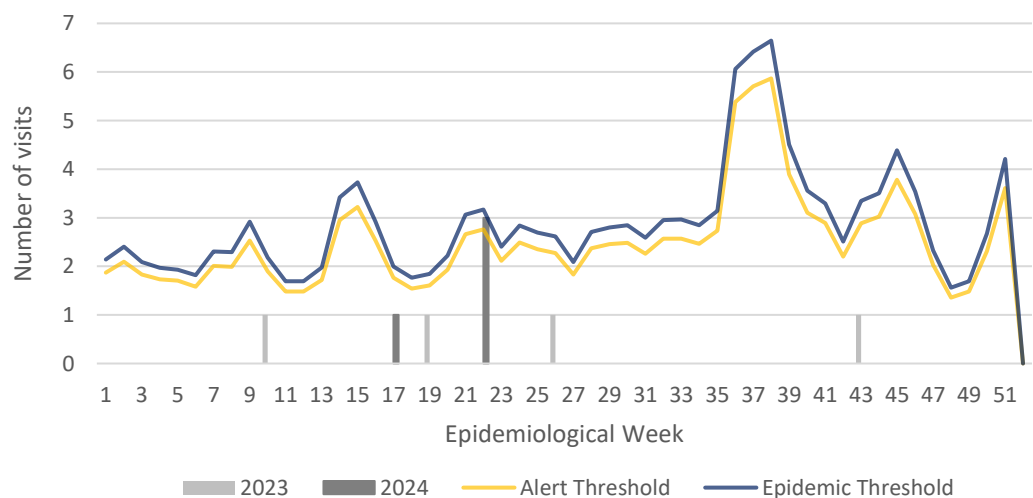
FEVER AND JAUNDICE

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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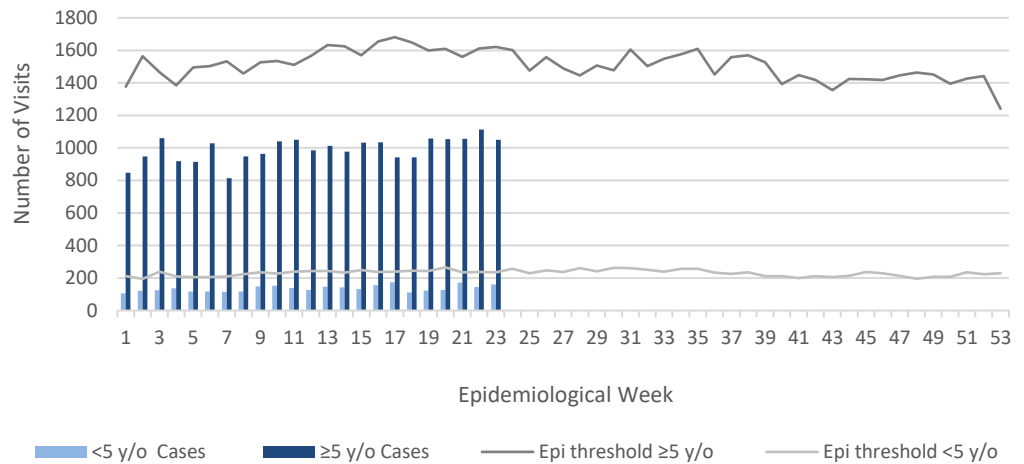


ACCIDENTS

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

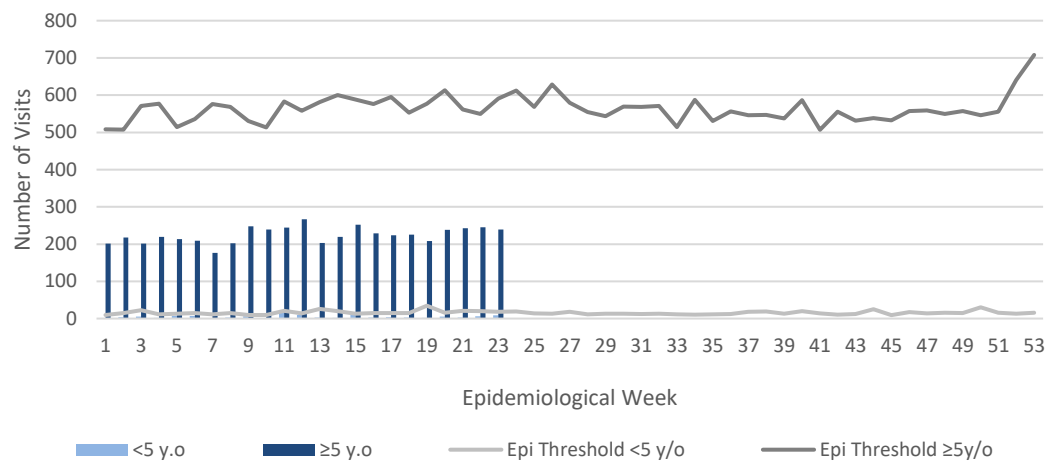


VIOLENCE

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

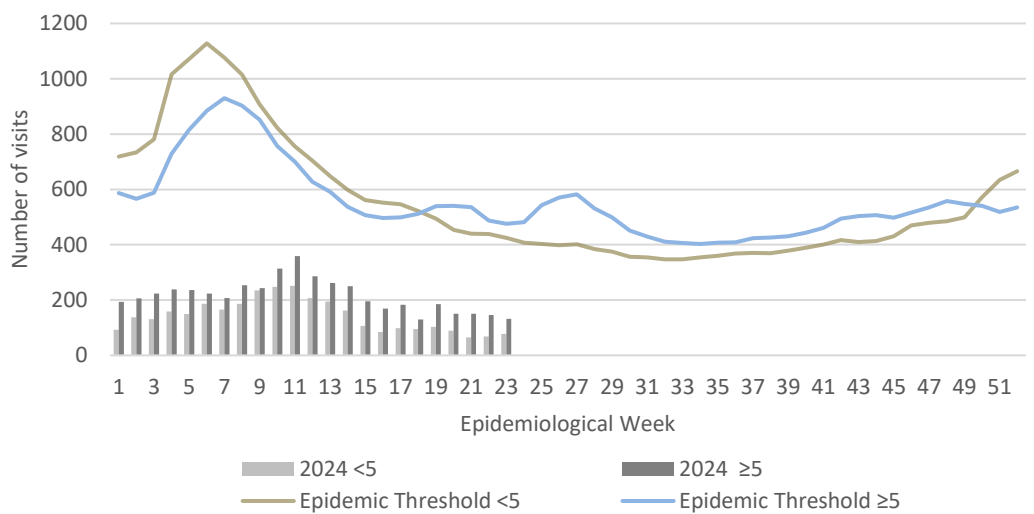


GASTROENTERITIS

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	177 ^β	168 ^β	Pertussis-like syndrome and Tetanus are clinically confirmed classifications. √ 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.	
	Cholera	0	0		
	Severe Dengue [√]	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	228	2318		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	9	41		
	Hepatitis C	1	18		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis	8	17		
	Monkeypox	0	3		
EXOTIC/ UNUSUAL	Plague	0	0		
HIGH 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	26	21		
	Ophthalmia Neonatorum	67	69		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	10	32		
	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



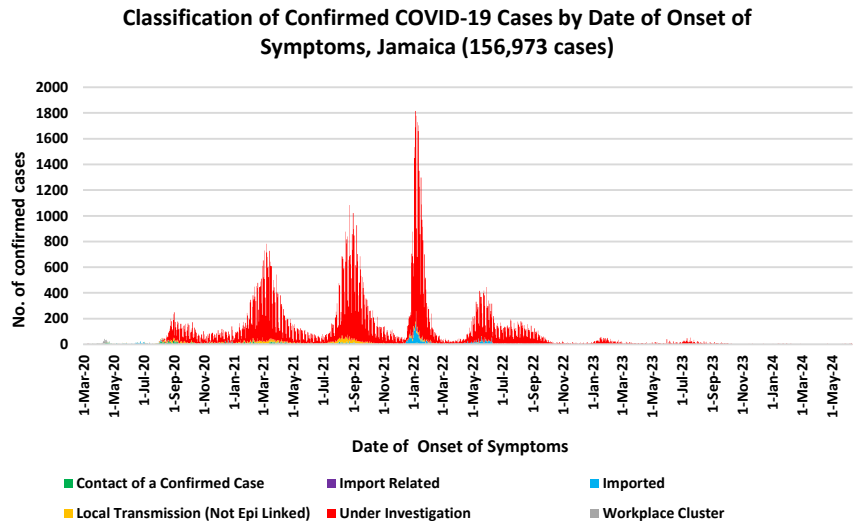
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



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COVID-19 Surveillance Update

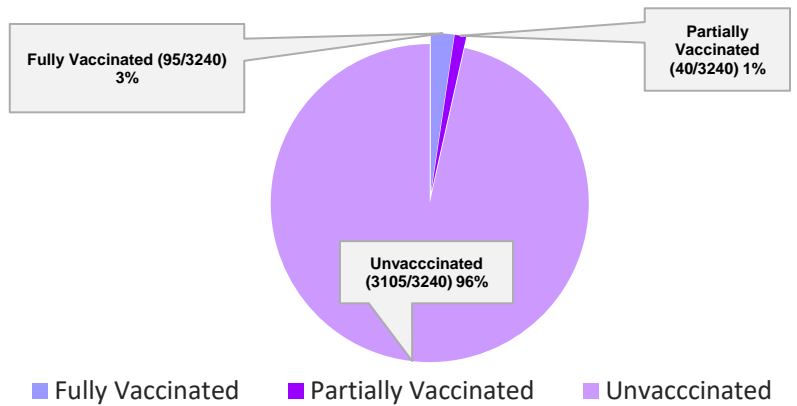
CASES	EW 23	Total
Confirmed	12	156973
Females	6	90461
Males	6	66509
Age Range	23 years to 100 years old	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases * Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.		



COVID-19 Outcomes

Outcomes	EW 23	Total
ACTIVE *2 weeks*		23
DIED – COVID Related	0	3802
Died - NON COVID	0	370
Died - Under Investigation	0	196
Recovered and discharged	0	103226
Repatriated	0	93
Total		156973

3233 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths

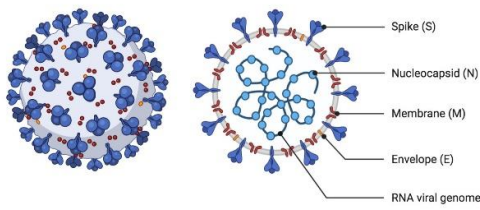


*Vaccination programme March 2021 – YTD
* Total as at current Epi week

COVID-19 Parish Distribution and Global Statistics

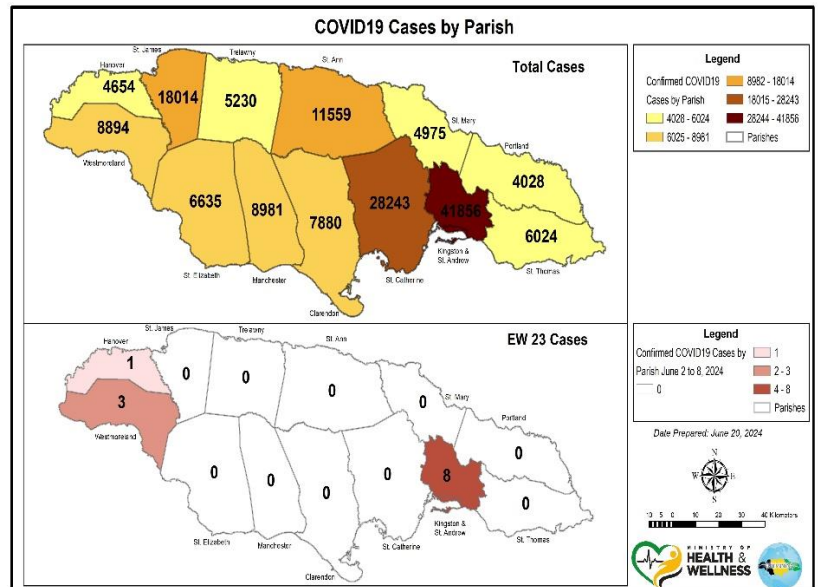
COVID-19 Virus Structure

SARS-CoV-2



COVID-19 WHO Global Statistics EW 20-23, 2024

Epi Week	Confirmed Cases	Deaths
20	33 800	483
21	37 000	412
22	28 200	424
23	29 600	335
Total (4weeks)	128 600	1654



6 NOTIFICATIONS- All clinical sites



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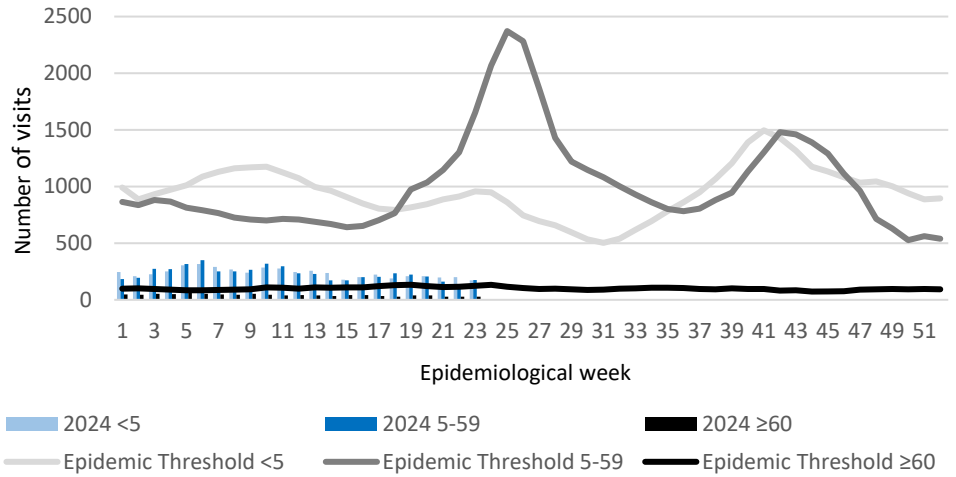
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 23

June 2, 2024 – June 8, 2024 Epidemiological Week 23

	EW 23	YTD
SARI cases	4	153
Total Influenza positive Samples	0	85
Influenza A	0	83
H3N2	0	26
H1N1pdm09	0	57
Not subtyped	0	0
Influenza B	0	2
B lineage not determined	0	0
B Victoria	0	2
Parainfluenza	0	0
Adenovirus	0	0
RSV	0	28

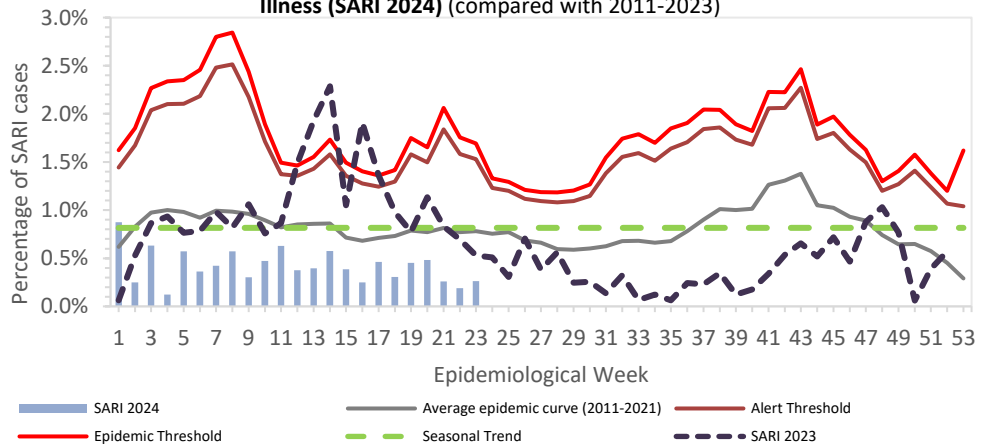
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2024 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 23, four (4) SARI admissions were reported.

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



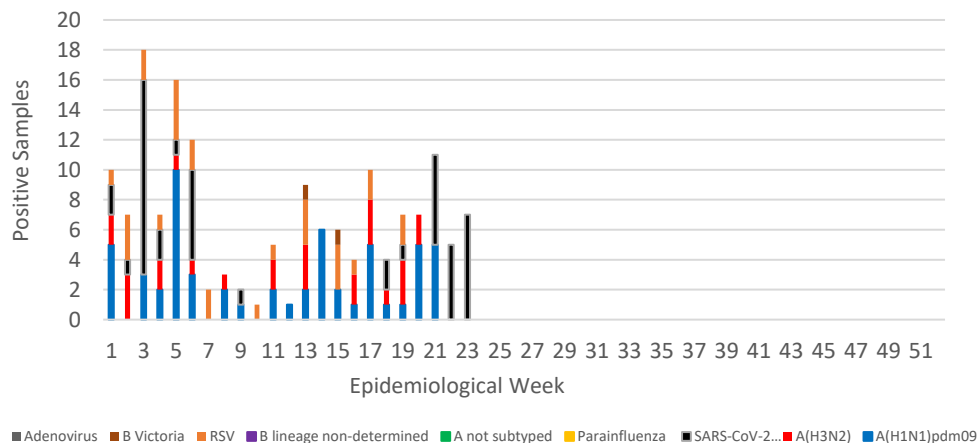
Caribbean Update EW 23

Caribbean: ILI and SARI cases have been declining over the past four weeks, with most positive cases attributable to influenza and SARS-CoV-2. Influenza activity has shown an increase to intermediate levels during the last four EWs. During this period, the predominant viruses have been of type A(H3N2), with concurrent circulation of influenza A(H1N1)pdm09 and, to a lesser extent, B/Victoria. RSV activity has remained low. SARS-CoV-2 activity has shown a marked increase in the last two weeks, reaching elevated levels compared to previous waves.

By country: Influenza activity has been observed over the last four EWs in the Dominican Republic, Jamaica, Guyana, and the Cayman Islands. SARS-CoV-2 activity was noted in Jamaica, Barbados, Guyana, and the Cayman Islands.

(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



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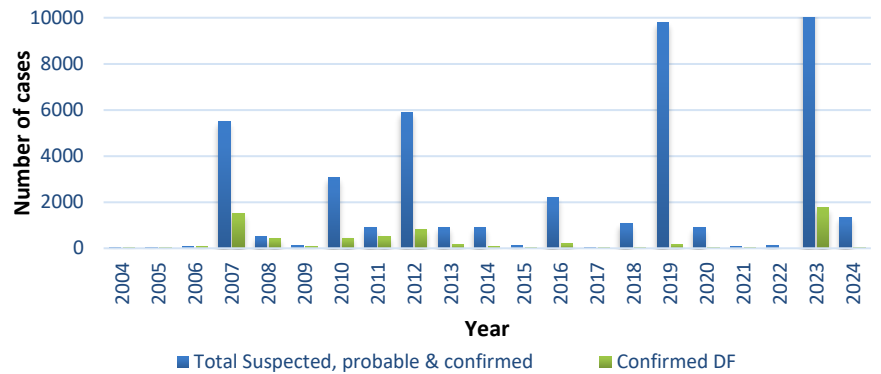
Dengue Bulletin

June 2, 2024 – June 8, 2024 Epidemiological Week 23

Epidemiological Week 23



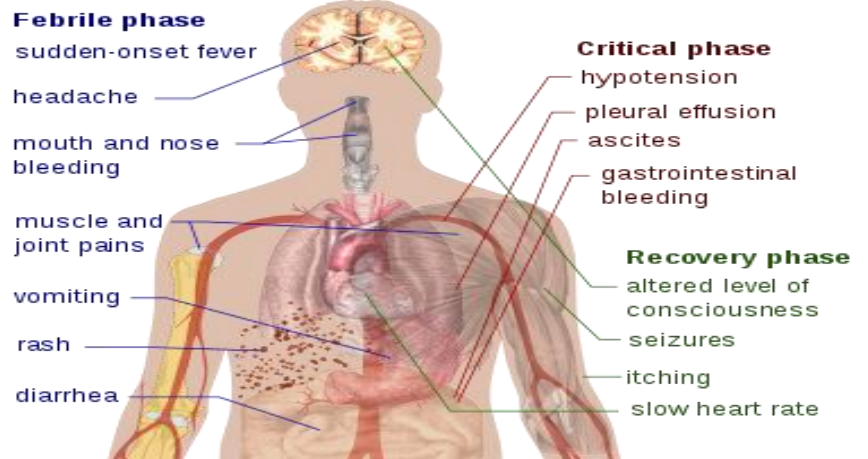
Dengue Cases by Year: 2004-2024, Jamaica



Reported suspected, probable and confirmed dengue with symptom onset in week 23 of 2024

	2024*	
	EW 23	YTD
Total Suspected, Probable & Confirmed Dengue Cases	4	1352
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0

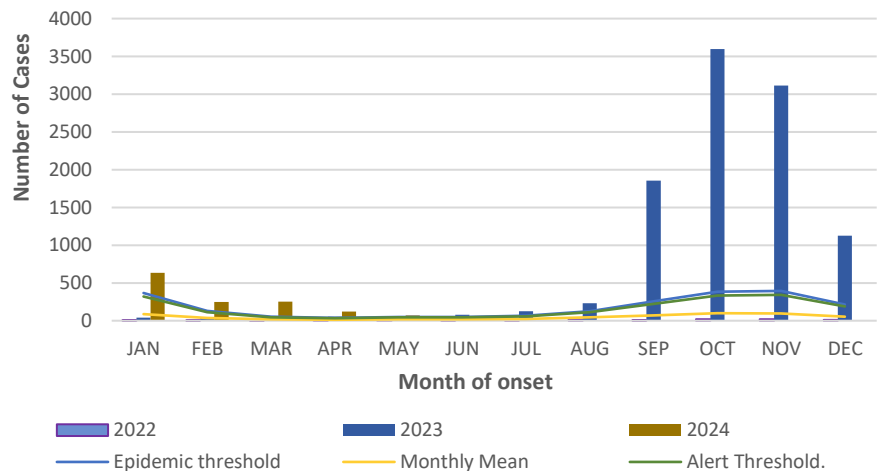
Symptoms of Dengue fever



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at June 18, 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-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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SENTINEL REPORT- 78 sites. Automatic reporting

RESEARCH PAPER

Abstract

NHRC-23-O03

The prevalence of elevated blood pressure and hypertension in adolescents 10-14 years old in Kingston and St. Andrew, Jamaica—a pilot study

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Objectives: This study aimed to determine the prevalence of elevated blood pressure (EBP) and hypertension (HTN) in early adolescents (10-14 years) in the Kingston metropolitan area and investigate associated sociodemographic and anthropometric factors.

Methods: A cross-sectional study was conducted in randomly selected schools in the Kingston metropolitan region. Requisite consent and assent were obtained with institution approvals. Participants completed self-administered questionnaires collecting sociodemographic data, medical and family histories. Participants' weight, height, and blood pressure were measured using standardized procedures. Logistic regression was used to evaluate factors associated with prevalent EBP (SBP and/or DBP \geq 90th < 95th percentile for sex, age, and height). Obesity is defined as a BMI \geq 95th percentile. Statistical significance was at the 5% level.

Results: Two hundred and seventy-six adolescents participated (male: n=123, 44.6%, mean (SD) age 11.34 (1.20) y; female: n=153, 55.4%; mean (SD) age 11.67 (1.20) y). Most participants (n=213, 77.7%) visited the doctor or nurse in the past year; 39% (n=106) had checked their BP in the past 12 months. Participants' nutritional status was categorised as underweight (n=6, 2.2%); normal weight (n=165, 59.8%); overweight (n=46, 16.7%); and obesity (n=59, 21.4%). Five participants (n=3 males, 2 females; 1.8%) met criteria for systolic hypertension (4th report). Overweight/obesity was the only variable significantly associated with hypertension (OR 4.1, 95%CI 1.42-11.91; p<0.01) in early adolescents.

Conclusion: Elevated blood pressure and hypertension are health concerns for early Jamaican adolescents and are positively correlated with overweight or obesity. Suboptimal screening of BP by health care providers occurs and should be encouraged.



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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
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30 sites. Actively
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SENTINEL
REPORT- 78 sites.
Automatic reporting