

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Hand washing



Parents and other household members who wash their own hands carefully and regularly with soap as well as the hands of infants who are too small to do it themselves could halve the rate of deadly diarrhoea, according to a new study.

According to Luby, although washing hands with soap is a well-known disease prevention measure, his study is the first to focus on washing the hands of infants under 12 months who are too young to wash their own hands but are at highest risk from diarrhoea-related diseases.

"It is remarkable that hand-washing with soap led to a marked reduction in diarrhoea without improving water quality, even among malnourished children who are at increased risk of death from diarrhoea," said Luby who reported that the water used for drinking and washing available to the communities participating in the study was highly contaminated with sewage.

"The study re-emphasises that behavioural changes can have an impact," said Dr James Bartram, Coordinator of WHO's Water, Sanitation and Health Programme. However, access to safe water remains a prerequisite for maintaining hygiene and to further reducing diarrhoeal disease of which is attributed to unsafe water supply, inadequate sanitation and hygiene, said Bartram.

Families participating in the study published in lived in urban squatter settlements in Karachi, Pakistan, and had at least two children younger than 15, at least one of whom was younger than five.

The researchers found that children younger than 15 years living in households that received hand-washing education and plain soap had a 53% lower incidence of diarrhoea compared with children in households not receiving this education and free soap. They found no significant difference in households using antibacterial soap.

The study's findings suggest that half of those lives could be saved. It also suggests that vigorous public promotion of hand-washing, particularly among those without reliable clean water supplies, could have a major impact on health.

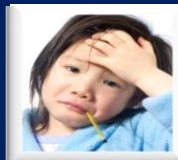
Whilst recognizing the important role played by governments in the promotion of hand-washing as a cost-effective way of fighting diarrhoea, Bartram also said that the key question for policy-makers is how to sustain that hygienic behaviour.

Source: <https://www.who.int/cancer/en/>

EPI WEEK 2

SYNDROMES

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CLASS 1 DISEASES

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INFLUENZA

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RESEARCH PAPER

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REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER

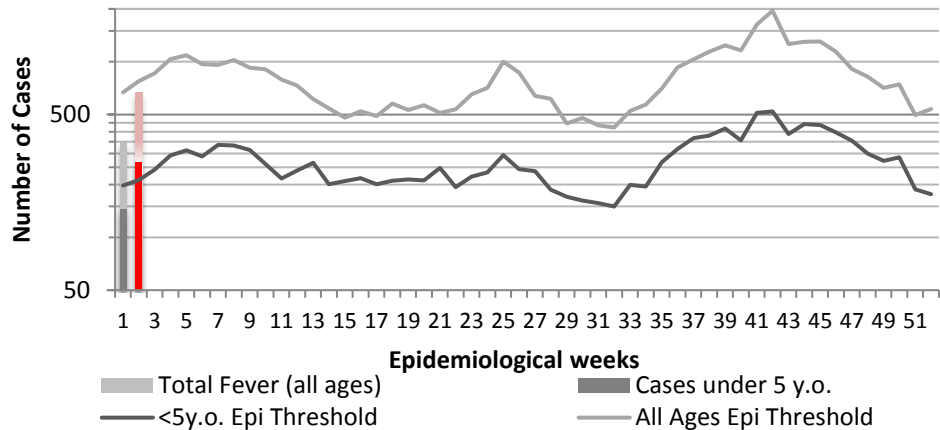
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

RED CURRENT WEEK

Fever in Under 5y.o. and Total Fever vs Epidemic Thresholds, Jamaica Epidemiological Week 2, 2019

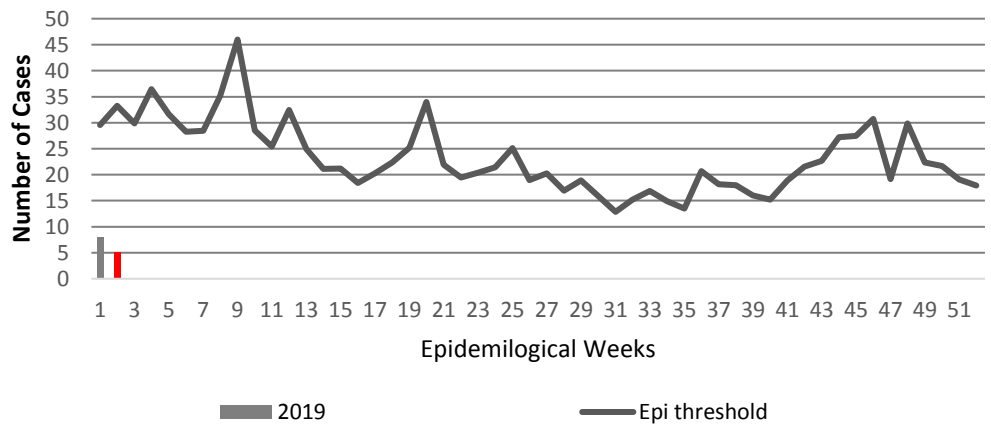


FEVER AND NEUROLOGICAL

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).



Total Fever and Neurological Symptoms vs Epidemic Threshold Jamaica: Week 2, 2019

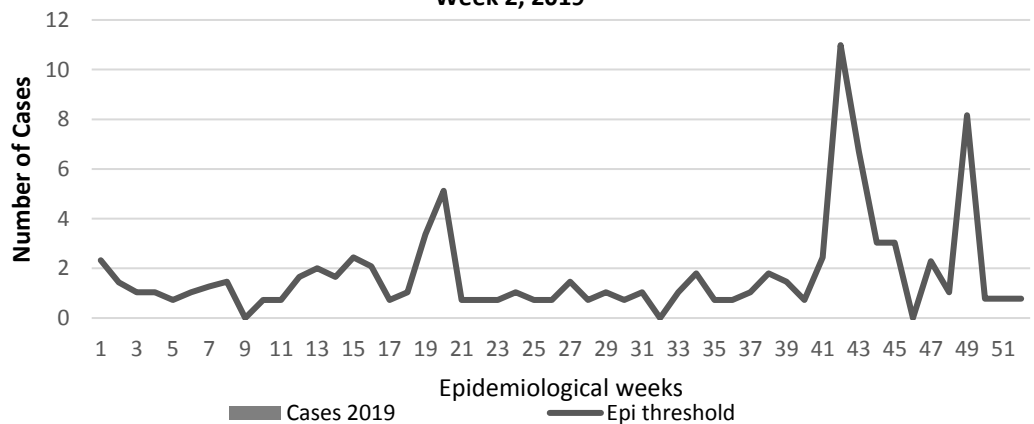


FEVER AND HAEMORRHAGIC

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.



Total Fever and Haemorrhagic Symptoms vs Epidemic Threshold Jamaica: Week 2, 2019



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

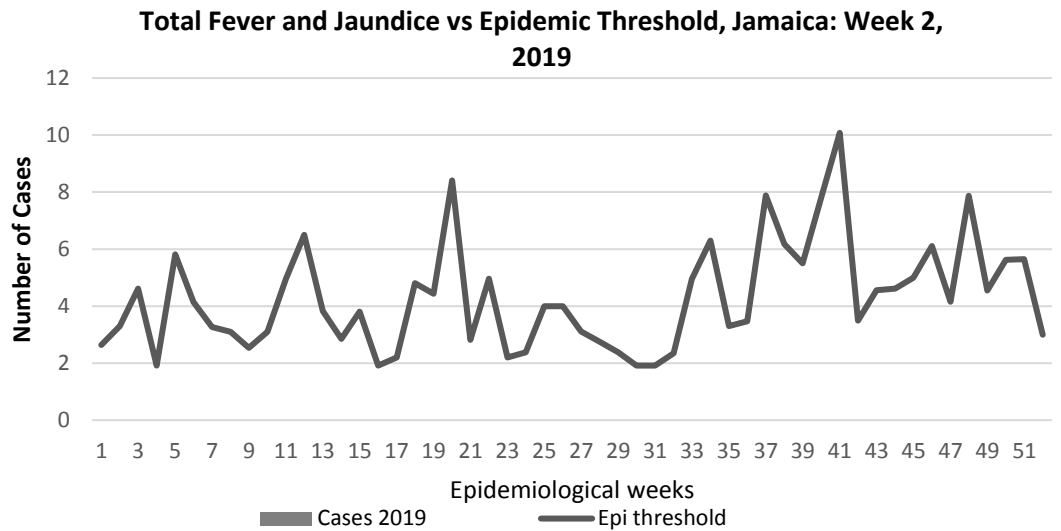


SENTINEL REPORT- 79 sites. Automatic reporting

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.

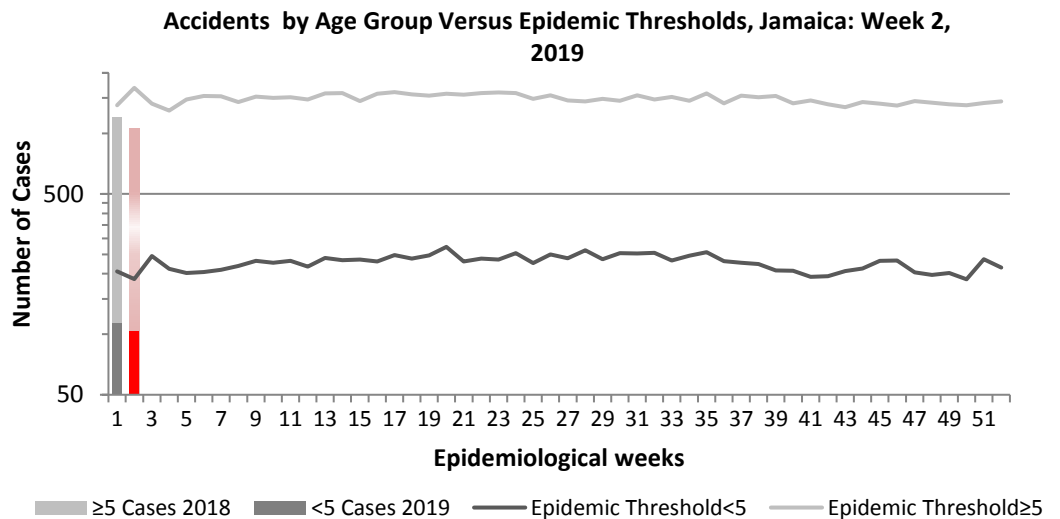


ACCIDENTS

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

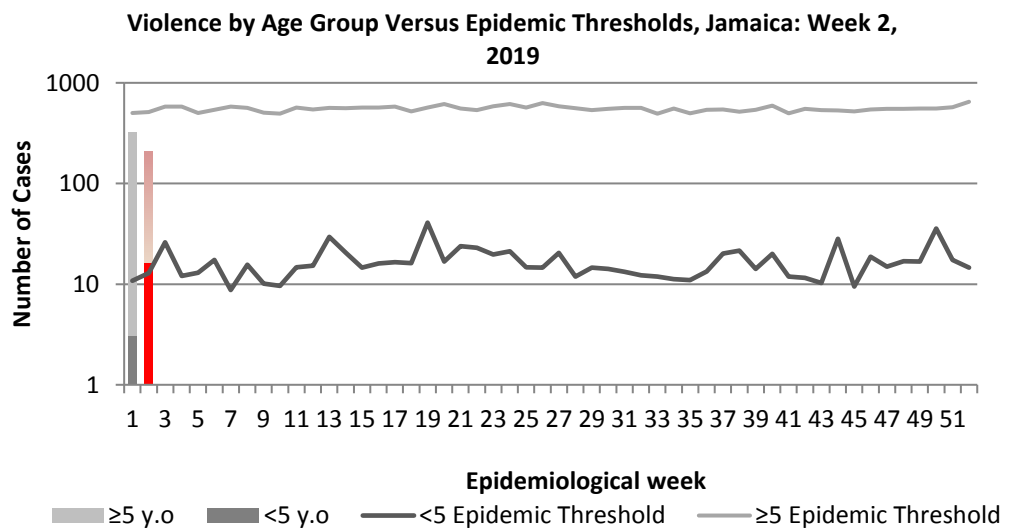
KEY

RED CURRENT WEEK



VIOLENCE

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



3 NOTIFICATIONS-
All clinical sites




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CLASS ONE NOTIFIABLE EVENTS				Comments	
			CONFIRMED YTD		
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning ¹		3	3	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.
	Cholera		0	0	
	Dengue Hemorrhagic Fever ²		0	0	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		0	0	
	Hepatitis C		0	0	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis (Clinically confirmed)		1	2	
EXOTIC/ UNUSUAL	Plague		0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	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 
	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		0	3	
	Ophthalmia Neonatorum		3	6	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		2	4	
Yellow Fever		0	0		
Chikungunya ⁴		0	0		
Zika Virus ⁵		0	0	NA- Not Available	

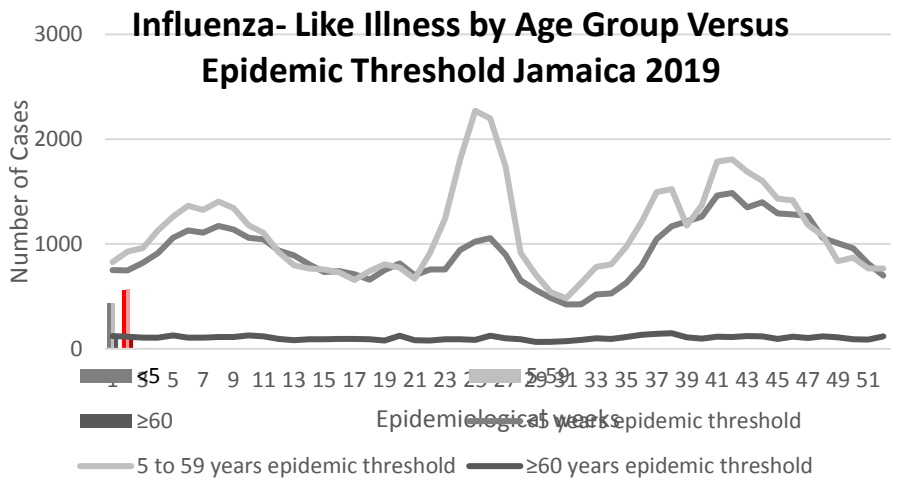
	4 NOTIFICATIONS- All clinical sites		INVESTIGATION REPORTS- Detailed Follow up for all Class One Events		HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued		SENTINEL REPORT- 79 sites. Automatic reporting
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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

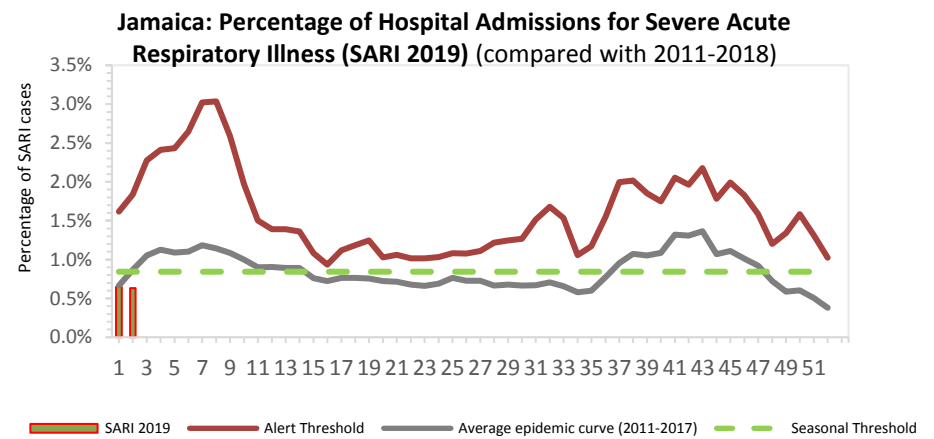
EW 2

January 6-12, 2019 Epidemiological Week 2

December 2019		
	<i>EW</i>	<i>YTD</i>
SARI cases	12	22
Total Influenza positive Samples	2	2
Influenza A	2	2
H3N2	0	0
H1N1pdm09	2	2
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0



Comments:
During EW 2 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



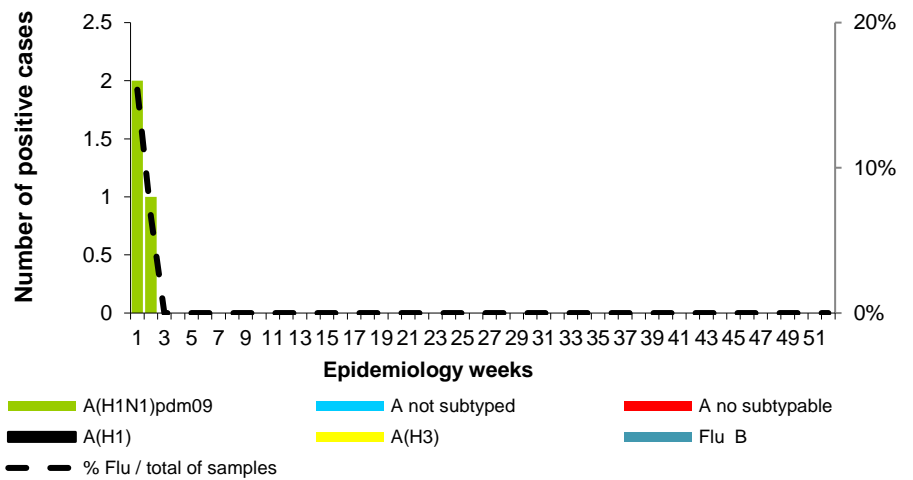
GLOBAL AND REGIONAL UPDATES

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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Distribution of influenza and subtype



5 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

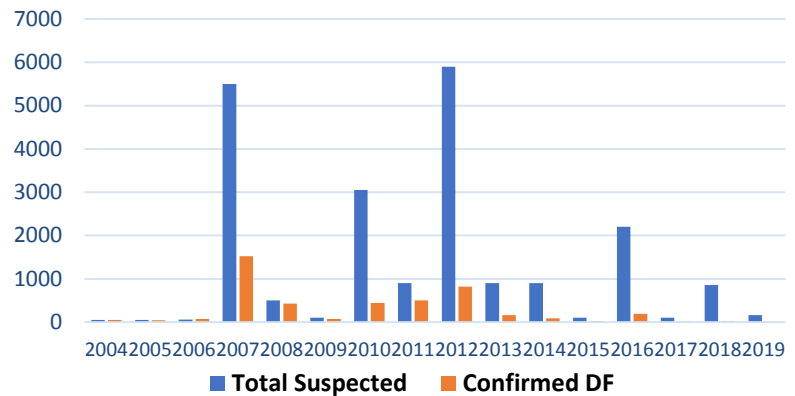
Dengue Bulletin

January 6-12, 2019 Epidemiological Week 2

Epidemiological Week 2



Dengue Cases by Year: 2007-2019, Jamaica



Reported suspected and confirmed dengue with symptom onset 2018 and 2019

	2019		2018 YTD
	EW 2	YTD	
Total Suspected Dengue Cases	377	542	24
Lab Confirmed Dengue cases	6	9	0
CONFIRMED	*DHF/ DSS	0	0
	Dengue Related Deaths	0	0

DENGUE FEVER

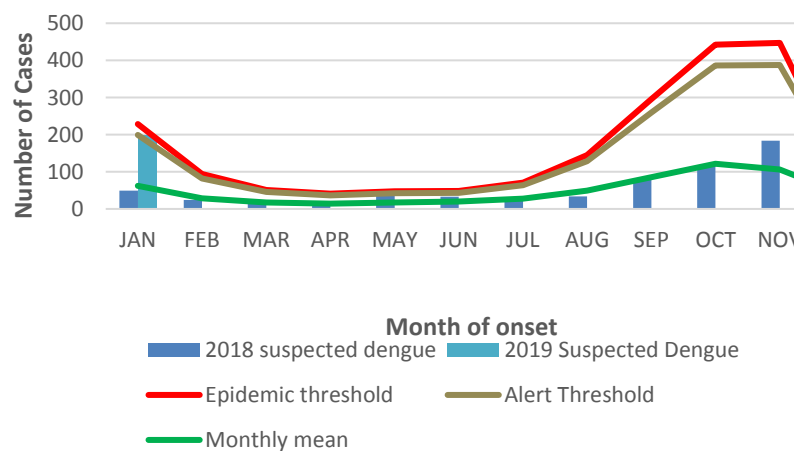
- Symptoms:**
 - High Fever
 - Headache
 - Nausea
 - Stomach Ache
 - Vomiting
 - Muscle Pain
 - Rashes
 - Diarrhea
 - Mild Bleeding gums
- Diagnoses:**
 - Antibody detection
 - Antigen detection
 - RNA detection
 - Viral isolation
- Prevention:**
 - Cover containers
 - Use mosquito nets, sprays.
 - Wear full sleeves
 - Fumigation
- Treatment:**
 - There is no specific treatment for dengue or dengue hemorrhagic fever. Only symptomatic treatment is given.



*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.

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



6 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

Gastroenteritis Bulletin

EW
2

January 6-12, 2019 Epidemiological Week 2

Epidemiological Week 2

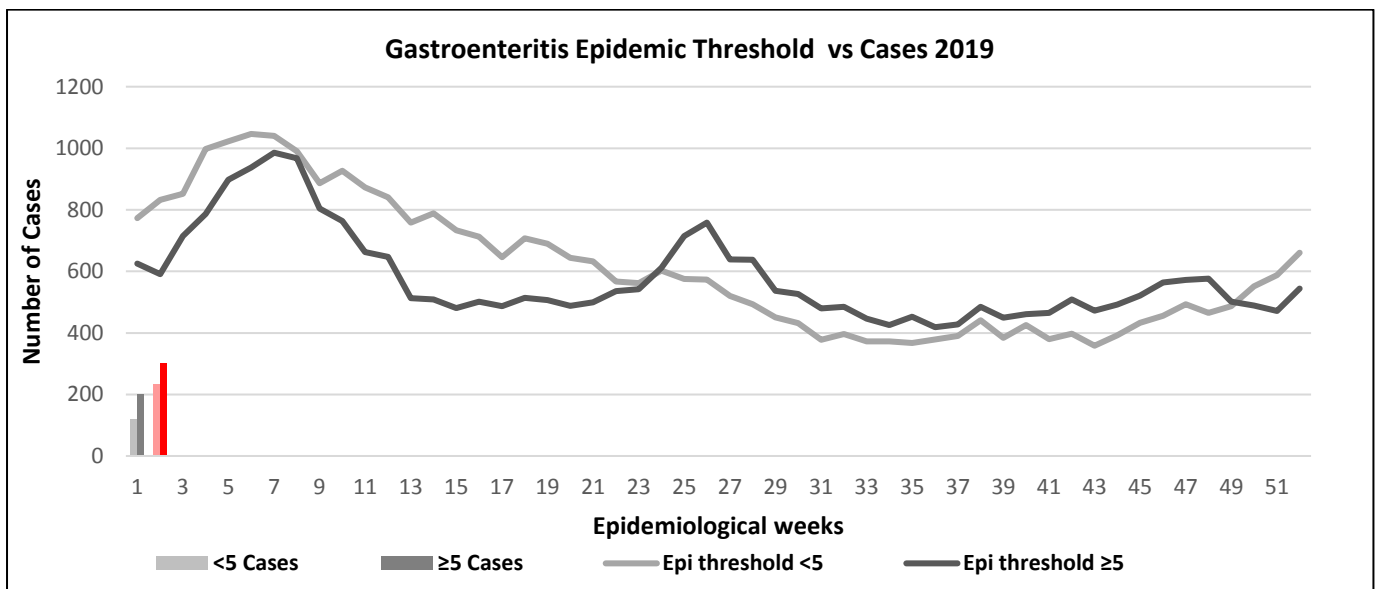
Weekly Breakdown of Gastroenteritis cases

Year	EW 2			YTD		
	<5	≥5	Total	<5	≥5	Total
2019	233	299	532	251	498	849
2018	164	243	407	321	459	780

Gastroenteritis:


In epidemiological week 2, 2019, the total number of reported GE cases showed a 31% increase compared to EW 2 of the previous year.

Figure 1: Total Gastroenteritis Cases Reported 2018-2019



Total number of GE cases per parish up to Week 2, 2019

Parishes	KSA	STT	POR	STM	STA	TRE	STJ	HAN	WES	STE	MAN	CLA	STC
<5	120	8	5	12	36	12	27	2	8	23	48	30	20
≥5	97	16	8	33	65	26	38	9	13	21	84	51	37

 **7 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

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.



8 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