

Week ending September 5, 2015

Epidemiology Week 35

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

Flooding and communicable diseases



Image source: <http://indianexpress.com/article/cities/mumbai/leptospirosis-cases-11-out-of-16-deaths-caused-due-to-delay-in-treatment/>

Risk assessment

Floods can potentially increase the transmission of the following communicable diseases:

- Water-borne diseases, such as Typhoid Fever, Cholera, Leptospirosis and Hepatitis A
- Vector-borne diseases, such as Malaria, Dengue and Dengue Haemorrhagic Fever, Yellow Fever, and West Nile Fever

Water-borne diseases

Flooding is associated with an increased risk of infection, however this risk is low unless there is significant population displacement and/or water sources are compromised.

The only epidemic-prone infection which can be transmitted directly from contaminated water is Leptospirosis, a zoonotic bacterial disease.

Transmission occurs through contact of the skin and mucous membranes with water, damp soil or vegetation (such as sugarcane) or mud contaminated with rodent urine.

Vector-borne diseases

Floods may indirectly lead to an increase in vector-borne diseases through the expansion in the number and range of vector habitats.

Preventive measures

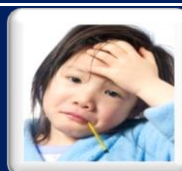
Communicable disease risks from flooding can be greatly reduced if the following recommendations are followed.

(Including)... Chlorination of water, vaccination against hepatitis A (for high risk groups-involved in the management of drinking water, waste water or sewage), (use of) insecticides, and health education.

Adapted from: http://www.who.int/hac/techguidance/ems/flood_cds/en/index1.html

EPI WEEK 35

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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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

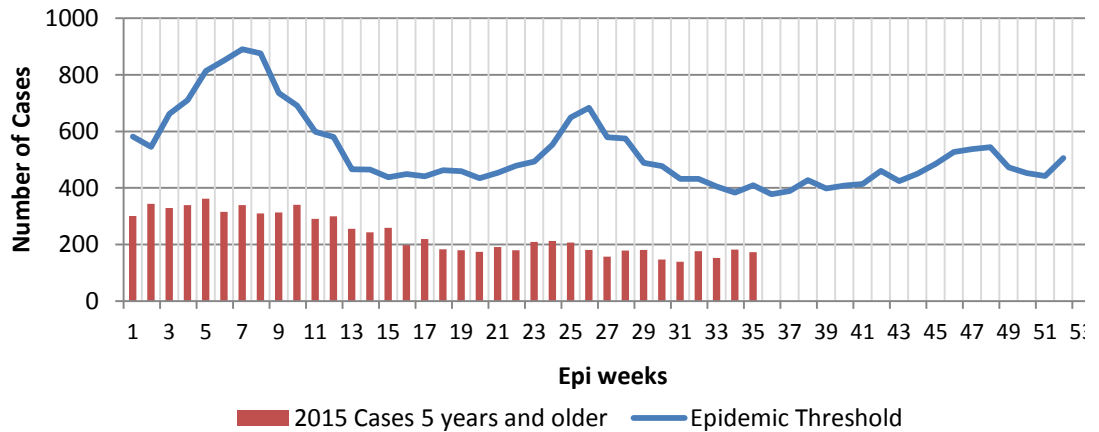
REPORTS FOR SYNDROMIC SURVEILLANCE

GASTROENTERITIS

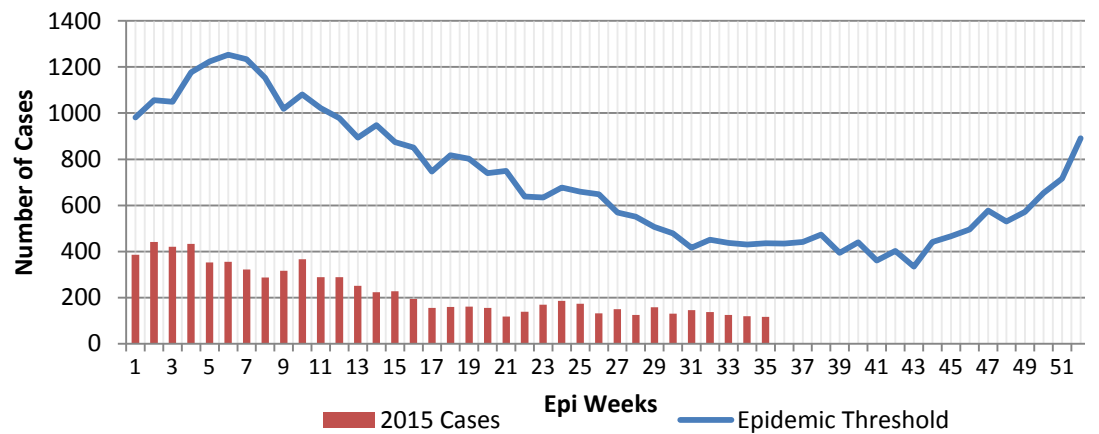
Three or more loose stools within 24 hours.



GE ≥5 Weekly Threshold vs Cases 2015, EW 1-35



GE <5 Weekly Threshold vs Cases 2015, EW 1-35

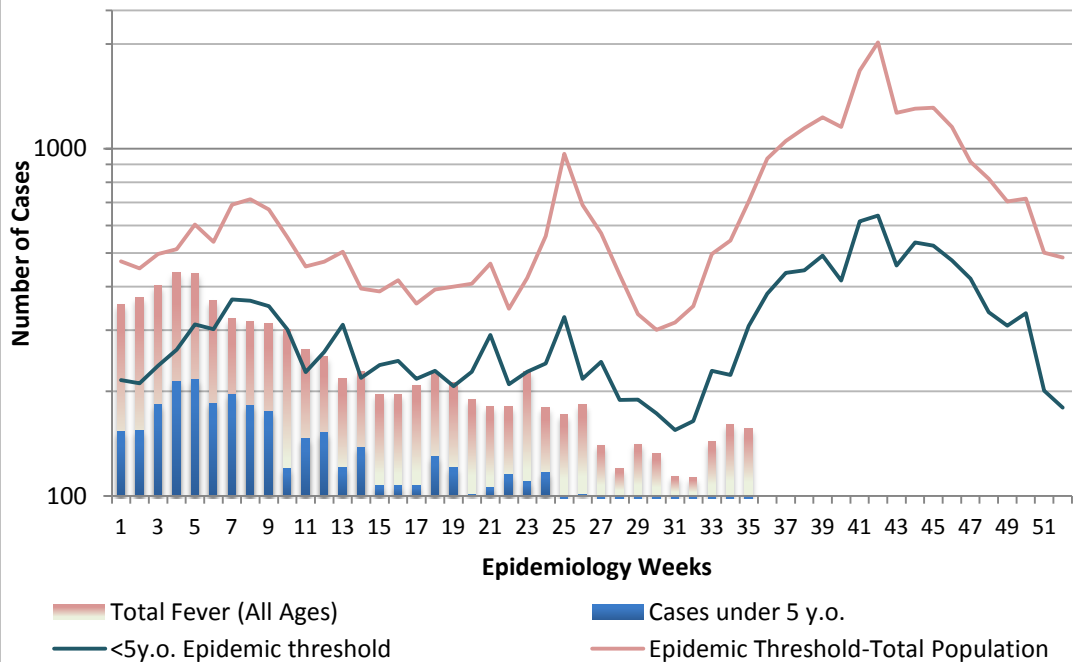


FEVER

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 1-35



NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

HOSPITAL ACTIVE SURVEILLANCE- 30 sites*. Actively pursued

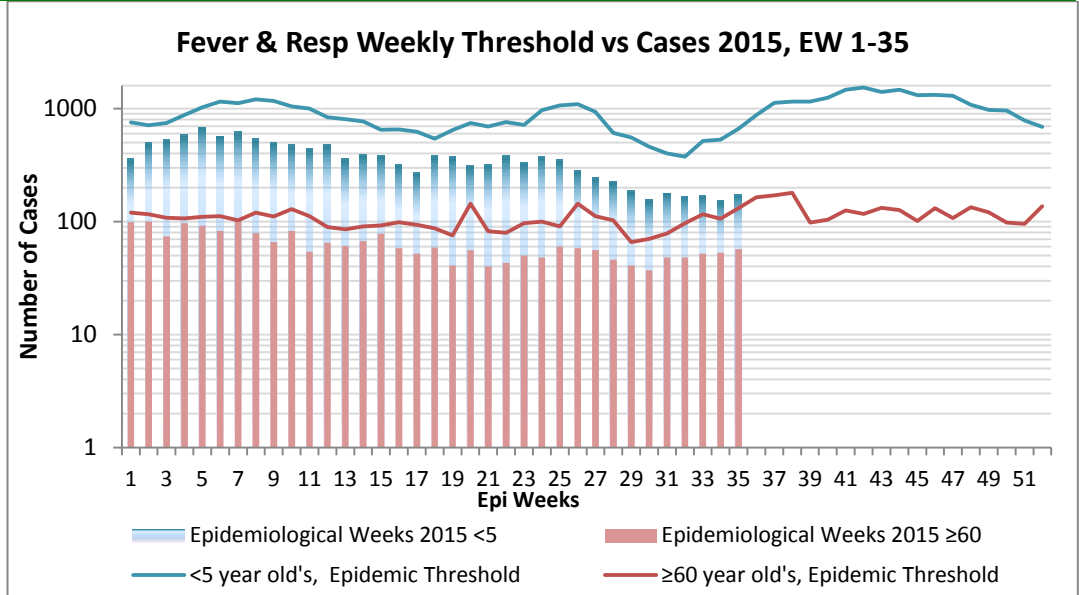
SENTINEL REPORT- 79 sites*. Automatic reporting

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REPORTS FOR SYNDROMIC SURVEILLANCE

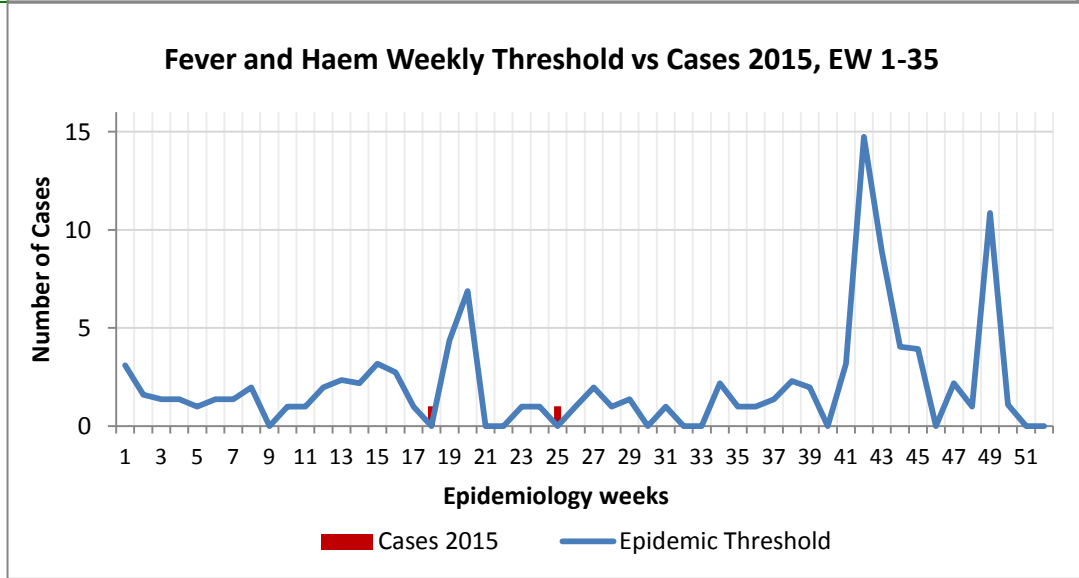
FEVER AND RESPIRATORY

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.



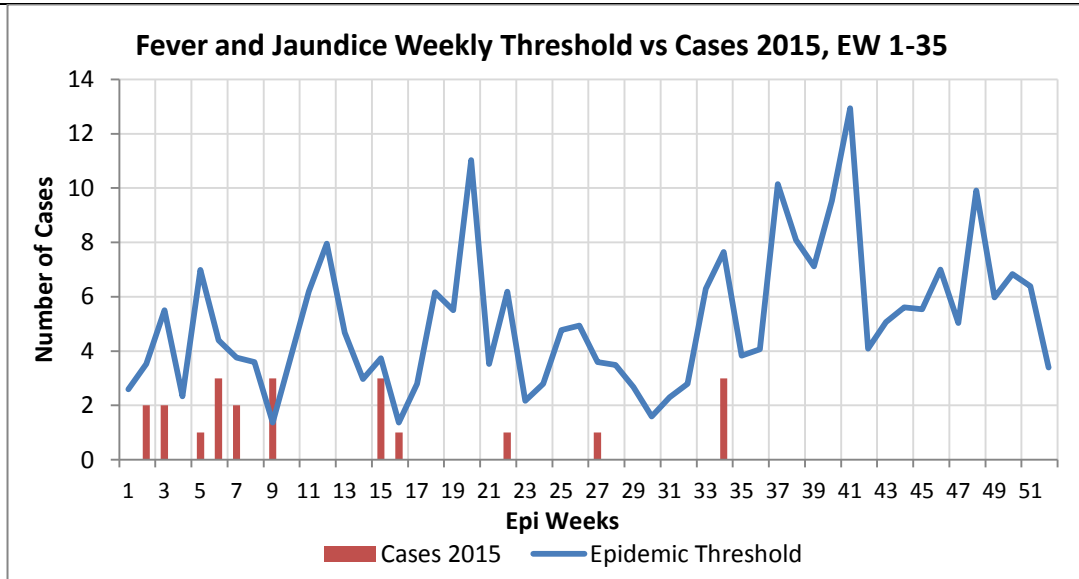
FEVER AND HAEMORRHAGIC

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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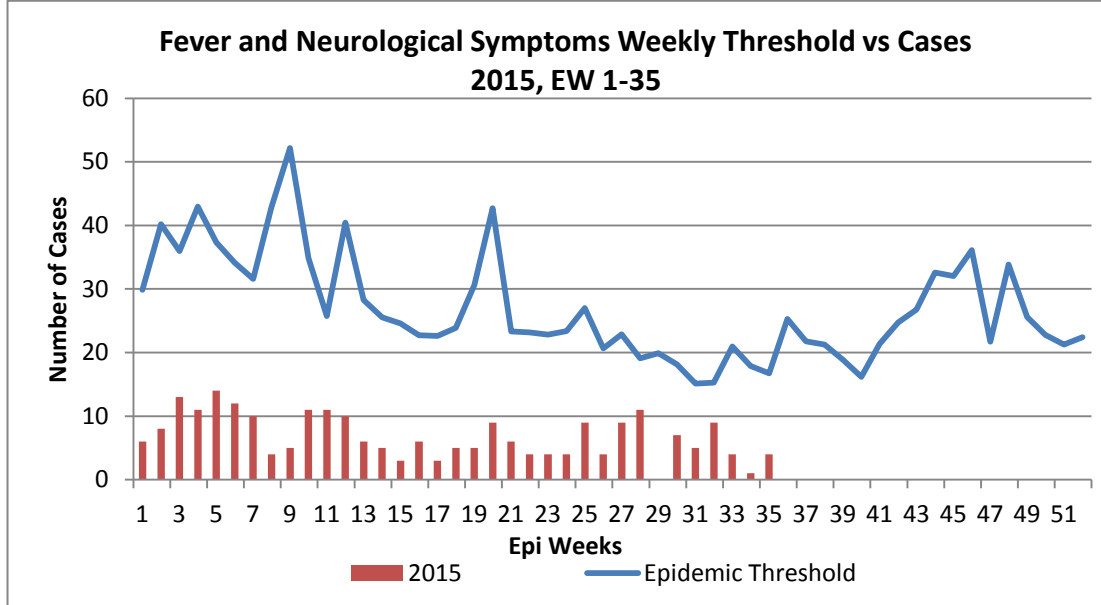
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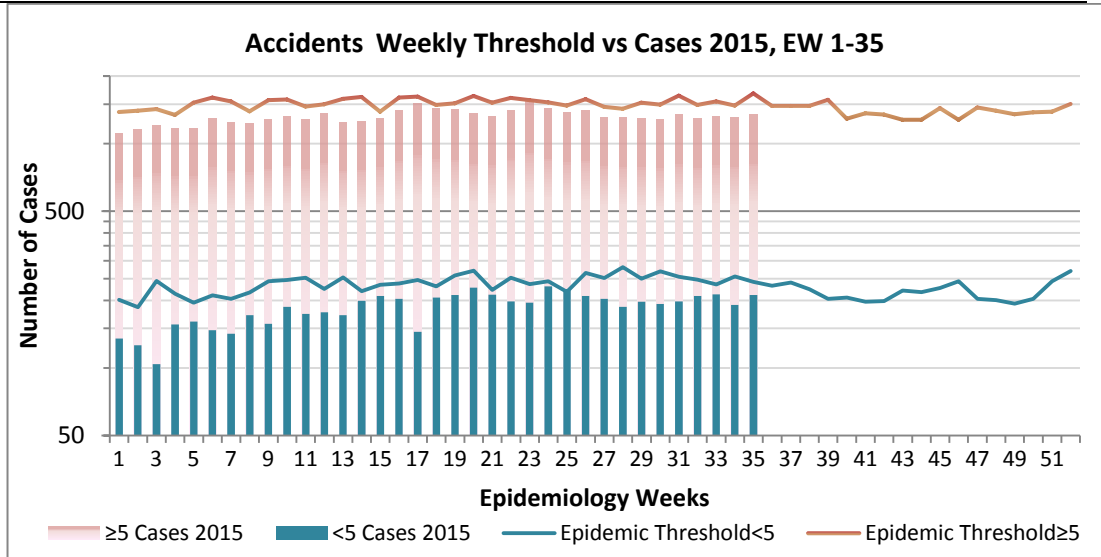
FEVER AND NEUROLOGICAL

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).



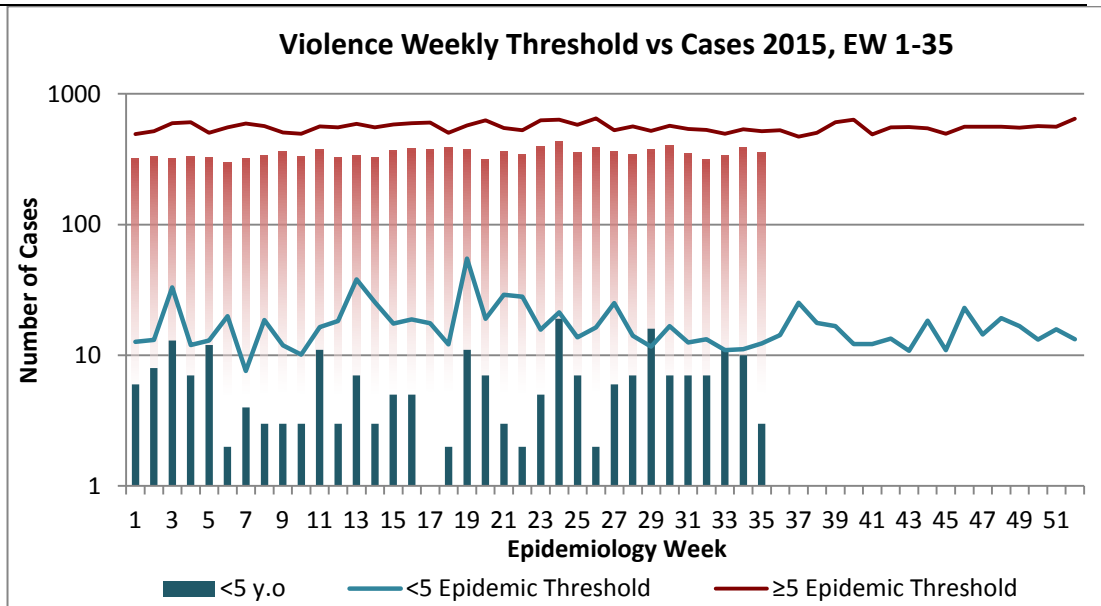
ACCIDENTS

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

	CLASS 1 EVENTS	CONFIRMED YTD		
		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	425	433	
	Cholera	0	0	
	Dengue Hemorrhagic Fever ¹	0	0	
	Hansen's Disease (Leprosy)	1	1	
	Hepatitis B	14	55	
	Hepatitis C	2	11	
	HIV/AIDS - See HIV/AIDS National Programme Report			
	Malaria (Imported)	2	1	
	Meningitis	249	491	
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	27	37	
	Ophthalmia Neonatorum	174	197	
	Pertussis-like syndrome	0	0	
	Rheumatic Fever	5	14	
	Tetanus	1	0	
	Tuberculosis	55	39	
Yellow Fever	0	0		
UNCLASSED**	Leptospirosis	16	9	

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.

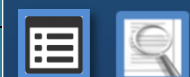
The TB case detection rate established by PAHO for Jamaica is at least 90% of their calculated estimate of cases in the island, this is 180 (of 200) cases per year.


*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

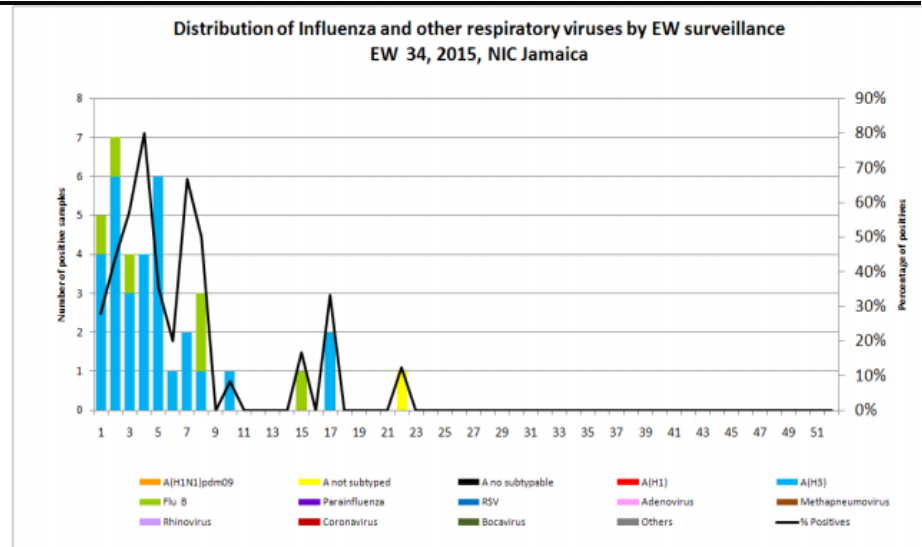
EW 35

August 30 – September 5, 2015

Epidemiology Week 35

September, 2015			Admitted Lower Respiratory Tract Infection and LRTI-related Deaths			
	EW 35	YTD	Current year		Previous year	
			Week 35 2015	YTD 2015	Week 35 2014	YTD 2014
SARI cases	15	607				
Total Influenza positive	0	37				
Samples			Admitted Lower Respiratory Tract Infections			
Influenza A	0	31	52	2669	67	2337
H3N2	0	30	Pneumonia-related Deaths			
			4	45	1	53
H1N1pdm09	0	0				
Influenza B		6				

Comments:
 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. There has been no detection of the influenza variant A/H3 virus (A/H3N2v), influenza Avian H5 or H7 viruses among samples tested.

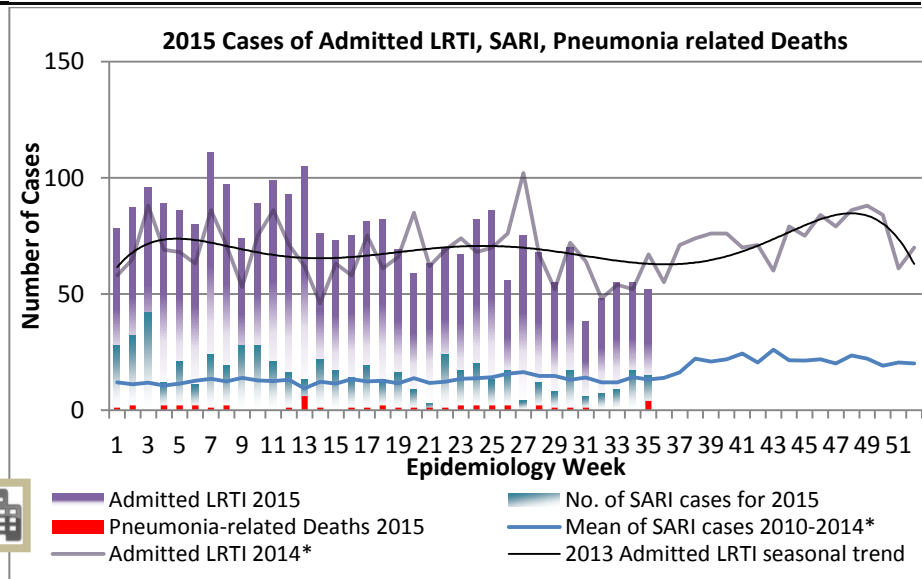


INDICATORS


Burden
 Year to date, respiratory syndromes account for 3.3% 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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 All clinical sites

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Dengue Bulletin

August 30 – September 5, 2015

Epidemiology Week 35

DENGUE AND SEVERE DENGUE

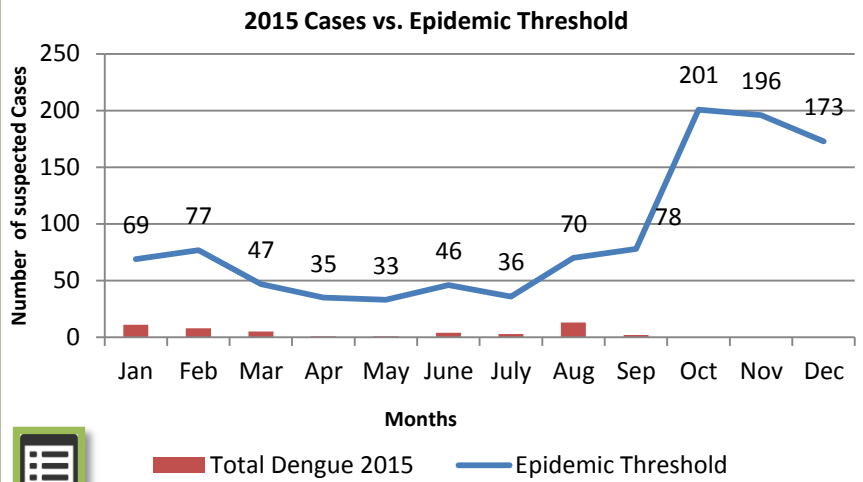
Classic dengue incidence per 100,000 (CI -95%): 14.6 (12.0–17.1)

Hemorrhagic dengue incidence per 100,000 (CI- 95%): 0.14 (0.03–0.24)

Classic dengue lethality % (CI- 95%): 0.12 (0.04–0.26)

Classic dengue mortality per 100,000 (CI -95%): 0.02 (0.00–0.04)

Source: Pan American Health Organization

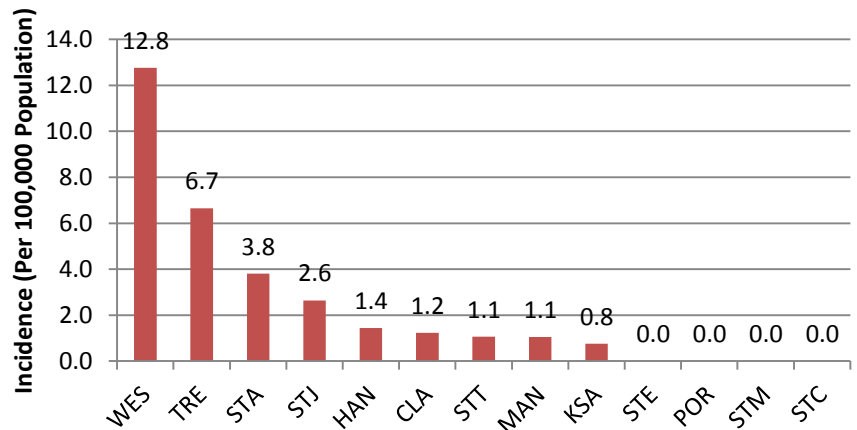


DISTRIBUTION

Year-to-Date Suspected Dengue Fever

	M	F	Total	%
<1	3	2	5	10.0
1-4	1	0	1	2.0
5-14	3	7	10	20.0
15-24	10	3	13	26.0
25-44	7	7	14	28.0
45-64	3	2	5	10.0
≥65	1	1	2	4.0
Unknown	0	0	0	0
TOTAL	28	22	50	100

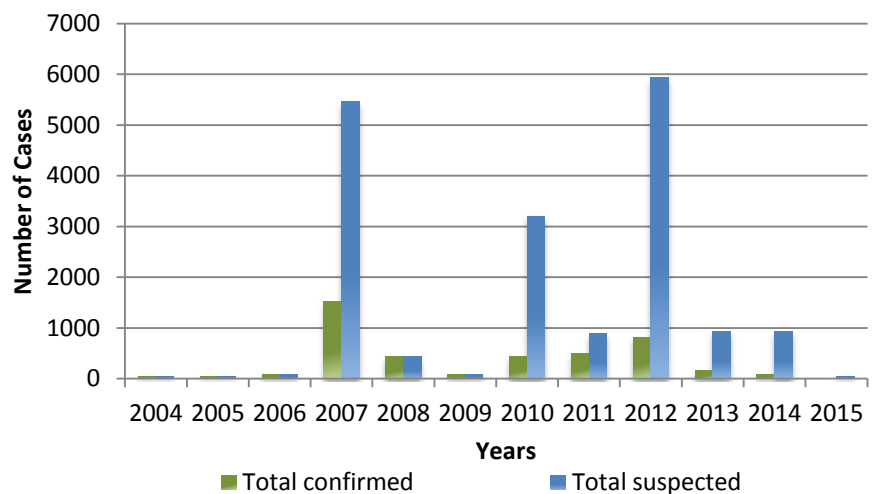
Parish Incidence




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

		2015		2014 YTD
		EW 35	YTD	
CONFIRMED	Total Suspected Dengue Cases	0	50	206
	Lab Confirmed Dengue cases	0	3	5
	DHF/DSS	0	0	0
	Dengue Related Deaths	0	0	0

Dengue Cases by Year, 2004-2015, Jamaica



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Gastroenteritis Bulletin

EW
35

August 30 – September 5, 2015

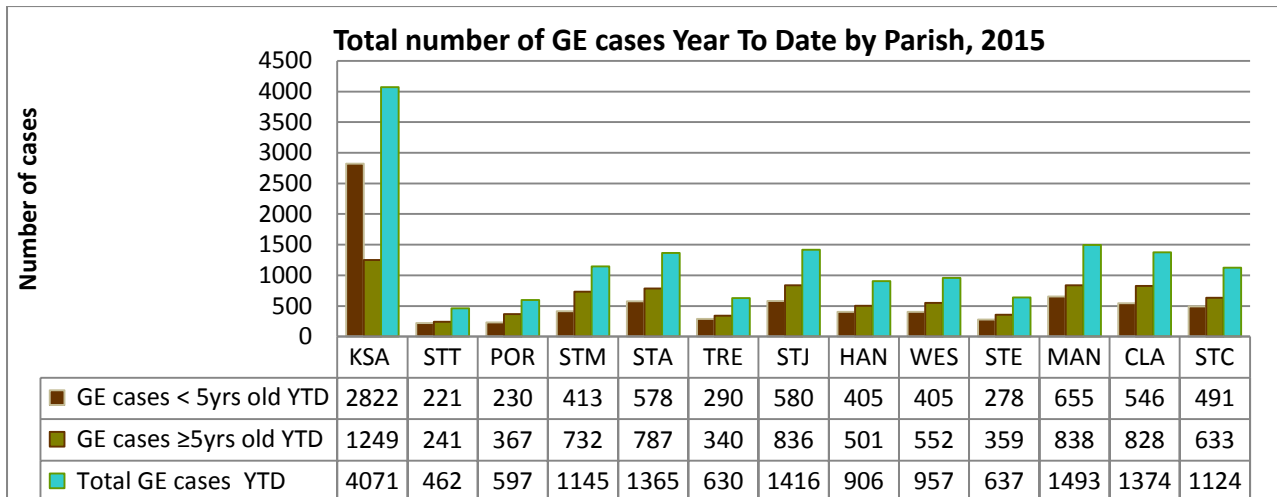
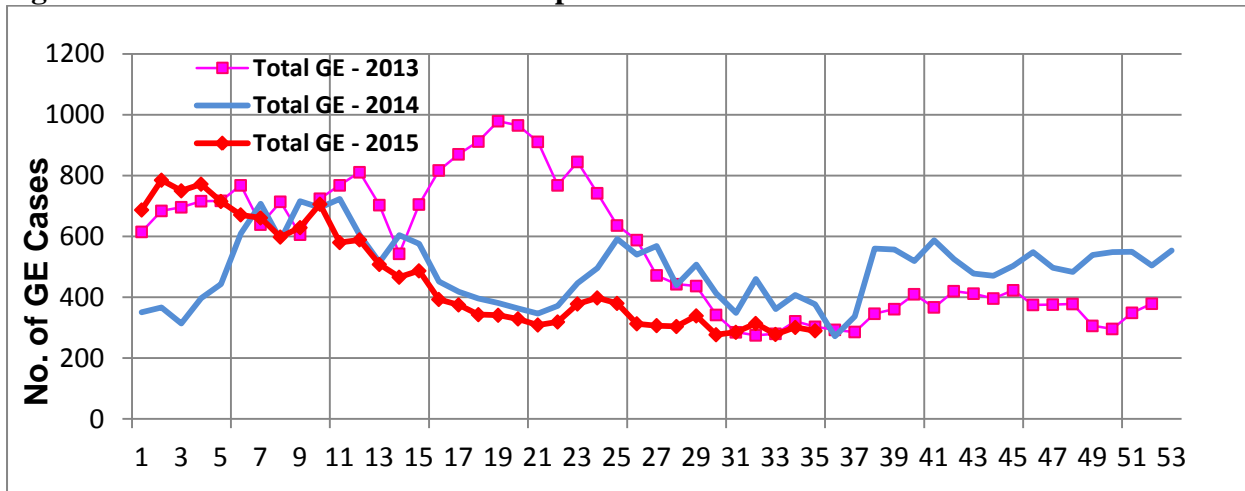
Epidemiology Week 35

Weekly Breakdown of Gastroenteritis cases

Year	EW 35			YTD		
	<5	≥5	Total	<5	≥5	Total
2015	117	173	290	7914	8263	16177
2014	174	203	377	8576	8297	16873

In Epidemiology Week 35, 2015, the total number of reported GE cases showed a 23% decrease compared to EW 35 of the previous year. The year to date figure showed a 4% decrease in cases for the period.

Figure 1: Total Gastroenteritis Cases Reported 2013-2015



RESEARCH PAPER

A Description of Registered Nurses' Documentation Practices and their Experiences with Documentation in a Jamaican Hospital

C Blake-Mowatt, JLM Lindo, S Stanley, J Bennett

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

Objective: To determine the level of documentation that exists among registered nurses employed at a Type A Hospital in Western Jamaica.

Method: Using an audit tool developed at the University Hospital of the West Indies, 79 patient docketts from three medical wards were audited to determine the level of registered nurses' documentation at the hospital. Data were analyzed using the SPSS® version 17 for Windows®. Qualitative data regarding the nurses' experience with documentation at the institution were gathered from focus group discussions including 12 nurses as-signed to the audited wards.

Results: Almost all the docketts audited (98%) revealed that nurses followed documentation guidelines for admission, recording patients' past complaints, medical history and assessment data. Most of the docketts (96.7%) audited had authorized abbreviations only. Similarly, 98% of the nurses' notes reflected clear documentation for nursing actions taken after identification of a problem and a summary of the patients' condition at the end of the shift. Only 25.6% of the docketts had nursing diagnosis which corresponded to the current medical diagnosis and less than a half (48.3%) had documented evidence of discharge planning. Most of the nurses' notes (86.7%) had no evidence of patient teaching. The main reported factors affecting documentation practices were workload and staff/patient ratios. Participants believed that nursing documentation could be improved with better staffing, improved peer guidance and continuing education.

Conclusion: Generally, nurses followed the guidelines for documentation; however, elements were missing which included patient teaching and discharge planning. This was attributed to high patient load and nurse /patient ratio.



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