

Week ending October 22, 2016

Epidemiology Week 42

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight World Diabetes Day

Theme: Eyes on Diabetes

WDD is the world's largest diabetes awareness campaign reaching a global audience of over 1 billion people in more than 160 countries. The campaign draws attention to issues of paramount importance to the diabetes world and keeps diabetes firmly in the public and political spotlight.

#### The World Diabetes Day campaign aims to:

Be the global driver to promote the importance of taking coordinated and concerted actions to confront diabetes as a critical global health issue.



The campaign is represented by a blue circle logo that was adopted in 2007 after the passage of the UN Resolution on diabetes. The blue circle is the global symbol for diabetes awareness. It signifies the unity of the global diabetes community in

response to the diabetes epidemic.

Over 640 million of us may be living with type 2 diabetes by 2040. Delayed diagnosis means that many people with type 2 diabetes suffer from at least one complication by the time they are diagnosed with diabetes.

A healthy lifestyle could prevent up to 70% of type 2 diabetes, healthy eating can help reduce risks.

Source: <http://www.idf.org/WDD15-guide/>,  
[https://www.google.com.jm/search?q=WDD+2016+banner&rlz=1C1KMZB\\_enJM682JM683&espv=2&biw=1366&bih=638&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjD6Kf0pY\\_QAhVBSWMKHd5FBt8Q\\_AUIBigB#imgsrc=xTF42dq7t\\_fRpM%3A](https://www.google.com.jm/search?q=WDD+2016+banner&rlz=1C1KMZB_enJM682JM683&espv=2&biw=1366&bih=638&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjD6Kf0pY_QAhVBSWMKHd5FBt8Q_AUIBigB#imgsrc=xTF42dq7t_fRpM%3A)

## EPI WEEK 42

SYNDROMES

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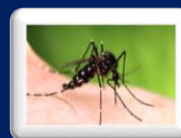
CLASS 1 DISEASES

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INFLUENZA

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DENGUE FEVER

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GASTROENTERITIS

PAGE 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

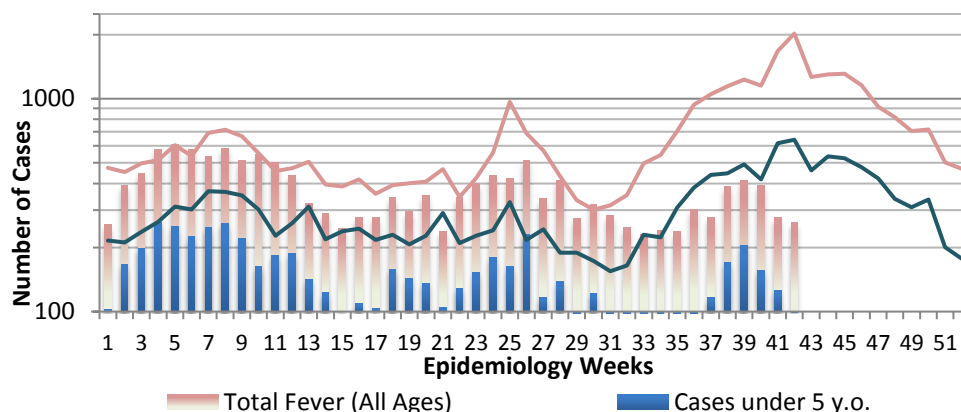
## REPORTS FOR SYNDROMIC SURVEILLANCE

### 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.



**Fever in under 5y.o. and Total Population 2016 vs Epidemic Thresholds, Epidemiology Week 42**

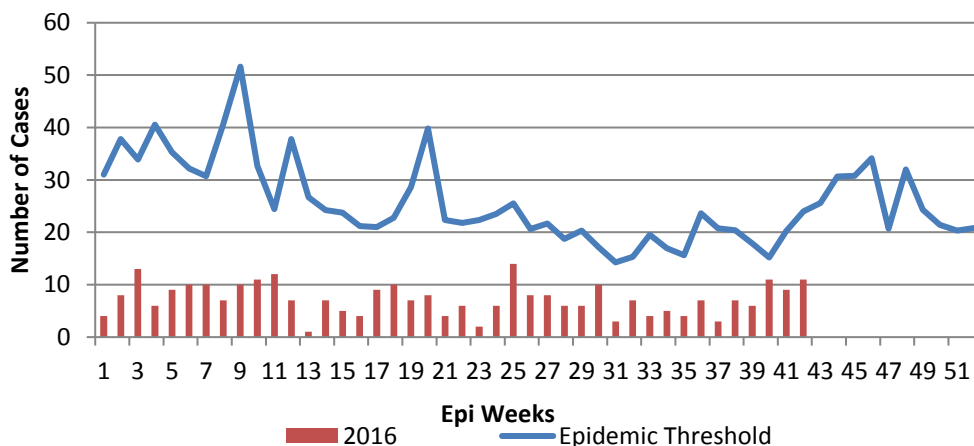


### FEVER AND NEUROLOGICAL

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 42**

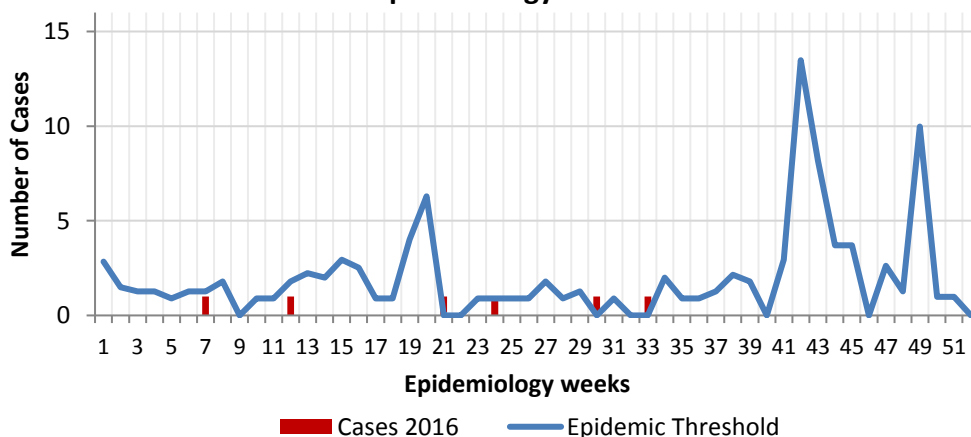


### FEVER AND HAEMORRHAGIC

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 42**



**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

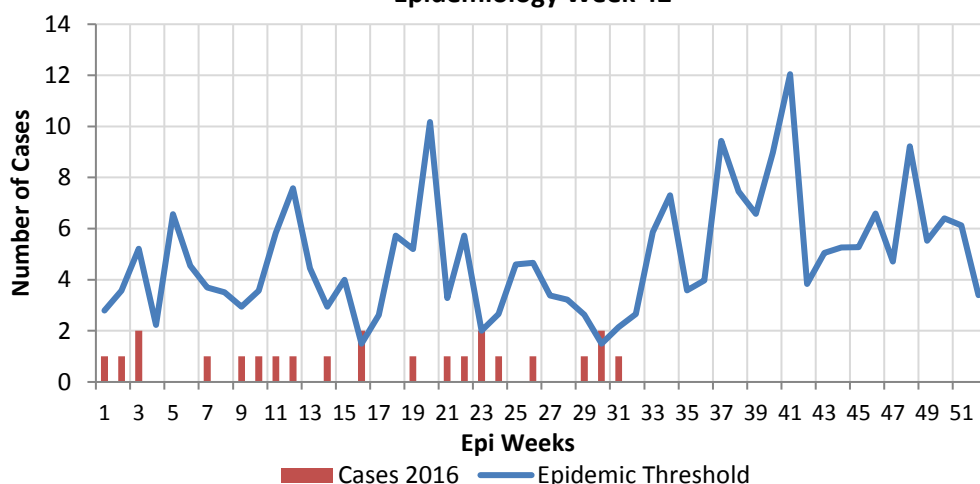
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**FEVER AND JAUNDICE**

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



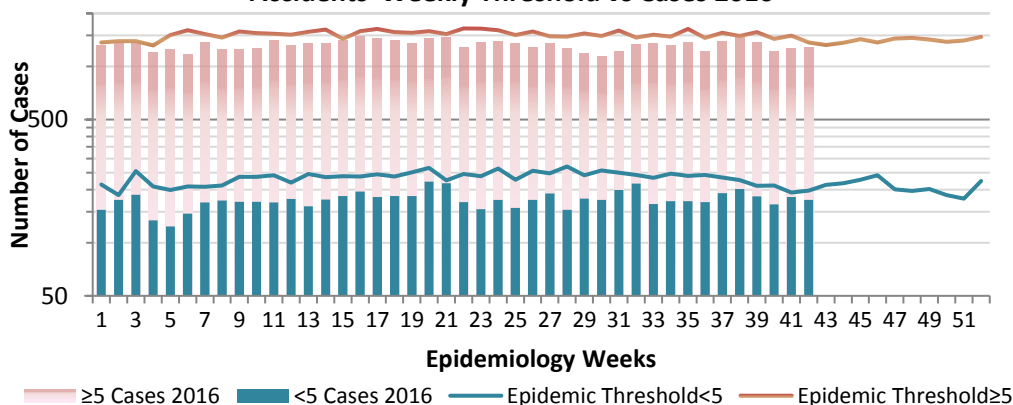
**Fever and Jaundice Weekly Threshold vs Cases 2016, Epidemiology Week 42**

**ACCIDENTS**

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



**Accidents Weekly Threshold vs Cases 2016**

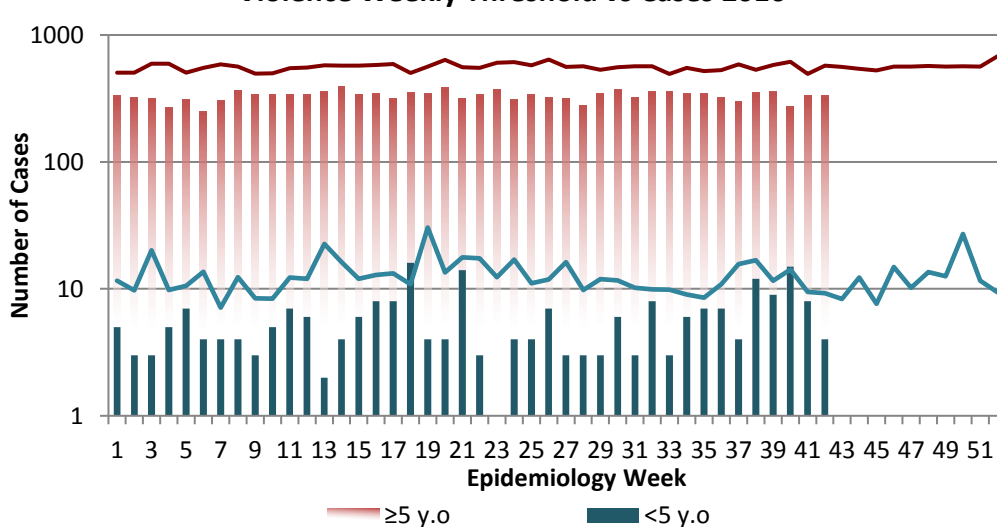
**VIOLENCE**

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**



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## 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	62	128	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	26	30		
	Hepatitis C	4	8		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	1	0		
	Meningitis	31	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.  *Data not available  <sup>1</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;  <sup>2</sup> Maternal Deaths include early and late deaths.	
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		
	Congenital Rubella Syndrome		0		0
	Congenital Syphilis		0		0
	Fever and Rash	Measles	0		2
		Rubella	0		0
	Maternal Deaths <sup>2</sup>		23		24
	Ophthalmia Neonatorum		343		245
	Pertussis-like syndrome		0		0
	Rheumatic Fever		1		9
	Tetanus		0		1
	Tuberculosis		0		0
	Yellow Fever		0		0
	Chikungunya	0	1		
	Zika Virus	158	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.

1 Dengue Hemorrhagic Fever data include Dengue related deaths;

2 Maternal Deaths include early and late deaths.



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## NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 42

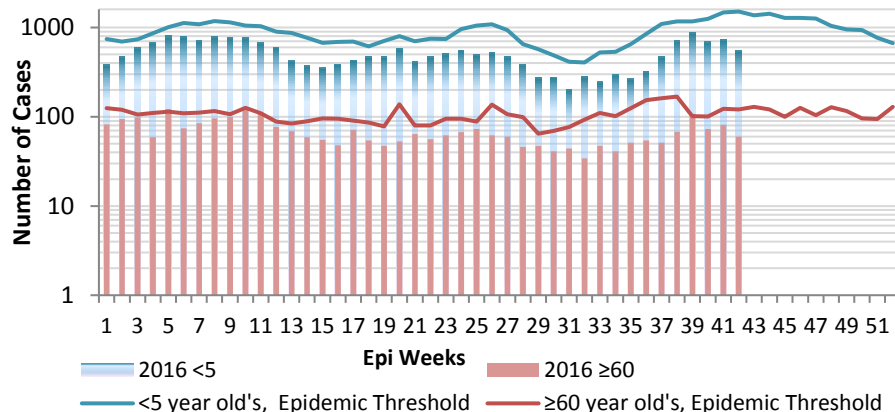
Oct. 16-22, 2016

Epidemiology Week 42

September 2016

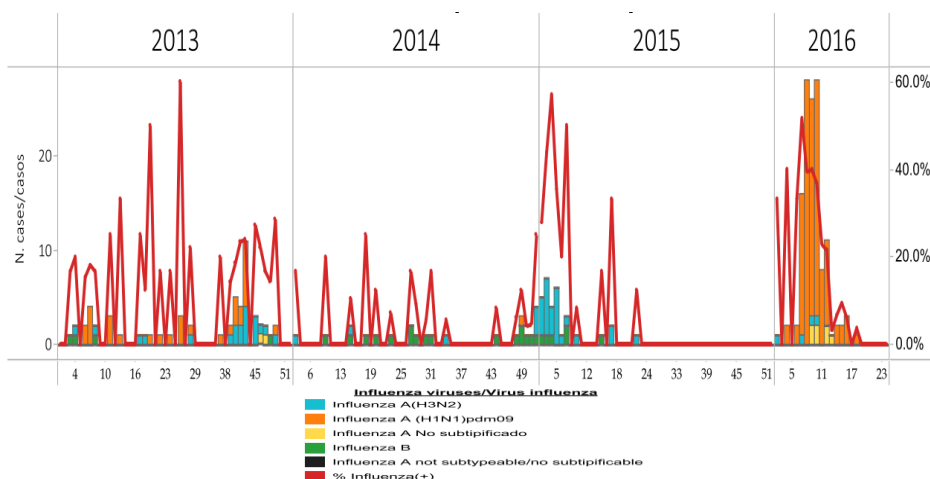
	EW 42	YTD
SARI cases	20	918
Total Influenza positive Samples	1	133
<b>Influenza A</b>	0	113
H3N2	1	10
H1N1pdm09	0	80
Not subtyped	1	42
<b>Influenza B</b>	0	0
<b>Other</b>	0	1

Fever &amp; Resp Weekly Threshold vs Cases 2016, Epidemiology Week 42

**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.

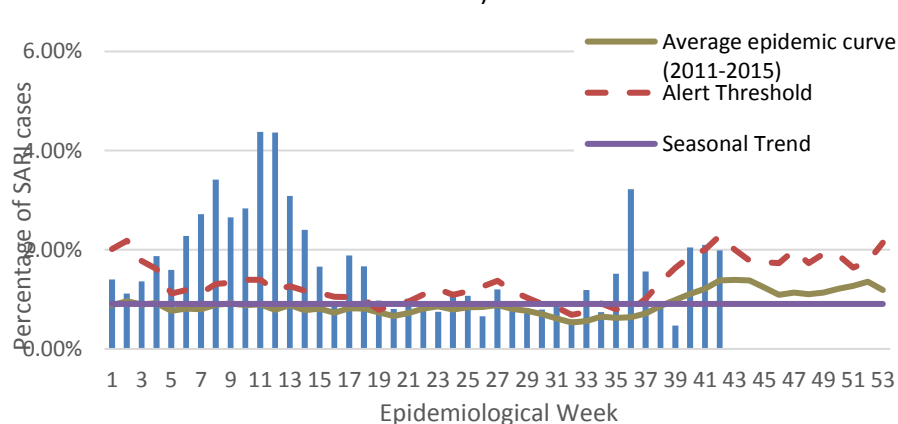
**Incidence**

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**

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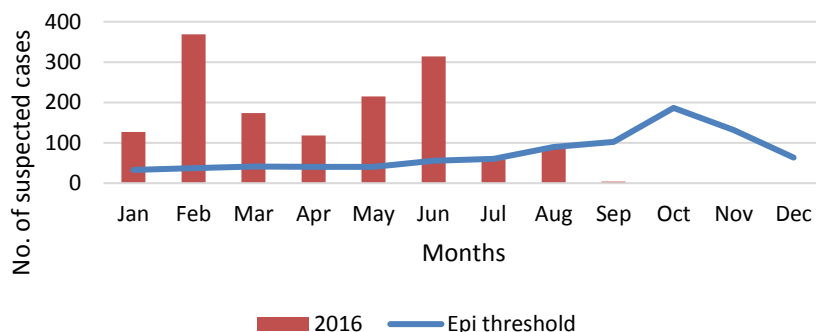
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# Dengue Bulletin

Oct. 16-22, 2016

Epidemiology Week 42

## 2016 Cases vs. Epidemic Threshold

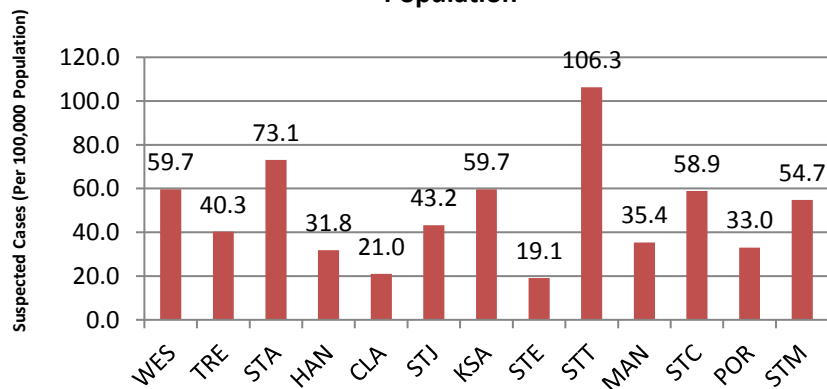


## DISTRIBUTION


### 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	271	136	14
<b>TOTAL</b>	<b>525</b>	<b>1014</b>	<b>286</b>	<b>1825</b>	<b>100</b>

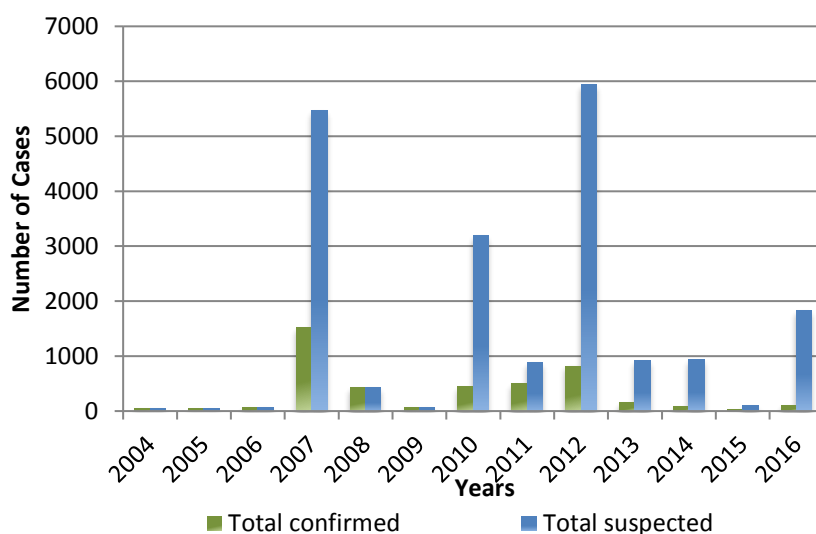
## Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2016		2015 YTD
		EW 42	YTD	
				
Total Suspected Dengue Cases		1	1825	30
Lab Confirmed Dengue cases		0	110	2
CONFIRMED	DHF/DSS	0	2	0
	Dengue Related Deaths	0	0	0

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



**NOTIFICATIONS-**  
All clinical sites



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# Gastroenteritis Bulletin

EW  
42

Oct. 16-22, 2016

Epidemiology Week 42

## Weekly Breakdown of Gastroenteritis cases

Year	EW 41			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	94	169	263	5,439	8,977	14,416
2015	153	200	353	9,034	9,755	18,789

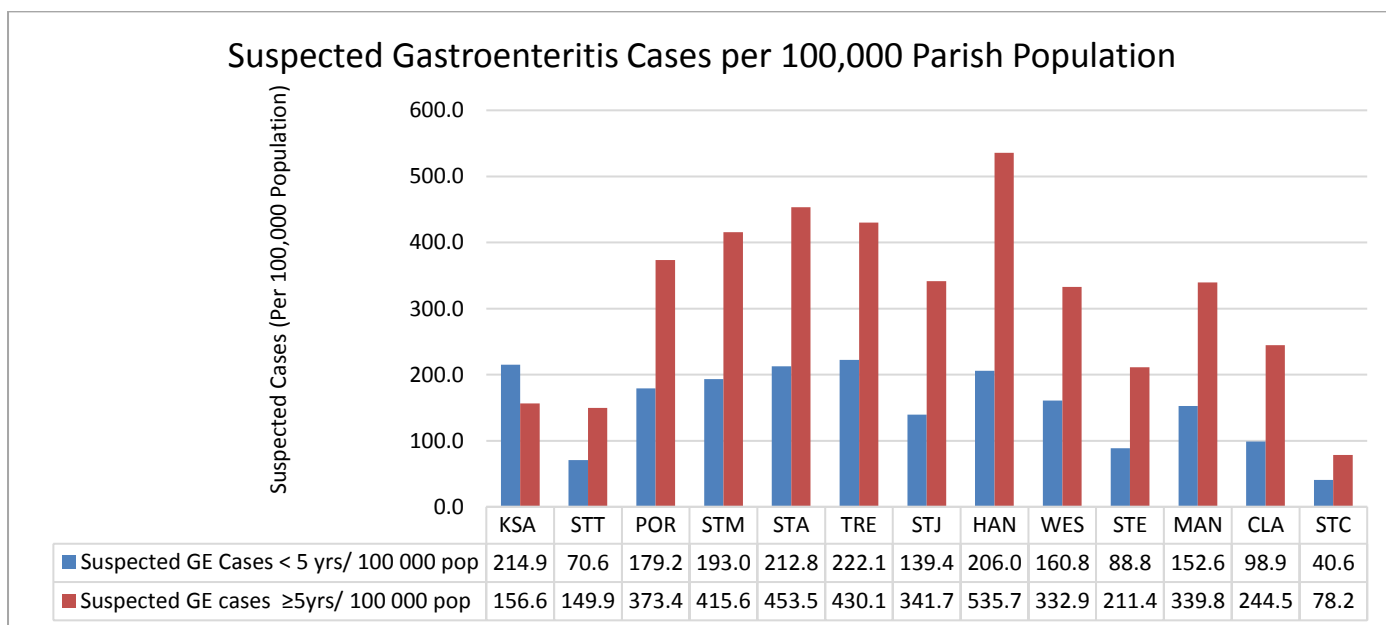
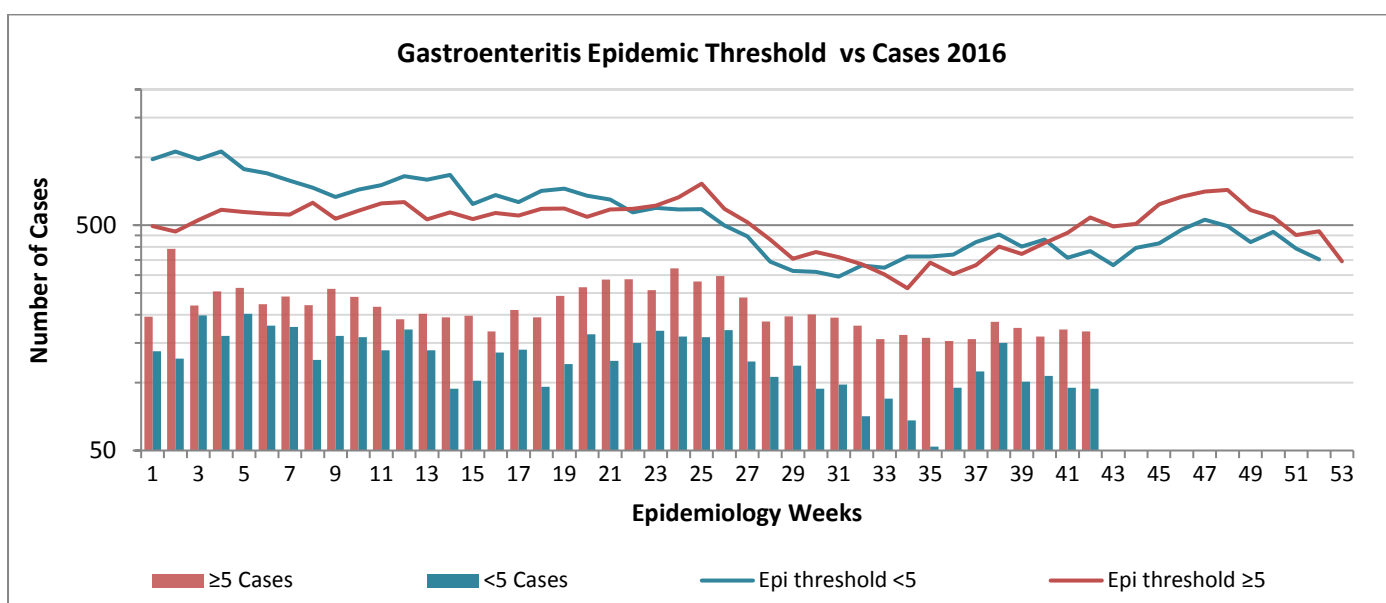
### Gastroenteritis:

In Epidemiology Week 42, 2016, the total number of reported GE cases showed a 19% decrease compared to EW 42 of the previous year.

The year to date figure showed a 21.7% decrease in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2015-2016



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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.



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