

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

World TB Day March 24, 2017

Unite efforts to leave no one behind

TB, the world's top infectious disease killer, claims 5 000 lives each day. The heaviest burden is carried by communities which already face socio-economic challenges such as migrants, refugees, prisoners, ethnic minorities to name a few.

TB strikes some of the world's poorest people hardest. WHO is determined to overcome the stigma, discrimination, and other barriers that prevent so many of these people from obtaining the services they so badly need.

Poverty, malnutrition, poor housing and sanitation, compounded by other risk factors such as HIV, tobacco, alcohol use and diabetes, can put people at heightened risk of TB and make it harder for them to access care. More than a third (4.3 million) of people with TB go undiagnosed or unreported, some receive no care at all and others access care of questionable quality.

The new WHO ethics guidance addresses contentious issues such as, the isolation of contagious patients, the rights of TB patients in prison, discriminatory policies against migrants affected by TB, among others. It emphasizes five key ethical obligations for governments, health workers, care providers, nongovernmental organizations, researchers and other stakeholders to:

- provide patients with the social support they need to fulfil their responsibilities
- refrain from isolating TB patients before exhausting all options to enable treatment adherence and only under very specific conditions
- enable "key populations" to access same standard of care offered to other citizens
- ensure all health workers operate in a safe environment
- rapidly share evidence from research to inform national and global TB policy updates.

Protecting human rights, ethics and equity are principles which underpin WHO's End TB Strategy. The current multidrug-resistant TB (MDR-TB) crisis and the health security threat it poses accentuate the situation even further.

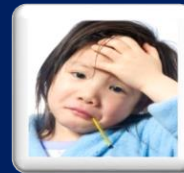
"Only when evidence-based, effective interventions are informed by a sound ethical framework, and respect for human rights, will we be successful in reaching our ambitious goals of ending the TB epidemic and achieving universal health coverage.

World TB Day is an opportunity to mobilize political and social commitment for further progress in efforts to end TB. This year, World TB Day signals new momentum at the highest levels with the announcement of the first ever Global Ministerial Conference on Ending TB, which will be held in Moscow in November 2017.

Source: [https://www.google.com.jm/webhp?sourceid=chrome-instant&rlz=1C1KMZB\\_enJM682JM683&ion=1&espv=2&ie=UTF-8#q=ophthalmia+neonatorum&](https://www.google.com.jm/webhp?sourceid=chrome-instant&rlz=1C1KMZB_enJM682JM683&ion=1&espv=2&ie=UTF-8#q=ophthalmia+neonatorum&)



## EPI WEEK 10



SYNDROMES

PAGE 2



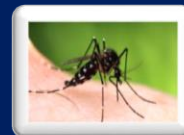
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



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

\*Incidence/Prevalence cannot be calculated

# REPORTS FOR SYNDROMIC SURVEILLANCE

## FEVER

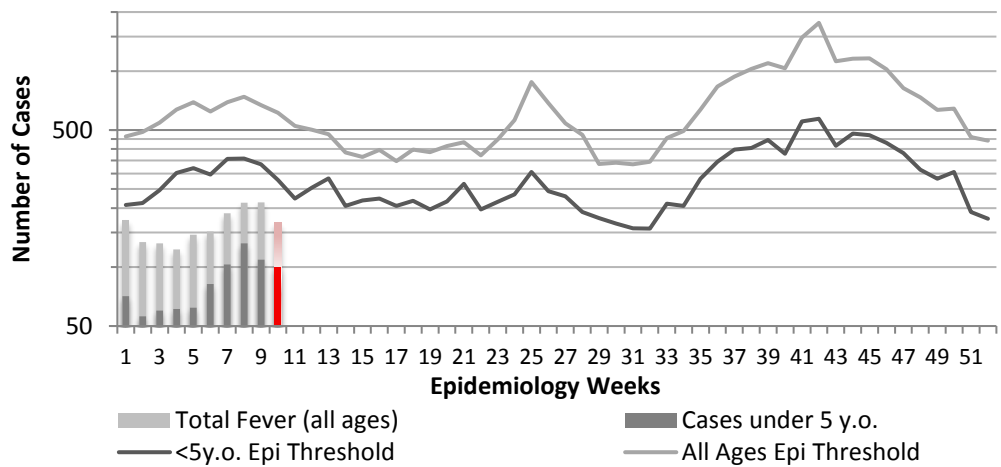
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



**KEY**

**RED** CURRENT WEEK

Fever in under 5y.o. and Total Population 2017 vs Epidemic Thresholds, Epidemiology Week 10

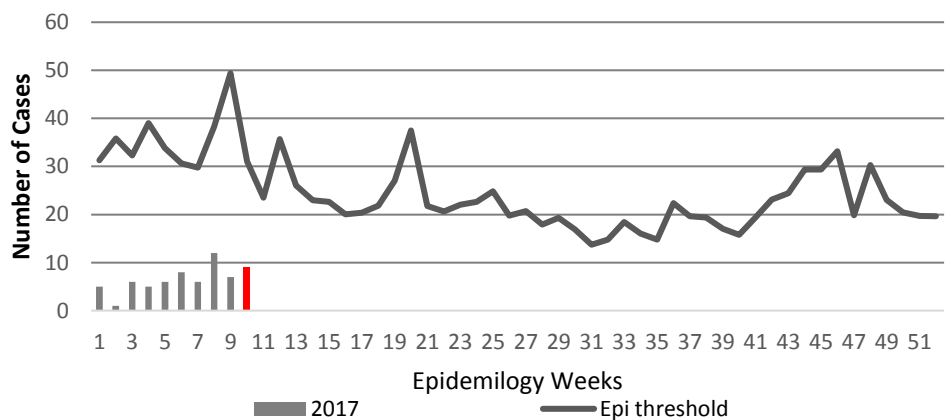


## FEVER AND NEUROLOGICAL

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 10

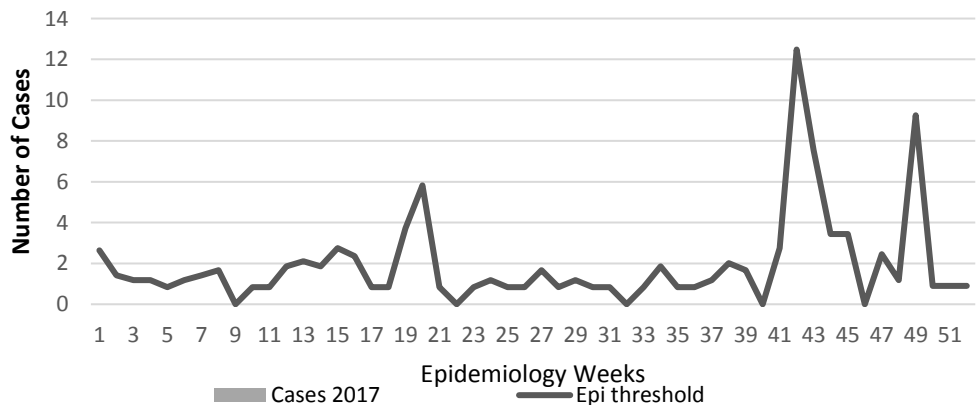


## FEVER AND HAEMORRHAGIC

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 10



**NOTIFICATIONS-** All clinical sites



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



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites\*. Actively pursued

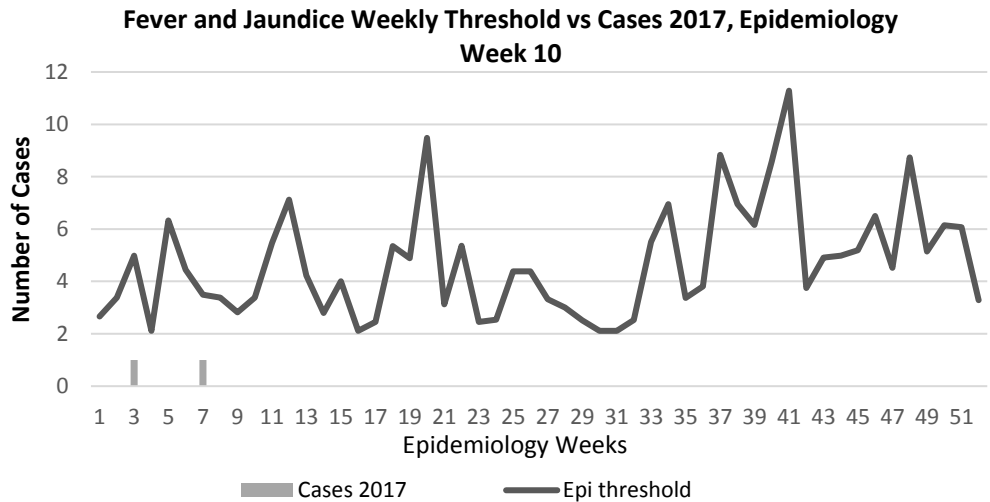


**SENTINEL REPORT-** 79 sites\*. Automatic reporting

\*Incidence/Prevalence cannot be calculated

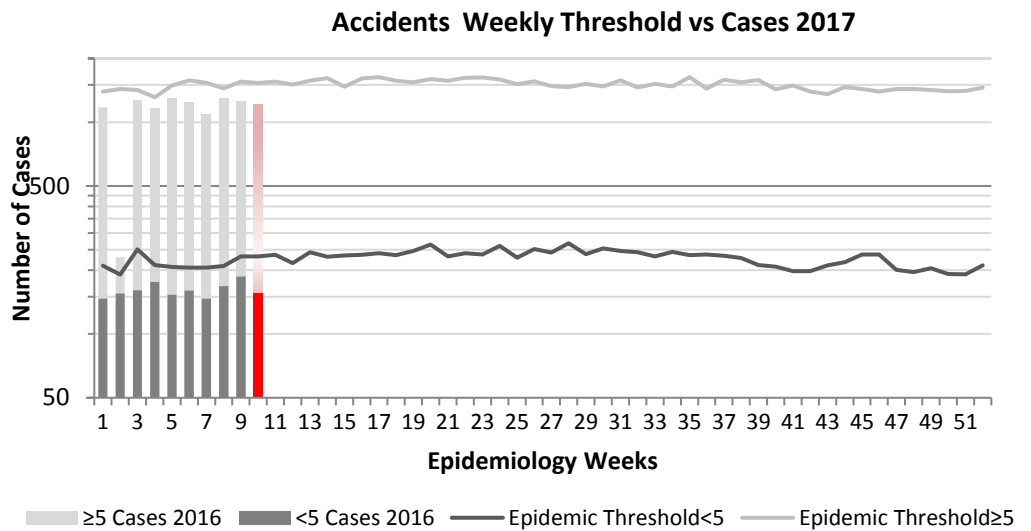
### FEVER AND JAUNDICE

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



### ACCIDENTS

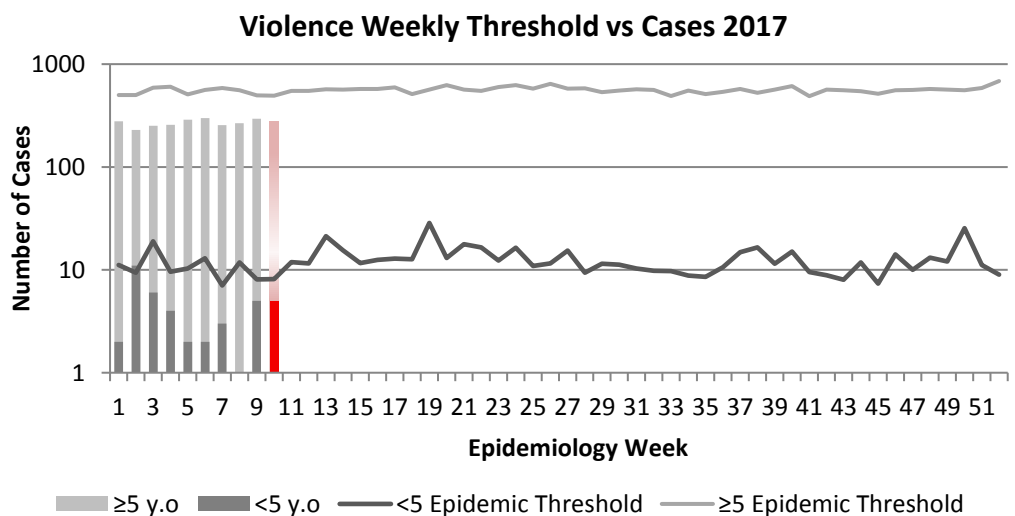
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.



### 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.



**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

\*Incidence/Prevalence cannot be calculated

**CLASS ONE NOTIFIABLE EVENTS**

**Comments**

	CONFIRMED YTD		Comments		
	CLASS 1 EVENTS	CURRENT YEAR		PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	14	31	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	0		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	2	1		
	Hepatitis C	0	0		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	2	1		Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Meningitis (Clinically confirmed)	5	13		
EXOTIC/ UNUSUAL	Plague	0	0	<p>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.</p> <p>*Data not available</p> <p><sup>1</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;</p> <p><sup>2</sup> Maternal Deaths include early and late deaths.</p>	
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		
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths <sup>2</sup>	6	5		
	Ophthalmia Neonatorum	44	87		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	1	1		
	Tetanus	0	0		
Tuberculosis	0	0			
Yellow Fever	0	0			
	Chikungunya	0	0		
	Zika Virus	0	1		



**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

\*Incidence/Prevalence cannot be calculated

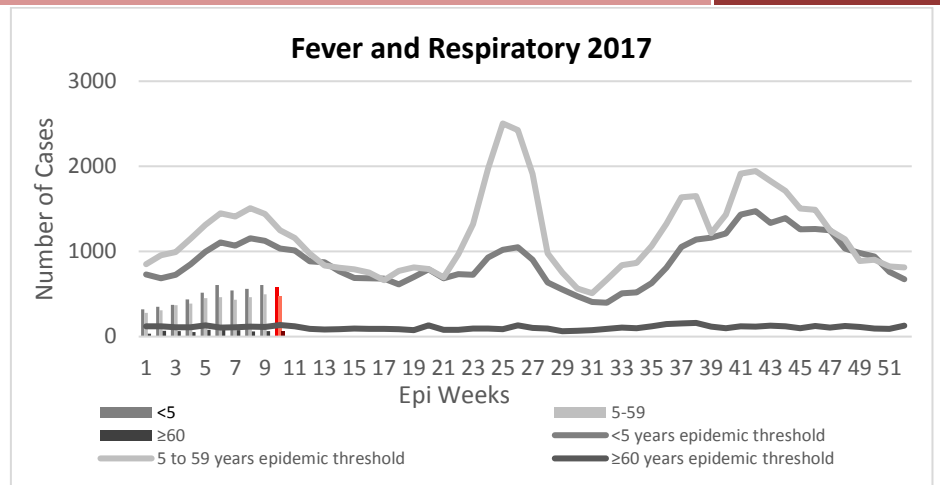
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 10*

March 5-11, 2017

Epidemiology Week 10

March 2017		
	EW 10	YTD
SARI cases	22	124
<b>Total Influenza positive Samples</b>	<b>0</b>	<b>1</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>0</b>	<b>1</b>
<b>Other</b>	<b>0</b>	<b>0</b>



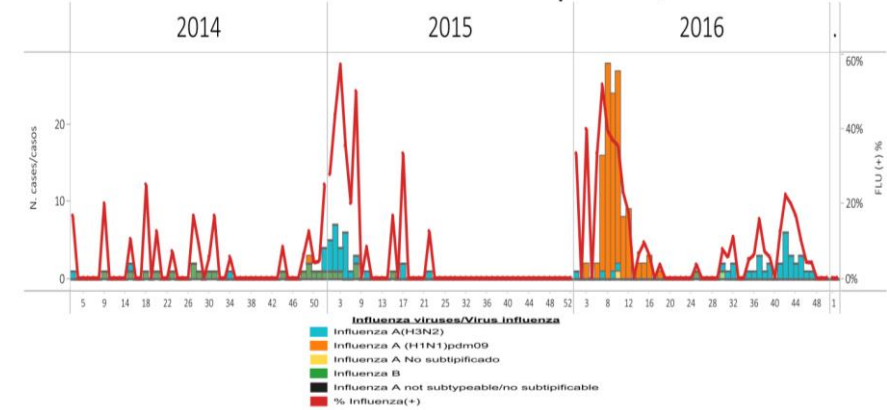
**Comments:**

During EW 10, SARI activity increased, but remained below the alert threshold and slightly above the the average epidemic curve.

During EW 10, pneumonia case-counts decreased (70 cases in EW 10), and were at same levels observed in 2015 and lower than the prior season, with the highest proportion in Kingston and Saint Andrew.

During EW 10, no influenza activity was reported.

Jamaica: Influenza virus distribution by EW, 2014-17  
Distribución de virus influenza por SE, 2014-16



**INDICATORS**

**Burden**

Year to date, respiratory syndromes account for 3.3% of visits to health facilities.

**Incidence**

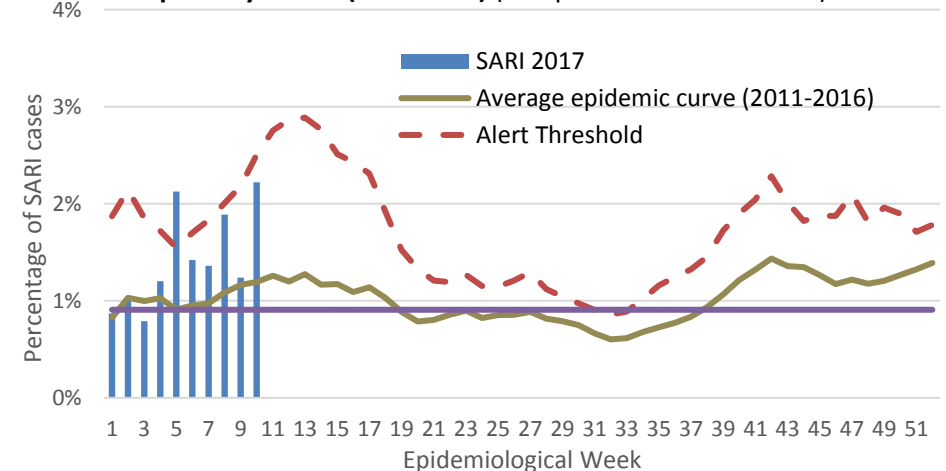
Cannot be calculated, as data sources do not collect all cases of Respiratory illness.



**Prevalence**

Not applicable to acute respiratory conditions.

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



**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

\*Incidence/Prevalence cannot be calculated

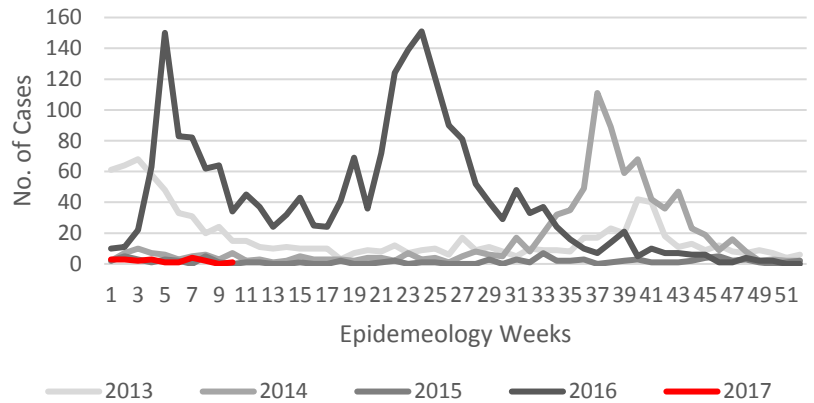
# Dengue Bulletin

March 5-11, 2017

Epidemiology Week 10



Dengue Cases by Epidemiology Weeks 2013-2017

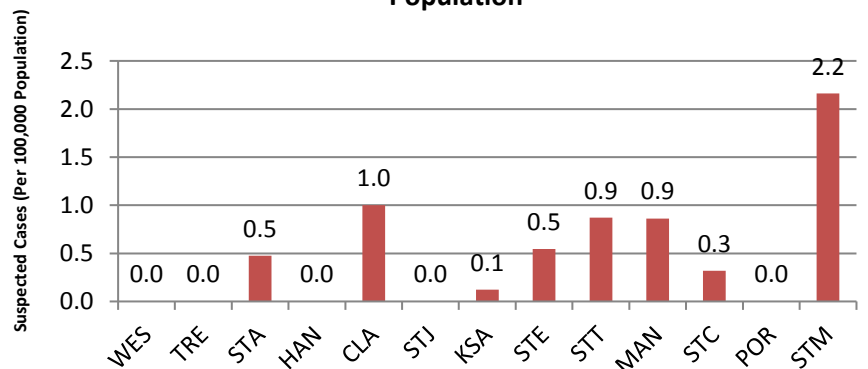


## DISTRIBUTION

### Year-to-Date Suspected Dengue Fever

	M	F	Un-known	Total	%
<1	0	0	0	0	0
1-4	0	0	0	0	0
5-14	4	2	0	6	31.5
15-24	2	2	0	4	21.2
25-44	3	3	1	6	31.5
45-64	2	1	0	3	15.8
≥65	0	0	0	0	0
Unknown	0	0	0	0	0
<b>TOTAL</b>	<b>11</b>	<b>7</b>	<b>1</b>	<b>20</b>	<b>100</b>

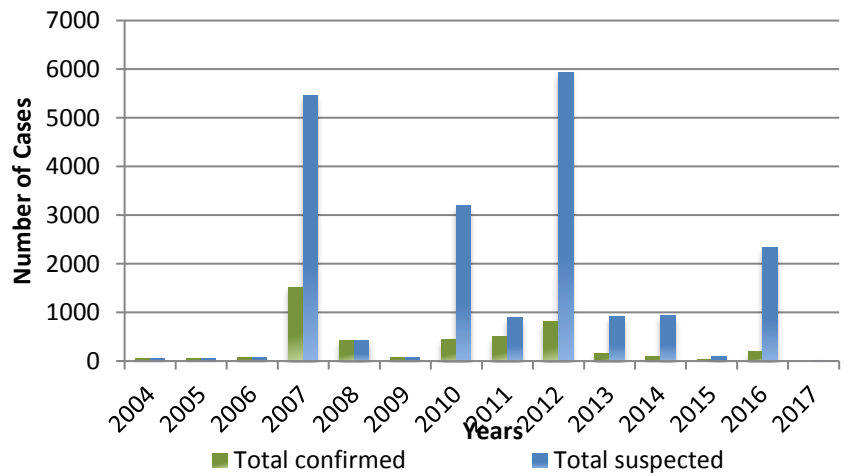
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2017		2016 YTD
		EW 9	YTD	
Total Suspected Dengue Cases		0	19	456
Lab Confirmed Dengue cases		0	0	52
<b>CONFIRMED</b>	DHF/DSS	0	0	1
	Dengue Related Deaths	0	0	0

Dengue Cases by Year: 2007-2017, Jamaica



**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

\*Incidence/Prevalence cannot be calculated



# Gastroenteritis Bulletin

EW  
10

March 5-11, 2017

Epidemiology Week 10

## Weekly Breakdown of Gastroenteritis cases

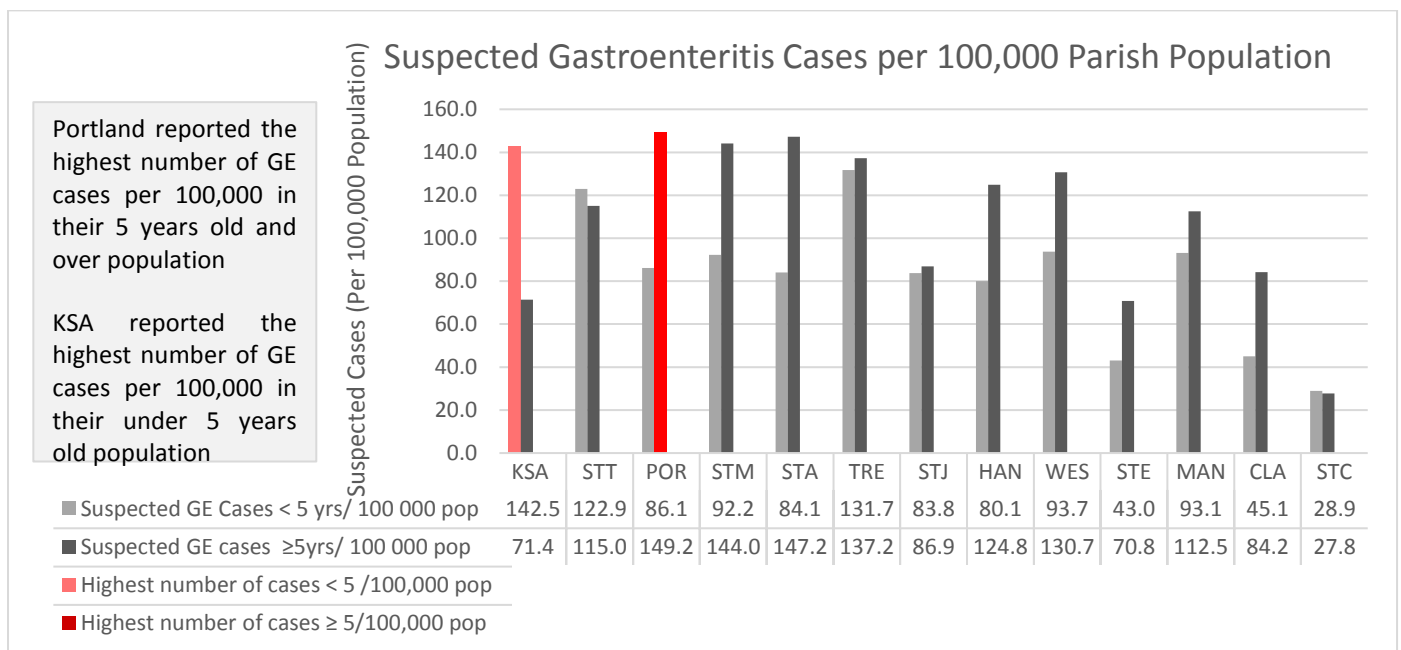
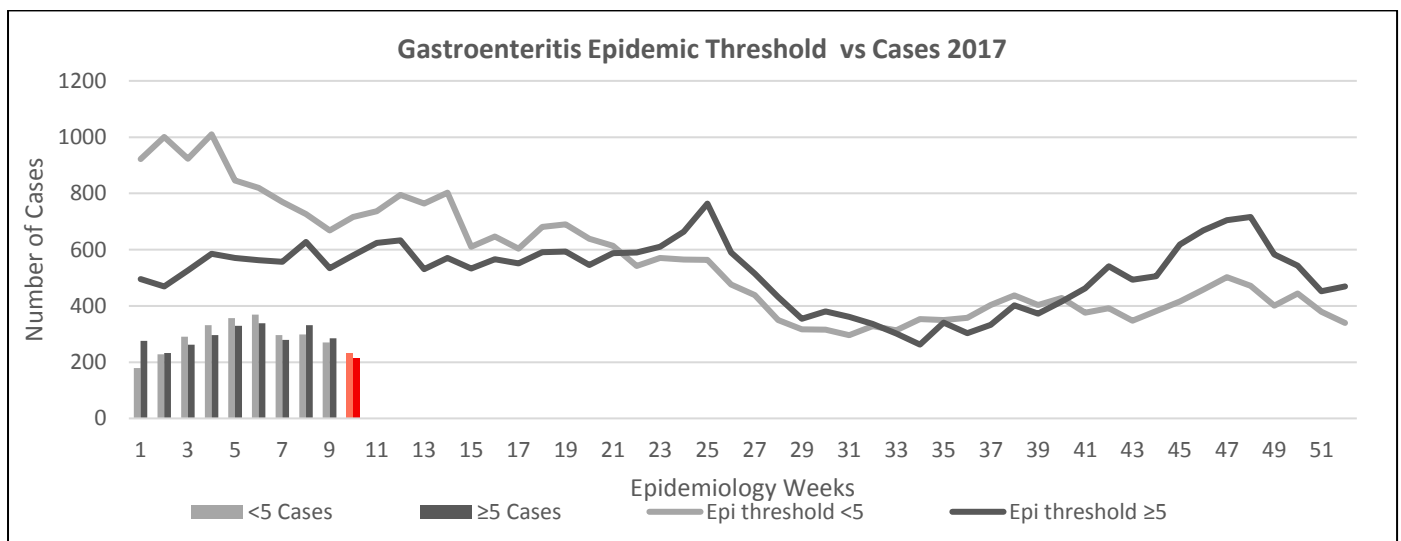
Year	EW 9			YTD		
	<5	≥5	Total	<5	≥5	Total
2017	232	215	447	2,852	2,844	5,696
2016	159	240	399	1,630	2,316	3,946

### Gastroenteritis:

In Epidemiology Week 10, 2017, the total number of reported GE cases showed a 11.2% increase compared to EW 10 of the previous year. The year to date figure showed an 14.4% increase in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2016-2017



**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

\*Incidence/Prevalence cannot be calculated

---

# 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  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: [surveillance@moh.gov.jm](mailto:surveillance@moh.gov.jm)



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

8

\*Incidence/Prevalence cannot be calculated