

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Blood Safety And Availability



Key facts

- Of the 118.5 million blood donations collected globally, 40% of these are collected in high-income countries, home to 16% of the world's population.
- In low-income countries, up to 54 % of blood transfusions are given to children under 5 years of age; whereas in high-income countries, the most frequently transfused patient group is over 60 years of age, accounting for up to 75% of all transfusions.
- Based on samples of 1000 people, the blood donation rate is 31.5 donations in high-income countries, 15.9 donations in upper-middle-income countries, 6.8 donations in lower-middle-income countries and 5.0 donations in low-income countries.
- An increase of 7.8 million blood donations from voluntary unpaid donors has been reported from 2013 to 2018. In total, 79 countries collect over 90% of their blood supply from voluntary unpaid blood donors; however, 56 countries collect more than 50% of their blood supply from family/replacement or paid donors.
- Only 55 of 171 reporting countries produce plasma-derived medicinal products (PDMP) through the fractionation of plasma collected in the reporting country. A total of 90 countries reported that all PDMP are imported, 16 countries reported that no PDMP were used during the reporting period, and 10 countries did not respond to the question.

National blood policy and organization



Blood transfusion saves lives and improves health, but many patients requiring transfusion do not have timely access to safe blood. Providing safe and adequate blood should be an integral part of every country's national health care policy and infrastructure.

WHO recommends that all activities related to blood collection, testing, processing, storage and distribution be coordinated at the national level through effective organization and integrated blood supply networks. The national blood system should be governed by national blood policy and legislative framework to promote uniform implementation of standards and consistency in the quality and safety of blood and blood products.

EPI WEEK 1



SYNDROMES

PAGE 2



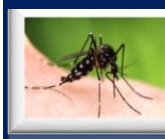
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

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GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

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 - 50, 2021 to 1 of 2022

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
2022													
50	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	Late (T)	On Time	On Time	Late (W)	Late (W)
51	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
52	On Time	On Time	On Time	On Time	On Time	Late (T)	Late (T)	Late (T)	On Time	On Time	On Time	On Time	On Time
1	On Time	Late (T)	Late (T)	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

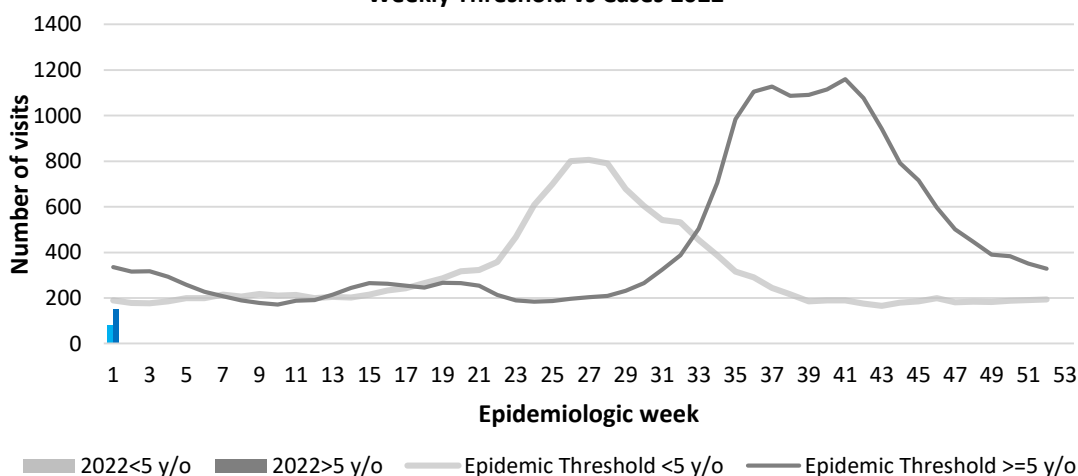
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2022



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



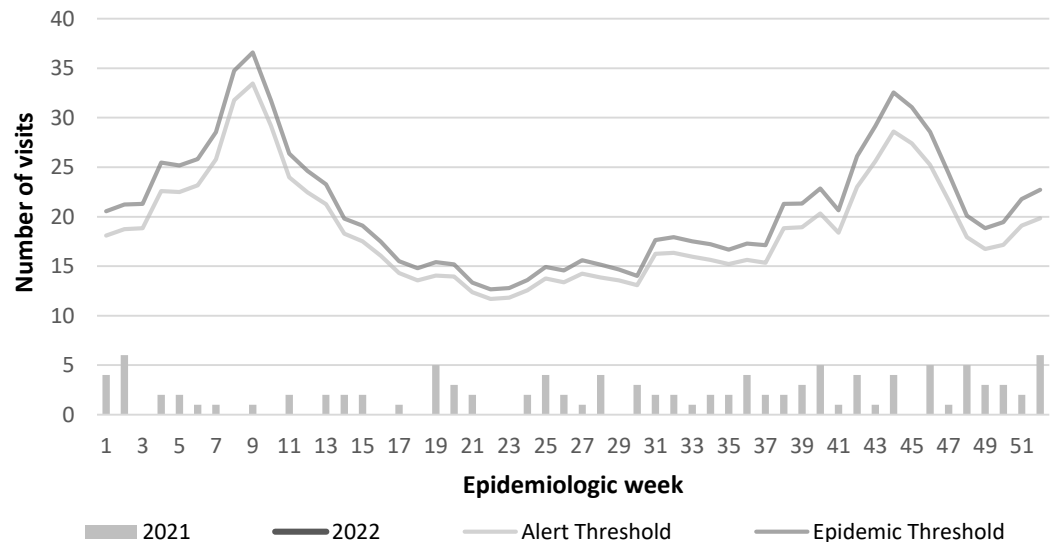
SENTINEL REPORT- 78 sites. Automatic reporting

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).



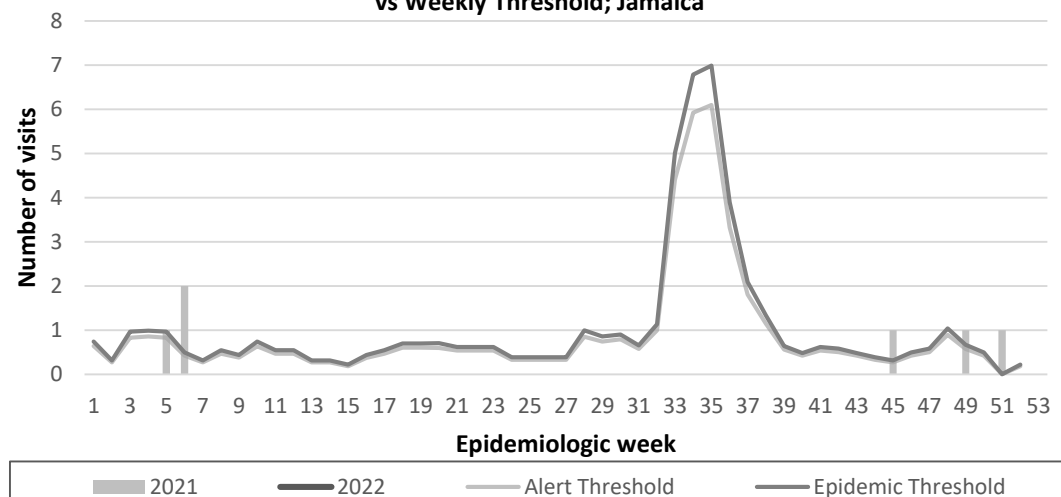
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2021 and 2022 vs. Weekly Threshold: Jamaica

**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 2021 and 2022 vs Weekly Threshold; Jamaica

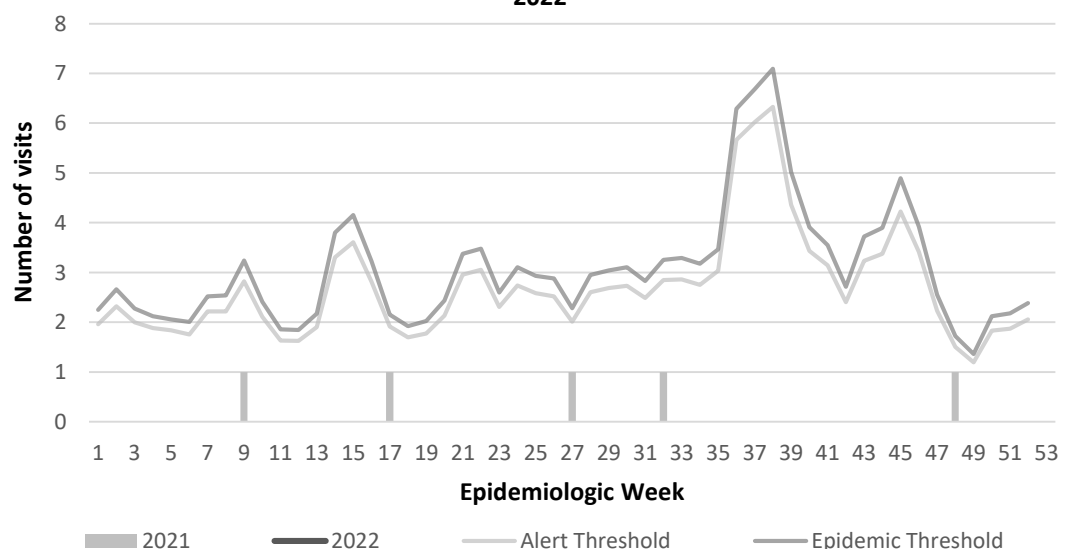
**FEVER AND JAUNDICE**

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 2021 and 2022



3 NOTIFICATIONS-
All clinical sites



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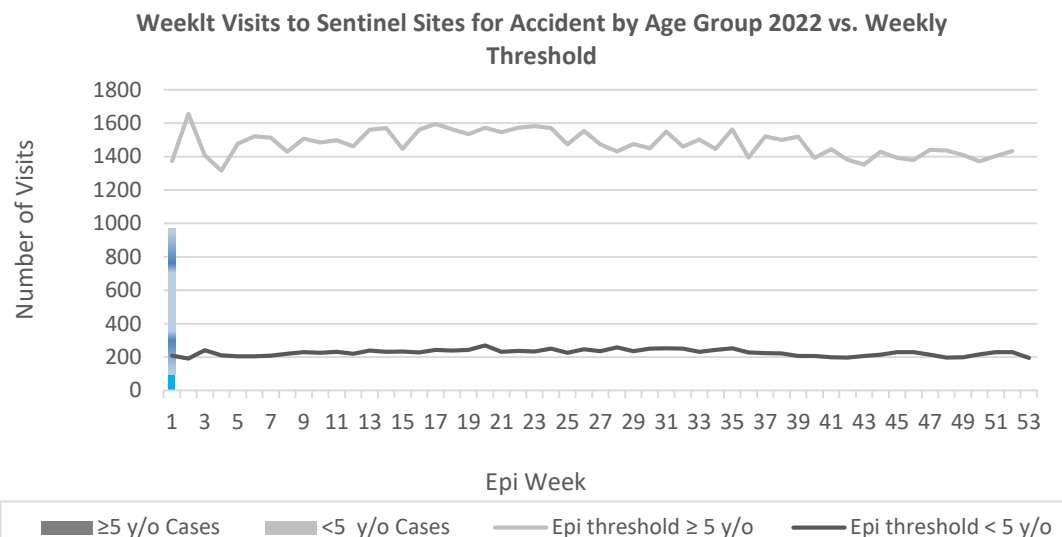
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

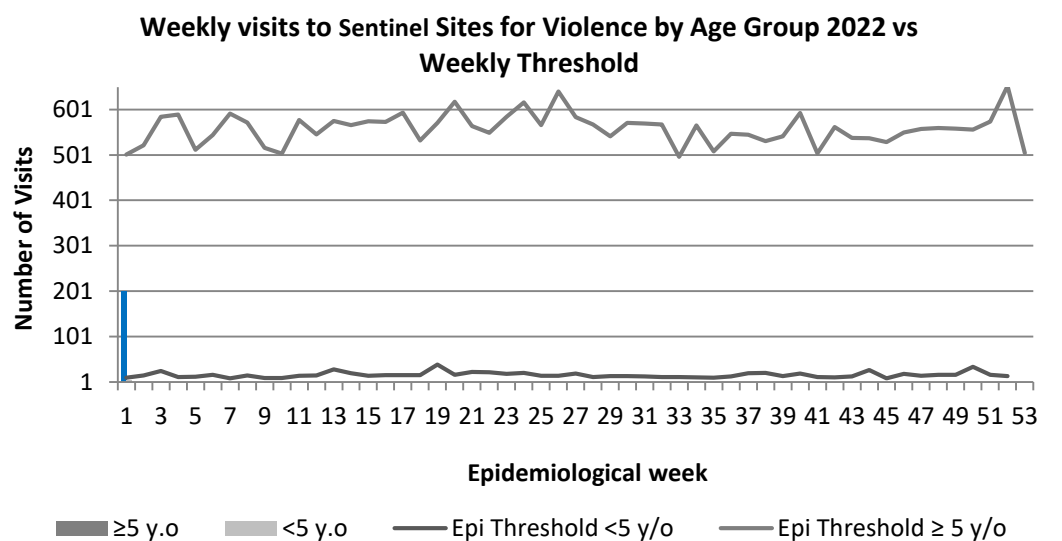
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

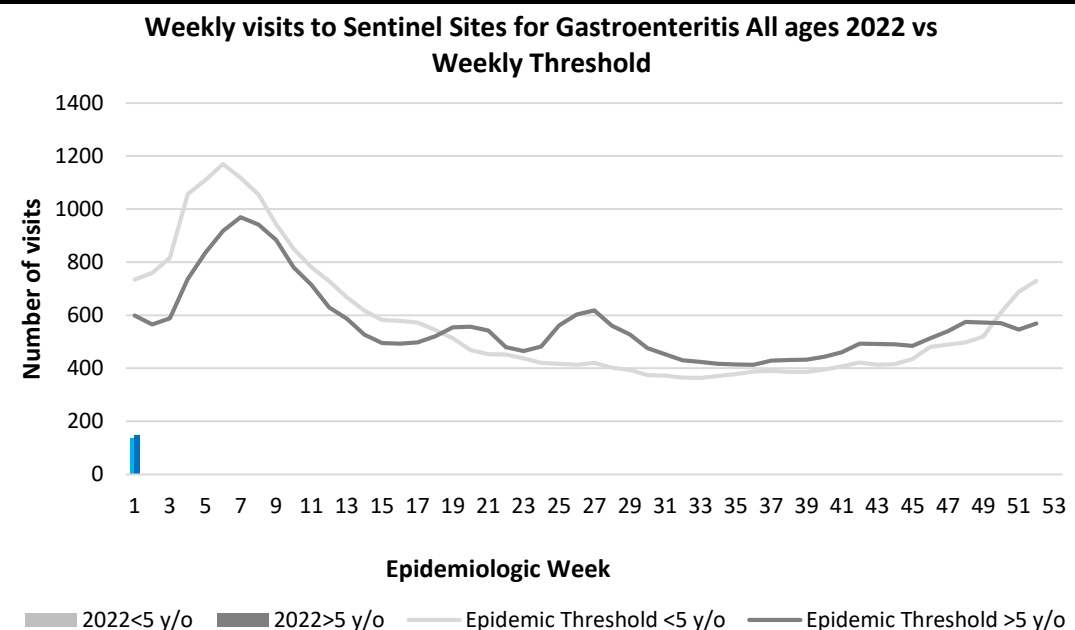
VARIATIONS OF BLUE SHOW CURRENT WEEK

**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



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CLASS ONE NOTIFIABLE EVENTS				Comments	
		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.	
	CLASS 1 EVENTS	CURRENT YEAR 2022	PREVIOUS YEAR 2021		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	0	2 ^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. ^ε CHIKV IgM positive cases ^θ Zika PCR positive cases ^β Updates made to prior weeks in 2020. ^α Figures are cumulative totals for all epidemiological weeks year to date.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	9781	596		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	0	0		
	Hepatitis C	0	0		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	0	0		
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		2	0	
	Ophthalmia Neonatorum		2	0	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		0	1	
Yellow Fever		0	0		
	Chikungunya ^ε	0	0	NA- Not Available	
	Zika ^θ	0	0		



5 NOTIFICATIONS-
All clinical sites



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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 1

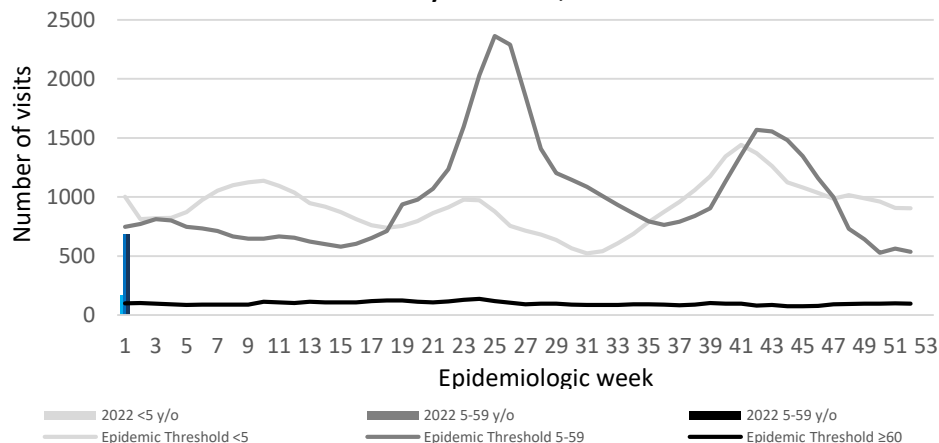
January 2– 8, 2022 Epidemiological Week 1

	EW 1	YTD
SARI cases	29	29
Total Influenza positive Samples	0	0
Influenza A	0	0
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0

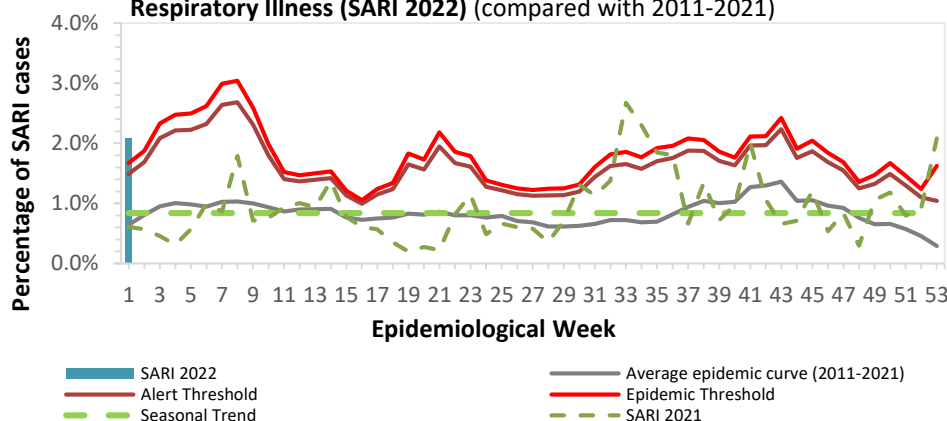
Epi Week Summary

During EW 1, twenty-nine (29) SARI admissions were reported.

Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages
2022 vs Weekly Threshold; Jamaica



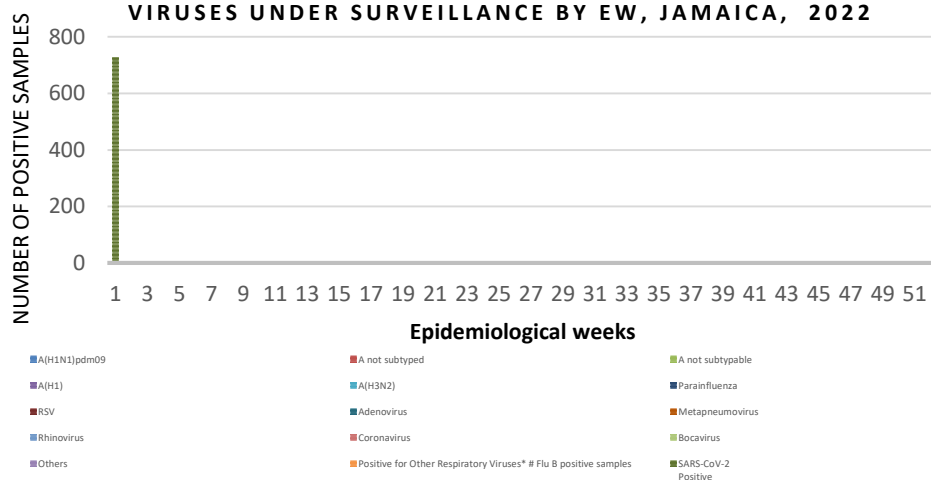
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2022) (compared with 2011-2021)



Caribbean Update EW 1

Caribbean: Influenza activity remained low. In Belize, SARS-CoV-2 and RSV detections continued to increase and in Haiti, SARS-CoV-2 activity continued elevated and increasing.

DISTRIBUTION OF INFLUENZA AND OTHER RESPIRATORY VIRUSES UNDER SURVEILLANCE BY EW, JAMAICA, 2022



6 NOTIFICATIONS-
All clinical
sites



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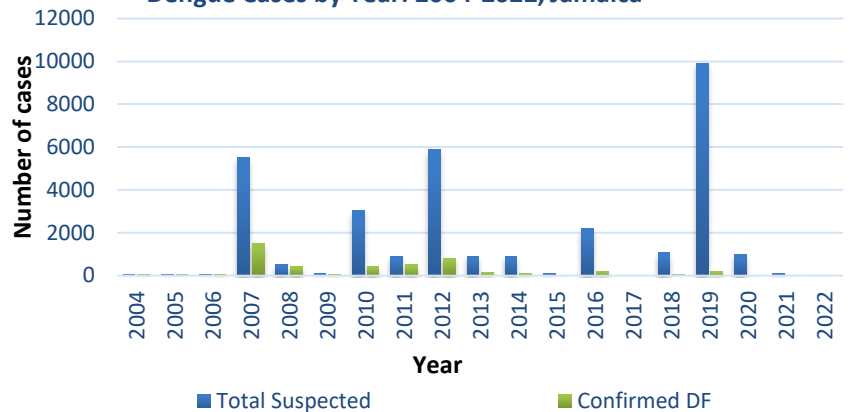
Dengue Bulletin

January 2- 8, 2022 Epidemiological Week 1

Epidemiological Week 1



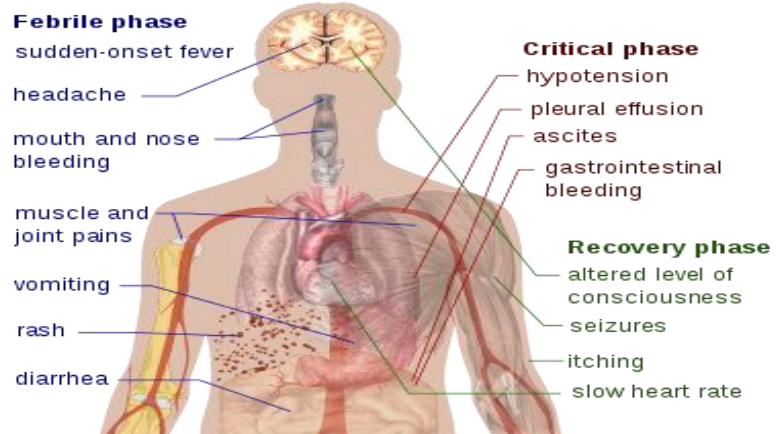
Dengue Cases by Year: 2004-2022, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 1 of 2022

	2022*	
	EW 1	YTD
Total Suspected Dengue Cases	0	0
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0

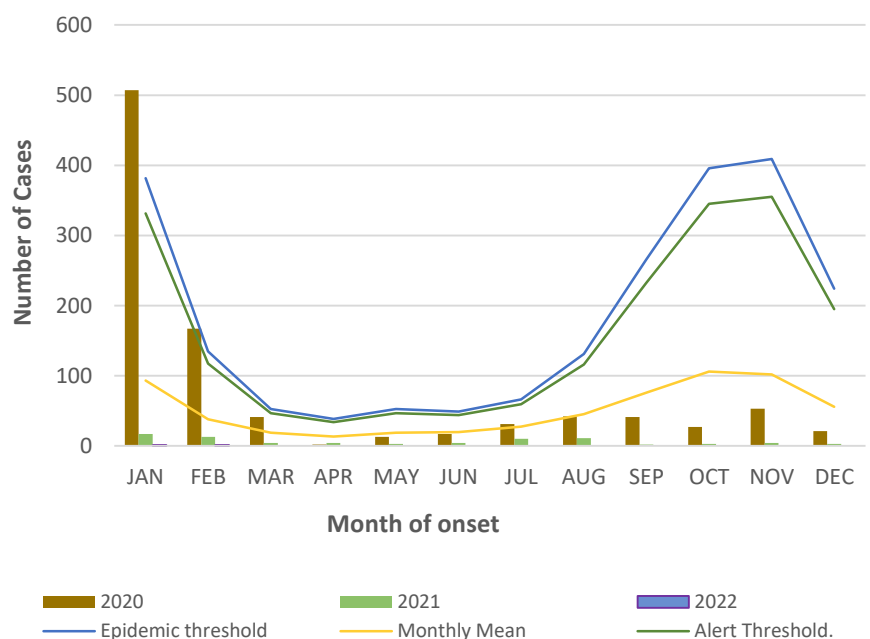
Symptoms of Dengue fever



Points to note:

- *Figure as at Jan 13, 2022
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2020, 2021 and 2022 versus monthly mean, alert, and epidemic thresholds (2007-2021)



7 NOTIFICATIONS-
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sites



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RESEARCH PAPER

ABSTRACT

Barriers to Adherence of Nurses and Patient Care Assistants to Hand Hygiene Practices and Equipment Decontamination Policy at an Urban Hospital in Jamaica

Feron Brown Hamilton¹, Antoinette Barton-Gooden²

Aim: To determine the barriers to adherence of Nurses and Patient Care Assistants to hand hygiene practices and Equipment Decontamination Policy.

Methods: Cross-sectional study design was utilized among 109 Registered Nurses and 26 Patient Care Assistants (PCAs) who were conveniently sampled from the Medical and Surgical Departments. A 54 item self-administered Behaviours and Levers to hand hygiene instrument and the Infection Control Policy Audit Tool. Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 20. Descriptive statistics included ANOVA and chi-squared test.

Results: Response rate was 68% with nurses (109/135) and PCAs (26/37). Most of the respondents were female (97%), age range 20-30 years (54.4%) and had 0-4 years' experience (63%). Self-reported adherence to appropriate hand hygiene practices were high: 84% reported 81-100% adherence. Barriers identified were: Social influences (\bar{x} 3.24, ± 1.67), knowledge of decontamination of equipment policy (\bar{x} 4.18, ± 2.01), environment context and resources (\bar{x} 4.64 ± 1.48) and action planning (\bar{x} 4.96 ± 1.59). There were no statistical significant relationship between socio-demographic characteristics: age (χ^2 4.684; $p > .05$); job title (χ^2 1.709; $p > .05$); years of service (χ^2 1.237, $p > .05$); unit assigned (χ^2 4.684; $p > 0.05$) and adherence. While participants who were 31 years and older were more knowledge of equipment decontamination policy (\bar{x} 5.71 ± 2.01 ; $p < 0.05$). PCAs had greater knowledge of the equipment decontamination policy (\bar{x} 5.41, ± 1.75 ; $p < 0.05$) when compared to Enrolled Assistant Nurses (\bar{x} 4.09 ± 1.90) and Registered Nurses (\bar{x} 3.85 ± 1.58).

Conclusion: Nurse and PCAs reported high hand hygiene adherence. Barriers were knowledge of the equipment decontamination policy, environment context and resources.



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8 NOTIFICATIONS-
All clinical
sites



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