

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

## WORLD KIDNEY DAY 2016 (March 10, 2016)

Theme: **Kidney Disease & Children.**

**Act Early to Prevent It!**



— KIDNEY —  
DISEASE  
& CHILDREN

**ACT EARLY  
TO PREVENT IT!**

Kidney disease can affect children in various ways, ranging from treatable disorders without long-term consequences to life-threatening conditions.

Acute kidney disease (AKI) is a serious condition that develops suddenly, often lasts a short time and may disappear completely once the underlying cause has been treated and if the patient receives the needed medical management, but it can also have long-lasting consequences with life-long problems.

Chronic kidney disease (CKD) doesn't disappear with treatment and tends to worsen over time. CKD eventually leads to kidney failure (end-stage kidney disease) and needs to be treated with a kidney transplant or blood-filtering treatments (dialysis) for life.

#### **Acute Kidney Injury or AKI**

AKI, in children, can be caused by trauma such as burns, dehydration, bleeding, injury or surgery. Trauma can cause very low blood pressure, which in turn can result in insufficient blood supply to the kidneys leading to acute kidney failure.

#### **Chronic Kidney Disease or CKD**

From birth to age 4, birth defects and hereditary diseases are the leading causes of kidney failure. Between ages 5 and 14, kidney failure is most commonly caused by hereditary diseases, nephrotic syndrome, and systemic diseases. Between ages 15 and 19, diseases that affect the glomeruli are the leading cause of kidney failure.

Children's kidney diseases are kidney diseases for life. The majority of children with kidney disease progress to end-stage kidney diseases in adulthood.

Source: <http://www.worldkidneyday.org/2016-campaign/2016-wkd-theme/>

## EPI WEEK 8



SYNDROMES

PAGE 2



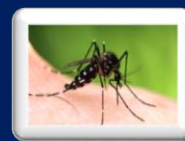
CLASS 1 DISEASES

PAGE 5



INFLUENZA

PAGE 7



DENGUE FEVER

PAGE 8



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

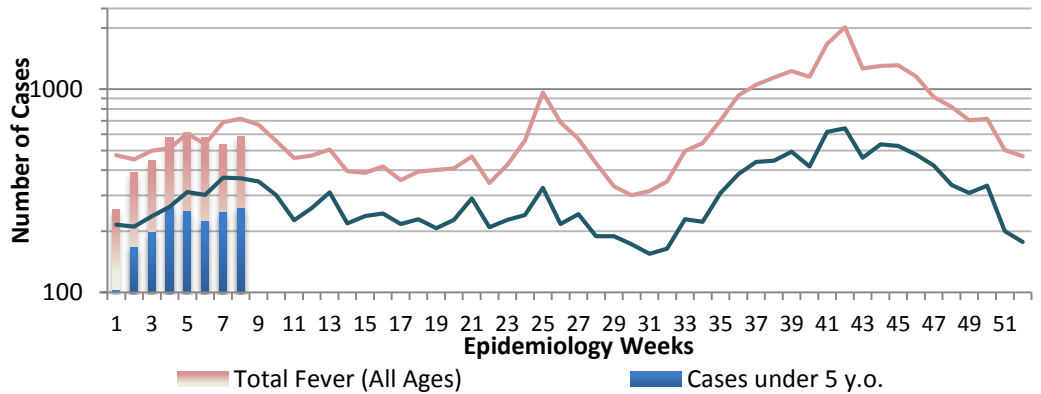
# REPORTS FOR SYNDROMIC SURVEILLANCE

## 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 8

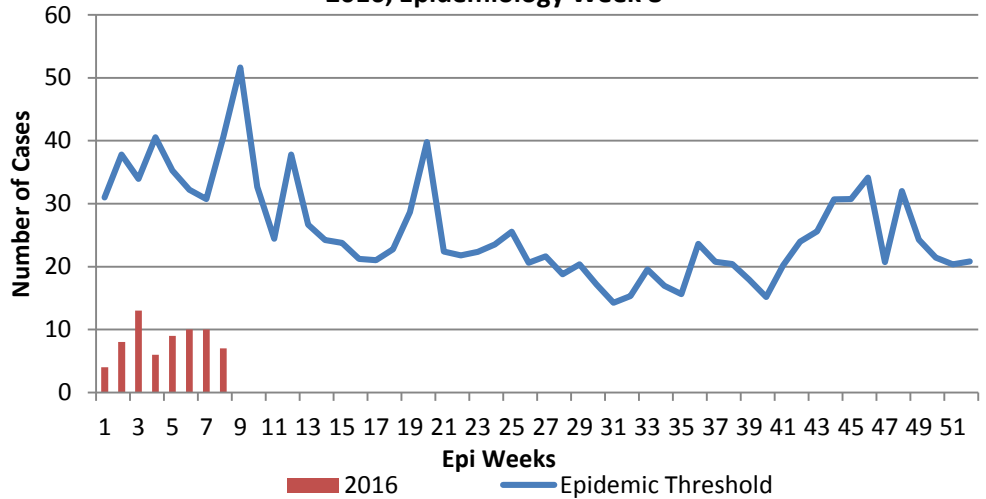


## FEVER AND NEUROLOGICAL

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 8

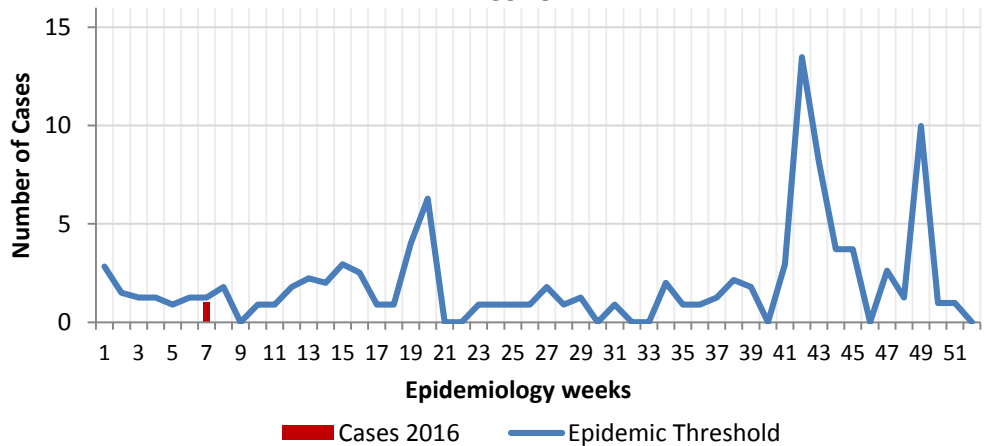


## FEVER AND HAEMORRHAGIC

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 8



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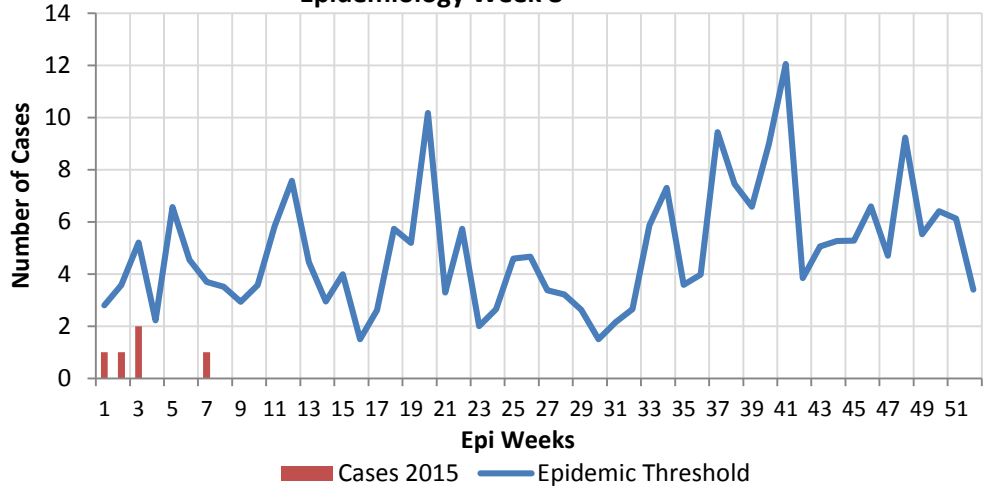
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**FEVER AND JAUNDICE**

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 8**

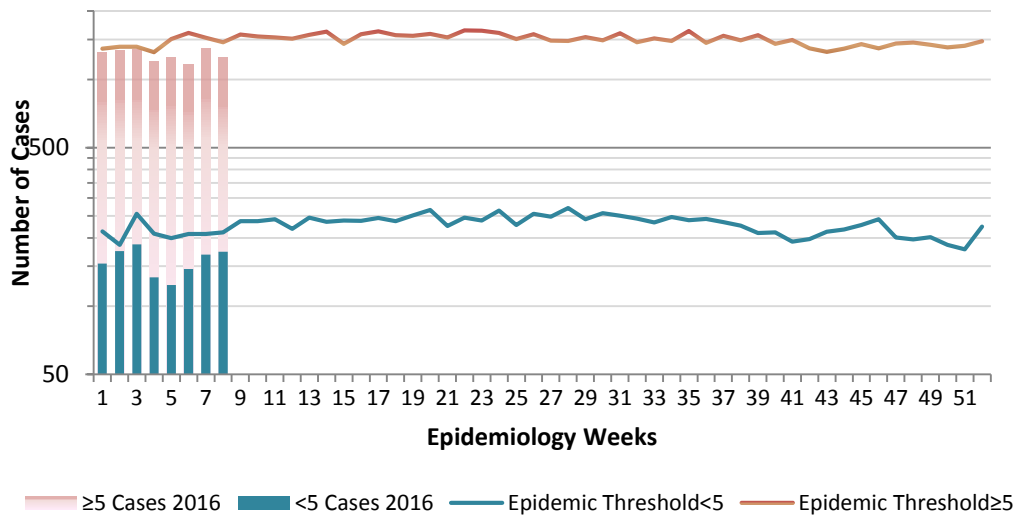


**ACCIDENTS**

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



**Accidents Weekly Threshold vs Cases 2016**

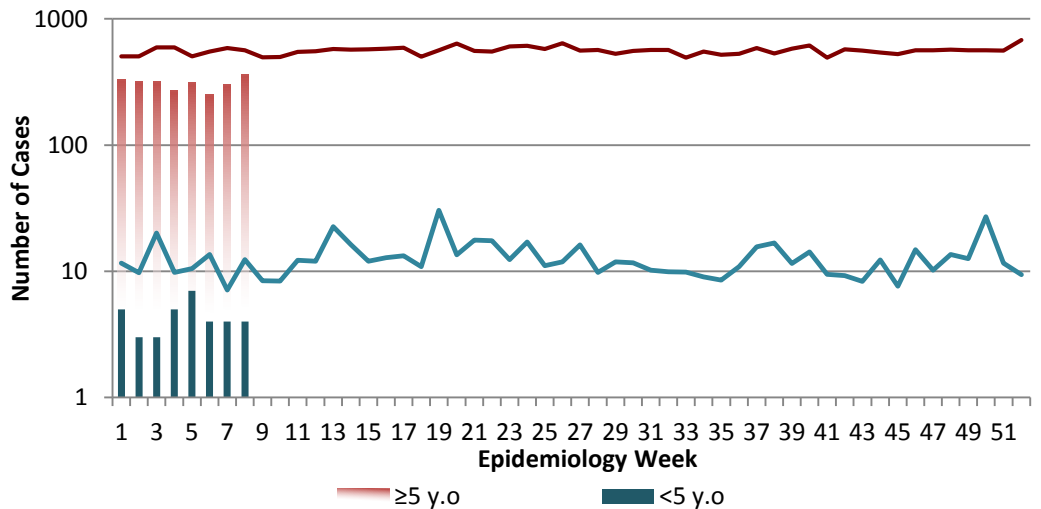


**VIOLENCE**

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	2	30	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	8		
	Hepatitis C	0	1		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	1	0		
	Meningitis	3	19		
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>	7	12		
	Ophthalmia Neonatorum	64	63		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	2		
	Tetanus	0	1		
	Tuberculosis	0	0		
	Yellow Fever	0	0		
	Chikungunya	3	1		
Zika Virus	1	0			



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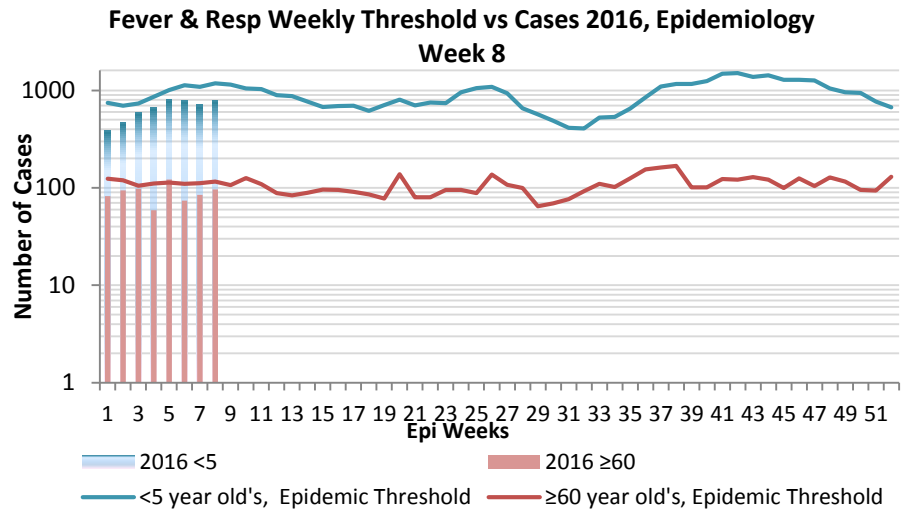
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

**EW 8**

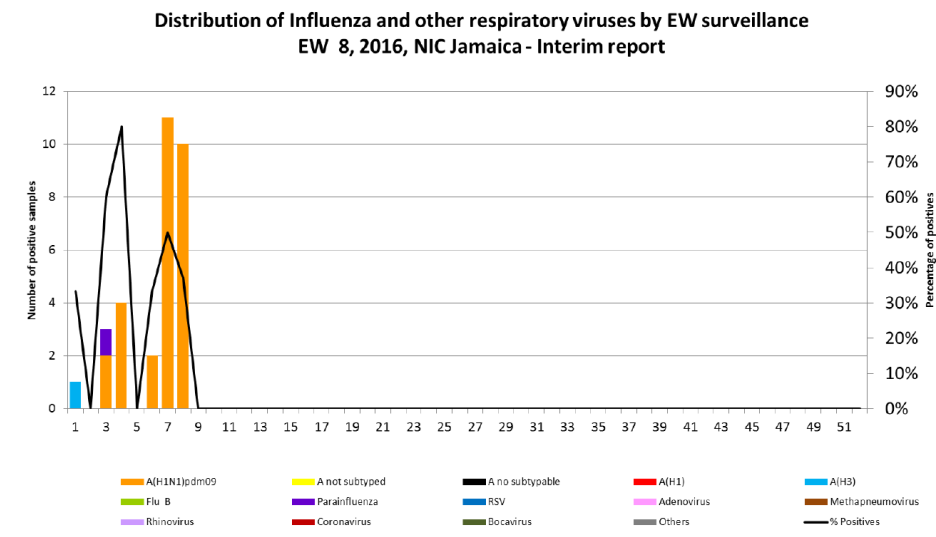
February 21– February 27, 2016

Epidemiology Week 8

February, 2016		
	EW 8	YTD
SARI cases	47	251
<b>Total Influenza positive</b>	<b>10</b>	<b>31</b>
<b>Samples</b>		
<b>Influenza A</b>	<b>10</b>	<b>30</b>
H3N2	0	1
H1N1pdm09	10	29
<b>Influenza B</b>	<b>0</b>	<b>0</b>
<b>Other</b>	<b>0</b>	<b>1</b>



**Comments:**  
 The percent positivity of influenza viruses circulating among respiratory samples tested in EW 8, 2016 among SARI cases was 37% (N=27). 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.

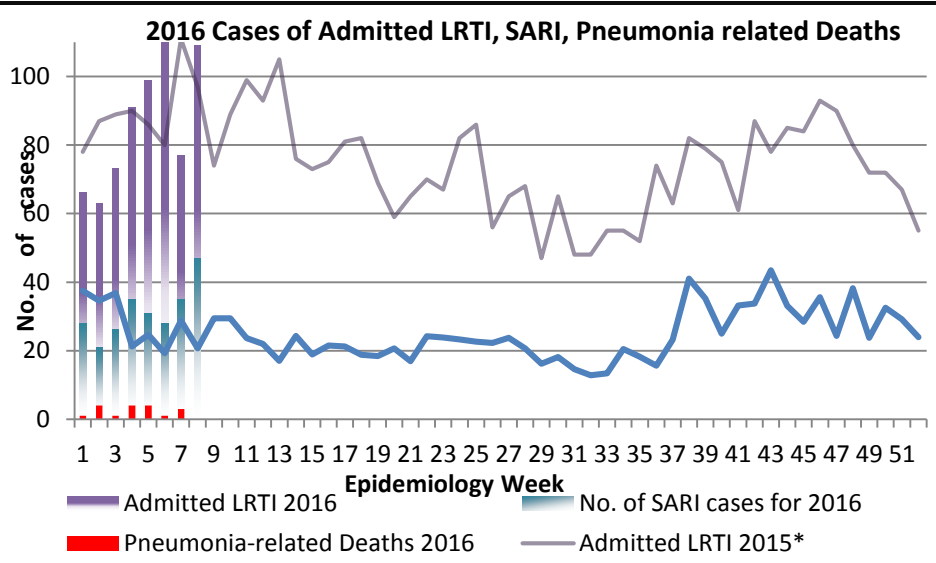


**INDICATORS**

**Burden**  
 Year to date, respiratory syndromes account for 6.8% 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**



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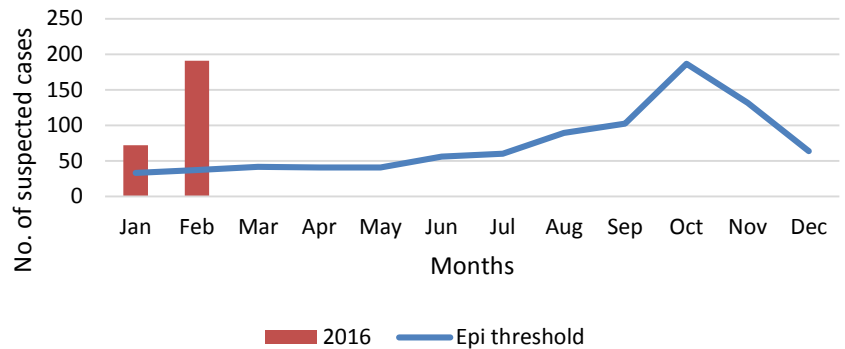
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# Dengue Bulletin

February 21– February 27, 2016

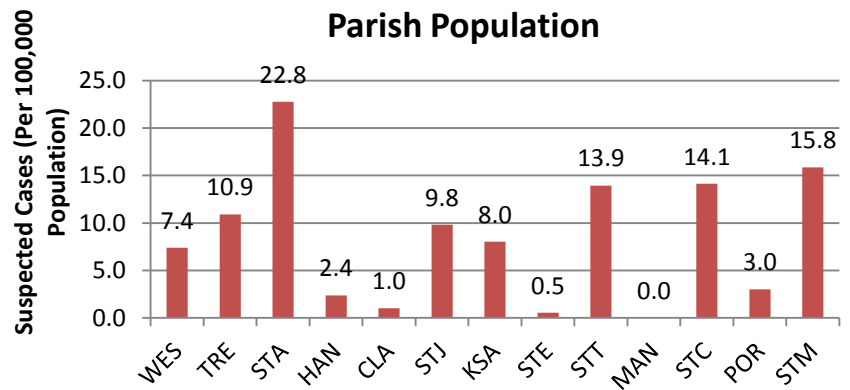
Epidemiology Week 8

2016 Cases vs. Epidemic Threshold



DISTRIBUTION				
Year-to-Date Suspected Dengue Fever				
	M	F	Total	%
<1	0	2	2	2
1-4	1	0	1	1
5-14	2	2	4	3
15-24	1	2	3	2
25-44	1	0	1	1
45-64	0	0	0	0
≥65	0	0	0	0
Unknown	155	129	284	91
<b>TOTAL</b>	<b>160</b>	<b>135</b>	<b>295</b>	<b>100</b>

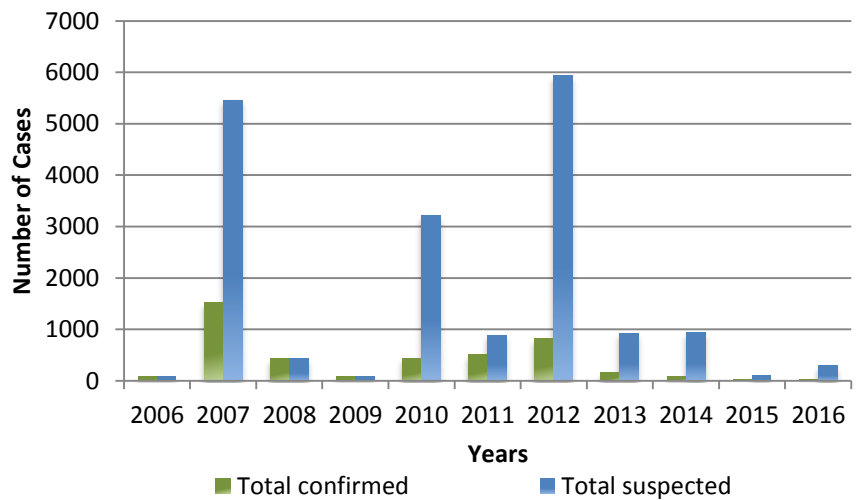
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2016		2015 YTD
		EW 8	YTD	
<b>Total Suspected Dengue Cases</b>		49	295	21
<b>Lab Confirmed Dengue cases</b>		0	23	0
<b>CONFIRMED</b>	DHF/DSS	0	0	0
	Dengue Related Deaths	0	0	0

Dengue Cases by Year: 2004-2016, Jamaica



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# Gastroenteritis Bulletin

EW  
8

February 21– February 27, 2016

Epidemiology Week 8

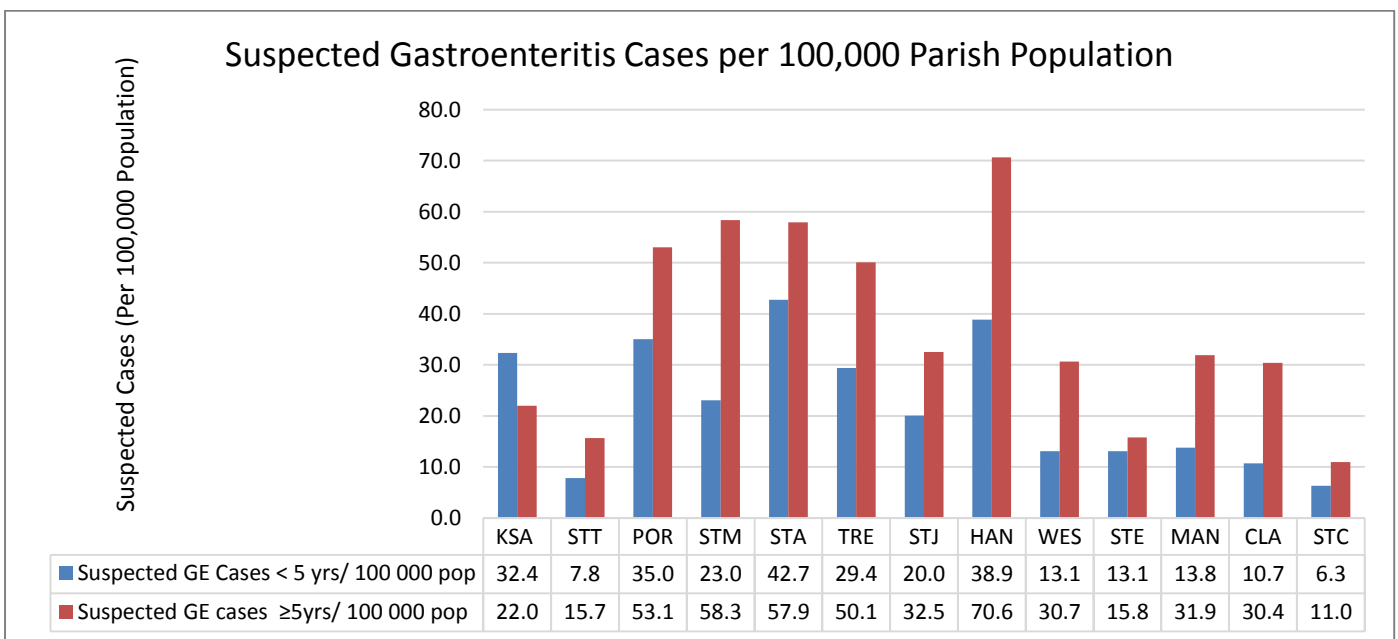
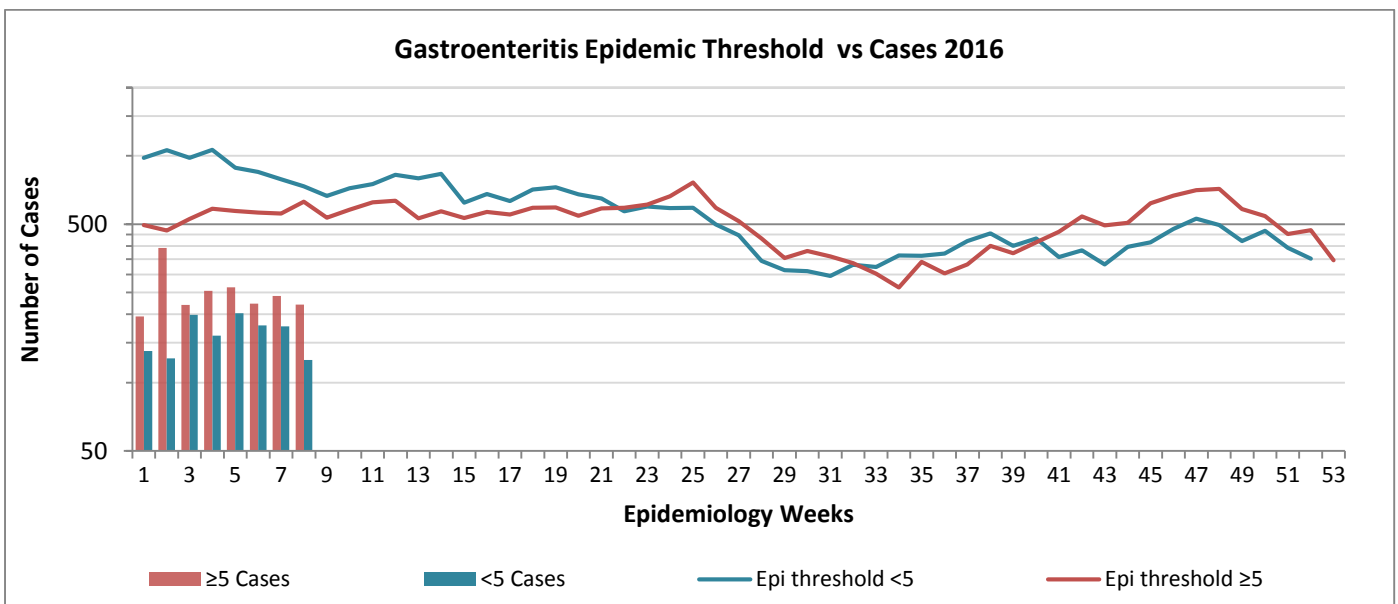
## Weekly Breakdown of Gastroenteritis cases

**Gastroenteritis:** Three or more loose stools within 24 hours.  
In Epidemiology Week 8, 2016, the total number of reported GE cases showed a 42% decrease compared to EW 8 of the previous year.  
The year to date figure showed a 44% decrease in cases for the period.



Year	EW 8			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	126	221	347	1310	1815	3125
2015	288	310	598	2999	2640	5639

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.



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NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
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