## WEEKLY EPIDEMIOLOGY BULLETIN NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

### Weekly Spotlight

### **Influenza Seasonal**



Seasonal influenza is an acute respiratory infection caused by influenza viruses which circulate in all parts of the world. It represents a yearround disease burden. It causes illnesses that range in severity and sometimes lead to hospitalization and death.

Most people recover from fever and other symptoms within a week without requiring medical attention. However, influenza can cause severe illness or death, particularly among high risk groups including the very young, the elderly, pregnant women, health workers and those with serious medical conditions.

In temperate climates, seasonal epidemics occur mainly during winter, while in tropical regions, influenza may occur throughout the year, causing outbreaks more irregularly.

Seasonal influenza is characterized by a sudden onset of fever, cough (usually dry), headache, muscle and joint pain, severe malaise (feeling unwell), sore throat and a runny nose. The cough can be severe and can last two or more weeks.

For patients that are not in a high risk group, treatment focuses on relieving symptoms of influenza such as fever. Patients that are known to be in a group at high risk for developing severe or complicated illness should seek medical attention and should be treated with antiviral drug as soon as possible.

Taken from WHO website on 08/November/2024 https://www.who.int/health-topics/influenza-seasonal#tab=tab\_1 https://www.who.int/health-topics/influenza-seasonal#tab=tab\_2 https://www.who.int/health-topics/influenza-seasonal#tab=tab\_3 https://www.vectorstock.com/royalty-free-vector/close-up-diagram-forinfluenza-virus-vector-17040065



### Sentinel Surveillance in Jamaica



Table showcasing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks – 40 to 43 of 2024

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 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.

Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
						20	124						
40	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
41	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
42	On	On	On	Late	On	Late	On	On	On	On	On	On	On
	Time	Time	Time	(T)	Time	(T)	Time	Time	Time	Time	Time	Time	Time
43	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time

## REPORTS FOR SYNDROMIC SURVEILLANCE

#### UNDIFFERENTIATED FEVER

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





Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica,

2 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





#### November 8, 2024

#### 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).



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  - 3 NOTIFICATIONS-All clinical sites
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SENTINEL REPORT- 78 sites. Automatic reporting



**FEVER AND** 

HAEMORRHAGIC

Temperature of >38°C

/100.4<sup>o</sup>*F* (or recent history of

fever) in a previously healthy

(bleeding) manifestation with

person presenting with at

least one haemorrhagic

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.



4 NOTIFICATIONS-All clinical sites



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### CLASS ONE NOTIFIABLE EVENTS

# Comments

			Confirm	ed YTD <sup><math>\alpha</math></sup>	AFP Field Guides from		
	CLASS 1 E	VENTS	CURRENT YEAR 2024	PREVIOUS YEAR 2023	WHO indicate that for an effective surveillance system detection rates for		
	Accidental Po	oisoning	218 <sup>β</sup>	337 <sup>β</sup>	AFP should be 1/100,000		
Ţ	Cholera		0	0	population under 15 years		
7NO	Severe Dengu	ue <sup>Y</sup>	See Dengue page below	See Dengue page below	old (0 to 7) cases annually.		
ATI	COVID-19 (S	SARS-CoV-2)	683	3772	Pertussis-like syndrome and		
ERN EST	Hansen's Dis	ease (Leprosy)	0	0	Tetanus are clinically		
INTI	Hepatitis B		24	56	confirmed classifications.		
AL /	Hepatitis C		3	27	Y Dengue Hemorrhagic		
ON/	HIV/AIDS		NA	NA	Fever data include Dengue		
IATI	Malaria (Imp	ported)	2	3	related deaths;		
Z	Meningitis		12	25	$^{\delta}$ Figures include all deaths		
	Monkeypox		0	3	associated with pregnancy		
EXOTIC/ UNUSUAL	Plague		0	0			
TY IY	Meningococc	al Meningitis	0	0	<sup>ε</sup> CHIKV IgM positive		
GH IDIT ALL	Neonatal Teta	anus	0	0	$\theta$ Zilco DCD positivo cosos		
H I ORB ORT	Typhoid Feve	er	0	0	$\beta$ He data and the minim		
MC	Meningitis H	/Flu	1	2	weeks.		
	AFP/Polio		0	0	$^{\alpha}$ Figures are cumulative		
	Congenital R	ubella Syndrome	0	0	totals for all epidemiologica		
70	Congenital S	yphilis	0	0	weeks year to date.		
MES	Fever and Rash	Measles	0	0			
SPECIAL PROGRAMI		Rubella	0	0			
	Maternal Dea	ιths <sup>δ</sup>	49	45			
	Ophthalmia N	Neonatorum	140	140			
	Pertussis-like	syndrome	0	0			
	Rheumatic Fe	ever	0	0			
	Tetanus		0	0	_		
	Tuberculosis		28	56			
	Yellow Fever	ſ	0	0			
	Chikungunya	3	0	0			
	Zika Virus <sup>0</sup>		0	0	NA- Not Available		

NOTIFICATIONS-5 All clinical sites



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HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





#### November 8, 2024

CASES	EW 43	Total		
Confirmed	4	157415		
Females	3	90700		
Males	1	66712		
Age Range	63 day to 78 years old	1 day to 108 years		

3 positive cases had no gender specification

\* PCR or Antigen tests are used to confirm cases \* Total represents all cases confirmed from 10 Mar 2020

to the current Epi-Week.

#### COVID-19 Outcomes

Outcomes	EW 43	Total			
ACTIVE *2 weeks*		11			
DIED – COVID Related	0	3865			
Died - NON COVID	0	388			
Died - Under Investigation	0	154			
Recovered and discharged	0	103226			
Repatriated	0	93			
Total		157415			
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**COVID-19 Surveillance Update** 



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Under Investigation

Workplace Cluster





Vaccination programme March 2021 – YTD

\* Total as at current Epi week

#### **COVID-19 Parish Distribution and Global Statistics**





NOTIFICATIONS-6 All clinical sites



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ACTIVE SURVEILLANCE-30 sites. Actively pursued





#### November 8, 2024

## NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

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*EW43* 

#### October 20, 2024 - October 26, 2024 Epidemiological Week 43



During EW 43, sixteen (16) SARI admissions were reported.



#### Caribbean Update EW 43

Caribbean: ILI cases have remained low over the las four EW, though there has been increased in the proportion of positive cases for RSV. SARI cases have remained low. Influenza activity remains fluctuating at low levels, with predominant subtypes A(H3N2) and A(H1N1)pdm09. RSV activity has shown a pronounced increased in several countries over the last four EW. SARS-CoV-2 remains low and is trending downward.

By country: In the last four EW, influenza activity has been reported in Belize, Jamaica, Suriname, the Cayman Islands and Guyana. SARS-CoV-2 activity has been observed in Haiti, Barbados and Saint Vincent and the Grenadines. RSV activity has been detected in Belize, the Dominican Republic, Barbados, the Cayman Islands, Guyana and Saint Vincent and the Grenadines. Jamaica: an increase in SARI cases has exceeded the epidemic threshold. Pneumonia cases has risen to extraordinary levels. Over the last four EW, influenza activity has exceede the epidemic threshold, alongside fluctuating activity of SARS-CoV-2 and RSV.



(taken from PAHO Respiratory viruses weekly report) https://www.paho.org/en/influenza-situation-report

#### 7 NOTIFICATIONS-All clinical sites



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Reported suspected, probable and confirmed dengue with symptom onset in week 43 of 2024

	2024*			
	EW 43	YTD		
Total Suspected, Probable & Confirmed Dengue Cases	5	1814		
Lab Confirmed Dengue cases	0	43		
CONFIRMED Dengue Related Deaths	0	2		

#### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at November 8, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Symptoms of Dengue fever



#### Suspected, probable and confirmed dengue cases for 2022 -2024 versus monthly mean, alert, and epidemic thresholds (2007-2022)



8 NOTIFICATIONS-All clinical sites



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HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





# **RESEARCH PAPER**

### Abstract

### NHRC-23-P02

### Age and Sex Differences in Adult Diabetic and Hypertensive Diagnoses in Urban Jamaica Brown M<sup>1</sup>

<sup>1</sup>University of the West Indies, Mona, Jamaica

**Objective:** To examine age and sex differences in adult diabetic and hypertensive diagnosis in urban Jamaica.

**Methods:** The research data was taken from the monthly clinical summary report for 2022. The study focused on the age-sex differences in diagnosis of diabetes mellitus, hypertension or having both illnesses in Kingston and St. Andrew (KSA). The statistical analysis of the observed age-sex differences were calculated using the mean, 95% confidence interval and Mann-Whitney U test statistical significance at p<.05.

**Results:** The overall mean age of NCD diagnosis within the sample was 55.2(95% CI 54.5-55.8). The Mann Whitney U test indicated more women than men were diagnosed as diabetic (387 females to 146 males, p<.05). Women were observed to be diabetic at a younger age than men (female mean age 52.5, 95% CI 51.4-53.5 compared to male mean age 56.8, 95% CI 55.5-58.8, p<.05). Notably, females were determined to have both chronic illnesses at an older age (mean age 56.6, 95% CI 54.7-58.4, p<.05) than those diabetic only. This reveals a gradual progression for women within the study. Males had an earlier mean age of diagnosis for hypertension 56.8, 95% CI 55.5-58, p<.05 compared to diabetes only 57.2, 95% CI 5A5.0-59.3, p<.05.

**Conclusion:** More females than males were diagnosed with diabetes mellitus. Females were identified diabetic at a younger age than males. They were also discovered to be diabetic before determined to have both illnesses. However, males were identified as being hypertensive at a younger age than those known as diabetic only.



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9 NOTIFICATIONS-All clinical sites



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HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



