

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Series: Animal bites 3 of 3



Cat bites

Scope of the problem

Worldwide, cat bites account for 2–50% of injuries related to animal-bites. They are commonly second to dog bites in terms of incidence. In Italy for example, the

incidence of cat-related injuries is 18 per 100 000 population, while in the United States of America, there are an estimated 400 000 cat bites and 66 000 visits to hospital emergency departments every year.

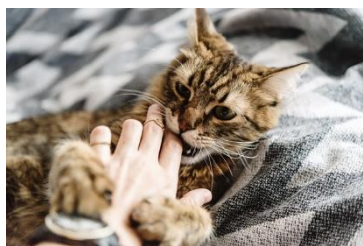
Key facts

- Animal bites are a significant cause of morbidity and mortality worldwide.
- Worldwide, up to five million people are bitten by snakes every year; the majority in Africa and South-East Asia.
- Prompt medical treatment with appropriate antivenom is required for poisonous snake bites.
- Dog bites account for tens of millions of injuries annually; the highest risk is among children.
- Rabies is a significant health concern following dog bites, cat bites and monkey bites.

Treatment

Treatment depends on the location of the bite and the rabies vaccination status of animal species inflicting the bite. The main principles of care include:

- early medical management including wound cleansing;
- prophylactic antibiotics to decrease infection risk;
- rabies post-exposure treatment depending on the animal vaccination status;
- administration of tetanus vaccine if the person has not been adequately vaccinated.



Who is most at risk?

Female adults have the highest rate of cat bites.

Prevention of cat bites and their serious health consequences

Communities should be informed about the risks of cat bites and prevention techniques for cat bites including vaccinating cats against rabies.

Health-care providers should be educated on the appropriate management of these injuries. Health authorities and policy-makers should ensure rabies control within animal populations, and appropriate supplies of post-exposure rabies treatment and antibiotic prophylaxis for bitten people. They should also support research initiatives directed at providing more information on the burden of cat bites.

Source: <https://www.who.int/news-room/fact-sheets/detail/animal-bites>

EPI WEEK 42



SYNDROMES

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CLASS 1 DISEASES

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GASTROENTERITIS

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RESEARCH PAPER

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SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



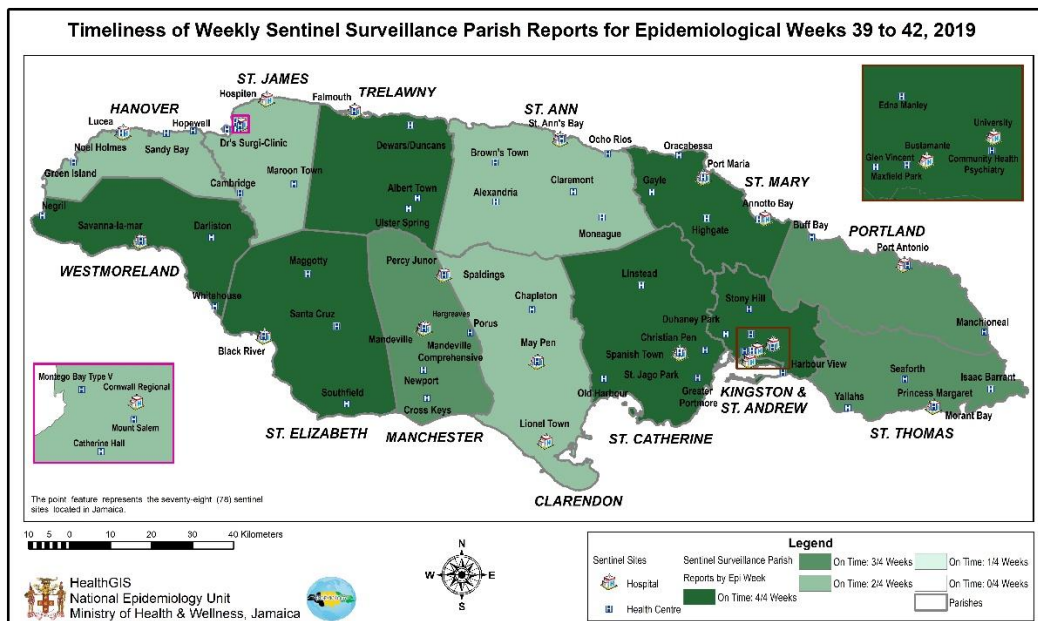
A syndromic surveillance system is good for early detection of and response to public health events.

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 39 to 42

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

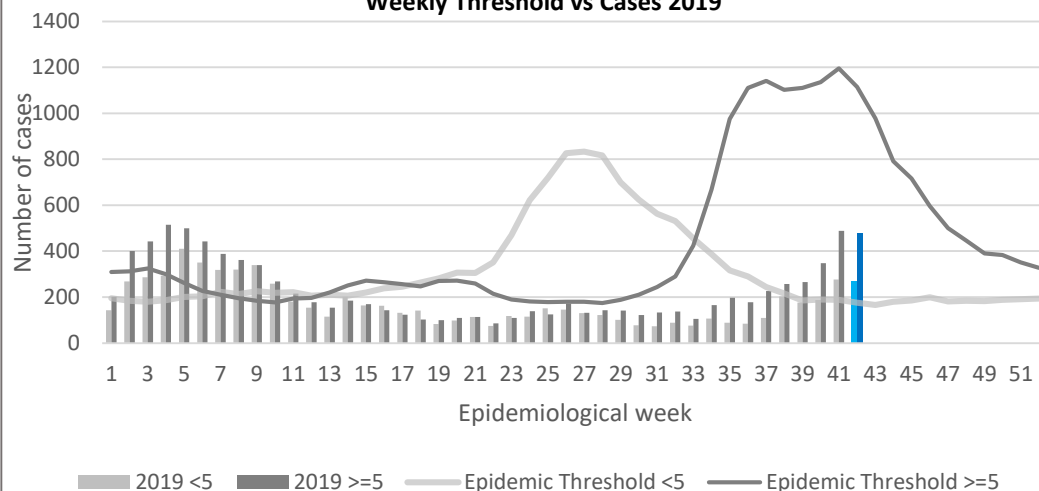
FEVER

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



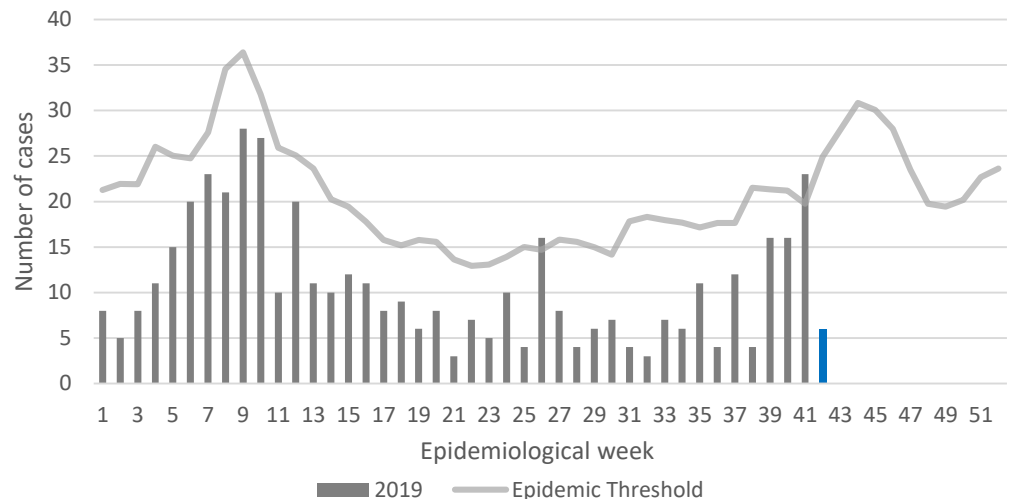
SENTINEL
REPORT- 78 sites.
Automatic reporting

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).



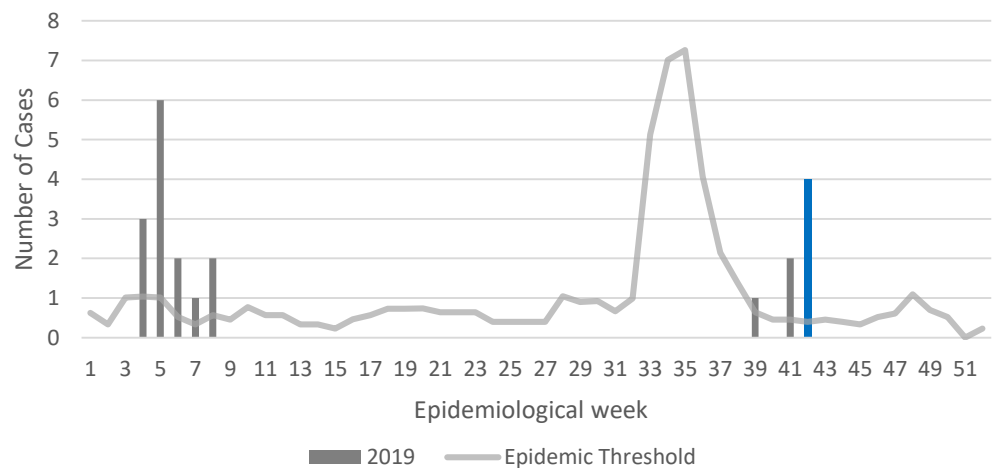
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2019 vs. Weekly Threshold: Jamaica

**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.



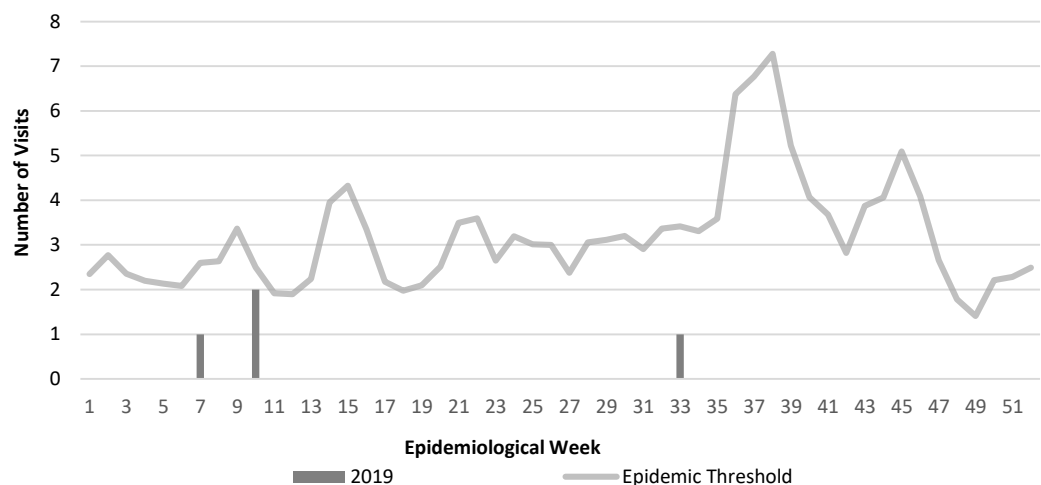
Weekly Visits to Sentinel Sites for Fever and Haemorrhagic 2019 vs Weekly Threshold; Jamaica

**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



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-
30 sites. Actively pursued



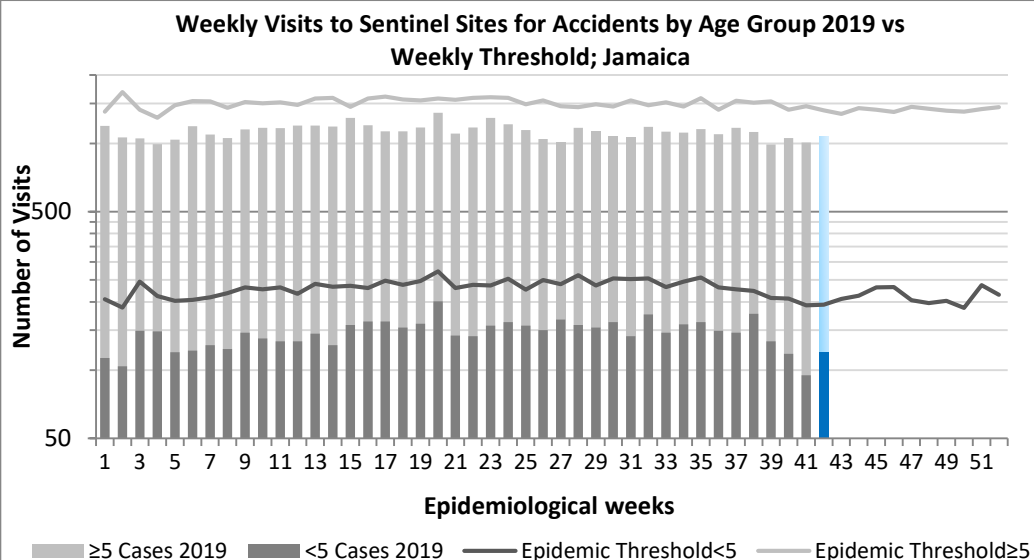
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

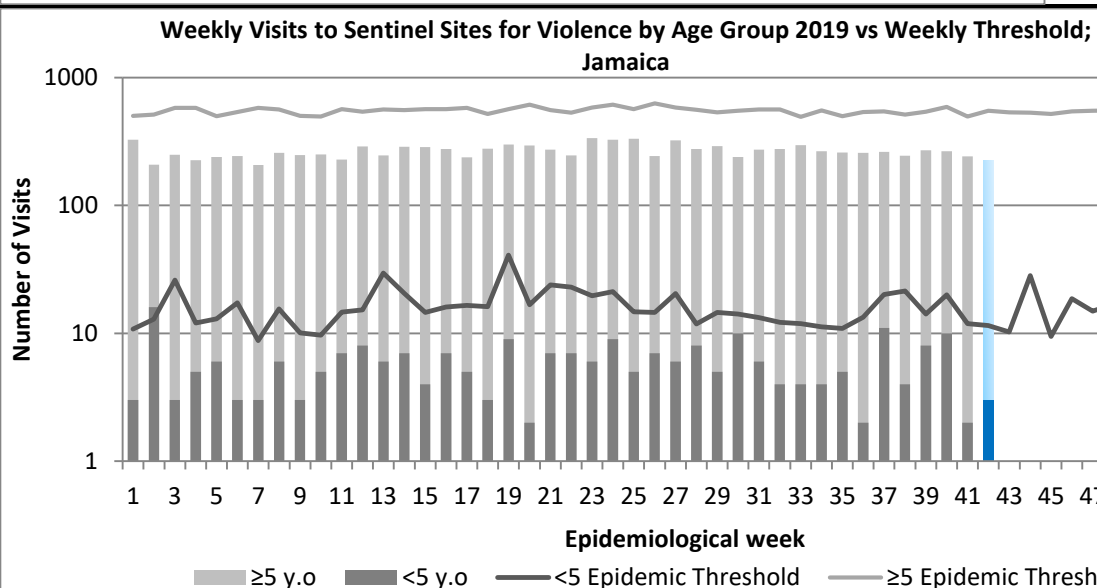
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

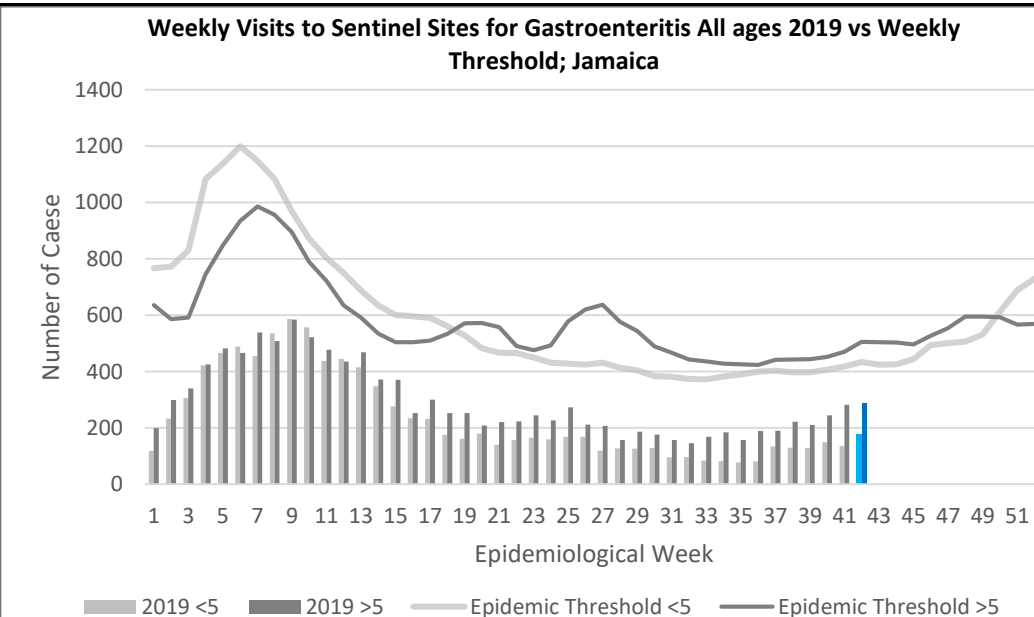
VARIATIONS OF **BLUE** SHOW CURRENT WEEK

**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



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

-	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. Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		60	169	
	Cholera		0	0	
	Dengue Hemorrhagic Fever*		NA	NA	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		16	40	
	Hepatitis C		2	7	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	2	
	Meningitis (Clinically confirmed)		20	37	
EXOTIC/ UNUSUAL	Plague		0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths; ** Figures include all deaths associated with pregnancy reported for the period.
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	*** 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**		51	54	
	Ophthalmia Neonatorum		161	254	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		48	68	
	Yellow Fever		0	0	
	Chikungunya***		2	10	
	Zika Virus****		0	1	NA- Not Available



5 NOTIFICATIONS-
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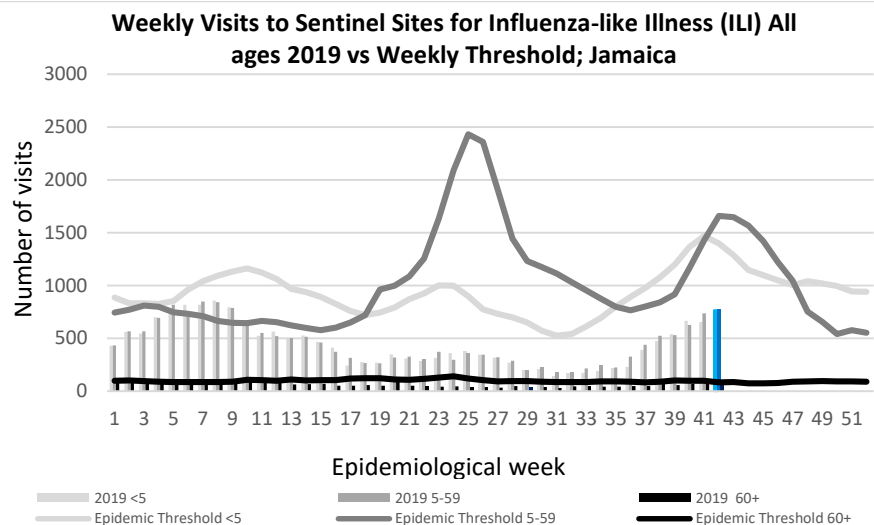
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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 42

October 13– October 19, 2019 Epidemiological Week 42

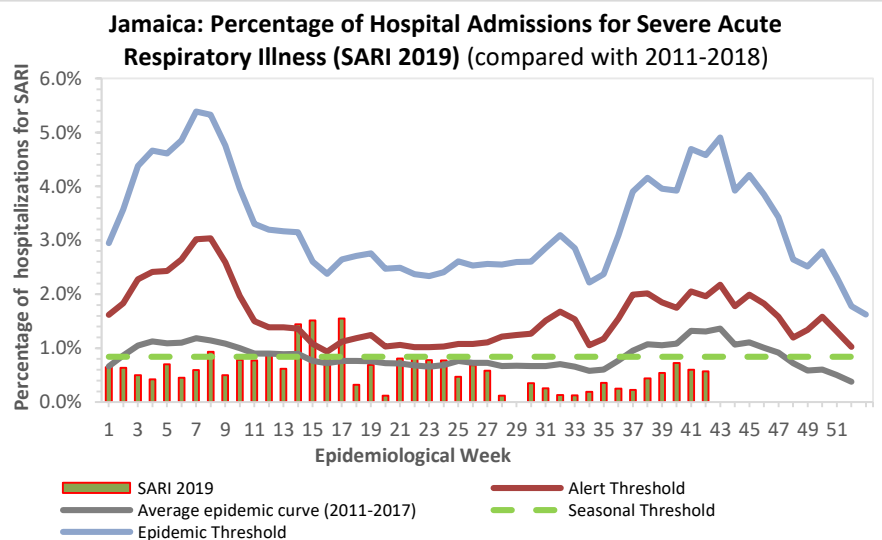
	EW 42	YTD
SARI cases	11	425
Total Influenza positive Samples	7	407
Influenza A	7	365
H3N2	3	123
H1N1pdm09	0	226
Not subtyped	4	13
Influenza B	0	42
Parainfluenza	0	7



Epi Week Summary

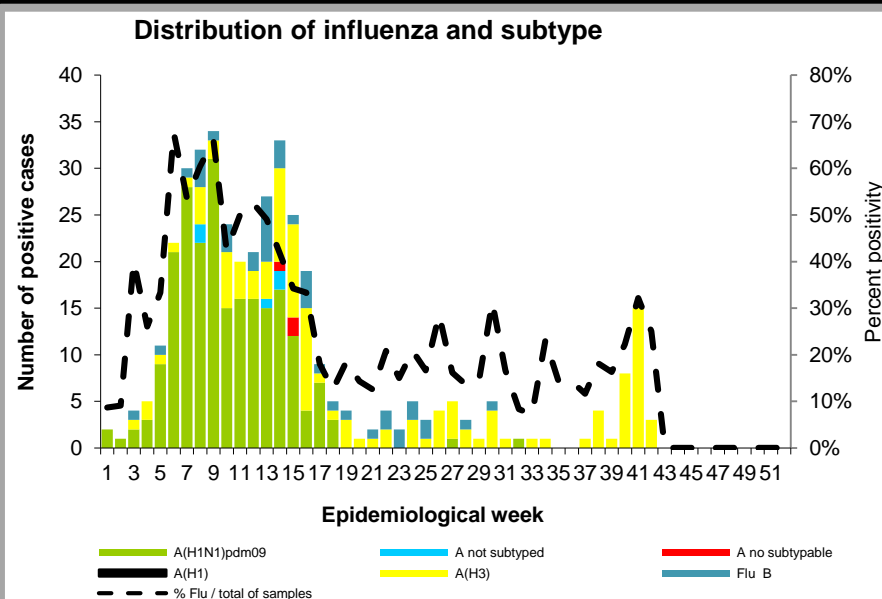
During EW 42, 7 cases of influenza were detected. Percent positivity is 20%.

During EW 42, 11 (eleven) SARI admissions were reported.



Caribbean Update EW 42

Influenza and SARI activity were low and continue at inter-seasonal levels with influenza A(H3N2), A(H1N1)pdm09, and influenza B viruses co-circulating in the subregion. In Jamaica, influenza activity has increased in recent weeks with influenza A(H3N2) virus predominance; SARI cases remain low. The Dominican Republic recorded increased RSV activity in recent week



6 NOTIFICATIONS-
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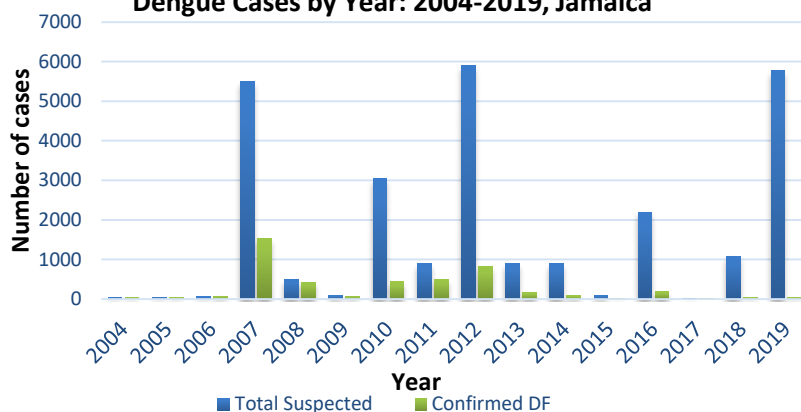
Dengue Bulletin

October 13– October 19, 2019 Epidemiological Week 42

Epidemiological Week 42



Dengue Cases by Year: 2004-2019, Jamaica



Reported suspected and confirmed dengue with symptom onset in weeks 1-42 2019

		2019		2018 YTD
		EW 42	YTD	
Total Suspected Dengue Cases		4	**5784	296
Lab Confirmed Dengue cases		0	**50	4
CONFIRMED	Dengue Related Deaths	0	**11	0

Symptoms of Dengue fever

Febrile phase

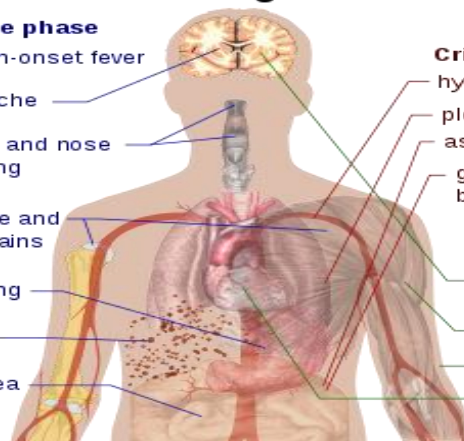
sudden-onset fever
headache
mouth and nose bleeding
muscle and joint pains
vomiting
rash
diarrhea

Critical phase

hypotension
pleural effusion
ascites
gastrointestinal bleeding

Recovery phase

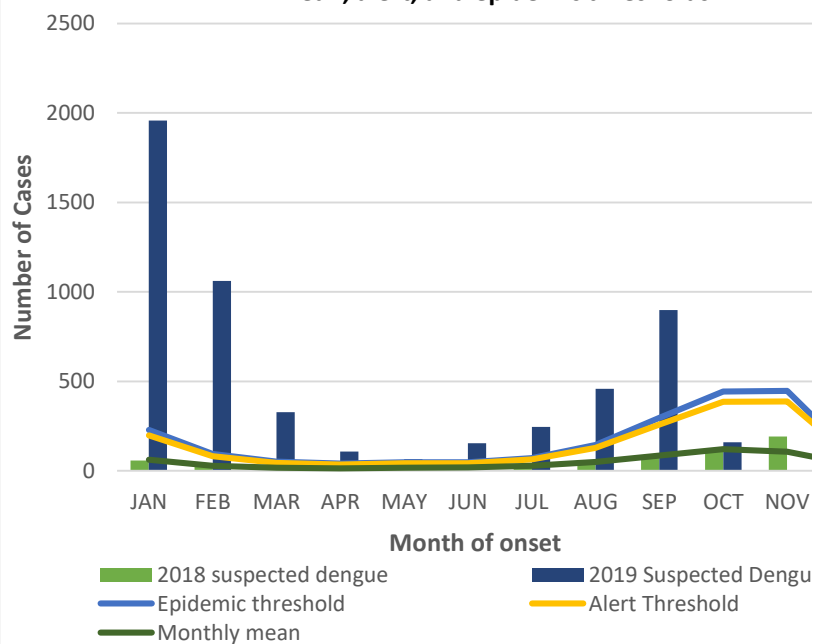
altered level of consciousness
seizures
itching
slow heart rate



Points to note:

- ****figure as at October 28, 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 month mean, alert, and epidemic thresholds



7 NOTIFICATIONS-
All clinical sites



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RESEARCH PAPER

ABSTRACT

Title: “ Anthropometry and food frequency in chronic non-communicable disease: associations in a clinic population”

Authors: *S. Robinson, S. Dawson*

Objective:

To investigate the relation of body mass index (BMI) and waist circumference (WC) to frequency of consumption of commonly consumed foods, in patients enrolled at a Type V Health Centre in Kingston.

Method:

Twenty –four adult patients (22 females) attending the CNCD Clinic were conveniently selected for the study, with a cross-sectional analysis being conducted on these patients. Participants were selected if they were diagnosed with at least one CNCD. Their weights, heights, and waist circumferences were measured and data on the frequency of consumption of selected foods acquired utilizing an administered questionnaire. The main outcome measure was a correlation between anthropometry and food frequency.

Results:

Of the 24 subjects, 23 had a BMI >25.0 with 22 having a waist circumference exceeding the recommended limit (Females= 89 cm and Males =101 cm). Mean BMI was 34.3 ± 7.4 with mean WC being 104.9 ± 17.7 cm.

Neither BMI nor WC was significantly associated with frequency of consumption of any food item from the different Food Groups, but positive correlations were identified between BMI and age ($p < 0.0001$), and BMI and WC ($p = 0.00051$).

Conclusion:

No statistically significant associations were found between BMI, Waist Circumference and food frequency in this population. A follow-up study (larger sample size, other food intake measures) is recommended to demystify whatever link may exist between anthropometry and food intake. Alongside BMI measurements, WC could be used routinely in the nutritional assessment of CNCD patients at Health facilities.



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