

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

Global food safety standards body issues new guidance

Guidelines on food hygiene to control foodborne parasites

Foods including meat, milk, fish, fruit and vegetables can be contaminated with different parasites. Examples include *Toxoplasma gondii* and *Taenia solium* (pork tapeworm) which can be carried by animals and transmitted to humans when they eat contaminated meat that is raw or undercooked. Humans infected with *Taenia solium* can develop brain cysts, and this is the most frequent preventable cause of epilepsy in the world. Three key ways to control foodborne parasites are to prevent infection in farmed food animals, prevent contamination of fresh and processed foods, and inactivate parasites in foods during processing (e.g. freezing, heat treatment). The guidelines adopted by the Codex Alimentarius Commission provide information on hygienic production of various types of foods to control parasites and protect health.



Maximum level of inorganic arsenic in husked rice

Arsenic is a naturally occurring element in the Earth's crust. It is present in many foods due to absorption from soil and water. Rice in particular can take up more arsenic than other foods and, being a highly consumed food item, can contribute significantly to arsenic exposure. Long-term exposure to arsenic from drinking-water and food can cause cancer and skin lesions. It has also been associated with developmental effects, heart disease, diabetes, and damage to the nervous system and brain. To protect consumers from excessive exposure, the Codex Alimentarius Commission recommends that no more than 0.35 mg/kg of inorganic arsenic should be allowed in husked rice (paddy rice from which the husk only has been removed, also known as brown rice or cargo rice).

Source: http://who.int/foodsafety/areas_work/food-standard/CAC/en/

EPI WEEK 24



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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

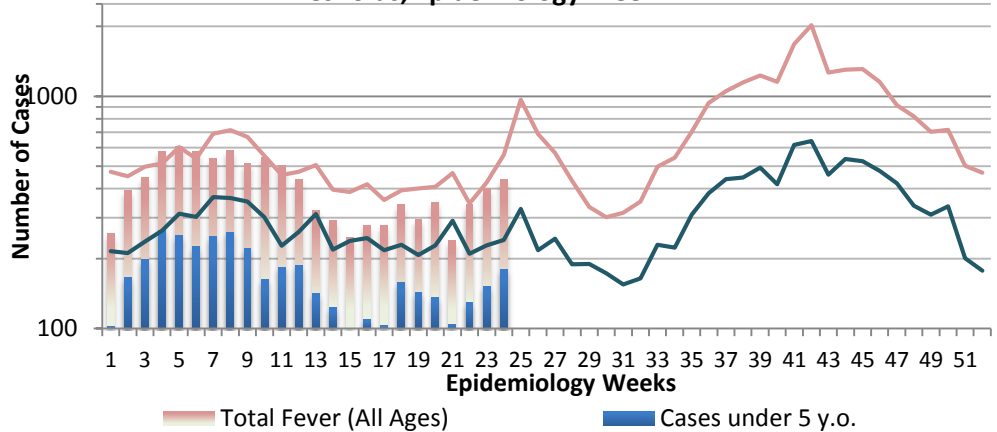
REPORTS FOR SYNDROMIC SURVEILLANCE

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 24

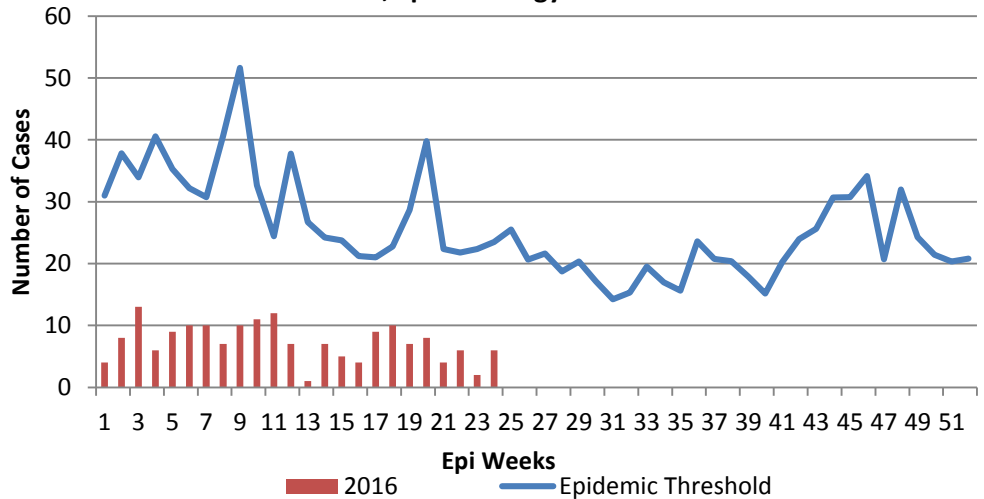


FEVER AND NEUROLOGICAL

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 24

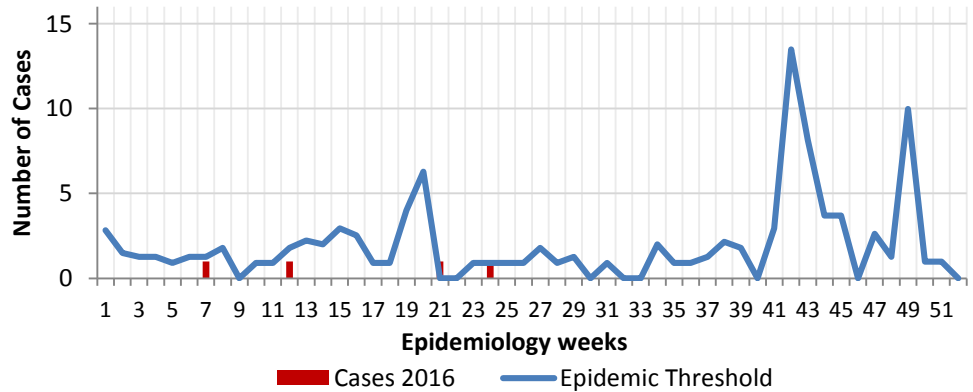


FEVER AND HAEMORRHAGIC

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 24



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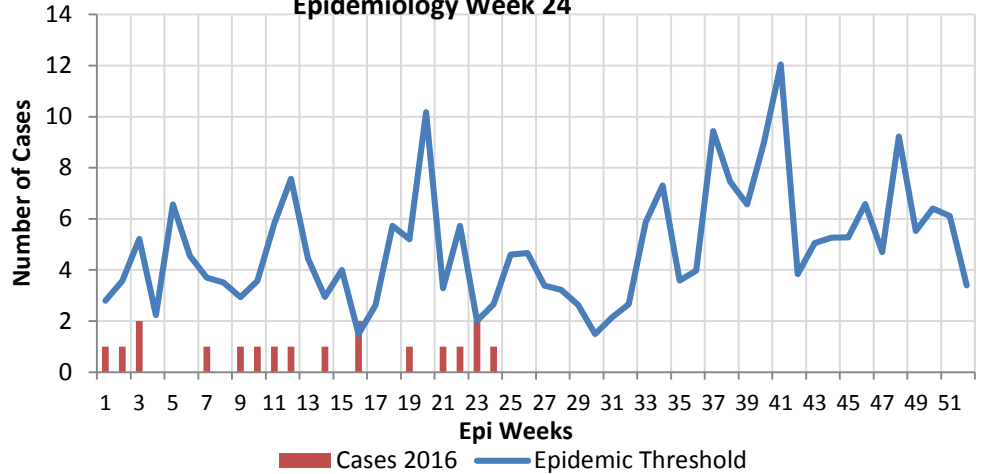
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FEVER AND JAUNDICE

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 24

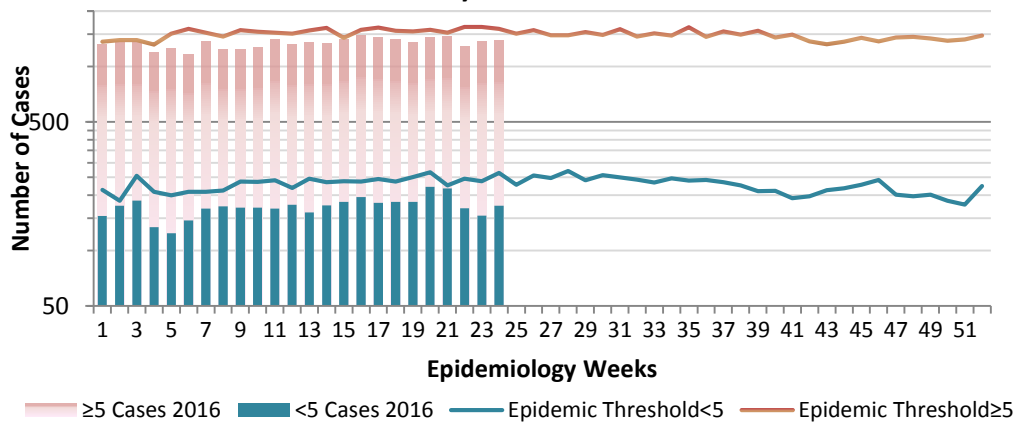


ACCIDENTS

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



Accidents Weekly Threshold vs Cases 2016



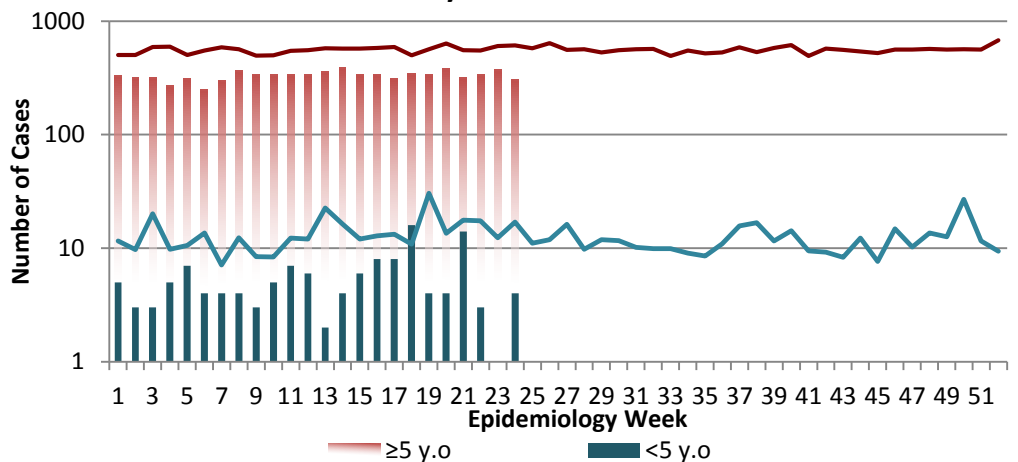
VIOLENCE

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

	CLASS 1 EVENTS	CONFIRMED YTD			
		CURRENT YEAR	PREVIOUS YEAR		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	18	89	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 ¹	2	0		
	Hansen's Disease (Leprosy)	1	0		
	Hepatitis B	14	21		
	Hepatitis C	4	2		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	1	0		
	Meningitis	10	50		
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		
	AFP/Polio	0	0		
SPECIAL PROGRAMMES	Congenital Rubella Syndrome	0	0	*Data not available ¹ Dengue Hemorrhagic Fever data include Dengue related deaths; ² Maternal Deaths include early and late deaths.	
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	17		2
		Rubella	0		0
	Maternal Deaths ²	23	24		
	Ophthalmia Neonatorum	200	153		
	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			



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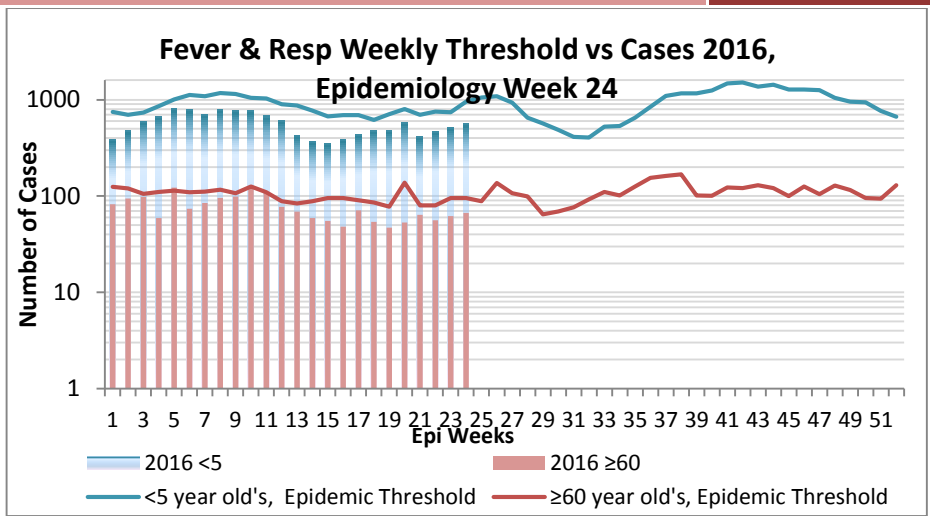
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 24

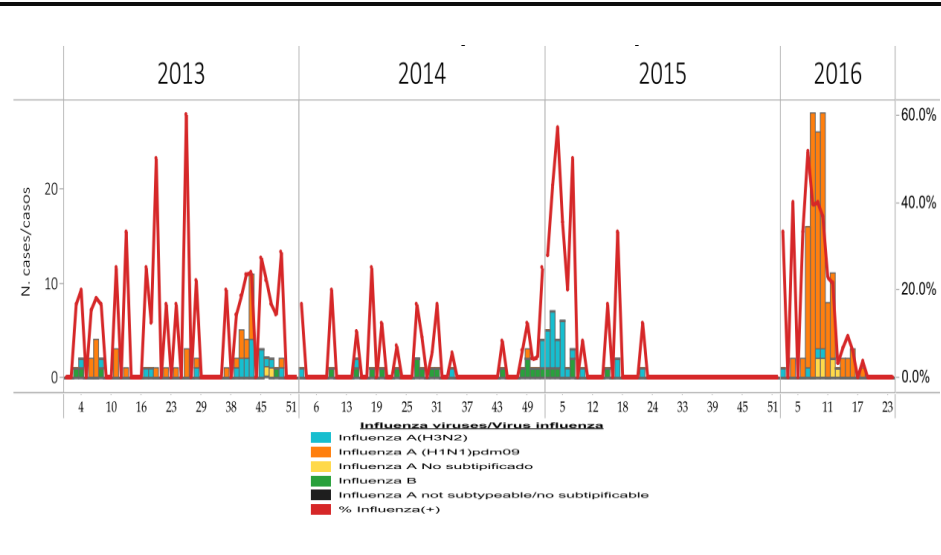
June 12-18, 2016

Epidemiology Week 24

June 2016		
	EW 24	YTD
SARI cases	14	688
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.

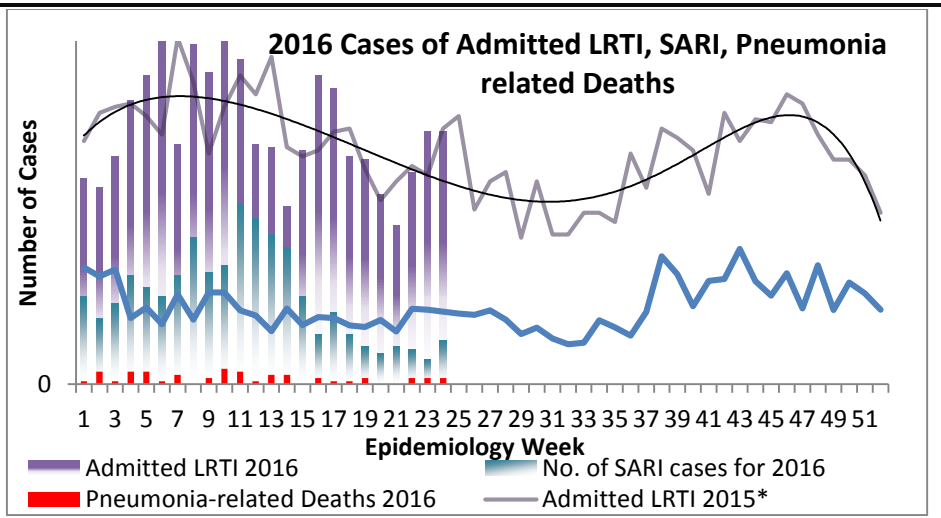


INDICATORS

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.



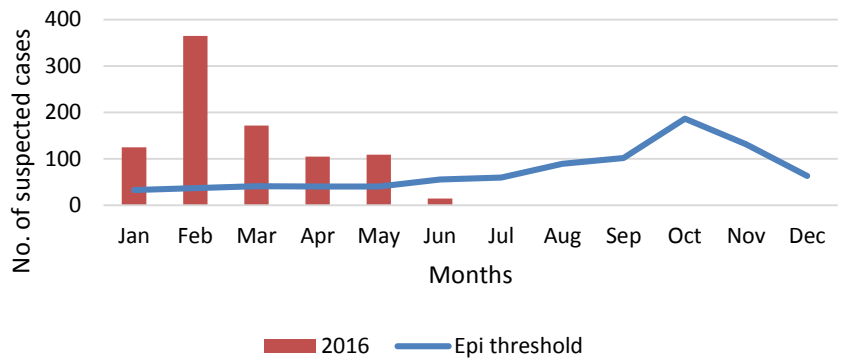
***Additional data needed to calculate Epidemic Threshold**

Dengue Bulletin

June 12-18, 2016

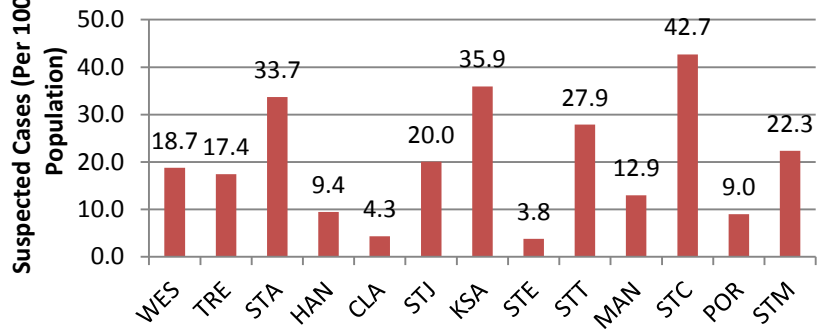
Epidemiology Week 24

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	15	23	0	38	5
5-14	86	89	3	178	19
15-24	72	102	1	175	20
25-44	96	210	3	309	29
45-64	35	79	1	115	10
≥65	4	10	0	14	2
Unknown	29	58	10	97	14
TOTAL	341	581	18	940	100

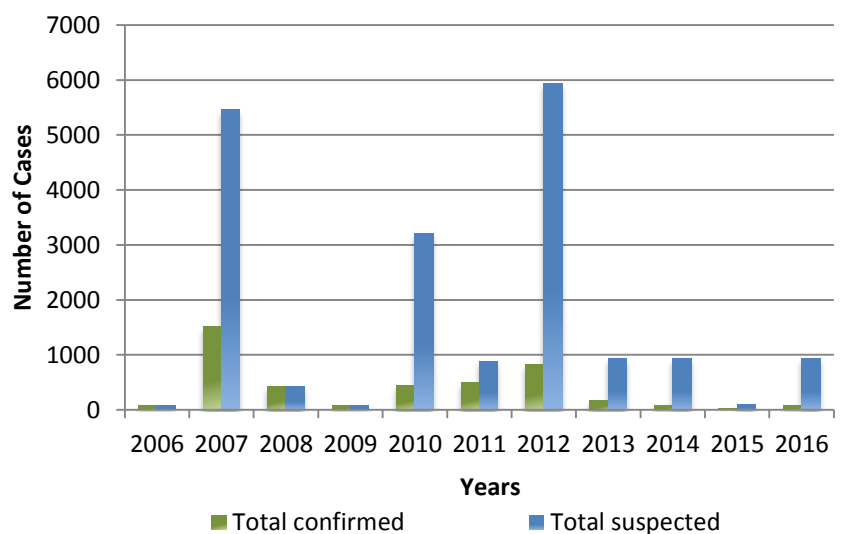
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2016		2015 YTD
		EW 24	YTD	
				
Total Suspected Dengue Cases		7	940	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
24

June 12-18, 2016

Epidemiology Week 24

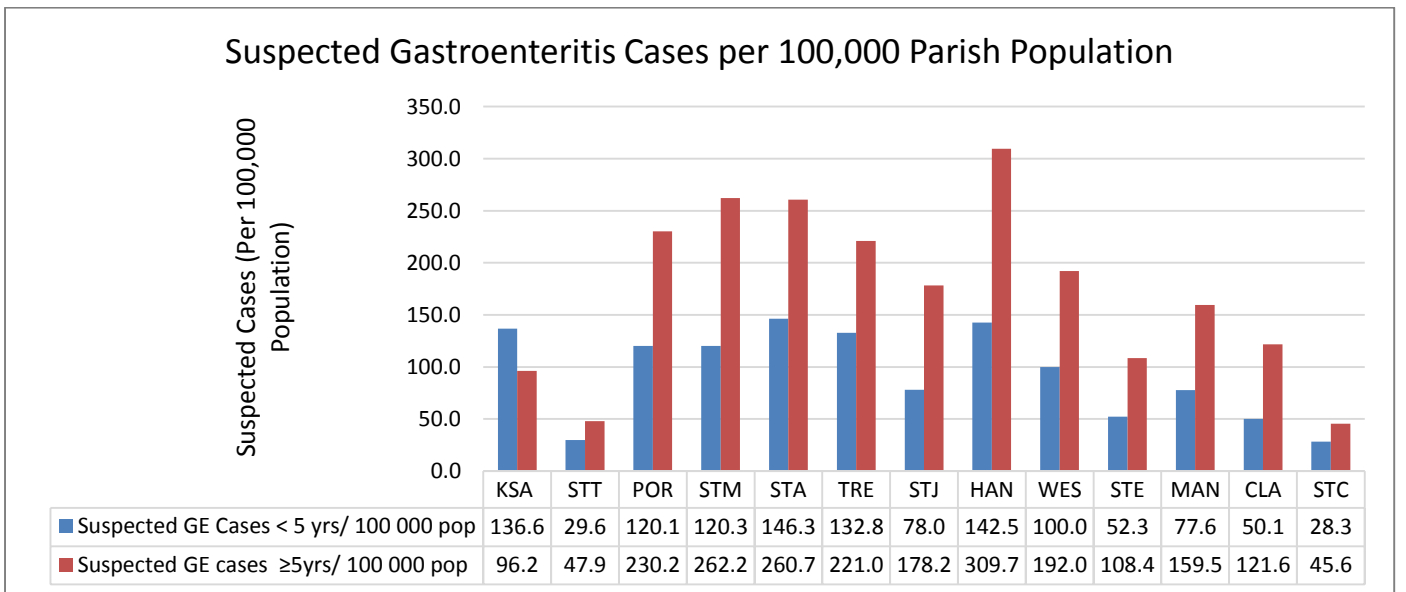
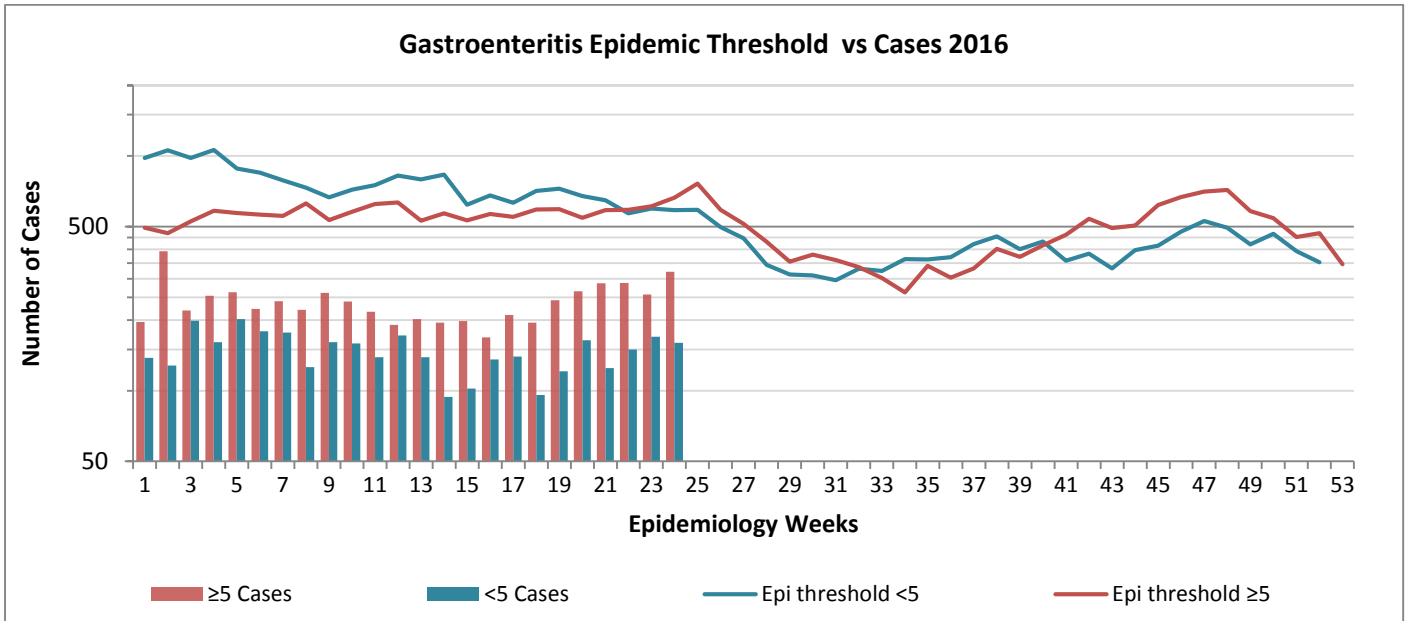
Weekly Breakdown of Gastroenteritis cases

Year	EW 24			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	160	321	481	3,538	5,554	9,092
2015	186	212	398	6,2401	6,388	12,789

Gastroenteritis: Three or more loose stools within 24 hours. In Epidemiology Week 23, 2016, the total number of reported GE cases showed a 11% increase compared to EW 23 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

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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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