

WEEKLY EPIDEMIOLOGY BULLETIN

EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight *Leishmaniasis*



Leishmaniasis is a vector-borne disease caused by a protozoan with a broad clinical spectrum and a variety of parasites, reservoirs, and vectors (Phlebotomus flies) involved in its transmission. It is directly linked to poverty but is also influenced by environmental and climactic factors.

The cutaneous form causes skin ulcers and can result in disfigurement similar to the effects of leprosy. The visceral form – the most severe – produces high fever, substantial weight loss, swelling of the spleen and liver and anemia, and results in death in over 90% of cases if left untreated.

Management is heavily dependent on limiting human exposure to the vector and early diagnosis and treatment.

Key Facts:

- More than 12 million people across the world are infected with leishmaniasis and 350 million are at risk.
- An estimated 75% of all cases of leishmaniasis are concentrated in 10 countries, 4 of which are in the Americas (Brazil, Colombia, Peru and Nicaragua).
- Brazil is one of 6 countries in which 90% of visceral leishmaniasis are found (the others are Ethiopia, India, Bangladesh, Sudan and South Sudan).

EPI WEEK 17



SYNDROMES

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CLASS 1 DISEASES

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CHIKUNGUYNA

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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

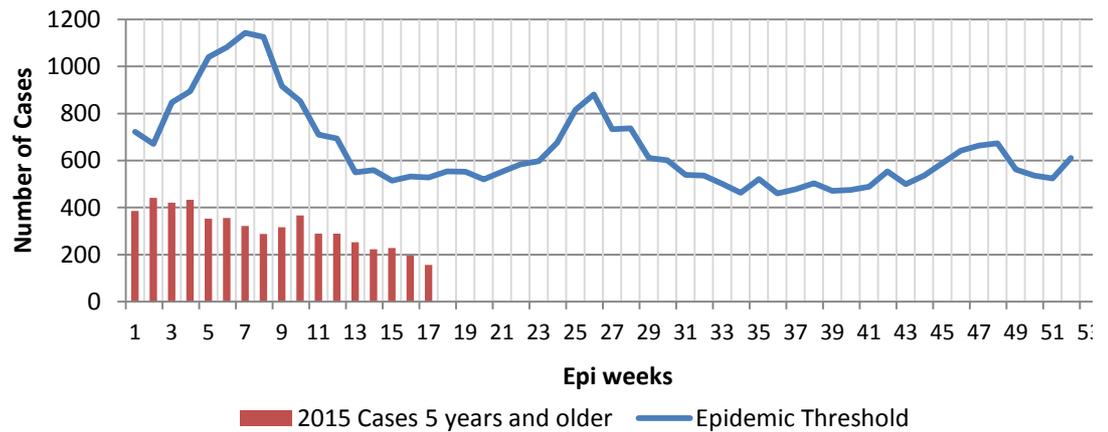
REPORTS FOR SYNDROMIC SURVEILLANCE

GASTROENTERITIS

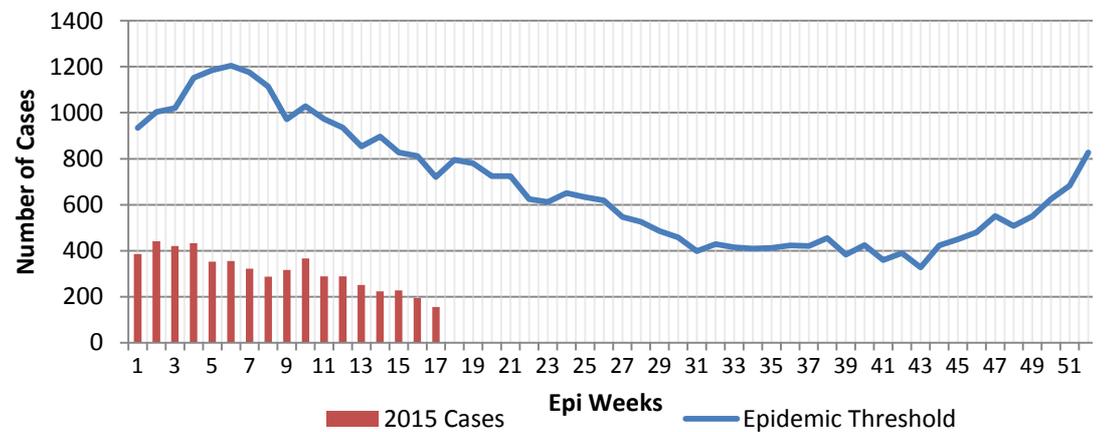
Three or more loose stools within 24 hours.



GE ≥5 Weekly Threshold vs Cases 2015, EW 1-17



GE <5 Weekly Threshold vs Cases 2015, EW 1-17

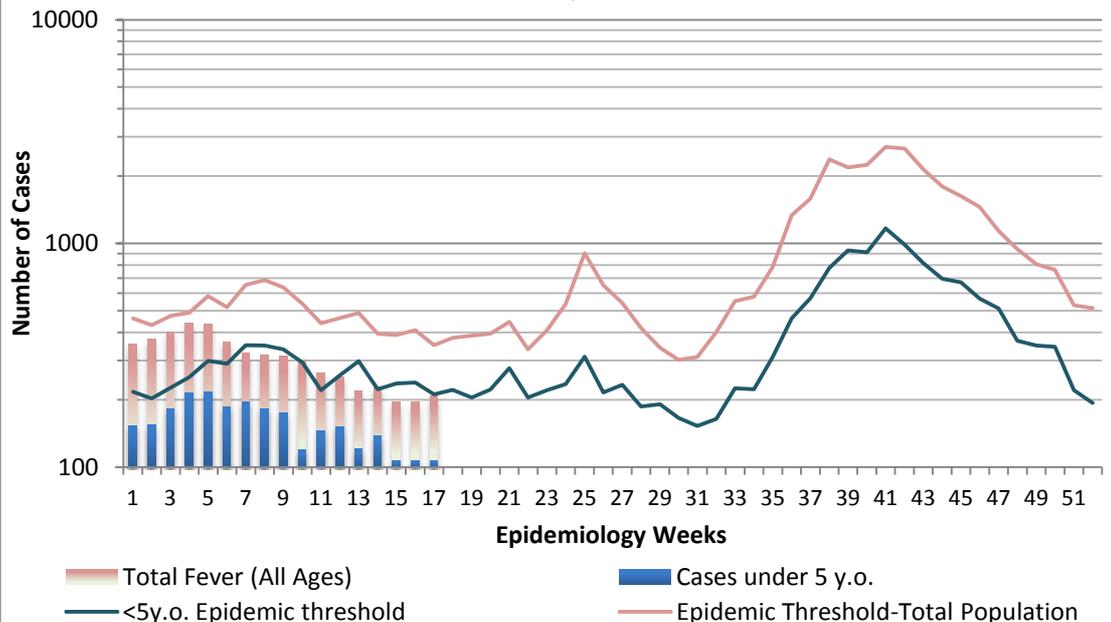


FEVER

Temperature of $>38^{\circ}C / 100.4^{\circ}F$ (or recent history of fever) with or without an obvious diagnosis or focus of infection.



Fever in under 5y.o. and Total Population 2015 vs Epidemic Thresholds, EW 1-17



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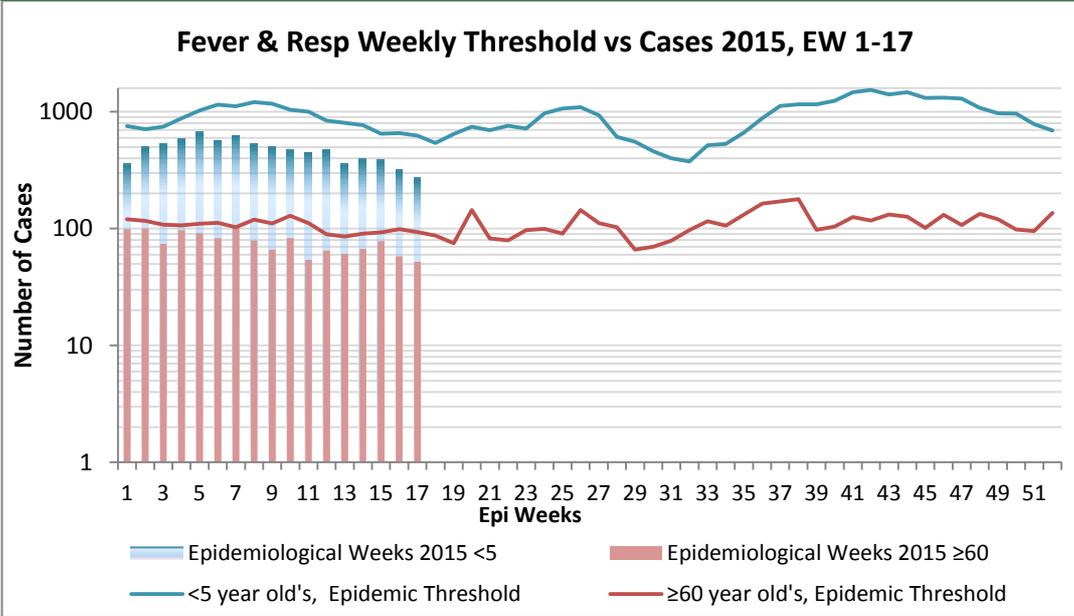
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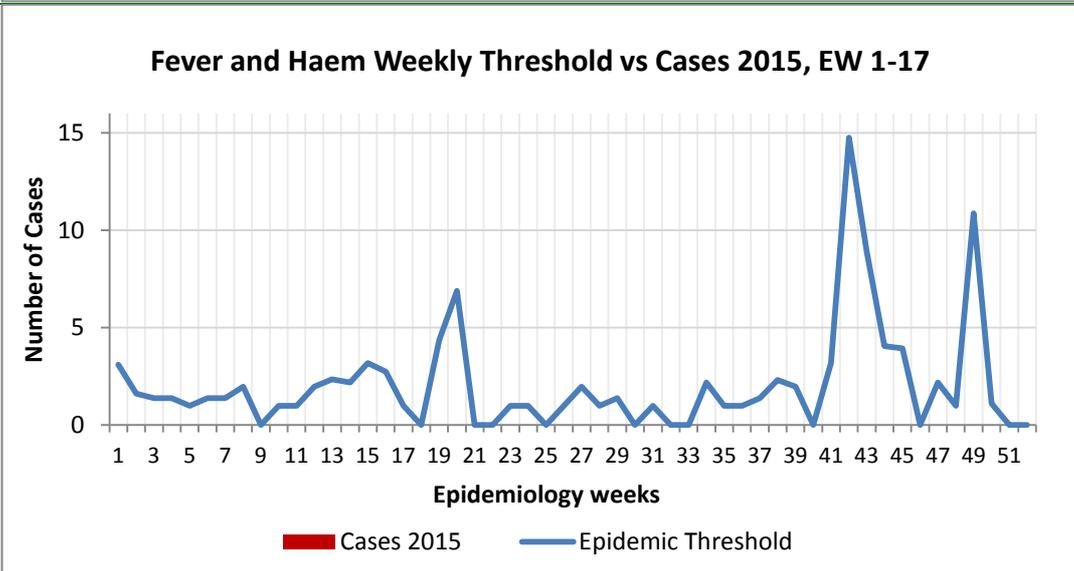
FEVER AND RESPIRATORY

Temperature of $>38^{\circ}C / 100.4^{\circ}F$ (or recent history of fever) in a previously healthy person with or without respiratory distress presenting with either cough or sore throat.



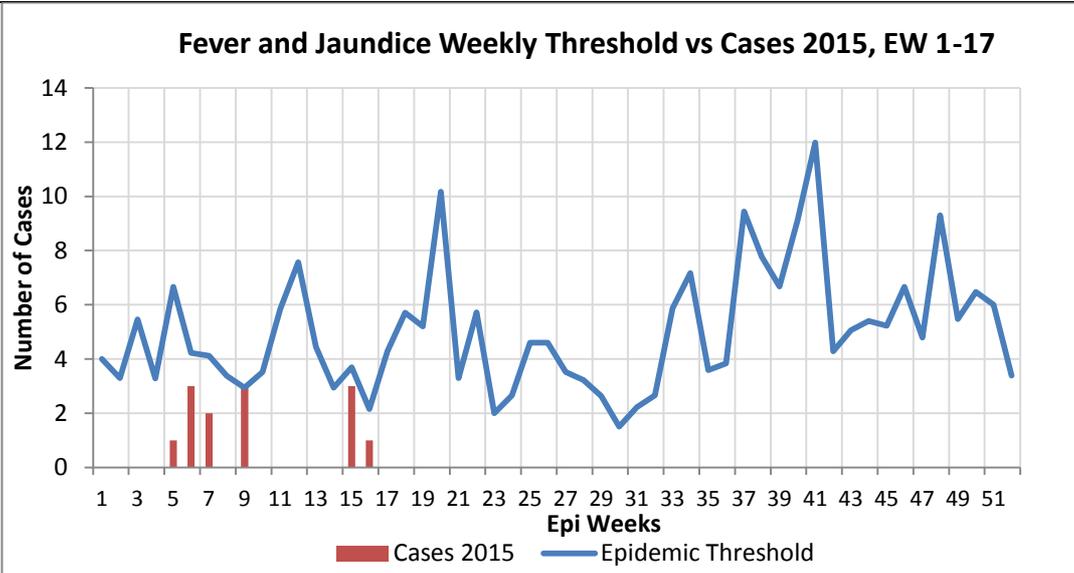
FEVER AND HAEMORRHAGIC

Temperature of $>38^{\circ}C / 100.4^{\circ}F$ (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE

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



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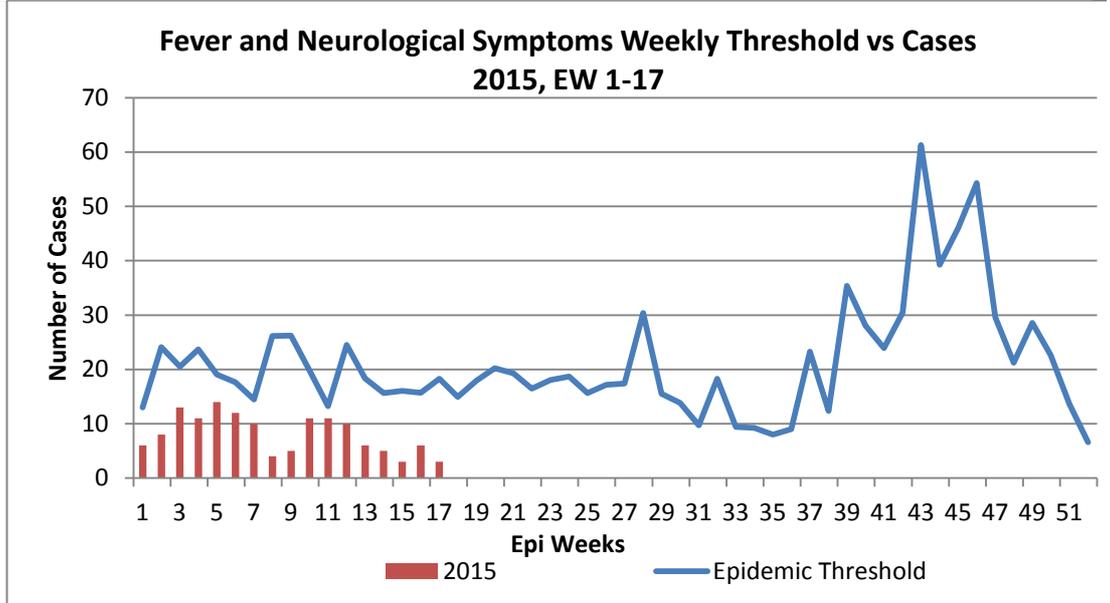
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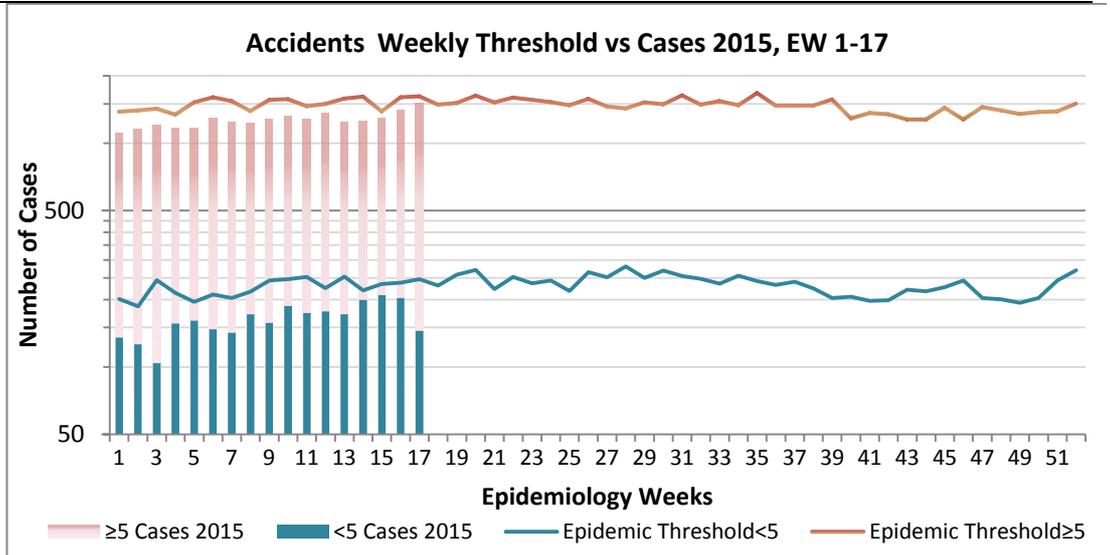
FEVER AND NEUROLOGICAL

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).



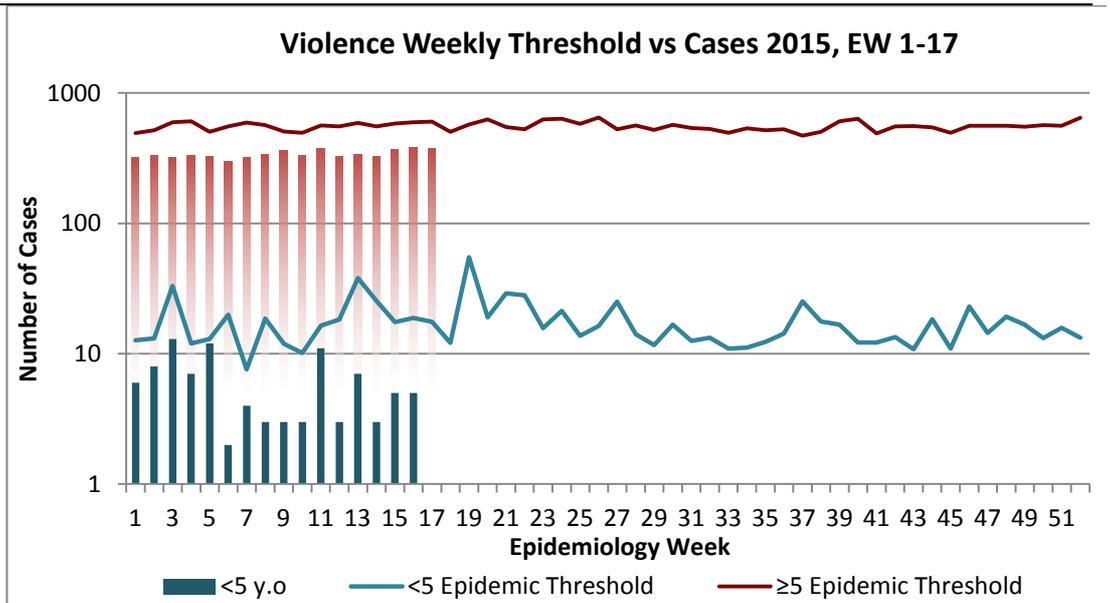
ACCIDENTS

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



VIOLENCE

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



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— CLASS ONE NOTIFIABLE EVENTS and LEPTOSPIROSIS

Comments

	CONFIRMED YTD			
	CLASS 1 EVENTS	CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	0	0	
	Cholera	0	0	
	Dengue Hemorrhagic Fever ¹	0	0	
	Hansen's Disease (Leprosy)	0	0	
	Hepatitis B	1	22	
	Hepatitis C	1	0	
	HIV/AIDS - See HIV/AIDS National Programme Report			
	Malaria (Imported)	2	0	
	Meningitis	0	0	
EXOTIC/ UNUSUAL	Plague	0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	
	Neonatal Tetanus	0	0	
	Typhoid Fever	2	0	
	Meningitis H/Flu	0	0	
	AFP/Polio	0	0	
SPECIAL PROGRAMMES	Congenital Rubella Syndrome	0	0	
	Congenital Syphilis	0	0	
	Fever and Rash	Measles	0	0
		Rubella	0	0
	Maternal Deaths ²	15	16	
	Ophthalmia Neonatorum	62	108	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	0	5	
	Tetanus	1	0	
	Tuberculosis	17	27	
Yellow Fever	0	0		
UNCLASSIFIED**	Leptospirosis	0	0	

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.

The TB case detection rate established by PAHO for Jamaica is at least 90% of their calculated estimate of cases in the island, this is 180 (of 200) cases per year.

*Data not available

**Leptospirosis is awaiting classification as class 1, 2 or 3

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

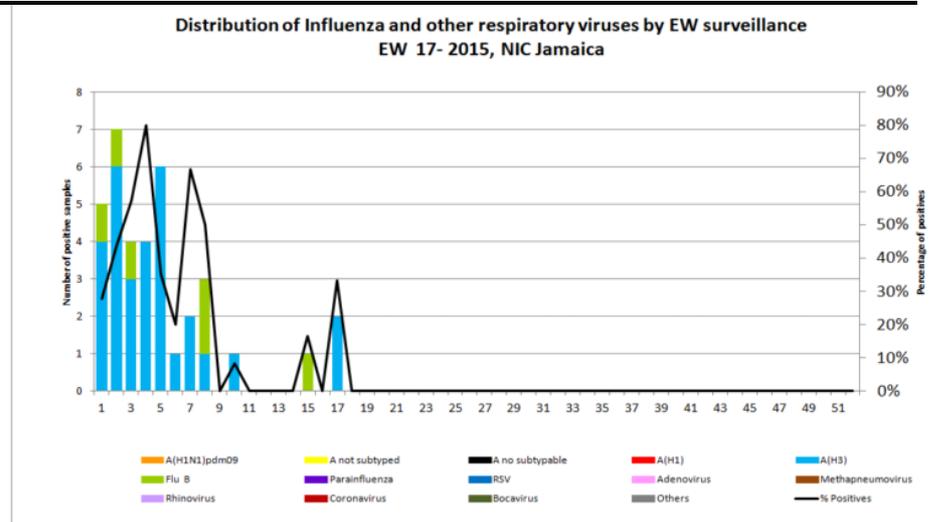
EW 17

April 26 – May 2, 2015

Epidemiology Week 17

May, 2015			Admitted Lower Respiratory Tract Infection and LRTI-related Deaths			
	EW 17	YTD	Current year		Previous year	
			Week 17 2015	YTD 2015	Week 17 2014	YTD 2014
SARI cases	19	365				
Total Influenza positive	0	33				
Samples						
Influenza A	0	28				
H3N2	0	28				
H1N1pdm09	0	0	Admitted Lower Respiratory Tract Infections			
Influenza B		5	Pneumonia-related Deaths			

Comments:
 The percent positivity of influenza viruses circulating among respiratory samples tested in EW 17, 2015 was 33.3%. This is a 33.3% increase compared with the previous week (0%). Influenza A/H3N2 is the predominant circulating virus (83%). Influenza B Yamagata continues to circulate at low levels. Both viruses are components of the 2014 -2015 Influenza Vaccines for the Northern Hemisphere.

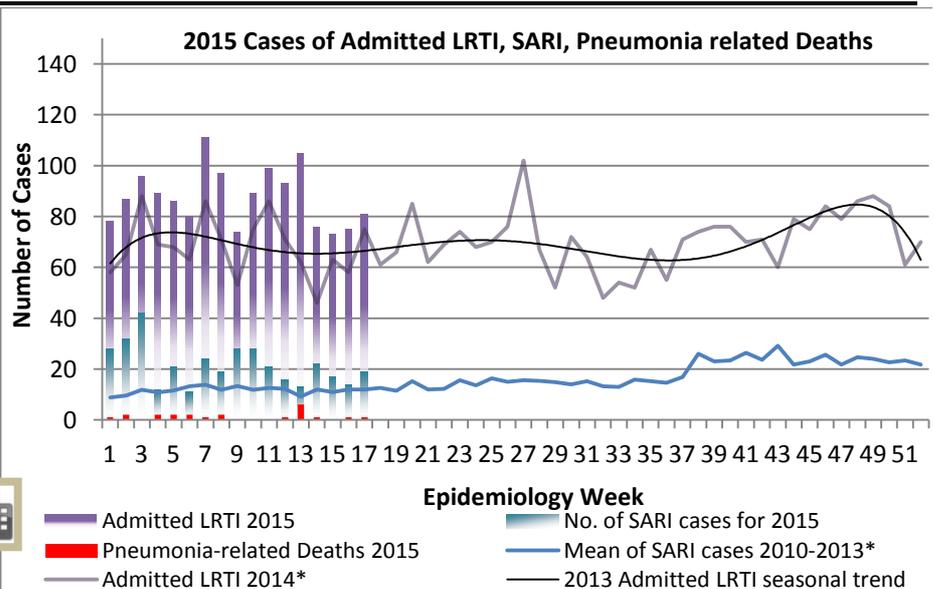


INDICATORS

Burden
 Year to date, respiratory syndromes account for 4.1% 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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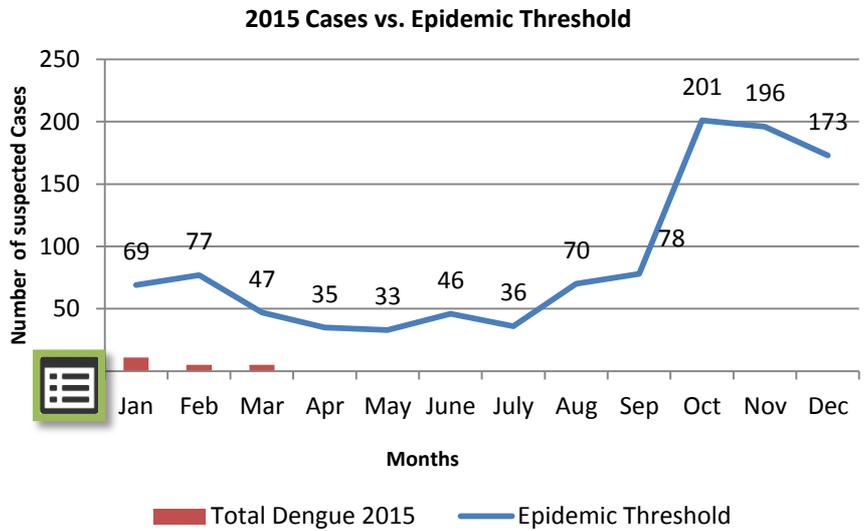
Dengue Bulletin

April 26 – May 2, 2015

Epidemiology Week 17

IMPORTANT INFORMATION

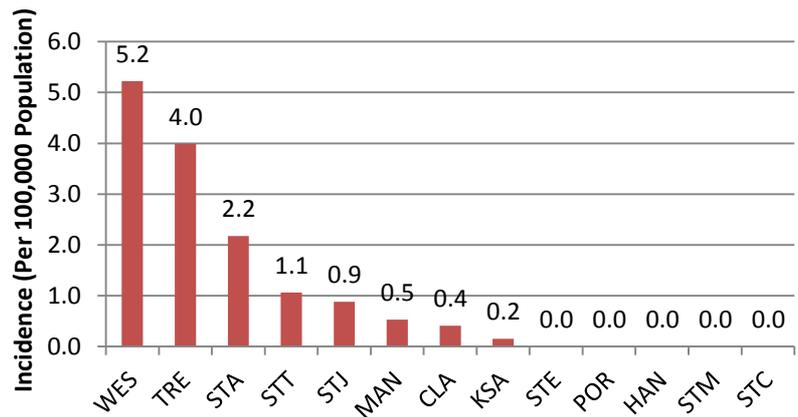
2014 Cases	Suspected DF	928
	Dengue incidence	34.1/100,000
	Lab-confirmed	72
	DHF/DSS	0
	Dengue-related Deaths	0
2015 YTD	Suspected DF	21
	Incidence	0.77/100,000
	Lab-Confirmed	2
	DHF/DSS	0



DISTRIBUTION

Year-to-Date Suspected Dengue Fever				
	M	F	Total	%
<1	2	2	4	19.0
1-4	1	0	1	4.8
5-14	0	1	1	4.8
15-24	1	1	2	9.5
25-44	4	5	9	42.9
45-64	2	1	3	14.3
≥65	1	0	1	4.8
Unknown	0	0	0	0
TOTAL	11	10	21	100

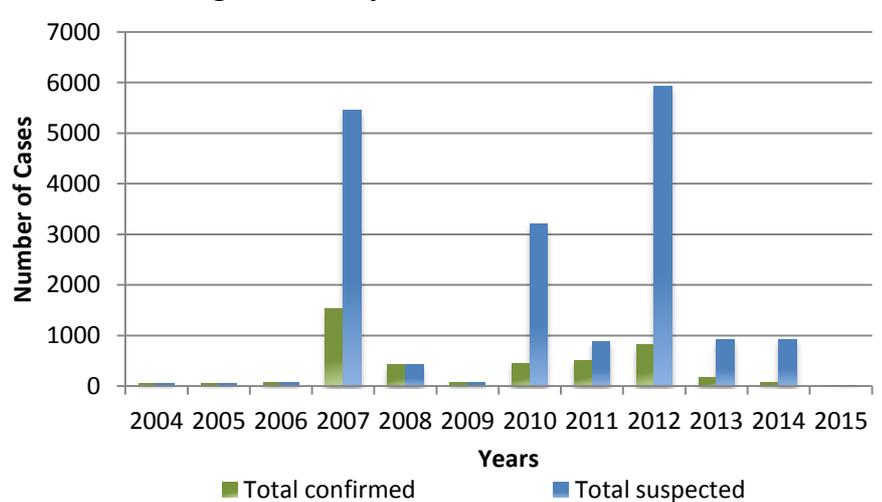
Parish Incidence



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

	2015		2014 YTD
	EW 17	YTD	
Total Suspected Dengue Cases	0	21	72
Lab Confirmed Dengue cases	0	2	0
CONFIRMED	DHF/DSS	0	2
	Dengue Related Deaths	0	2

Dengue Cases by Year, 2004-2015, Jamaica



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Gastroenteritis Bulletin

EW
17

April 26 – May 2, 2015

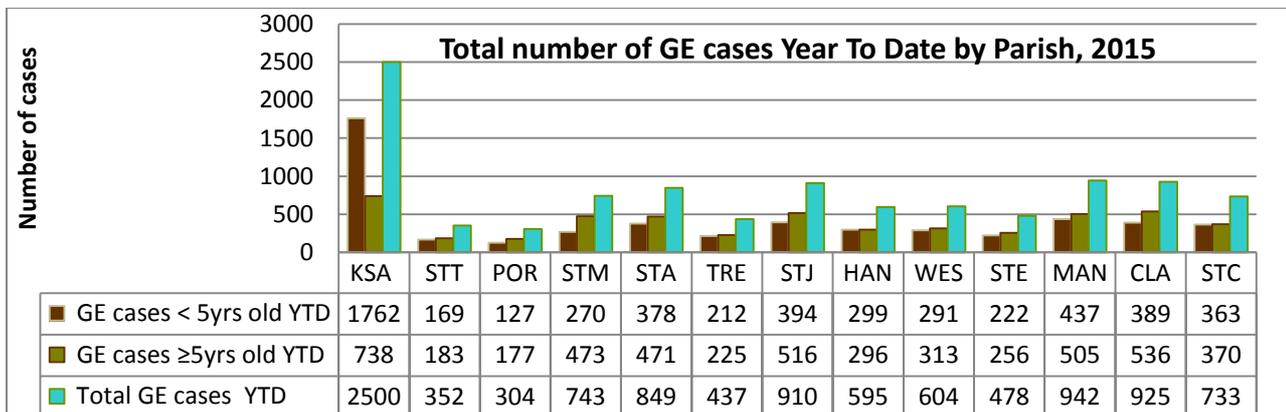
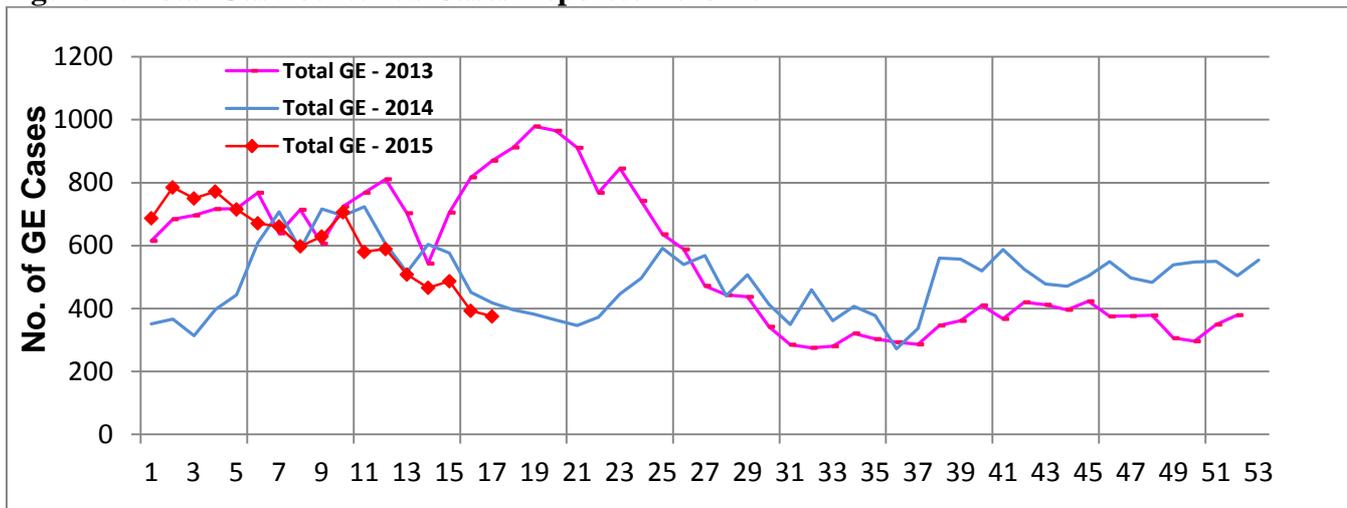
Epidemiology Week 17

Weekly Breakdown of Gastroenteritis cases

Year	EW 17			YTD		
	<5	≥5	Total	<5	≥5	Total
2015	156	219	375	5313	5059	10372
2014	205	213	418	4529	4530	9059

In Epidemiology Week 17, 2015, the total number of reported GE cases showed a 10% decrease compared to EW 17 of the previous year. The year to date figure showed a 14% increase in cases for the period.

Figure 1: Total Gastroenteritis Cases Reported 2013-2015



RESEARCH PAPER

Diabetes Quality of Care Collaborative: The Jamaican Experience

Davidson-Sadler T¹

¹Ministry of Health, Jamaica

Objective: To examine the use of Quality of Care Collaborative in primary care in Jamaica.

Methods: In 2009, the Ministry of Health in collaboration with the Pan American Health Organization embarked on a Diabetes Care Collaborative quality of care improvement project in seven government Health Centres (HCs) (St. Jago Park, Comprehensive, Maxfield Park, Windward Road, Cambridge, Mandeville and St. Ann's Bay health centres) government health centres and one private (Diabetes Association of Jamaica). The intervention used the Chronic Care Model (CCM) and the Breakthrough Series Methodology (BSM) to promote collaboration between primary care and secondary care teams to identify gaps in the provided care and find solutions.

Results: All eight HC's implemented the programme and at the end of two years only seven of six had the programme in place. In Kingston and St. Andrew two the programme had spread to other facilities. Five of the health facilities made changes to the standard of care provided. Of the seven facilities chosen only three utilized the model correctly.

Conclusion: This CCM and BSM, if correctly applied, can identify gaps in the health care system which can later be addressed and allow for further improvement of quality of care.



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