# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

# Adolescent health



Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health.

Adolescents experience rapid physical, cognitive and psychosocial growth. This affects how they feel, think, make decisions, and interact with the world around them.

Despite being thought of as a healthy stage of life, there is significant death, illness and injury in the adolescent years. Much of this is preventable or treatable. During this phase, adolescents establish patterns of behaviour – for instance, related to diet, physical activity, substance use, and sexual activity – that can protect their health and the health of others around them, or put their health at risk now and in the future.

To grow and develop in good health, adolescents need information, including age-appropriate comprehensive sexuality education; opportunities to develop life skills; health services that are acceptable, equitable, appropriate and effective; and safe and supportive environments. They also need opportunities to meaningfully participate in the design and delivery of interventions to improve and maintain their health. Expanding such opportunities is key to responding to adolescents' specific needs and rights.



Source: https://www.who.int/health-topics/adolescent-health#tab=tab\_1

# EPI WEEK 31



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SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in **Jamaica** 



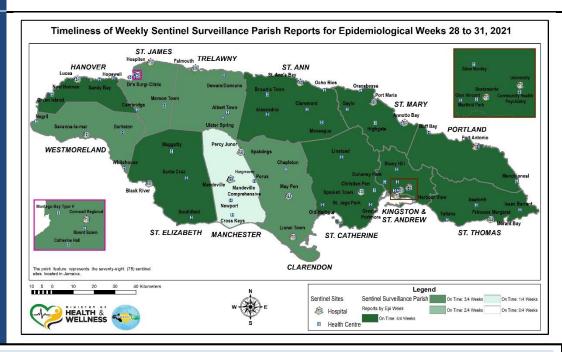
A syndromic surveillance system is good for early detection of and response to public health events.

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.

Map representing the **Timeliness of Weekly Sentinel Surveillance** Parish Reports for the Four **Most Recent Epidemiological Weeks -**28 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.



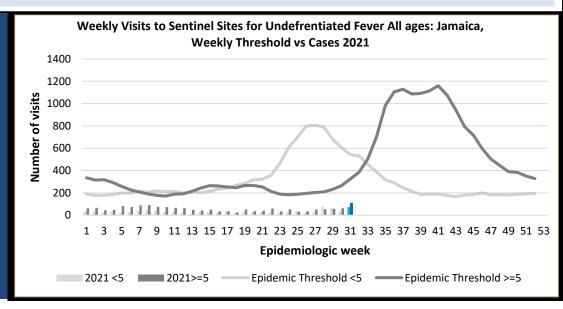
# REPORTS FOR SYNDROMIC SURVEILLANCE

#### **FEVER**

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



KEY VARIATIONS OF BLUE SHOW CURRENT WEEK





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).



## FEVER AND HAEMORRHAGIC

Temperature of  $>38^{\circ}C$  /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.



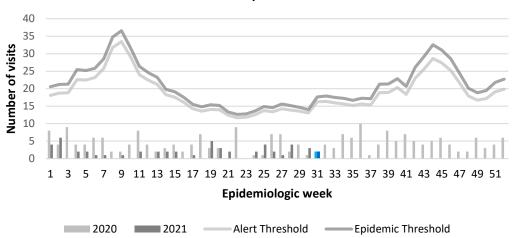
## FEVER AND JAUNDICE

Temperature of  $>38^{\circ}C/100.4^{\circ}F$  (or recent history of fever) in a previously healthy person presenting with jaundice.

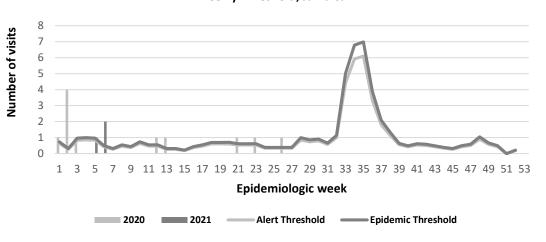
The epidemic threshold is used to confirm the emergence of an epidemic in order to implement control measures. It is calculated using the mean reported cases per week plus 2 standard deviations.



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



## Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2020 and 2021 vs Weekly Threshold; Jamaica



Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2020 and 2021 8 7 6 Number of visits 5 4 3 2 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 3 **Epidemiologic Week** 2020 2021 **Alert Threshold** Epidemic Threshold



3 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



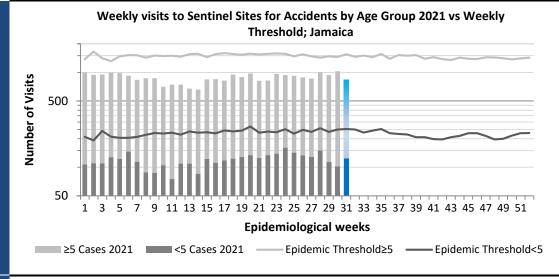
#### **ACCIDENTS**

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

# **KEY**

VARIATIONS OF BLUE SHOW CURRENT WEEK



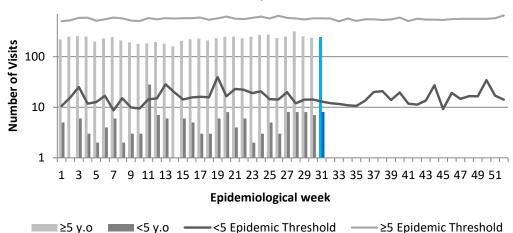


#### **VIOLENCE**

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



## Weekly visits to Sentinel Sites for Violence by Age Group 2021 vs Weekly Threshold; Jamaica

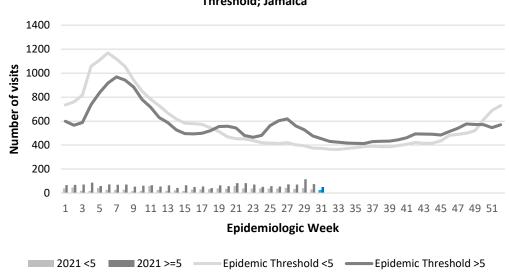


## **GASTROENTERITIS**

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



# **CLASS ONE NOTIFIABLE EVENTS**

# Comments

			Confirmed YTD <sup>α</sup>		AFP Field Guides
	CLASS 1 EVENTS		CURRENT YEAR 2021	PREVIOUS YEAR 2020	from WHO indicate that for an effective surveillance system,
	Accidental Poisoning		$22^{\beta}$	76	detection rates for
NATIONAL /INTERNATIONAL INTEREST	Cholera		0	0	AFP should be 1/100,000 population
	Dengue Hemorrhagic Fever <sup>γ</sup>		See Dengue page below	See Dengue page below	under 15 years old (6 to 7) cases annually.
	Hansen's Disease (Leprosy)		0	0	
	Hepatitis B		2	3	Pertussis-like syndrome and Tetanus
	Hepatitis C		0	0	are clinically
	HIV/AIDS		NA	NA	confirmed classifications.
	Malaria (Imported)		0	0	
	Meningitis (Clinically confirmed)		4	1	<sup>γ</sup> Dengue Hemorrhagic Fever
EXOTIC/ UNUSUAL	Plague		0	0	data include Dengue related deaths;
ſY/ TY	Meningococcal Meningitis		0	0	8
H IGH MORBIDITY, MORTALITY	Neonatal Tetanus		0	0	<sup>δ</sup> Figures include all deaths associated with
	Typhoid Fever		0	0	pregnancy reported
ΣΣ	Meningitis H/Flu		0	0	for the period.
SPECIAL PROGRAMMES	AFP/Polio		0	0	<sup>ε</sup> CHIKV IgM
	Congenital Rubella Syndrome		0	0	positive cases
	Congenital Syphilis		0	0	<sup>θ</sup> Zika PCR positive cases
	Fever and Rash	Measles	0	0	- β Updates made to prior weeks in 2020.
		Rubella	0	0	
	Maternal Deaths <sup>δ</sup>		23	22	<sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.
	Ophthalmia Neonatorum		0	38	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		19	29	
	Yellow Fever		0	0	
	Chikungunya <sup>ɛ</sup>		0	0	
	Zika Virus <sup>θ</sup>		0	0	NA- Not Available
NOTIFICATIONS- INVESTIGATION		HOS	DITAI	SENTINEL.	







INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

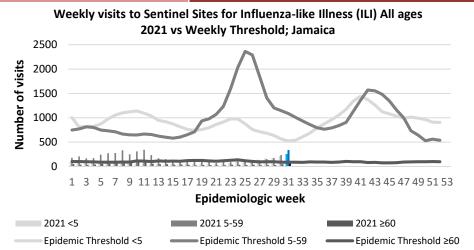


# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 31

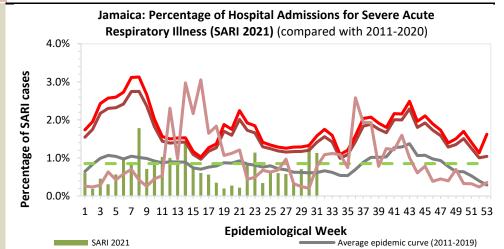
August 1-7, 2021 Epidemiological Week 31

	EW 31	YTD
SARI cases	18	337
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



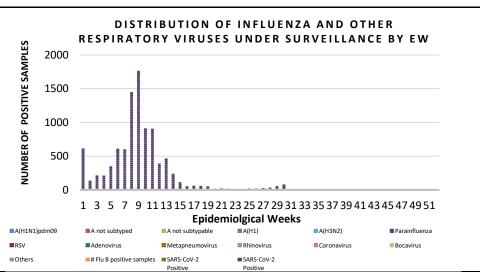
## **Epi Week Summary**

During EW 31, 18 (eighteen) SARI admissions were reported.



## Caribbean Update EW 31

**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



Alert Threshold

Seasonal Trend

HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



Epidemic Threshold SARI 2020

# Dengue Bulletin

Epidemiological Week 31

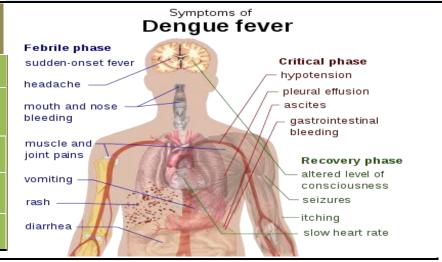
August 1 - 7, 2021 Epidemiological Week 31



Dengue Cases by Year: 2004-2021, Jamaica 12000 10000 Number of cases 8000 6000 4000 2000 0 2015 2016 2013 2014 Year ■ Total Suspected ■ Confirmed DF

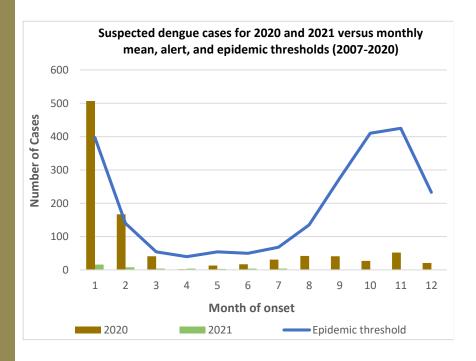
# Reported suspected and confirmed dengue with symptom onset in week 31 of 2021

	2021*		
	EW 31	YTD	
Total Suspected Dengue Cases	0	37	
Lab Confirmed Dengue cases	0	5	
CONFIRMED Dengue Related Deaths	0	0	



#### **Points to note:**

- \*Figure as at Ausgust 5, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.





7 NOTIFICATIONS-All clinical sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



# **RESEARCH PAPER**

## **ABSTRACT**

# Title: A Review of the 1918 Influenza Pandemic - The Jamaica Experience

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National Epidemiology Unit, Ministry of Health, Jamaica

**Objective:** To describe the 1918 influenza pandemic in Jamaica and explore the socio-political and health-care contexts of the event.

**Methods:** Reviewed documents to obtain data on demographic parameters, hospital admissions for influenza, social conditions, and health system response.

**Results:** The Jamaican population in 1918 was 809,005 (384,319 males and 424,686 females). Health care was delivered by a network of: private practices, hospitals, infirmaries, and dispensaries.

The 1918 influenza pandemic started in January; the first recorded case of pandemic influenza in Jamaica occurred around October 1918 and by December the pandemic in Jamaica waned. In 1918/19 the proportion of influenza hospitalizations was 157 times greater than the mean for the preceding 10 years (1,412/10,000 versus 9/10,000). The influenza-specific death rate in 1918/19 was 3,288/10,000 in hospitalized patients while the maximum annual influenza-specific death rate in non-outbreak years was 80/10,000. The crude death rate declined by 32% from 1918/19 to 1919/20.

The First World War, local riots, food shortages, and recent hurricanes may have challenged the local authorities' reaction to the emergence of the pandemic in Jamaica. The response to the outbreak included: school closures, bans on public gatherings, disinfection of public transport, local travel bans, hiring of additional sanitary workers, opening of emergency hospitals and soup kitchens, health education, and policy changes.

**Conclusion**: The 1918 influenza outbreak in Jamaica was sudden and severe. The response to the 1918 influenza outbreak was affected by the socio-political realities of the day, which should be kept in mind for future pandemic preparedness planning.



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8 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

