

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

## Ambient (outdoor) Air Quality and Health

#### Key facts

- Air pollution is a major environmental risk to health. By reducing air pollution levels, countries can reduce the burden of disease from stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases, including asthma.



- The lower the levels of air pollution, the better the cardiovascular and respiratory health of the population will be, both long- and short-term.

- The "WHO Air quality guidelines" provide an assessment of health effects of air pollution and thresholds for health-harmful pollution levels.

- Ambient (outdoor air pollution) in both cities and rural areas was estimated to cause 3.7 million premature deaths worldwide in 2012.
- Some 88% of those premature deaths occurred in low- and middle-income countries, and the greatest number in the WHO Western Pacific and South-East Asia regions.
- Policies and investments supporting cleaner transport, energy-efficient housing, power generation, industry and better municipal waste management would reduce key sources of urban outdoor air pollution.
- Reducing outdoor emissions from household coal and biomass energy systems, agricultural waste incineration, forest fires and certain agro-forestry activities (e.g. charcoal production) would reduce key rural and peri-urban air pollution sources in developing regions.
- Reducing outdoor air pollution also reduces emissions of CO<sub>2</sub> and short-lived climate pollutants such as black carbon particles and methane, thus contributing to the near- and long-term mitigation of climate change.
- In addition to outdoor air pollution, indoor smoke is a serious health risk for some 3 billion people who cook and heat their homes with biomass fuels and coal.



Source: <http://www.who.int/mediacentre/factsheets/fs313/en/>

## EPI WEEK 13



**SYNDROMES**

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**CLASS 1 DISEASES**

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**INFLUENZA**

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**DENGUE FEVER**

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**GASTROENTERITIS**

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**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

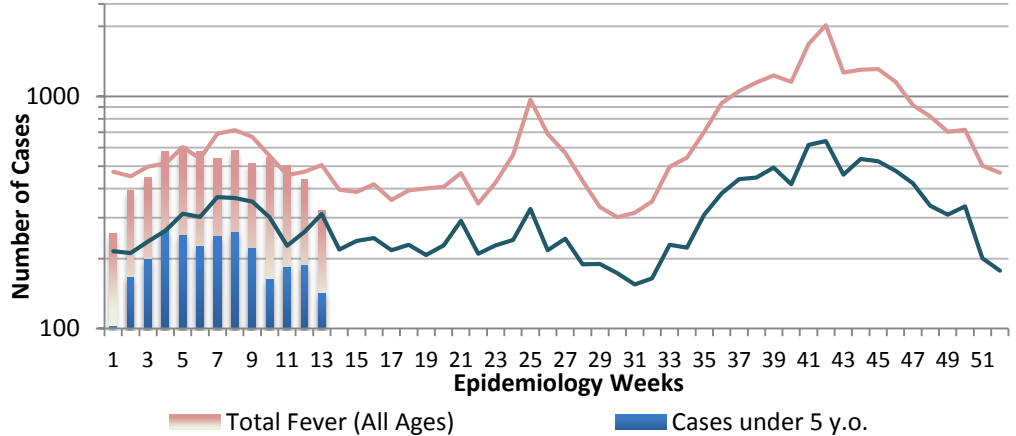
# REPORTS FOR SYNDROMIC SURVEILLANCE

## 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 13

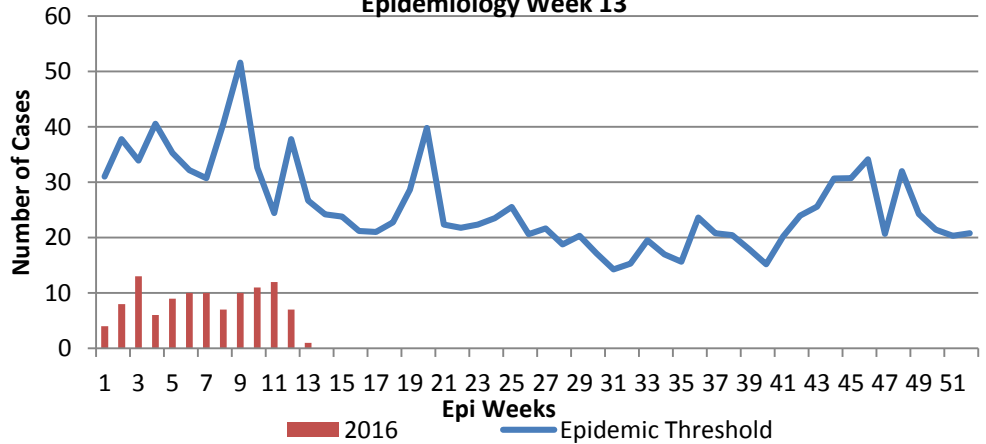


## FEVER AND NEUROLOGICAL

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 13

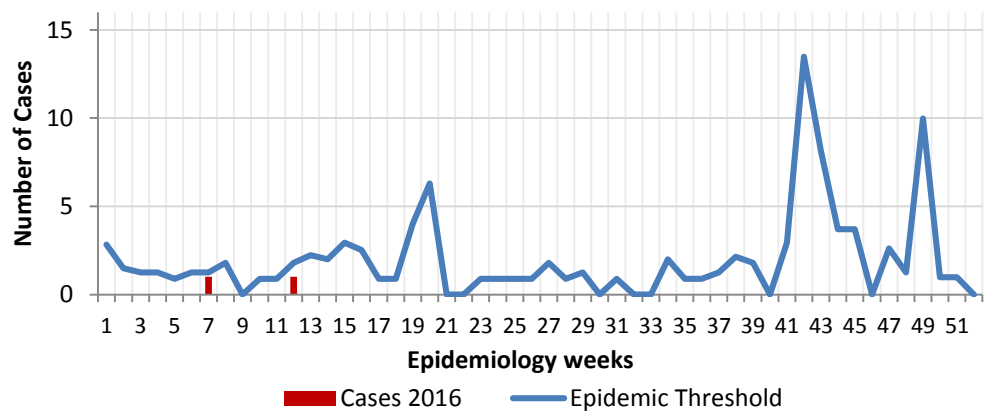


## FEVER AND HAEMORRHAGIC

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 13



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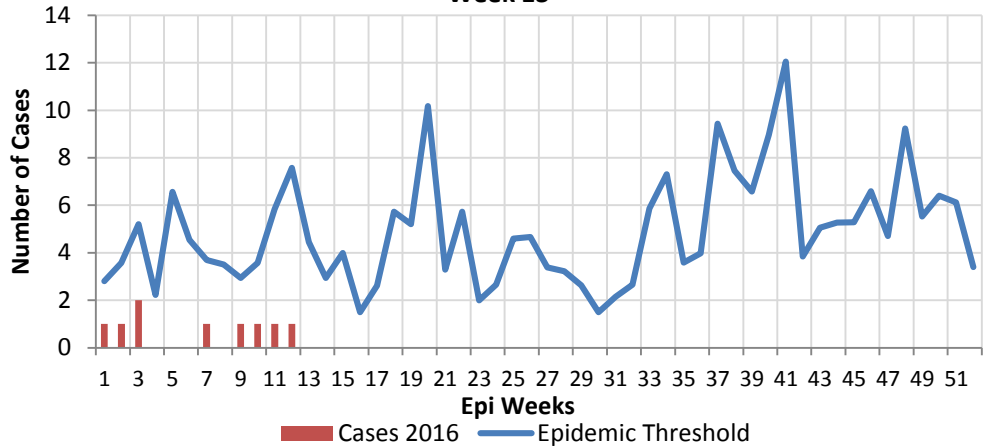
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**FEVER AND JAUNDICE**

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 13**

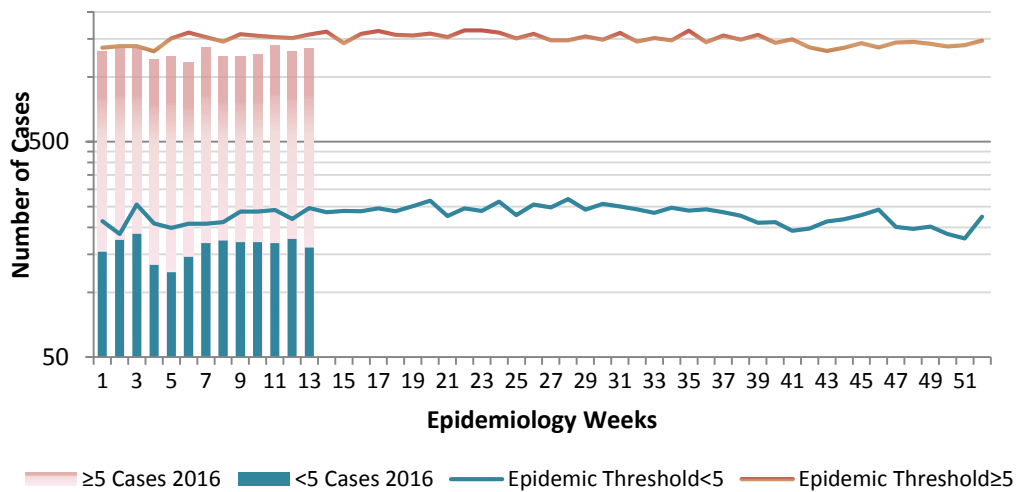


**ACCIDENTS**

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



**Accidents Weekly Threshold vs Cases 2016**

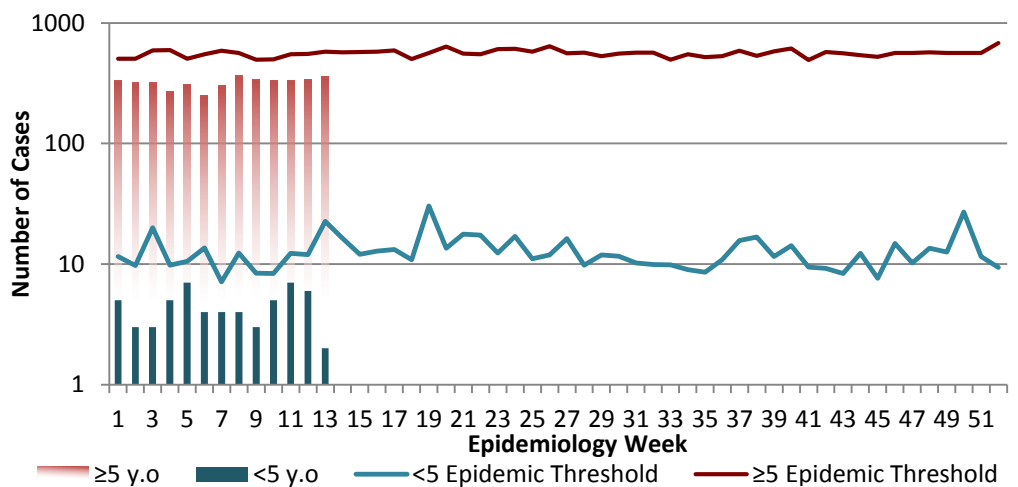


**VIOLENCE**

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	49	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>	1	0		
	Hansen's Disease (Leprosy)	1	0		
	Hepatitis B	2	12		
	Hepatitis C	0	2		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	1	0		
	Meningitis	6	34		
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>	15	17		
	Ophthalmia Neonatorum	139	86		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	12		
	Tetanus	0	1		
	Tuberculosis	0	0		
	Yellow Fever	0	0		
	Chikungunya	0	1		
Zika Virus	6	0			



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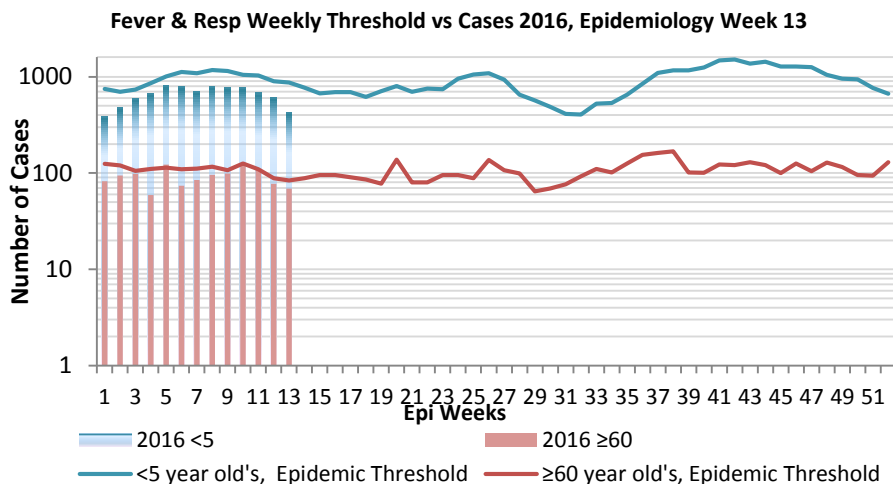
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

**EW 13**

March 27 – April 2, 2016

Epidemiology Week 13

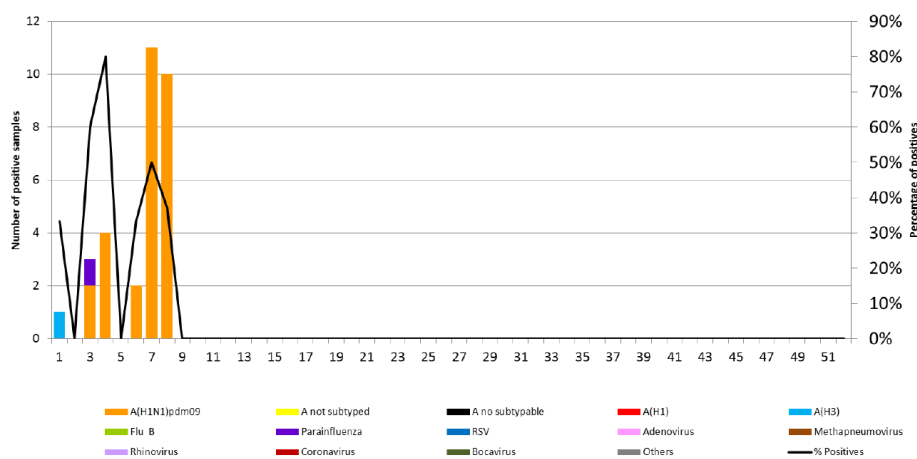
February, 2016		
	EW 13	YTD
SARI cases	48	496
<b>Total Influenza positive Samples</b>	<b>0</b>	<b>98</b>
<b>Influenza A</b>	<b>0</b>	<b>70</b>
H3N2	0	1
H1N1pdm09	0	68
Not subtyped	0	28
<b>Influenza B</b>	<b>0</b>	<b>0</b>
<b>Other</b>	<b>0</b>	<b>1</b>



**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.

**Distribution of Influenza and other respiratory viruses by EW surveillance EW 8, 2016, NIC Jamaica - Interim report**



**INDICATORS**

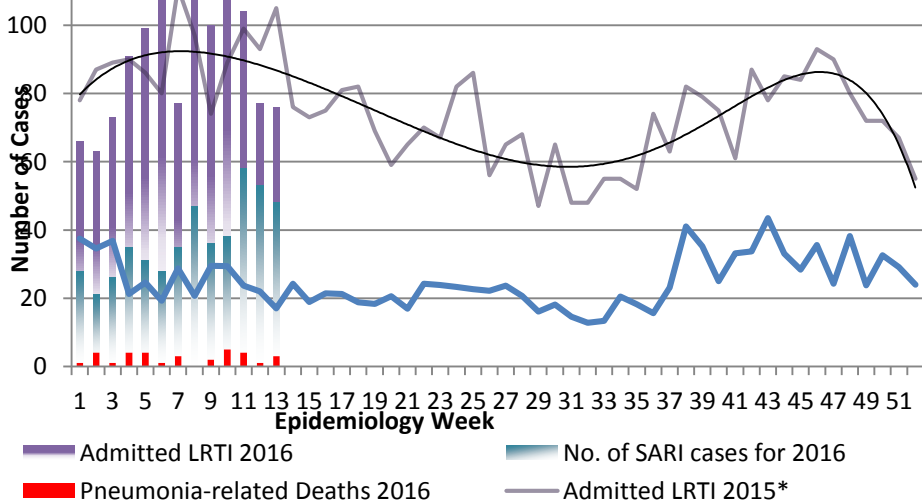
**Burden**  
Year to date, respiratory syndromes account for 4.2% of visits to health facilities.

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

**Prevalence**  
Not applicable to acute respiratory conditions.



**2016 Cases of Admitted LRTI, SARI, Pneumonia related Deaths**



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



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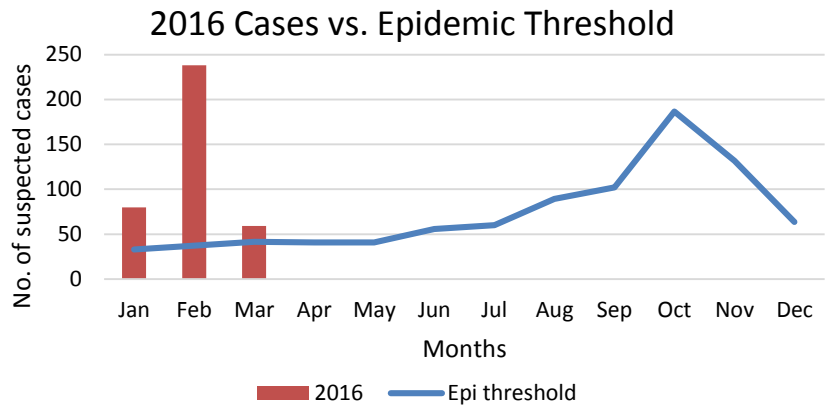
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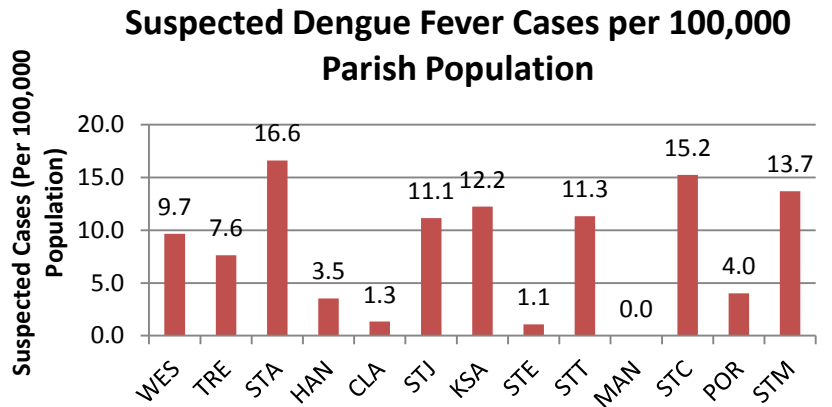
# Dengue Bulletin


March 27 – April 2, 2016

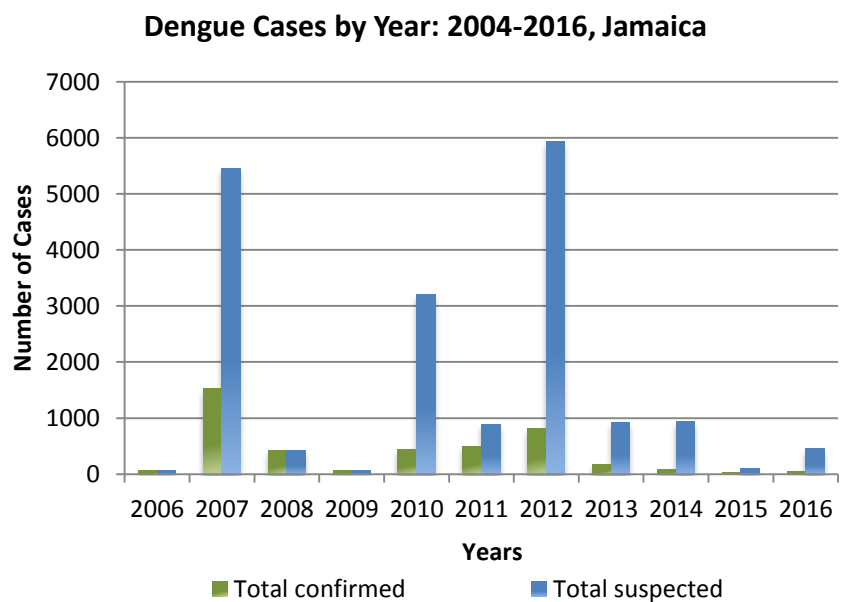
Epidemiology Week 13



DISTRIBUTION					
Year-to-Date Suspected Dengue Fever					
	M	F	Un-kwn	Total	%
<1	0	2	0	2	1
1-4	1	0	0	1	0
5-14	2	2	0	4	2
15-24	1	2	0	3	1
25-44	1	0	0	1	0
45-64	0	0	0	0	0
≥65	0	0	0	0	0
Unknown	138	198	122	458	96
<b>TOTAL</b>	<b>143</b>	<b>204</b>	<b>122</b>	<b>469</b>	<b>100</b>



Weekly Breakdown of suspected and confirmed cases of DF,DHF,DSS,DRD				
	2016		2015 YTD	
	EW 13	YTD		
				
<b>Total Suspected Dengue Cases</b>	2	469	24	
<b>Lab Confirmed Dengue cases</b>	0	41	1	
<b>CONFIRMED</b>	<b>DHF/DSS</b>	0	1	0
	<b>Dengue Related Deaths</b>	0	0	0



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# Gastroenteritis Bulletin

**EW**  
**13**

March 27 – April 2, 2016

Epidemiology Week 13

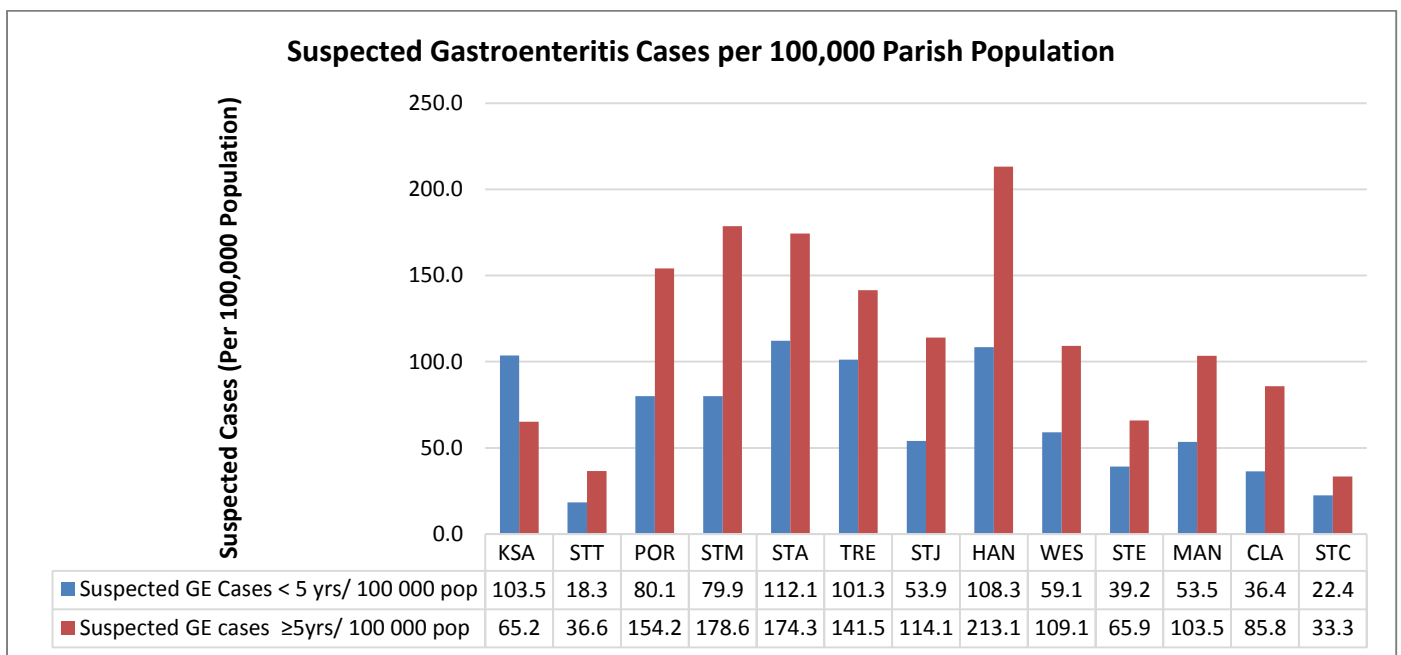
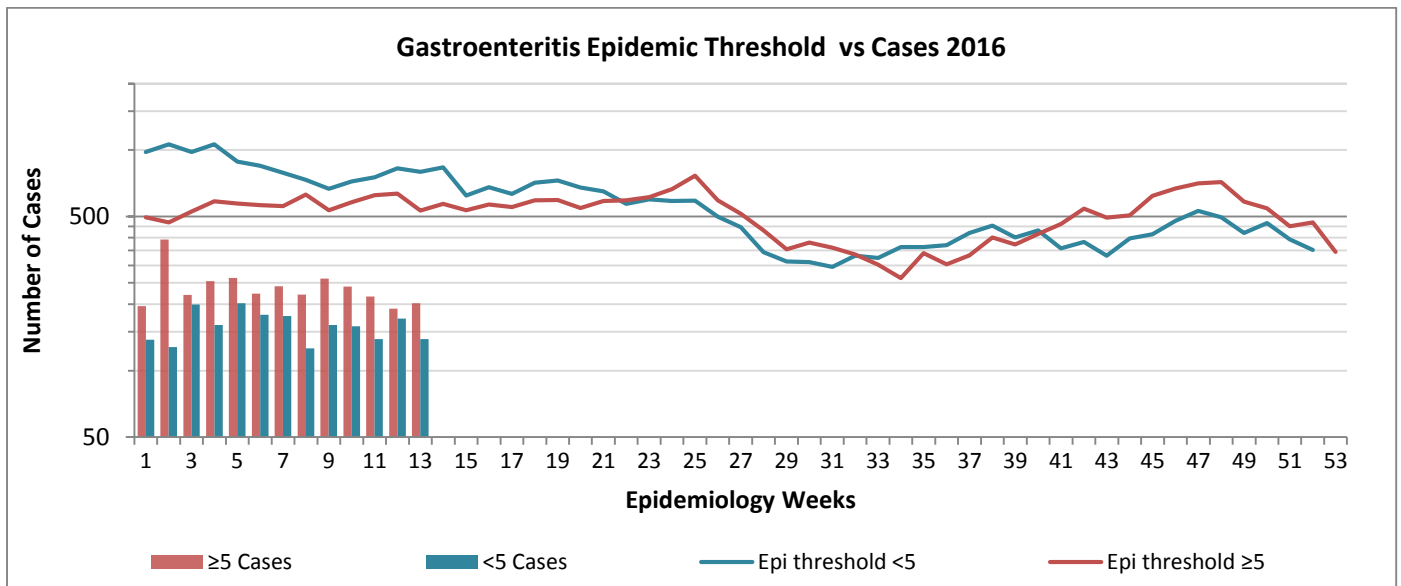
## Weekly Breakdown of Gastroenteritis cases

Year	EW 13			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	139	202	341	2080	2926	5006
2015	252	256	508	4511	4140	8351

**Gastroenteritis:** Three or more loose stools within 24 hours. In Epidemiology Week 13, 2016, the total number of reported GE cases showed a 33% decrease compared to EW 13 of the previous year. The year to date figure showed a 40% decrease in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2015-2016



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# RESEARCH PAPER

## A Need for Capacity Building in Faith-Based Response to HIV/AIDS in Jamaica

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**Objective:** To identify initiatives being conducted by faith-based organizations (FBOs) and explore their most urgent needs in addressing the HIV/AIDS epidemic.

**Design and Methods:** Focus group discussions (FGD) and in-depth interviews were conducted with members of FBOs, members of HIV/AIDS support groups and persons living with HIV/AIDS (PLWHA) over a 6 month period in three parishes. Twelve (12) FGD and 30 in-depth interviews were conducted. Data were analysed by descriptive and interpretive techniques following the completion of transcriptions of the interviews and focus groups.

**Results:** One hundred (100) persons participated in the study, 18 of which were PLWHA. Approximately 60% of FBOs who participated had initiatives to address stigma and discrimination which included education and counselling sessions with their congregants (60%) as well as providing psychological support to PLWHA (50%). One FBO also had media publication. More than 50% of the FBO leaders interviewed expressed their most urgent need to be strengthening of the leadership to address stigma and discrimination and treatment of PLWHA among their congregants.

**Conclusions:** Programs to address stigma and discrimination were the most common initiatives in the FBOs that participated in the study. Strengthening the capacity of FBO leaders to identify and address stigma and discrimination among their congregants and the wider community was identified as their most urgent need followed by the capacity to provide psychological support for PLWHA.



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NOTIFICATIONS-  
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sites



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