

Week ending November 12, 2016

Epidemiology Week 45

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

### World AIDS Day December 1, 2016

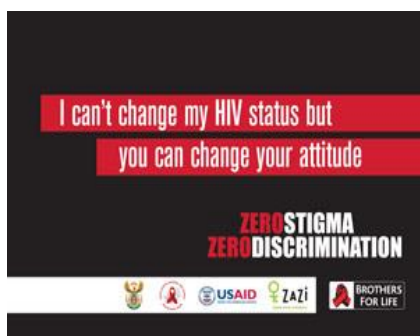
## Theme: Getting to Zero

World AIDS Day has taken place on December 1st every year since 1988.

It provides an opportunity to draw attention to the HIV epidemic around the world. Many people choose to organise an event on or around December 1st, to raise awareness of HIV, to remember loved ones who have died, to show solidarity with people living with HIV, to celebrate survival and health, and to raise money for HIV and related causes.

For many people the day is associated with the red ribbon, an instantly recognisable symbol. Wearing a red ribbon is a simple way to show your support, and there are also many other ways in which you can get involved. Globally there are an estimated 34 million people who have the virus. Despite the virus only being identified in 1984, more than 35 million people have died of HIV or AIDS, making it one of the most destructive pandemics in history.

Today, scientific advances have been made in HIV treatment, there are laws to protect people living with HIV and we understand so much more about the condition.



World AIDS Day is important because it reminds the public and Government that HIV has not gone away – there is still a vital need to raise money, increase awareness, fight prejudice and improve education.

Downloaded from: <http://www.aidsmap.com/resources/worldaidsday/What-is-World-AIDS-Day/page/2081844/>, <https://www.worldaidsday.org/about>



**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

## EPI WEEK 45

SYNDROMES

PAGE 2



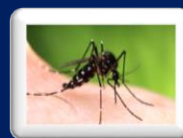
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

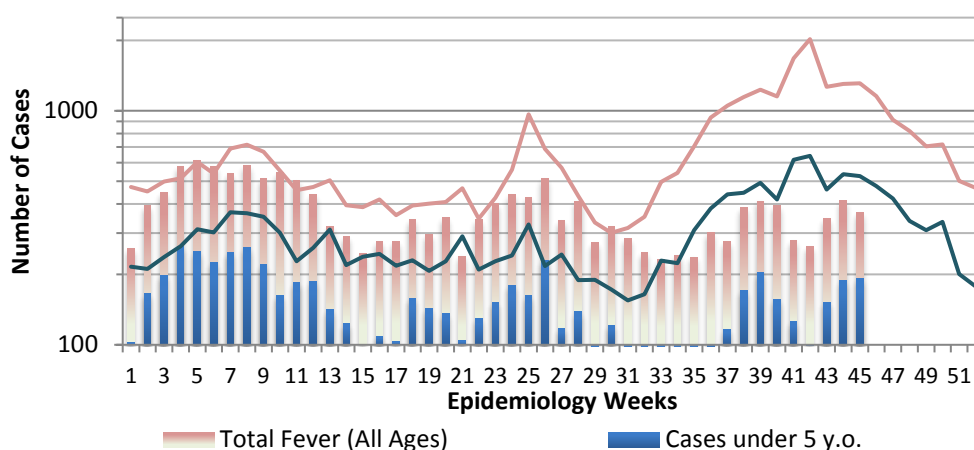
## REPORTS FOR SYNDROMIC SURVEILLANCE

### 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 45**

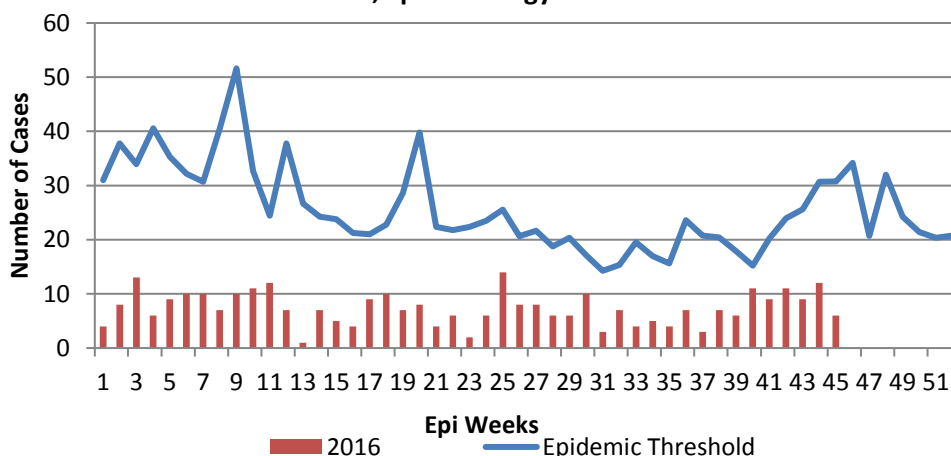


### FEVER AND NEUROLOGICAL

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 2016, Epidemiology Week 45**

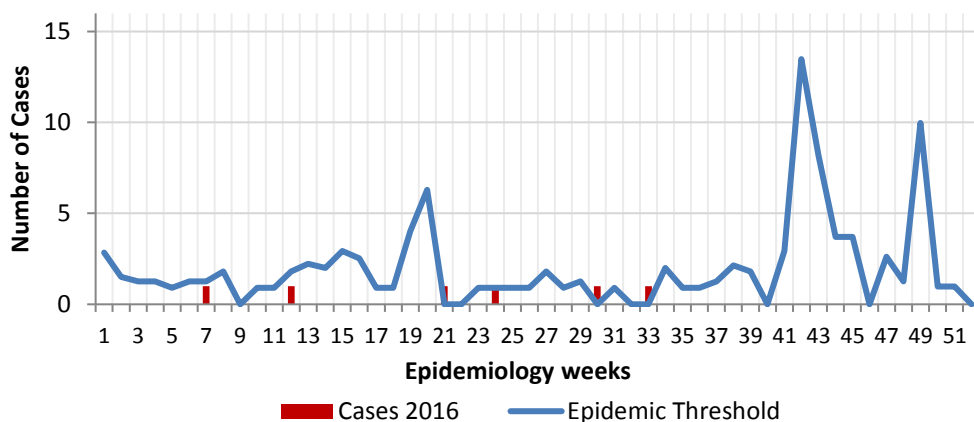


### FEVER AND HAEMORRHAGIC

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 2016, Epidemiology Week 45**



**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

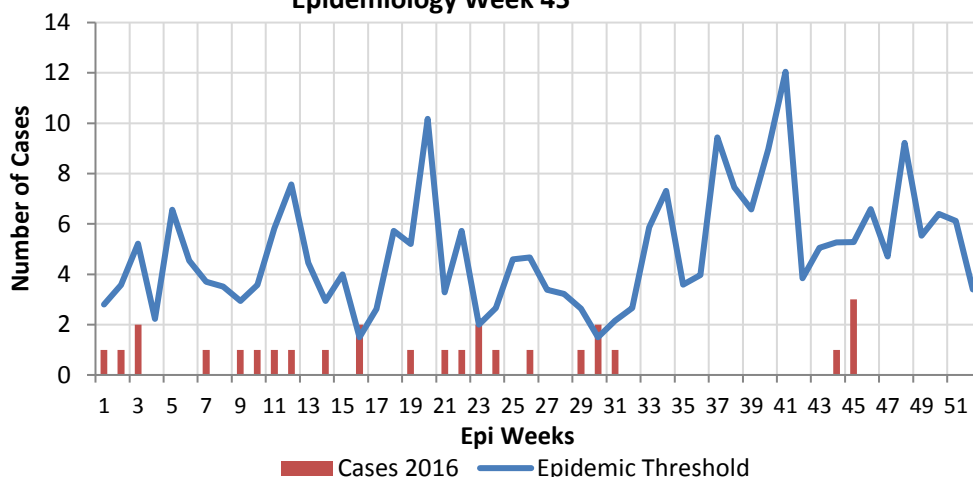
\*Incidence/Prevalence cannot be calculated

**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.



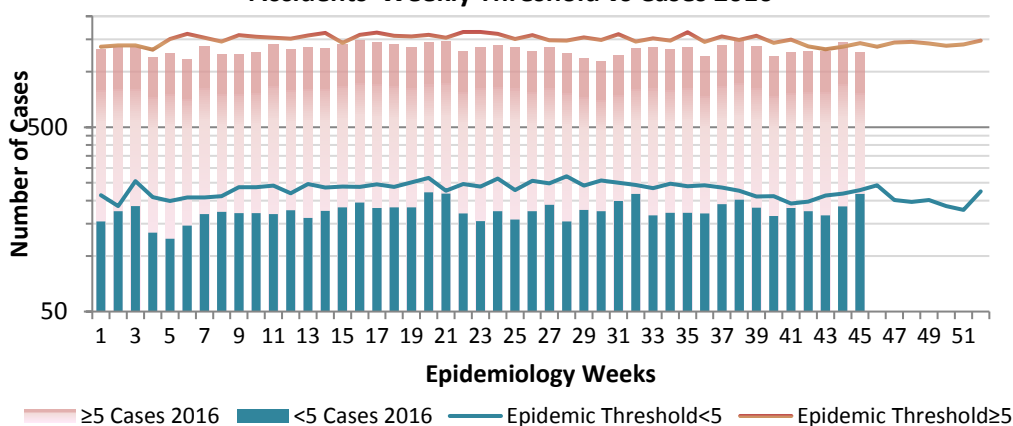
**Fever and Jaundice Weekly Threshold vs Cases 2016, Epidemiology Week 45**

**ACCIDENTS**

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



**Accidents Weekly Threshold vs Cases 2016**

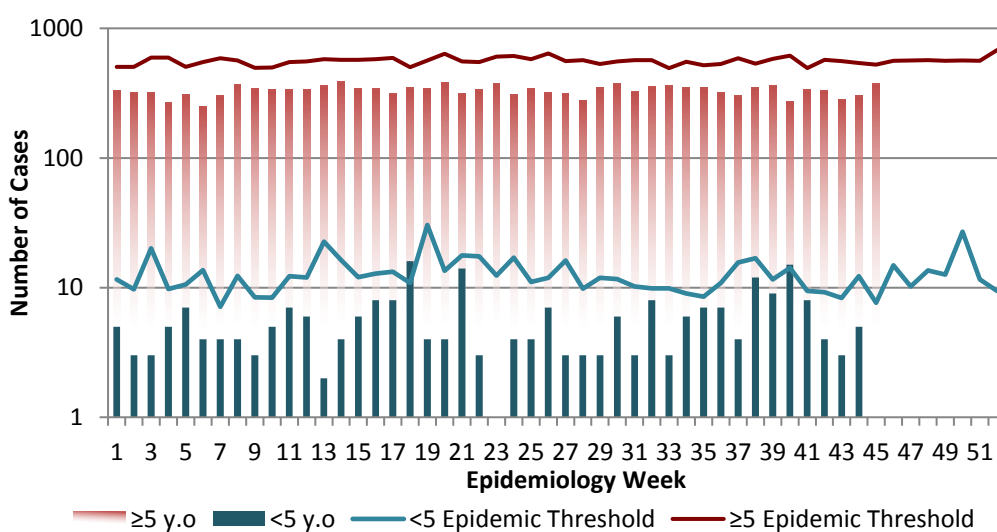
**VIOLENCE**

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

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 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

3

\*Incidence/Prevalence cannot be calculated

## 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.
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		70	130	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Cholera		0	0	
	Dengue Hemorrhagic Fever <sup>1</sup>		2	0	
	Hansen’s Disease (Leprosy)		1	0	
	Hepatitis B		27	30	
	Hepatitis C		4	9	
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)		1	0	
	Meningitis		38	66	
EXOTIC/ UNUSUAL	Plague		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.
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	
	Neonatal Tetanus		0	0	
	Typhoid Fever		1	0	
	Meningitis H/Flu		0	0	
SPECIAL PROGRAMMES	AFP/Polio		0	0	*Data not available
	Congenital Rubella Syndrome		0	0	
	Congenital Syphilis		0	0	1 Dengue Hemorrhagic Fever data include Dengue related deaths;
	Fever and Rash	Measles	0	2	
		Rubella	0	0	
	Maternal Deaths <sup>2</sup>		43	52	2 Maternal Deaths include early and late deaths.
	Ophthalmia Neonatorum		407	249	
	Pertussis-like syndrome		0	0	 
	Rheumatic Fever		6	13	
	Tetanus		0	1	
	Tuberculosis		0	0	
	Yellow Fever		0	0	
	Chikungunya		0	1	
	Zika Virus		197	0	



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

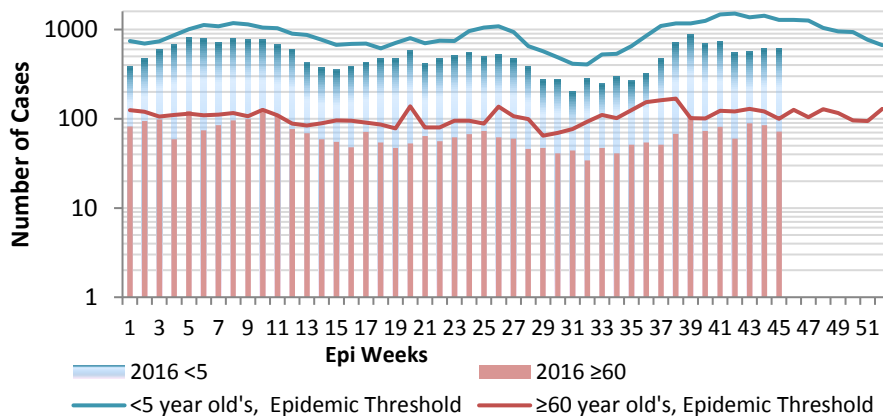
# EW 45

Nov 6-12, 2016

Epidemiology Week 45

September 2016		
	EW 45	YTD
SARI cases	18	955
<b>Total Influenza positive Samples</b>	<b>2</b>	<b>157</b>
<b>Influenza A</b>	<b>0</b>	<b>153</b>
H3N2	1	20
H1N1pdm09	0	80
Not subtyped	1	53
<b>Influenza B</b>	<b>0</b>	<b>3</b>
<b>Other</b>	<b>0</b>	<b>1</b>

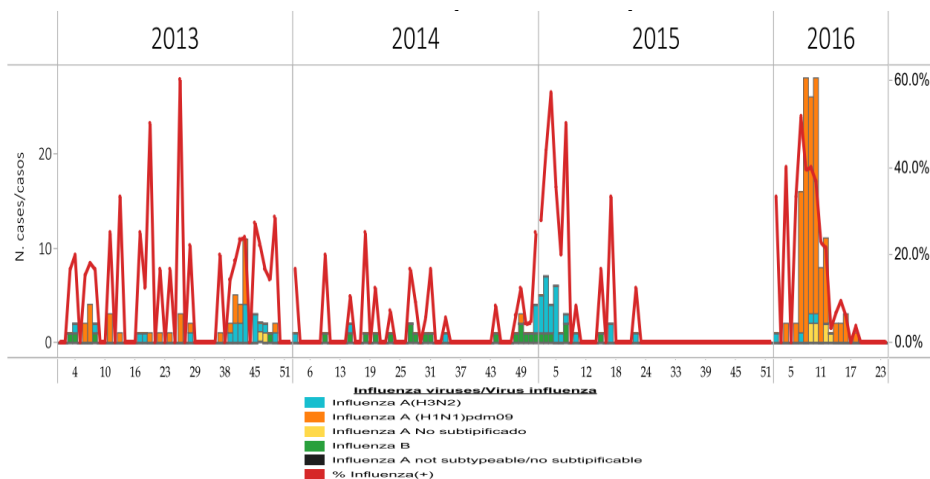
**Fever & Resp Weekly Threshold vs Cases 2016, Epidemiology Week 45**



## 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 4.2% of visits to health facilities.

### Incidence

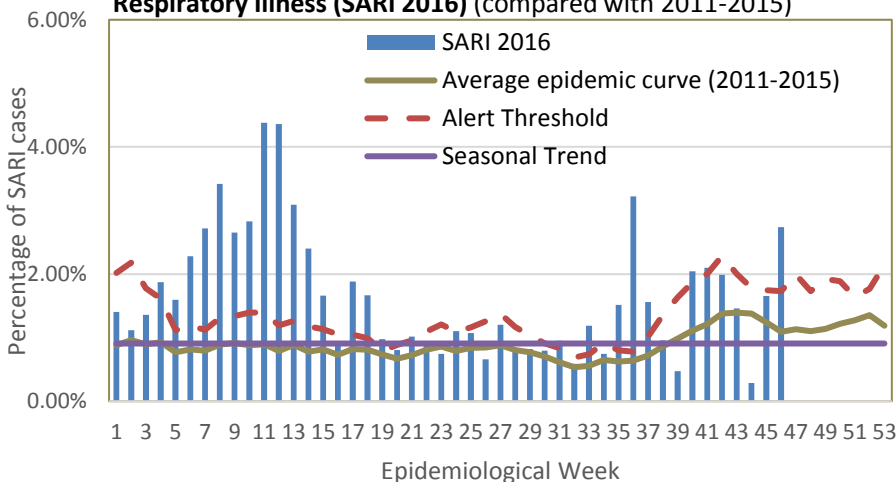
Cannot be calculated, as data sources do not collect all cases of Respiratory illness.



### Prevalence

Not applicable to acute respiratory conditions.

**Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2016) (compared with 2011-2015)**



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



**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

5

\*Incidence/Prevalence cannot be calculated

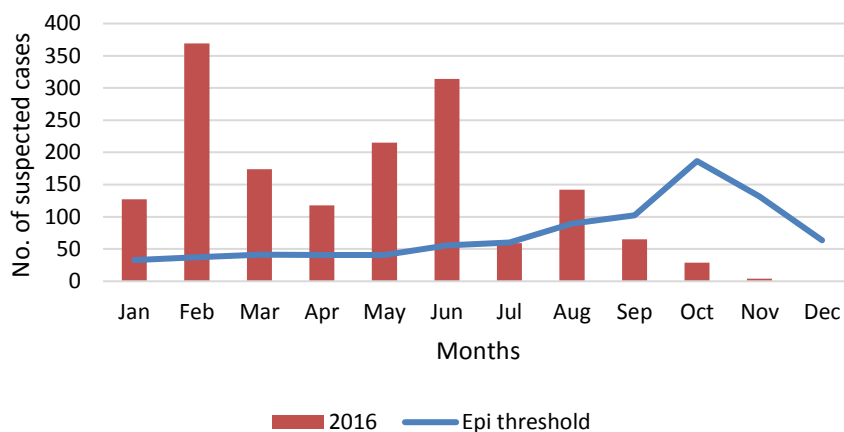
# Dengue Bulletin

Nov 6-12, 2016

Epidemiology Week 45

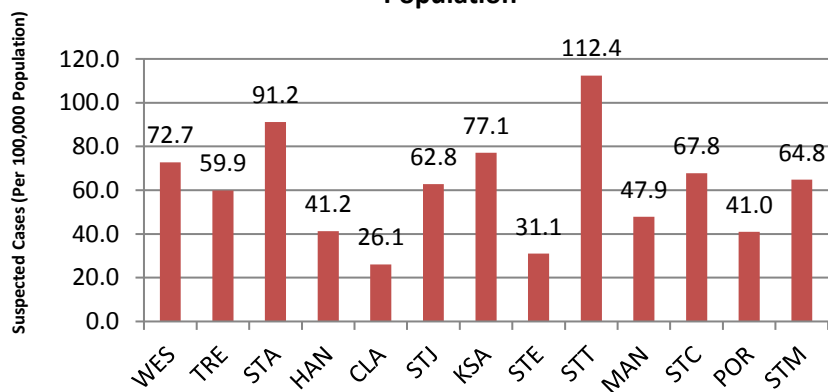


## 2016 Cases vs. Epidemic Threshold



DISTRIBUTION					
Year-to-Date Suspected Dengue Fever					
	M	F	Un-kwn	Total	%
<1	4	10	0	14	1
1-4	24	25	0	45	5
5-14	126	135	3	229	19
15-24	101	180	4	245	20
25-44	151	373	6	451	29
45-64	62	184	2	209	10
≥65	9	18	0	25	2
Unknown	48	89	444	136	14
<b>TOTAL</b>	<b>525</b>	<b>1014</b>	<b>730</b>	<b>2269</b>	<b>100</b>

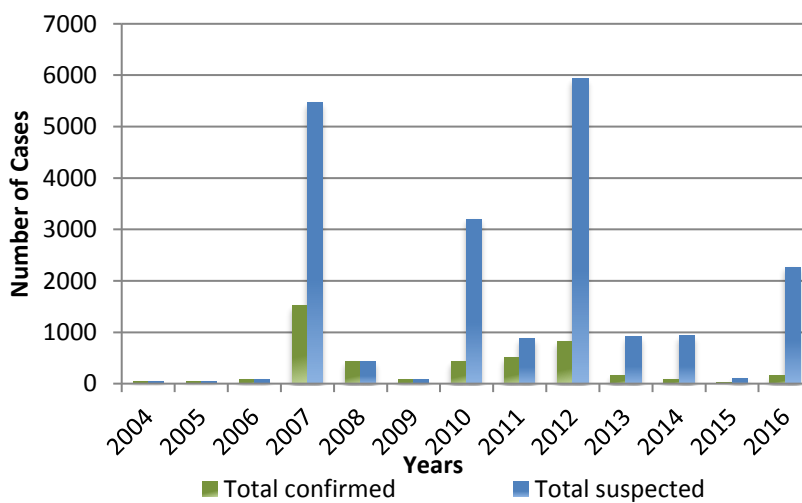
## Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2016		2015 YTD
		EW 45	YTD	
Total Suspected Dengue Cases		3	2269	30
Lab Confirmed Dengue cases		0	154	2
CONFIRMED	DHF/DSS	0	3	0
	Dengue Related Deaths	0	0	0

## Dengue Cases by Year: 2004-2016, 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 45

Nov 6-12, 2016

Epidemiology Week 45

## Weekly Breakdown of Gastroenteritis cases

Year	EW 45			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	113	191	304	5,837	9,586	15,423
2015	167	187	354	9,552	10,352	19,904

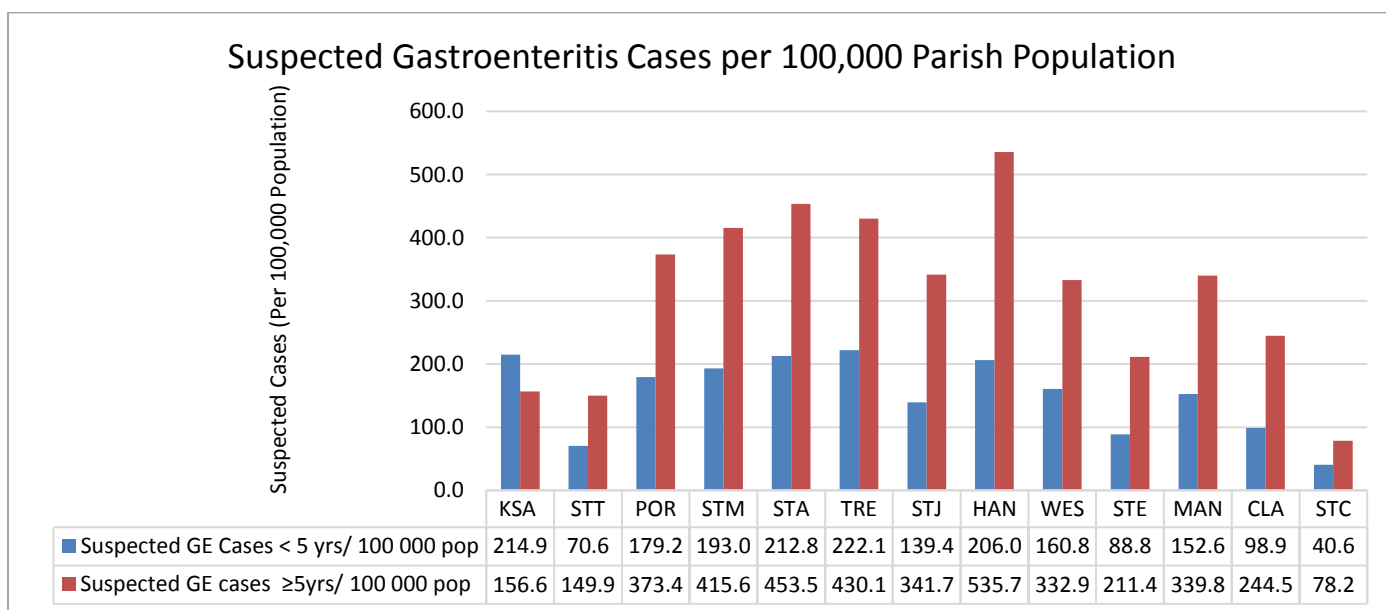
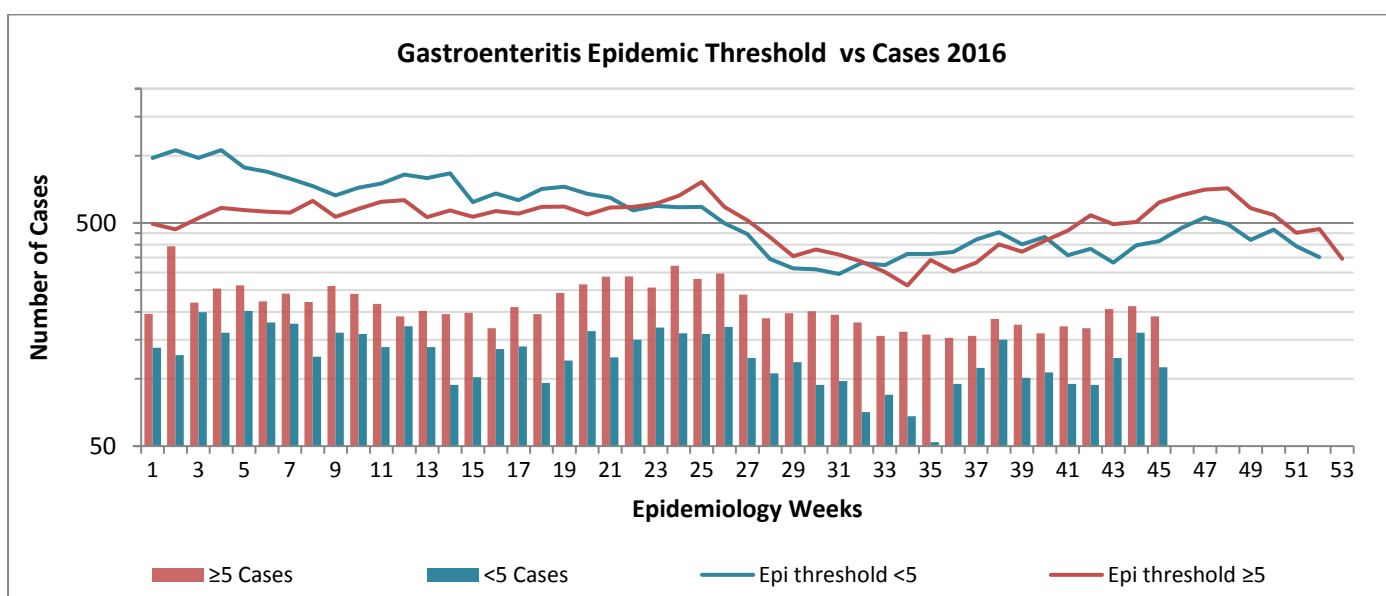
### Gastroenteritis:

In Epidemiology Week 45, 2016, the total number of reported GE cases showed a 17.7% decrease compared to EW 45 of the previous year.

The year to date figure showed a 21% decrease in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2015-2016



**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

# 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: [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

\*Incidence/Prevalence cannot be calculated



SENTINEL  
REPORT- 79 sites\*.  
Automatic reporting