WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Drought

Drought is a prolonged dry period in the natural climate cycle that can occur anywhere in the world. It is a slow-onset disaster characterized by the lack of precipitation, resulting in a water shortage. Drought can have a serious impact on health, agriculture, economies, energy and the environment. An estimated 55 million people globally are affected by droughts every year, and they are the most serious hazard to livestock and crops in nearly every part of the world. Drought threatens people's livelihoods, increases the risk of disease and death, and fuels mass migration. Water scarcity impacts 40% of the world's population, and as many as 700 million people are at-risk of being displaced as a result of drought by 2030.

Rising temperatures caused by climate change are making already dry regions drier and wet regions wetter. In dry regions, this means that when temperatures rise, water evaporates more quickly, and thus increases the risk of drought or prolongs periods of drought. Between 80-90% of all documented disasters from natural hazards during the past 10 years have resulted from floods, droughts, tropical cyclones, heat waves and severe storms.

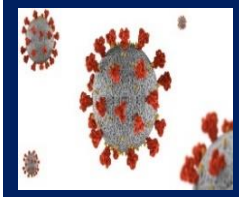
When drought causes water and food shortages there can be many impacts on the health of the affected population, which may increase the risk of disease and death. Drought may have acute and chronic health effects, including:

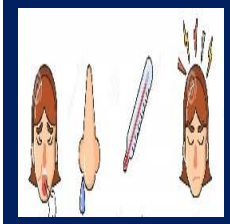
- malnutrition due to the decreased availability of food, including micronutrient deficiency, such as iron-deficiency anaemia;
- increased risk of infectious diseases, such as cholera, diarrhoea, and pneumonia, due to acute malnutrition, lack of water and sanitation, and displacement;
- psycho-social stress and mental health disorders;
- disruption of local health services due to a lack of water supplies, loss of buying power, migration and/or health workers being forced to leave local areas.

Severe drought can also affect air quality by making wildfires and dust storms more likely, increasing health risk in people already impacted by lung diseases, like asthma or chronic obstructive pulmonary disease (COPD), or with heart disease.

Taken from WHO website on 27/ May /2024
https://www.who.int/health-topics/drought#tab=tab_1
https://www.who.int/health-topics/drought#tab=tab_2

EPI WEEK 20





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 – 17 to 20 of 2024

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

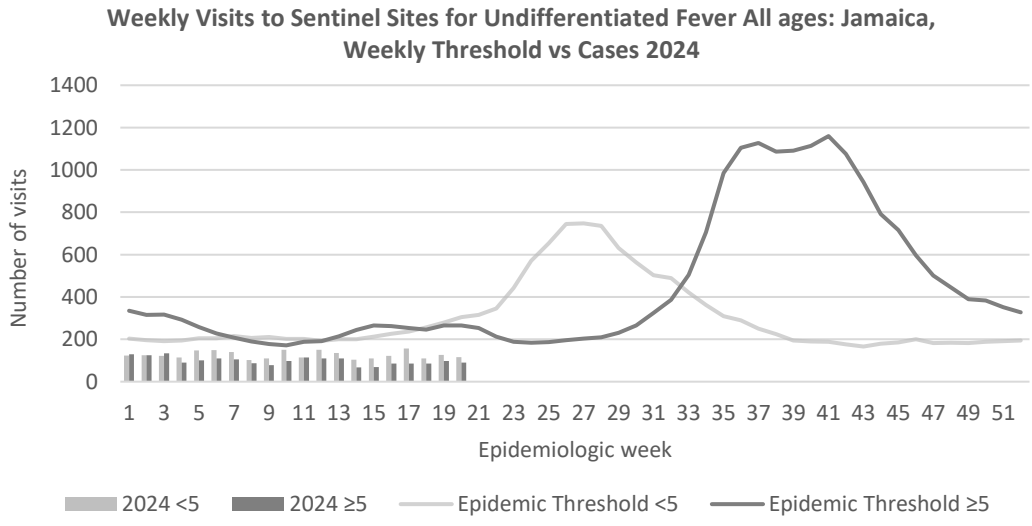
KEY:
Yellow- late submission on Tuesday
Red – late submission after Tuesday

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													
17	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
18	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
19	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
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

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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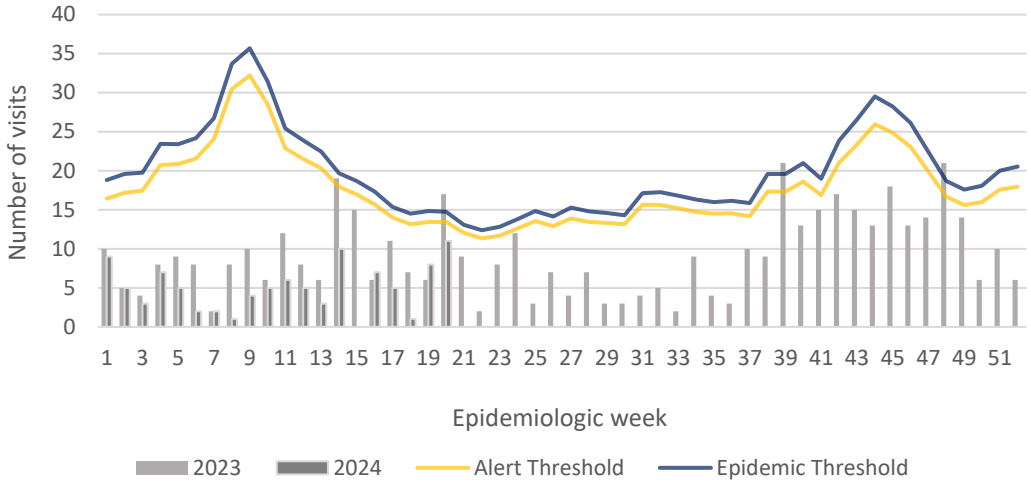
FEVER AND NEUROLOGICAL

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).

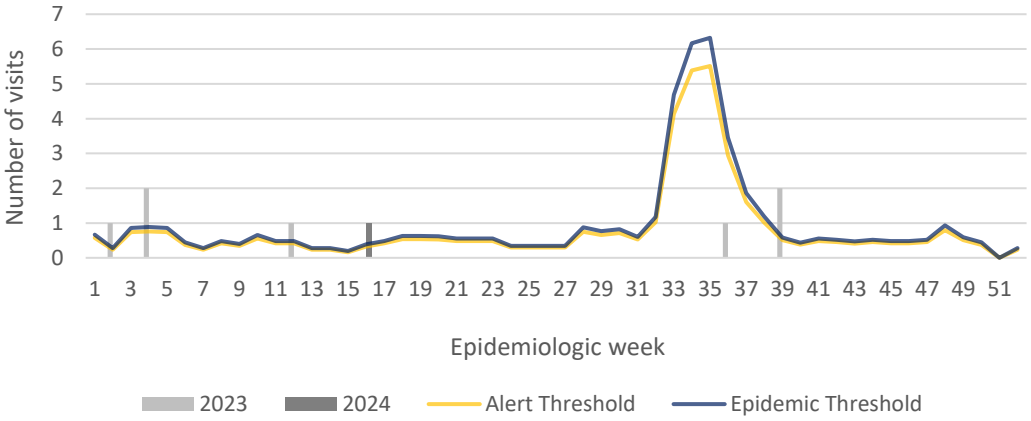
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2023 and 2024 vs. Weekly Threshold: Jamaica



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.

Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2023 and 2024 vs Weekly Threshold; Jamaica

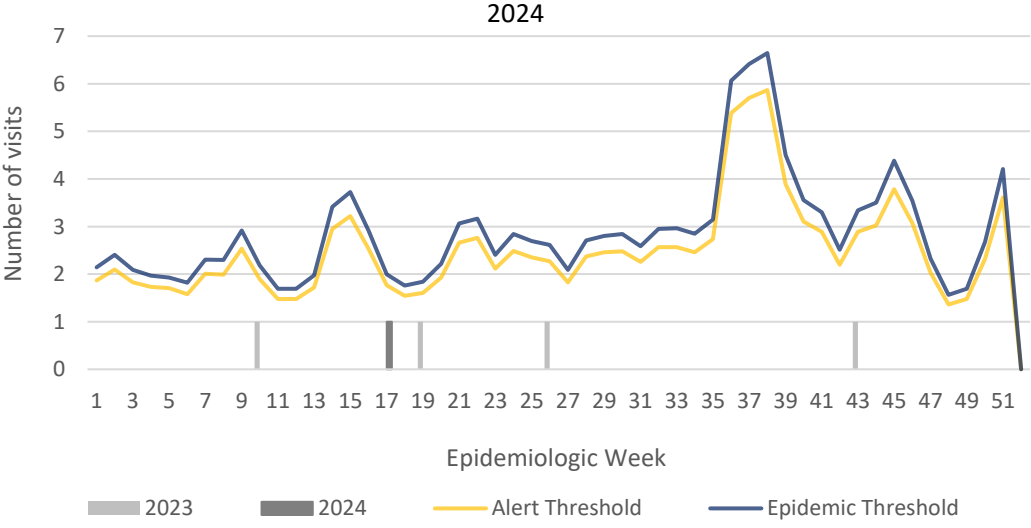


FEVER AND JAUNDICE

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.

Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2023 and 2024



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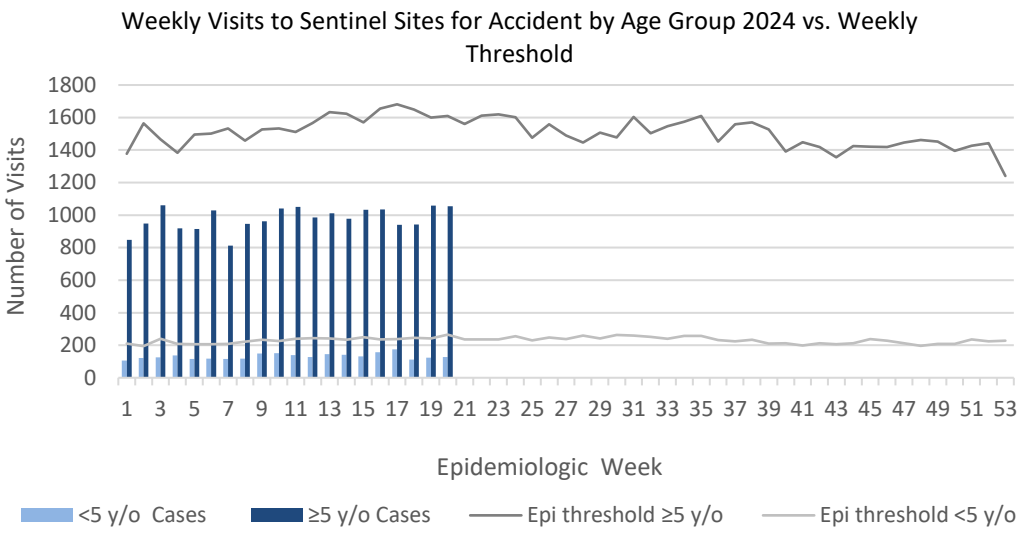
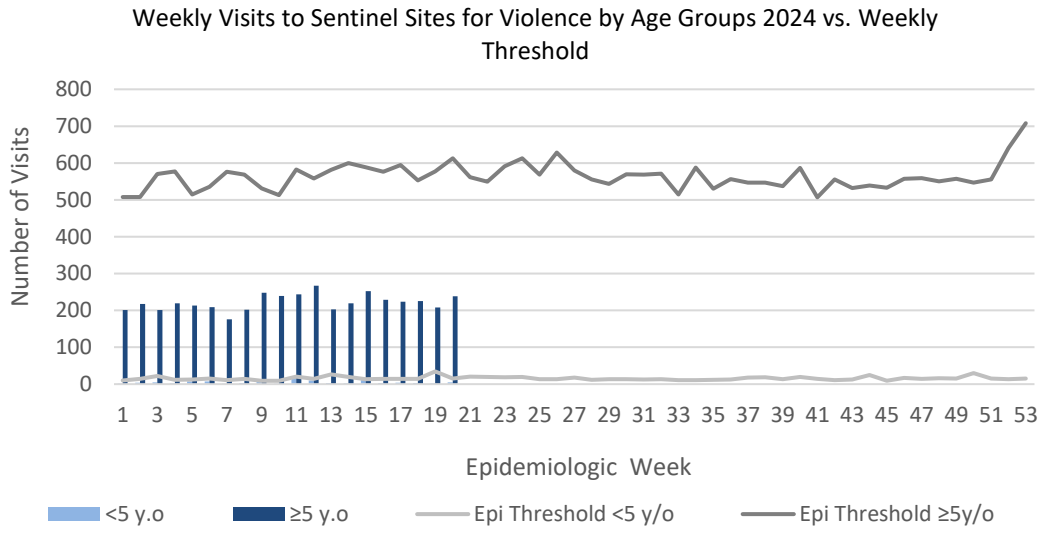
ACCIDENTS

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



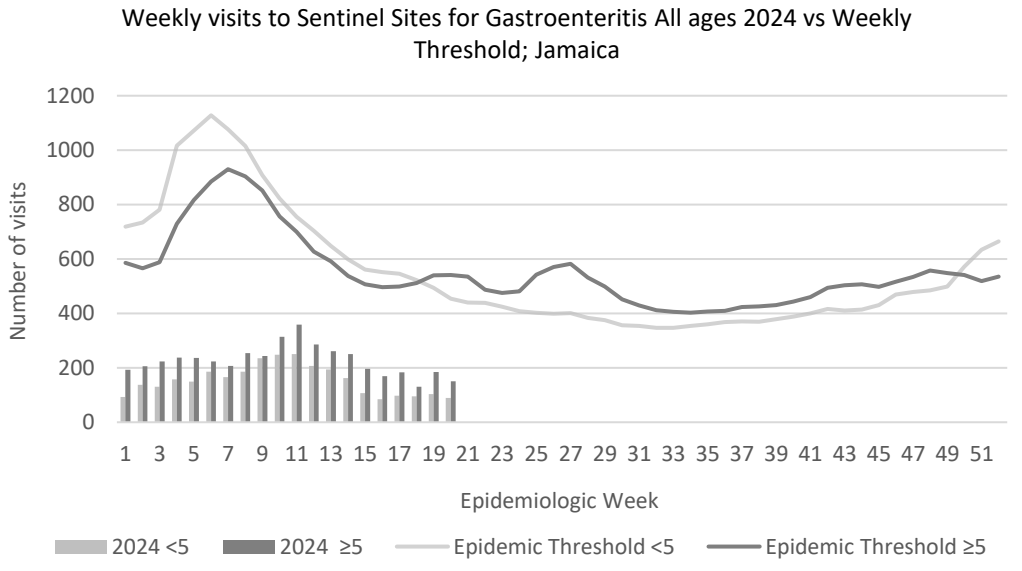
VIOLENCE

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	Confirmed YTD[α] PREVIOUS YEAR 2023
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		142[β]	122[β]
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		See Dengue page below	See Dengue page below
	COVID-19 (SARS-CoV-2)		189	2119
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		4	40
	Hepatitis C		1	14
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis		8	17
	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]		25	20
	Ophthalmia Neonatorum		58	54
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		5	29
	Yellow Fever		0	0
	Chikungunya[ε]		0	0
	Zika Virus[θ]		0	0

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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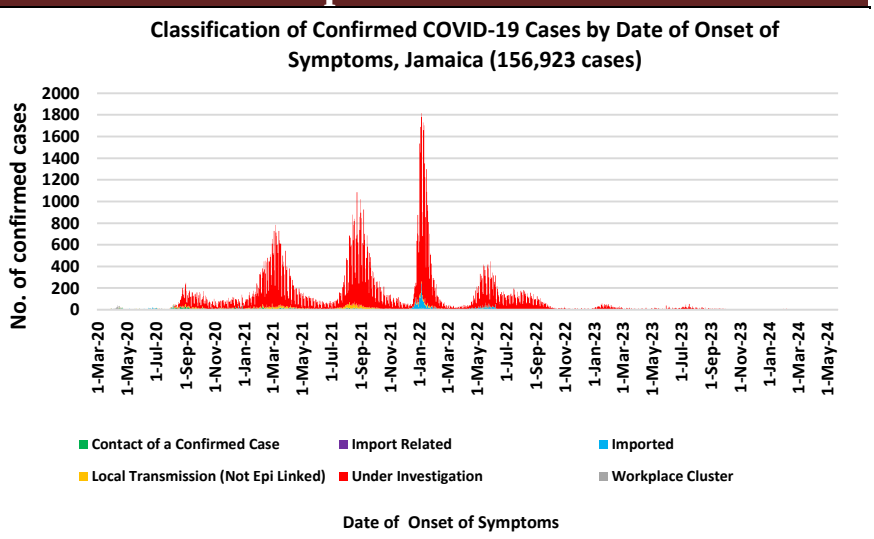
COVID-19 Surveillance Update

CASES	EW 20	Total
Confirmed	5	156923
Females	4	90432
Males	1	66488
Age Range	2 years to 80 years old	1 day to 108 years

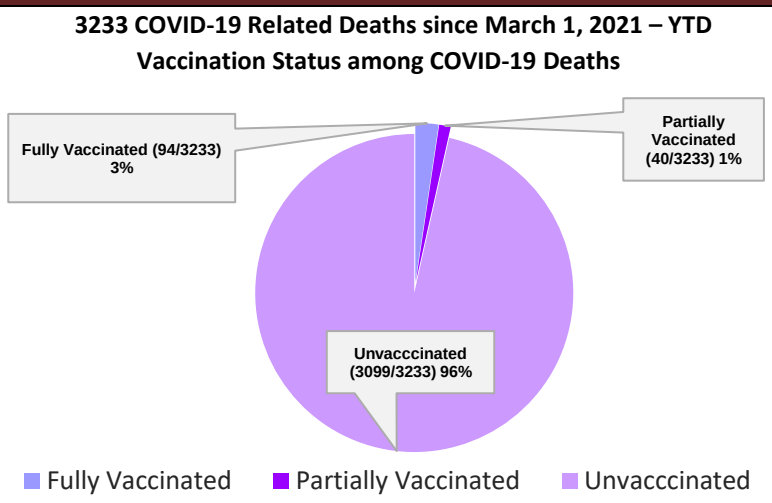
* 3 positive cases had no gender specification
* PCR or Antigen tests are used to confirm cases
* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

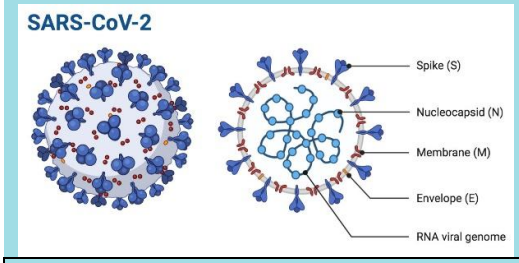
Outcomes	EW 20	Total
ACTIVE *2 weeks*		11
DIED – COVID Related	0	3795
Died - NON COVID	0	370
Died - Under Investigation	0	201
Recovered and discharged	0	103226
Repatriated	0	93
Total		156923

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



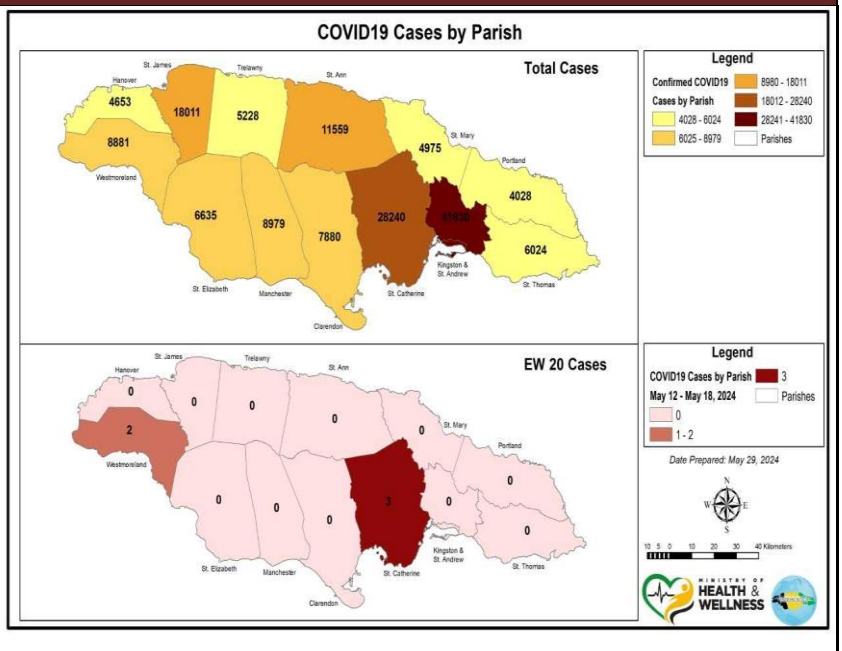
COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure



COVID-19 WHO Global Statistics EW 17-20, 2024

Epi Week	Confirmed Cases	Deaths
17	32 300	646
18	34 300	513
19	30 800	449
20	32 500	293
Total (4weeks)	**129 900**	**1901**



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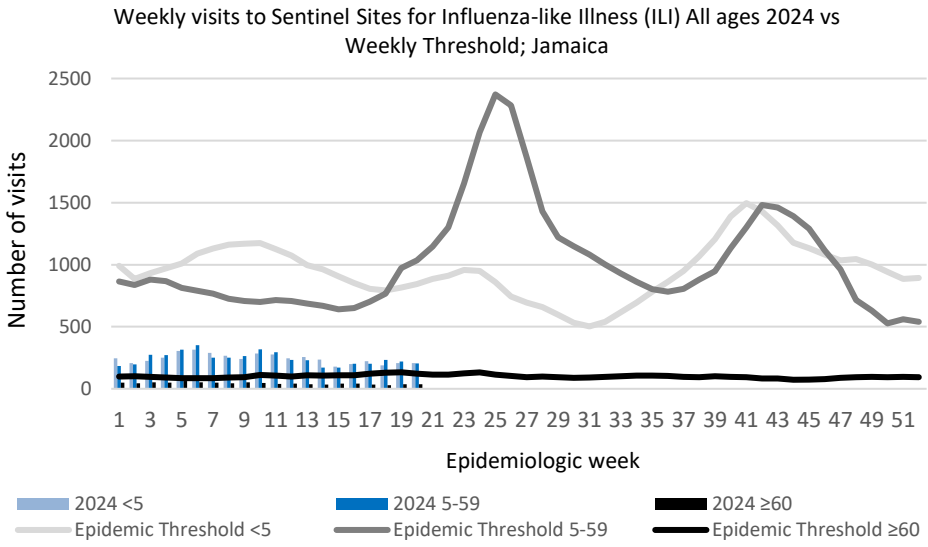
May 31 , 2024 ISSN 0799-3927

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 20

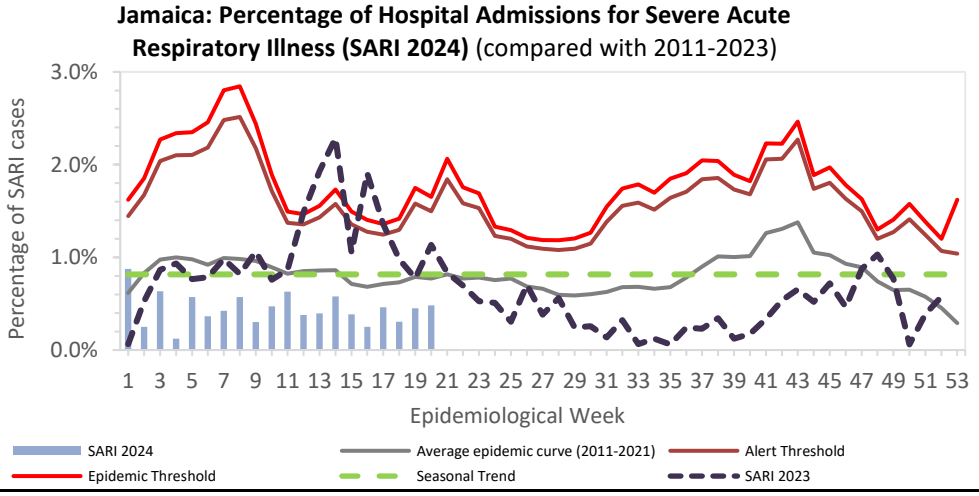
May 12, 2024 – May 18, 2024 Epidemiological Week 20

	EW 20	*YTD*
SARI cases	8	142
Total Influenza positive Samples	**2**	**66**
Influenza A	**2**	**64**
H3N2	0	18
H1N1pdm09	2	46
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	26



Epi Week Summary

During EW 20, eight (8) SARI admissions were reported.

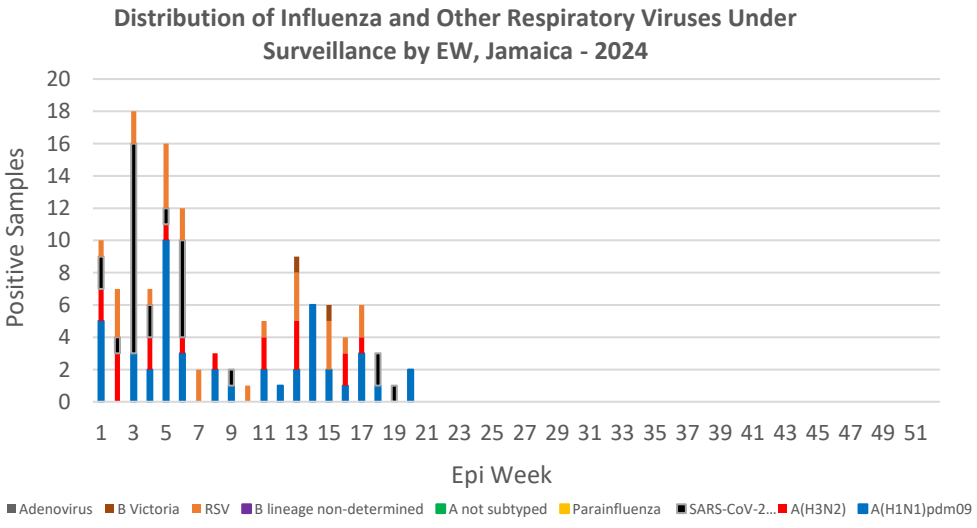


Caribbean Update EW 20

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

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

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



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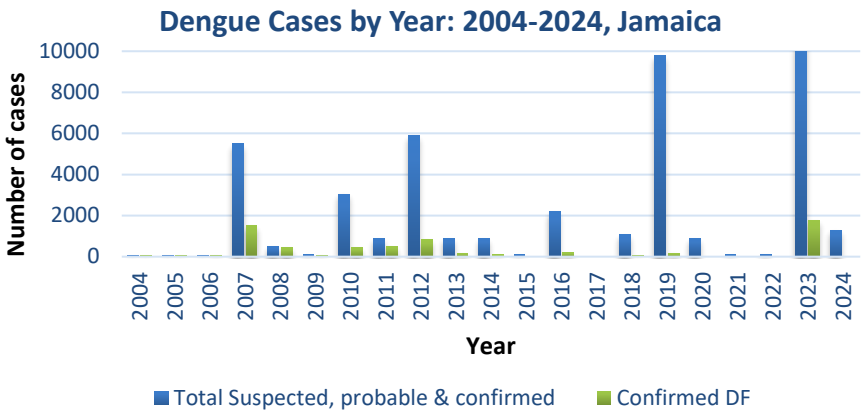
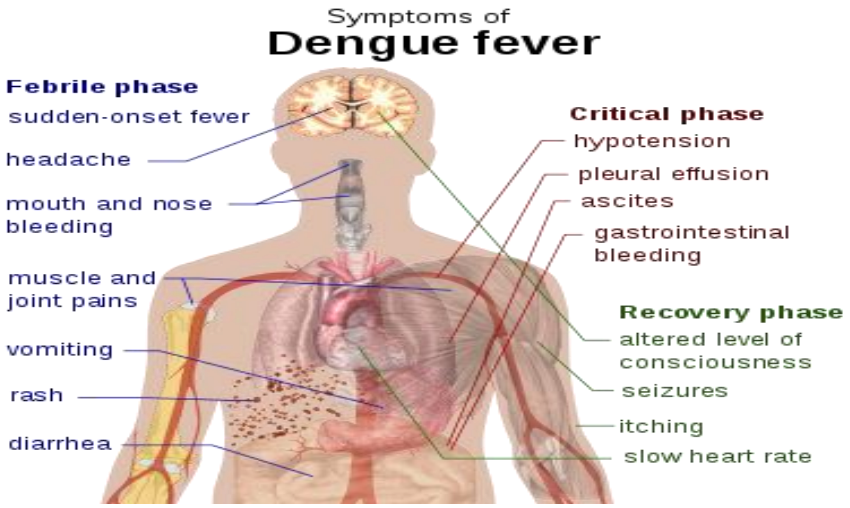
Dengue Bulletin

May 12, 2024 – May 18, 2024 Epidemiological Week 20 | Epidemiological Week 20



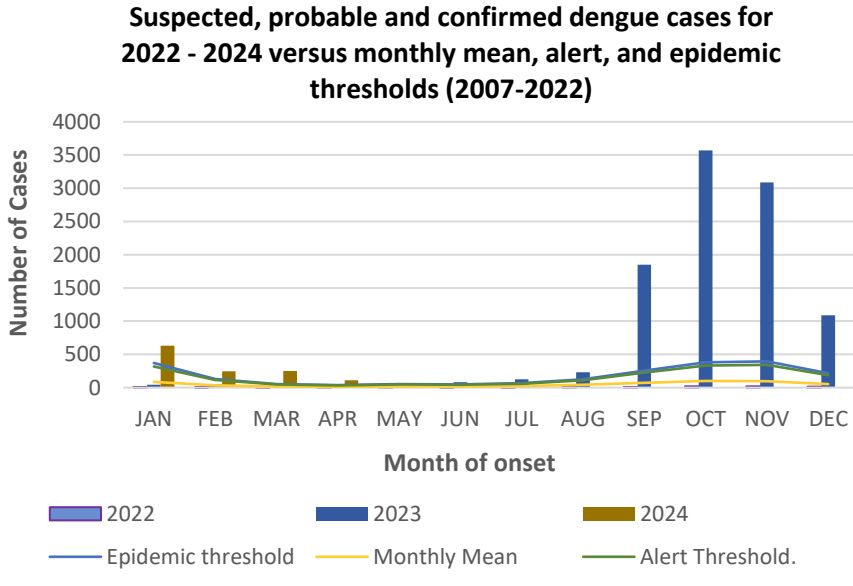
Reported suspected, probable and confirmed dengue with symptom onset in week 20 of 2024

	2024*	
	EW 20	YTD
Total Suspected, Probable & Confirmed Dengue Cases	3	1292
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- **Dengue deaths are reported based on date of death.**
- ***Figure as at May 31, 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_22_P8

Cannabis use among Heads of Household- Prevalence and Associated Factors

Spaulding-O'Hara, J[1], Abel, W.[1]

[1]*University of the West Indies, Mona, Jamaica*

Objectives: To explore the prevalence of *cannabis* use among heads of household, its co-use with tobacco and alcohol, its associated sociodemographic factors, and psychosocial effects in a Jamaican National Drug Use Prevalence Survey.

Methods: A retrospective cross-sectional study of participants 18 years and over were examined using secondary data analysis which utilized prevalence percentages, Pearson Chi-squared and T-test analyses and finally ANOVA, pairwise comparisons and binary logistic regression.

Results: Lifetime prevalence of cannabis use among heads of household was 30.6%. Most heads were males (76.4%), young adults (43.5%) and of secondary level education (71.2%). However, ANOVA predicted that cannabis users are more likely to be males and middle-aged. Amongst *cannabis* users, tobacco and alcohol lifetime prevalence was 100% & 96.6% respectively. Most head of household cannabis users responded 'never' to experiencing negative psychosocial factors: forensic history (N=422, χ^2 0.104, p=0.007), physical aggression (N=426, χ^2 0.121, p=0.002), memory loss (N=416, χ^2 0.089, p= 0.019), domestic problems (N=428, χ^2 0.109, p= 0.005). Harmful alcohol use was significantly higher than non-harmful alcohol use with regards to negative psychosocial factors.

Conclusion: Most Jamaican household heads who used cannabis also reported lifetime tobacco and alcohol use, however they did not experience significant negative psychosocial effects. A likely explanation for this 'contradiction' is their sense of responsibility to their families, as they were mostly light and intermittent tobacco smokers and nonharmful alcohol drinkers, thus averting considerable substance misuse. Further research is needed to explore the potential mitigating factors in this population.

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