

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

#### New Global Commitment to End Tuberculosis

Global efforts to combat TB have saved an estimated 53 million lives since 2000 and reduced the TB mortality rate by 37%. However, progress in many countries has stalled, global targets are off-track, and persistent gaps remain in TB care and prevention.

As a result, TB still kills more people than any other infectious disease. There are major problems associated with antimicrobial resistance, and it is the leading killer of people with HIV.

"One of the main problems has been a lack of political will and inadequate investment in fighting TB," added Dr Tedros. "Today's declaration must go hand-in-hand with increased investment."

The meeting was attended by ministers and country delegations, as well as representatives of civil society and international organizations, scientists, and researchers. More than 1000 participants took part in the two-day conference which resulted in collective commitment to ramp up action on four fronts



Downloaded  
<http://www.who.int/mediacentre/news/releases/2017/commitment-end-tuberculosis/en/>

from:

### EPI WEEK 45



SYNDROMES

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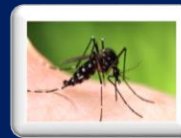
CLASS 1 DISEASES

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INFLUENZA

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GASTROENTERITIS

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RESEARCH PAPER

PAGE 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

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# REPORTS FOR SYNDROMIC SURVEILLANCE

## FEVER

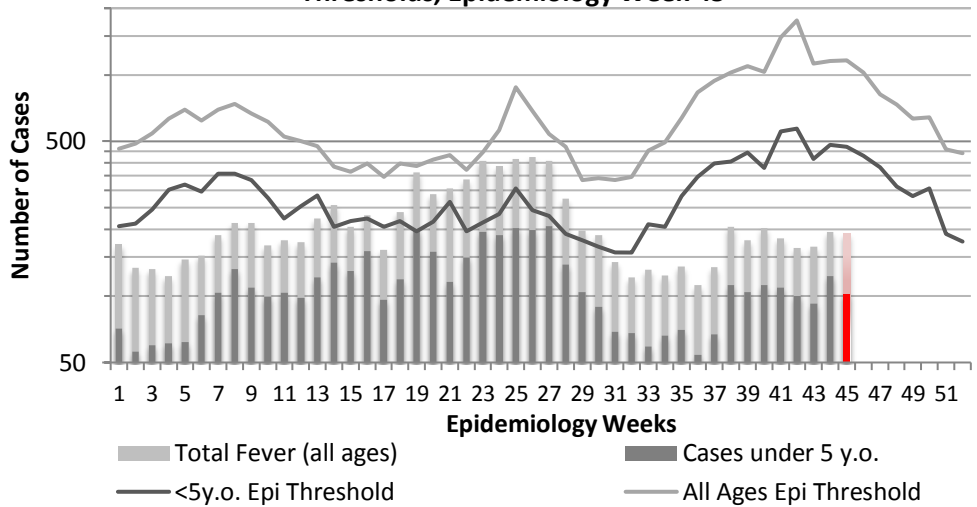
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



**KEY**

**RED** CURRENT WEEK

**Fever in under 5y.o. and Total Population 2017 vs Epidemic Thresholds, Epidemiology Week 45**

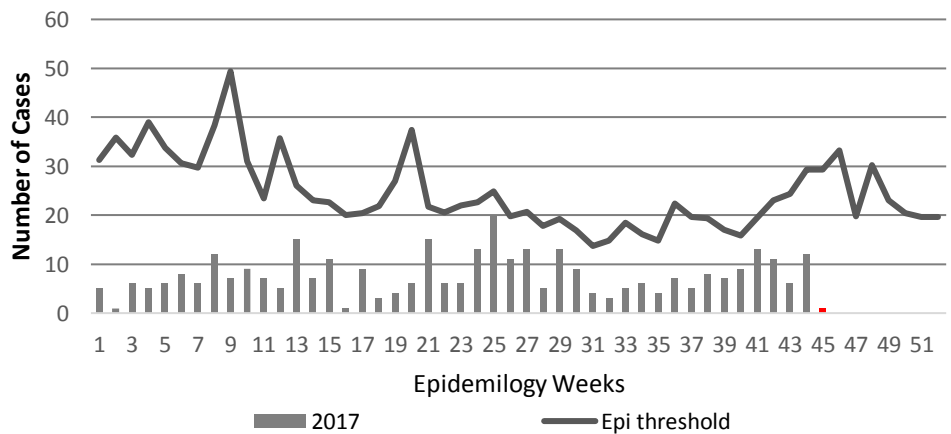


## FEVER AND NEUROLOGICAL

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).



**Fever and Neurological Symptoms Weekly Threshold vs Cases 2017, Epidemiology Week 45**

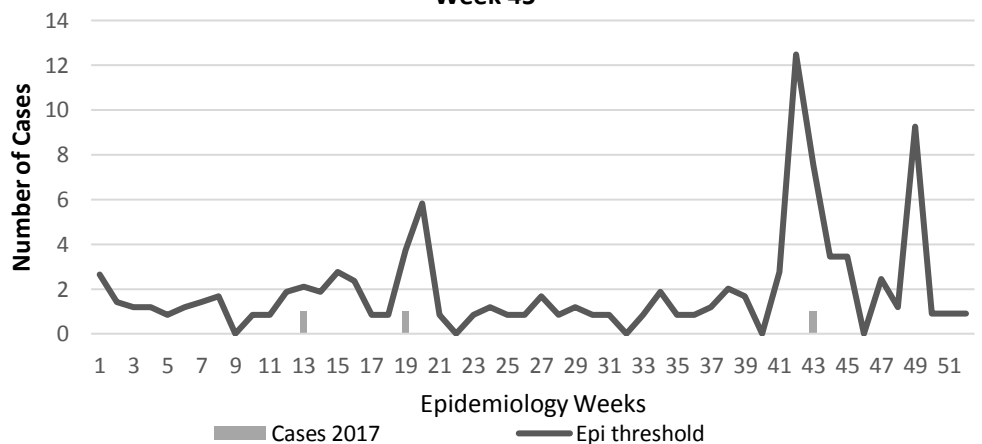


## FEVER AND HAEMORRHAGIC

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.



**Fever and Haem Weekly Threshold vs Cases 2017, Epidemiology Week 45**



**NOTIFICATIONS-**  
All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events



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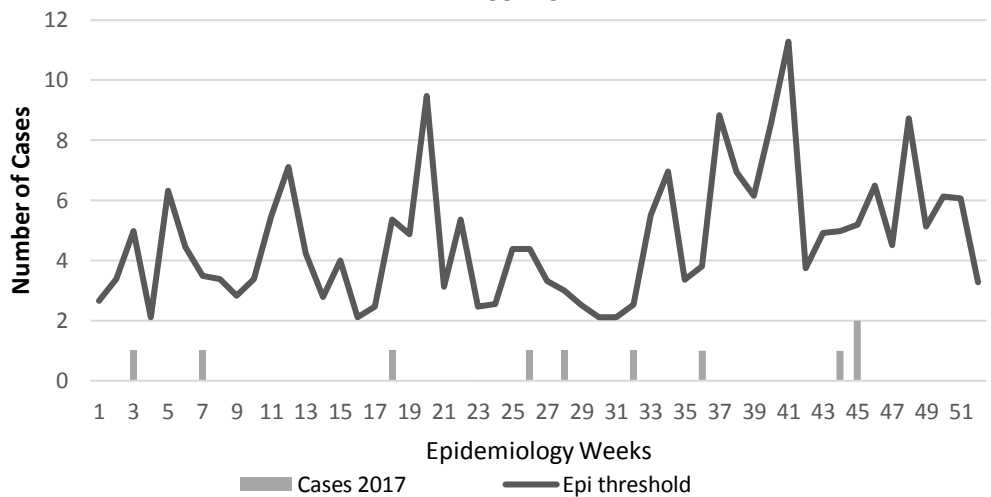
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### FEVER AND JAUNDICE

Temperature of  $>38^{\circ}C$  /  $100.4^{\circ}F$  (or recent history of fever) in a previously healthy person presenting with jaundice.



**Fever and Jaundice Weekly Threshold vs Cases 2017, Epidemiology Week 45**

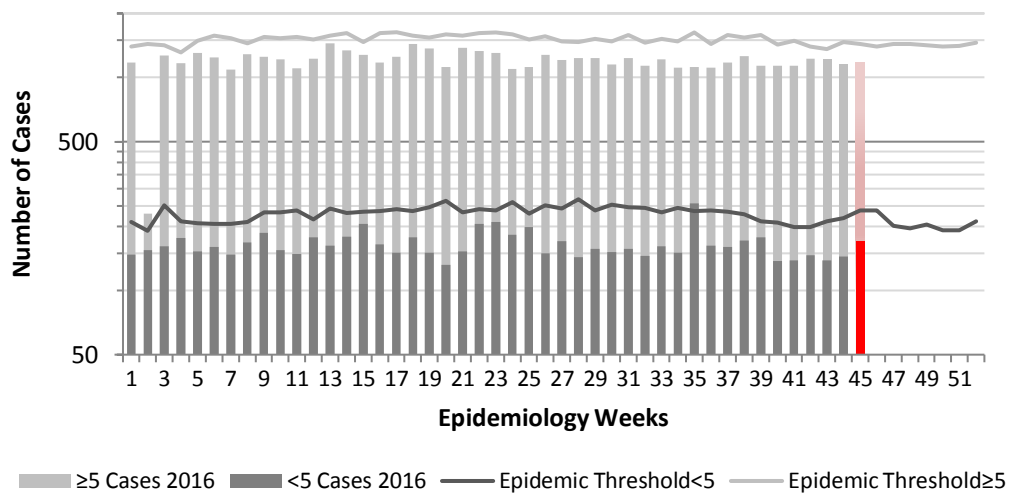


### ACCIDENTS

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



**Accidents Weekly Threshold vs Cases 2017**



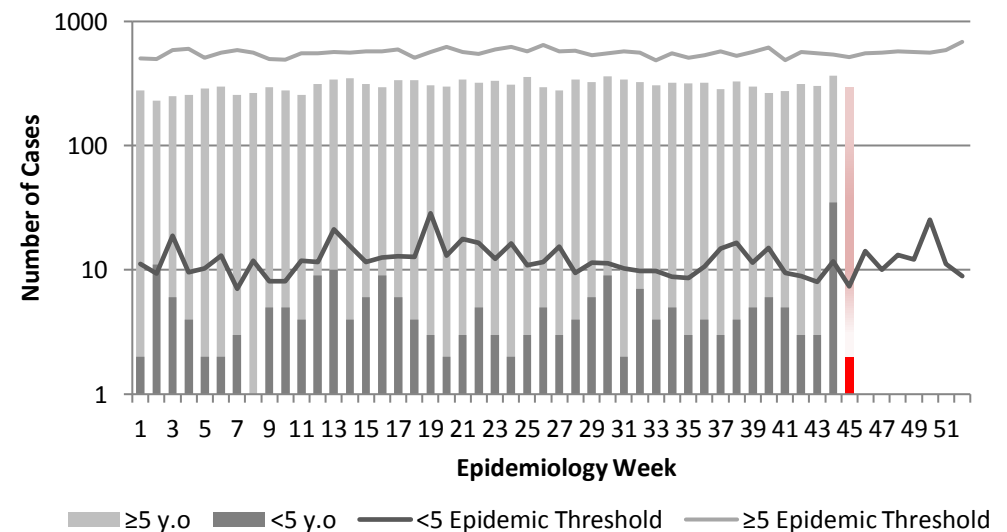
### VIOLENCE

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

The epidemic threshold is used to confirm the emergence of an epidemic so as to step-up appropriate control measures.



**Violence Weekly Threshold vs Cases 2017**



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All clinical sites



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## CLASS ONE NOTIFIABLE EVENTS

## Comments

|                                  | CONFIRMED YTD                                     |              | Comments |  |   |
|----------------------------------|---|--------------|----------|--|---|
|                                  | CLASS 1 EVENTS                                    | CURRENT YEAR |          | PREVIOUS YEAR  |   |
| NATIONAL /INTERNATIONAL INTEREST | Accidental Poisoning                              | 101          | 129      | 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 <sup>1</sup>             | 0            | 3        |  |   |
|                                  | Hansen's Disease (Leprosy)                        | 0            | 2        |  |   |
|                                  | Hepatitis B                                       | 51           | 27       |  |   |
|                                  | Hepatitis C                                       | 10           | 4        |  |   |
|                                  | HIV/AIDS - See HIV/AIDS National Programme Report |              |          |  |   |
|                                  | Malaria (Imported)                                | 6            | 2        |  |   |
|                                  | Meningitis (Clinically confirmed)                 | 37           | 63       |  |   |
| EXOTIC/ UNUSUAL                  | Plague  | 0            | 0        | Pertussis-like syndrome and Tetanus are clinically confirmed classifications.  |   |
| HIGH MORBIDITY/ MORTALITY        | Meningococcal Meningitis                          | 0            | 0        | The TB case detection rate established by PAHO for Jamaica is at least 70% of their calculated estimate of cases in the island, this is 180 (of 200) cases per year.   |   |
|                                  | Neonatal Tetanus                                  | 0            | 0        |  |   |
|                                  | Typhoid Fever                                     | 0            | 0        |  |   |
|                                  | Meningitis H/Flu                                  | 0            | 0        |  |   |
| SPECIAL PROGRAMMES               | AFP/Polio   | 0            | 0        | <p>1 Dengue Hemorrhagic Fever data include Dengue related deaths;</p> <p>2 Maternal Deaths include early and late deaths.</p> <p>Hep B increase for wk 29, 2017 due to results received from NBTS/NPHL</p>  |   |
|                                  | Congenital Rubella Syndrome                       | 0            | 0        |  |   |
|                                  | Congenital Syphilis                               | 0            | 0        |  |   |
|                                  | Fever and Rash                                    | Measles      | 0        |  | 0 |
|                                  |   | Rubella      | 0        |  | 0 |
|                                  | Maternal Deaths <sup>2</sup>                      | 40           | 43       |  |   |
|                                  | Ophthalmia Neonatorum                             | 309          | 407      |  |   |
|                                  | Pertussis-like syndrome                           | 0            | 0        |  |   |
|                                  | Rheumatic Fever                                   | 3            | 6        |  |   |
|                                  | Tetanus   | 1            | 0        |  |   |
|                                  | Tuberculosis                                      | 50           | 104      |  |   |
| Yellow Fever                     | 0   | 0            |          |  |   |
| Chikungunya                      | 0   | 4            |          |  |   |
| Zika Virus                       | 0   | 162          |          |  |   |



NOTIFICATIONS-  
All clinical sites



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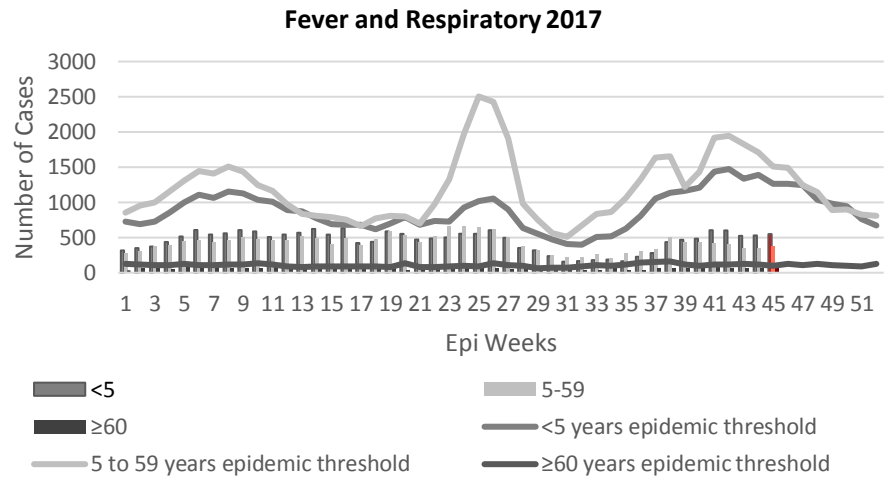
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 45*

November 5 – November 11, 2017

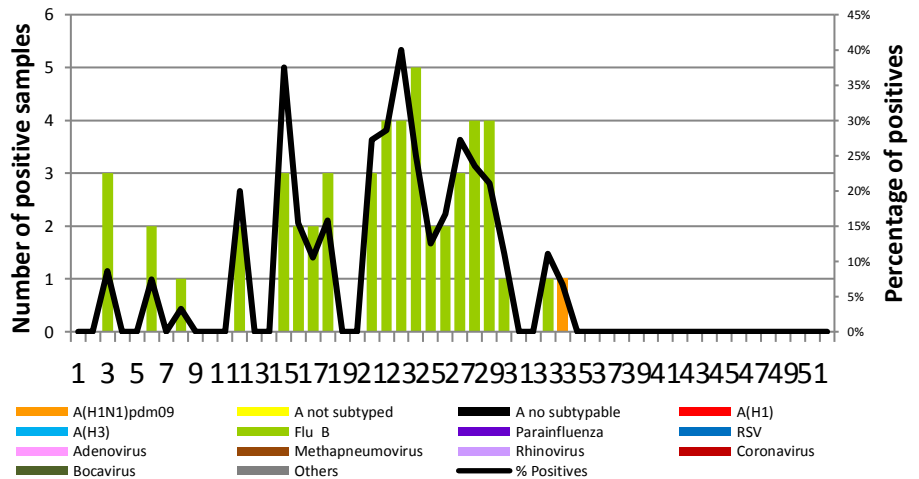
Epidemiology Week 45

| October 2017                            |          |           |
|---|----------|-----------|
|   | EW 45    | YTD       |
| SARI cases                              | 0        | 308       |
| <b>Total Influenza positive Samples</b> | <b>2</b> | <b>26</b> |
| <b>Influenza A</b>                      | <b>0</b> | <b>0</b>  |
| H3N2                                    | 0        | 0         |
| H1N1pdm09                               | 0        | 0         |
| Not subtyped                            | 0        | 0         |
| <b>Influenza B</b>                      | <b>4</b> | <b>26</b> |
| <b>Other</b>                            | <b>0</b> | <b>0</b>  |



**Comments:**  
 During EW 41, the proportion of SARI hospitalizations among all hospitalizations slightly decreased and remained below the average epidemic curve and the alert threshold as compared to previous weeks.  
 During EW 39, the number of pneumonia cases increased below the alert threshold and was higher than the previous seasons for the same period.  
 During EW 41, ARI cases remained at similar levels as compared to previous weeks, and was similar to levels observed in previous season for the same period.

**Distribution of Influenza and other respiratory viruses among SARI cases by EW surveillance EW 34, 2017, NIC Jamaica**



## INDICATORS

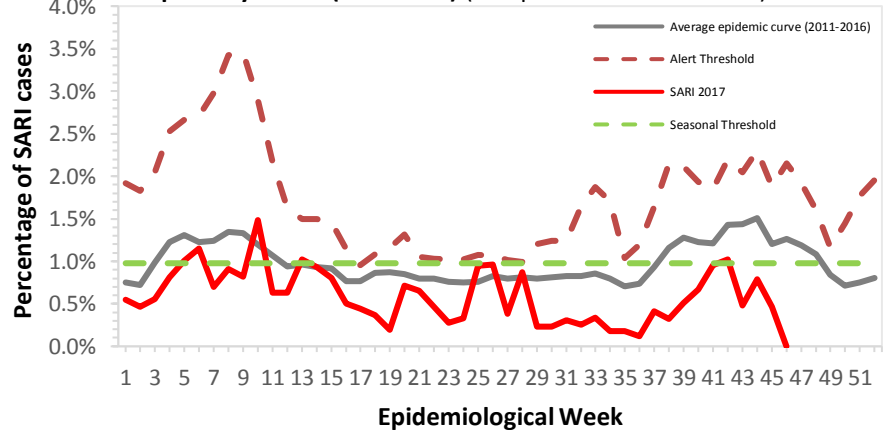
**Burden**  
 Year to date, respiratory syndromes account for 4.4% of visits to health facilities.

**Incidence**  
 Cannot be calculated, as data sources do not collect all cases of Respiratory illness.



**Prevalence**  
 Not applicable to acute respiratory conditions.

**Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2017) (compared with 2011-2016)**



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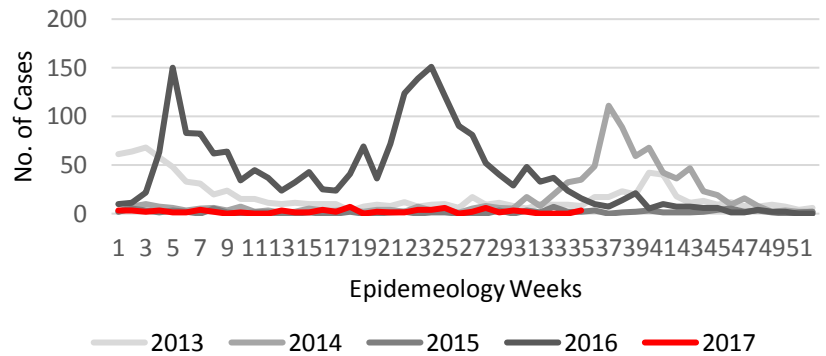
# Dengue Bulletin

November 5 – November 11, 2017

Epidemiology Week 45



Dengue Cases by Epidemiology Weeks 2013-2017

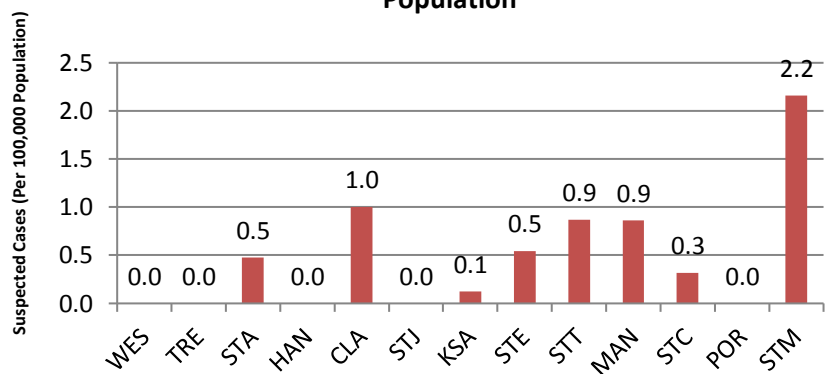


## DISTRIBUTION

### Year-to-Date Suspected Dengue Fever

|              | M         | F         | Un-known | Total     | %          |
|--------------|-----------|-----------|----------|-----------|------------|
| <1           | 2         | 0         | 0        | 2         | 2.9        |
| 1-4          | 4         | 1         | 0        | 5         | 7.1        |
| 5-14         | 6         | 11        | 0        | 17        | 24.3       |
| 15-24        | 7         | 8         | 0        | 15        | 21.4       |
| 25-44        | 14        | 6         | 1        | 21        | 30         |
| 45-64        | 4         | 4         | 0        | 8         | 11.4       |
| ≥65          | 0         | 0         | 0        | 0         | 0          |
| Unknown      | 1         | 1         | 0        | 2         | 2.9        |
| <b>TOTAL</b> | <b>38</b> | <b>31</b> | <b>1</b> | <b>70</b> | <b>100</b> |

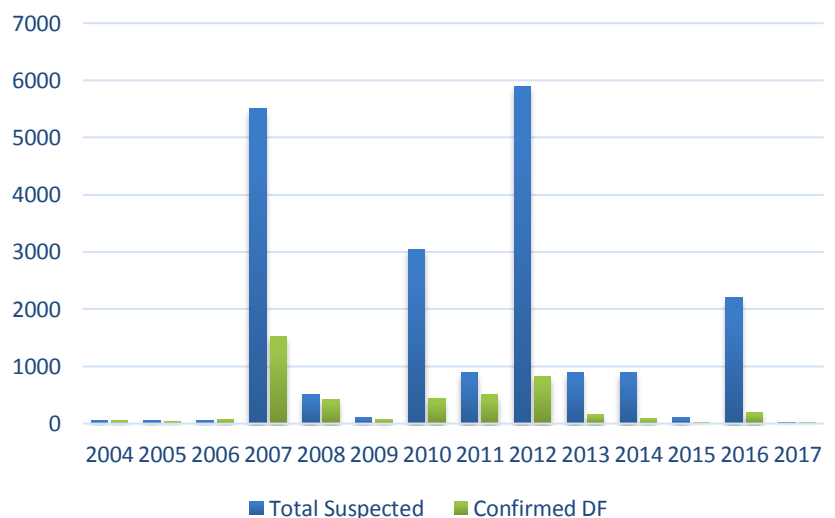
Suspected Dengue Fever Cases per 100,000 Parish Population



### Weekly Breakdown of suspected and confirmed cases of DF,DHF,DSS,DRD

|                              |                       | 2017  |     | 2016 YTD |
|------------------------------|-----------------------|-------|-----|----------|
|                              |                       | EW 45 | YTD |          |
| Total Suspected Dengue Cases |                       | 0     | 70  | 1823     |
| Lab Confirmed Dengue cases   |                       | 0     | 14  | 153      |
| CONFIRMED                    | DHF/DSS               | 0     | 0   | 3        |
|                              | Dengue Related Deaths | 0     | 0   | 0        |

Dengue Cases by Year: 2007-2017, Jamaica



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# Gastroenteritis Bulletin

EW  
45

November 5 – November 11, 2017

Epidemiology Week 45

## Weekly Breakdown of Gastroenteritis cases

| Year | EW 45 |     |       | YTD   |       |        |
|------|-------|-----|-------|-------|-------|--------|
|      | <5    | ≥5  | Total | <5    | ≥5    | Total  |
| 2017 | 132   | 163 | 295   | 7,026 | 8,978 | 16,004 |
| 2016 | 113   | 191 | 304   | 5,837 | 9,586 | 15,423 |

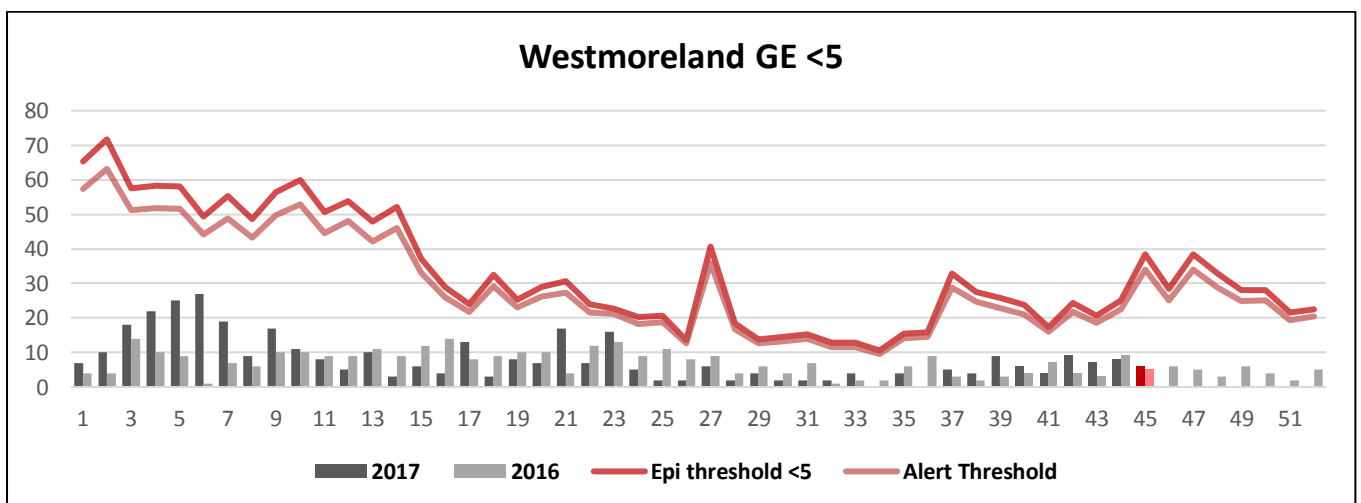
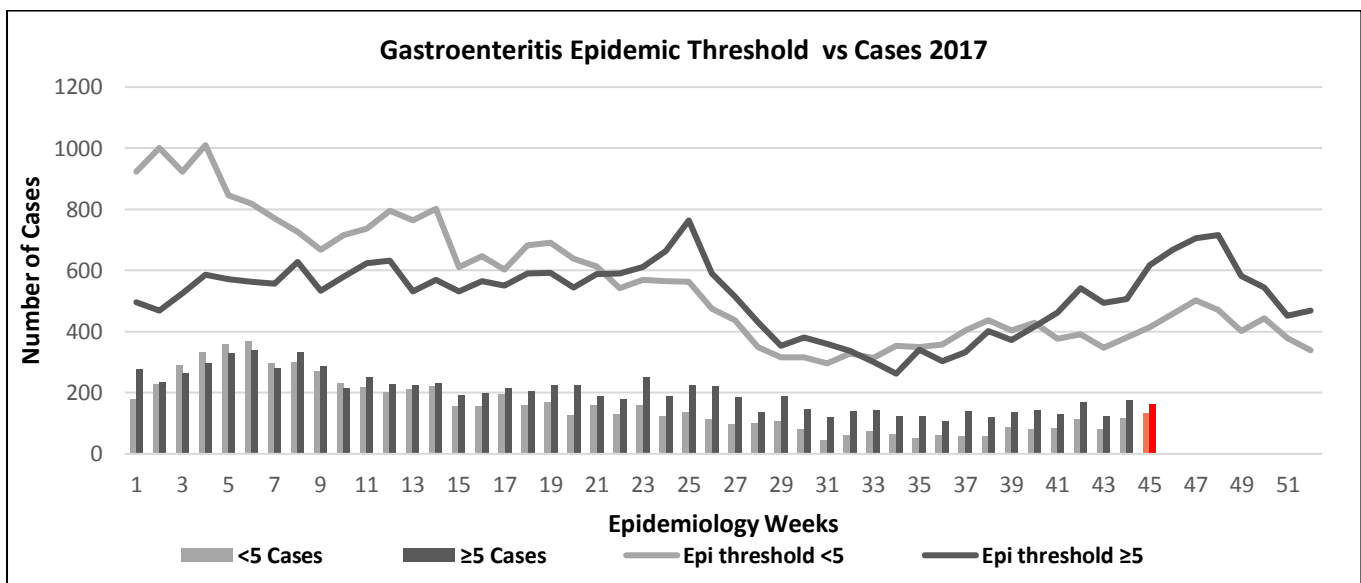
### Gastroenteritis:

In Epidemiology Week 45, 2017, the total number of reported GE cases showed a 12% decrease compared to EW 45 of the previous year.

The year to date figure showed an 8% increase in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2016-2017



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## RESEARCH PAPER

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### **Patient Satisfaction with Nurse Practitioner delivered Services at two Health Centres in Kingston and St. Andrew**

*K Jones, JLM Lindo, P Anderson Johnson*

*The UWI School of Nursing, Mona, The University of the West Indies, Kingston 7*

**Objective:** To explore the level of patient satisfaction with nurse practitioner delivered services in two health centres in Kingston and St. Andrew.

**Method:** A cross sectional survey of 120 adult clients ( $\geq 18$  years old) seen by the nurse practitioner at a Type 3 and a Type 5 health centre in Kingston and St. Andrew was conducted utilizing a self administered questionnaire. The data collection instrument included a modified Nurse Practitioner Satisfaction Survey. Data were analyzed using the SPSS® version 18 for Windows®.

**Results:** Of 120 participants, 77.2% were females with an average age of  $40 \pm 16$  years. Most (63.3%) were from the Type 5 health centre. The mean general satisfaction score was 80.88 out of a possible 90 and 83.3% of the respondents reported they were very satisfied and 16.6% were satisfied with the nurse practitioner services at both facilities. There was no significant difference between the mean satisfaction scores among males ( $80.41 \pm 6.5$ ) and females ( $80.95 \pm 8.3$ ) and respondents from the Type 3 ( $81.09 \pm 9.18$ ) and Type 5 ( $81.76 \pm 7.1$ ) health centre. No respondent was dissatisfied. The mean satisfaction score was significantly higher among respondents 40 years and older than that of their younger counterparts ( $p=0.032$ ). Socio-demographic and organization characteristics were not associated with the mean satisfaction score.

**Conclusions:** A high level of satisfaction exists among patients seen by the nurse practitioner in the two facilities in Kingston and St Andrew. Nurse practitioners may play an expanded role in the delivery of primary healthcare.



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



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