

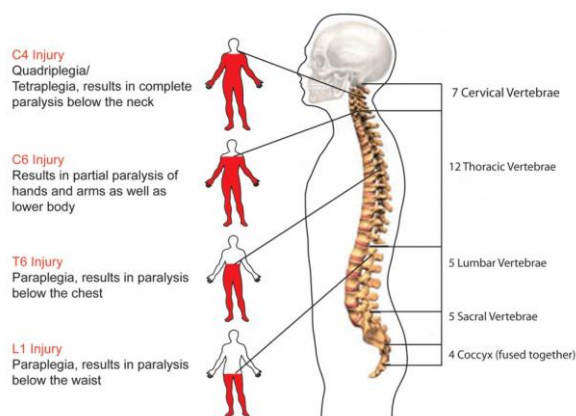
WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Spinal Cord Injury (SCI)

Key facts

- Every year, around the world, between 250 000 and 500 000 people suffer a spinal cord injury (SCI).
- The majority of spinal cord injuries are due to preventable causes such as road traffic crashes, falls or violence.
- People with a spinal cord injury are two to five times more likely to die prematurely than people without a spinal cord injury, with worse survival rates in low- and middle-income countries.
- Spinal cord injury is associated with lower rates of school enrollment and economic participation, and it carries substantial individual and societal costs.

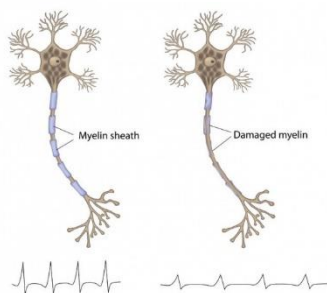


Demographic trends

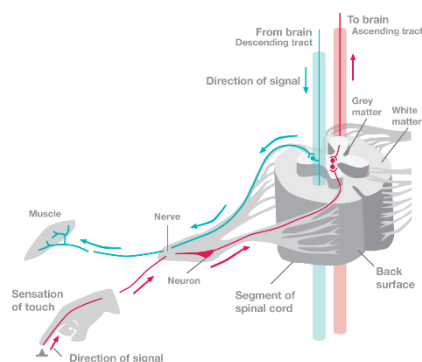
Males are most at risk in young adulthood (20-29 years) and older age (70+). Females are most at risk in adolescence (15-19) and older age (60+). Studies report male-to-female ratios of at least 2:1 among adults, sometimes much higher.

Health, economic and social consequences

Spinal cord injury is associated with a risk of developing secondary conditions that can be debilitating and even life-threatening—e.g. deep vein thrombosis, urinary tract infections, muscle spasms, osteoporosis, pressure ulcers, chronic pain, and respiratory complications. Acute care, rehabilitation services and ongoing health maintenance are essential for prevention and management of these conditions.



Spinal cord injury may render a person dependent on caregivers. Assistive technology is often required to facilitate mobility, communication, self-care or domestic activities. An estimated 20-30% of people with spinal cord injury show clinically significant signs of depression, which in turn has a negative impact on improvements in functioning and overall health.



Misconceptions, negative attitudes and physical barriers to basic mobility result in the exclusion of many people from full participation in society. Children with spinal cord injury are less likely than their peers to start school, and once enrolled, less likely to advance. Adults with spinal cord injury face similar barriers to economic participation, with a global unemployment rate of more than 60%.

Existing data do not allow for global cost estimates of spinal cord injury, but they do offer a general picture.

- The level and severity of the injury have an important influence on costs--injuries higher up on the spinal cord (e.g. tetraplegia vs. paraplegia) incur higher costs.
- Direct costs are highest in the first year after spinal cord injury onset and then decrease significantly over time.
- Indirect costs, in particular lost earnings, often exceed direct costs.
- Much of the cost is borne by people with spinal cord injury.
- Costs of spinal cord injury are higher than those of comparable conditions such as dementia, multiple sclerosis and cerebral palsy.

For more information on spinal cord injury please visit: <https://www.who.int/news-room/fact-sheets/detail/spinal-cord-injury>

EPI WEEK 8

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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RESEARCH PAPER

PAGE 8



SENTINEL SYNDROMIC **SURVEILLANCE****Sentinel Surveillance in Jamaica**

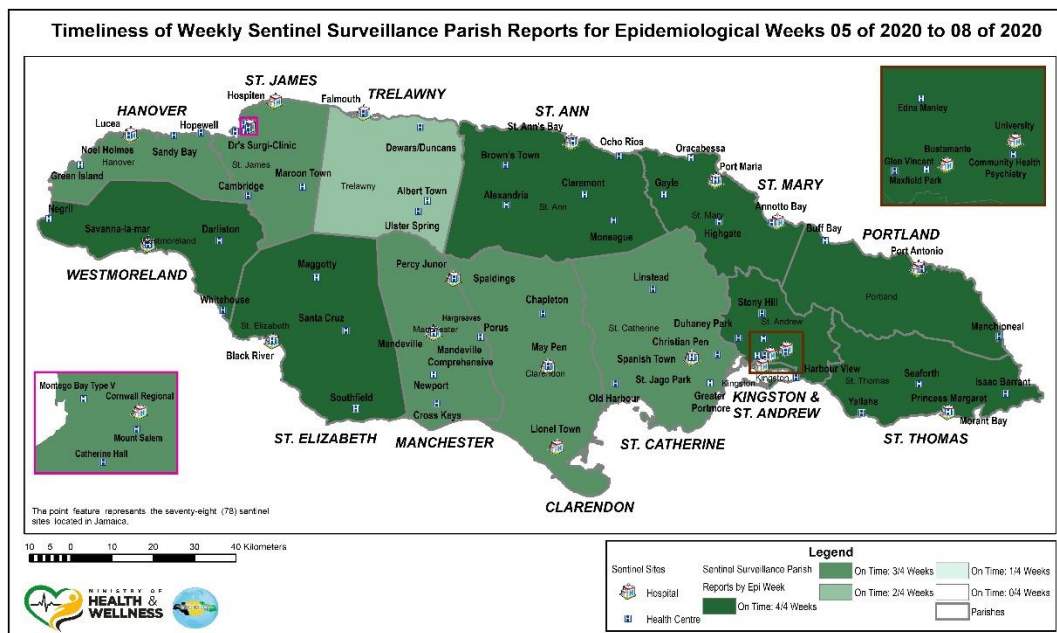
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 5 to 8 of 2020

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

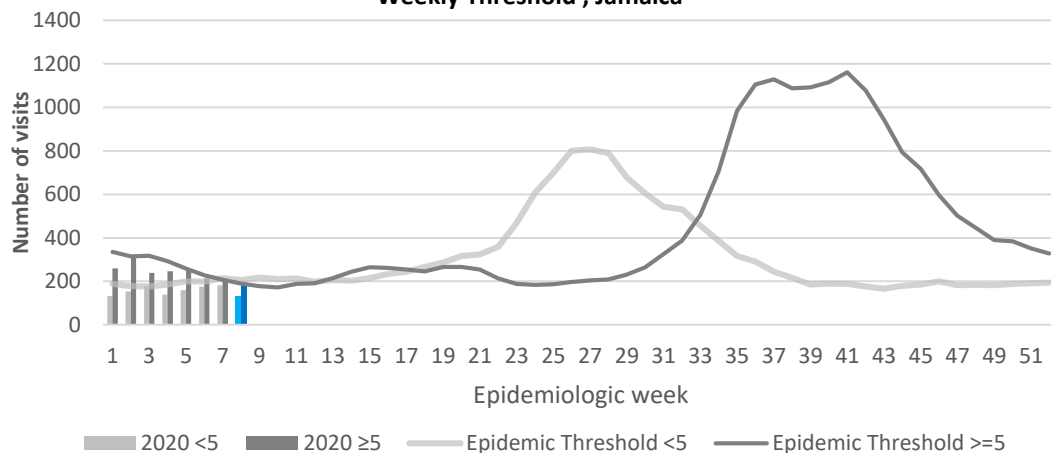
**REPORTS FOR SYNDROMIC SURVEILLANCE****FEVER**

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 2020 vs Weekly Threshold ; Jamaica



2 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



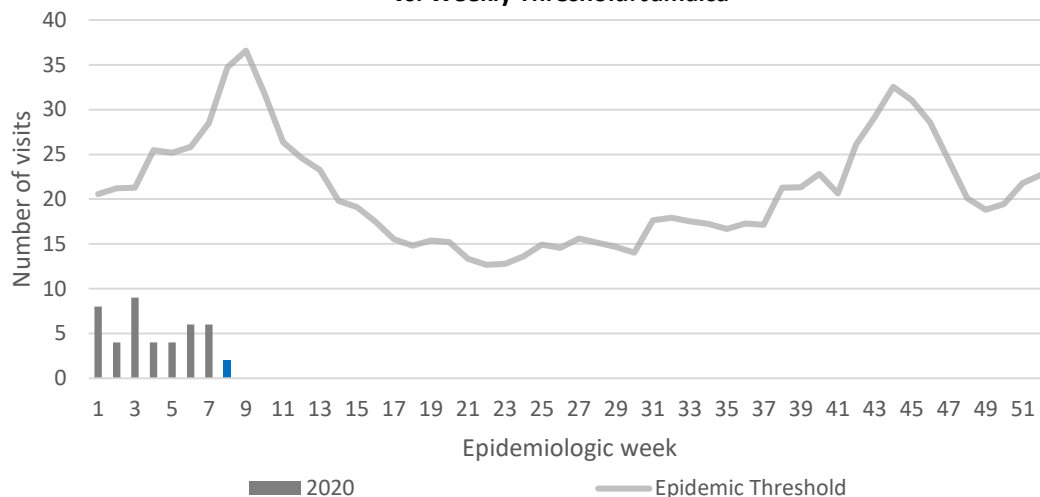
SENTINEL REPORT- 78 sites. Automatic reporting

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).



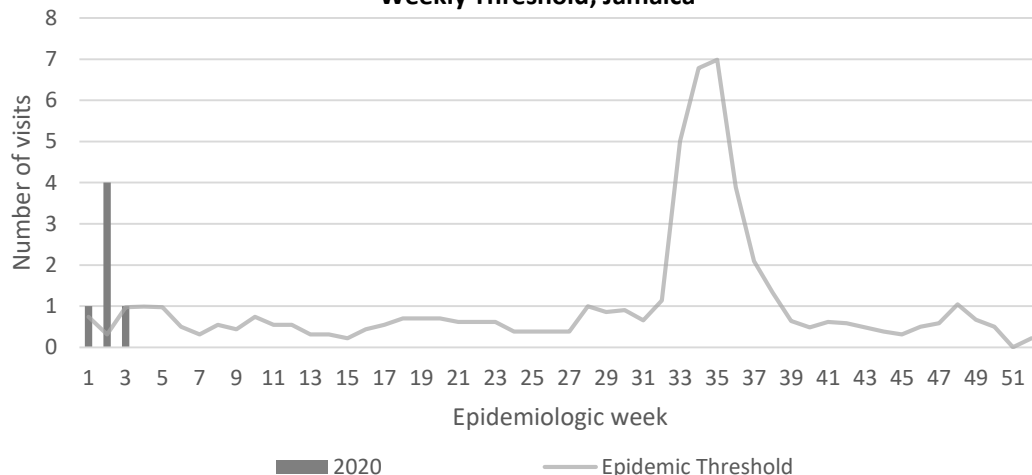
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2020 vs. Weekly Threshold: Jamaica

**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 vs Weekly Threshold; Jamaica

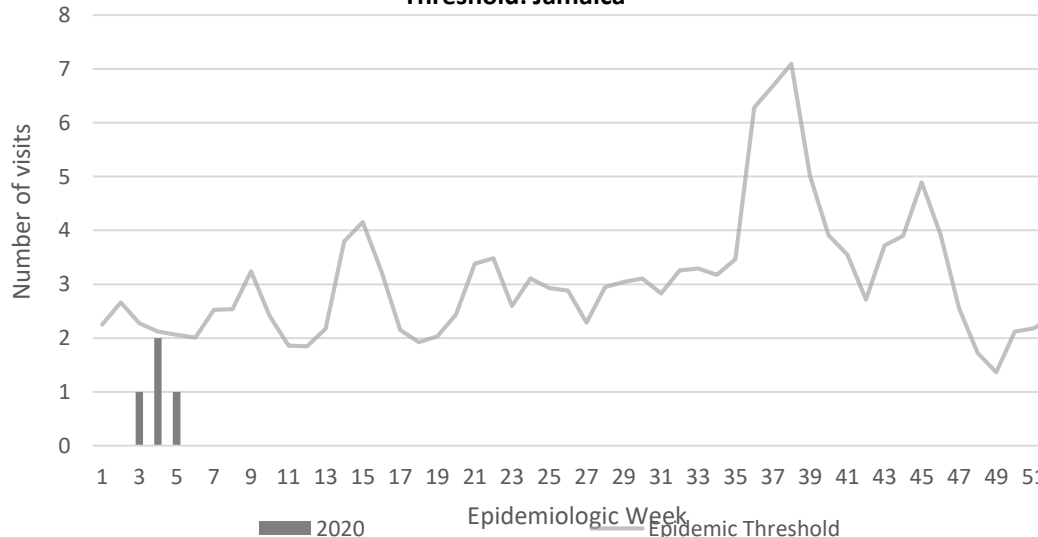
**FEVER AND JAUNDICE**

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.



Weekly visits to Sentinel Sites for Fever and Jaundice 2020 vs Weekly Threshold: Jamaica



3 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

ACCIDENTS

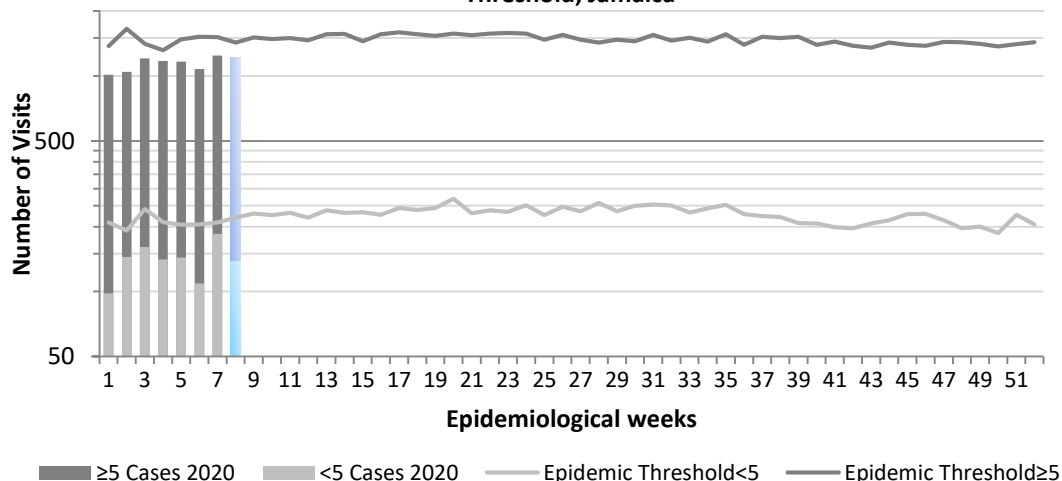
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

VARIATIONS OF BLUE
SHOW CURRENT WEEK



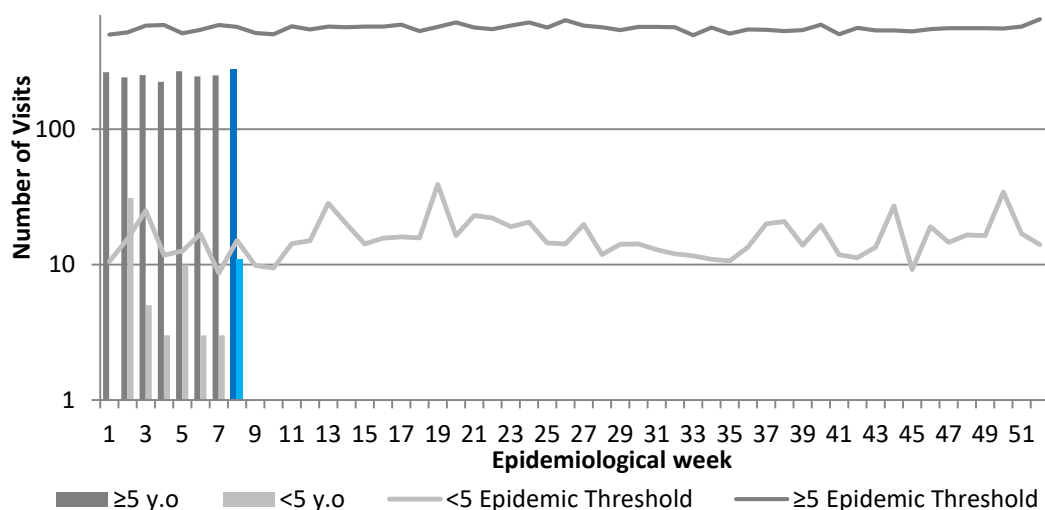
Weekly visits to Sentinel Sites for Accidents by Age Group 2020 vs Weekly Threshold; Jamaica

**VIOLENCE**

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



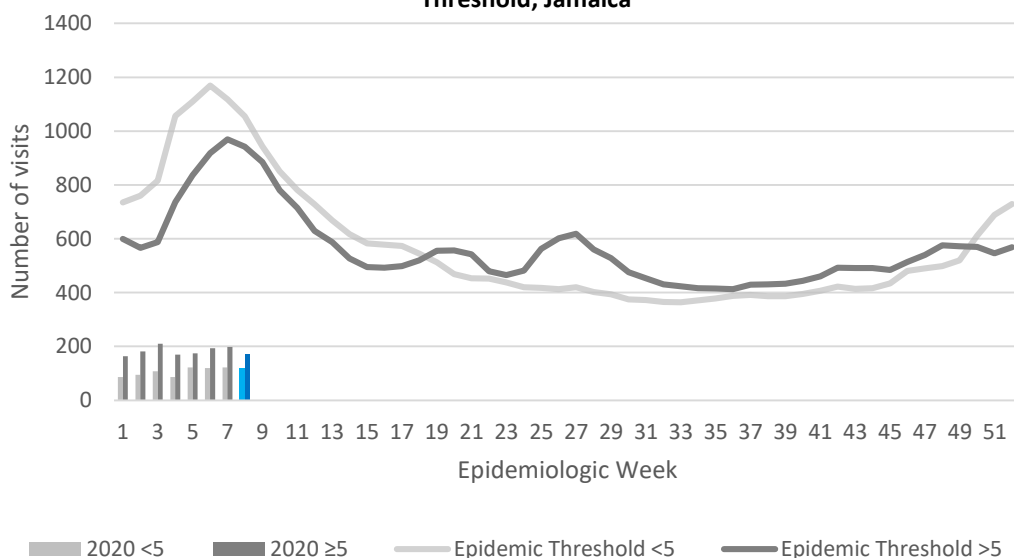
Weekly visits to Sentinel Sites for Violence by Age Group 2020 vs Weekly Threshold; Jamaica

**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 2020 vs Weekly Threshold; Jamaica



4 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

- CLASS ONE NOTIFIABLE EVENTS					Comments
			Confirmed YTD		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.
	CLASS 1 EVENTS		CURRENT YEAR 2020	PREVIOUS YEAR 2019	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		5	6	
	Cholera		0	0	
	Dengue Hemorrhagic Fever*		NA	NA	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		0	1	
	Hepatitis C		0	1	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis (Clinically confirmed)		1	1	
EXOTIC/ UNUSUAL	Plague		0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths; ** Figures include all deaths associated with pregnancy reported for the period. * 2019 YTD figure was updated. *** CHIKV IgM positive cases  **** Zika PCR positive cases
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**		3	8	
	Ophthalmia Neonatorum		12	37	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		0	11	
	Yellow Fever		0	0	
	Chikungunya***		0	0	
	Zika Virus****		0	0	



5 NOTIFICATIONS-
All clinical sites



INVESTIGATION
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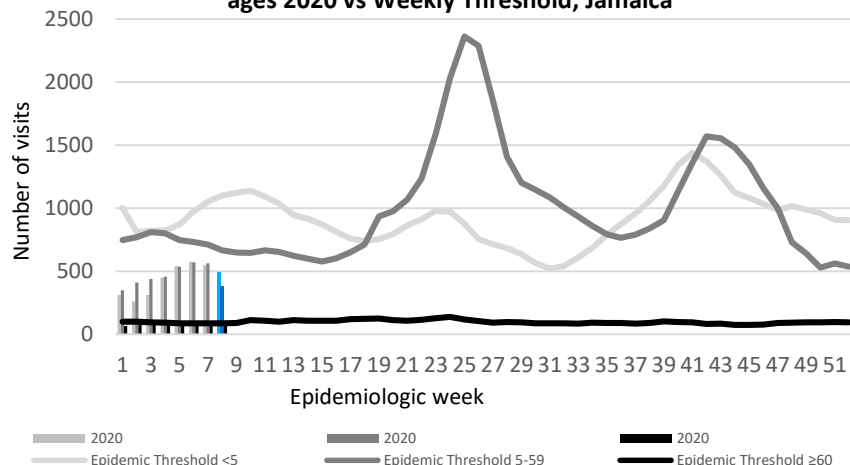
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 08

February 16, 2020– February 22, 2020 Epidemiological Week 08

	EW 08	YTD
SARI cases	7	60
Total Influenza positive Samples	4	43
Influenza A	3	27
H3N2	0	2
H1N1pdm09	0	18
Not subtyped	3	7
Influenza B	1	16
Parainfluenza	0	0

Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2020 vs Weekly Threshold; Jamaica

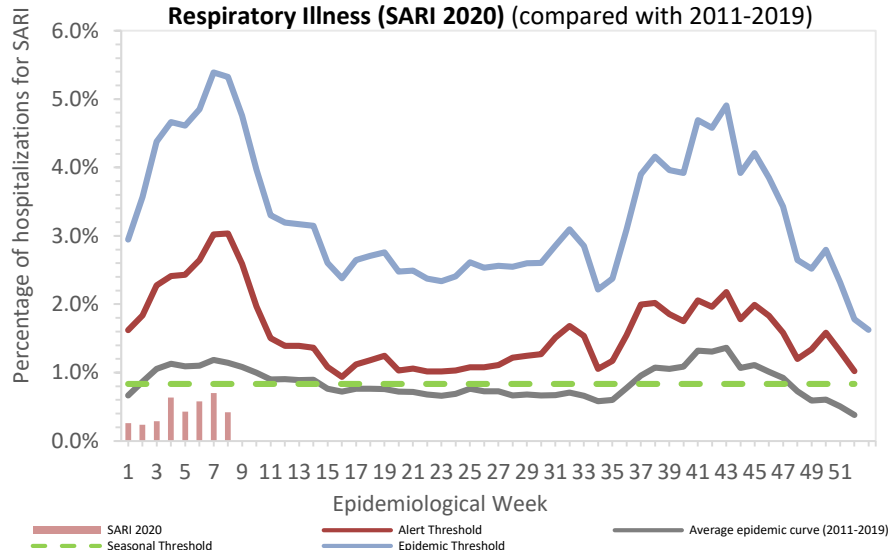


Epi Week Summary

During EW 08, 7 (seven) SARI admissions were reported.

23.5% positivity for EW 08

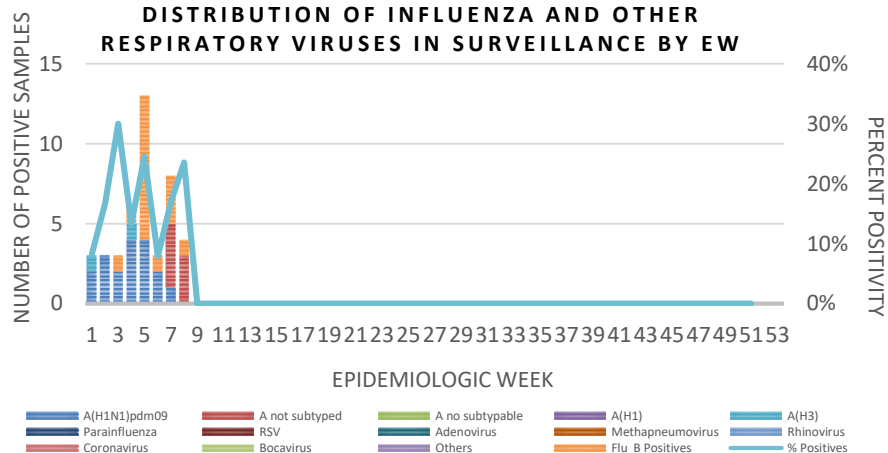
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2020) (compared with 2011-2019)



Caribbean Update EW 08

Overall, influenza activity is elevated in the sub-region. In Cuba, influenza activity increased with influenza A and B viruses co-circulating. Influenza activity continued increased in Belize with influenza A(H1N1)pdm09 and influenza B viruses co-circulating. All the French Territories are in the epidemic phase with a continued increase in influenza activity observed in Guadeloupe and Martinique. In Saint-Barthélemy influenza activity was stable. In the Dominican Republic, influenza activity slightly increased with influenza A(H1N1)pdm09 predominance and influenza B/Yamagata co-circulating; In Saint Lucia, influenza-like illness is above the epidemic threshold with influenza A(H1N1)pdm09 virus circulating in recent weeks.

DISTRIBUTION OF INFLUENZA AND OTHER RESPIRATORY VIRUSES IN SURVEILLANCE BY EW



6 NOTIFICATIONS-
All clinical
sites



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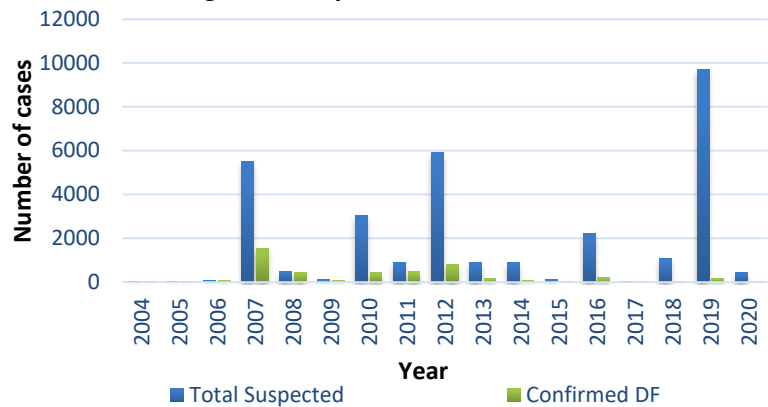
Dengue Bulletin

February 16– February 22, 2020 Epidemiological Week 08

Epidemiological Week 08



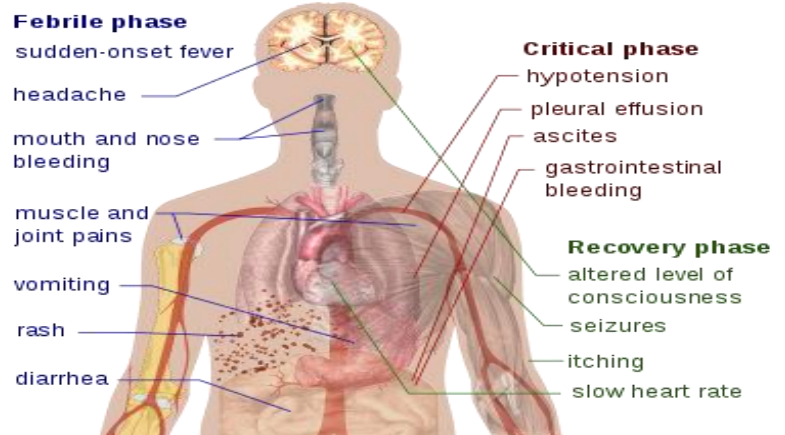
Dengue Cases by Year: 2004-2020, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 8 of 2020

	2020	
	EW 8	YTD
Total Suspected Dengue Cases	1**	442**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**

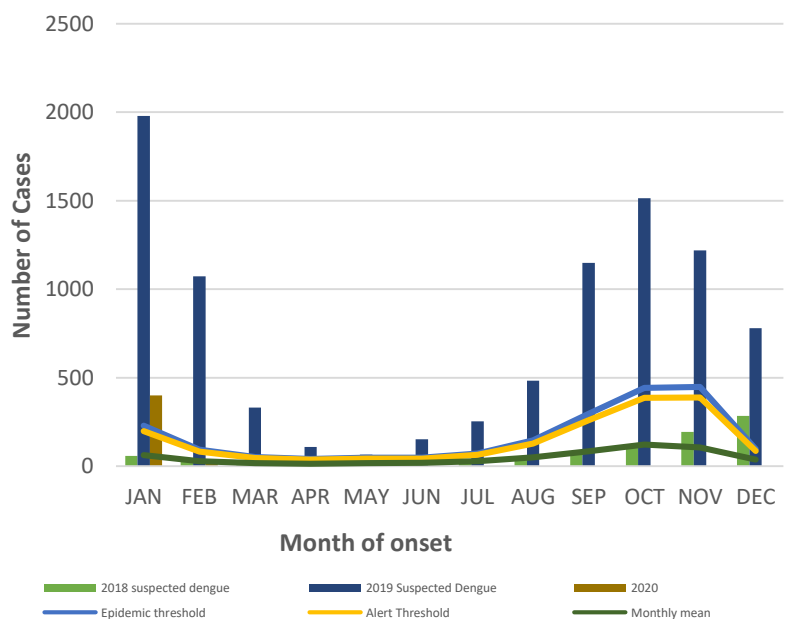
Symptoms of Dengue fever



Points to note:

- ** figure as at February 27, 2020
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2018, 2019, and 2020 versus monthly mean, alert, and epidemic thresholds



7 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
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SENTINEL
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RESEARCH PAPER

ABSTRACT

Evidence of the severity of stress and anxiety among Jamaican junior track and field athletes

Eon Campbell^{1,*}, Rachael Irving¹, Melanie Poudevigne², Lowell Dilworth³

¹ Department of Basic Medical Sciences, The University of the West Indies, Mona, Jamaica

² Health and Fitness Management, Clayton State University, Morrow, Georgia, United States of America

³ Department of Pathology, The University of the West Indies, Mona, Jamaica

*Corresponding author: ceon88@yahoo.com

Research is suggesting that elite athletes are vulnerable to and struggle with mental health problems.

Objectives: The current study aimed to determine (I) the severity of stress and anxiety symptoms in elite Jamaican junior track and field athletes and (II) the association of stress and anxiety levels with performance in competition.

Methods: Seventy-eight junior athletes included 37 females (mean age: 15.8 ± 2.1 years) and 41 males (mean age: 16.7 ± 1.7 years) were examined twice during the competitive phase of the athletic season. Measurements included perceived stress, somatic trait anxiety, cognitive trait anxiety and competition performance data. Measures were averaged to determine levels. Pearson correlation was used to examine the relationships between levels of stress/anxiety and performance.

Results: The findings indicated that approximately 30% of junior track and field athletes perceived that they were stressed and experienced symptoms of anxiety. With regards to gender, no significant differences were noted in perceived stress and sport anxiety scores, although female athletes scored higher on both scales. There were significant negative correlations between performance data and the levels of stress ($r = -0.47$, $p < 0.01$), somatic trait anxiety ($r = -0.44$, $p < 0.01$) and cognitive trait anxiety ($r = -0.49$, $p < 0.01$).

Conclusion: The findings of the current study substantiate research which suggests that elite athletes are vulnerable to and struggle with mental health problems, in particular stress and anxiety. The study showed that stress and anxiety may have debilitating effects on competition performance results.



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
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