

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

#### How can water-related diseases be prevented during hurricanes?

The three top priorities concerning drinking water and sanitation during an emergency situation such as a hurricane are:

- ensuring the provision of enough safe water for drinking and for personal hygiene to the people affected by the crisis;
- ensuring that all people affected by the crisis have access to hygienic sanitation facilities;
- promoting good hygiene behaviors.



Following damage to existing sanitation systems or increased pressure due to large numbers of displaced or homeless people, effective and well-coordinated action by all those involved in the emergency response is critical.

The first priority is to provide a sufficient quantity of water, even if its safety cannot be guaranteed, and to protect water sources from contamination. A minimum of 15 litres per person per day should be provided as soon as possible.



During emergencies, people may use untreated water for laundry or bathing. Water-quality improvements should be made over succeeding days or weeks as a matter of urgency.

Inadequate disposal of human excreta is a major health risk in emergency situations. It is essential to organize sanitation facilities immediately, such as designated defecation fields or collective trench latrines. Emergency facilities need to be progressively improved or replaced with simple pit latrines, ventilated improved pit latrines, or pour-flush latrines as the situation develops. All types of latrines need to be properly cleaned, disinfected and maintained.

The provision of drinking water and sanitation services in health facilities is a top priority. Safe drinking water, basic sanitation facilities and safe disposal of infectious wastes will prevent the spread of disease and improve health conditions.

In all cases, good hygiene practices are key to preventing disease transmission. Water should be provided in sufficient quantities to enable proper hygiene. Hands should be washed immediately after defecation, after handling babies' faeces, before preparing food and before eating.



Downloaded from: <http://www.who.int/features/qa/31/en/>

### EPI WEEK 32



SYNDROMES

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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

## FEVER

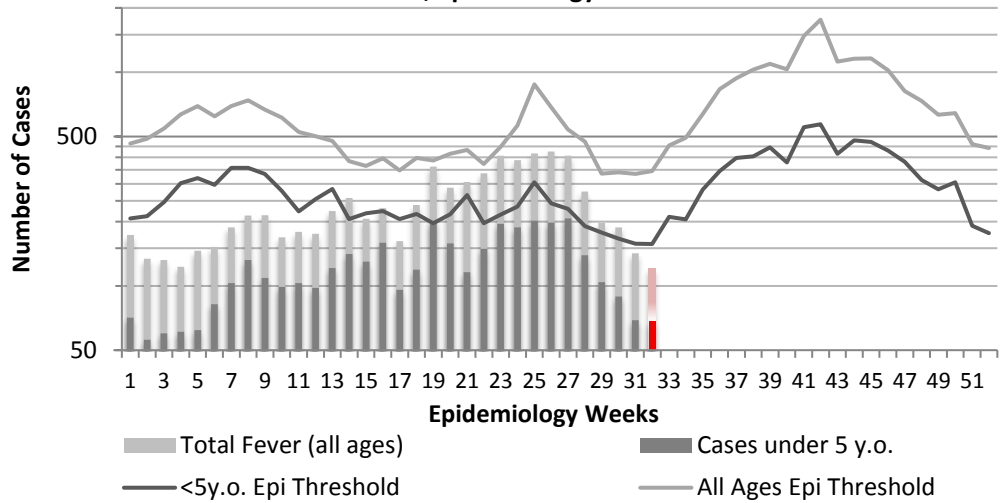
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



**KEY**

**RED** CURRENT WEEK

**Fever in under 5y.o. and Total Population 2017 vs Epidemic Thresholds, Epidemiology Week 32**

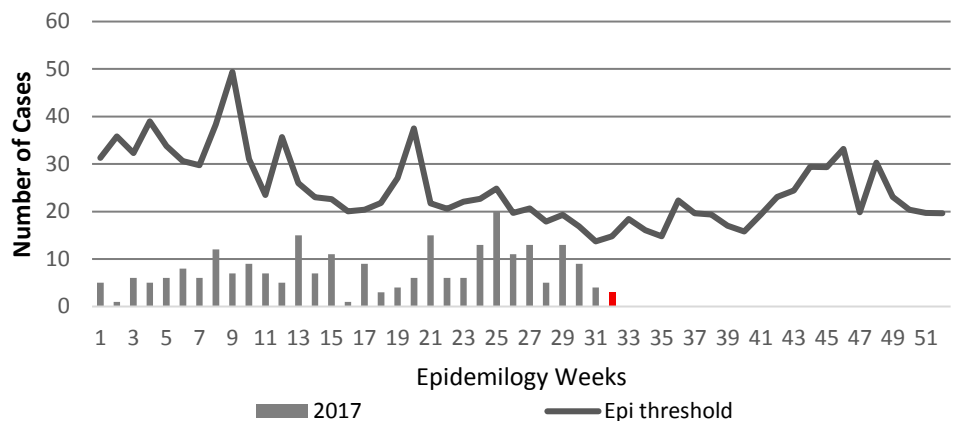


## FEVER AND NEUROLOGICAL

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 32**

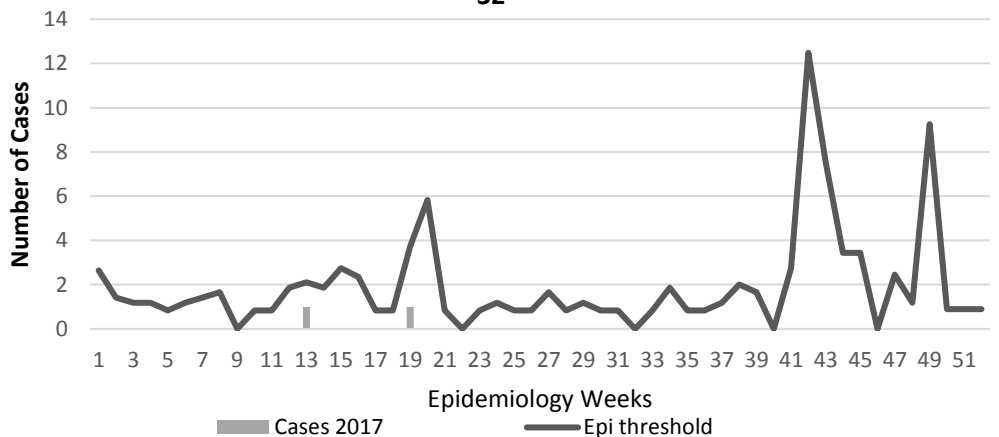


## FEVER AND HAEMORRHAGIC

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 32**



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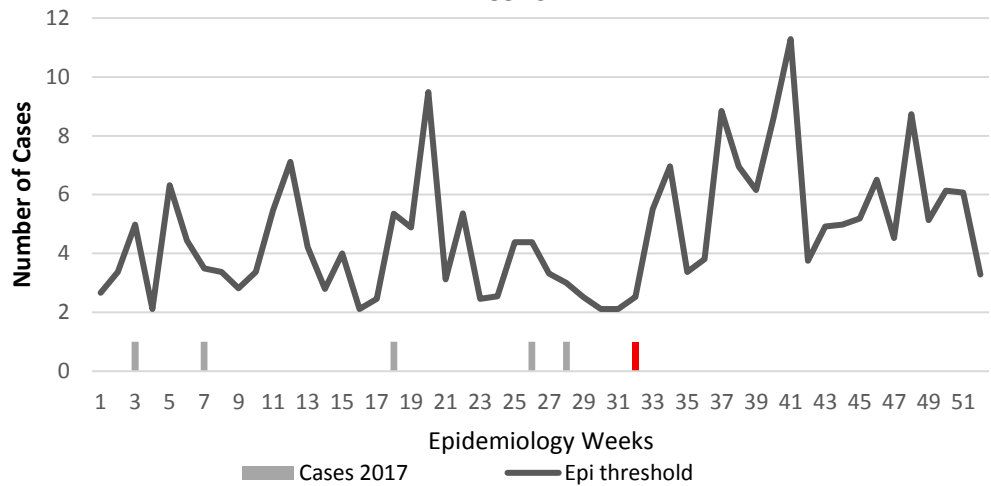
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### FEVER AND JAUNDICE

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



Fever and Jaundice Weekly Threshold vs Cases 2017, Epidemiology Week 32

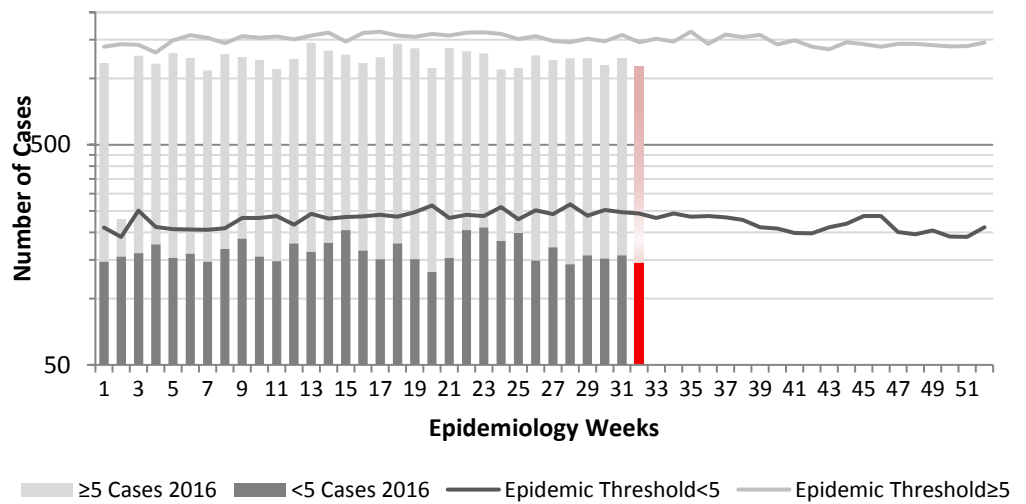


### ACCIDENTS

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



Accidents Weekly Threshold vs Cases 2017



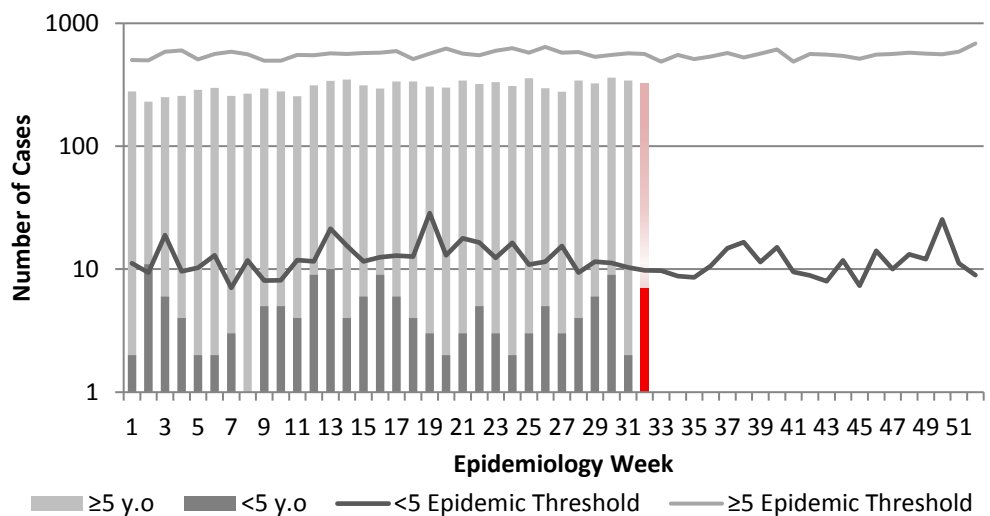
### VIOLENCE

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.



Violence Weekly Threshold vs Cases 2017



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**CLASS ONE NOTIFIABLE EVENTS**

**Comments**

	CLASS 1 EVENTS	CONFIRMED YTD			
		CURRENT YEAR	PREVIOUS YEAR		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	65	100	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	3		
	Hansen’s Disease (Leprosy)	0	2		
	Hepatitis B	32	22		
	Hepatitis C	6	4		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	7	2		Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Meningitis (Clinically confirmed)	28	42		
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	1 Dengue Hemorrhagic Fever data include Dengue related deaths;  2 Maternal Deaths include early and late deaths.  Hep B increase for wk 29, 2017 due to results received from NBTS/NPHL	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths <sup>2</sup>	18	25		
	Ophthalmia Neonatorum	167	268		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	3	6		
	Tetanus	1	0		
	Tuberculosis	29	39		
Yellow Fever	0	0			
	Chikungunya	0	4	 	
	Zika Virus	0	145		



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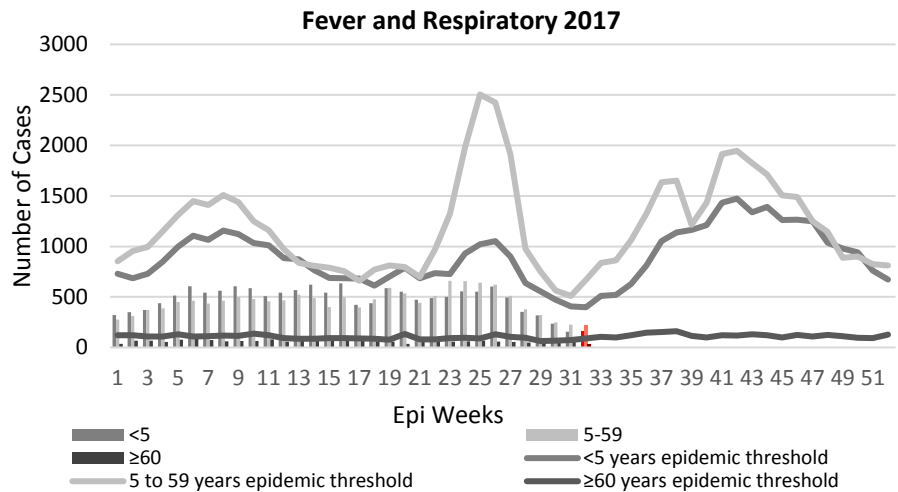
# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 32*

August 6-12, 2017

Epidemiology Week 32

July 2017		
	EW 32	YTD
SARI cases	2	306
<b>Total Influenza positive Samples</b>	<b>2</b>	<b>26</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>4</b>	<b>26</b>
<b>Other</b>	<b>0</b>	<b>0</b>

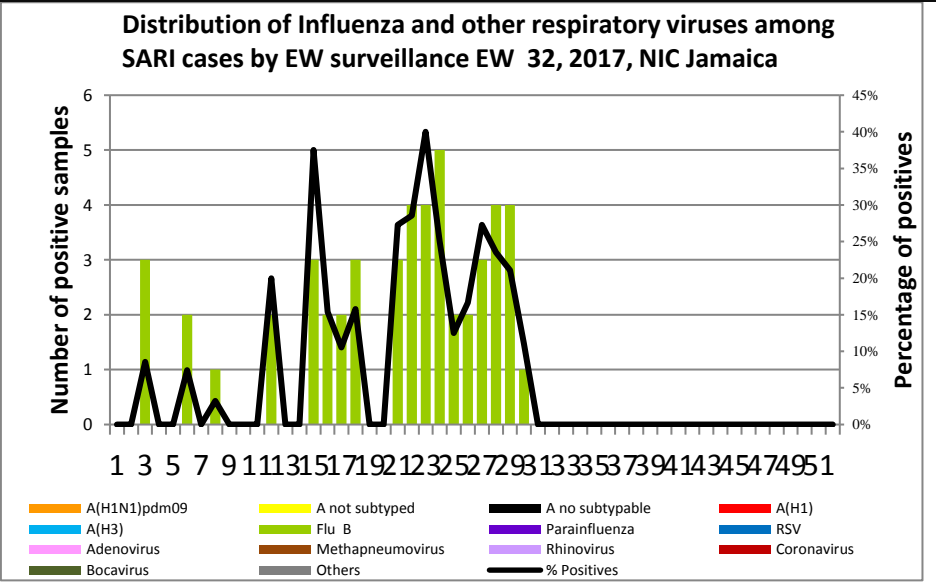


**Comments:**

During EW 32, the proportion of SARI hospitalizations among all hospitalizations decreased below the average epidemic curve and the alert threshold as compared to previous weeks

During EW 31, the number of SARI cases slightly increased as compared to previous weeks and was lower than the previous seasons for the same period.

During EW 31, few influenza detections were reported, with slightly decreased activity (9% positivity) and influenza B predominating.



**INDICATORS**

**Burden**

Year to date, respiratory syndromes account for 4.4% of visits to health facilities.

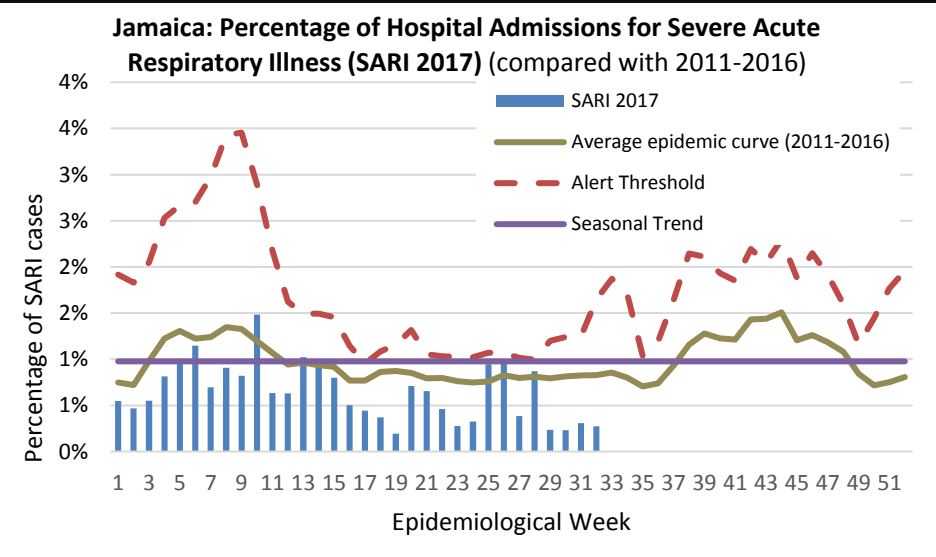
**Incidence**

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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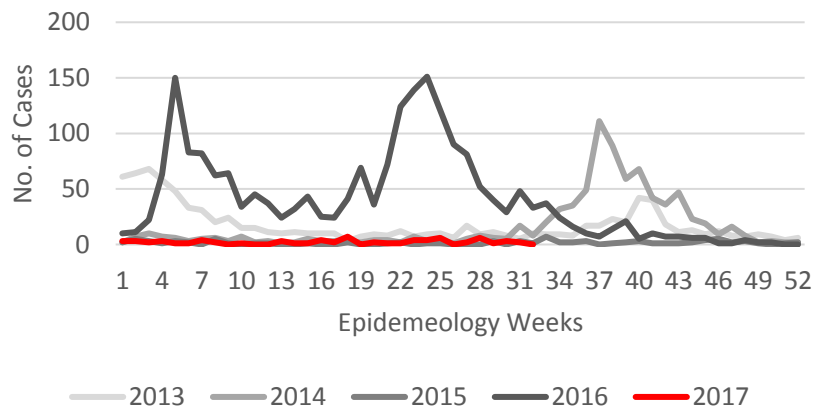
# Dengue Bulletin

August 6-12, 2017

Epidemiology Week 32



Dengue Cases by Epidemiology Weeks 2013-2017

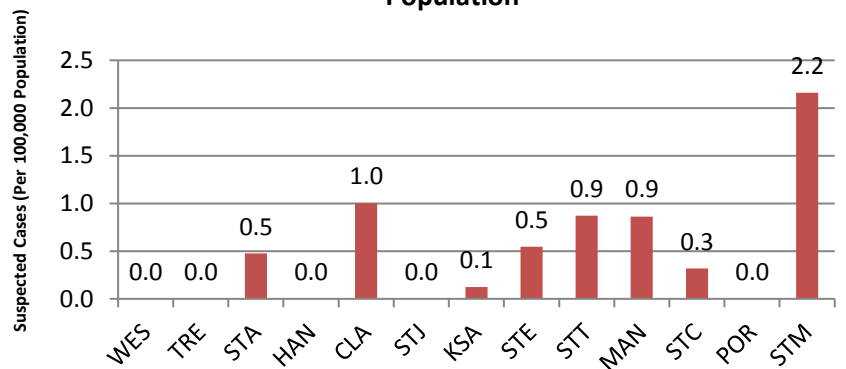


## DISTRIBUTION

### Year-to-Date Suspected Dengue Fever

	M	F	Un-known	Total	%
<1	2	0	0	2	2.9
1-4	4	1	0	5	7.1
5-14	6	11	0	17	24.3
15-24	7	8	0	15	21.4
25-44	14	6	1	21	30
45-64	4	4	0	8	11.4
≥65	0	0	0	0	0
Unknown	1	1	0	2	2.9
<b>TOTAL</b>	<b>38</b>	<b>31</b>	<b>1</b>	<b>70</b>	<b>100</b>

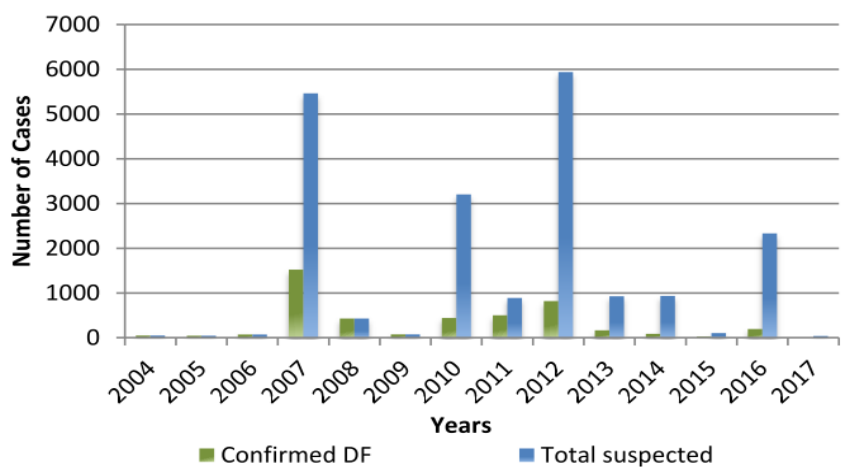
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2017		2016
		EW 32	YTD	YTD
<b>Total Suspected Dengue Cases</b>		2	70	1808
<b>Lab Confirmed Dengue cases</b>		0	11	145
<b>CONFIRMED</b>	<b>DHF/DSS</b>	0	0	3
	<b>Dengue Related Deaths</b>	0	0	0

Dengue Cases by Year: 2007-2017, Jamaica



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# Gastroenteritis Bulletin

EW  
32

August 6-12, 2017

Epidemiology Week 32

## Weekly Breakdown of Gastroenteritis cases

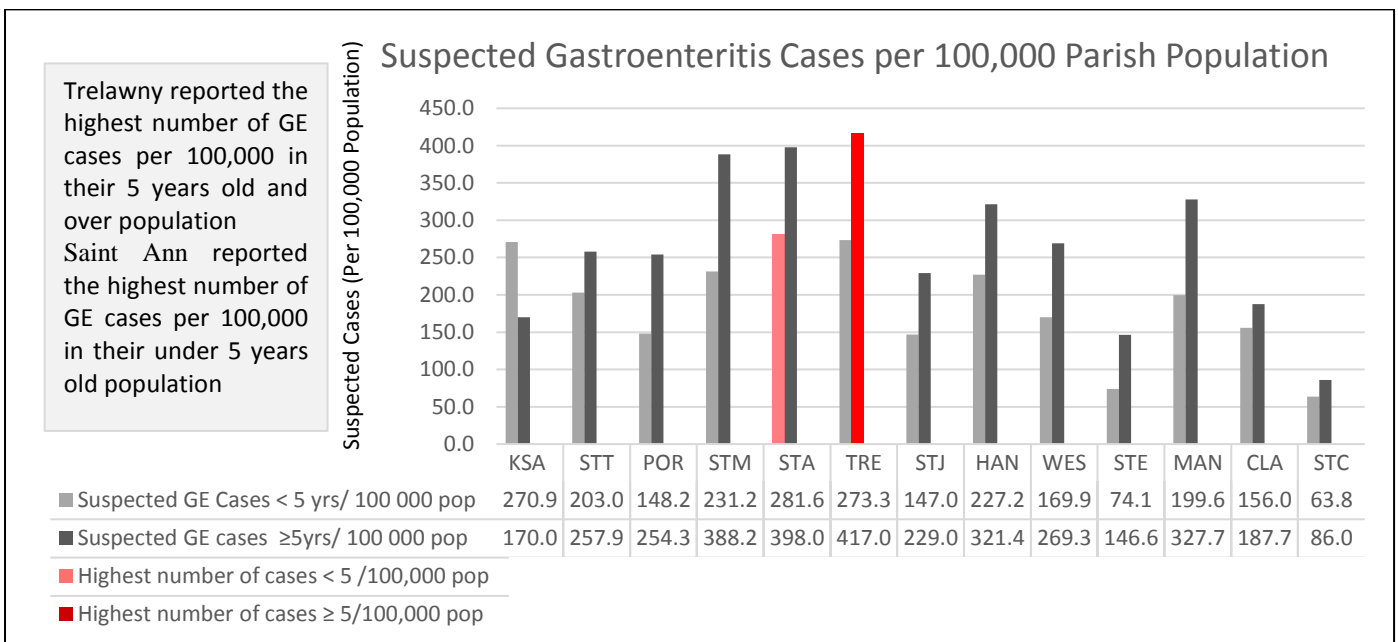
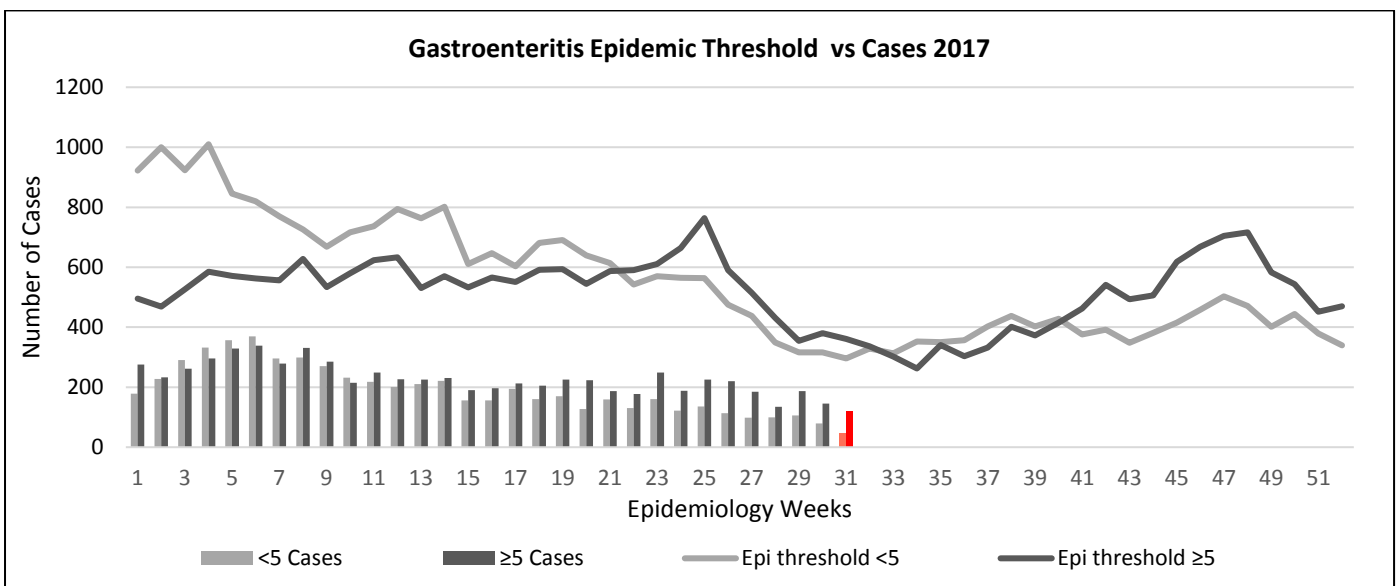
Year	EW 32			YTD		
	<5	≥5	Total	<5	≥5	Total
2017	62	139	201	5,975	7,187	13,162
2016	71	179	250	4,480	7,329	11,809

### Gastroenteritis:

In Epidemiology Week 32, 2017, the total number of reported GE cases showed an 13% decrease compared to EW 32 of the previous year. The year to date figure showed a 11% increase in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2016-2017



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REPORTS- Detailed Follow up for all Class One Events



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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.



The Ministry of Health  
24-26 Grenada Crescent  
Kingston 5, Jamaica  
Tele: (876) 633-7924  
Email: [surveillance@moh.gov.jm](mailto:surveillance@moh.gov.jm)



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