

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Year of Health and Care Workers 2021

Protect. Invest. Together.



PROTECT our health and care workers

Health and care workers have protected the world during COVID-19: We have a moral obligation to protect them. Health workers delivering new COVID-19 health care innovations and vaccines should have the requisite support and enabling work environment. Vaccinating health and care workers first is the right thing to do and the smart thing to do.

INVEST in the people who invest in us

The world is facing a global shortage of health workers. We must invest in education, jobs and decent work to protect the world from disease and achieve universal health coverage. Globally, 70% of the health and social workforce are women. Nurses and midwives represent a large portion of this. We need to invest in gender equity.



TOGETHER, we can make it happen

We all have a role to play to ensure that our health and care workforces are supported, protected, motivated and equipped to deliver safe health care at all times, not only during COVID-19.



Annual theme campaigns

EPI WEEK 30



SYNDROMES

PAGE 2



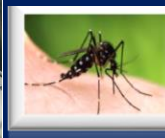
CLASS 1 DISEASES

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INFLUENZA

PAGE 5



DENGUE FEVER

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GASTROENTERITIS

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RESEARCH PAPER

PAGE 8

SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



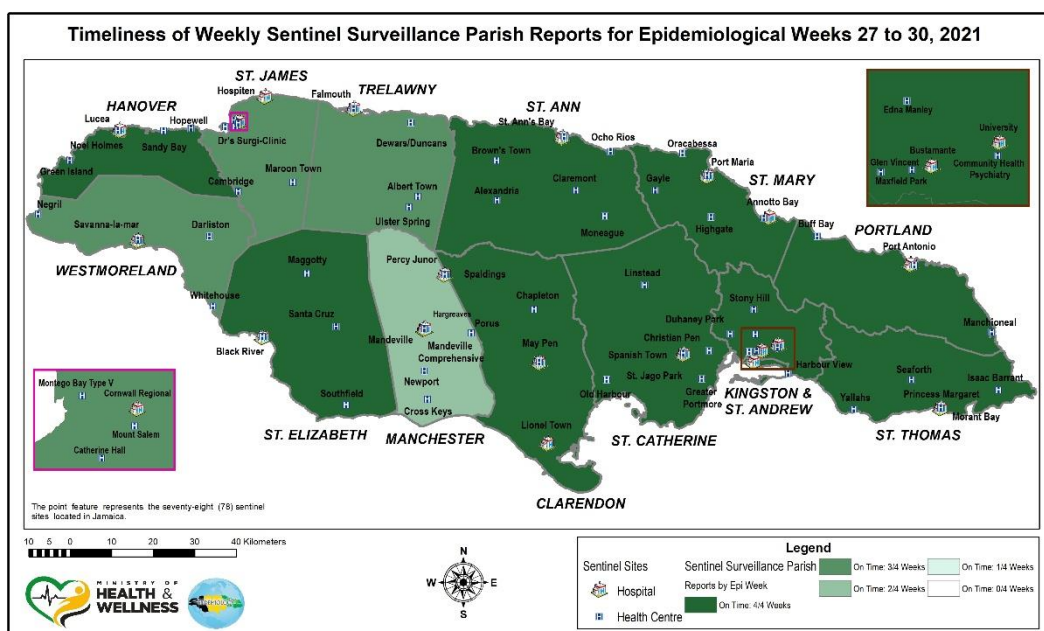
A syndromic surveillance system is good for early detection of and response to public health events.

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.

Map representing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks - 27 2021 to 30 of 2021

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



REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER

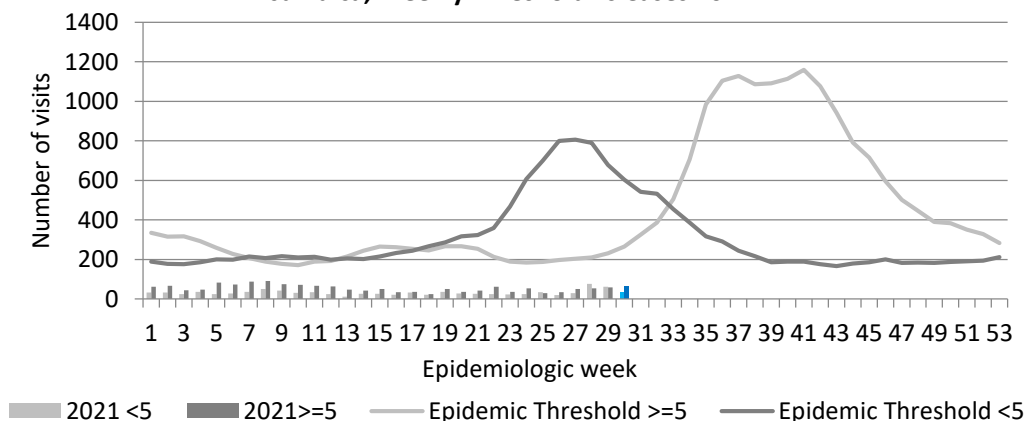
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2021



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



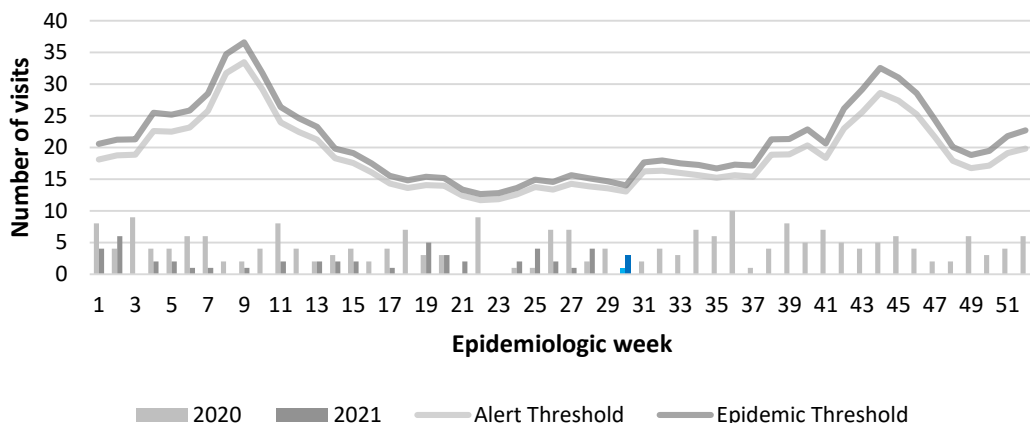
SENTINEL REPORT- 78 sites. Automatic reporting

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).



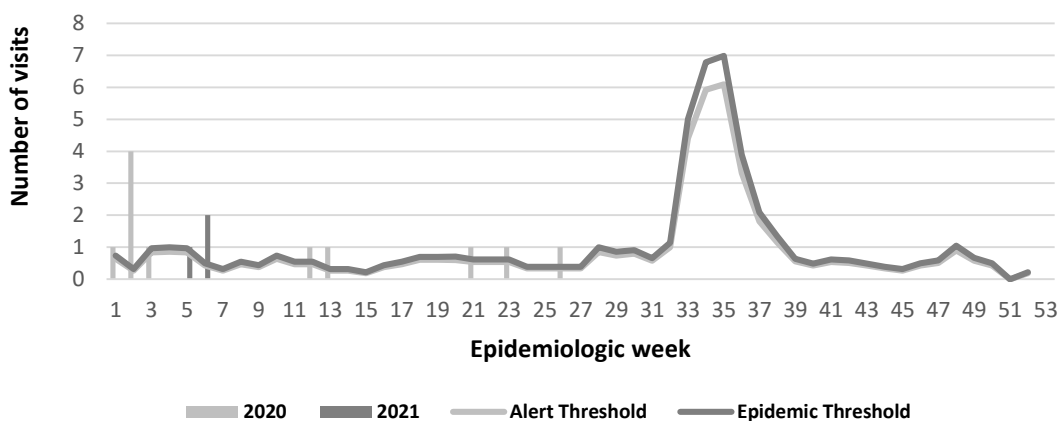
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2020 and 2021 vs. Weekly Threshold: Jamaica

**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 2020 and 2021 vs Weekly Threshold; Jamaica

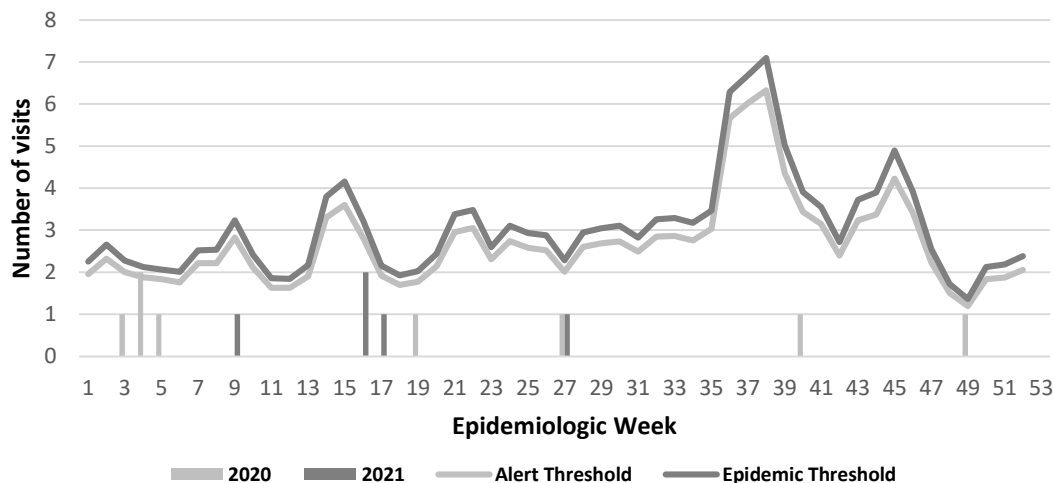
**FEVER AND JAUNDICE**

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 2020 and 2021



3 NOTIFICATIONS-
All clinical sites



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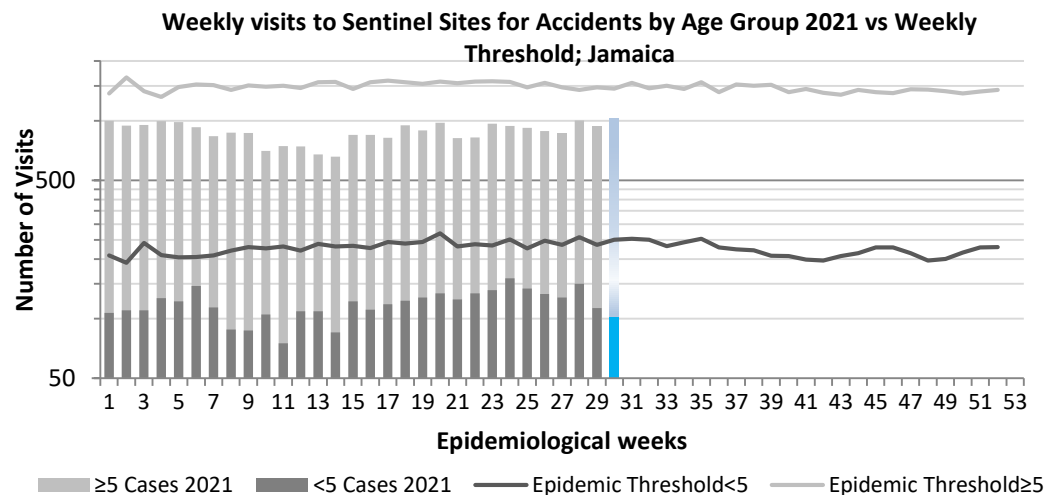
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

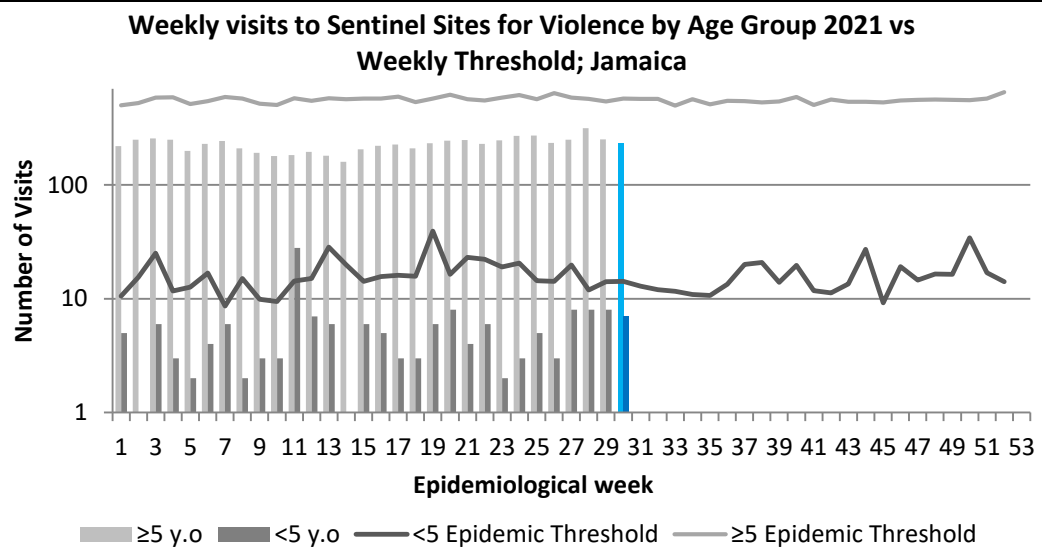
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

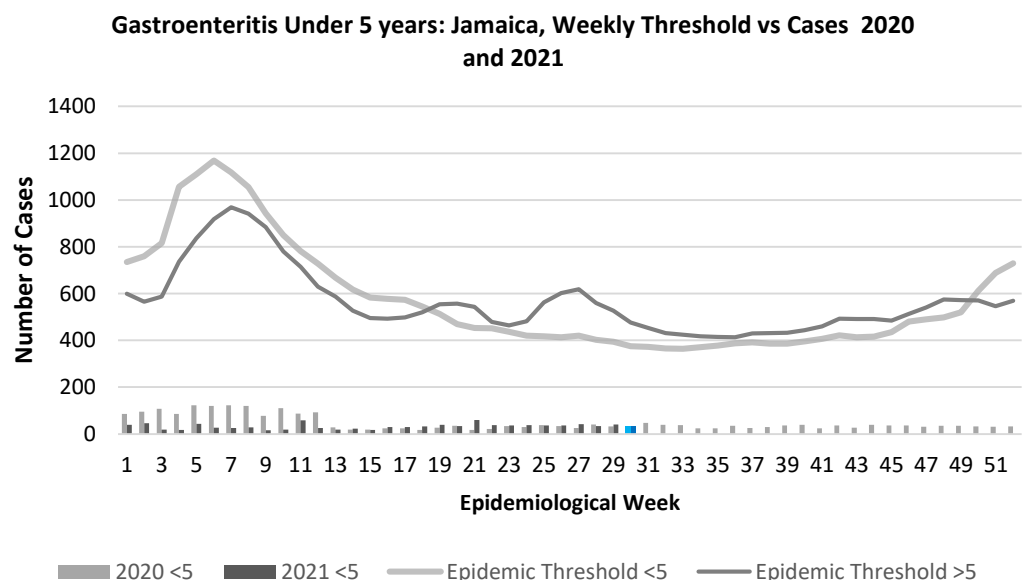
VARIATIONS OF **BLUE** SHOW CURRENT WEEK

**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	
	CLASS 1 EVENTS		CURRENT YEAR 2021	PREVIOUS YEAR 2020
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		22 ^β	75
	Cholera		0	0
	Dengue Hemorrhagic Fever ^γ		See Dengue page below	See Dengue page below
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		2	3
	Hepatitis C		0	0
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis (Clinically confirmed)		4	1
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		23	22
	Ophthalmia Neonatorum		0	38
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		19	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 in 2020.

^α Figures are cumulative totals for all epidemiological weeks year to date.

NA- Not Available



5 NOTIFICATIONS-
All clinical sites



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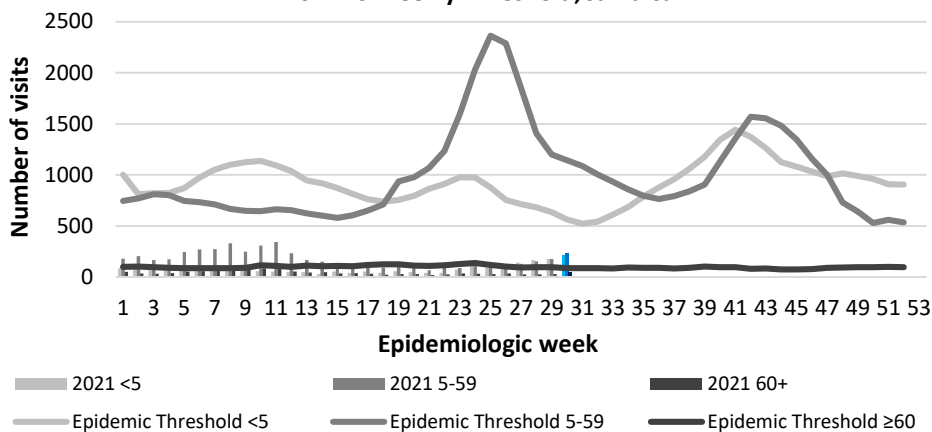
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 30

July 25 - 31, 2021 Epidemiological Week 30

	EW 30	YTD
SARI cases	23	319
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

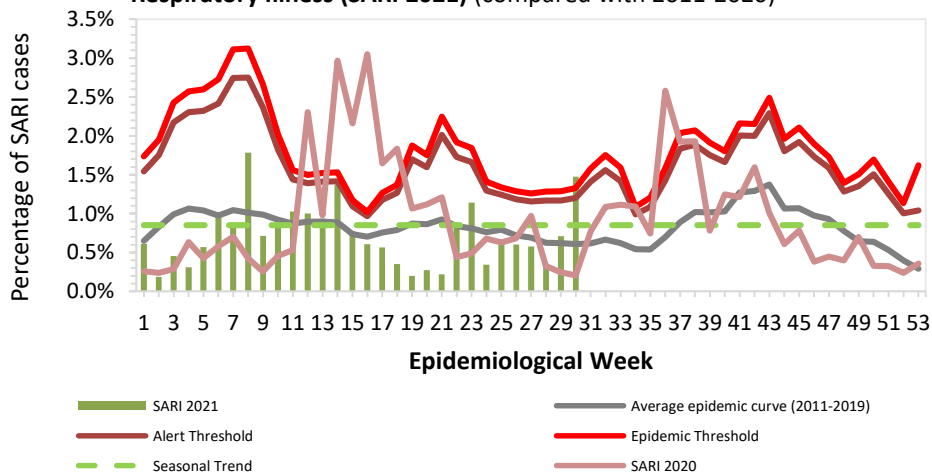
Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages
2021 vs Weekly Threshold; Jamaica



Epi Week Summary

During EW 30, 23 (twenty-three) SARI admissions were reported.

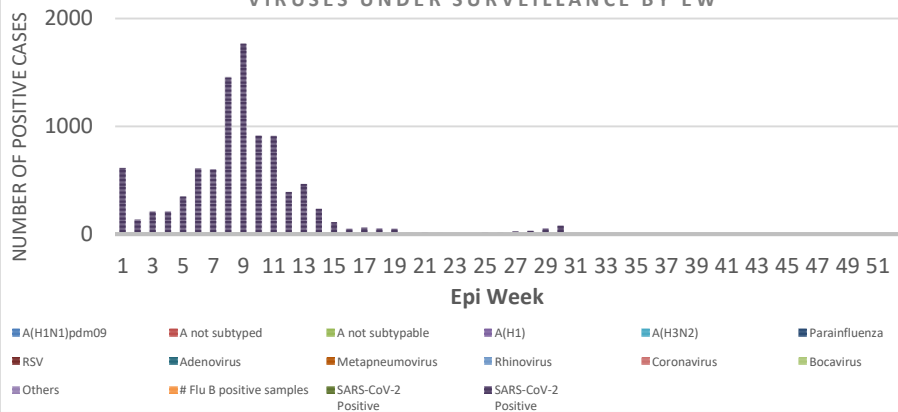
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2021) (compared with 2011-2020)



Caribbean Update EW 30

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



6 NOTIFICATIONS-
All clinical
sites



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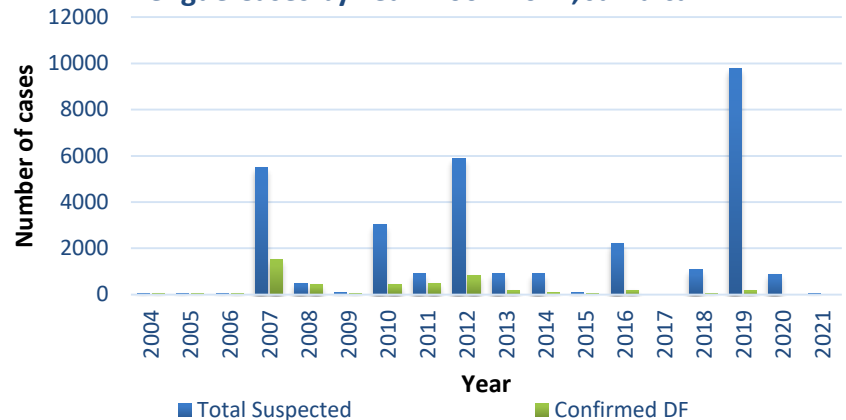
Dengue Bulletin

July 25 - 31, 2021 Epidemiological Week 30

Epidemiological Week 30



Dengue Cases by Year: 2004-2021, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 30 of 2021

	2021*	
	EW 30	YTD
Total Suspected Dengue Cases	0	37
Lab Confirmed Dengue cases	0	5
CONFIRMED Dengue Related Deaths	0	0

Symptoms of Dengue fever

Febrile phase

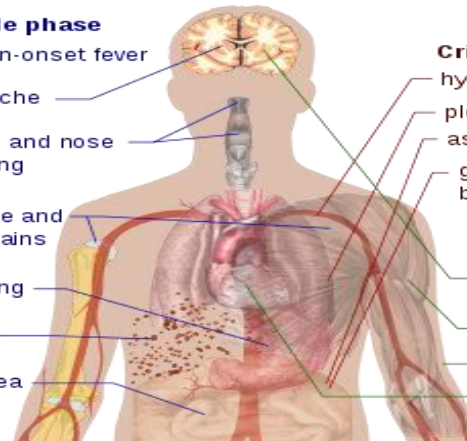
sudden-onset fever
headache
mouth and nose bleeding
muscle and joint pains
vomiting
rash
diarrhea

Critical phase

hypotension
pleural effusion
ascites
gastrointestinal bleeding

Recovery phase

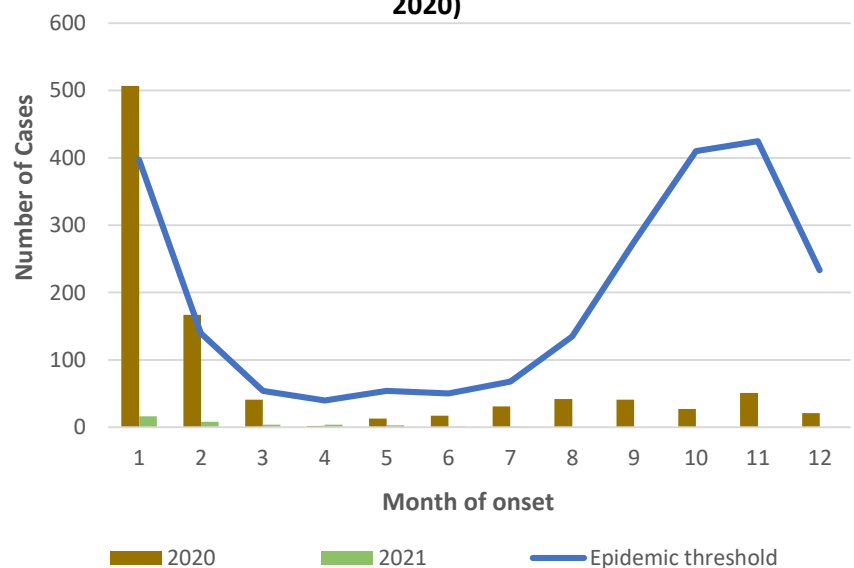
altered level of consciousness
seizures
itching
slow heart rate



Points to note:

- *Figure as at July 27, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

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



7 NOTIFICATIONS-
All clinical
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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-
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9 NOTIFICATIONS-
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