WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Youth Violence

Occurs when young people intentionally use physical force or power to threaten or harm others. It is a public health problem that is preventable.

Key facts

- Youth violence is a global public health problem. It includes a range of acts from bullying and physical fighting, to more severe sexual and physical assault to homicide.
- Worldwide some 200 000 homicides occur among youth 10–29 years of age each year, which

is 42% of the total number of homicides globally each year.

- Homicide is the fourth leading cause of death in people aged 10-29 years, and 84% of these homicides involve male victims.
- For each young person killed, many more sustain injuries requiring hospital treatment.
- In one study, from 3–24% of women report that their first sexual experience was forced.
- When it is not fatal, youth violence has a serious, often lifelong, impact on a person's physical, psychological and social functioning.

Youth violence is a global public health problem. It includes a range of acts from bullying and physical fighting, to more severe sexual and physical assault to homicide.

Scope of the problem

Worldwide an estimated 200 000 homicides occur among youth 10–29 years of age each year, making it the fourth leading cause of death for people in this age group. Youth homicide rates vary dramatically between and within countries. Globally, 84% of youth homicide victims are males, and most perpetrators are males too. Between 2000-2016, rates of youth homicide decreased in most countries, although the decrease has been greater in high-income countries than in low- and middle-income countries.

For every young person killed by violence, more sustain injuries that require hospital treatment. Firearm attacks end more often in fatal injuries than assaults that involve fists, feet, knives, and blunt objects.

Sexual violence also affects a significant proportion of youth. For example, one in eight young people report sexual abuse.

Physical fighting and bullying are also common among young people. A study of 40 developing countries showed that an average of 42% of boys and 37% of girls were exposed to bullying.

 $Source: \ \underline{https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss}$

EPI WEEK 10



SYNDROMES

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CLASS 1 DISEASES

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INFLUENZA

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DENGUE FEVER

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GASTROENTERITIS

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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 - 7 to 10 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

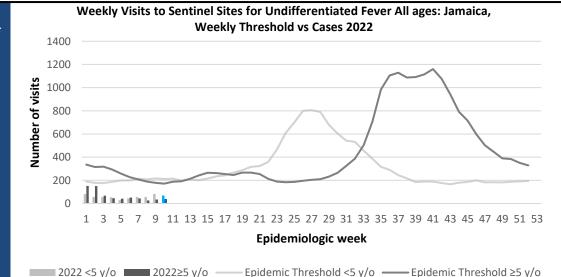
Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2022													
7													
	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time
8	On Time	On Time	On Time	On Time	On Time	On Time	Late (W)	On Time	On Time	On Time	On Time	On Time	On Time
9	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	Late (W)
10	On Time	Late (T)	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

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



VARIATIONS OF BLUE SHOW CURRENT WEEK





2 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

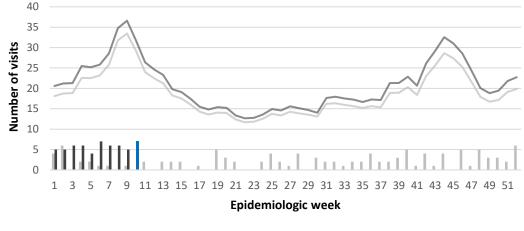


FEVER AND NEUROLOGICAL

Temperature of >38°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

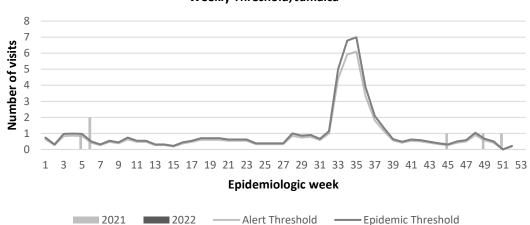
Temperature of $>38^{\circ}C$ $/100.4^{\circ}F$ (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2021 and 2022 vs Weekly Threshold; Jamaica

Alert Threshold

- Epidemic Threshold



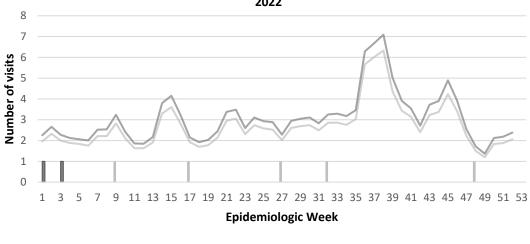
FEVER AND JAUNDICE

Temperature of $>38^{\circ}C/100.4^{\circ}F$ (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







NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

2021

2021

2022



2022

HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

Alert Threshold



SENTINEL REPORT- 78 sites. Automatic reporting

Epidemic Threshold

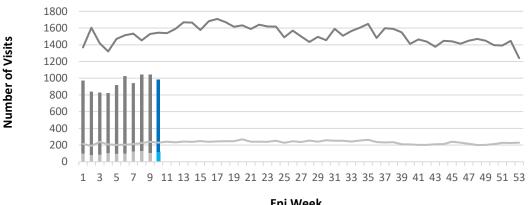
ACCIDENTS

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

VARIATIONS OF BLUE SHOW CURRENT WEEK



Weekly Visits to Sentinel Sites for Accident by Age Group 2022 vs. Weekly **Threshold**



Epi Week

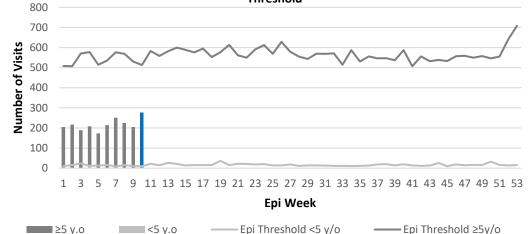
≥5 y/o Cases <5 v/o Cases</p> Epi threshold ≥5 y/o Epi threshold <5 y/o

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 2022 vs. Weekly **Threshold**

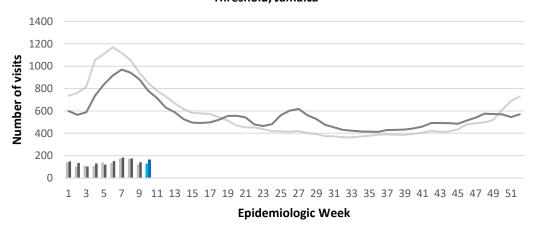


GASTROENTERITIS

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 2022 vs Weekly Threshold; Jamaica



2022 <5 y/o 2022 ≥5 y/o —

Epidemic Threshold <5 y/o —— Epidemic Threshold >5 y/o



NOTIFICATIONS-All clinical sites



INVESTIGATION **REPORTS-** Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



CLASS ONE NOTIFIABLE EVENTS

Comments

			Confirm	ned YTD^{α}	AFP Field Guides from WHO indicate that for an effective surveillance system,	
	CLASS 1 EVENTS		CURRENT YEAR 2022	PREVIOUS YEAR 2021		
	Accidental Po	isoning	14^{β}	24^{β}	detection rates for AFP	
AL	Cholera		0	0	should be 1/100,000 population under 15	
NATIONAL /INTERNATIONAL INTEREST	Dengue Hemo	orrhagic Fever ^γ	See Dengue page below	See Dengue page below	years old (6 to 7) cases	
NAT ST	COVID-19 (S	ARS-CoV-2)	31271	20099	annually.	
L /INTERN INTEREST	Hansen's Dise	ease (Leprosy)	0	0	Pertussis-like	
	Hepatitis B		2	2	syndrome and Tetanus	
NA.	Hepatitis C		0	1	are clinically confirmed	
ATIC	HIV/AIDS		NA	NA	classifications.	
Ž	Malaria (Imp	orted)	0	0	———————— ^γ Dengue Hemorrhagic	
	Meningitis (C	linically confirmed)	0	3	Fever data include	
EXOTIC/ UNUSUAL	Plague		0	0	Dengue related deaths;	
25	Meningococo	cal Meningitis	0	0	^δ Figures include all	
H IGH MORBIDITY/ MORTALITY	Neonatal Tet	anus	0	0	deaths associated with pregnancy reported for	
H I ORB ORT	Typhoid Fever		0	0	the period.	
ΣΣ	Meningitis H	I/Flu	0	0	^ε CHIKV IgM positive	
	AFP/Polio		0	0	cases	
	Congenital Rubella Syndrome		0	0	^θ Zika PCR positive	
70	Congenital Syphilis		0	0	cases	
MES	Fever and Rash	Measles	0	0	^β Updates made to prior weeks in 2020.	
SPECIAL PROGRAMI		Rubella	0	0	^α Figures are	
SOG	Maternal Deaths ^δ		7	9	cumulative totals for	
L PF	Ophthalmia N	eonatorum	17	19	all epidemiological weeks year to date.	
CIA	Pertussis-like syndrome		0	0	weeks your to dute.	
SPE	Rheumatic Fever		0	0		
	Tetanus		0	0		
	Tuberculosis		3	9		
	Yellow Fever		0	0		
	Chikungunya ^e			0		
	Zika Virus ^θ		0	0	NA- Not Available	







INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- $30\ sites.$ Actively pursued

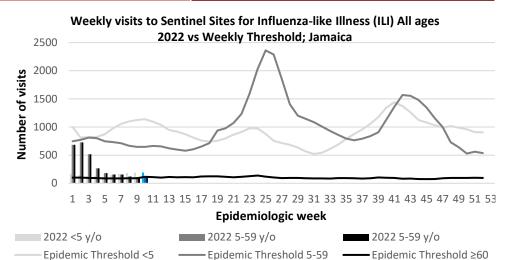


NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 10

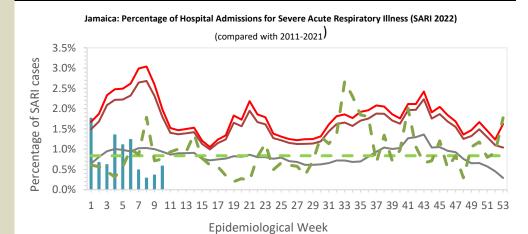
March 6 – 12, 2022 Epidemiological Week 10

	EW 10	YTD
SARI cases	7	129
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



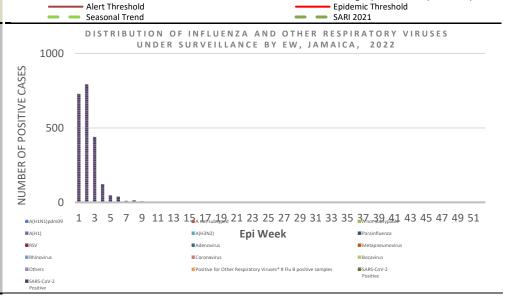
Epi Week Summary

During EW 10, seven (7) SARI admissions were reported.



Caribbean Update EW 10

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.





6 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



SARI 2022

HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

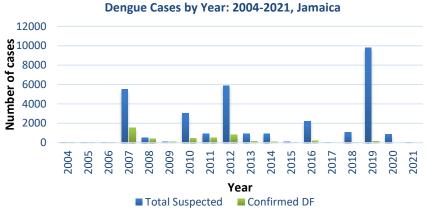
Average epidemic curve (2011-2021)

Dengue Bulletin

March 6 - 12, 2022 Epidemiological Week 10



Epidemiological Week 10



Reported suspected and confirmed dengue with symptom onset in week 10 of 2022

	2022*			
	EW 10	YTD		
Total Suspected Dengue Cases	0	2		
Lab Confirmed Dengue cases	0	0		
CONFIRMED Dengue Related Deaths	0	0		

Symptoms of Dengue fever Febrile phase sudden-onset fever Critical phase hypotension headache pleural effusion ascites mouth and nose bleeding gastrointestinal bleeding muscle and joint pains Recovery phase altered level of vomiting consciousness seizures rash itching diarrhea slow heart rate

Points to note:

- *Figure as at March 17, 2022
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

500 400 200 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

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

NVI

7 NOTIFICATIONS-All clinical sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



- Epidemic threshold

2020

HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

2021

Monthly Mean



SENTINEL REPORT- 78 sites. Automatic reporting

- Alert Threshold.

2022

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, \pm 1.67), knowledge of decontamination of equipment policy (\bar{x} 4.18, \pm 2.01), environment context and resources (\bar{x} 4.64 \pm 1.48) and action planning (\bar{x} 4.96 \pm 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 \pm 2.01; p<0.05). PCAs had greater knowledge of the equipment decontamination policy (\bar{x} 5.41, \pm 1.75; p<0.05) when compared to Enrolled Assistant Nurses (\bar{x} 4.09 \pm 1.90) and Registered Nurses (\bar{x} 3.85 \pm 1.58).

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



The Ministry of Health and Wellness 24-26 Grenada Crescent Kingston 5, Jamaica Tele: (876) 633-7924

Email: surveillance@moh.gov.jm



8 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

