

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

#### World Water Day 2017

#### Why waste water?

World Water Day, on 22 March every year, is about taking action to tackle the water crisis. Today, there are over 663 million people living without a safe water supply close to home, spending countless hours queuing or trekking to distant sources, and coping with the health impacts of using contaminated water.



Globally, the vast majority of all the wastewater from our homes, cities, industry and agriculture flows back to nature without being treated or reused – polluting drinking, bathing, irrigation and losing valuable nutrients and other recoverable materials.

Reducing and safely treating and reusing wastewater, for example in agriculture and aquaculture, protects worker, farmers and consumers promotes food security, health and wellbeing.

#### Water safety and quality

Water safety and quality are fundamental to human development and well-being. Providing access to safe water is one of the most effective instruments in promoting health and reducing poverty.

As the international authority on public health and water quality, WHO leads global efforts to prevent transmission of waterborne



disease. This is achieved by promoting health-based regulations to governments and working with partners to promote effective risk management practices to water suppliers, communities and households.

#### Sanitation and wastewater

Safely managed sanitation and safe wastewater treatment and reuse are fundamental to protect public health. WHO is leading efforts to monitor the global burden of sanitation related disease and access to safely managed sanitation and safely treated wastewater under the Sustainable Development agenda.

WHO support implementation by promoting risk assessment and management in normative guidelines and tools and collaborates with partners in other health initiatives such as; neglected tropical diseases, nutrition, infection prevention and control and antimicrobial resistance to maximize health benefits of sanitation interventions.

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## EPI WEEK 9



SYNDROMES

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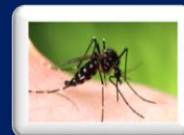
CLASS 1 DISEASES

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INFLUENZA

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DENGUE FEVER

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GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8



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

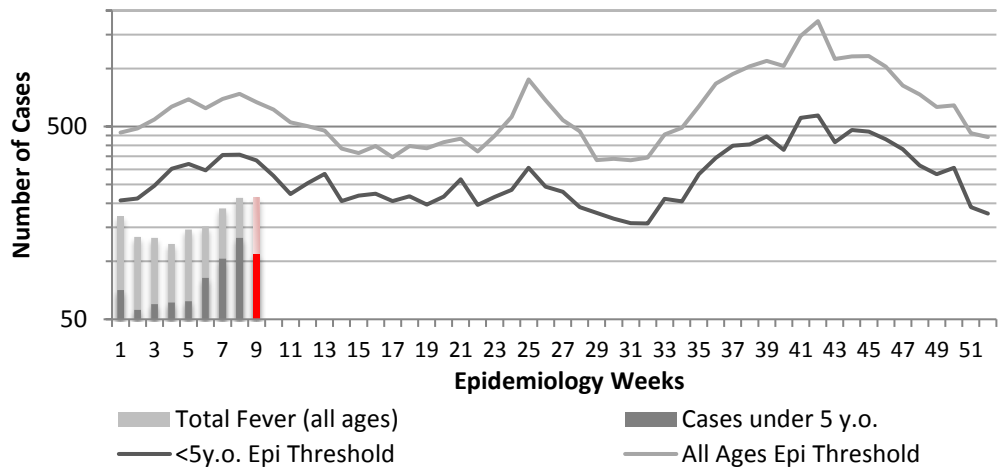
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



**KEY**

**RED** CURRENT WEEK

Fever in under 5y.o. and Total Population 2017 vs Epidemic Thresholds, Epidemiology Week 9

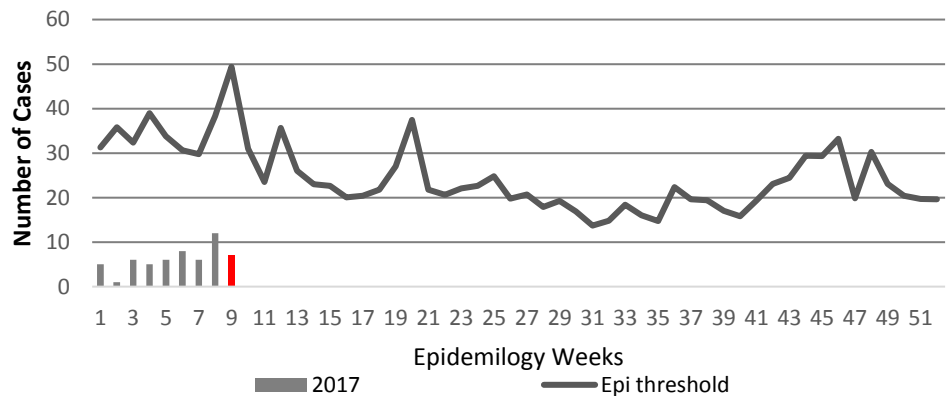


## FEVER AND NEUROLOGICAL

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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 2017, Epidemiology Week 9

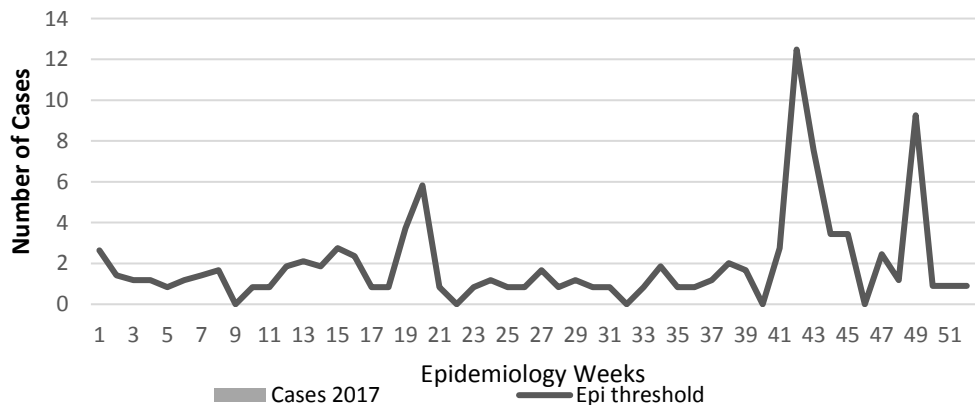


## FEVER AND HAEMORRHAGIC

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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 2017, Epidemiology Week 9



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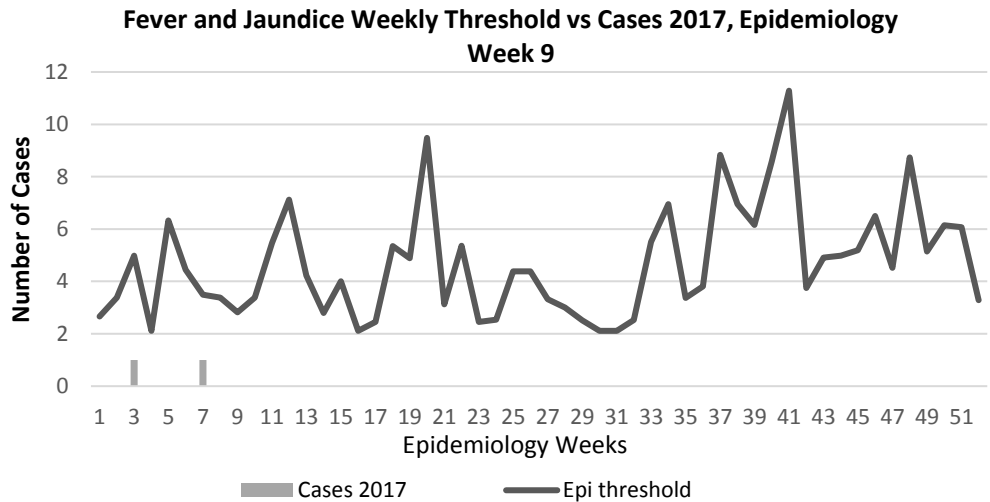


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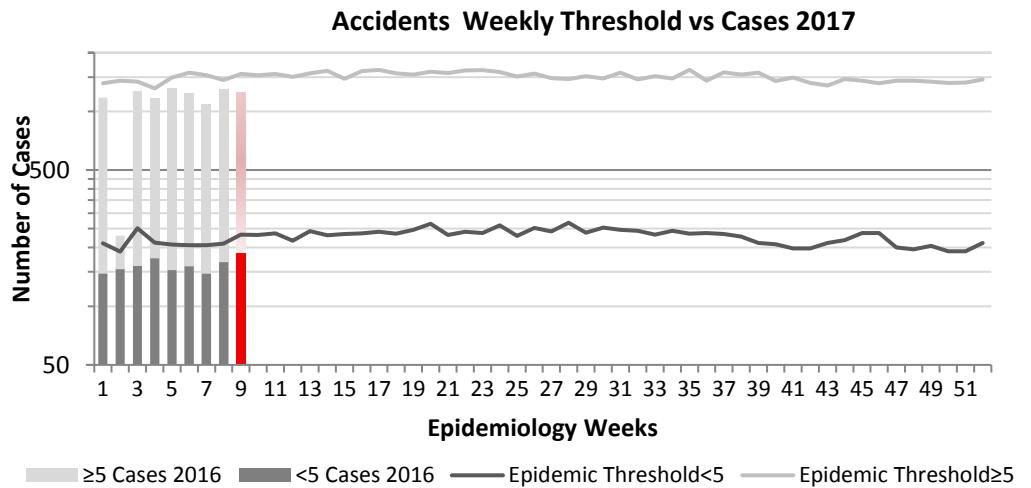
### FEVER AND JAUNDICE

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



### ACCIDENTS

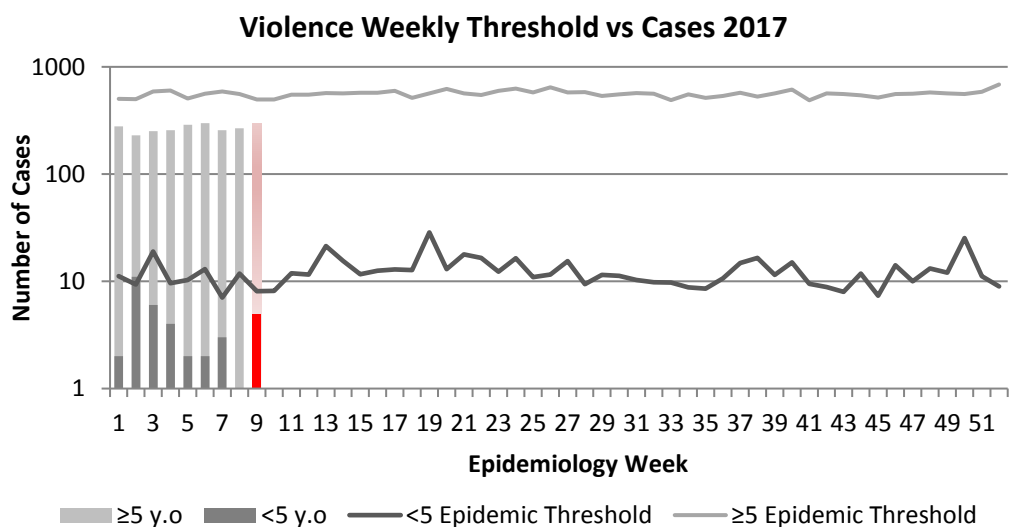
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.



### VIOLENCE

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

The epidemic threshold is used to confirm the emergence of an epidemic so as to step-up appropriate control measures.



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CLASS ONE NOTIFIABLE EVENTS

Comments

	CLASS 1 EVENTS	CONFIRMED YTD			
		CURRENT YEAR	PREVIOUS YEAR		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	14	31	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.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever <sup>1</sup>	0	0		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	2	1		
	Hepatitis C	0	0		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	0	0		Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Meningitis (Clinically confirmed)	2	10		
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		
SPECIAL PROGRAMMES	AFP/Polio	0	0	*Data not available	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths <sup>2</sup>	6	5		
	Ophthalmia Neonatorum	39	68		
	Pertussis-like syndrome	0	0		1 Dengue Hemorrhagic Fever data include Dengue related deaths;
	Rheumatic Fever	1	1		
	Tetanus	0	0		2 Maternal Deaths include early and late deaths.
	Tuberculosis	0	0		
Yellow Fever	0	0			
	Chikungunya	0	0	 	
	Zika Virus	0	0		



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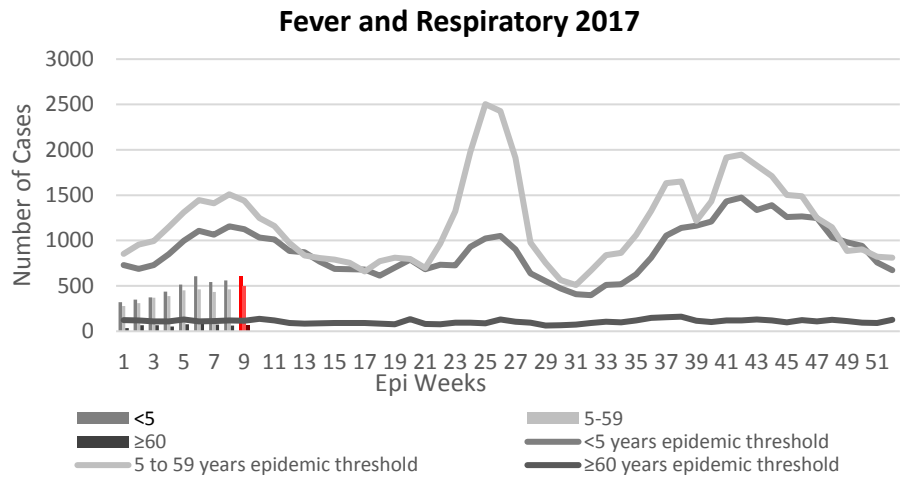
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 9

Feb 26- March 4, 2017

Epidemiology Week 9

January 2017		
	EW 9	YTD
SARI cases	12	102
<b>Total Influenza positive Samples</b>	<b>0</b>	<b>1</b>
<b>Influenza A</b>	<b>0</b>	<b>0</b>
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
<b>Influenza B</b>	<b>0</b>	<b>1</b>
<b>Other</b>	<b>0</b>	<b>0</b>



**Comments:**

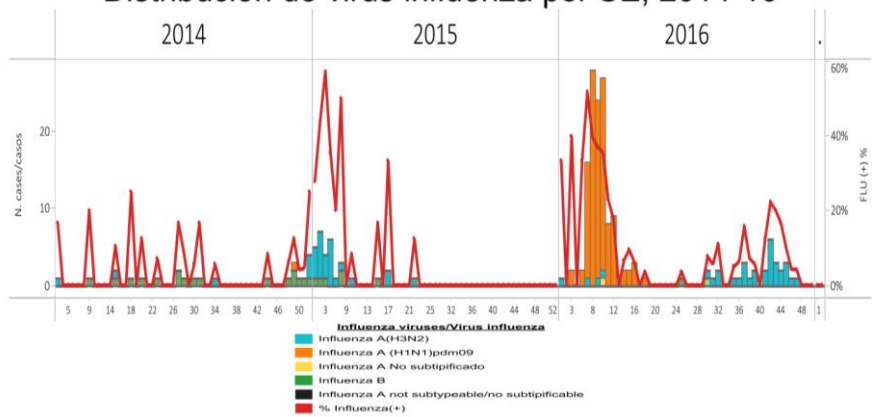
During EW 9, SARI activity decreased, but remained below the alert threshold and slightly above the average epidemic curve.

During EW 9, SARI cases were most frequently reported among children aged from 12 to 23 months of age.

During EW 9, pneumonia case-counts increased and were at same levels observed in 2016 and 2015, with the highest proportion in Kingston and Saint Andrew.

During EW 9, no influenza activity was reported.

Jamaica: Influenza virus distribution by EW, 2014-17  
Distribución de virus influenza por SE, 2014-16



**INDICATORS**

**Burden**

Year to date, respiratory syndromes account for 3.3% of visits to health facilities.

**Incidence**

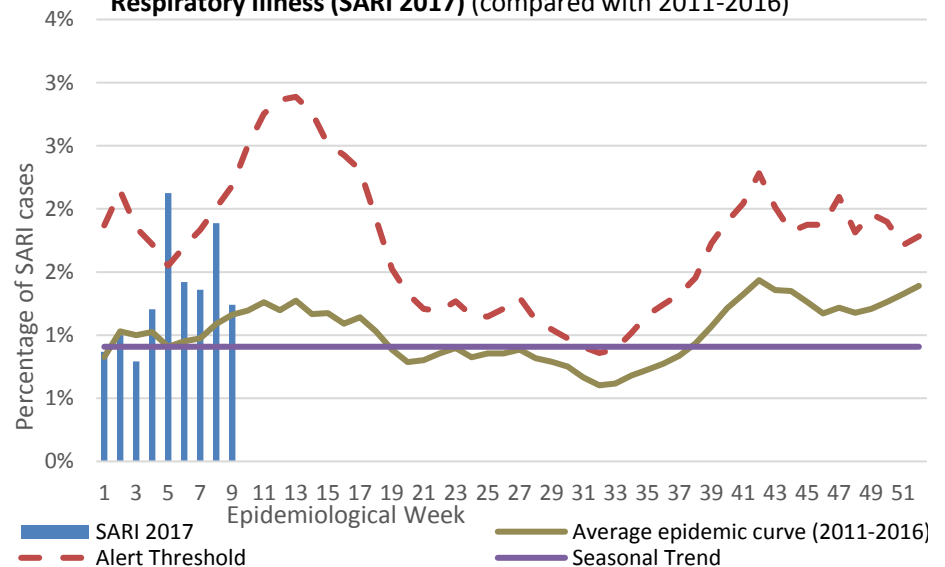
Cannot be calculated, as data sources do not collect all cases of Respiratory illness.



**Prevalence**

Not applicable to acute respiratory conditions.

Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2017) (compared with 2011-2016)



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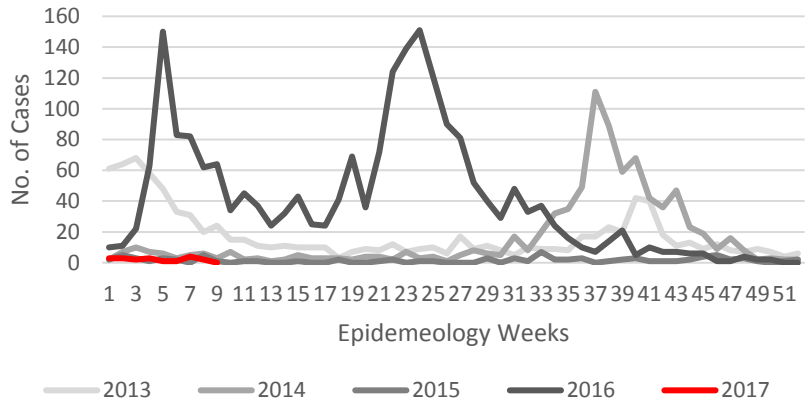
# Dengue Bulletin

Feb 26- March 4, 2017

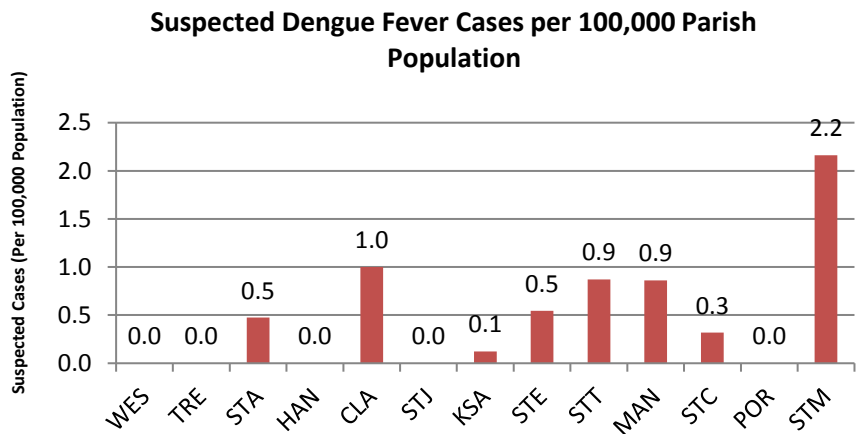
Epidemiology Week 9



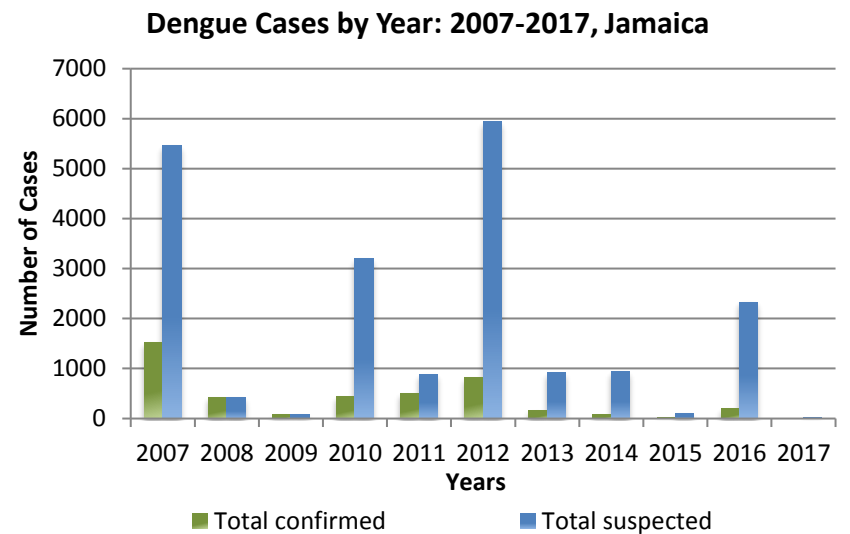
Dengue Cases by Epidemiology Weeks 2013-2017



DISTRIBUTION					
Year-to-Date Suspected Dengue Fever					
	M	F	Un-known	Total	%
<1	0	0	0	0	0
1-4	0	0	0	0	0
5-14	4	2	0	6	31.5
15-24	2	2	0	4	21.2
25-44	3	2	1	6	31.5
45-64	2	1	0	3	15.8
≥65	0	0	0	0	0
Unknown	0	0	0	0	0
<b>TOTAL</b>	<b>11</b>	<b>7</b>	<b>1</b>	<b>19</b>	<b>100</b>



Weekly Breakdown of suspected and confirmed cases of DF,DHF,DSS,DRD				
		2017		2016 YTD
		EW 9	YTD	
CONFIRMED	Total Suspected Dengue Cases	0	19	456
	Lab Confirmed Dengue cases	0	0	52
	DHF/DSS	0	0	1
	Dengue Related Deaths	0	0	0



# Gastroenteritis Bulletin

EW  
9

Feb 26- March 4, 2017

Epidemiology Week 9

## Weekly Breakdown of Gastroenteritis cases

Year	EW 9			YTD		
	<5	≥5	Total	<5	≥5	Total
2017	270	285	555	2,620	2,629	5,249
2016	161	261	422	1,471	2,076	3,547

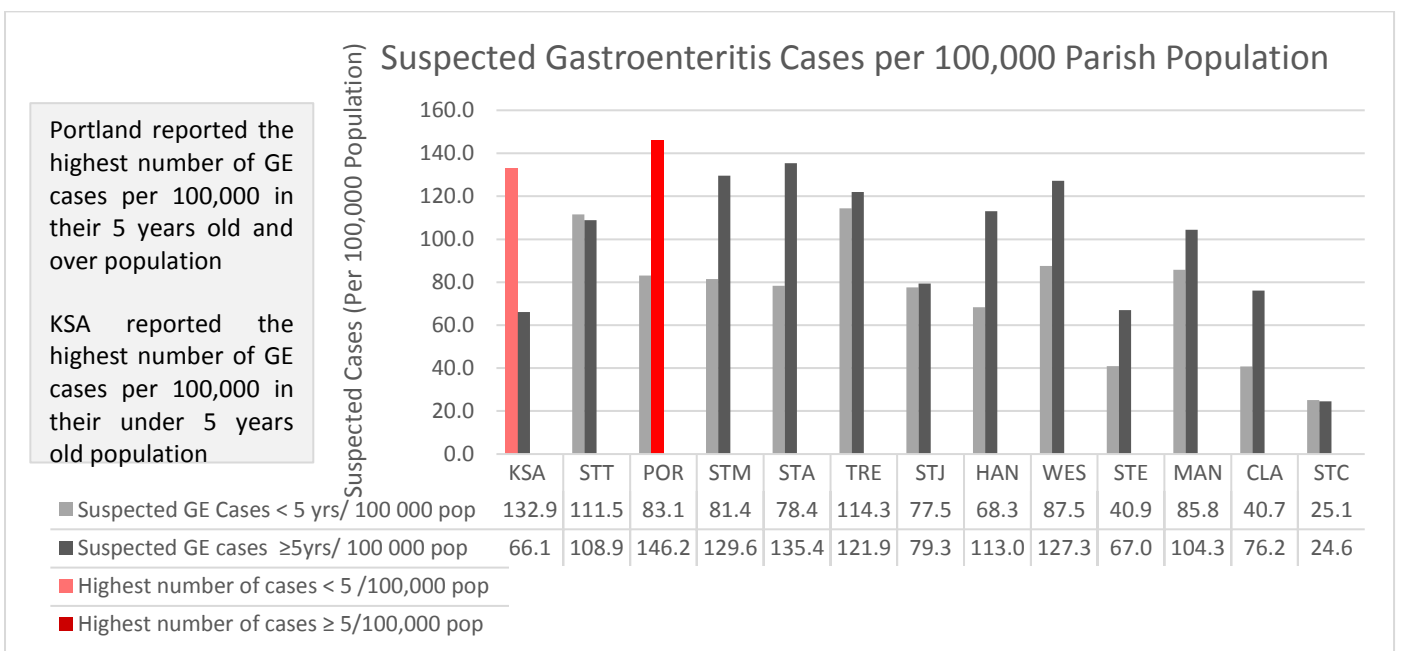
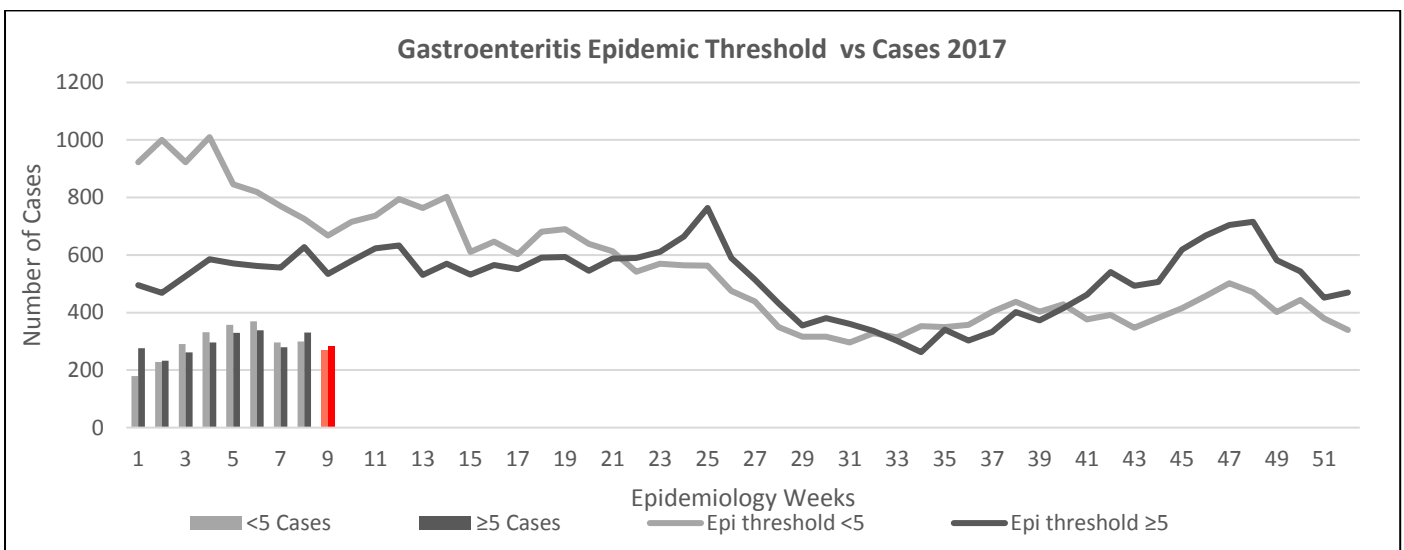
### Gastroenteritis:

In Epidemiology Week 9, 2017, the total number of reported GE cases showed a 13% increase compared to EW 9 of the previous year.

The year to date figure showed an 14.7% increase in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2016-2017



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# RESEARCH PAPER

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## HIV Case-Based Surveillance System Audit

*S. Whitbourne, Z. Miller*

**Objectives:** Evaluate the Public Health Surveillance System for HIV reporting, to help ensure that the data collected is accurate and useful for understanding epidemiological trends.

**Background:** Public health programmes focus on the monitoring, control and reduction in the incidence of target diseases, conditions or health events through various interventions and actions. The surveillance system is the primary mechanism through which specific disease information is collected and needs to be periodically assessed.

**Methodology:** In 2016, an audit was conducted of the HIV Case-Based Surveillance System in Jamaica. Laboratory records were reviewed from seven major health care facilities representing all four Regional Health Authorities. Cases with a positive HIV test in 2014 were noted and comparisons of positive cases were made with the cases that had been reported to the National Surveillance Unit. Qualitative data was also collected from key personnel in the form of questionnaires related to the processes involved in diagnosis, detection, investigation and reporting of HIV positive cases, but this paper will focus on the quantitative findings.

**Findings:** Preliminary data analysis reveals a high level of underreporting of HIV cases to the national level.

**Conclusions:** Audits and other forms of assessment need to be conducted on surveillance systems to ensure that the data supporting a public health programme is reliable and accurate, for effective delivery of services to target populations.



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