

Week ending July 2, 2016

Epidemiology Week 26

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

Global immunization coverage sustained in the past five years

The latest WHO and UNICEF data on global immunization coverage show that 86% of the world's children received the required 3 doses of diphtheria-tetanus-pertussis containing vaccines (DTP3) in 2015, a coverage level that has been sustained above 85% since 2010.



As a result, the number of children who did not receive routine

vaccinations has dropped to an estimated 19.4 million, down from 33.8 million in 2000.

However, this progress falls short of global immunization targets of the Global Vaccine Action Plan (GVAP) for the Decade of Vaccines of achieving 90% or more DTP3 vaccination coverage at the national level and 80% or more in all districts² in all countries by 2015.

Among the 194 WHO Member States, 126 countries achieved and sustained the 90% immunization target for DTP3, up from 63 in 2000. Many of these countries, especially the low and middle income countries, need to continue strengthening their health systems as they add vaccines to their national programmes so that coverage with all vaccines reach and sustain at the 90% or more target.

The updated WHO/UNICEF estimates also show that coverage with vaccines other than DTP, has improved. Worldwide, the number of children protected against hepatitis B is high and increasing steadily. In 2000, just 29% of children received three doses of vaccine against the viral disease; this has increased to 84% in 2015. However, more still needs to be done to ensure that all infants receive a hepatitis B vaccine dose within their first 24 hours of life.

Source: http://who.int/immunization/newsroom/press/immunization_coverage_july_2016/en/

EPI WEEK 26



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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

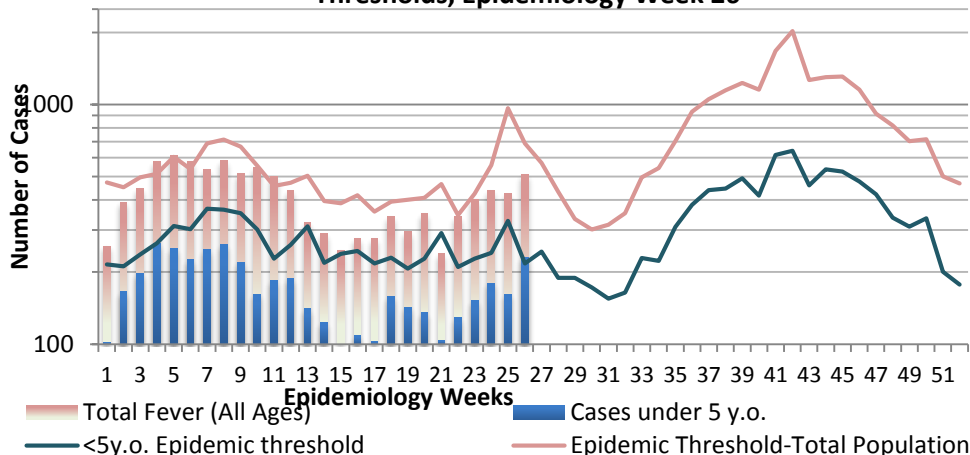
REPORTS FOR SYNDROMIC SURVEILLANCE

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 26

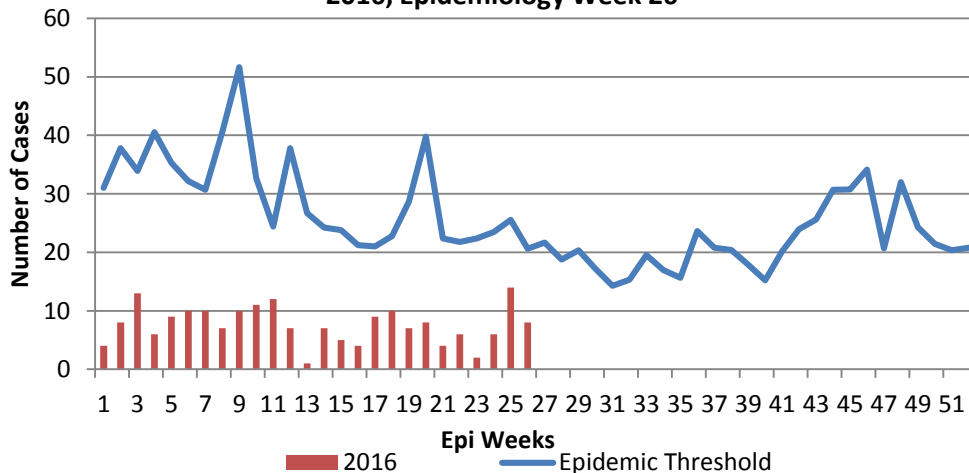


FEVER AND NEUROLOGICAL

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 26

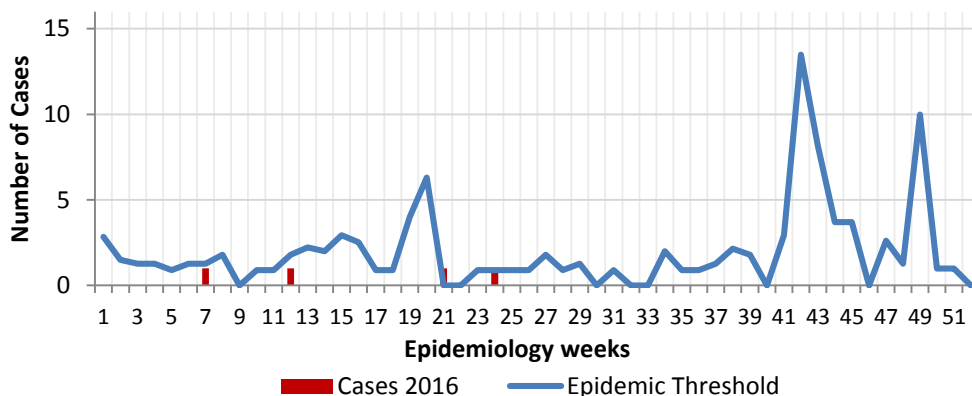


FEVER AND HAEMORRHAGIC

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 26



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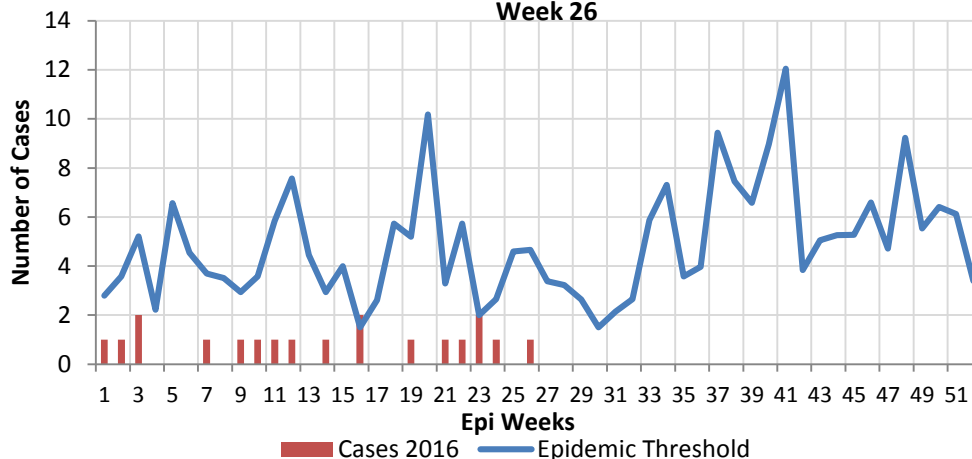
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FEVER AND JAUNDICE

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



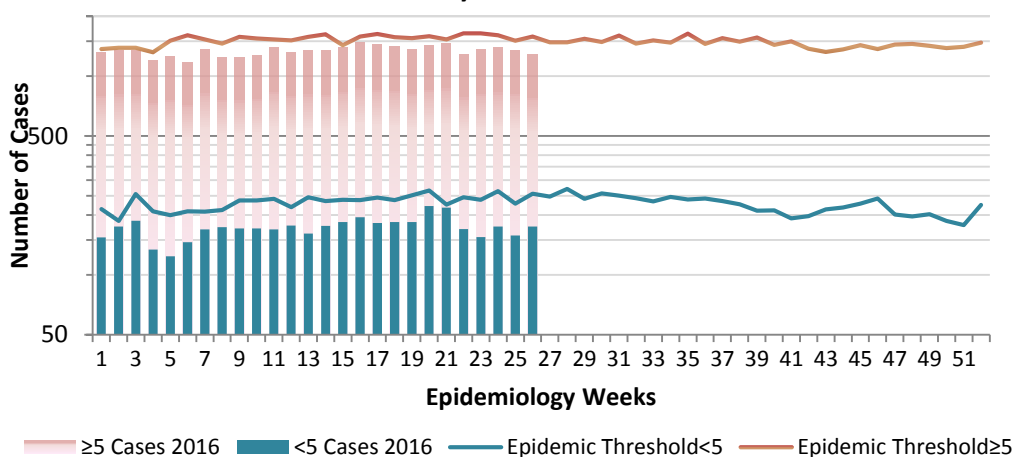
Fever and Jaundice Weekly Threshold vs Cases 2016, Epidemiology
Week 26

**ACCIDENTS**

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



Accidents Weekly Threshold vs Cases 2016

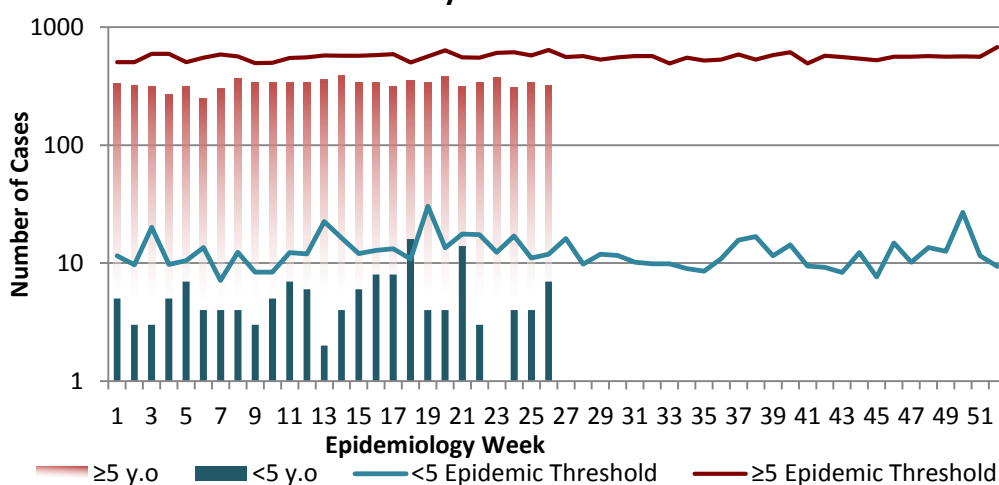
**VIOLENCE**

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		18		96
	Cholera		0		0
	Dengue Hemorrhagic Fever ¹		2		0
	Hansen’s Disease (Leprosy)		1		0
	Hepatitis B		15		26
	Hepatitis C		4		2
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)		1		0
	Meningitis		10	56	
EXOTIC/ UNUSUAL	Plague		0	0	
HIGH MORBIDIT/ MORTALITY	Meningococcal Meningitis		0	0	
	Neonatal Tetanus		0	0	
	Typhoid Fever		0	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	17	2	
		Rubella	0	0	
	Maternal Deaths ²		23	24	
	Ophthalmia Neonatorum		202	166	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		1	9	
	Tetanus		0	1	
	Tuberculosis		0	0	
	Yellow Fever		0	0	
	Chikungunya		0	1	
	Zika Virus		24	0	



Pertussis-like syndrome and Tetanus are clinically confirmed classifications.

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

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 26

June 26-July 2, 2016

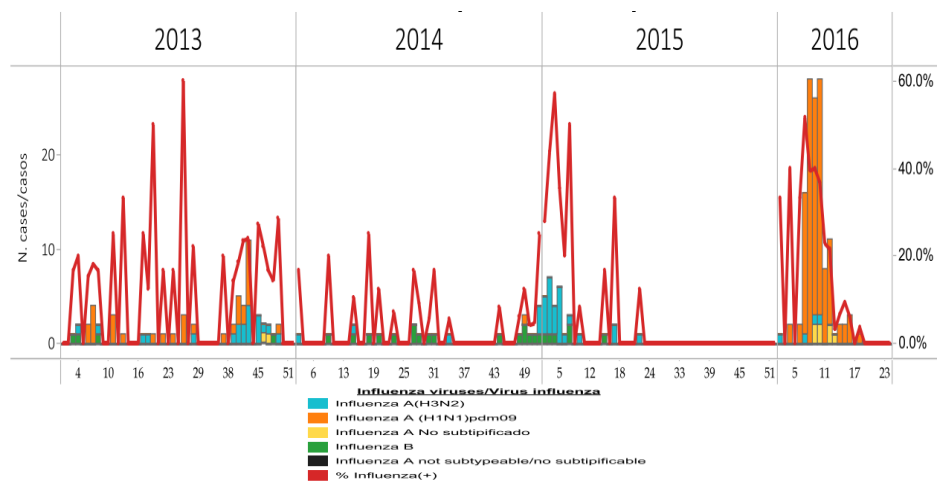
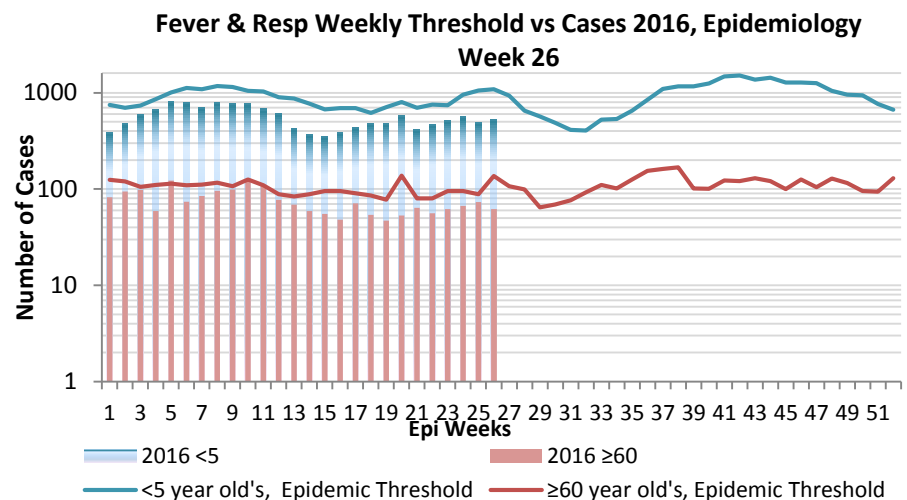
Epidemiology Week 26

June 2016		
	EW 26	YTD
SARI cases	8	706
Total Influenza positive Samples	0	114
Influenza A	0	113
H3N2	0	1
H1N1pdm09	0	80
Not subtyped	0	32
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**

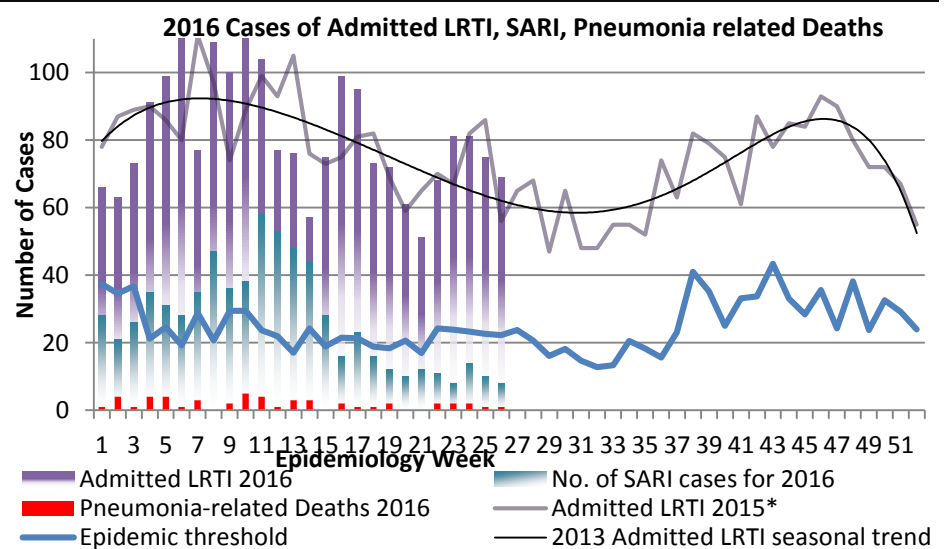
Year to date, respiratory syndromes account for 4.2% of visits to health facilities.

Incidence

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

**Prevalence**

Not applicable to acute respiratory conditions.



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



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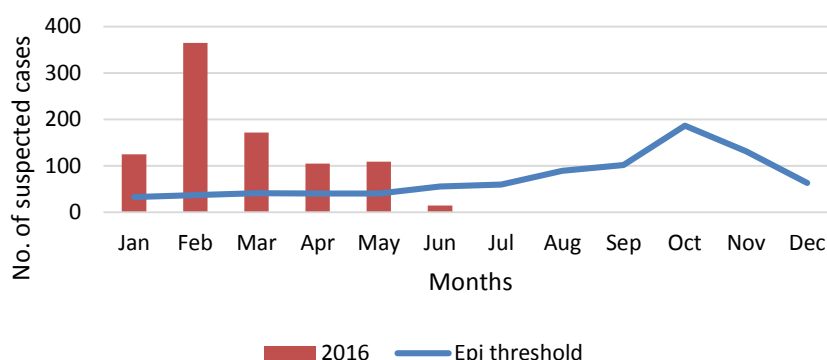
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Dengue Bulletin

June 26-July 2, 2016

Epidemiology Week 26

2016 Cases vs. Epidemic Threshold

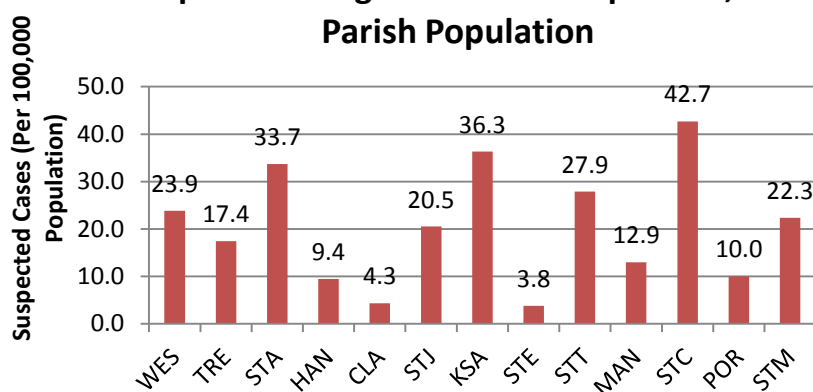


DISTRIBUTION


Year-to-Date Suspected Dengue Fever

	M	F	Un-kwn	Total	%
<1	4	9	0	14	1
1-4	15	23	0	38	5
5-14	87	89	3	178	19
15-24	72	106	1	175	20
25-44	111	247	4	309	29
45-64	23	50	0	115	10
≥65	4	10	0	14	2
Unknown	30	58	10	97	14
TOTAL	346	592	18	956	100

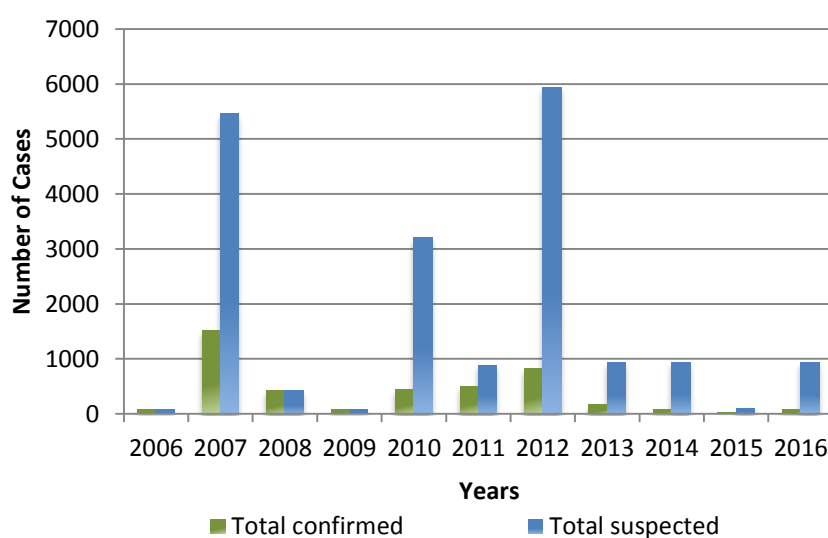
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2016		2015 YTD
		EW 26	YTD	
				
Total Suspected Dengue Cases		4	956	30
Lab Confirmed Dengue cases		0	68	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 26

June 26-July 2, 2016

Epidemiology Week 25

Weekly Breakdown of Gastroenteritis cases

Year	EW 26			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	171	297	468	3,868	6,132	10,000
2015	132	181	313	6,706	6,776	13,482

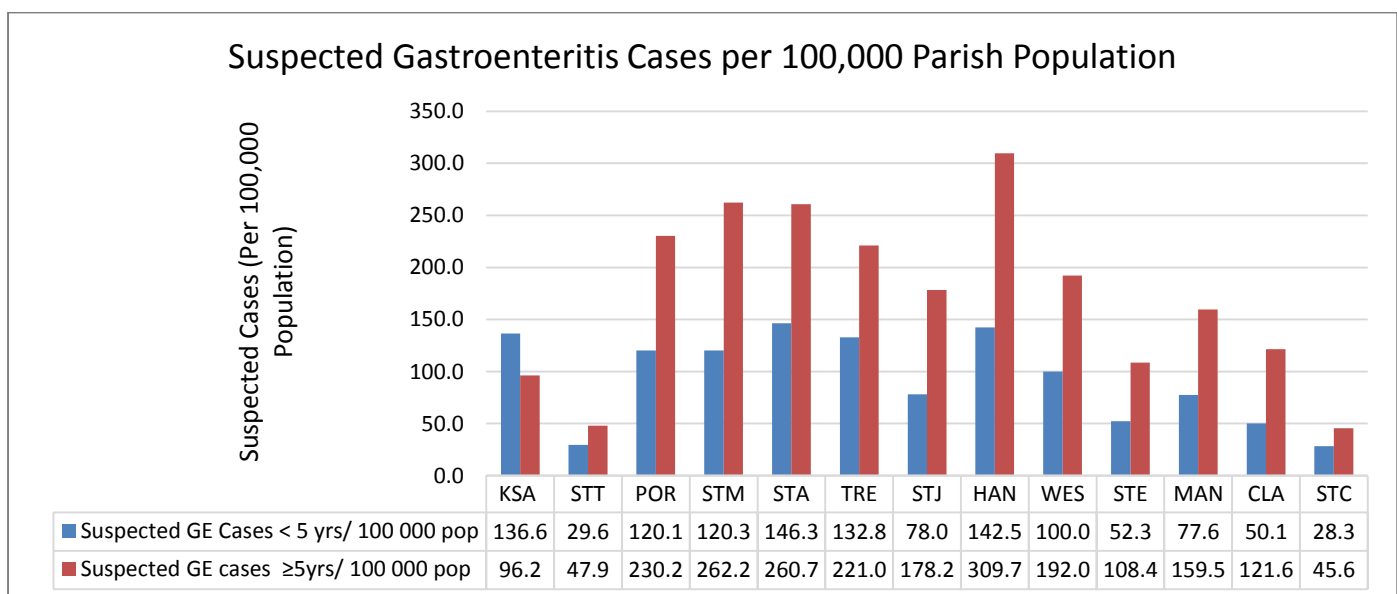
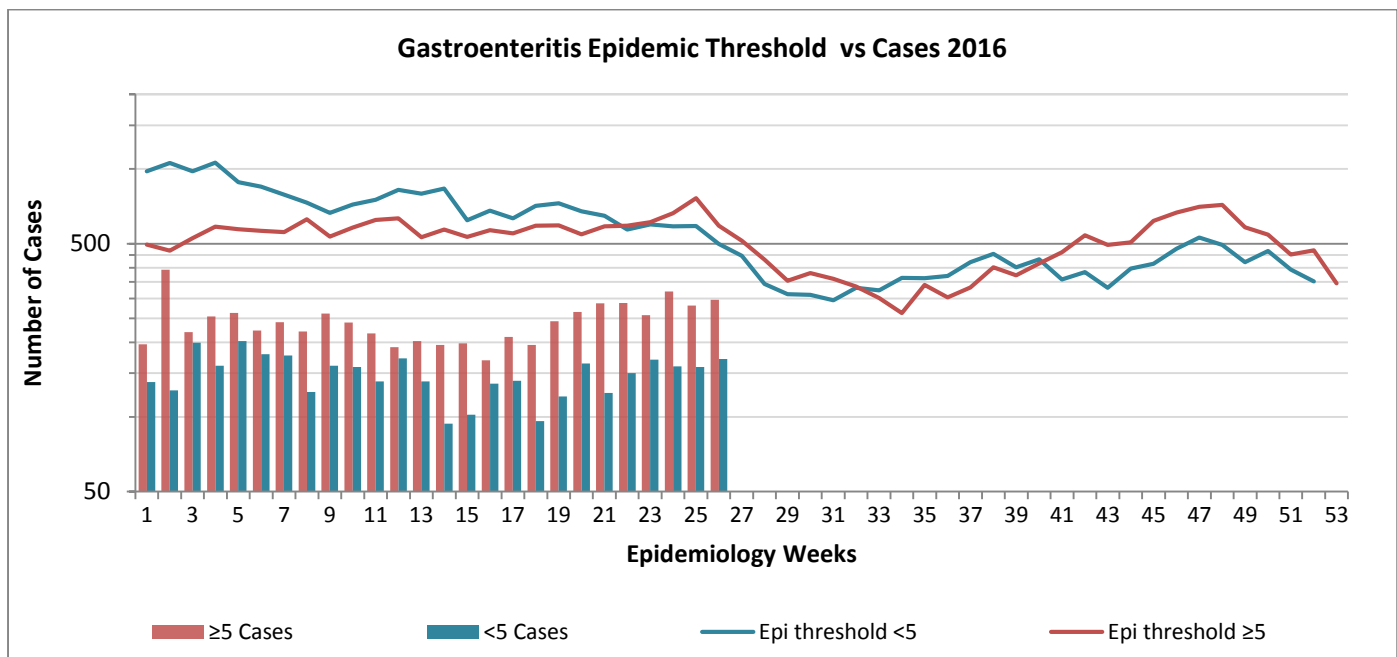
Gastroenteritis:

In Epidemiology Week 26, 2016, the total number of reported GE cases showed a 11% increase compared to EW 26 of the previous year.

The year to date figure showed a 30% 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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