

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Climate Change and Health



Climate change and health

中文 Français Русский Español

Key facts

- Climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.
- The direct damage costs to health (i.e. excluding costs in health-determining sectors such as agriculture and water and sanitation), is estimated to be between USD 2-4 billion/year by 2030.
- Areas with weak health infrastructure – mostly in developing countries – will be the least able to cope without assistance to prepare and respond.
- Reducing emissions of greenhouse gases through better transport, food and energy-use choices can result in improved health, particularly through reduced air pollution.

All populations will be affected by climate change, but some are more vulnerable than others. Children – in particular, children living in poor countries – are among the most vulnerable to the resulting health risks and will be exposed longer to the health consequences. The health effects are also expected to be more severe for elderly people and people with infirmities or pre-existing medical conditions. Areas with weak health infrastructure – mostly in developing countries – will be the least able to cope without assistance to prepare and respond.

Downloaded from: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

EPI WEEK 28

SYNDROMES

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RESEARCH PAPER

PAGE 8



SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



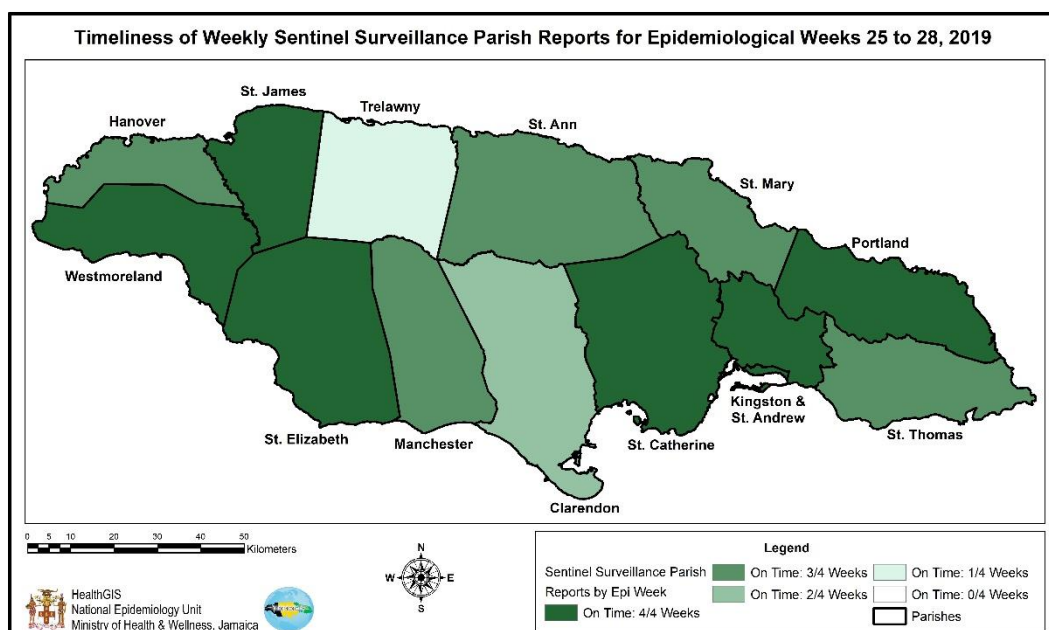
A syndromic surveillance system is good for early detection of and response to public health events.

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 - Weeks 25 to 28

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

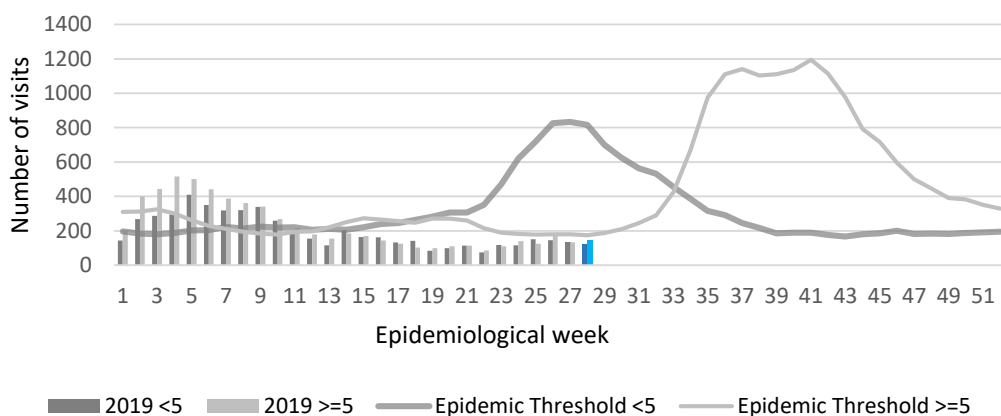
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2019



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



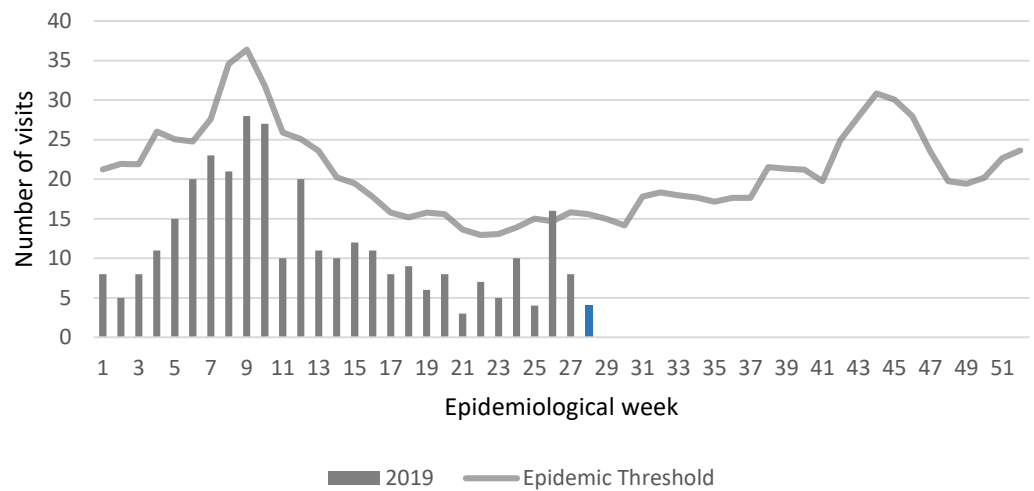
SENTINEL REPORT- 78 sites. Automatic reporting

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).



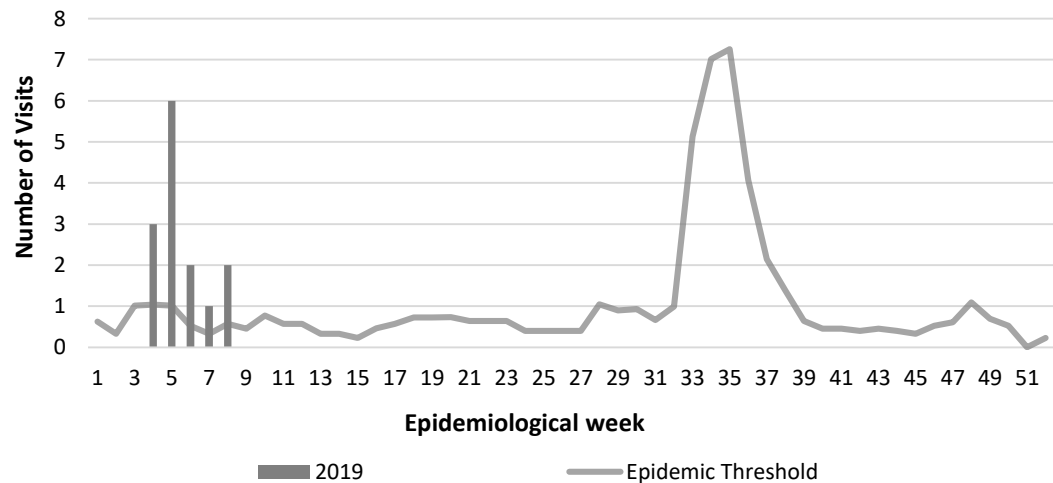
**Weekly visits to Sentinel Sites for Fever and Neurological Symptoms
2019 vs Weekly Threshold: Jamaica**

**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. Visits for Fever and Haemorrhagic symptoms were reported in weeks 4 to 8 only, year to date.



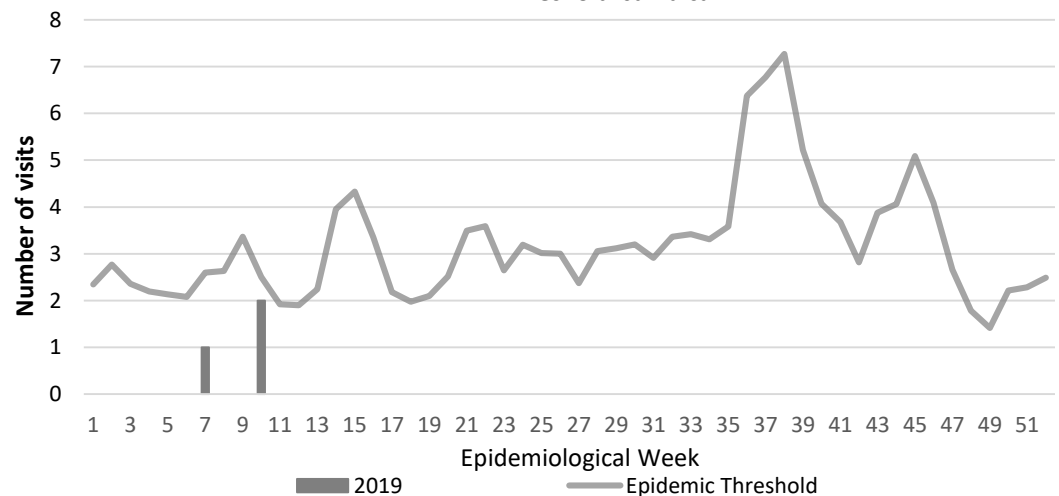
**Weekly visits to Sentinel Sites for Fever and Haemorrhagic Symptoms 2019
vs Weekly Threshold; Jamaica**

**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. Visits to sentinel sites for Fever and Jaundice were reported in weeks 7 and 10 only, year to date.

**Weekly visits to Sentinel Sites for Fever and Jaundice 2019 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
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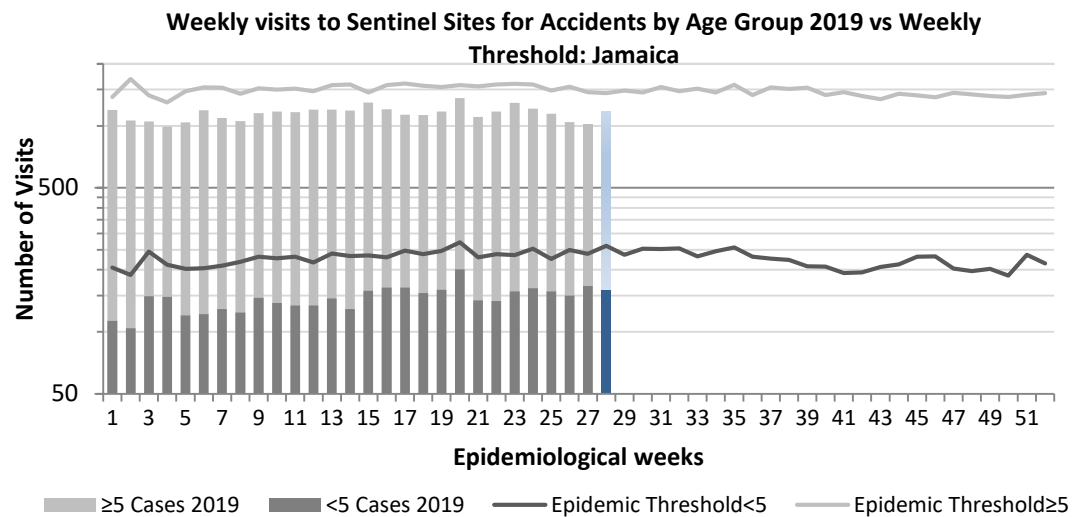
**SENTINEL
REPORT-** 78 sites.
Automatic reporting

ACCIDENTS

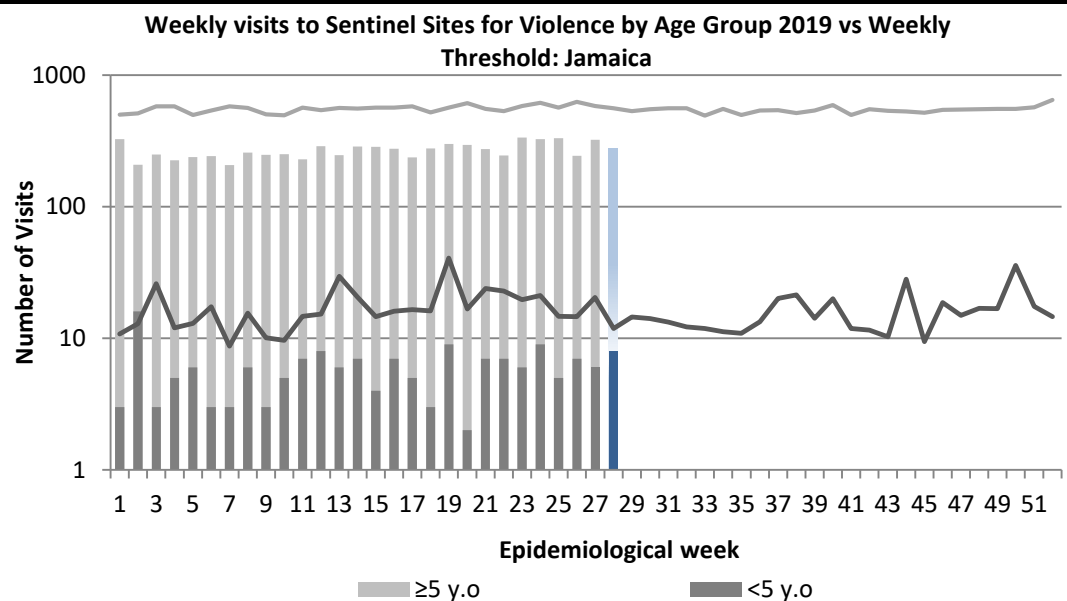
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

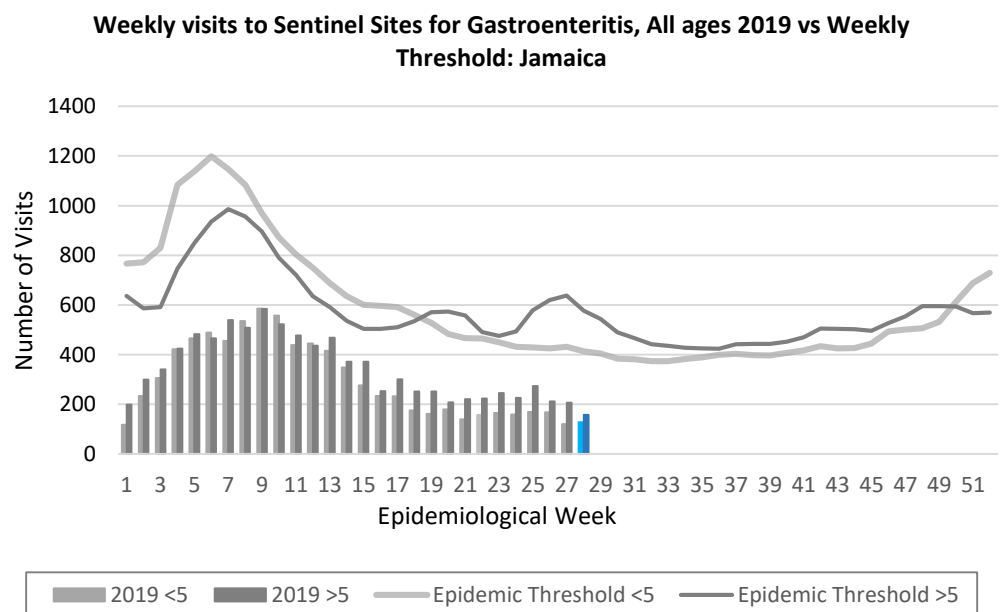
VARIATIONS OF BLUE SHOW CURRENT WEEK

**VIOLENCE**

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

**GASTROENTERITIS**

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



4 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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-	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.
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		22	205	
	Cholera		0	0	
	Dengue Hemorrhagic Fever*		NA	NA	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		11	19	
	Hepatitis C		2	2	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	2	
	Meningitis (Clinically confirmed)		11	37	
EXOTIC/ UNUSUAL	Plague		0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths;
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	** Figures include all deaths associated with pregnancy reported for the period. *** CHIKV IgM positive cases **** Zika PCR positive cases
	Congenital Rubella Syndrome		0	0	
	Congenital Syphilis		0	0	
	Fever and Rash	Measles	0	0	
		Rubella	0	0	
	Maternal Deaths**		31	35	
	Ophthalmia Neonatorum		98	177	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		27	32	
	Yellow Fever		0	0	
	Chikungunya***		0	0	
	Zika Virus****		0	0	NA- Not Available



5 NOTIFICATIONS-
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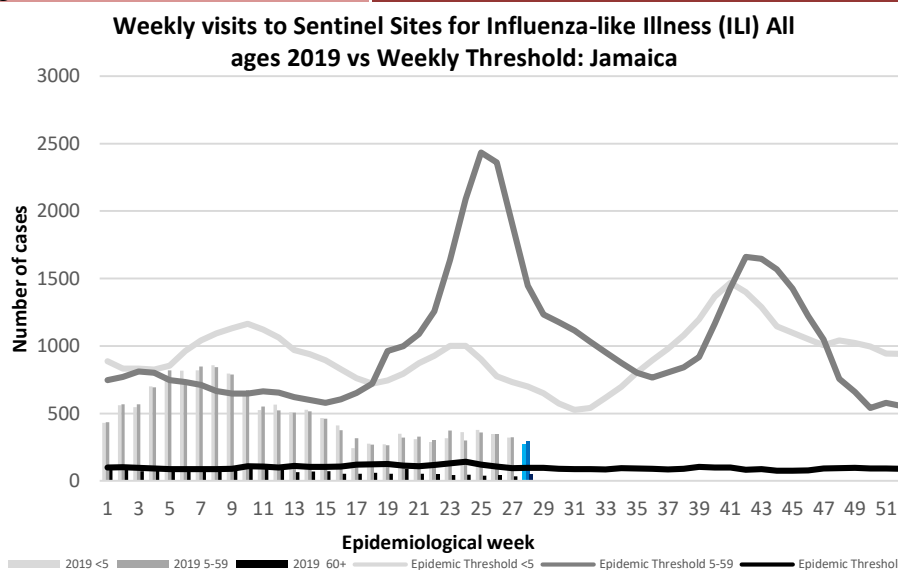
SENTINEL
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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

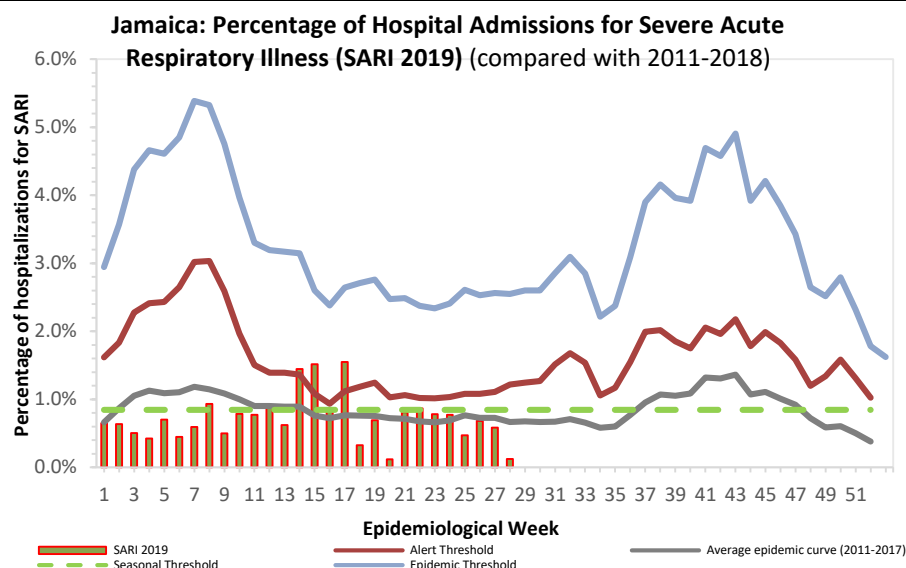
EW 28

July 7 – July 13, 2019 Epidemiological Week 28

July 2019		
	EW 28	YTD
SARI cases	2	339
Total Influenza positive Samples	3	356
Influenza A	2	315
H3N2	0	79
H1N1pdm09	0	225
Not subtyped	2	8
Influenza B	1	41
Parainfluenza	0	5



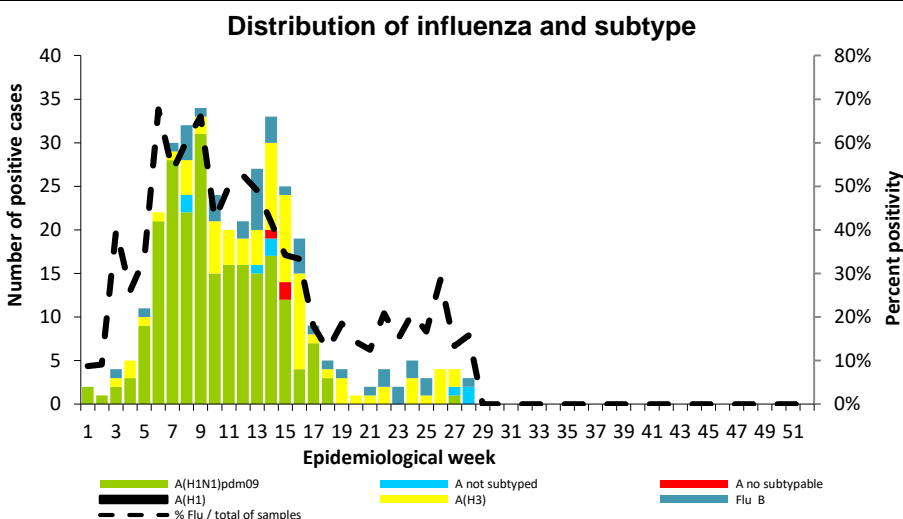
During EW 28, Influenza detections slightly decreased with circulation of influenza A and B viruses. Percent positivity for influenza was also low.



GLOBAL AND REGIONAL UPDATES

Global: Worldwide, seasonal influenza A viruses accounted for the majority of detections.

Caribbean: During EW 28 Influenza and SARI activity were low and continue to decrease; influenza A(H3N2) predominated in recent weeks.



6 NOTIFICATIONS-
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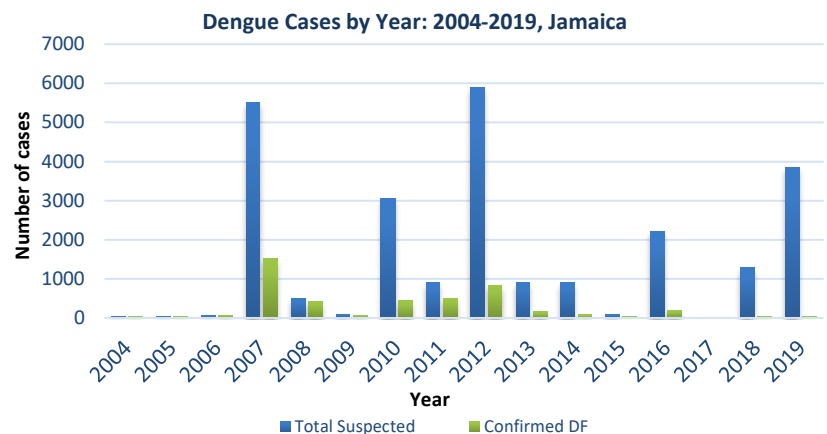


SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

July 7 – July 13, 2019 Epidemiological Week 28

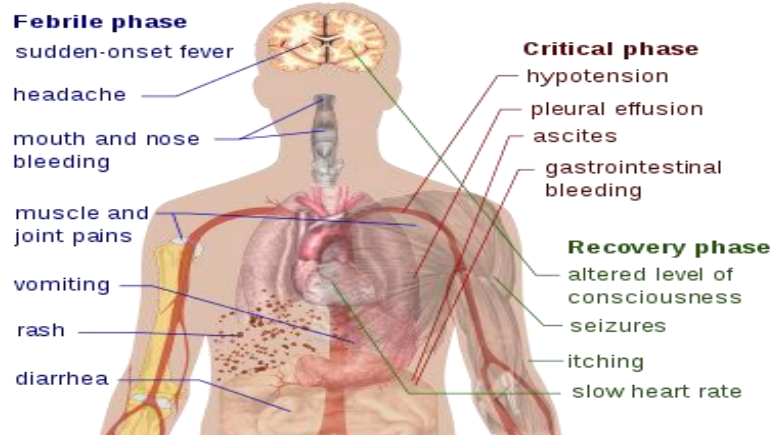
Epidemiological Week 28



Reported suspected and confirmed dengue with symptom onset in weeks 1-28, 2019

		2019		2018 YTD
		EW 28	YTD	
Total Suspected Dengue Cases		11	3846	159
Lab Confirmed Dengue cases		0	28	0
CONFIRMED	Dengue Related Deaths	0	5	0

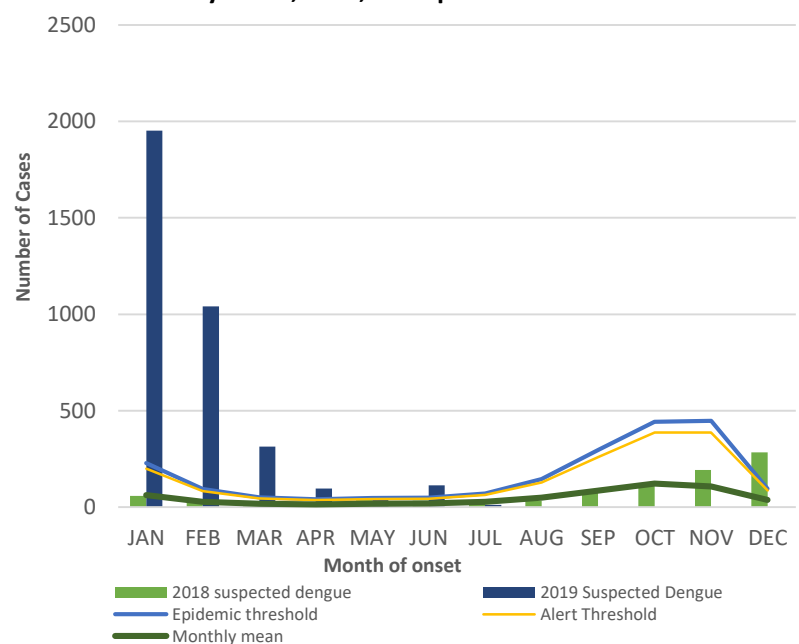
Symptoms of Dengue fever



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



7 NOTIFICATIONS-
All clinical sites



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RESEARCH PAPER

HIV Case-Based Surveillance System Audit

S. Whitbourne, Z. Miller

Objectives: Evaluate the Public Health Surveillance System for HIV reporting, to help ensure that the data collected is accurate and useful for understanding epidemiological trends.

Background: Public health programmes focus on the monitoring, control and reduction in the incidence of target diseases, conditions or health events through various interventions and actions. The surveillance system is the primary mechanism through which specific disease information is collected and needs to be periodically assessed.

Methodology: In 2016, an audit was conducted of the HIV Case-Based Surveillance System in Jamaica. Laboratory records were reviewed from seven major health care facilities representing all four Regional Health Authorities. Cases with a positive HIV test in 2014 were noted and comparisons of positive cases were made with the cases that had been reported to the National Surveillance Unit. Qualitative data was also collected from key personnel in the form of questionnaires related to the processes involved in diagnosis, detection, investigation and reporting of HIV positive cases, but this paper will focus on the quantitative findings.

Findings: Preliminary data analysis reveals a high level of underreporting of HIV cases to the national level.

Conclusions: Audits and other forms of assessment need to be conducted on surveillance systems to ensure that the data supporting a public health programme is reliable and accurate, for effective delivery of services to target populations.



The Ministry of Health and Wellness
24-26 Grenada Crescent
Kingston 5, Jamaica
Tele: (876) 633-7924
Email: surveillance@moh.gov.jm



8 NOTIFICATIONS-
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