

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

## Weekly Spotlight

Today is World TB Day 2016!



TB is one of the world's top health challenges: **MORE THAN 2.4 BILLION PEOPLE**, equal to a **ONE THIRD** of the world's population are infected with TB



### EACH YEAR



9.6 MILLION NEW CASES



1.5 MILLION DEATHS

### EACH DAY

26,000 NEW CASES

4,100 DEATHS

9,000 MISSED

Despite our best efforts...



...there is an unacceptable low rate of decline in incidence each year

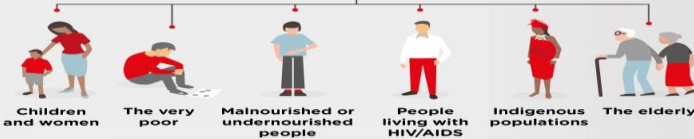


3.5 MILLION people are either not diagnosed or not treated



The proportion of missed cases remains the same each year

Among those missed are those most vulnerable



Many of those missed will either die, follow some unknown treatment but most will continue to infect others



Yearly **AROUND 500,000** people will develop multidrug-resistant TB (MDR-TB)

There is slow progress in tackling MDR-TB

ONLY 1 IN 4 MDR-TB cases is diagnosed

ONLY 111,000 patients were started on MDR-TB treatment last year

ONLY 1 IN 9 MDR-TB cases is successfully treated



Each dollar invested in TB yields US \$85 in return

### TOGETHER WE MUST



Increase and provide access to diagnosis, treatment and care for everyone



Focus on empowering and serving the most vulnerable



Create innovative, effective and sustainable solutions and tools

Help us work towards eliminating TB

[www.stoptb.org](http://www.stoptb.org)

#EndTB

Stop TB Partnership

## EPI WEEK 10



SYNDROMES

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CLASS 1 DISEASES

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INFLUENZA

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DENGUE FEVER

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GASTROENTERITIS

PAGE 9



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

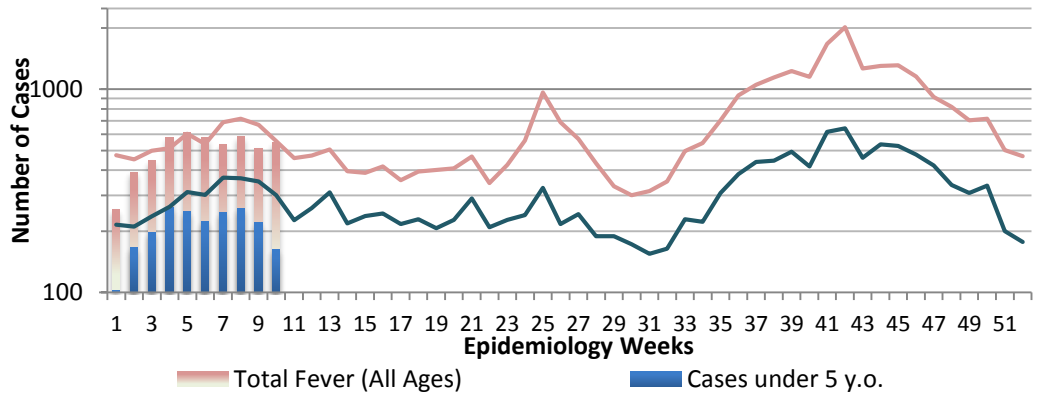
# REPORTS FOR SYNDROMIC SURVEILLANCE

## 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.



Fever in under 5y.o. and Total Population 2016 vs Epidemic Thresholds, Epidemiology Week 10

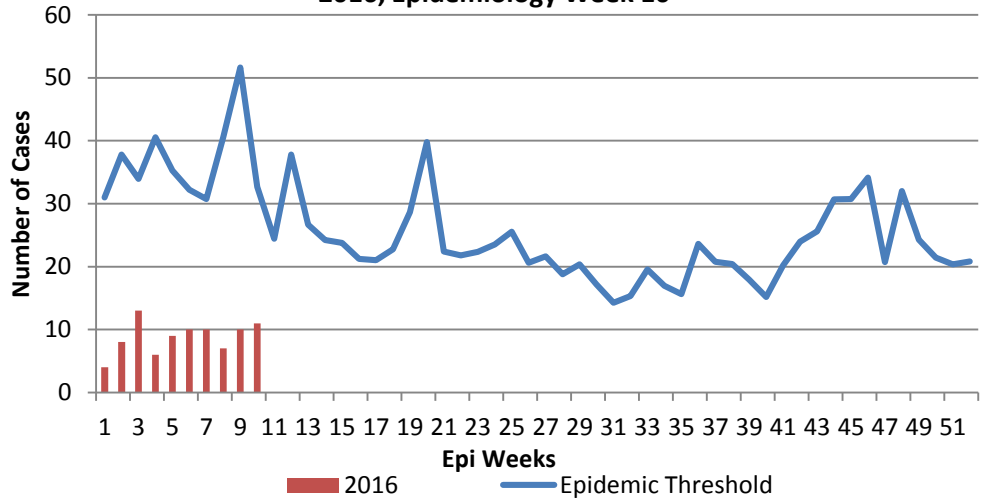


## FEVER AND NEUROLOGICAL

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 2016, Epidemiology Week 10

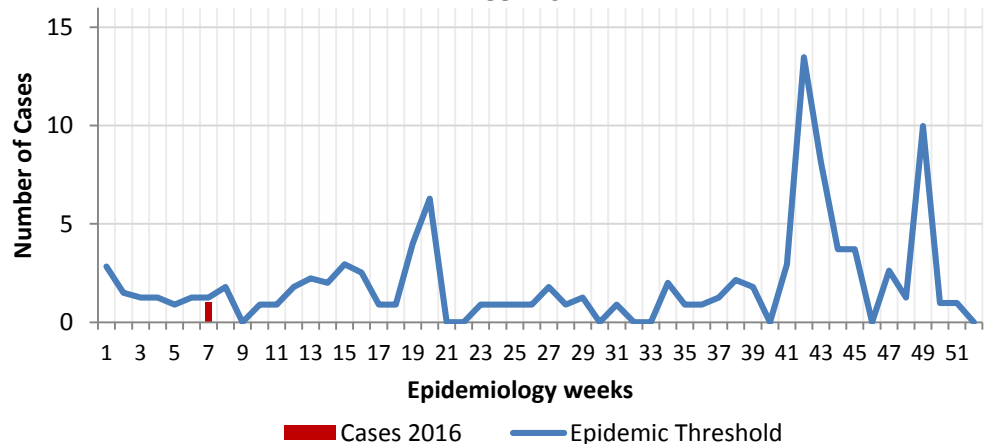


## FEVER AND HAEMORRHAGIC

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 2016, Epidemiology Week 10



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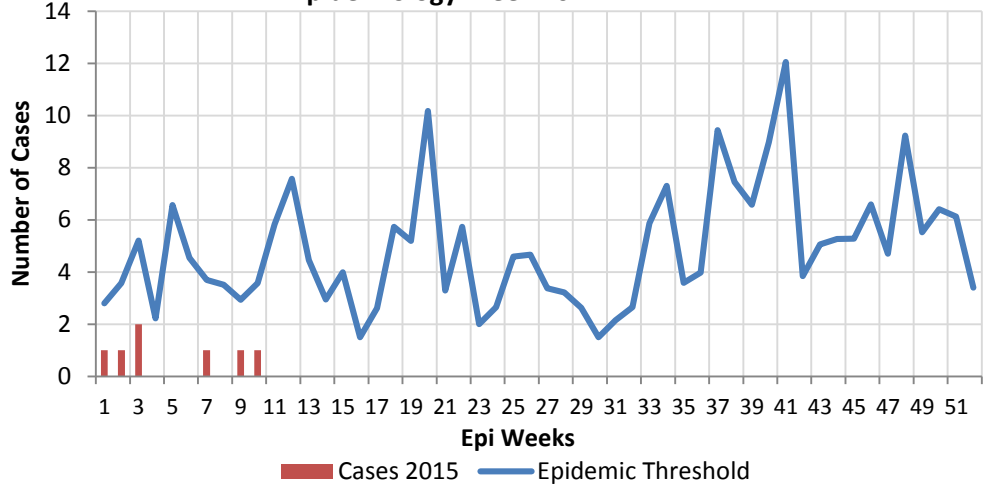
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**FEVER AND JAUNDICE**

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 2016, Epidemiology Week 10**

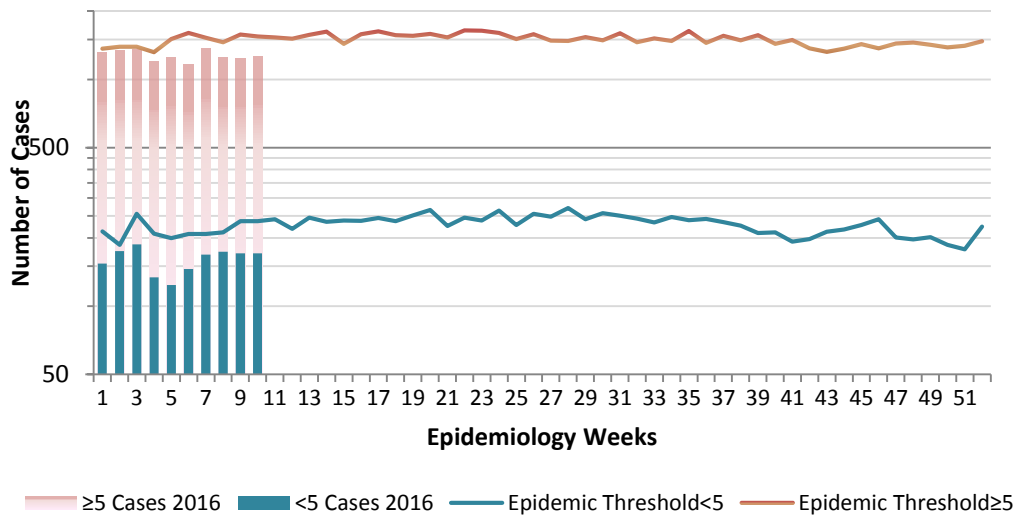


**ACCIDENTS**

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



**Accidents Weekly Threshold vs Cases 2016**

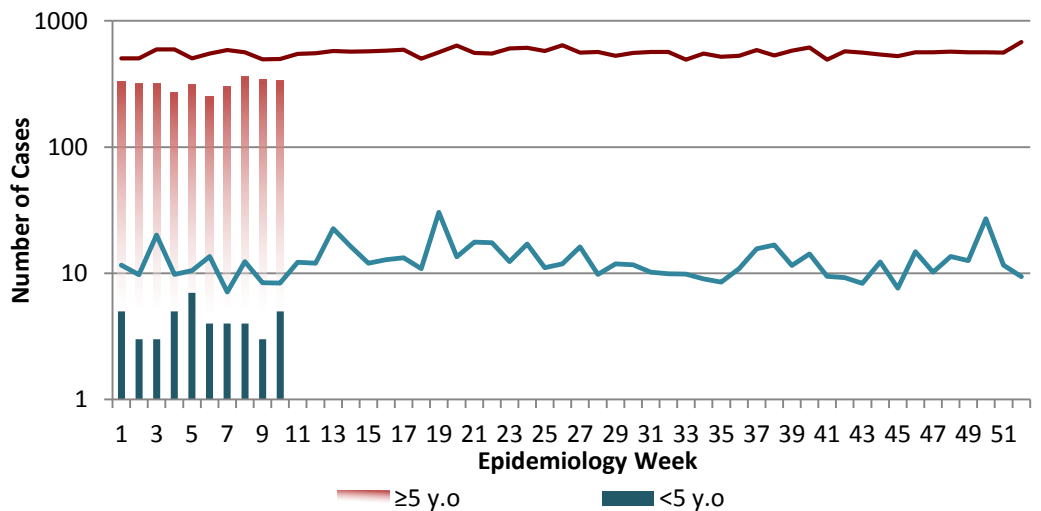


**VIOLENCE**

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



**Violence Weekly Threshold vs Cases 2016**



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— CLASS ONE NOTIFIABLE EVENTS

Comments

	CLASS 1 EVENTS	CONFIRMED YTD			
		CURRENT YEAR	PREVIOUS YEAR		
NATIONAL/INTERNATIONAL INTEREST	Accidental Poisoning	10	36	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 <sup>1</sup>	0	0		
	Hansen's Disease (Leprosy)	1	0		
	Hepatitis B	1	13		
	Hepatitis C	0	1		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	1	0		
	Meningitis	8	23		
EXOTIC/ UNUSUAL	Plague	0	0		
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	*Data not available  <sup>1</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;  <sup>2</sup> Maternal Deaths include early and late deaths.	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths <sup>2</sup>	13	14		
	Ophthalmia Neonatorum	87	74		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	5		
	Tetanus	0	1		
	Tuberculosis	0	0		
	Yellow Fever	0	0		
Chikungunya	0	1			
Zika Virus	1	0			



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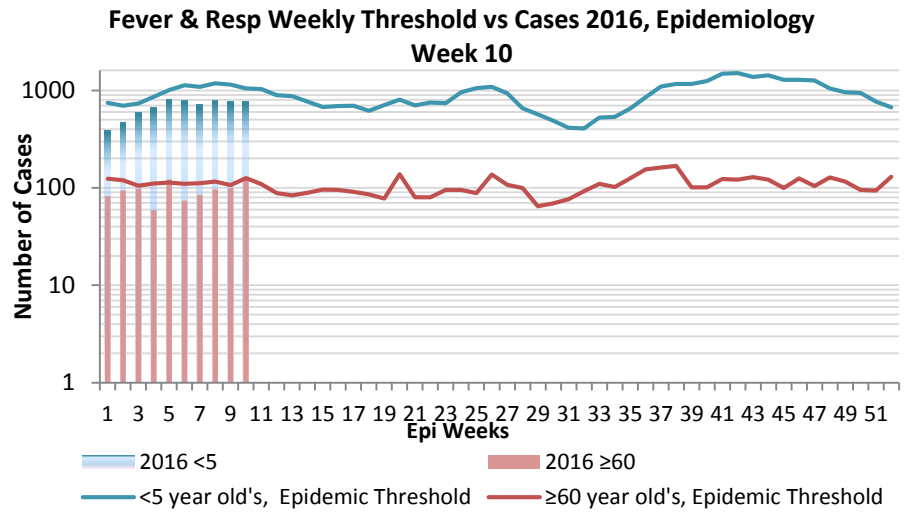
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 10*

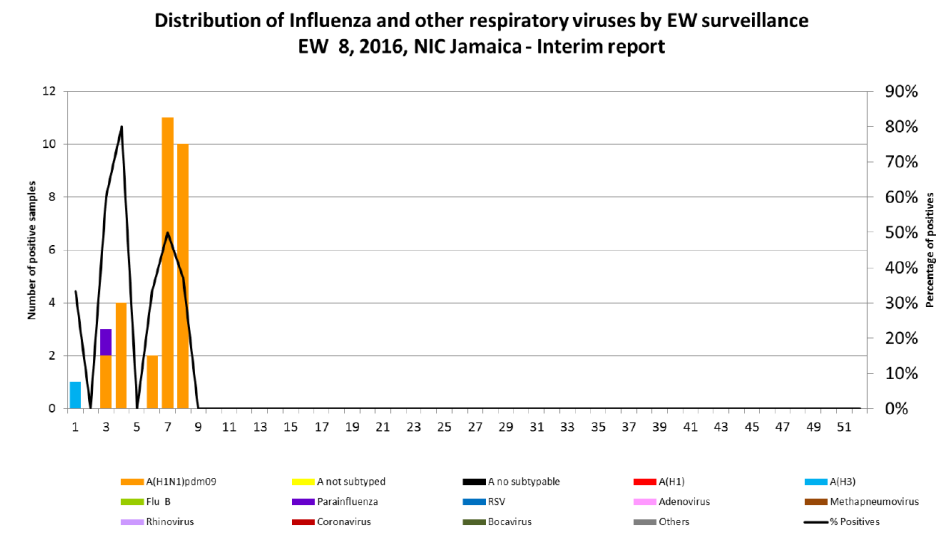
March 6– March 12, 2016

Epidemiology Week 10

February, 2016		
	<i>EW 10</i>	<i>YTD</i>
SARI cases	38	337
<b>Total Influenza positive</b>	<b>11</b>	<b>71</b>
<b>Samples</b>		
<b>Influenza A</b>	<b>11</b>	<b>70</b>
H3N2	0	1
H1N1pdm09	8	66
Not subtyped	3	3
<b>Influenza B</b>	<b>0</b>	<b>0</b>
<b>Other</b>	<b>0</b>	<b>1</b>



**Comments:**  
 The percent positivity among all samples tested from EW 1 to EW 8, 2016 is 40.3% (N= 77)  
 Influenza A(H1N1)pdm09 continued to circulate in EWs 1 to 8 as the predominant virus at 97%. No Influenza B viruses have been detected since 2016. In addition, there has been no detection of the influenza A/H3v or A/H1v variant viruses, or avian H5 and H7 viruses among human samples tested.

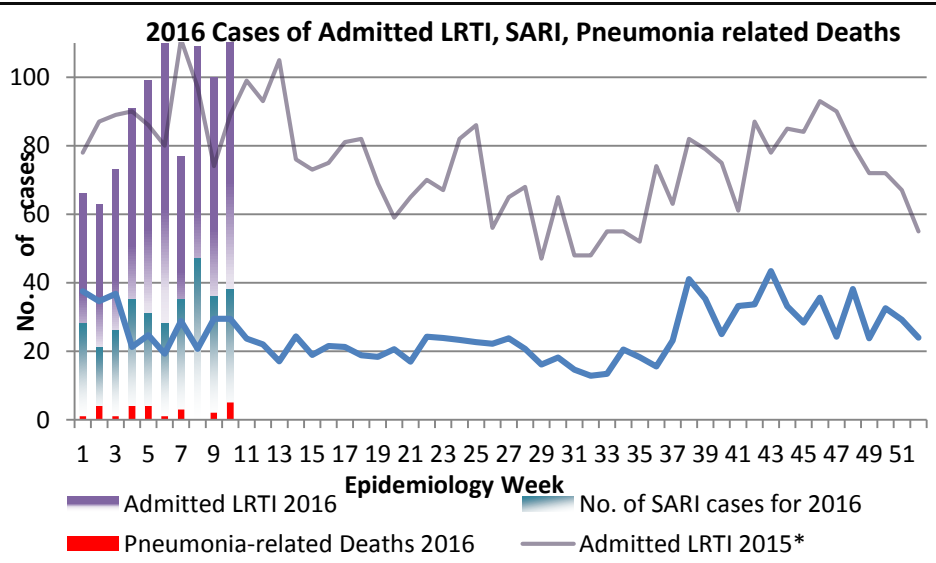


**INDICATORS**

**Burden**  
 Year to date, respiratory syndromes account for 6.6% 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.



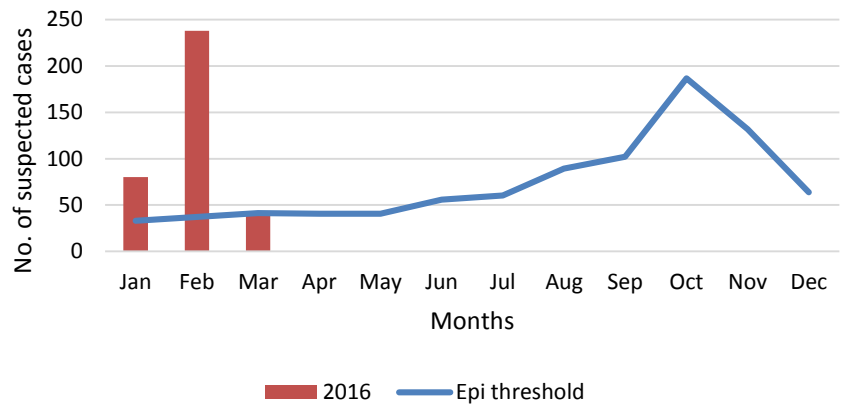
**\*Additional data needed to calculate Epidemic Threshold**

# Dengue Bulletin

March 6– March 12, 2016

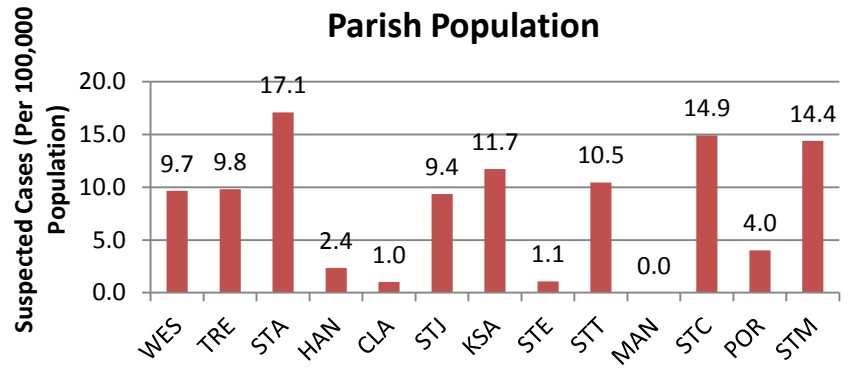
Epidemiology Week 10


2016 Cases vs. Epidemic Threshold



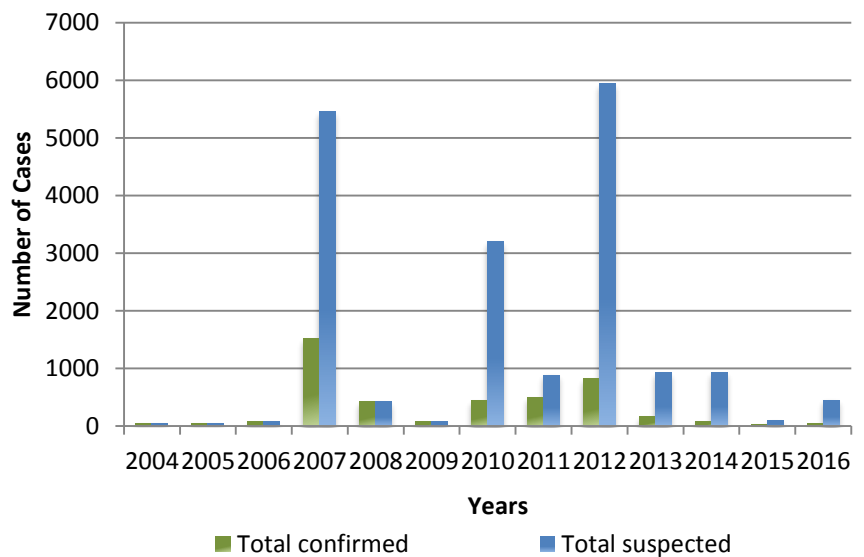
DISTRIBUTION				
Year-to-Date Suspected Dengue Fever				
	M	F	Total	%
<1	0	2	2	1
1-4	1	0	1	0
5-14	2	2	4	2
15-24	1	2	3	1
25-44	1	0	1	0
45-64	0	0	0	0
≥65	0	0	0	0
Unknown	143	204	347	96
<b>TOTAL</b>	<b>148</b>	<b>210</b>	<b>358</b>	<b>100</b>

Suspected Dengue Fever Cases per 100,000 Parish Population



Weekly Breakdown of suspected and confirmed cases of DF,DHF,DSS,DRD				
	2016		2015 YTD	
	EW 10	YTD		
				
<b>Total Suspected Dengue Cases</b>	16	358	22	
<b>Lab Confirmed Dengue cases</b>	2	38	1	
<b>CONFIRMED</b>	<b>DHF/DSS</b>	1	1	0
	<b>Dengue Related Deaths</b>	0	0	0

Dengue Cases by Year: 2004-2016, Jamaica



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All clinical sites



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# Gastroenteritis Bulletin

**EW**  
**10**

March 6– March 12, 2016

Epidemiology Week 10

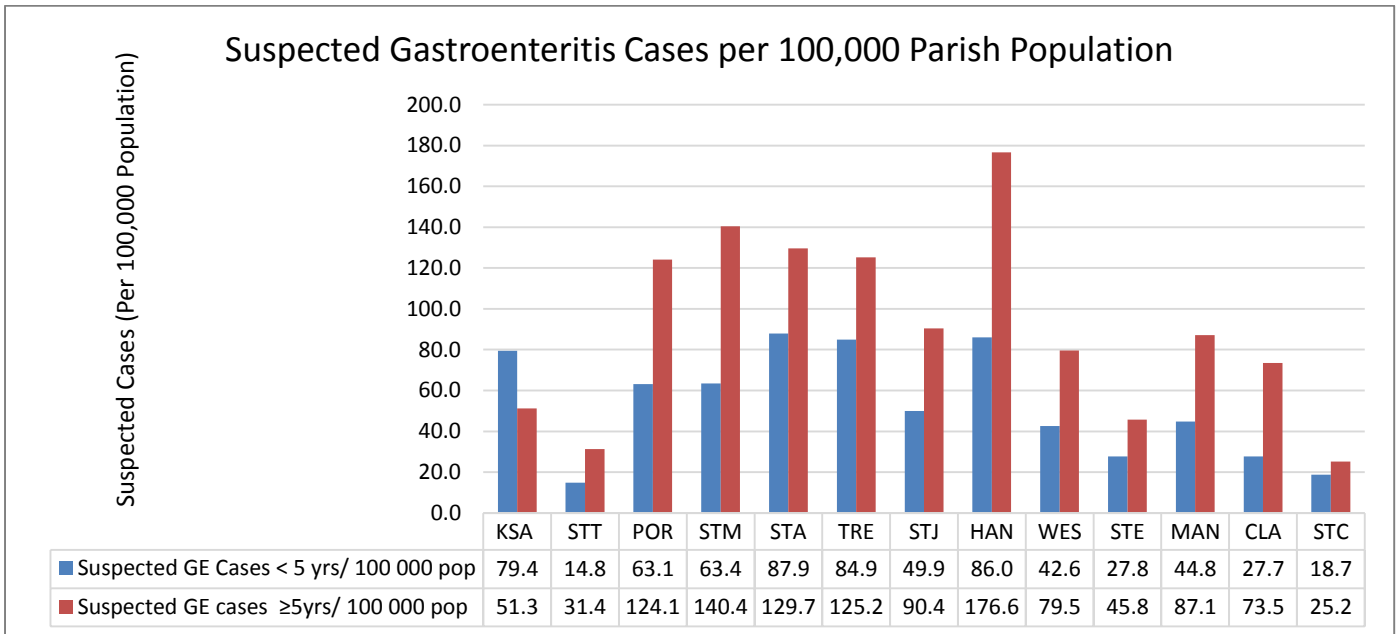
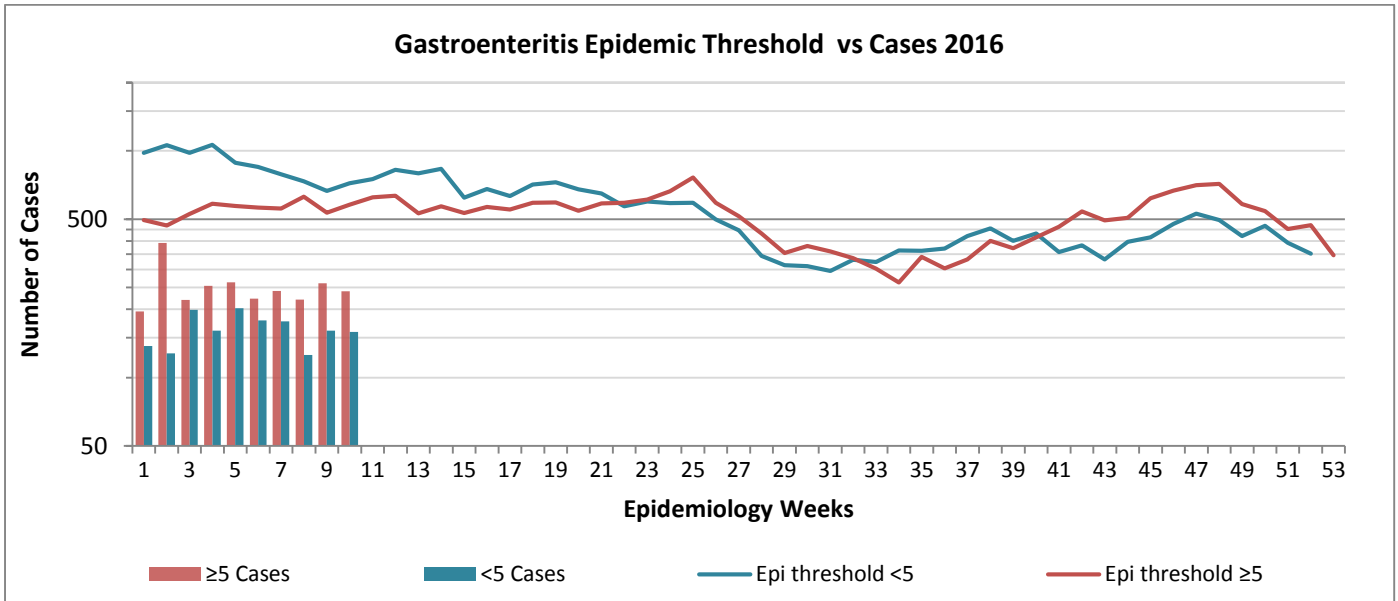
## Weekly Breakdown of Gastroenteritis cases

Year	EW 10			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	159	240	399	1630	2316	3946
2015	366	340	706	3681	3293	6674

**Gastroenteritis:** Three or more loose stools within 24 hours. In Epidemiology Week 10, 2016, the total number of reported GE cases showed a 43% decrease compared to EW 10 of the previous year. The year to date figure showed a 41% decrease in cases for the period.



**Figure 1: Total Gastroenteritis Cases Reported 2014-2016**



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# RESEARCH PAPER

## A Comparison of the Nutritional Status of HIV- positive Children living in Family Homes and an 'Institutionalized' Children's Home

S Dawson, S Robinson, J DeSouza

Epidemiology Research and Training Unit, Ministry of Health, Kingston, Jamaica

**Objective:** To assess the nutritional status of HIV-infected children living in family homes and in an institution.

**Design and Method:** A cross-sectional descriptive study was conducted involving 31 HIV- positive children with anthropometric measurements used as outcome indicators. The children who met the inclusion criteria were enrolled, and nutritional statuses for both sets of children were assessed and compared.

**Results:** Fifteen of the children (48.4%) lived in family homes and sixteen (51.6%) in the institution, with a mean age of  $7.2 \pm 3.2$  years. Significant differences between the two settings were found for the means, Weight-For-Height, WFH ( $p=0.020$ ) and Body Mass Index, BMI ( $p=0.005$ ); children in family homes having significantly better WFH and BMI. Four of the children (13.3%) were underweight; 3 from the institution (18.8%) and 1 (6.7%) from a family home. Two children (6.9%) were found to be 'at risk' of being overweight.

**Conclusion:** Although anthropometric indices for most of these children are within the acceptable range, there seems to be significant differences in nutritional status between infected children resident in family homes, and those in the institution. The factors responsible for such differences are not immediately obvious, and require further investigation. The influence of ARV therapy on nutritional outcomes in these settings require prospective studies which include dietary, immunologic and biochemical markers, in order to provide data that may help to improve the medical nutritional management of these children.



The Ministry of Health  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: [mohsurveillance@gmail.com](mailto:mohsurveillance@gmail.com)



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