

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Series: 5 Keys to a Healthy Diet (4-5)

### 4) Eat moderate amounts of fats and oils



- Use unsaturated vegetable oils (e.g. olive, soy, sunflower or corn oil) rather than animal fats or oils high in saturated fats (e.g. butter, ghee, lard, coconut and palm oil)
- Choose white meat (e.g. poultry) and fish, which are generally low in fats, in preference to red meat
- Eat only limited amounts of processed meats because these are high in fat and salt

Where possible, opt for low-fat or reduced-fat versions of milk and dairy products

Avoid processed, baked and fried foods that contain industrially produced trans-fat

#### Why?

Fats and oils are concentrated sources of energy, and eating too much fat, particularly the wrong kinds of fat, can be harmful to health. For example, people who eat too much saturated fat and trans-fat are at higher risk of heart disease and stroke. Trans-fat may occur naturally in certain meat and milk products, but the industrially produced trans-fat (e.g. partially hydrogenated oils) present in various processed foods is the main source.

### 5) Eat less salt and sugars



- When cooking and preparing foods, limit the amount of salt and high-sodium condiments (e.g. soy sauce and fish sauce)
- Avoid foods (e.g. snacks), that are high in salt and sugars
- Limit intake of soft drinks or soda and other drinks that are high in sugars (e.g. fruit juices, cordials and

syrups, flavoured milks and yogurt drinks)

Choose fresh fruits instead of sweet snacks such as cookies, cakes and chocolate

#### Why?

People whose diets are high in sodium (including salt) have a greater risk of high blood pressure, which can increase their risk of heart disease and stroke. Similarly, those whose diets are high in sugars have a greater risk of becoming overweight or obese, and an increased risk of tooth decay. People who reduce the amount of sugars in their diet may also reduce their risk of noncommunicable diseases such as heart disease and stroke.

## EPI WEEK 38



SYNDROMES

PAGE 2



CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



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.

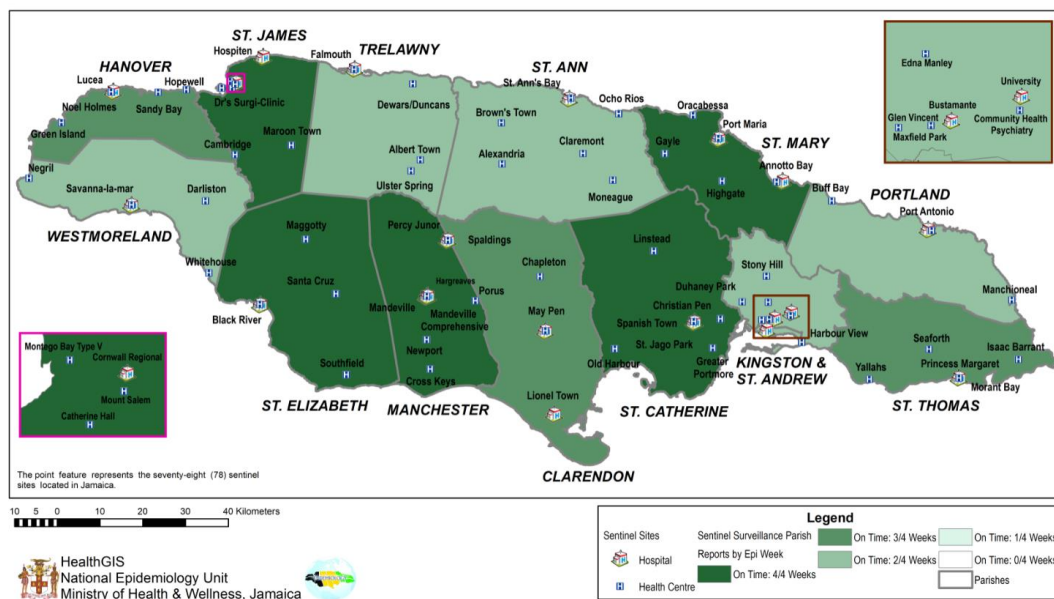
Sentinel surveillance occurs when selected health facilities (sentinel sites) form a network that reports on certain health conditions on a regular basis, for example, weekly. Reporting is mandatory whether or not there are cases to report.

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 35 to 38

Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.

Timeliness of Weekly Sentinel Surveillance Parish Reports for Epidemiological Weeks 35 to 38, 2019



## REPORTS FOR SYNDROMIC SURVEILLANCE

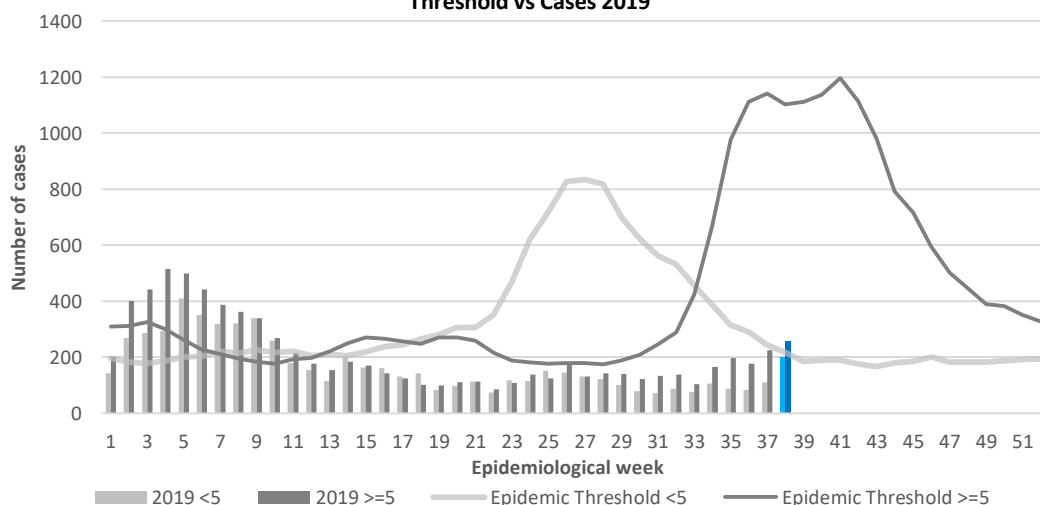
### FEVER

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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



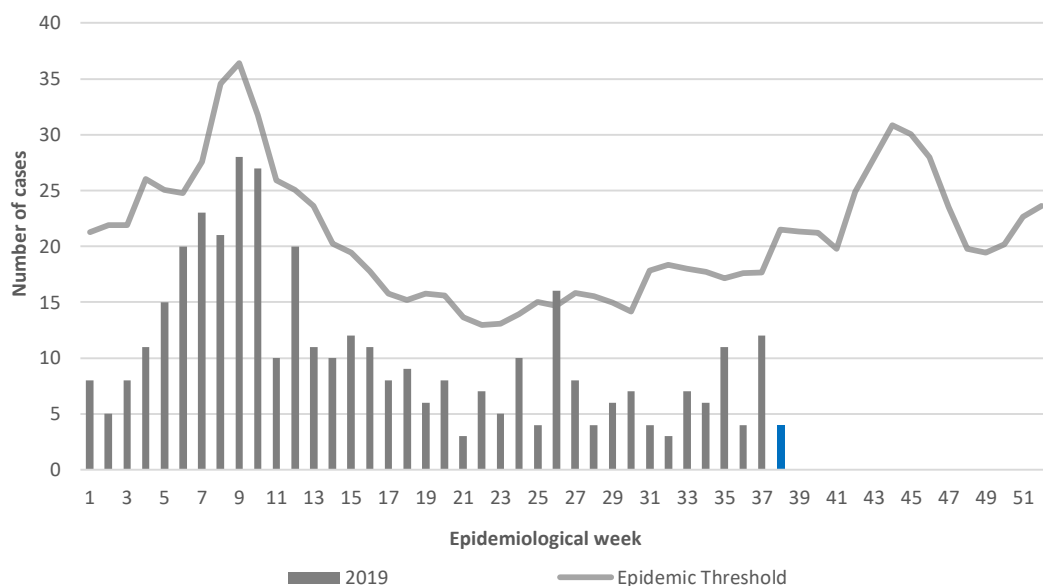
SENTINEL  
REPORT- 78 sites.  
Automatic reporting

**FEVER AND NEUROLOGICAL**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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).



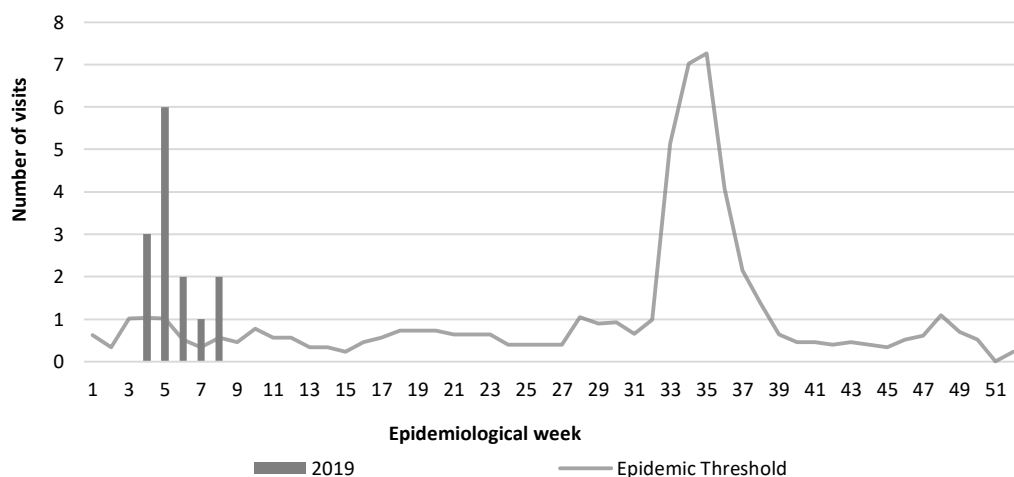
**Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2019 vs. Weekly Threshold: Jamaica**

**FEVER AND HAEMORRHAGIC**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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.



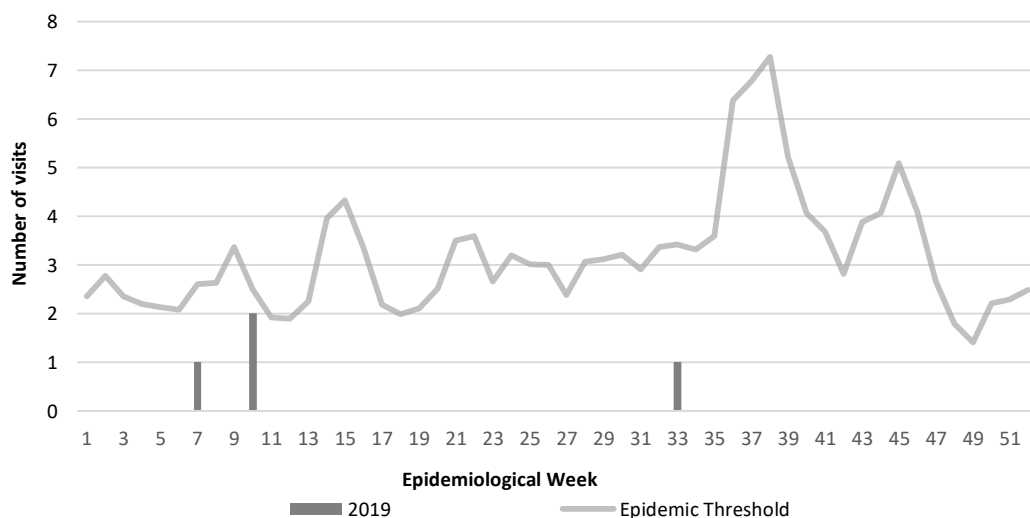
**Weekly visits to Sentinel Sites for Fever and Haemorrhagic Symptoms 2019 vs Weekly Threshold; Jamaica**

**FEVER AND JAUNDICE**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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**

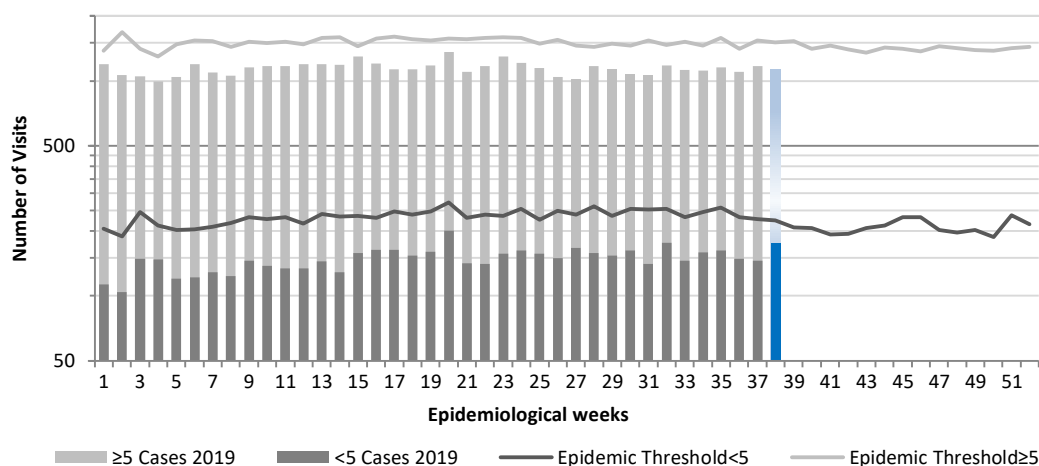
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

**KEY**

VARIATIONS OF **BLUE** SHOW CURRENT WEEK



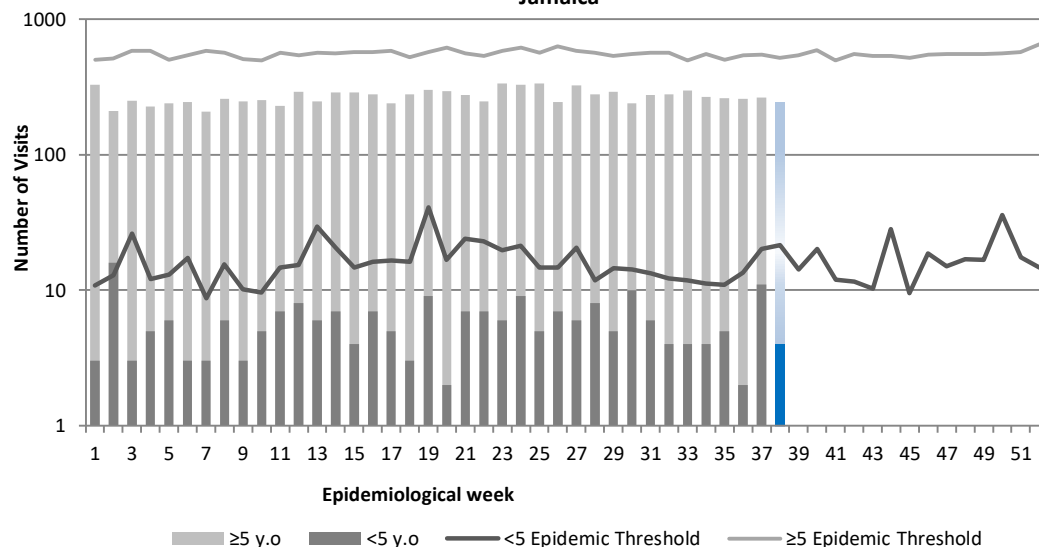
Weekly visits to Sentinel Sites for Accidents by Age Group 2019 vs Weekly Threshold; Jamaica

**VIOLENCE**

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



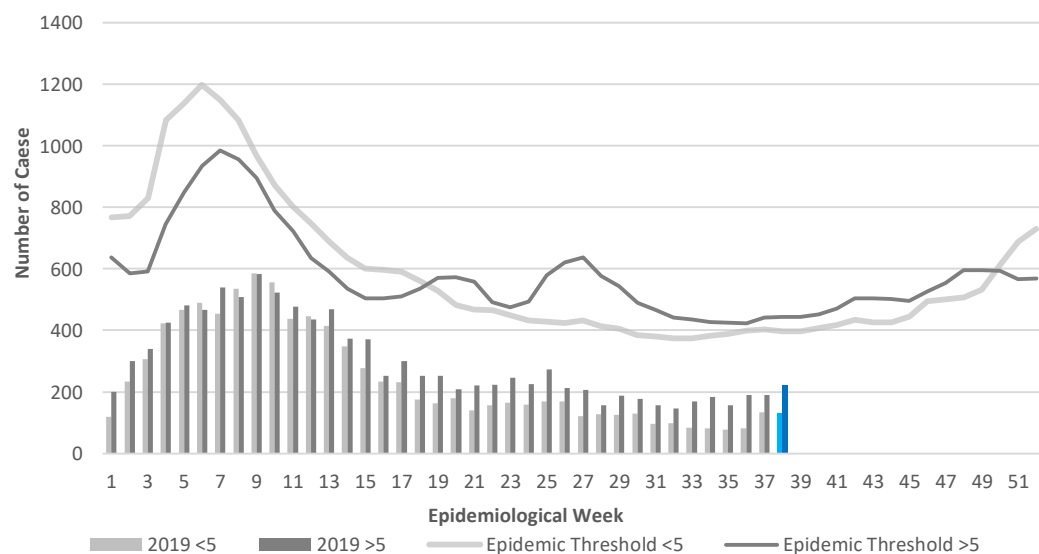
Weekly visits to Sentinel Sites for Violence by Age Group 2019 vs Weekly Threshold; Jamaica

**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




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 |               |   |   |
|                                  | CLASS 1 EVENTS                    | CURRENT YEAR  | PREVIOUS YEAR |   |   |
| NATIONAL /INTERNATIONAL INTEREST | Accidental Poisoning              | 57            | 160           | 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.  |   |
|                                  | Cholera                           | 0             | 0             |   |   |
|                                  | Dengue Hemorrhagic Fever*         | NA            | NA            |   |   |
|                                  | Hansen’s Disease (Leprosy)        | 0             | 0             |   |   |
|                                  | Hepatitis B                       | 11            | 34            |   |   |
|                                  | Hepatitis C                       | 2             | 6             |   |   |
|                                  | HIV/AIDS                          | NA            | NA            |   |   |
|                                  | Malaria (Imported)                | 0             | 2             |   |   |
|                                  | Meningitis (Clinically confirmed) | 18            | 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.<br><br>*** CHIKV IgM positive cases<br><br>**** Zika PCR positive cases |   |
|                                  | Congenital Rubella Syndrome       | 0             | 0             |   |   |
|                                  | Congenital Syphilis               | 0             | 0             |   |   |
|                                  | Fever and Rash                    | Measles       | 0             |   | 0 |
|                                  |                                   | Rubella       | 0             |   | 0 |
|                                  | Maternal Deaths**                 | 45            | 49            |   |   |
|                                  | Ophthalmia Neonatorum             | 161           | 234           |   |   |
|                                  | Pertussis-like syndrome           | 0             | 0             |   |   |
|                                  | Rheumatic Fever                   | 0             | 0             |   |   |
|                                  | Tetanus                           | 0             | 0             |   |   |
|                                  | Tuberculosis                      | 44            | 58            |   |   |
|                                  | Yellow Fever                      | 0             | 0             |   |   |
|                                  | Chikungunya***                    | 1             | 10            |   |   |
|                                  | Zika Virus****                    | 0             | 0             | NA- Not Available   |   |



5 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



# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

# EW 38

September 15 – September 21, 2019 Epidemiological Week 38

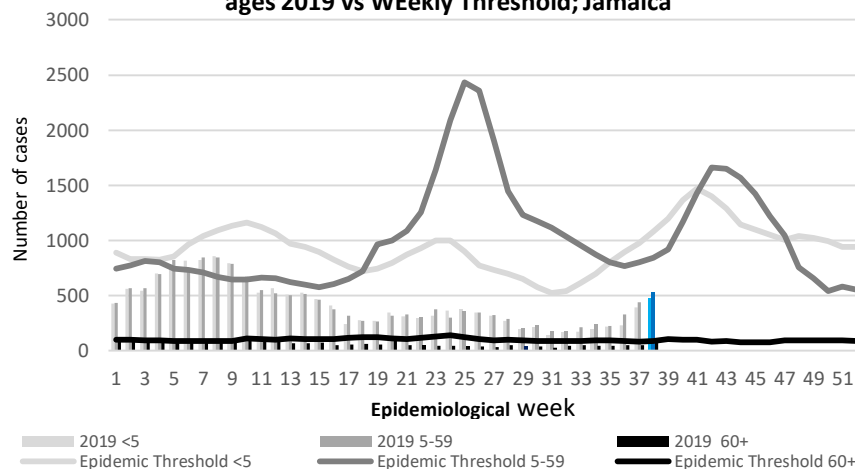
|                                  | EW 38 | YTD |
|----------------------------------|-------|-----|
| SARI cases                       | 8     | 378 |
| Total Influenza positive Samples | 4     | 372 |
| Influenza A                      | 4     | 330 |
| H3N2                             | 0     | 91  |
| H1N1pdm09                        | 0     | 226 |
| Not subtyped                     | 4     | 10  |
| Influenza B                      | 0     | 42  |
| Parainfluenza                    | 0     | 6   |

## Epi Week Summary

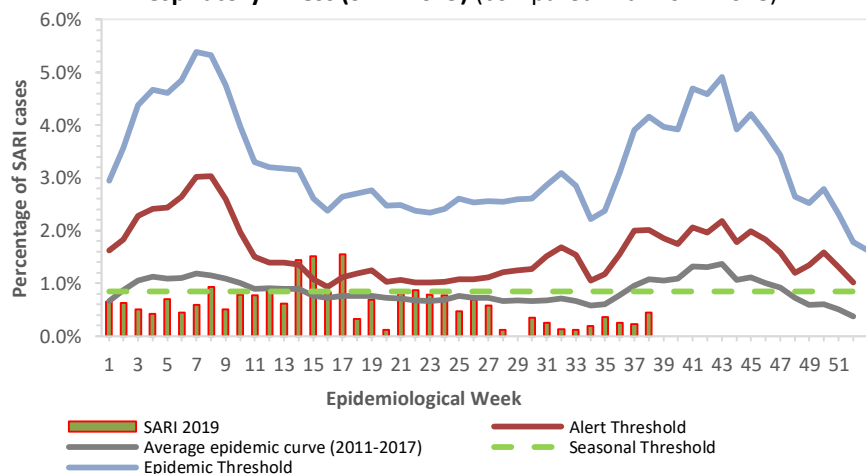
During EW 38, 4 cases of influenza (all were Influenza A) were detected. Percent positivity is 26.7%.

During EW 38, 8 (eight) SARI admissions were reported.

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



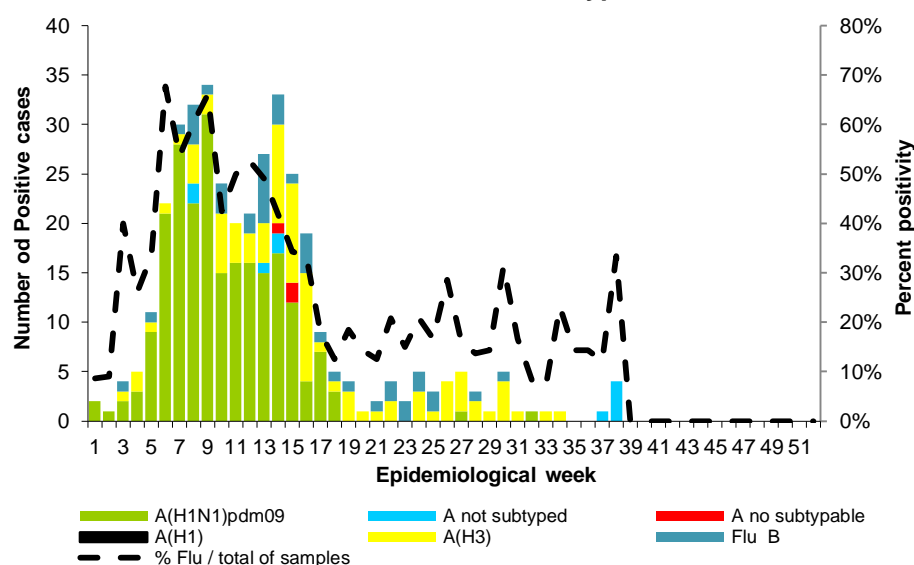
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



## Caribbean Update EW 38

Influenza and SARI activity was low and continue to decrease in the sub-region. Cuba and Dominican Republic continued to report low influenza activity and increased RSV activity. In Puerto Rico, influenza-positive cases were slightly above the historical average, with influenza A(H3N2) predominance.

Distribution of influenza and subtype



6 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

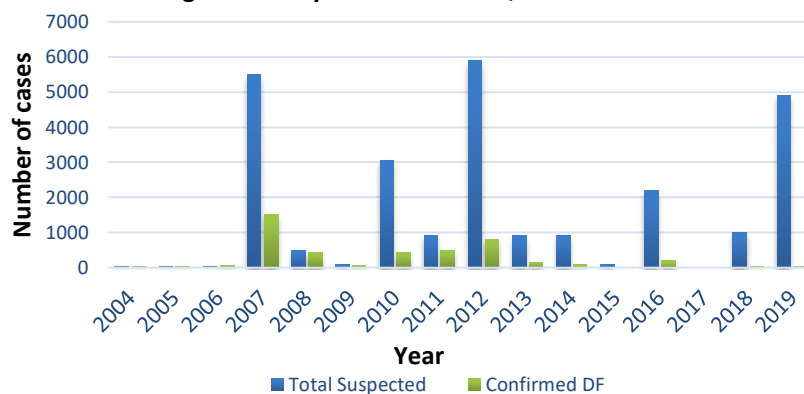
# Dengue Bulletin

September 15– September 21, 2019 Epidemiological Week 38

Epidemiological Week 38



Dengue Cases by Year: 2007-2019, Jamaica



## Reported suspected and confirmed dengue with symptom onset in weeks 1-38 2019

|                              |                       | 2019  |        | 2018 YTD |
|------------------------------|-----------------------|-------|--------|----------|
|                              |                       | EW 38 | YTD    |          |
| Total Suspected Dengue Cases |                       | 3     | **4886 | 265      |
| Lab Confirmed Dengue cases   |                       | 0     | 37     | 2        |
| CONFIRMED                    | Dengue Related Deaths | 0     | 8      | 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

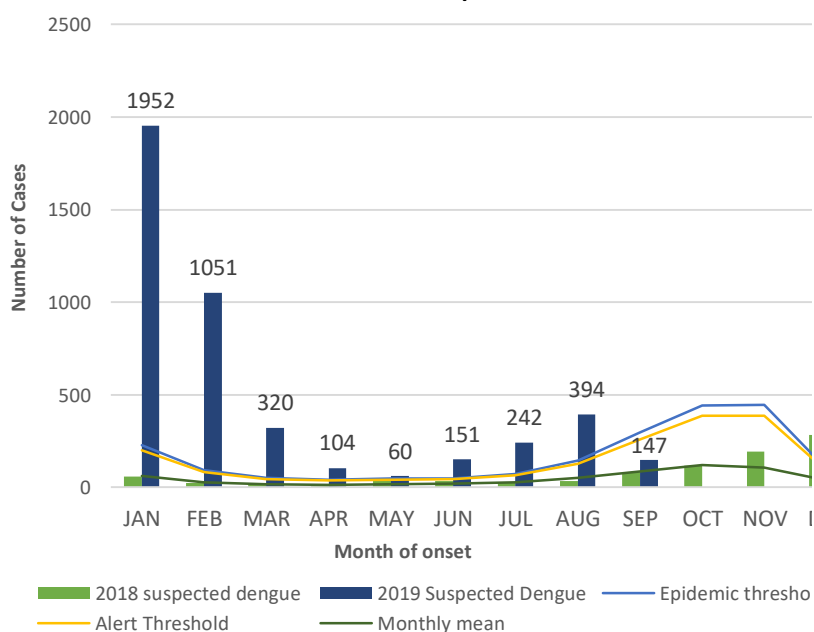
itching

slow heart rate

## Points to note:

- \*\*figure as at September 30, 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



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
30 sites. Actively  
pursued



SENTINEL  
REPORT- 78 sites.  
Automatic reporting

# RESEARCH PAPER

**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  $34.3 \pm 7.4$  with mean WC being  $104.9 \pm 17.7$  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.



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



8 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