

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Deafness And Hearing Loss



Key facts

- By 2050 nearly 2.5 billion people are projected to have some degree of hearing loss and at least 700 million will require hearing rehabilitation.
- Over 1 billion young adults are at risk of permanent, avoidable hearing loss due to unsafe listening practices.

- An annual additional investment of less than US\$ 1.40 per person is needed to scale up ear and hearing care services globally.
- Over a 10-year period, this promises a return of nearly US\$ 16 for every US dollar invested.

Over 5% of the world’s population – or 430 million people – require rehabilitation to address their ‘disabling’ hearing loss (432 million adults and 34 million children). It is estimated that by 2050 over 700 million people – or one in every ten people – will have disabling hearing loss.

‘Disabling’ hearing loss refers to hearing loss greater than 35 decibels (dB) in the better hearing ear. Nearly 80% of people with disabling hearing loss live in low- and middle-income countries. The prevalence of hearing loss increases with age, among those older than 60 years, over 25% are affected by disabling hearing loss.

Prevention

Many of the causes that lead to hearing loss can be avoided through public health strategies and clinical interventions implemented across the life course.

Prevention of hearing loss is essential throughout the life course – from prenatal and perinatal periods to older age. In children, nearly 60% of hearing loss is due to avoidable causes that can be prevented through implementation of public health measures. Likewise, in adults, most common causes of hearing loss, such as exposure to loud sounds and ototoxic medicines, are preventable.

Effective strategies for reducing hearing loss at different stages of the life course include:

- immunization;
- good maternal and childcare practices;
- genetic counselling;
- identification and management of common ear conditions;
- occupational hearing conservation programmes for noise and chemical exposure;
- safe listening strategies for the reduction of exposure to loud sounds in recreational settings; and
- rational use of medicines to prevent ototoxic hearing loss.

EPI WEEK 9



SYNDROMES

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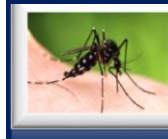
CLASS 1 DISEASES

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INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



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 - 6 to 9 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

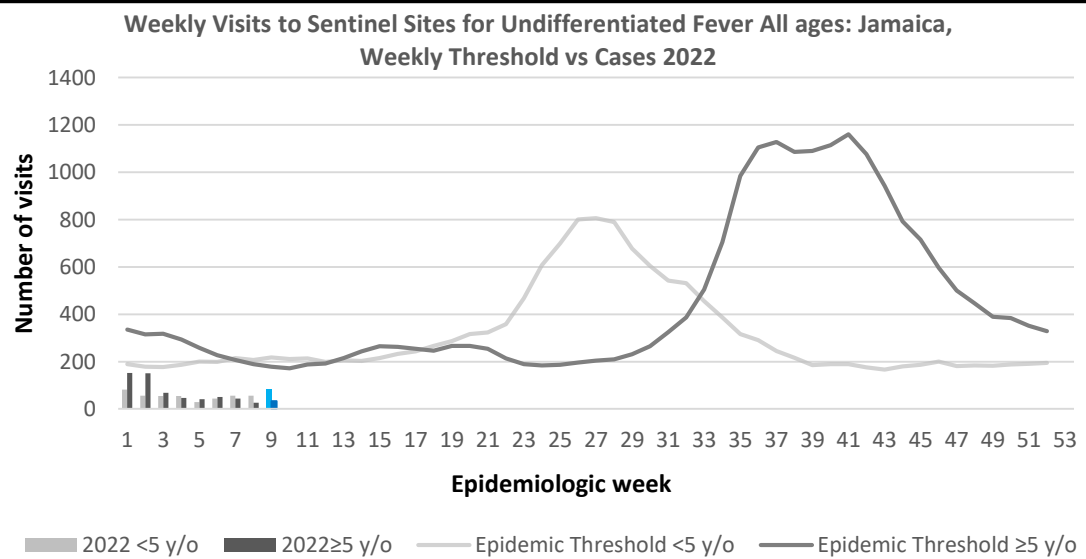
Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
2022													
6	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	Late (T)	On Time	On Time	Late (T)	On Time
7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

REPORTS FOR SYNDROMIC SURVEILLANCE

Temperature of >38°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



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



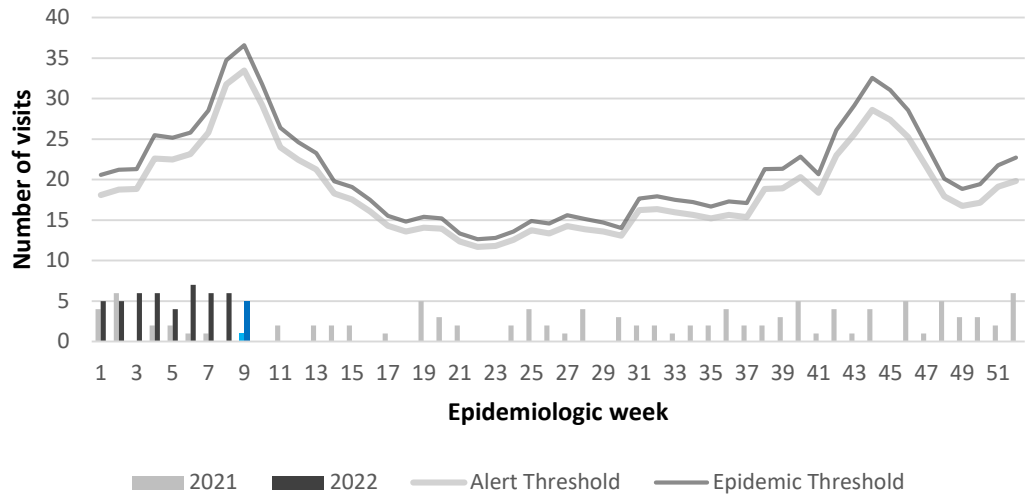
SENTINEL REPORT- 78 sites. Automatic reporting

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

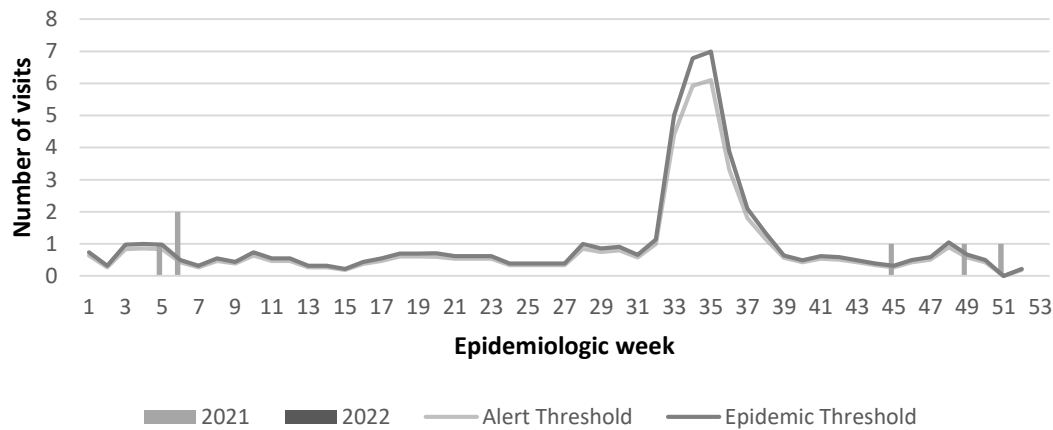


FEVER AND HAEMORRHAGIC

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



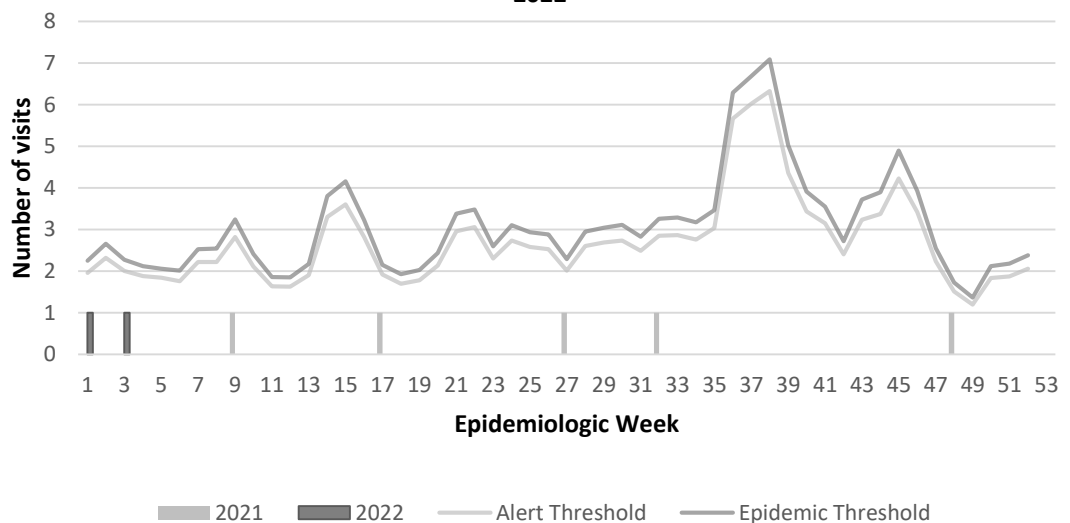
FEVER AND JAUNDICE

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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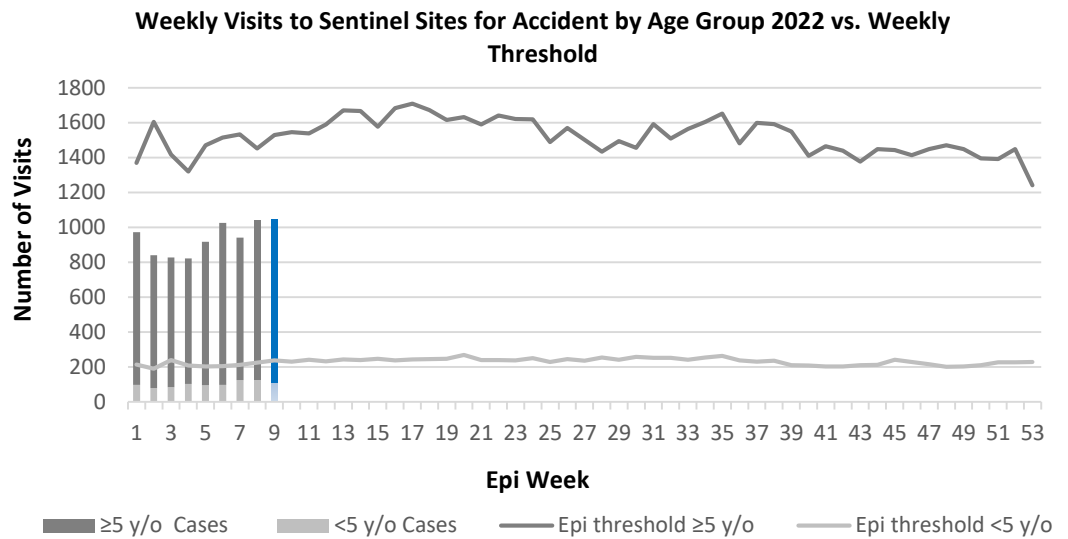
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

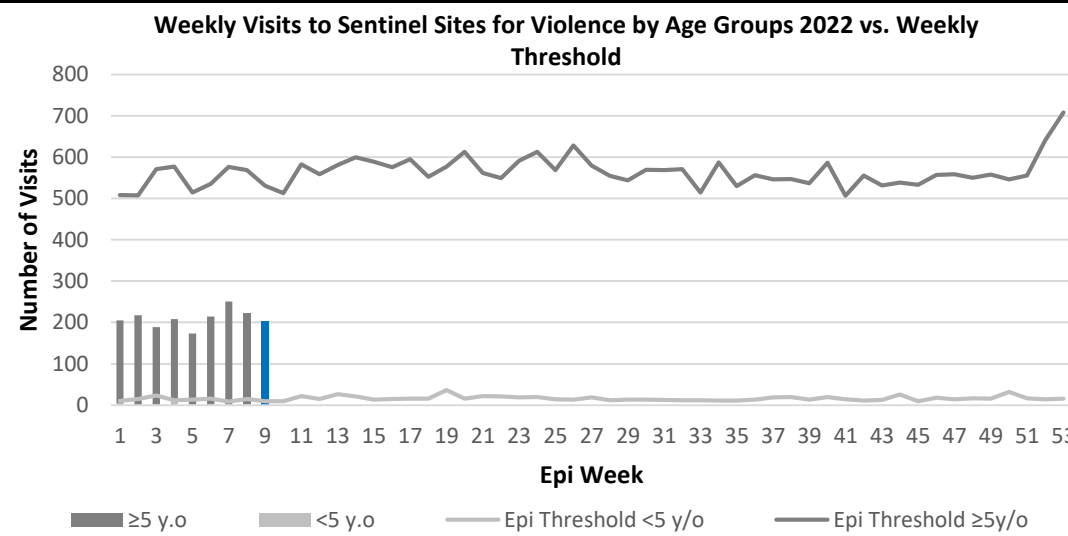
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



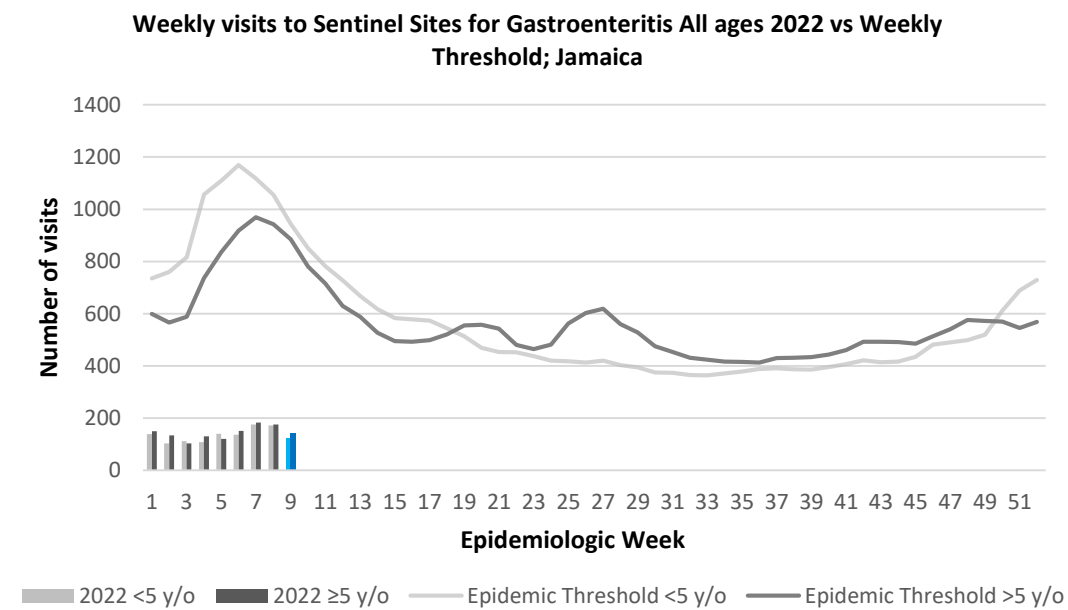
VIOLENCE

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	
	CLASS 1 EVENTS	Confirmed YTD ^α			
		CURRENT YEAR 2022	PREVIOUS YEAR 2021		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	13 ^β	23 ^β	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;	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	31086	15983		
	Hansen's Disease (Leprosy)	0	0		
	Hepatitis B	0	2		
	Hepatitis C	0	1		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	0	3		
EXOTIC/ UNUSUAL	Plague	0	0	^δ Figures include all deaths associated with pregnancy reported for the period.	
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	^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.	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths ^δ	7	9		
	Ophthalmia Neonatorum	12	14		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	2	8		
	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



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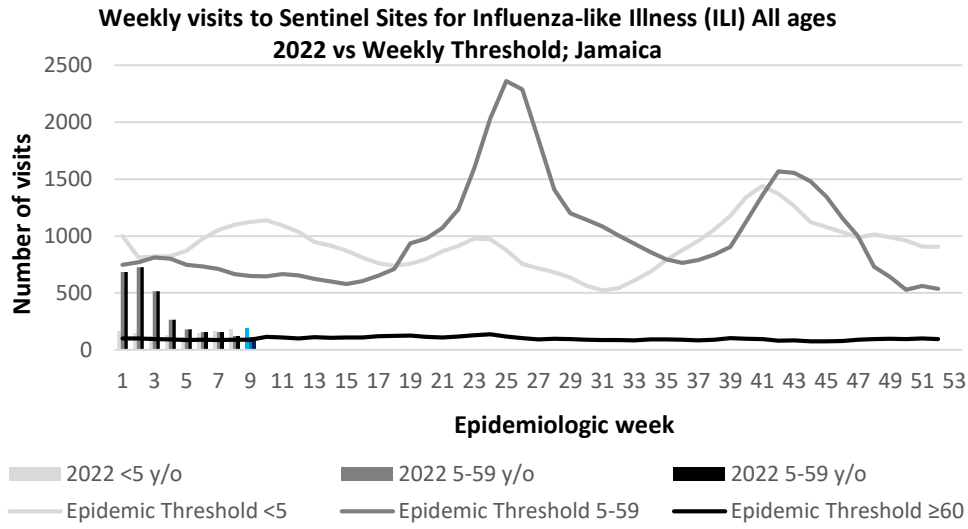
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 9

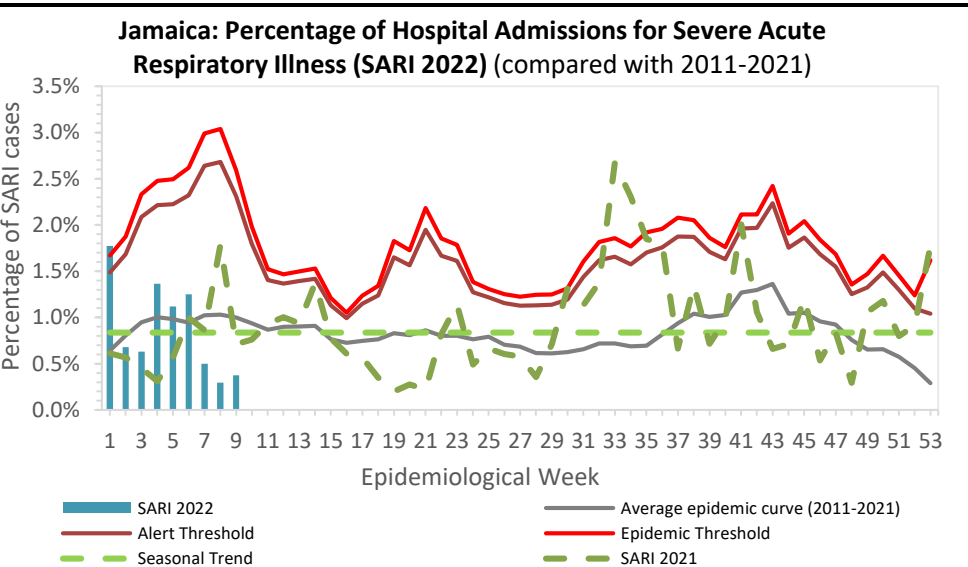
February 27 – March 5, 2022 Epidemiological Week 9

	EW 9	YTD
SARI cases	6	122
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



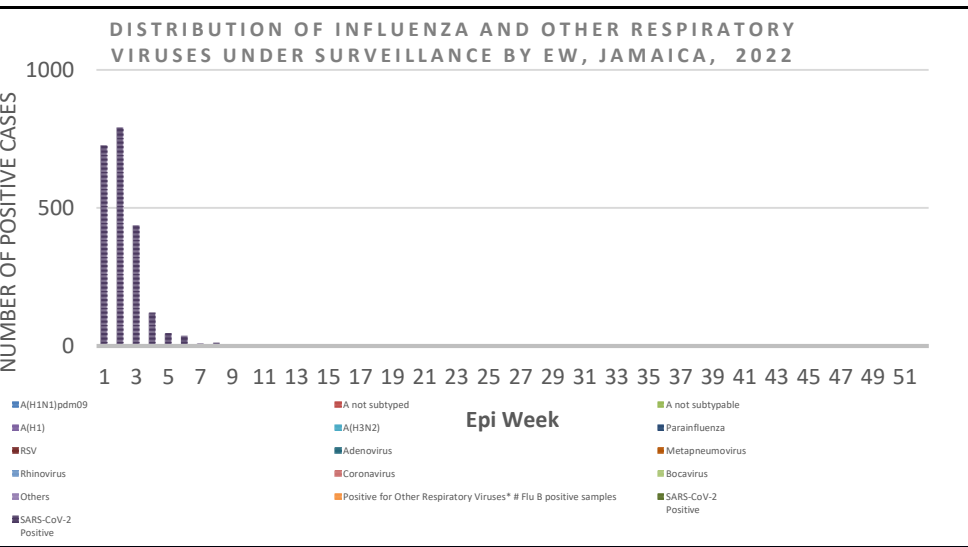
Epi Week Summary

During EW 9, six (6) SARI admissions were reported.



Caribbean Update EW 9

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



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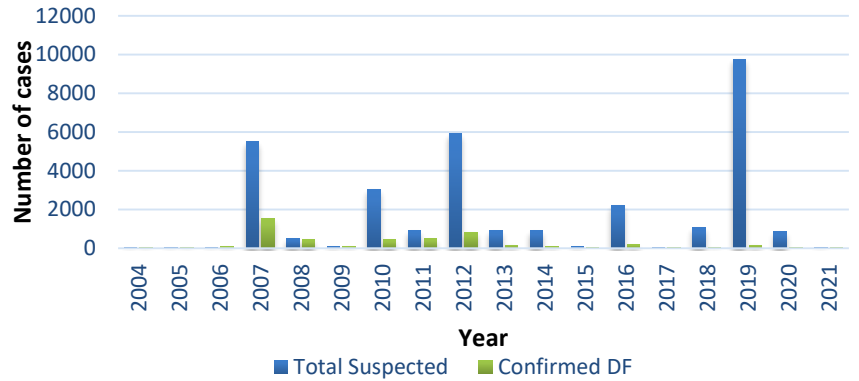
Dengue Bulletin

February 27 – March 5, 2022 Epidemiological Week 9


Epidemiological Week 9

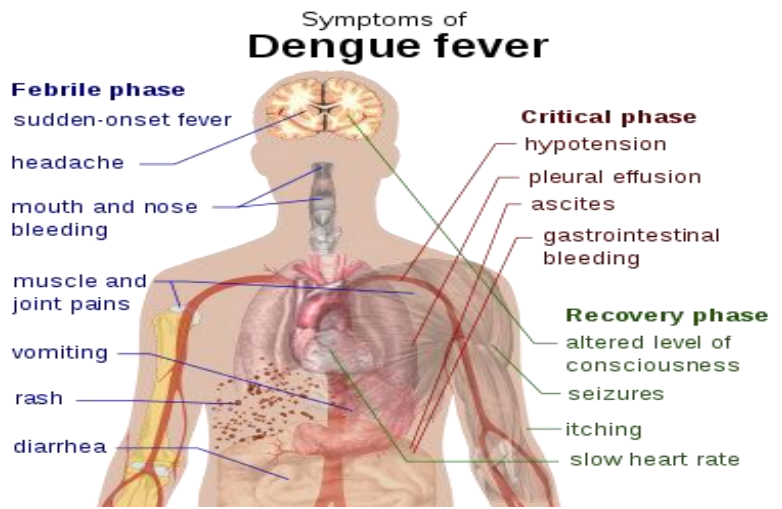


Dengue Cases by Year: 2004-2021, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 9 of 2022

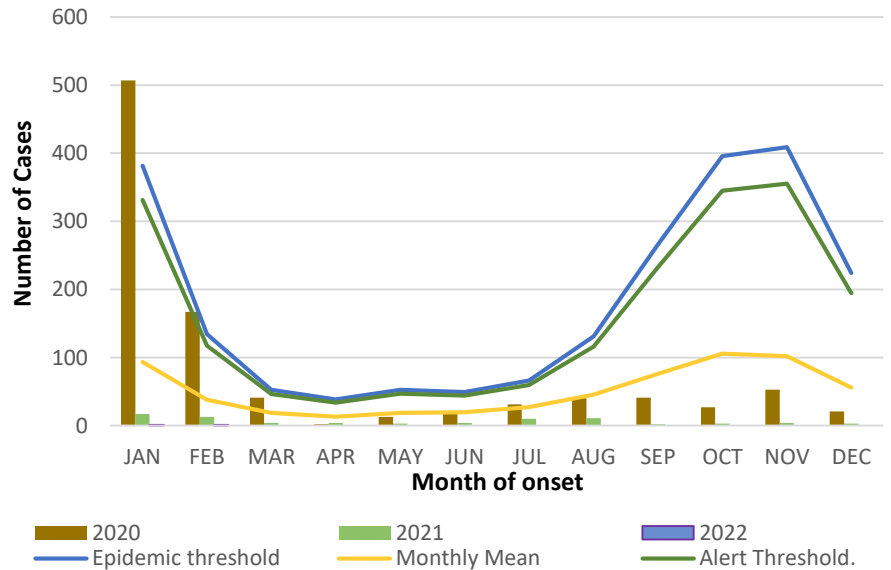
	2022*	
	EW 9	YTD
 Total Suspected Dengue Cases	2	0
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



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.

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



7 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

THE EPIDEMIOLOGY OF OSTEOMYELITIS IN THE SICKLE CELL POPULATION OF JAMAICA

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Introduction: Knowing the most likely causative organism causing osteomyelitis in the sickle cell population is crucial in implementing empirical therapy; the most common causative organism varies globally.

Objectives: To determine the epidemiology of culture proven osteomyelitis in patients who attended the Sickle Cell Unit (SCU) from 2008- 2018, in particular, to determine the most common organisms and whether there was an association of the causal organism with patient location or disease severity.

Methods: Ethical approval was obtained from The University of the West Indies Ethics Committee. The charts of all eligible patients were examined. The gender, age, address of individuals and the site of the osteomyelitis and causative organism were extracted. Polyostotic episodes and those which required greater than 42 days of antibiotics were deemed severe. Data were analyzed using SPSS; associations were assessed using the Pearson Chi- Squared Test.

Results: Forty three patients met the inclusion criteria; 26 males and 17 females with the mean age being 16.5 years (Range 1-60). St. Catherine was the most common parish. The most prevalent organisms included Salmonella (42%), Staphylococcus Aureus (26%) and Enterobacter (12%). Commonly affected sites included the Tibia (44%), Humerus (26%) and Femur (16%), 7% were severe. There was no association between the causal organism and patient location ($p=0.196$) or disease severity ($p=0.367$).

Conclusion: Salmonella was the most common organism causing osteomyelitis in persons attending the SCU. Specific education of patients in avoidance of exposure to this organism may be helpful.



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8 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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