

Week ending October 15, 2016

Epidemiology Week 41

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

Malaria Day in the Americas

November 4, 2016

Theme: "Counting Malaria Out: Promoting Best Practices and Collaboration".

Each year, approximately 250 million people suffer from malaria, with an estimated one million deaths annually worldwide. In the Americas, malaria morbidity has been reduced by 56% between 2000 and 2009. Eighteen of the 21 malaria endemic countries in the Region indicate this trend of declining malaria cases, while three countries continue to report increases in total number of cases. To broaden the discussion and expand opportunities to better understand the multifaceted nature of the demand for the response to malaria.

Malaria Day in the Americas is regarded as an important opportunity and mechanism for countries of the Region to engage various stakeholders in aggressively fighting malaria.

Malaria Day campaigns to increase advocacy and commitment among stakeholders and draws communities and the general population into concrete actions that contribute to the achievement of goals and targets at the global, regional, country, and community level.



Source: http://www.paho.org/campeonesmalaria/?page_id=32&lang=en

EPI WEEK 41

SYNDROMES

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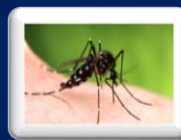
CLASS 1 DISEASES

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INFLUENZA

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DENGUE FEVER

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GASTROENTERITIS

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RESEARCH PAPER

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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

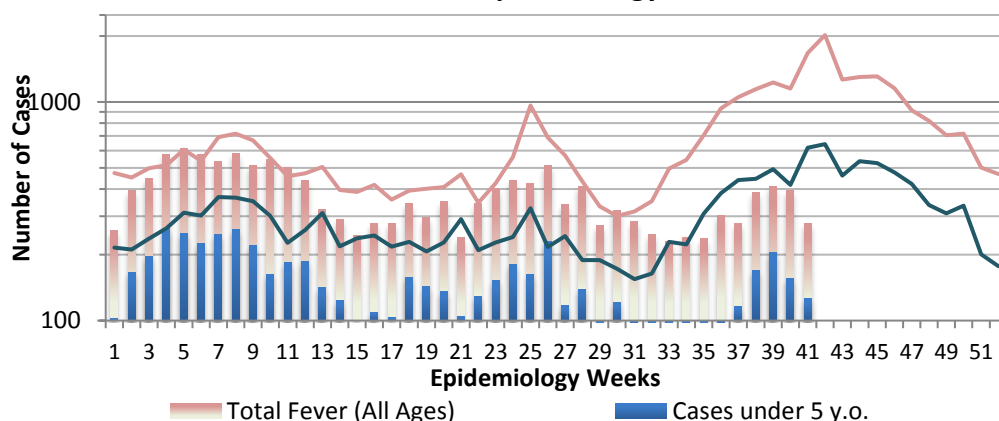
REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER

Temperature of $>38^{\circ}\text{C}$ / 100.4°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 41

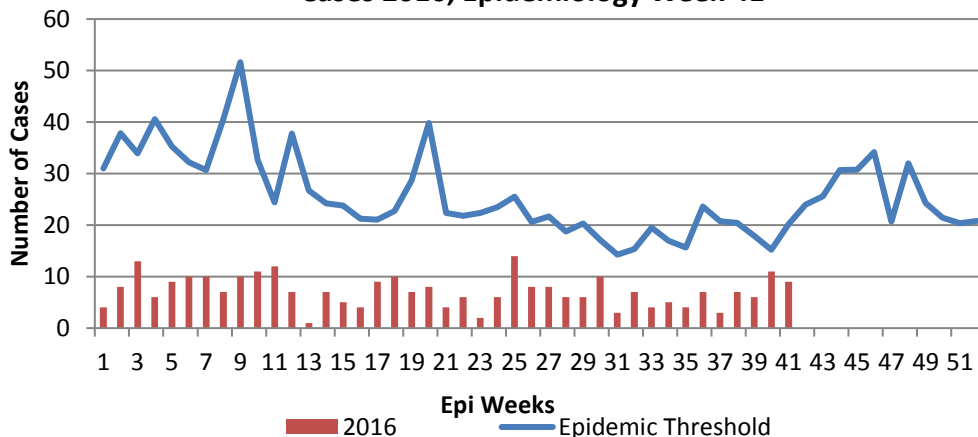


FEVER AND NEUROLOGICAL

Temperature of $>38^{\circ}\text{C}$ / 100.4°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 41

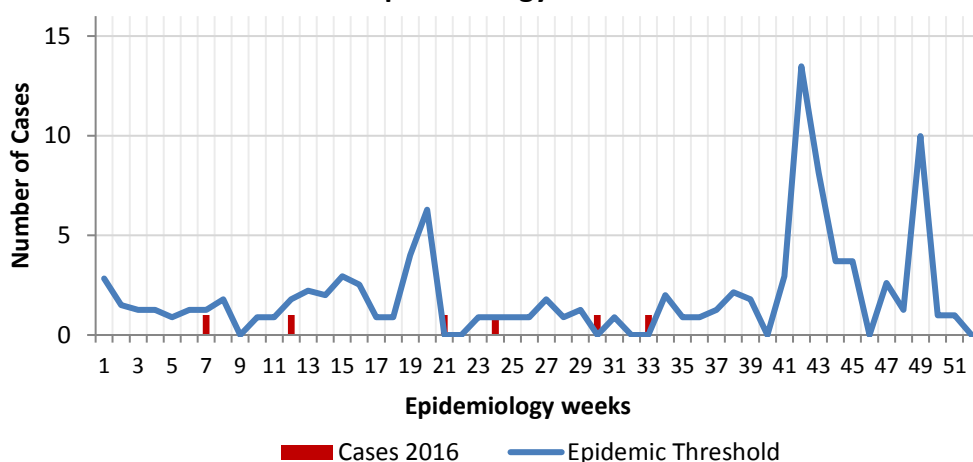


FEVER AND HAEMORRHAGIC

Temperature of $>38^{\circ}\text{C}$ / 100.4°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 41



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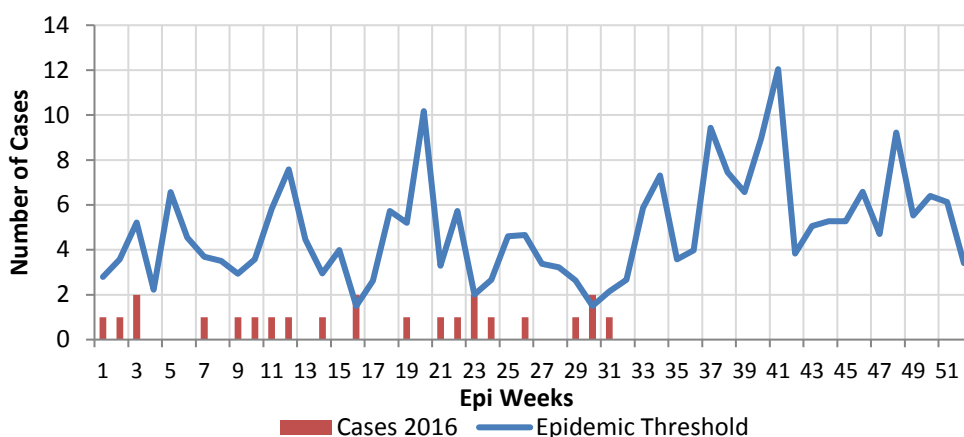
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FEVER AND JAUNDICE

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



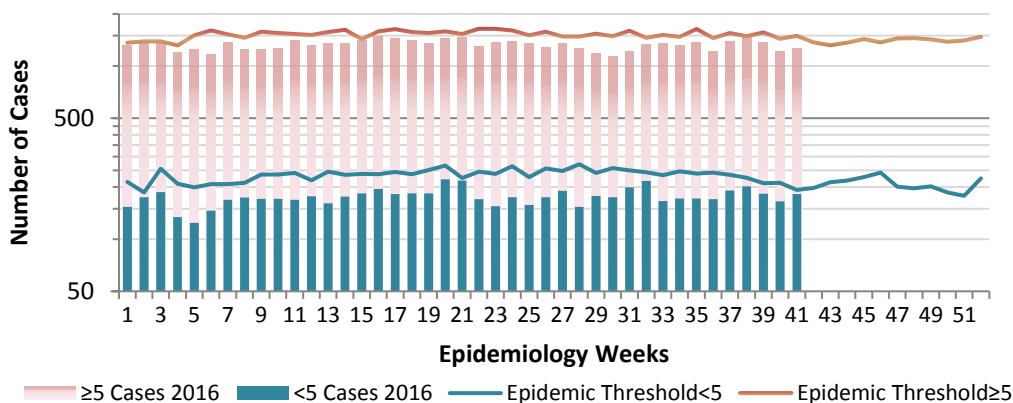
Fever and Jaundice Weekly Threshold vs Cases 2016, Epidemiology Week 41

**ACCIDENTS**

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



Accidents Weekly Threshold vs Cases 2016

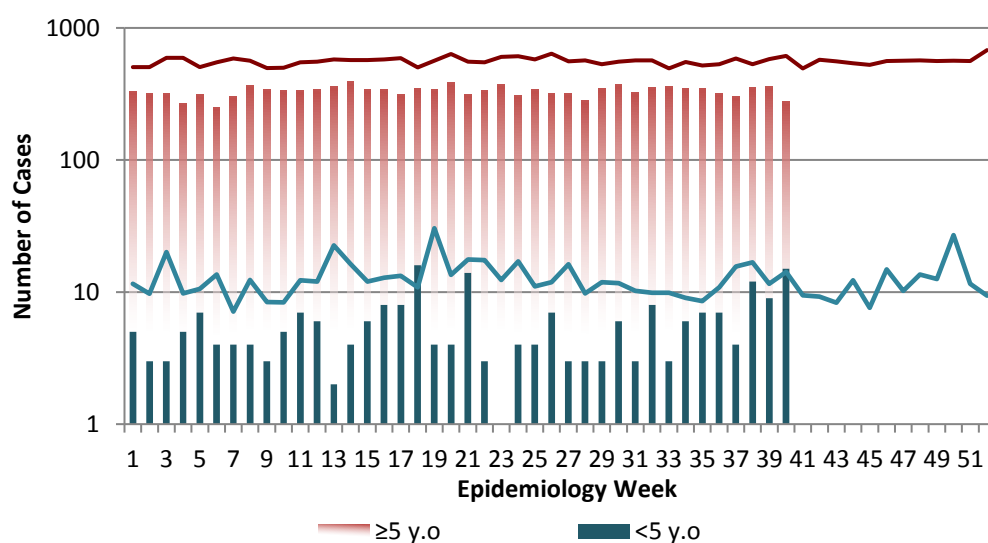
**VIOLENCE**

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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SENTINEL REPORT- 79 sites*. Automatic reporting

3

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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 ¹		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.
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 ²		23	24	2 Maternal Deaths include early and late deaths.
	Ophthalmia Neonatorum		343	242	
	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	

1 Dengue Hemorrhagic Fever data include Dengue related deaths;

2 Maternal Deaths include early and late deaths.



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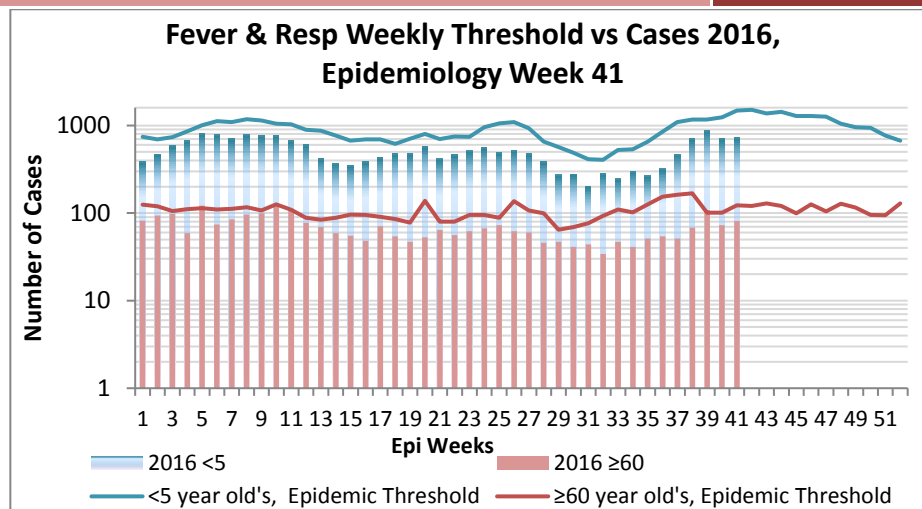
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 41

Oct. 9-15, 2016

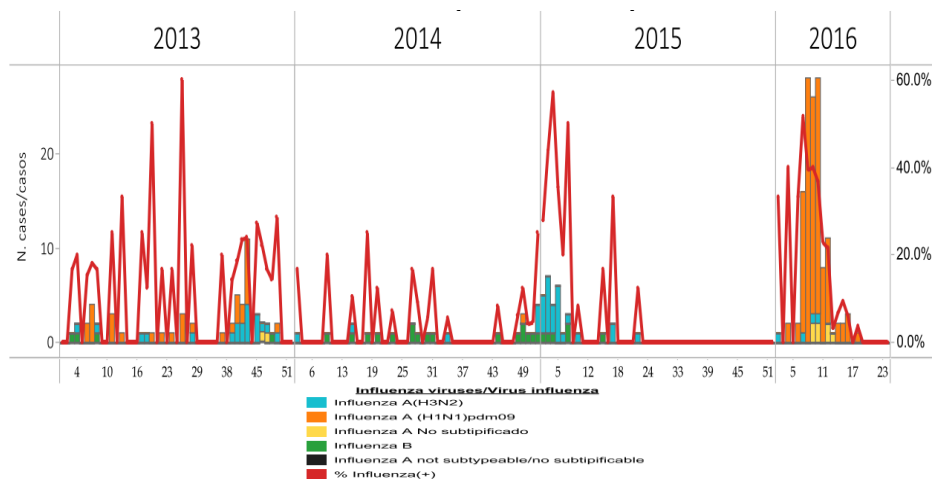
Epidemiology Week 41

September 2016		
	EW 41	YTD
SARI cases	20	895
Total Influenza positive Samples	1	133
Influenza A	0	113
H3N2	1	10
H1N1pdm09	0	80
Not subtyped	1	42
Influenza B	0	0
Other	0	1

**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.

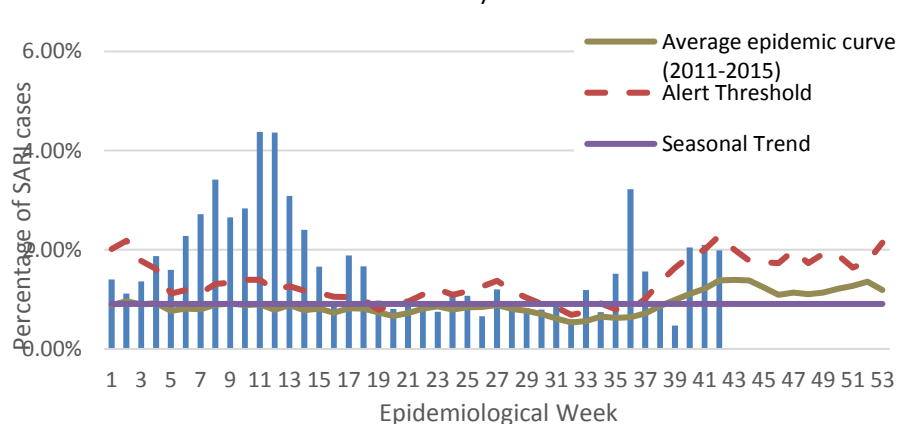
Incidence

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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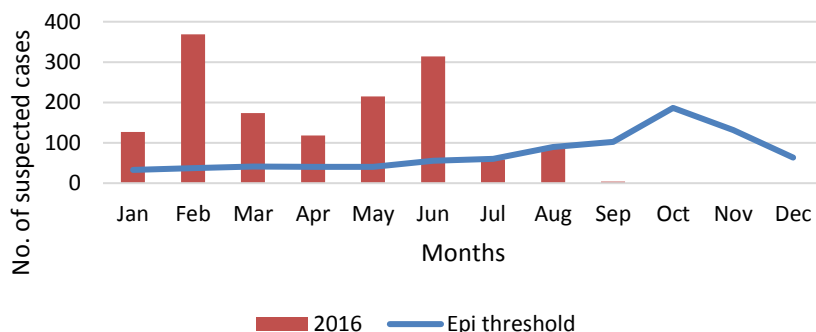
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Dengue Bulletin

Oct. 9-15, 2016

Epidemiology Week 41

2016 Cases vs. Epidemic Threshold

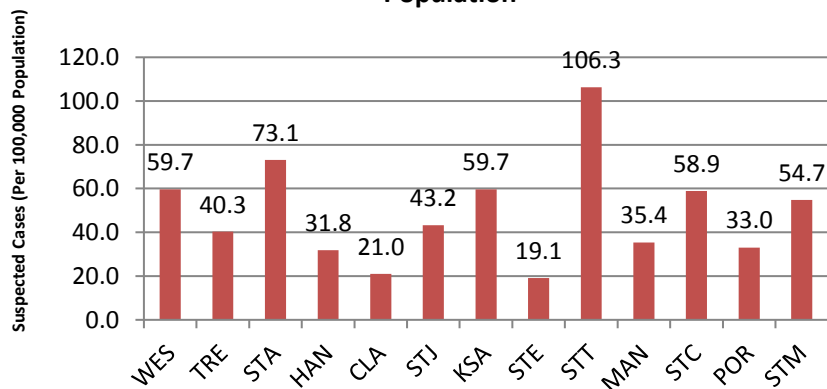


DISTRIBUTION

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
TOTAL	525	1014	286	1825	100

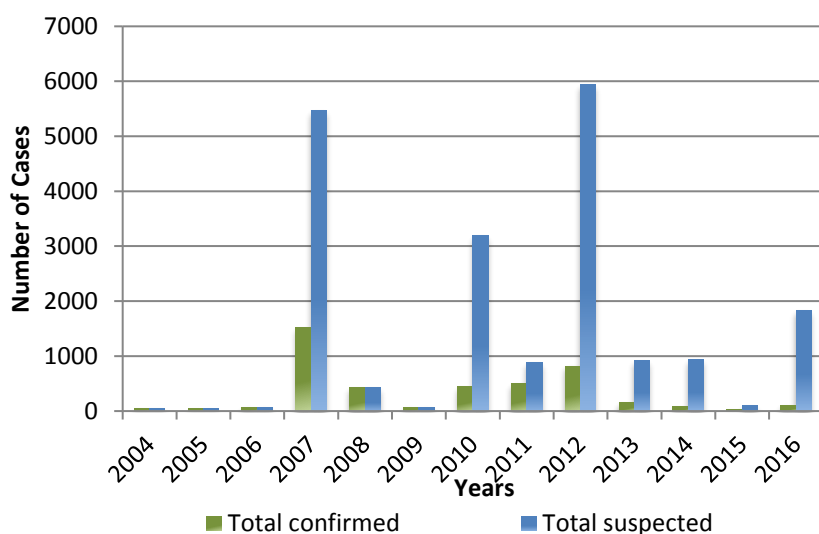
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2016		2015 YTD
		EW 41	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



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Gastroenteritis Bulletin

EW 41

Oct. 9-15, 2016

Epidemiology Week 41

Weekly Breakdown of Gastroenteritis cases

Year	EW 41			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	95	172	267	5,345	8,808	14,153
2015	183	251	434	8,881	9,555	18,436

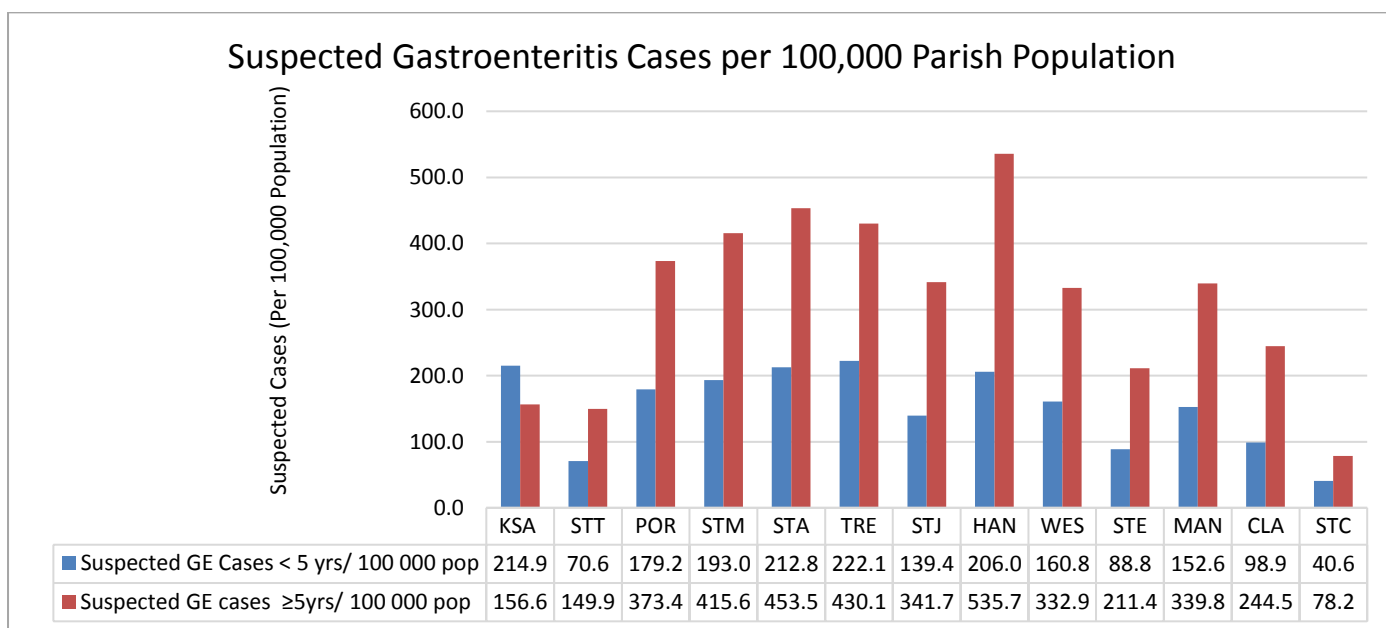
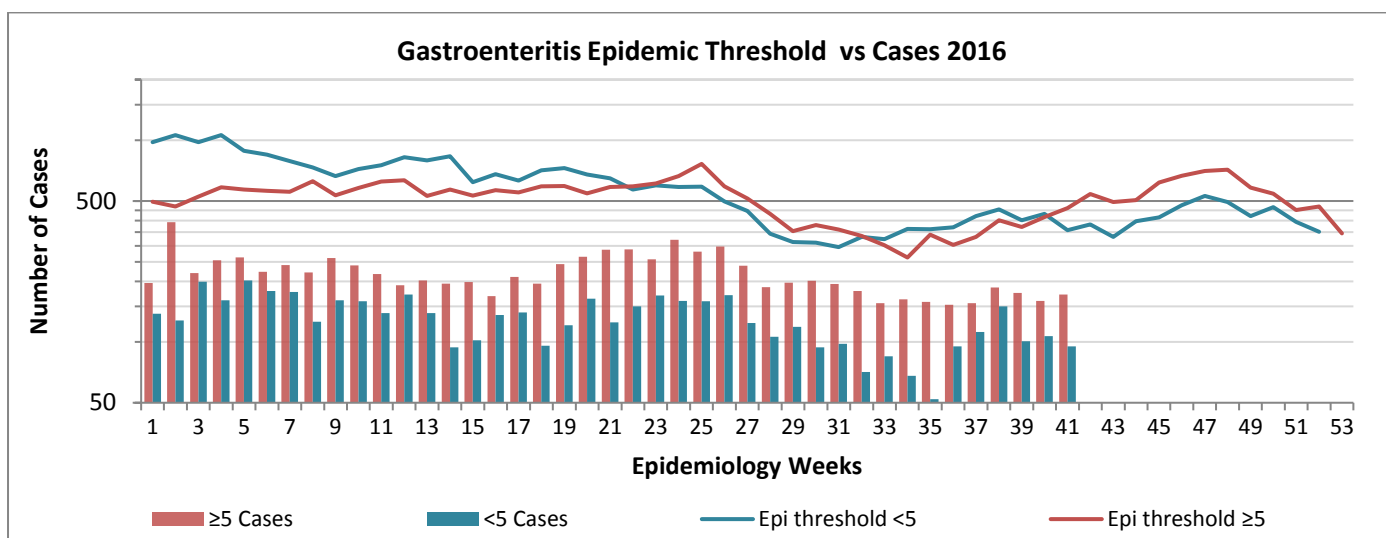
Gastroenteritis:

In Epidemiology Week 41, 2016, the total number of reported GE cases showed a 20.3% decrease compared to EW 41 of the previous year.

The year to date figure showed a 23% 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 ± 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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