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Week ending January 23, 2016 Epidemiology Week 3

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

The Influenza Virus

There are three types of influenza viruses: A, B and C. Human influenza A and B viruses cause seasonal epidemics. The emergence of a new and very different influenza virus to infect people can cause an influenza pandemic. Influenza type C infections cause a mild respiratory illness and are not thought to cause epidemics.

Influenza A viruses are divided into subtypes based on two proteins on the surface of the virus: the hemagglutinin (H) and the neuraminidase (N). There are 18 different hemagglutinin subtypes and 11 different neuraminidase subtypes. (H1 through H18 and N1 through N11 respectively.)

Influenza A viruses can be further broken down into different strains. Current subtypes of influenza A viruses found in people are influenza A (H1N1) and influenza A (H3N2) viruses. In the spring of 2009, a new influenza A (H1N1) virus emerged to cause illness in people. This virus was very different from the human influenza A (H1N1) viruses circulating at that time. The new virus caused the first influenza pandemic in more than 40 years. That virus (often called “2009 H1N1”) has now replaced the H1N1 virus that was previously circulating in humans.

Influenza B viruses are not divided into subtypes, but can be further broken down into lineages and strains. Currently circulating influenza B viruses belong to one of two lineages: B/Yamagata and B/Victoria.

The internationally accepted naming convention for influenza viruses endorsed by WHO uses the following components:

- The antigenic type (e.g., A, B, C)
- The host of origin (e.g., swine, etc. No host of origin designated for human-origin viruses.)
- Geographical origin (e.g., Denver, Taiwan, etc.)
- Strain number (e.g., 15, 7, etc.)
- Year of isolation (e.g., 57, 2009, etc.)
- For influenza A viruses, the hemagglutinin and neuraminidase antigen description in parentheses (e.g., (H1N1), (H5N1)

For example:

- A/duck/Alberta/35/76 (H1N1) for a virus from duck origin

Influenza A (H1N1), A (H3N2), and one or two influenza B viruses (depending on the vaccine) are included in each year’s influenza vaccine. Getting a flu vaccine can protect against flu viruses that are the same or related to the viruses in the vaccine. The seasonal flu vaccine does not protect against influenza C viruses. In addition, flu vaccines will NOT protect against infection and illness caused by other viruses that also can cause influenza-like symptoms.

Source: http://www.cdc.gov/flu/about/viruses/types.htm

EPI WEEK 3

SYNDROMES

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CLASS 1 DISEASES

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INFLUENZA

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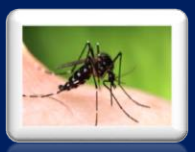

DENGUE FEVER

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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

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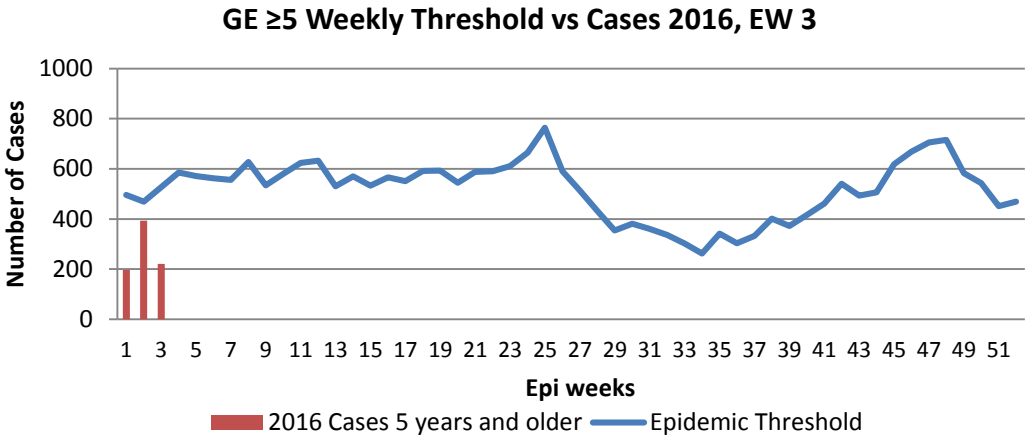
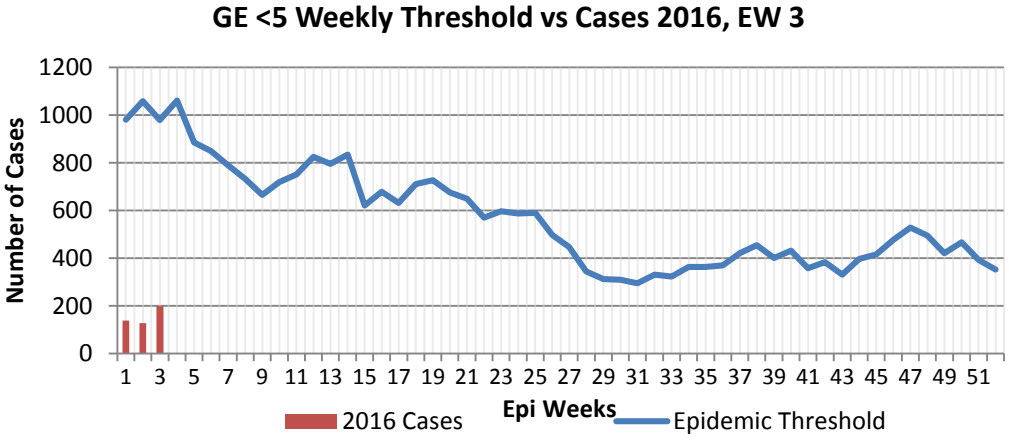
REPORTS FOR SYNDROMIC SURVEILLANCE

GASTROENTERITS

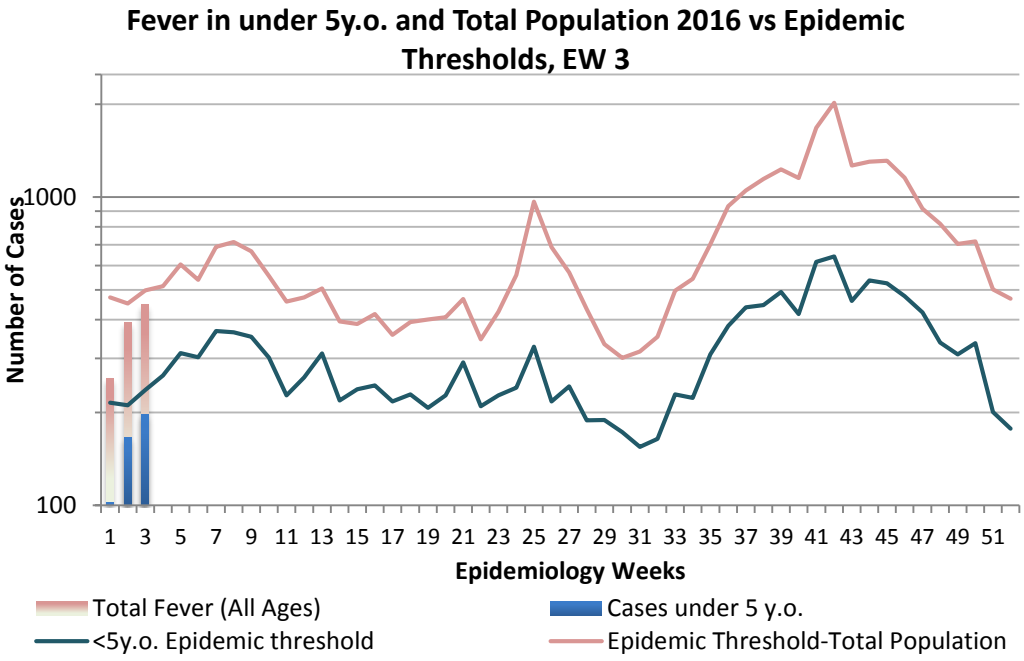
Three or more loose stools within 24 hours.





FEVER

Temperature of $>38^0C$ /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



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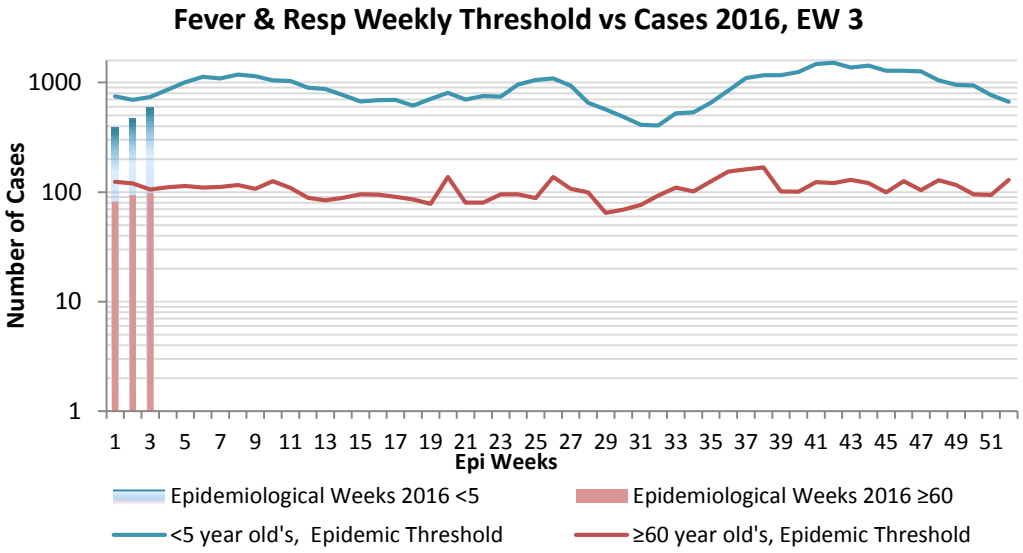
REPORTS FOR SYNDROMIC SURVEILLANCE

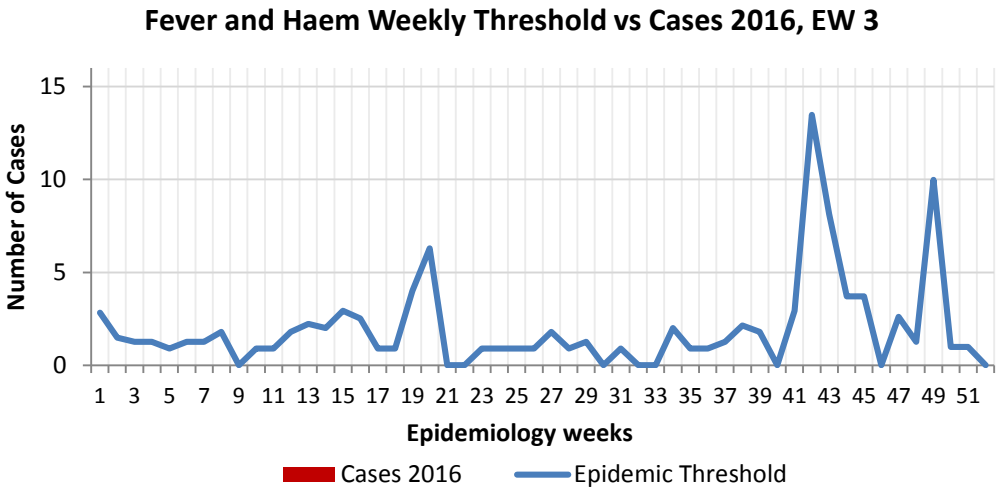
FEVER AND RESPIRATORY

Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person with or without respiratory distress presenting with either cough or sore throat.



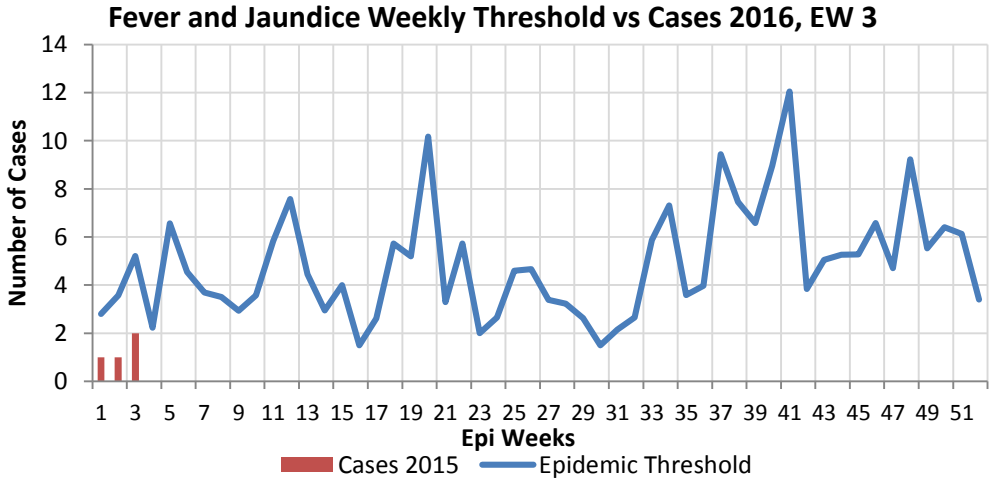
FEVER AND HAEMORRHAGIC

Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



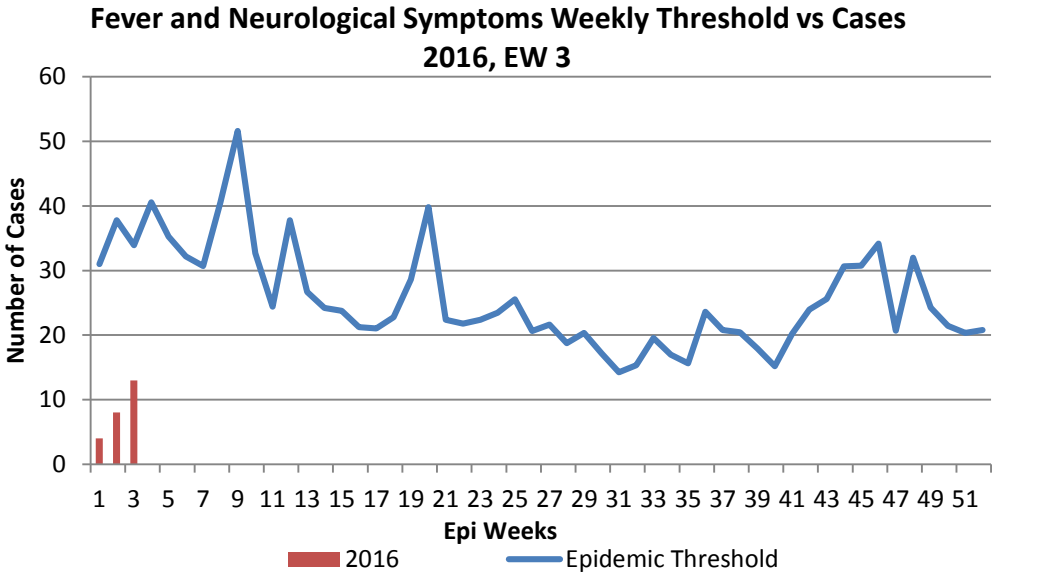
FEVER AND JAUNDICE

Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with jaundice.



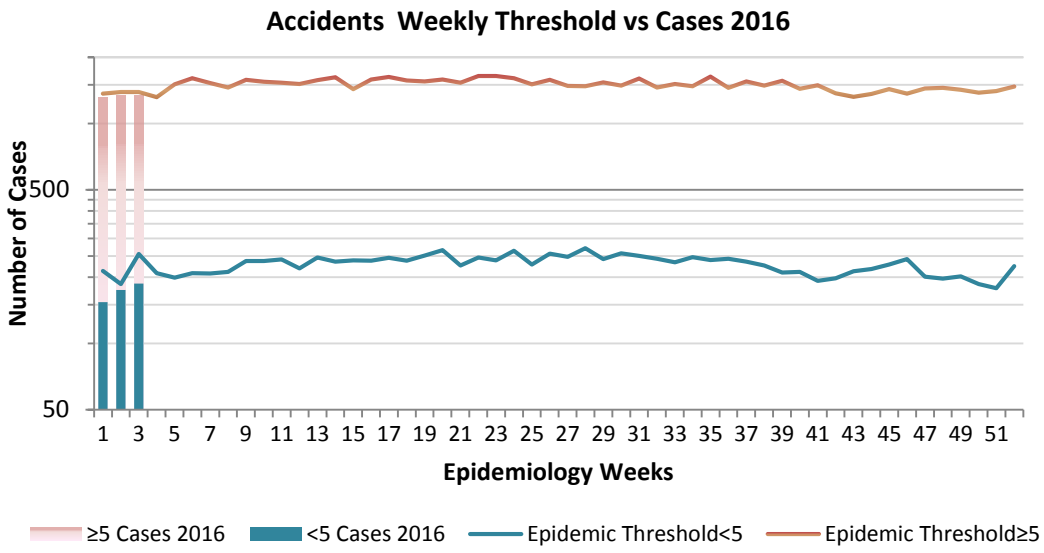
FEVER AND NEUROLOGICAL

Temperature of $>38^0C$ /100.4^0F (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).



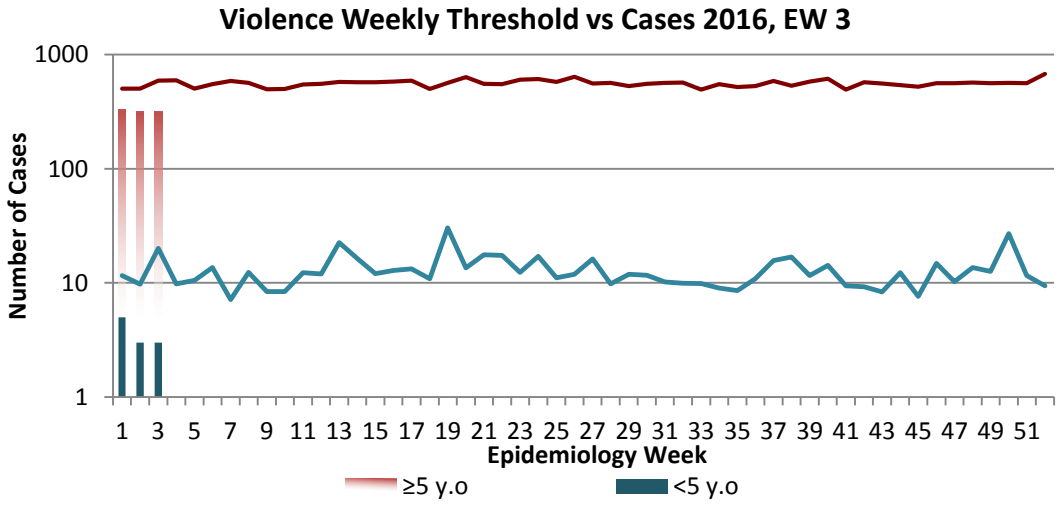
ACCIDENTS

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.



NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

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CLASS ONE NOTIFIABLE EVENTS and LEPTOSPIROSIS

	CLASS 1 EVENTS		CONFIRMED YTD CURRENT YEAR	CONFIRMED YTD PREVIOUS YEAR
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		18	26
	Cholera		0	0
	Dengue Hemorrhagic Fever[1]		0	0
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		0	2
	Hepatitis C		0	0
	HIV/AIDS - See HIV/AIDS National Programme Report			
	Malaria (Imported)		1	0
	Meningitis		13	28
EXOTIC/ UNUSUAL	Plague		0	0
H IGH MORBIDIT/ MORTALIY	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	0	0
		Rubella	0	0
	Maternal Deaths[2]		0	0
	Ophthalmia Neonatorum		13	22
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		0	0
	Yellow Fever		0	0
UNCLASSED**	Leptospirosis		1	0

Comments

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 70% 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 3

January 17– January 23, 2016 Epidemiology Week 3

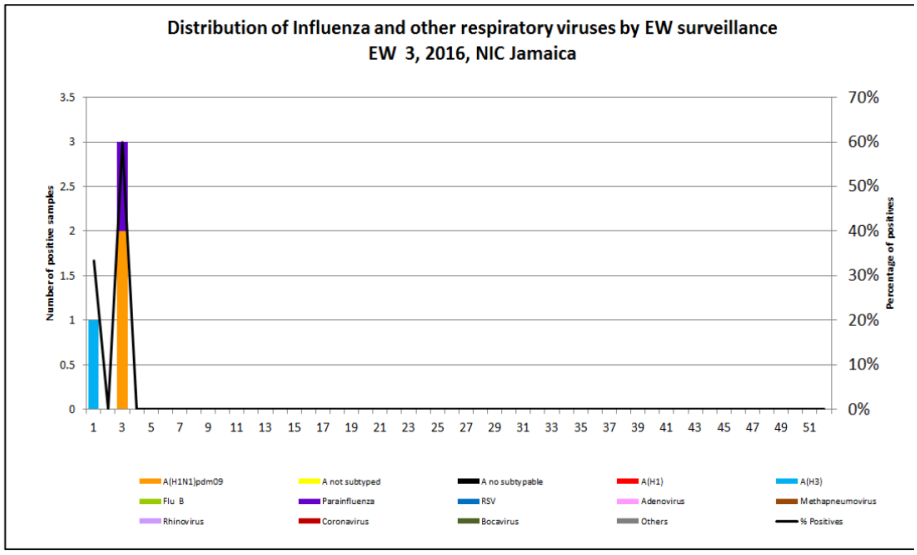
January, 2016	*EW 3*	*YTD*
SARI cases	*26*	*75*
Total Influenza positive	***3***	***4***
Samples		
Influenza A	***2***	***1***
H3N2	*0*	*1*
H1N1pdm09	*2*	*2*
Influenza B	*0*	***0***

Admitted Lower Respiratory Tract Infection and LRTI-related Deaths

	Current year		Previous year	
	Week 3 2016	**YTD** 2016	Week 3 2015	YTD 2015
Admitted Lower Respiratory Tract Infections	73	202	96	261
Pneumonia-related Deaths	1	6	0	3

Comments:

The percent positivity of influenza viruses circulating among respiratory samples tested in EW 3, 2016 was 40%. Both Influenza A (H3N2) and influenza A(H1N1)pdm09 are co-circulating with Influenza A/H1N1 (pdm09) predominating at 67%. No Influenza B serotype has been detected since 2016. 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

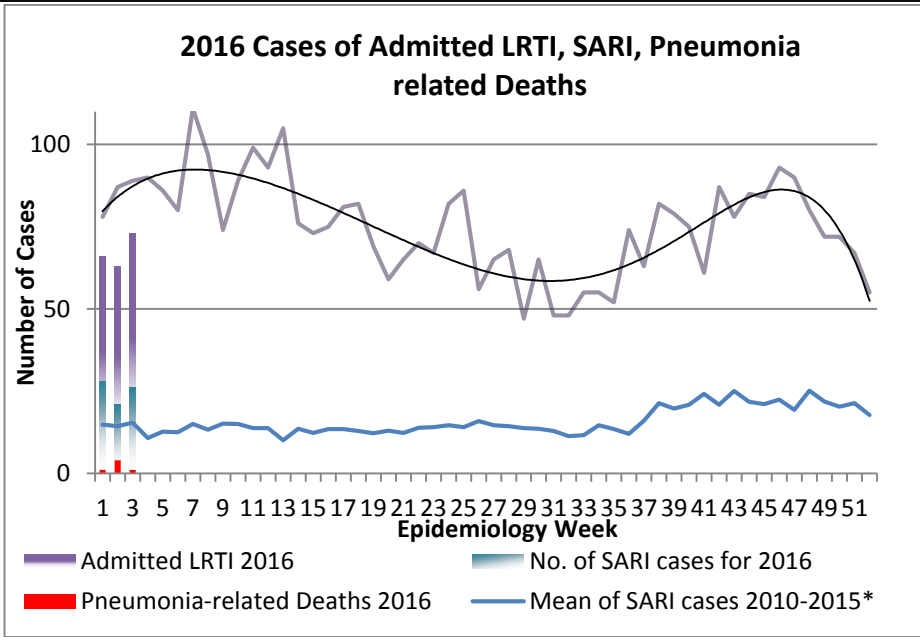
Year to date, respiratory syndromes account for 4.6% of visits to health facilities.

Incidence

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

Prevalence

Not applicable to acute respiratory conditions.



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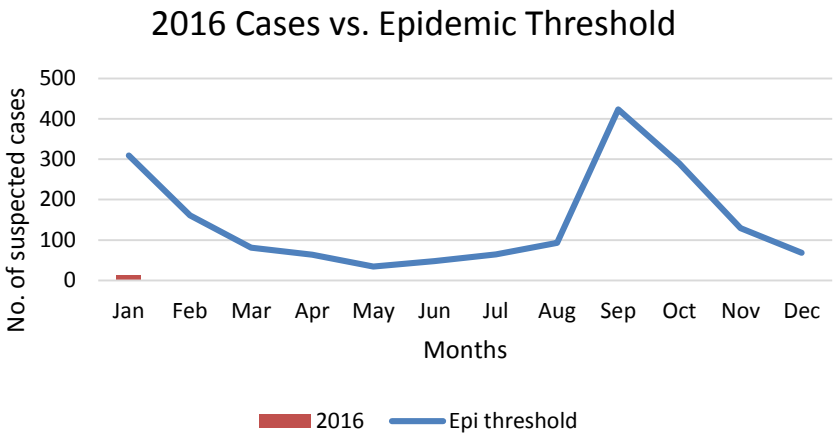
***Additional data needed to calculate Epidemic Threshold**

Dengue Bulletin

January 17–January 23, 2016 Epidemiology Week 3

DENGUE

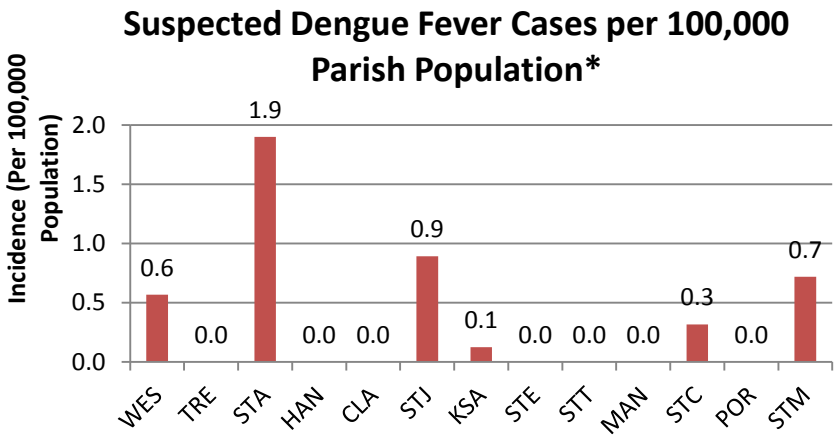
*Parish population is calculated based on census data from STATIN 2012.



DISTRIBUTION

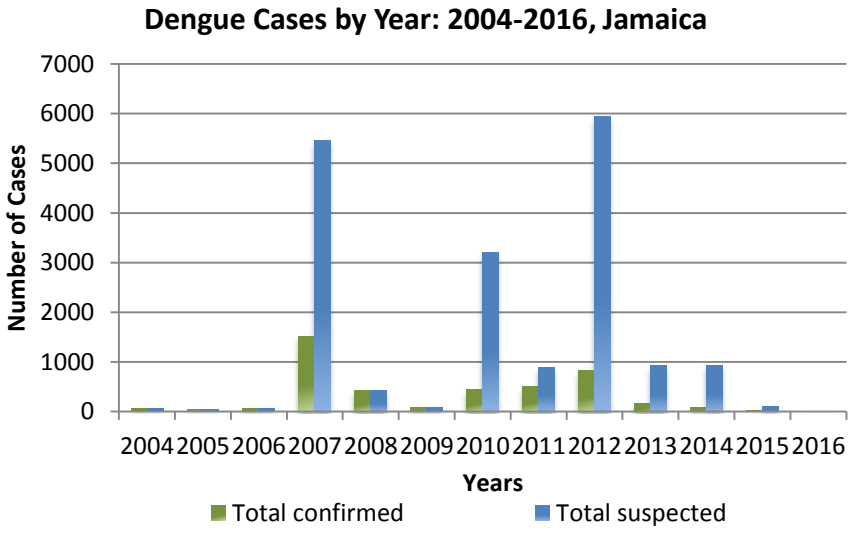
Year-to-Date Suspected Dengue Fever

	M	F	Total	%
<1	0	2	2	17
1-4	1	0	1	9
5-14	2	2	4	33
15-24	1	2	3	25
25-44	1	0	1	8
45-64	0	0	0	0
≥65	0	0	0	0
Unknown	1	0	1	8
TOTAL	**6**	**6**	**12**	**100**



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

		2016		2015 YTD
		EW 3	YTD	
Total Suspected Dengue Cases		7	12	10
Lab Confirmed Dengue cases		0	0	0
CONFIRMED	**DHF/DSS**	0	0	0
	Dengue Related Deaths	0	0	0



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Gastroenteritis Bulletin

EW 3

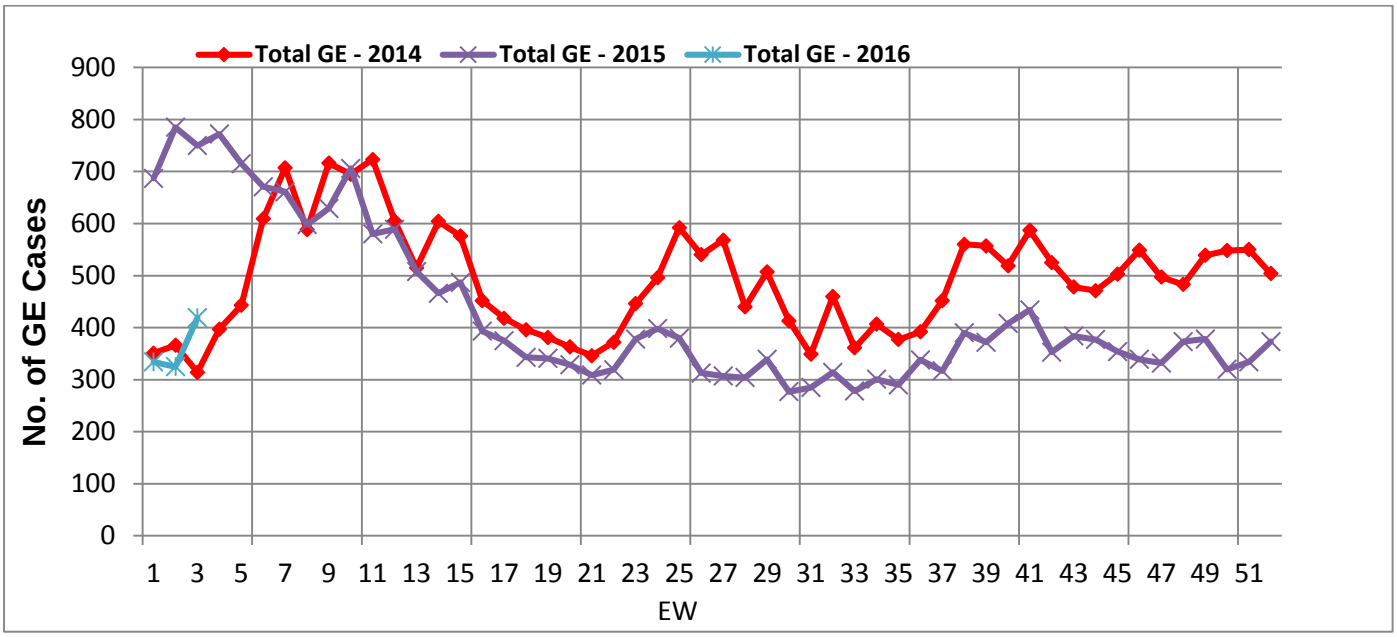
January 17 –January 23, 2016 Epidemiology Week 3

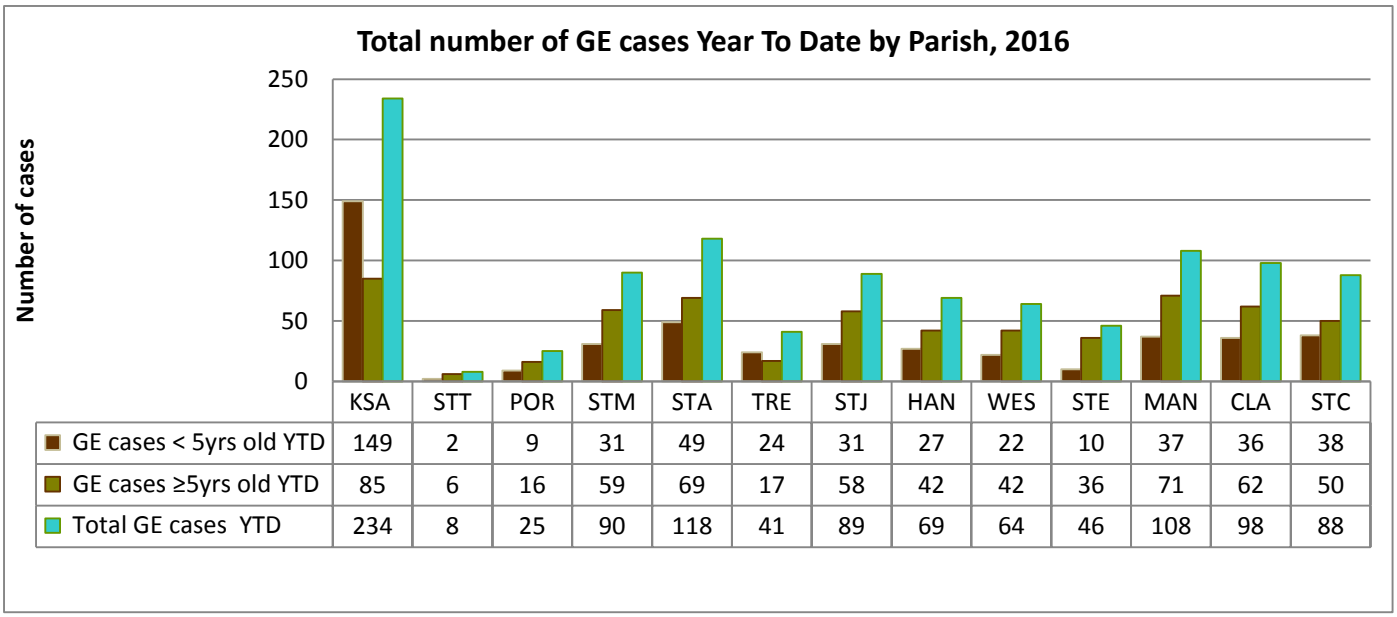
Weekly Breakdown of Gastroenteritis cases

Year	EW 3			YTD		
	<5	≥5	Total	<5	≥5	Total
2016	199	220	419	465	613	1078
2015	421	329	750	1248	974	2222

In Epidemiology Week 3, 2016, the total number of reported GE cases showed a 44% decrease compared to EW 3 of the previous year.
The year to date figure showed a 51% decrease in cases for the period.

Figure 1: Total Gastroenteritis Cases Reported 2014-2016





	KSA	STT	POR	STM	STA	TRE	STJ	HAN	WES	STE	MAN	CLA	STC
GE cases < 5yrs old YTD	149	2	9	31	49	24	31	27	22	10	37	36	38
GE cases ≥5yrs old YTD	85	6	16	59	69	17	58	42	42	36	71	62	50
Total GE cases YTD	234	8	25	90	118	41	89	69	64	46	108	98	88

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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 dockets 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 assigned to the audited wards.

Results: Almost all the dockets audited (98%) revealed that nurses followed documentation guidelines for admission, recording patients' past complaints, medical history and assessment data. Most of the dockets (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 dockets 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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