

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

New WHO-led study says majority of adolescents worldwide are not sufficiently physically active, putting their current and future health at risk



The first ever global trends for adolescent insufficient physical activity show that urgent action is needed to increase physical activity levels in girls and boys aged 11 to 17 years. The study finds that more than 80% of school-going adolescents globally did not meet current recommendations of at least one hour of physical activity per day – including 85% of

girls and 78% of boys.

The difference in the proportion of boys and girls meeting the recommendations was greater than 10 percentage points in almost one in three countries in 2016, with the biggest gaps seen in the United States of America and Ireland. Most countries in the study saw this gender gap widen between 2001-2016.



The health benefits of a physically active lifestyle during adolescence include improved cardiorespiratory and muscular fitness, bone and cardiometabolic health, and positive effects on weight. There is also growing evidence that physical activity

has a positive impact on cognitive development and socializing. Current evidence suggests that many of these benefits continue into adulthood.

To improve levels of physical activity among adolescents, the study recommends that:

- Urgent scaling up is needed of known effective policies and programmes to increase physical activity in adolescents;
- Multisectoral action is needed to offer opportunities for young people to be active, involving education, urban planning, road safety and others;



EPI WEEK 46

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SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



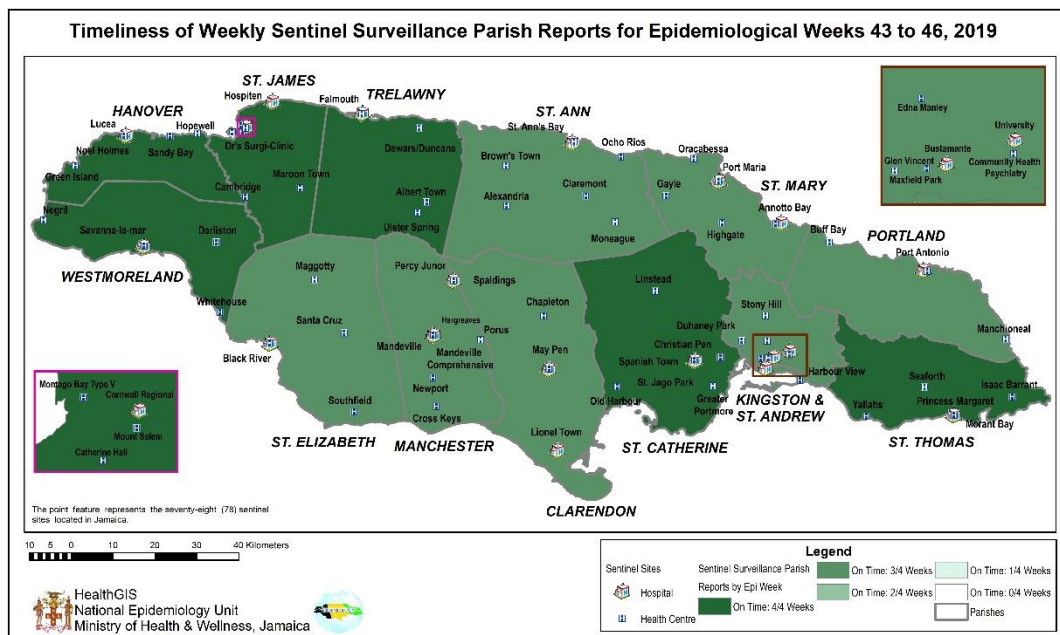
A syndromic surveillance system is good for early detection of and response to public health events.

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 - Weeks 43 to 46

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

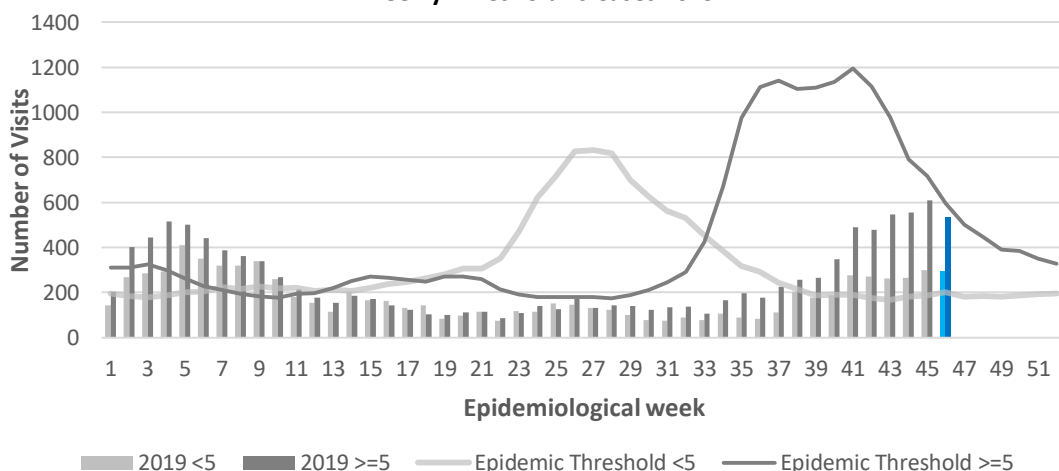
FEVER

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



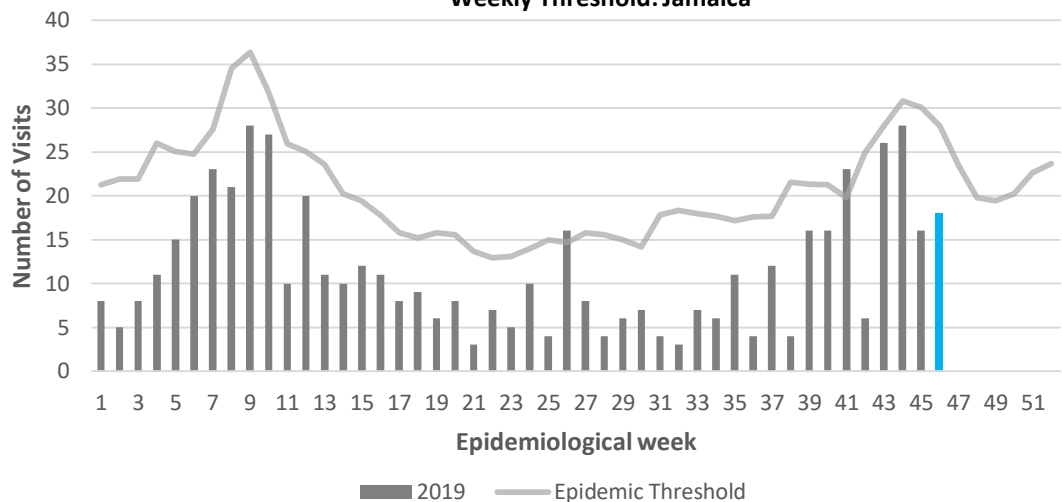
SENTINEL
REPORT- 78 sites.
Automatic reporting

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).



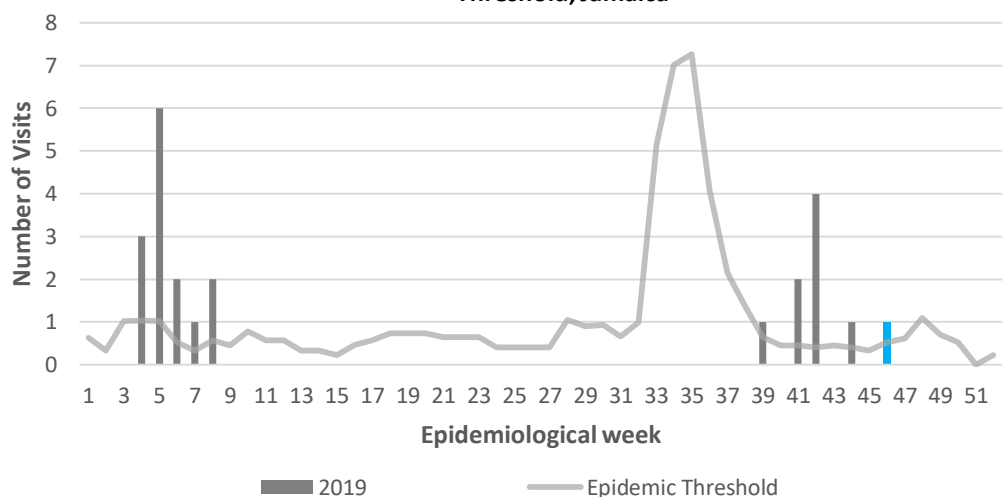
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2019 vs. Weekly Threshold: Jamaica

**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, 39, 41, 42, and 44, year to date.



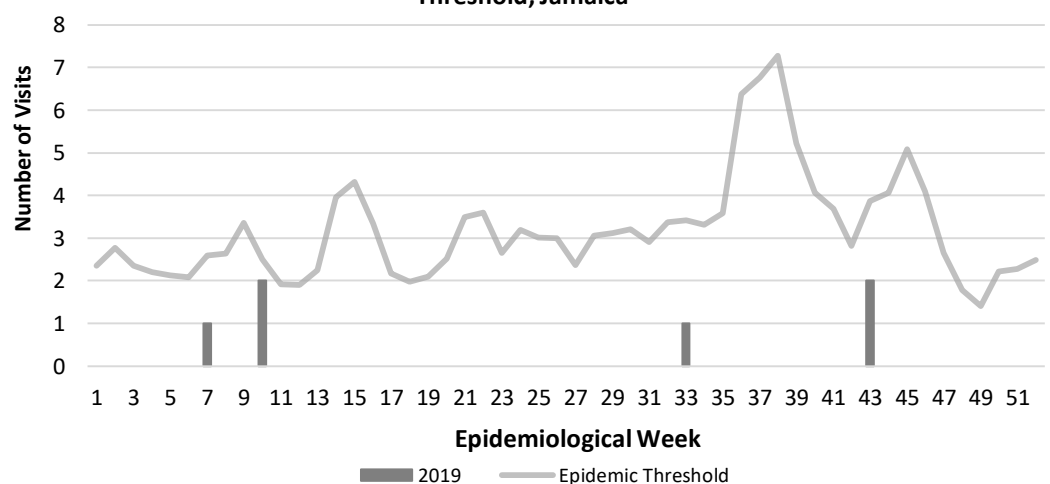
Weekly Visits to Sentinel Sites for Fever and Haemorrhagic 2019 vs Weekly Threshold; Jamaica

**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, 10, 33 and 43 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 pursued



SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

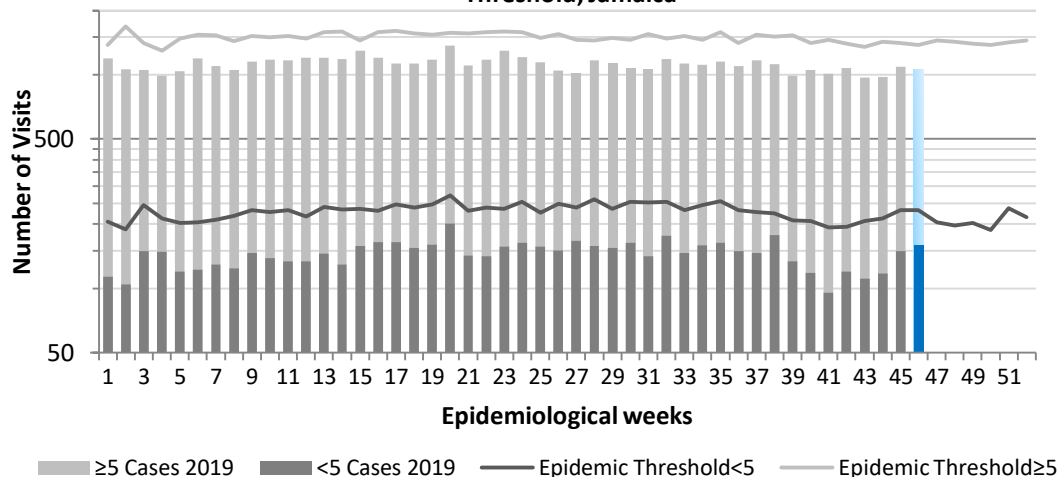
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

VARIATIONS OF **BLUE** SHOW CURRENT WEEK



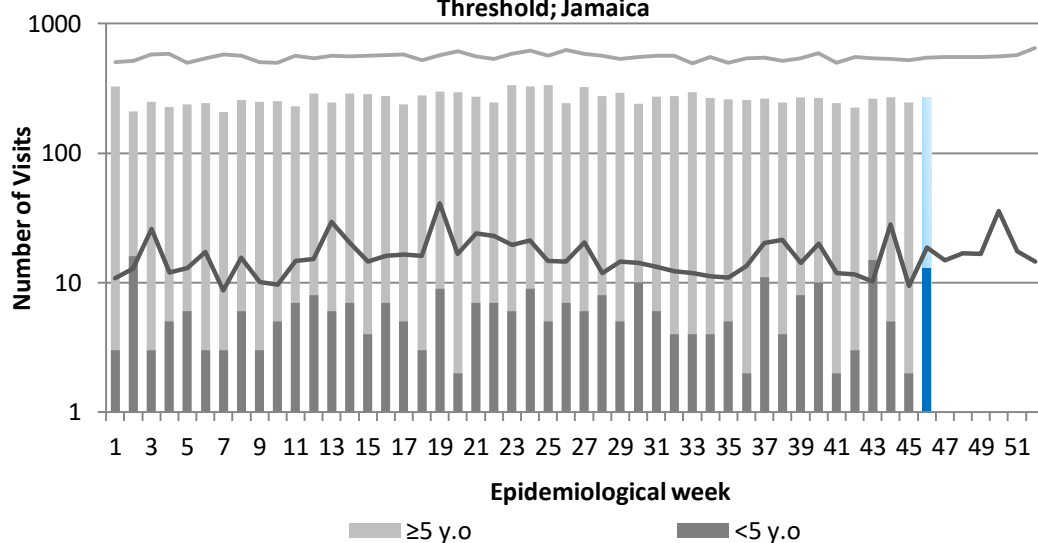
Weekly Visits to Sentinel Sites for Accidents by Age Group 2019 vs Weekly Threshold; Jamaica

**VIOLENCE**

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



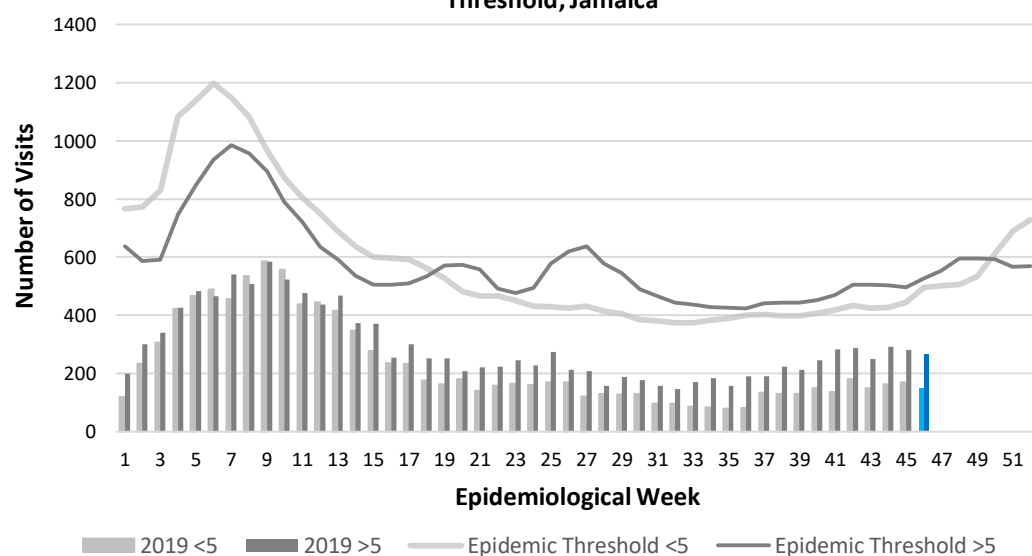
Weekly Visits to Sentinel Sites for Violence by Age Group 2019 vs Weekly Threshold; Jamaica

**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 2019 vs Weekly Threshold; Jamaica



4 NOTIFICATIONS-
All clinical sites




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HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

- CLASS ONE NOTIFIABLE EVENTS					Comments
			Confirmed YTD		
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		64	177	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*		NA	NA	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		23	85	
	Hepatitis C		2	7	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	5	
	Meningitis (Clinically confirmed)		20	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**		53	59	
	Ophthalmia Neonatorum		222	272	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		54	72	
	Yellow Fever		0	0	
		Chikungunya***		7	
	Zika Virus****		0	1	NA- Not Available



5 NOTIFICATIONS-
All clinical sites



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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 46

November 10 – November 16, 2019 Epidemiological Week 46

	EW 46	YTD
SARI cases	11	474
Total Influenza positive Samples	7	444
Influenza A	7	401
H3N2	5	165
H1N1pdm09	0	226
Not subtyped	2	7
Influenza B	0	43
Parainfluenza	0	7

Epi Week Summary

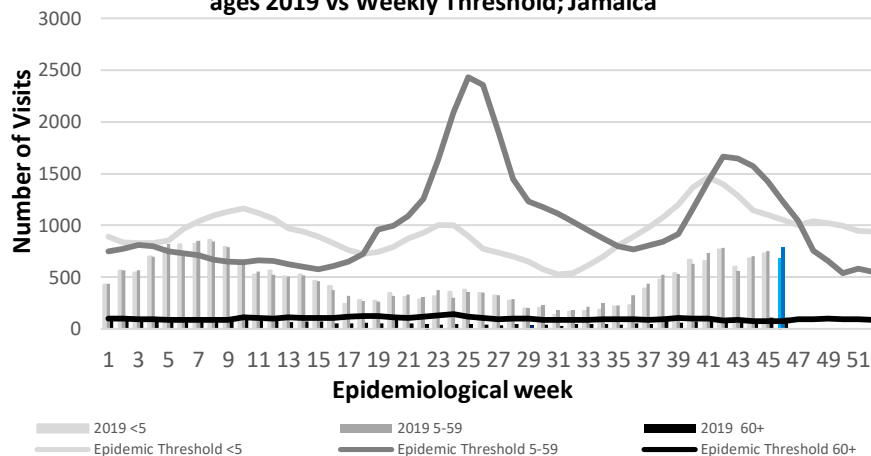
During EW 46, 7 cases of influenza were detected. Percent positivity is 25% .

During EW 46, 11 (eleven) SARI admissions were reported.

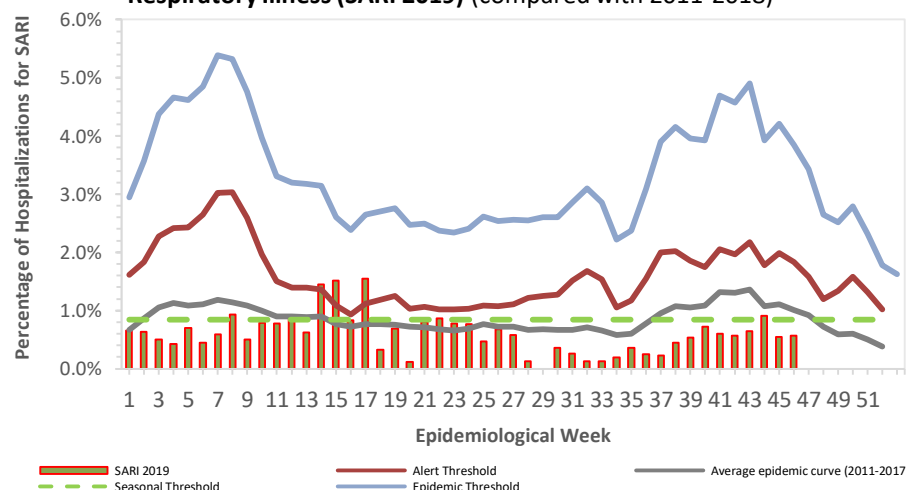
Caribbean Update EW 46

Influenza and SARI activity continued at low levels with influenza A(H3N2), A(H1N1)pdm09, and influenza B viruses co-circulating in the subregion. In Cuba, influenza activity decreased with influenza B/Victoria virus predominance; SARI cases remained at a low level. In Jamaica, influenza activity decreased with influenza A(H3N2) virus predominance and SARI cases at low levels. In St. Lucia, the number of ILI cases increased among those aged less than five years of age and was above the alert threshold.

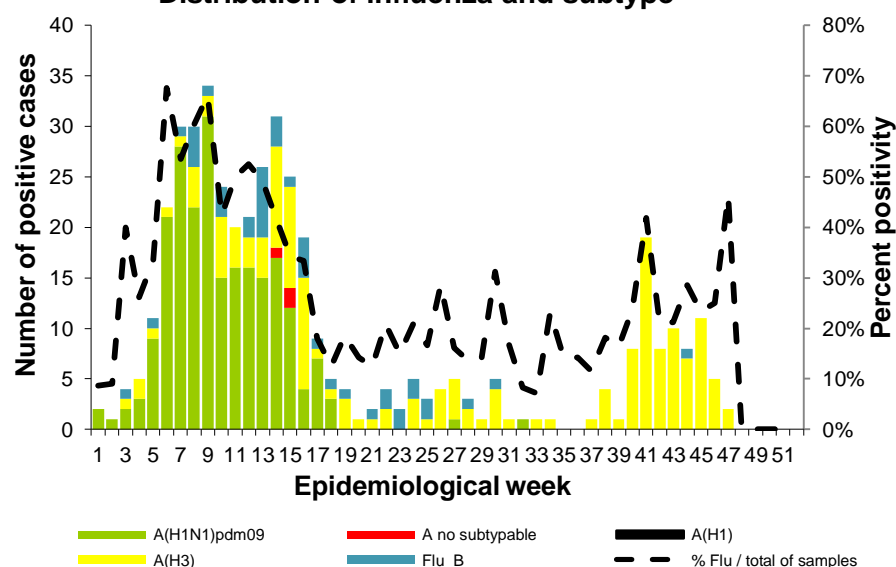
Weekly Visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2019 vs Weekly Threshold; Jamaica



Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



Distribution of influenza and subtype



6 NOTIFICATIONS-
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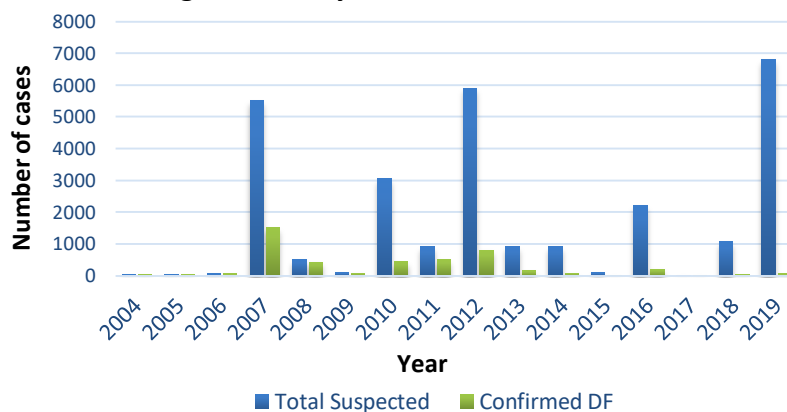
Dengue Bulletin

November 10 – November 16, 2019 Epidemiological Week 46

Epidemiological Week 46



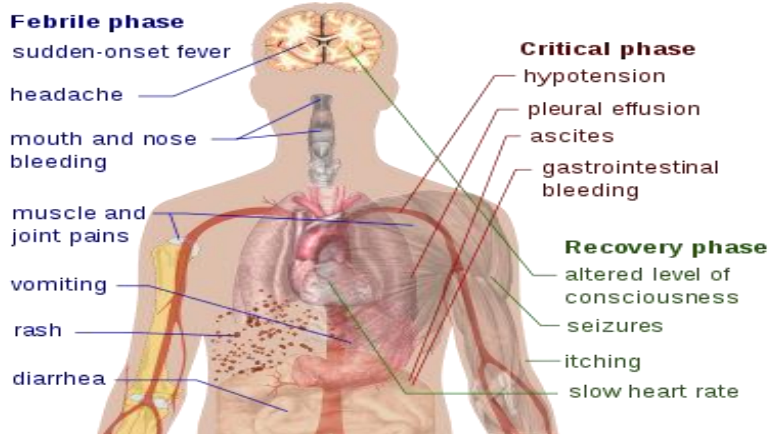
Dengue Cases by Year: 2004-2019, Jamaica



Reported suspected and confirmed dengue with symptom onset in weeks 1-46 2019

	2019		2018 YTD
	EW 46	YTD	
Total Suspected Dengue Cases	0	6792	377
Lab Confirmed Dengue cases	0	55	8
CONFIRMED Dengue Related Deaths	0	15	1

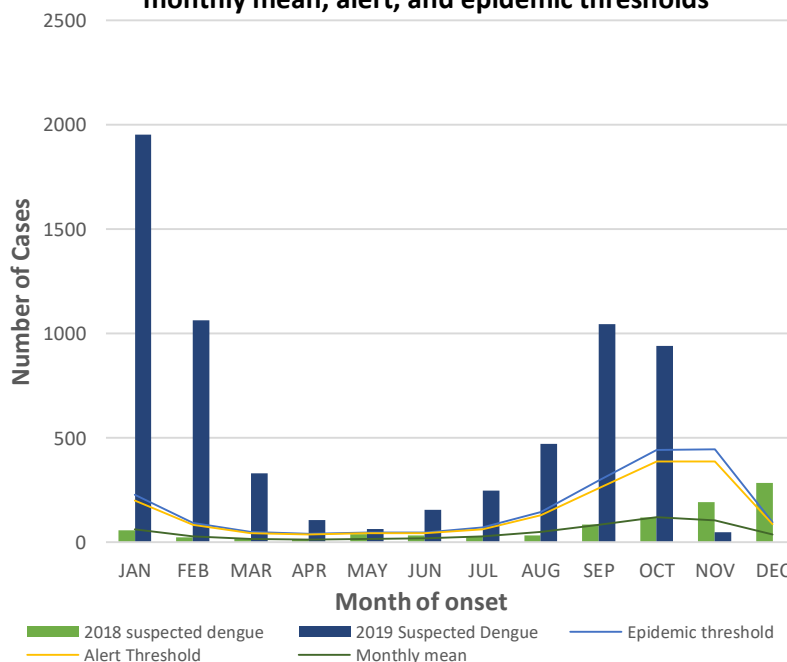
Symptoms of Dengue fever



Points to note:

- ****figure as at November 21, 2019**
- 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

ABSTRACT

Title: Complementary and alternative therapies used by patients with hypertension and type 2 diabetes mellitus in western Jamaica

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Objective: This study examined prevalence and predictors of complementary and alternative medicine (CAM) use among clinic patients with Hypertension (HTN) and/or Type 2 Diabetes Mellitus (DM) in western Jamaica.]

Methods: An investigator-administered questionnaire was used to collect data on sociodemographic factors, CAM use, and knowledge and perceptions of CAM.

Results: Of the 345 participants, 311 had HTN, 130 had Type 2 DM, and 96 had both; 79% of those with HTN and 65% with Type 2 DM reported current use of CAM. Multivariable logistic regression revealed that participants with HTN or Type 2 DM who reported none/poor knowledge of CAM were 67% less likely to use CAM compared to those who reported average/good/excellent CAM knowledge (HTN - AOR=0.33, 95% CI=0.13-0.87; Type 2 DM - AOR= 0.06, 95% CI=0.01-0.37). Patients with HTN who believed that CAM is a natural method for treating HTN were 3.9 times more likely to use CAM (AOR = 3.9, 95% CI=1.26-12.00) and patients with Type 2 DM who believed that it is acceptable to use both prescription medication and CAM simultaneously were 7.19 times more likely to use CAM (CI=1.34-38.52).

Conclusions: A high proportion of patients in western Jamaica use CAM for treating HTN and Type 2 DM and most do not discuss CAM use with healthcare providers. Several factors were found to be significantly associated with CAM use among the patients. These results can be used in designing patient and educational interventions to ensure proper use, and mitigation of harmful effects, of CAM.



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8 NOTIFICATIONS-
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