

WEEKLY EPIDEMIOLOGY BULLETIN

EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

WHO 5 Facts on Malaria



1. Malaria is caused by *Plasmodium* parasites that are transmitted to people through the bites of infected *Anopheles* mosquitoes. Of the 5 parasite species that cause malaria in humans, *Plasmodium falciparum* is the most deadly.
2. Half of the world's population is at risk of malaria. Every year, 3.2 billion people are at risk of malaria. This leads to about 198 million malaria cases and an estimated 584,000 malaria deaths.
3. Every minute a child dies from malaria. In 2013, 90% of the world's malaria deaths occurred in Africa and over 430,000 African children died before their fifth birthday.
4. Malaria mortality rates have fallen by 47% globally since 2000.
5. Early diagnosis and prompt treatment of malaria prevents deaths. It also contributes to reducing malaria transmission.

Adapted from:

http://www.who.int/features/factfiles/malaria/malaria_facts/en/index9.html

EPI WEEK 24

SYNDROMES



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CLASS 1 DISEASES



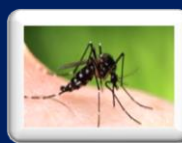
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INFLUENZA



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DENGUE FEVER



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GASTROENTERITIS



PAGE 9



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

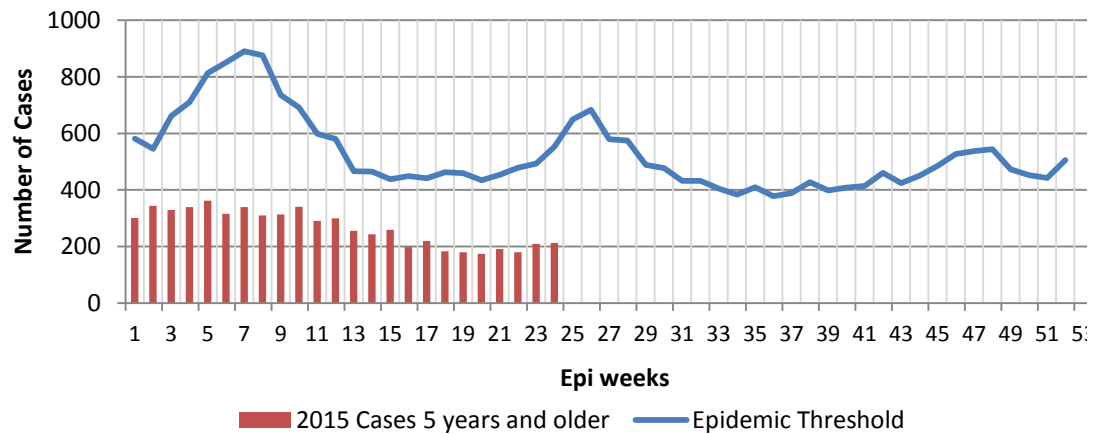
REPORTS FOR SYNDROMIC SURVEILLANCE

GASTROENTERITIS

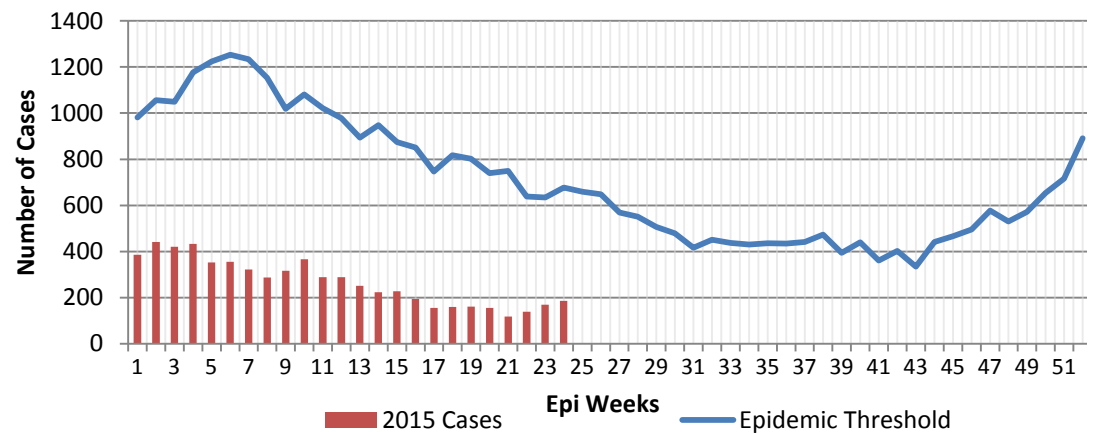
Three or more loose stools within 24 hours.



GE ≥5 Weekly Threshold vs Cases 2015, EW 1-24



GE <5 Weekly Threshold vs Cases 2015, EW 1-24

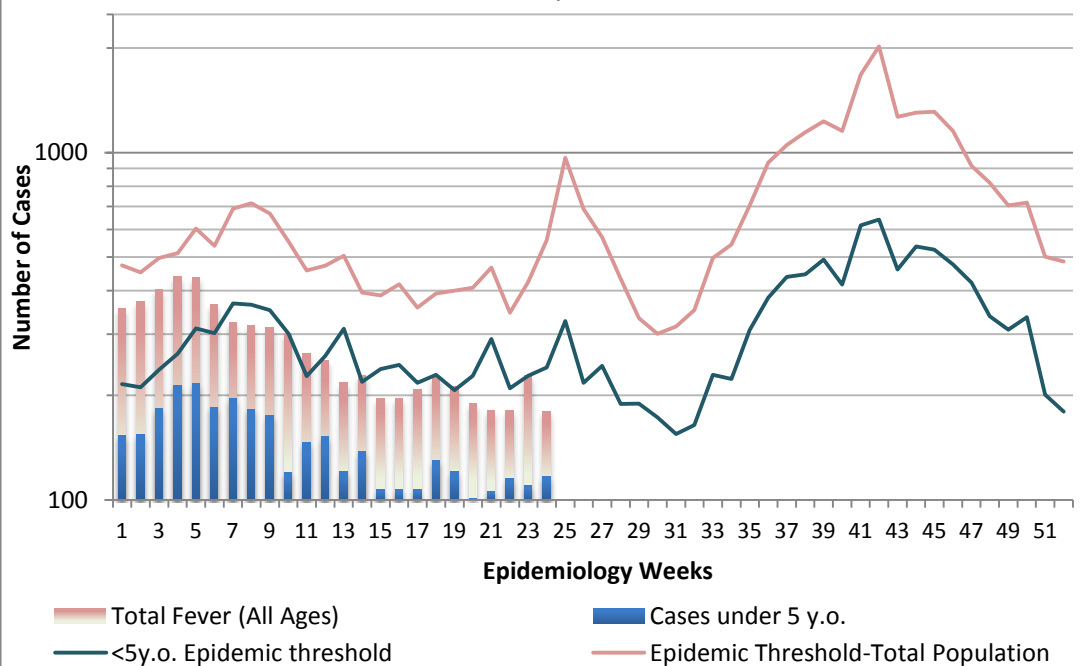


FEVER

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 1-24



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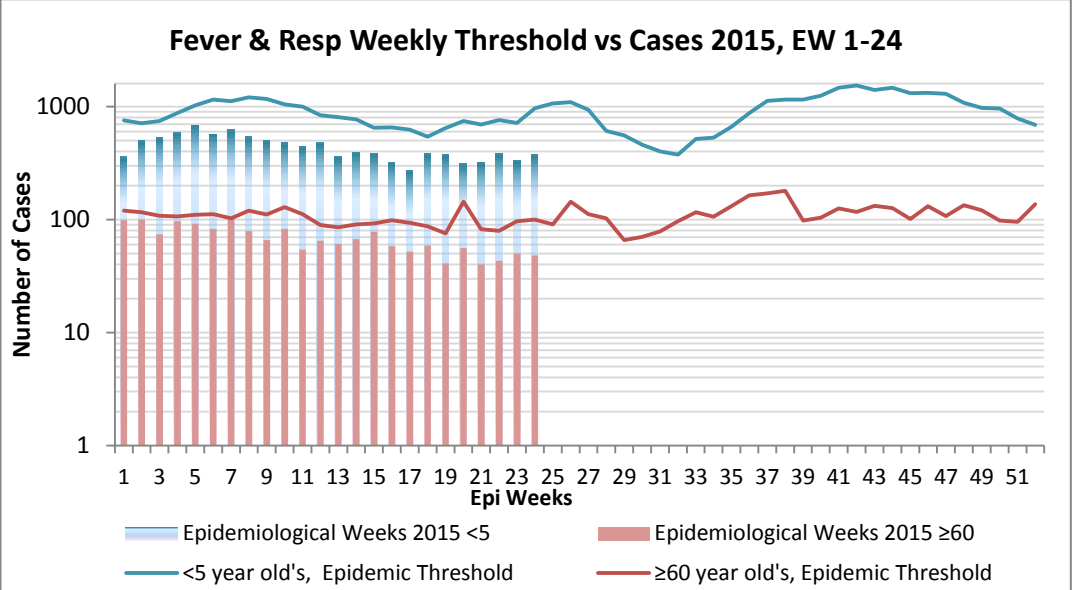
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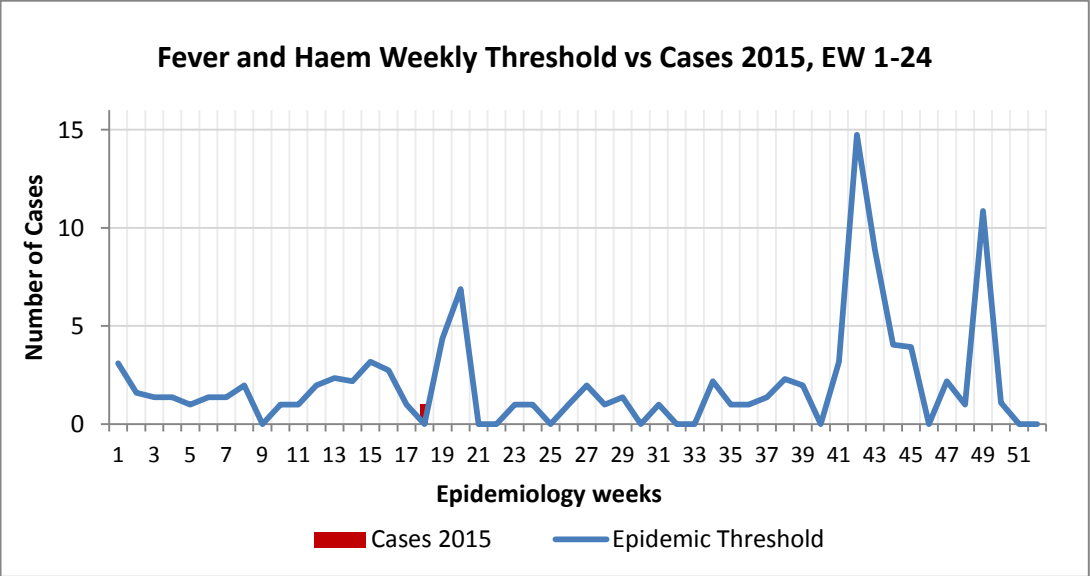
FEVER AND RESPIRATORY

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.



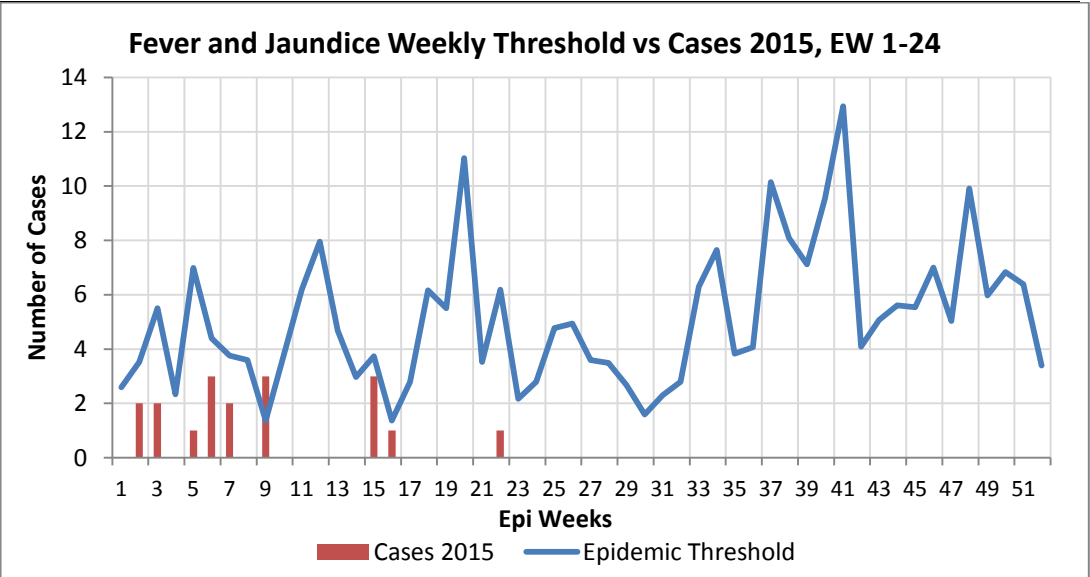
FEVER AND HAEMORRHAGIC

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.



NOTIFICATIONS- All clinical sites

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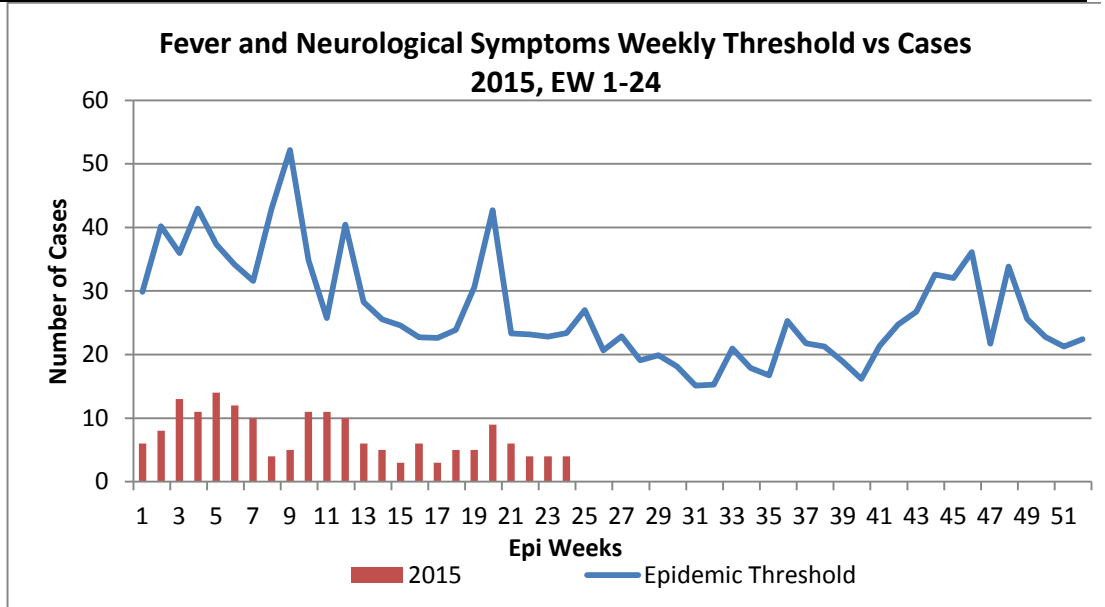
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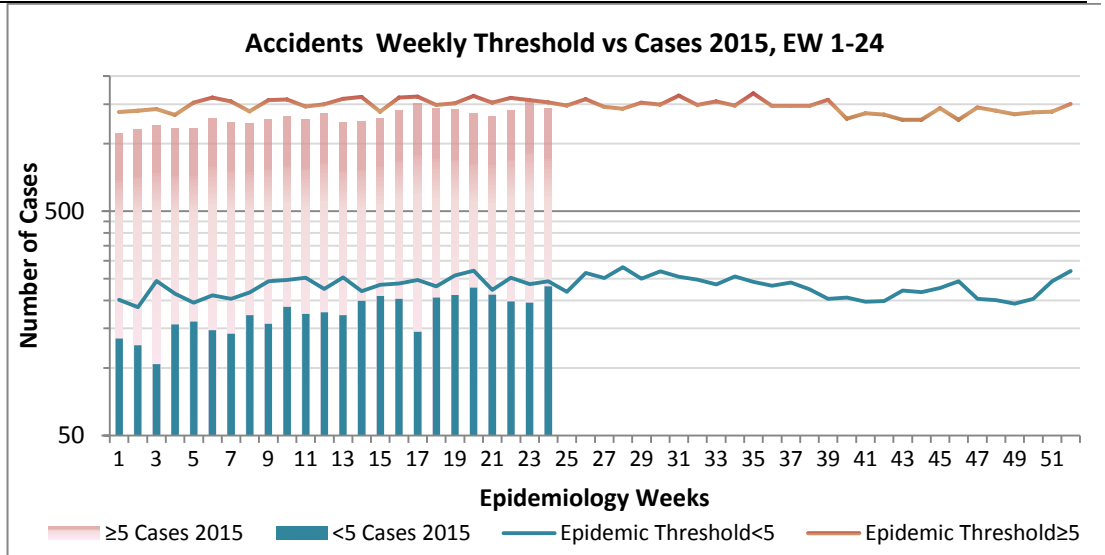
FEVER AND NEUROLOGICAL

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).



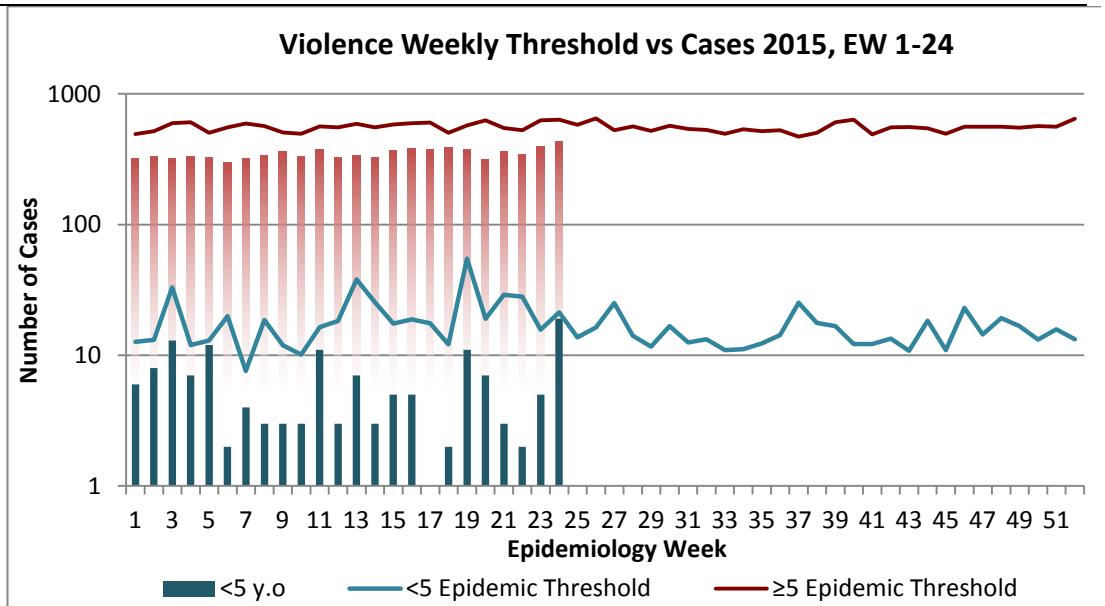
ACCIDENTS

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	32	305	
	Cholera	0	0	
	Dengue Hemorrhagic Fever ¹	0	0	
	Hansen's Disease (Leprosy)	0	0	
	Hepatitis B	5	35	
	Hepatitis C	1	1	
	HIV/AIDS - See HIV/AIDS National Programme Report			
	Malaria (Imported)	2	0	
	Meningitis	175	334	
EXOTIC/ UNUSUAL	Plague	0	0	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	
	Neonatal Tetanus	0	0	
	Typhoid Fever	3	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	22	20	
	Ophthalmia Neonatorum	105	147	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	2	6	
	Tetanus	1	0	
	Tuberculosis	22	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

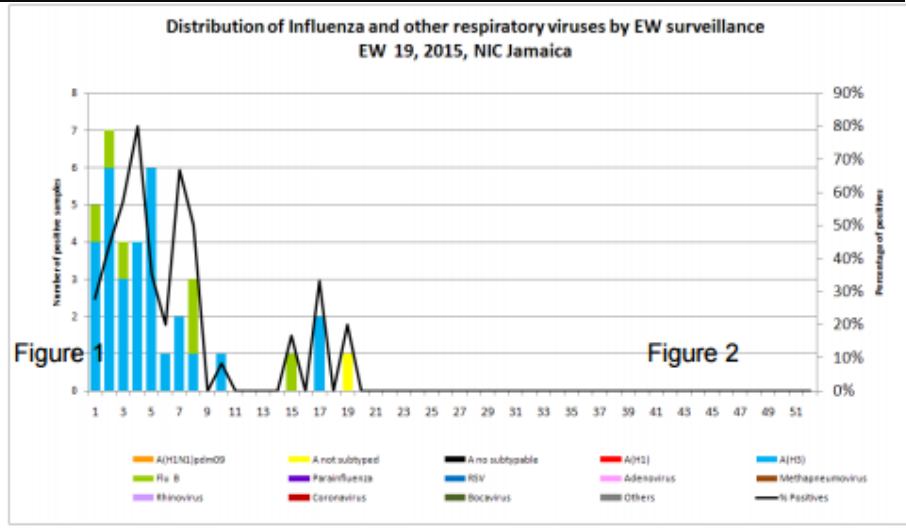
EW 24

June 14 – June 20, 2015

Epidemiology Week 24

June, 2015			Admitted Lower Respiratory Tract Infection and LRTI-related Deaths			
	EW 24	YTD	Current year		Previous year	
			Week 24 2015	YTD 2015	Week 24 2014	YTD 2014
SARI cases	20	470				
Total Influenza positive	0	33				
Samples			Admitted Lower Respiratory Tract Infections			
Influenza A	0	28	82	2011	68	1613
H3N2	0	28	Pneumonia-related Deaths			
			2	32	1	30
<u>H1N1pdm09</u>	0	0				
Influenza B		5				

Comments:
 The percent positivity of influenza viruses circulating among respiratory samples tested in EW 19, 2015 was 20%. Influenza A/H3N2 is the predominant circulating virus (81%), while Influenza B Yamagata continues to circulate at low levels of 16%. Both viruses are components of the 2014 -2015 Influenza Vaccines for the Northern Hemisphere.

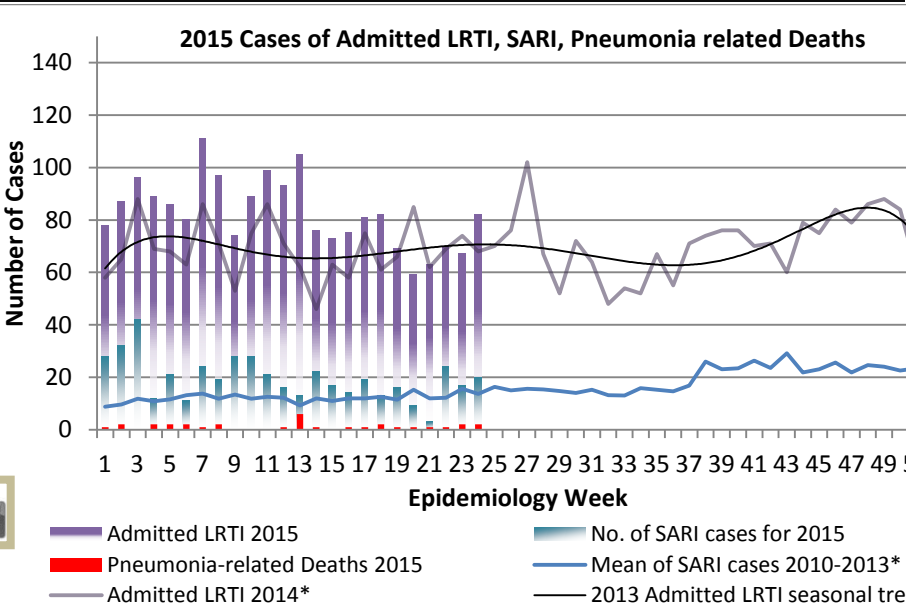


INDICATORS

Burden
 Year to date, respiratory syndromes account for 3.8% 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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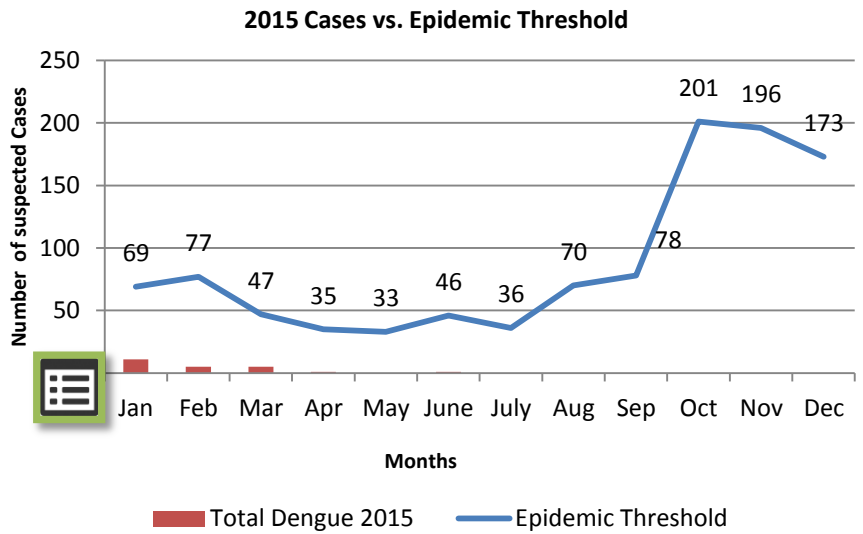
Dengue Bulletin

June 14 – June 20, 2015

Epidemiology Week 24

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	23
	Incidence	0.85/100,000
	Lab-Confirmed	3
	DHF/DSS	0

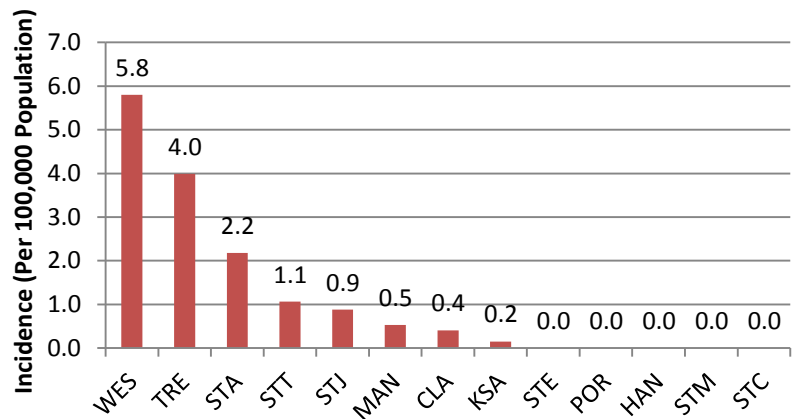


DISTRIBUTION

Year-to-Date Suspected Dengue Fever

	M	F	Total	%
<1	2	2	4	17.4
1-4	1	0	1	4.3
5-14	1	2	3	13.0
15-24	1	1	2	8.7
25-44	4	5	9	39.1
45-64	2	1	3	13.0
≥65	1	0	1	4.3
Unknown	0	0	0	0
TOTAL	12	11	23	100

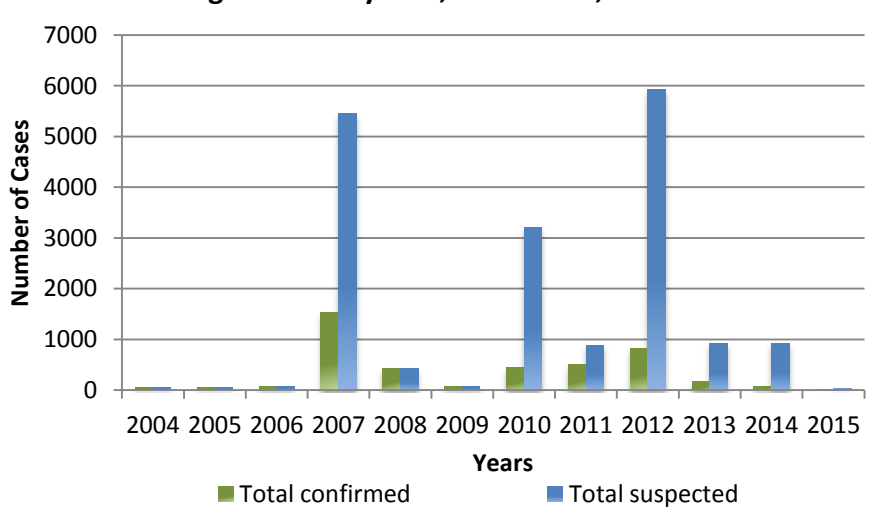
Parish Incidence



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

	2015		2014 YTD
	EW 24	YTD	
Total Suspected Dengue Cases	0	23	97
Lab Confirmed Dengue cases	0	3	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
24

June 14 – June 20, 2015

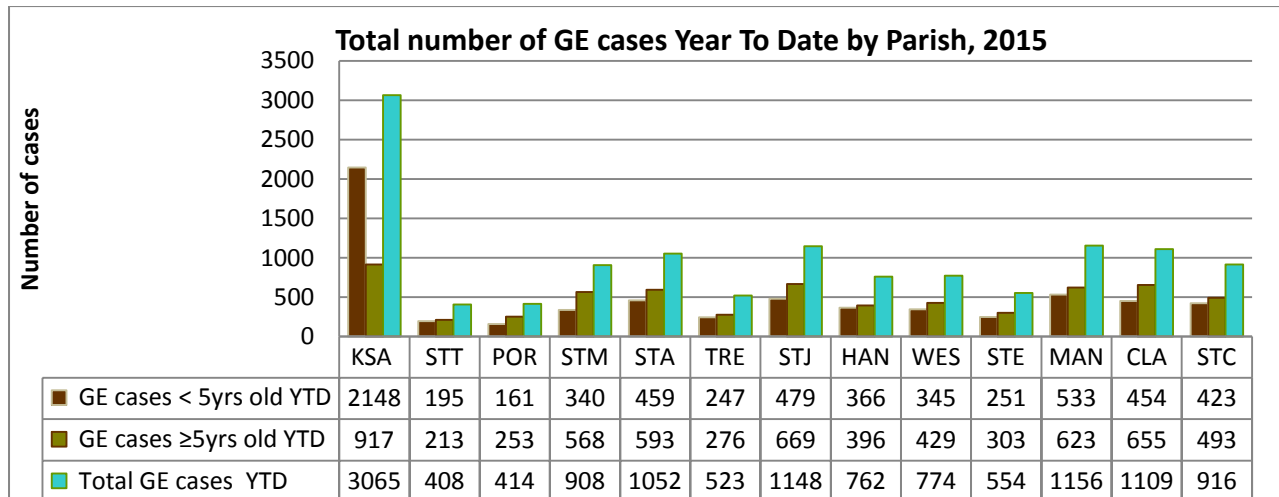
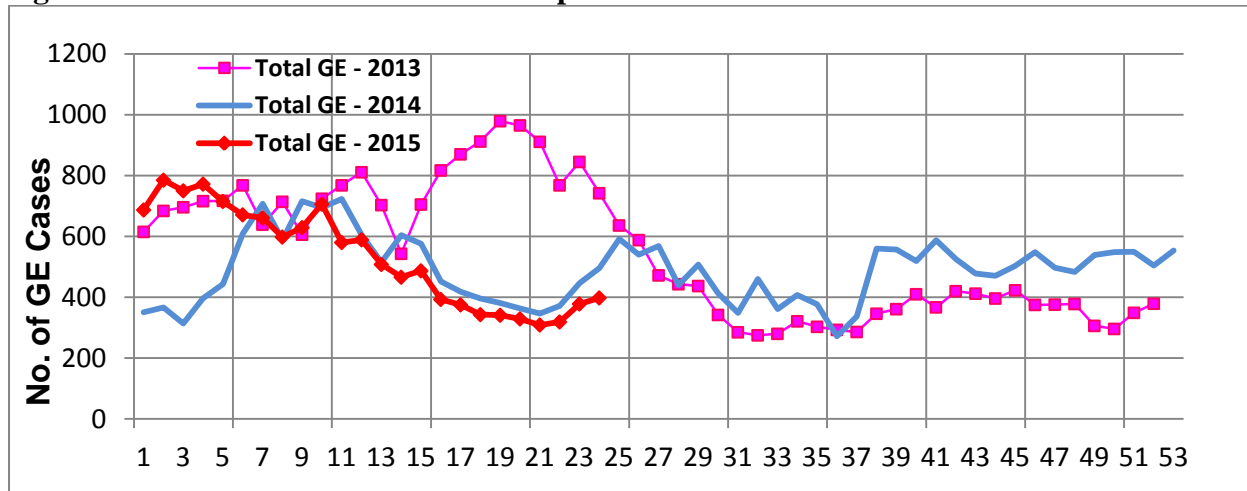
Epidemiology Week 24

Weekly Breakdown of Gastroenteritis cases

Year	EW 24			YTD		
	<5	≥5	Total	<5	≥5	Total
2015	186	212	398	6401	6388	12789
2014	261	235	496	5880	5979	11859

In Epidemiology Week 24, 2015, the total number of reported GE cases showed a 20% decrease compared to EW 24 of the previous year. The year to date figure showed an 8% increase in cases for the period.

Figure 1: Total Gastroenteritis Cases Reported 2013-2015



RESEARCH PAPER

Patient Satisfaction with Nurse Practitioner delivered Services at two Health Centres in Kingston and St. Andrew

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The UWI School of Nursing, Mona, The University of the West Indies, Kingston 7

Objective: To explore the level of patient satisfaction with nurse practitioner delivered services in two health centres in Kingston and St. Andrew.

Method: A cross sectional survey of 120 adult clients (≥ 18 years old) seen by the nurse practitioner at a Type 3 and a Type 5 health centre in Kingston and St. Andrew was conducted utilizing a self administered questionnaire. The data collection instrument included a modified Nurse Practitioner Satisfaction Survey. Data were analyzed using the SPSS® version 18 for Windows®.

Results: Of 120 participants, 77.2% were females with an average age of 40 ± 16 years. Most (63.3%) were from the Type 5 health centre. The mean general satisfaction score was 80.88 out of a possible 90 and 83.3% of the respondents reported they were very satisfied and 16.6% were satisfied with the nurse practitioner services at both facilities. There was no significant difference between the mean satisfaction scores among males (80.41 ± 6.5) and females (80.95 ± 8.3) and respondents from the Type 3 (81.09 ± 9.18) and Type 5 (81.76 ± 7.1) health centre. No respondent was dissatisfied. The mean satisfaction score was significantly higher among respondents 40 years and older than that of their younger counterparts ($p=0.032$). Socio-demographic and organization characteristics were not associated with the mean satisfaction score.

Conclusions: A high level of satisfaction exists among patients seen by the nurse practitioner in the two facilities in Kingston and St Andrew. Nurse practitioners may play an expanded role in the delivery of primary healthcare.



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