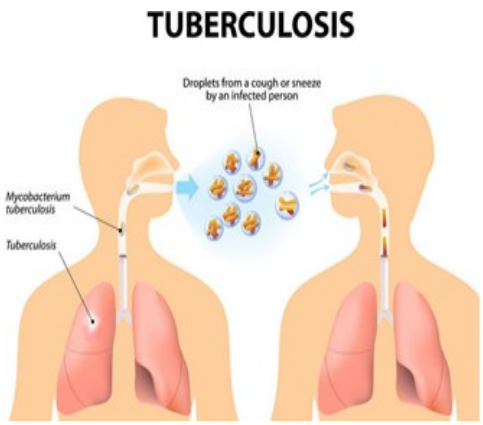
WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Tuberculosis

- Tuberculosis (TB) is one of the top 10 causes of death worldwide.
- In 2017, 10 million people fell ill with TB, and 1.6 million died from the disease (including 0.3 million among people with HIV).
- In 2017, an estimated 1 million children became ill with TB and 230 000 children died of TB (including children with HIV associated TB).



- TB is a leading killer of HIV-positive people.
- Multidrug-resistant TB (MDR-TB) remains a public health crisis and a health security threat. WHO estimates that there were 558 000 new cases with resistance to rifampicin – the most effective first-line drug, of which - 82% had MDR-TB.
- Globally, TB incidence is falling at about 2% per year. This needs to accelerate to a 4–5% annual decline to reach the 2020 milestones of the End TB Strategy.
- An estimated 54 million lives were saved through TB diagnosis and treatment between 2000 and 2017.
- Ending the TB epidemic by 2030 is among the health targets of the Sustainable Development Goals.

Tuberculosis mostly affects adults in their most productive years. However, all age groups are at risk. Over 95% of cases and deaths are in developing countries.

People who are infected with HIV are 20 to 30 times more likely to develop active TB. The risk of active TB is also greater in persons suffering from other conditions that impair the immune system.

One million children (0–14 years of age) fell ill with TB, and 230 000 children died from the disease in 2017.

Tobacco use greatly increases the risk of TB disease and death. 7.9% of TB cases worldwide are attributable to smoking.

Common symptoms of active lung TB are cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats.

TB is a treatable and curable disease. Active, drug-susceptible TB disease is treated with a standard 6 month course of 4 antimicrobial drugs that are provided with information, supervision and support to the patient by a health worker or trained volunteer. Without such support, treatment adherence can be difficult and the disease can spread. The vast majority of TB cases can be cured when medicines are provided and taken properly.

Source:https://www.who.int/news-room/fact-sheets/detail/tuberculosis

EPI WEEK 11

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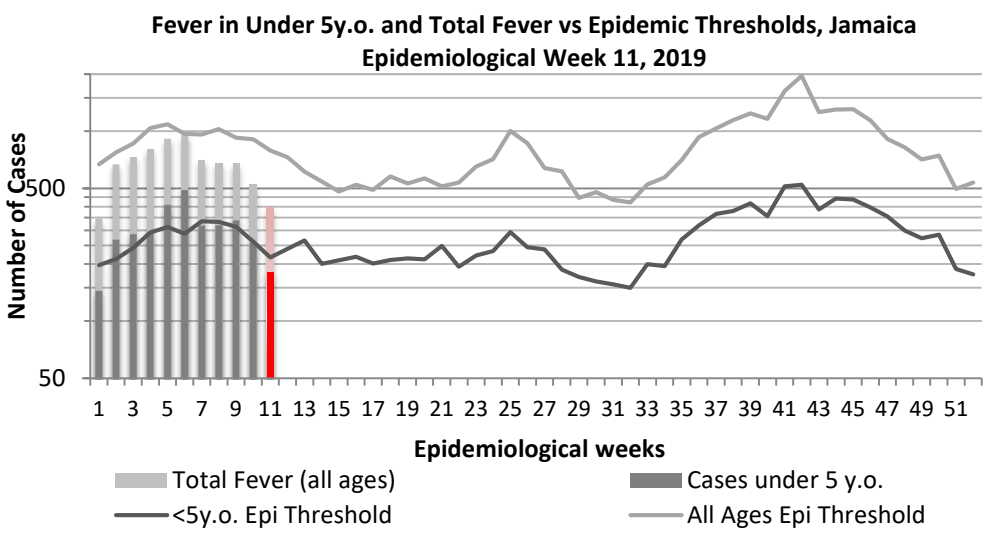
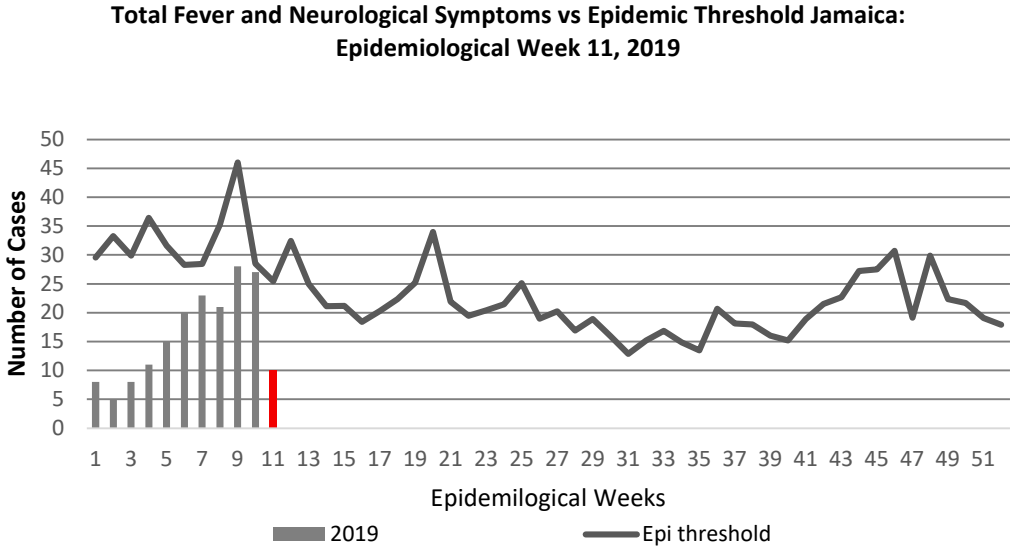
REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER
Temperature of >38^0C /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.

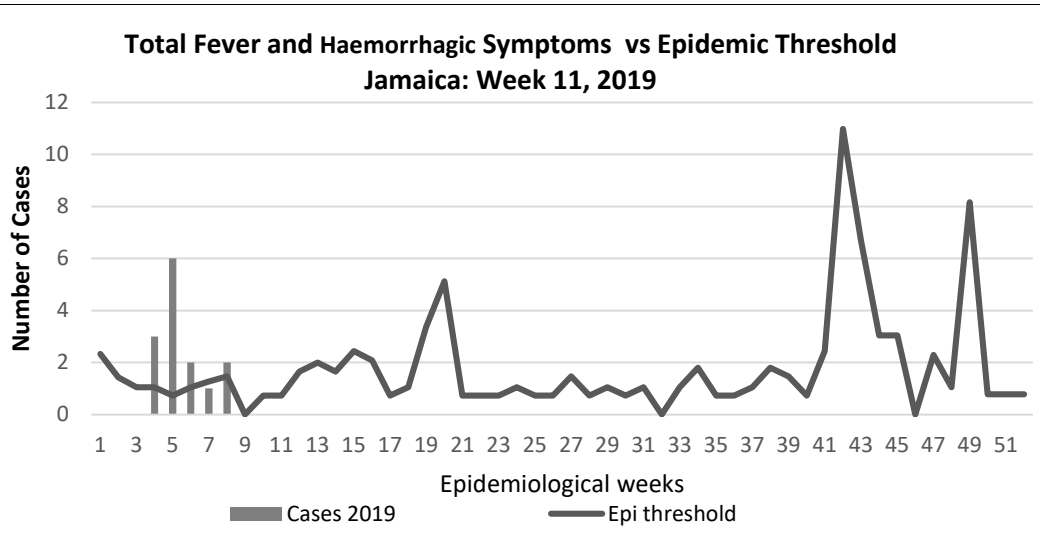
KEY
RED CURRENT WEEK



FEVER AND NEUROLOGICAL
Temperature of >38^{0}C /100.4^{0}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 >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



2 NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 79 sites. Automatic reporting

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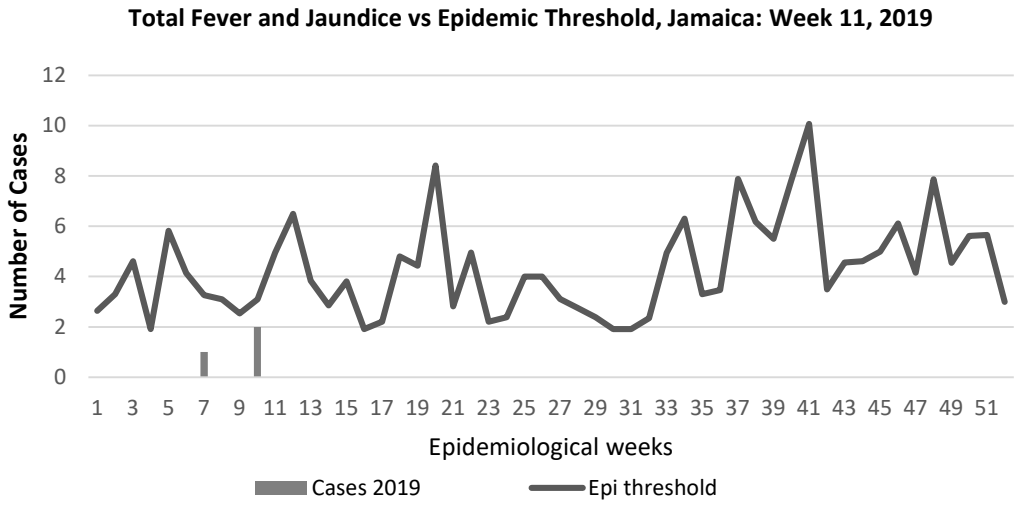
FEVER AND JAUNDICE

Temperature of >38^0C /100.4^0F (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.

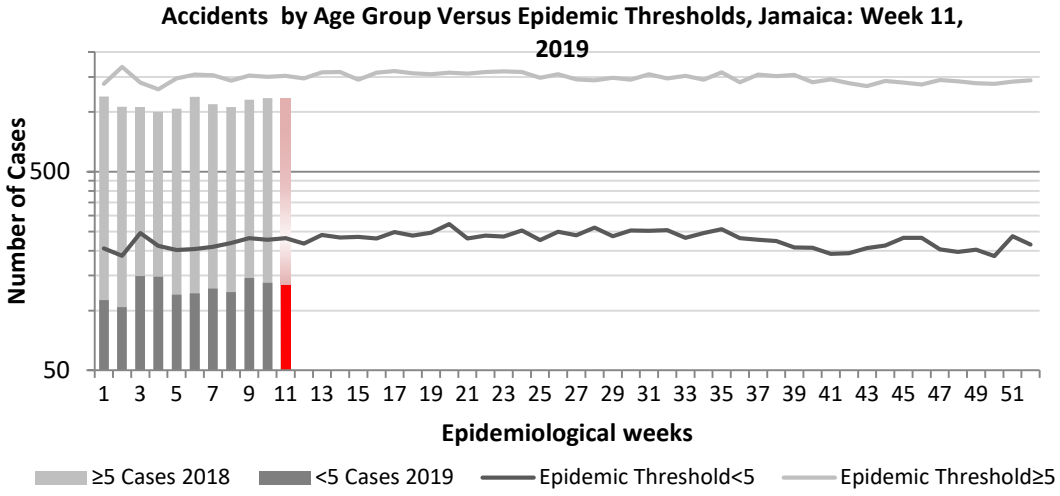


ACCIDENTS

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

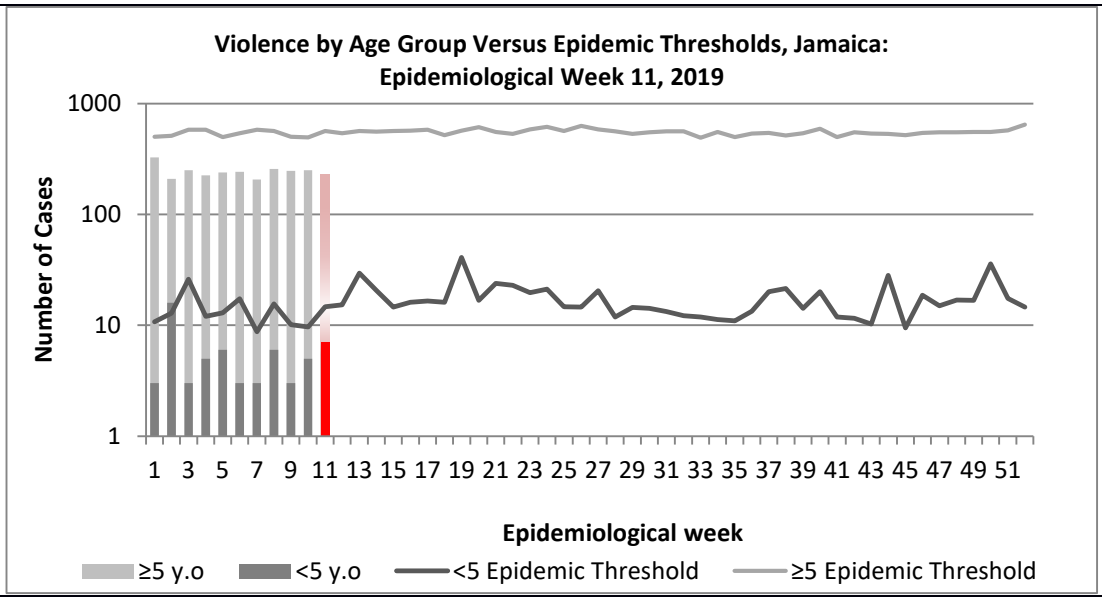
KEY

RED CURRENT WEEK



VIOLENCE

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



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CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS		CONFIRMED YTD CURRENT YEAR	CONFIRMED YTD PREVIOUS YEAR
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning[1]		6	30
	Cholera		0	0
	Dengue Hemorrhagic Fever[2]		0	0
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		1	0
	Hepatitis C		1	0
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis (Clinically confirmed)		1	13
EXOTIC/ UNUSUAL	Plague		0	0
H IGH MORBIDIT/ MORTALIY	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]		9	21
	Ophthalmia Neonatorum		15	35
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		5	8
	Yellow Fever		0	0
	Chikungunya[4]		0	0
	Zika Virus[5]		0	0

Comments

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.

[1] Numbers in brackets indicate combined suspected and confirmed Accidental Poisoning cases

[2] Dengue Hemorrhagic Fever data include Dengue related deaths;

[3] Figures include all deaths associated with pregnancy reported for the period.

[4] CHIKV IgM positive cases

[5] Zika PCR positive cases

NA- Not Available

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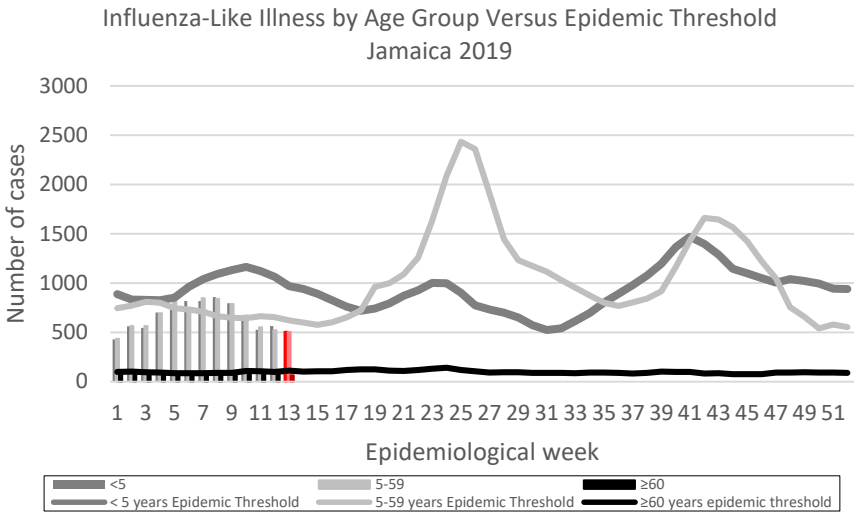
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

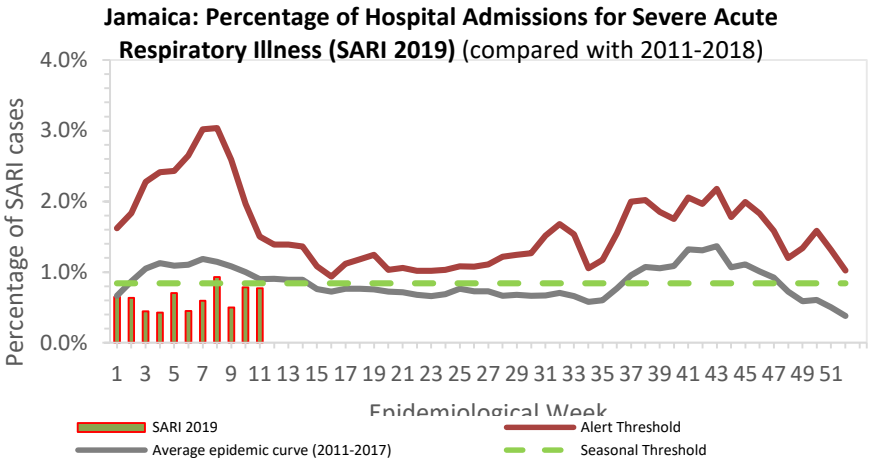
EW 11

March 11-17, 2019 Epidemiological Week 11

February 2019		
	EW 11	*YTD*
SARI cases	*13*	*124*
Total Influenza positive Samples	*4*	*144*
Influenza A	*4*	*135*
H3N2	*0*	*7*
H1N1pdm09	*0*	*59*
Not subtyped	*4*	*69*
Influenza B	*0*	*9*
Parainfluenza	*0*	*0*



Comments:
During EW 11 SARI activity remained below the seasonal threshold, similar to the previous seasons for the same period. Decreased influenza activity was reported; with influenza A(H1N1)pdm09 predominating in previous weeks



GLOBAL AND REGIONAL UPDATES

Worldwide: Seasonal influenza subtype A accounted for the majority of influenza detections.

Caribbean: Influenza activity decreased and RSV activity was reported in most of the subregion. In Cuba and Haiti, the greatest activity of SARI was associated with influenza A (H1N1) pdm09.

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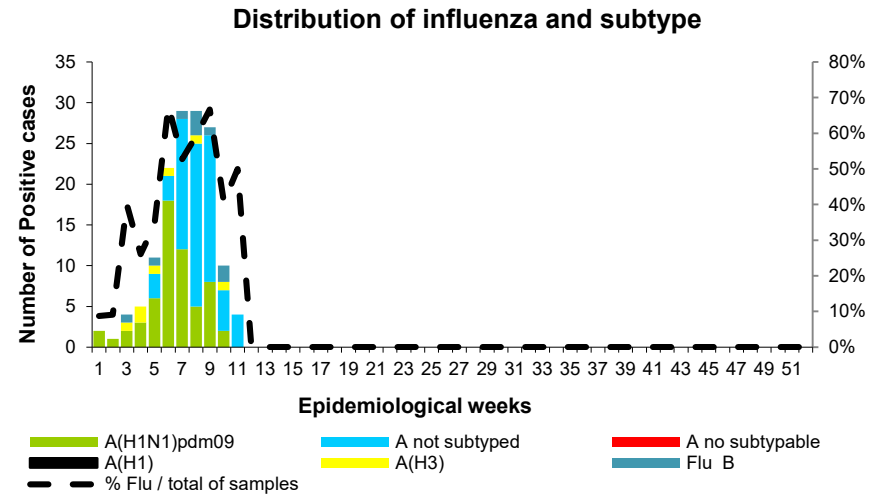

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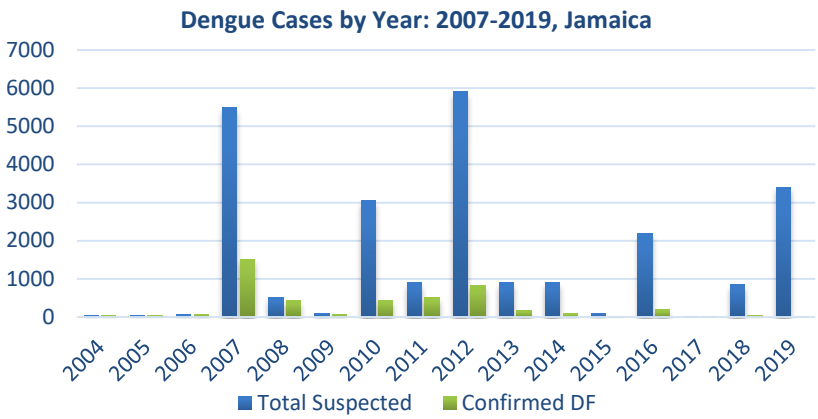
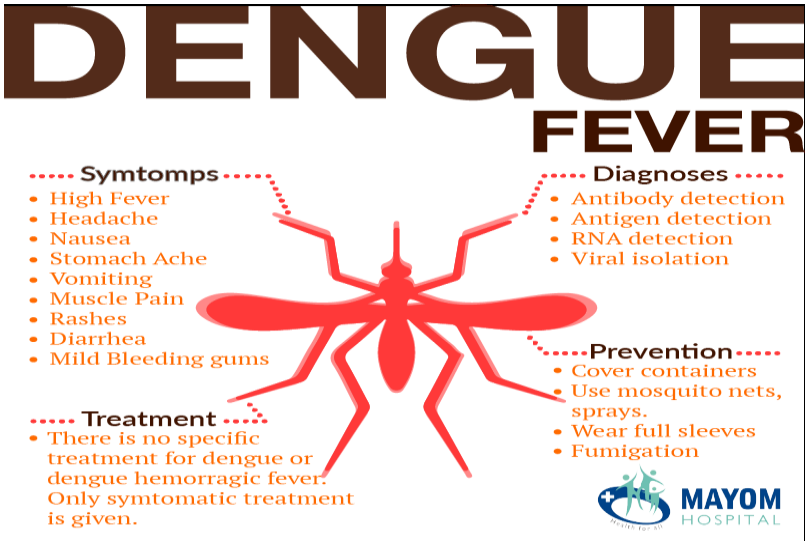
Dengue Bulletin

March 10-16, 2019 Epidemiological Week 11 | Epidemiological Week 11



Reported suspected and confirmed dengue with symptom onset in weeks 1-11, 2019

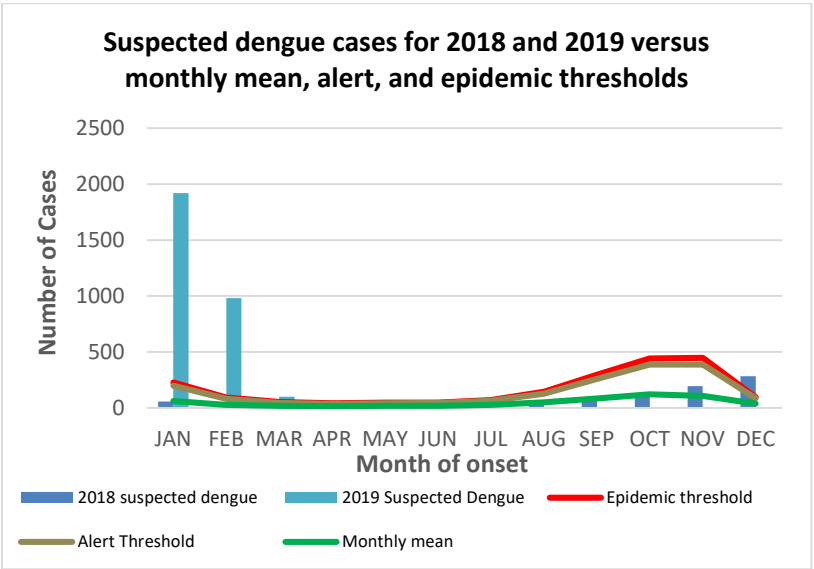
		2019		2018 YTD
		EW 11	YTD	
Total Suspected Dengue Cases		8	3190	1292
Lab Confirmed Dengue cases		0	16	0
CONFIRMED	*DHF/DSS	0	0	0
	Dengue Related Deaths	0	2	1



***DHF/DSS: Dengue Haemorrhagic Fever/ Dengue Shock Syndrome**

Points to note:

- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as presumed dengue.**



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Gastroenteritis Bulletin

March 10-16, 2019 Epidemiological Week 11 | Epidemiological Week 11

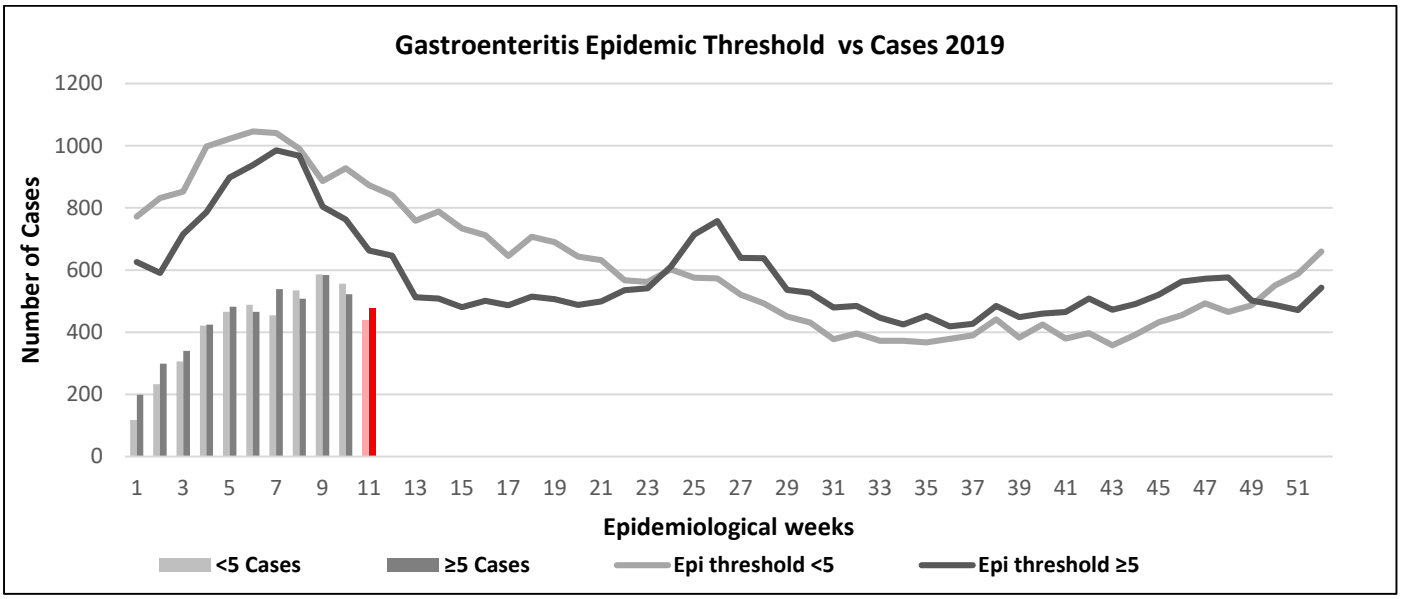
EW 11

Weekly Breakdown of Gastroenteritis cases

Year	EW 11			YTD		
	<5	≥5	Total	<5	≥5	Total
2019	438	477	915	5,050	5,277	10,327
2018	143	210	353	2,442	3,359	5,801

Gastroenteritis:
In epidemiological week 11, 2019, the total number of reported GE cases showed a 159% increase compared to EW 11 of the previous year.
The year to date figures showed a 78% increase in cases for the period.

Figure 1: Total Gastroenteritis Cases Reported 2018-2019



Total number of GE cases per parish up to Week 11 , 2019

Parishes	KSA	STT	POR	STM	STA	TRE	STJ	HAN	WES	STE	MAN	CLA	STC
<5	1890	128	54	212	342	266	369	72	182	138	479	206	267
≥5	1183	220	87	341	516	266	348	113	221	190	579	422	355

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RESEARCH PAPER

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

Authors: *Iyanna Wellington, Ardene Harris, Nicolas Elias, Shara Williams, Kelly-Ann Gordon-Johnson, Nathlee McMorris, Neisha Vanhorne, Lesley-Ann James, Andriene Grant, Karen Webster-Kerr*

Institution: *National Epidemiology Unit, Ministry of Health, Jamaica*

Corresponding Author / Presenter: *Dr Iyanna Wellington* at wellingtoni@moh.gov.jm

ABSTRACT

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.