

# WEEKLY EPIDEMIOLOGY BULLETIN

## NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### Weekly Spotlight

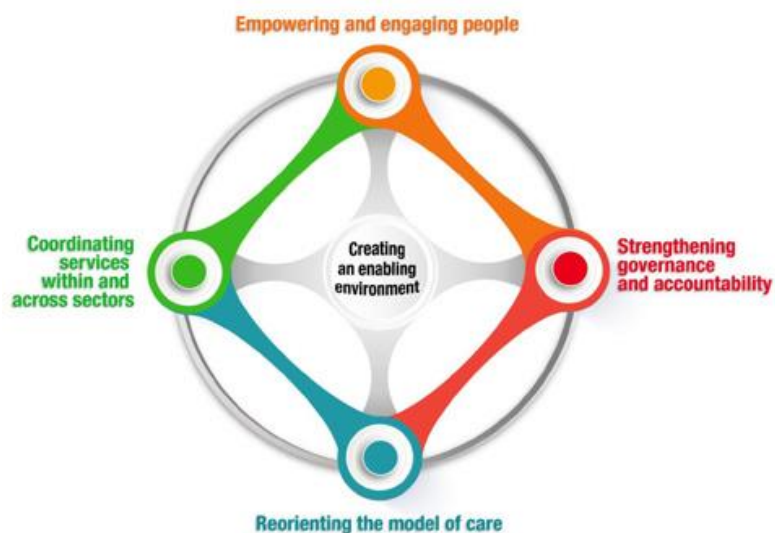
## What is people-centred care?

Globally, 1 in 20 people still lacks access to essential health services that could be delivered at a primary care clinic instead of a hospital. Where services are accessible, they can be fragmented and of poor quality. WHO is supporting countries to progress towards universal health coverage by designing health services for people instead of diseases and health institutions, so that everyone gets the right care, at the right time, in the right place.

### The Way Forward: Five Strategies

The vision for the *Framework on Integrated people-centred health services* is a future in which all people have equal access to quality health services that are co-produced in a way that meets their life course needs and respects their preferences, are coordinated across the continuum of care and are comprehensive, safe, effective, timely, efficient, and acceptable and all carers are motivated, skilled and operate in a supportive environment.

WHO recommends five interwoven strategies that need to be implemented in order to achieve this vision. Health authorities are encouraged to select those policies and interventions that best fit their national, sub-national or local needs and to customize them to match their priorities, capabilities and resources.



### Five strategies

Engaging and empowering people and communities;  
Strengthening governance and accountability;  
Reorienting the model of care;  
Coordinating services within and across sectors;  
Creating an enabling environment.

Source: <http://who.int/servicedeliverysafety/areas/people-centred-care/strategies/en/>



**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

## EPI WEEK 23



**SYNDROMES**

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**DENGUE FEVER**

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**RESEARCH PAPER**

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## REPORTS FOR SYNDROMIC SURVEILLANCE

### FEVER

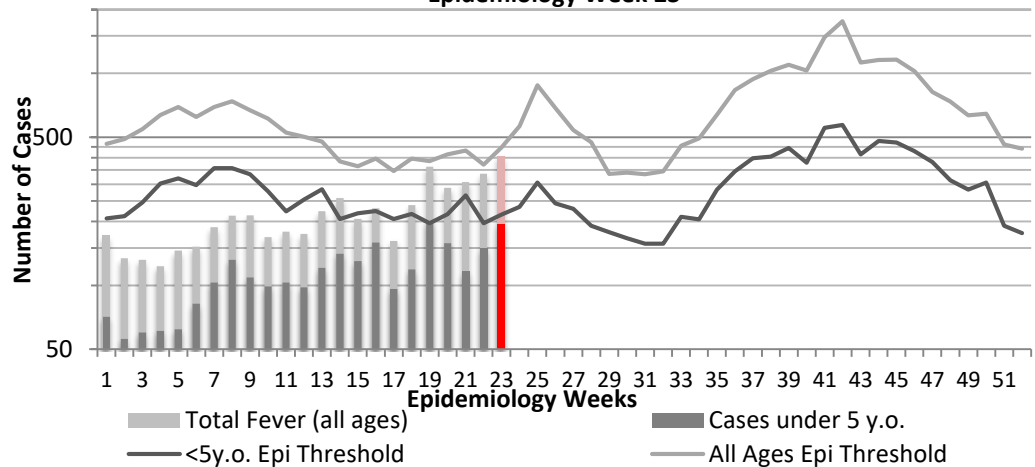
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



### KEY

**RED** CURRENT WEEK

Fever in under 5y.o. and Total Population 2017 vs Epidemic Thresholds, Epidemiology Week 23

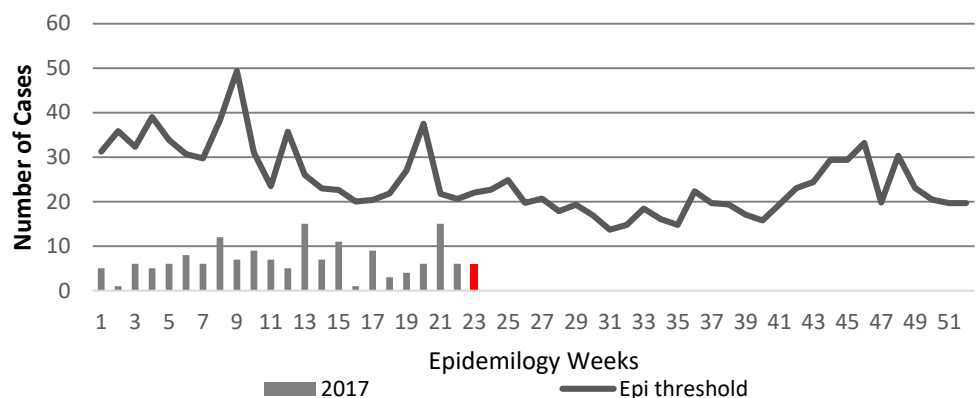


### FEVER AND NEUROLOGICAL

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 23

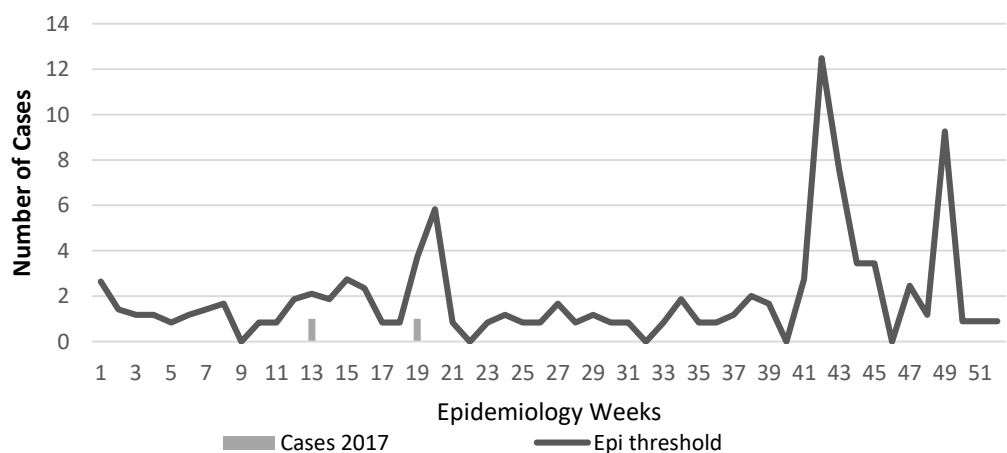


### FEVER AND HAEMORRHAGIC

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 23



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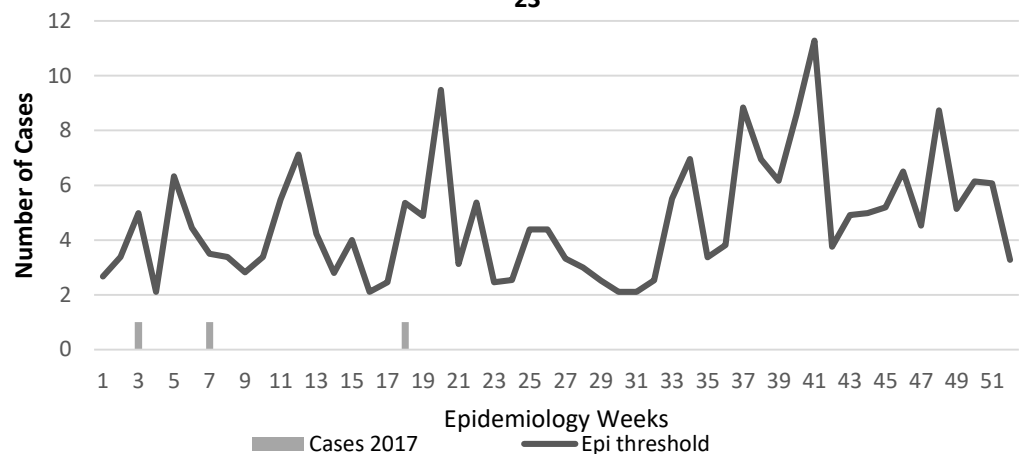
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**FEVER AND JAUNDICE**

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



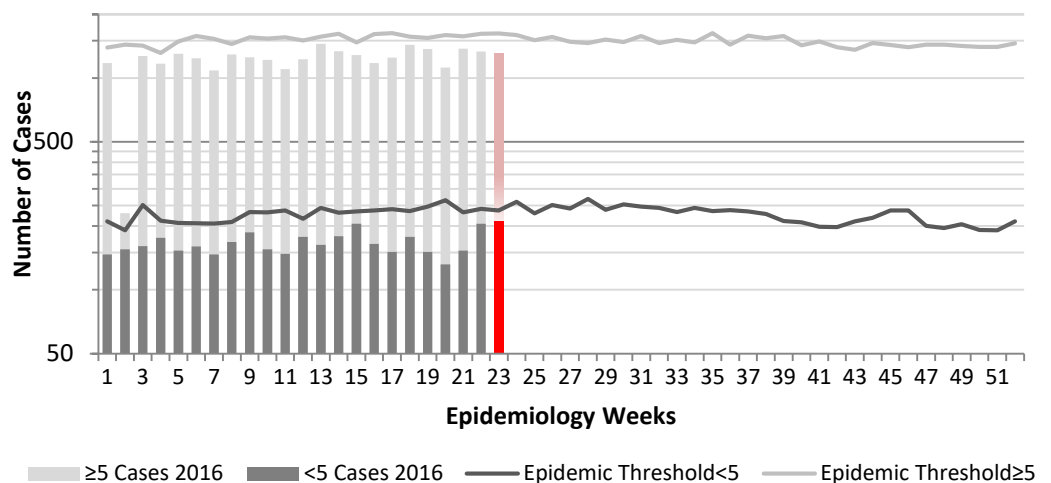
**Fever and Jaundice Weekly Threshold vs Cases 2017, Epidemiology Week 23**

**ACCIDENTS**

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



**Accidents Weekly Threshold vs Cases 2017**

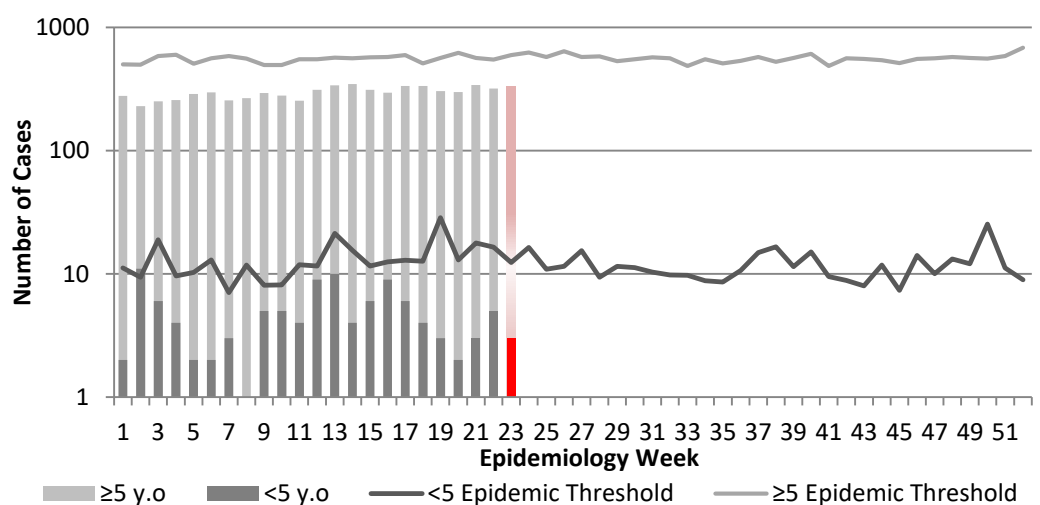
**VIOLENCE**

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

			CONFIRMED YTD		
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		45	78	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		12	14	
	Hepatitis C		2	4	
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)		2	1	
	Meningitis (Clinically confirmed)		17	29	
EXOTIC/ UNUSUAL	Plague		0	0	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis		0	0	
	Neonatal Tetanus		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.
	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>		16	25	
	Ophthalmia Neonatorum		98	195	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		3	6	
	Tetanus		1	0	
	Tuberculosis		0	11	
	Yellow Fever		0	0	
	Chikungunya		0	0	 
	Zika Virus		0	18	



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# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

# EW 23

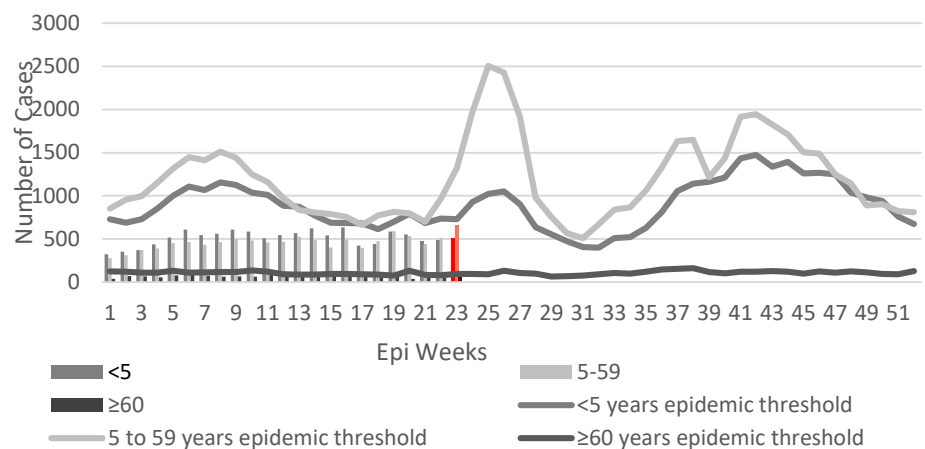
June 4- June 10, 2017

Epidemiology Week 23

June 2017

	EW 23	YTD
SARI cases	5	245
<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>

## Fever and Respiratory 2017



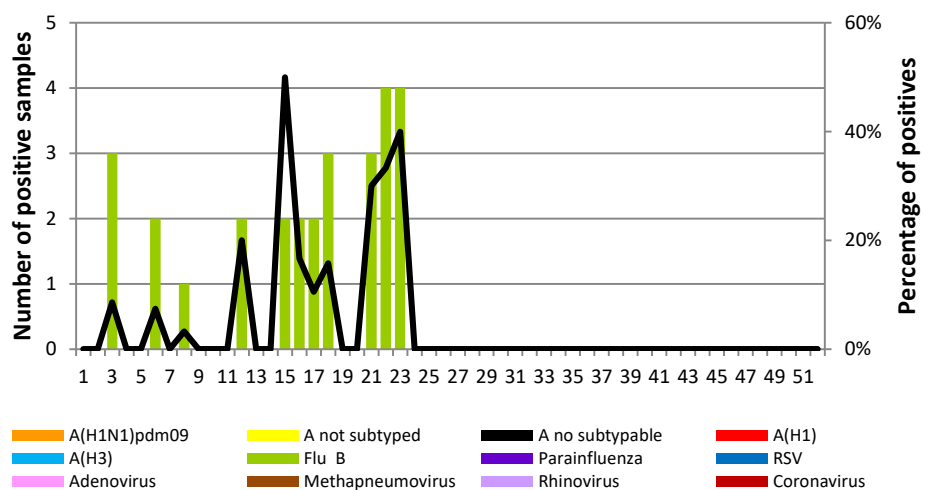
### Comments:

During EW 23, SARI activity slightly decreased and was below the average epidemic curve.

During EW 23, SARI cases were most frequently reported among children between 0-4 years of age.

During EW 23, few influenza detections were reported, with increased activity (40% positivity) and influenza B predominating.

### Distribution of Influenza and other respiratory viruses among SARI cases by EW surveillance EW 23, 2017, NIC Jamaica



## INDICATORS

### Burden

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

### Incidence

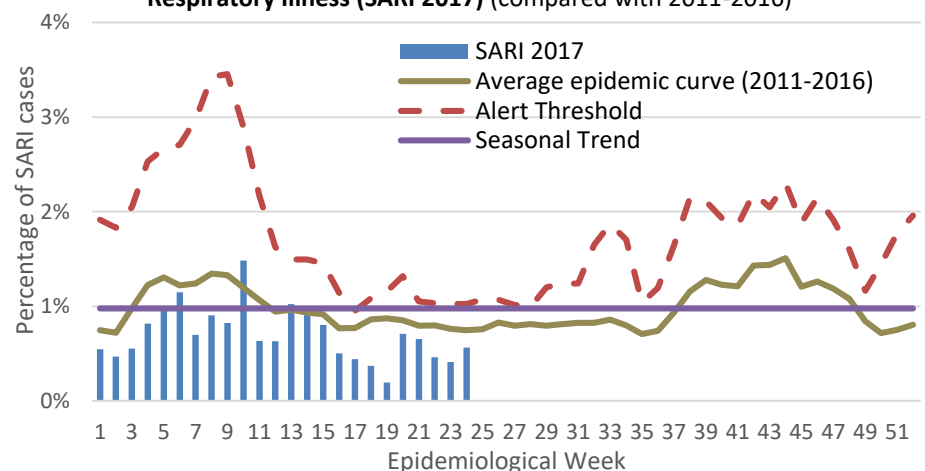
Cannot be calculated, as data sources do not collect all cases of Respiratory illness.



### Prevalence

Not applicable to acute respiratory conditions.

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



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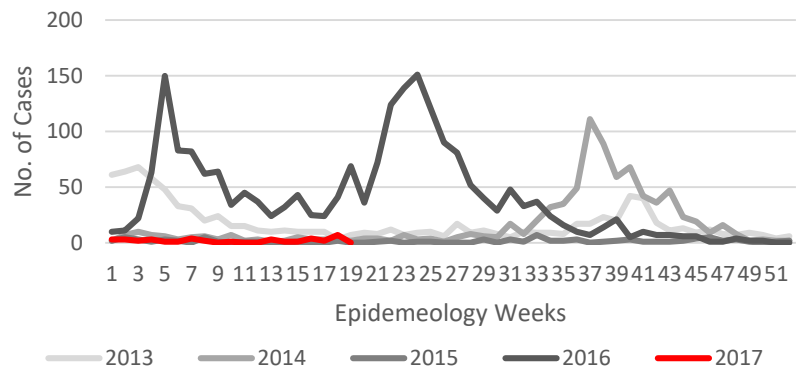
# Dengue Bulletin

June 3- June 10, 2017

Epidemiology Week 23



Dengue Cases by Epidemiology Weeks 2013-2017

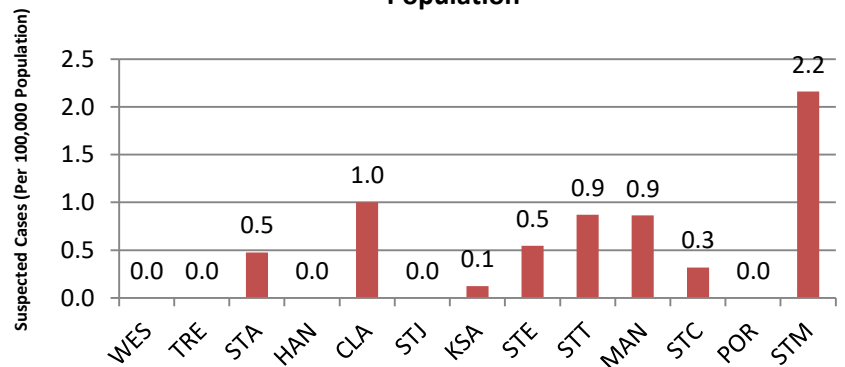


## DISTRIBUTION

### Year-to-Date Suspected Dengue Fever

	M	F	Un-known	Total	%
<1	1	0	0	1	2.6
1-4	2	1	0	3	7.9
5-14	4	5	0	9	23.7
15-24	4	3	0	7	18.4
25-44	6	5	1	12	31.6
45-64	1	3	0	4	10.5
≥65	0	0	0	0	0
Unknown	1	1	0	2	5.3
<b>TOTAL</b>	<b>19</b>	<b>18</b>	<b>1</b>	<b>38</b>	<b>100</b>

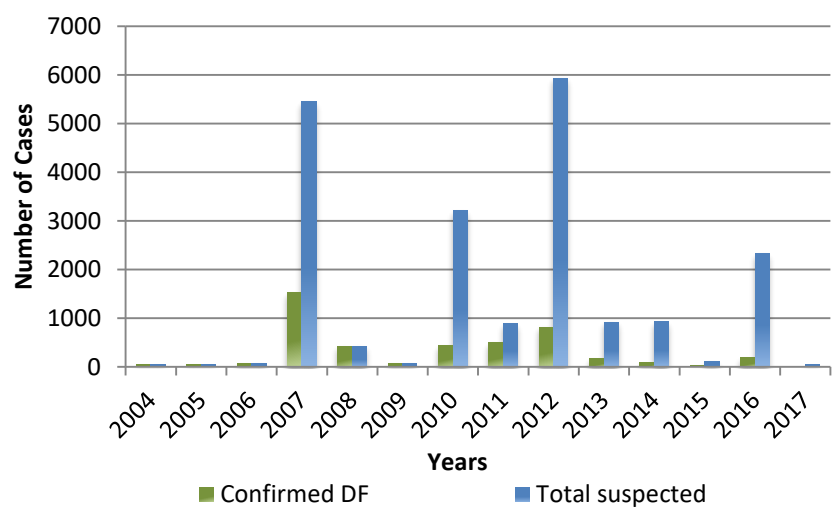
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2017		2016 YTD
		EW 22	YTD	
Total Suspected Dengue Cases		0	46	1064
Lab Confirmed Dengue cases		0	2	91
CONFIRMED	DHF/DSS	0	0	2
	Dengue Related Deaths	0	0	0

Dengue Cases by Year: 2007-2017, Jamaica



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# Gastroenteritis Bulletin

## EW 23

June 4- June 10, 2017

Epidemiology Week 23

### Weekly Breakdown of Gastroenteritis cases

Year	EW 23			YTD		
	<5	≥5	Total	<5	≥5	Total
2017	160	249	409	5,114	5,642	10,756
2016	170	257	427	3,378	5,233	8,611

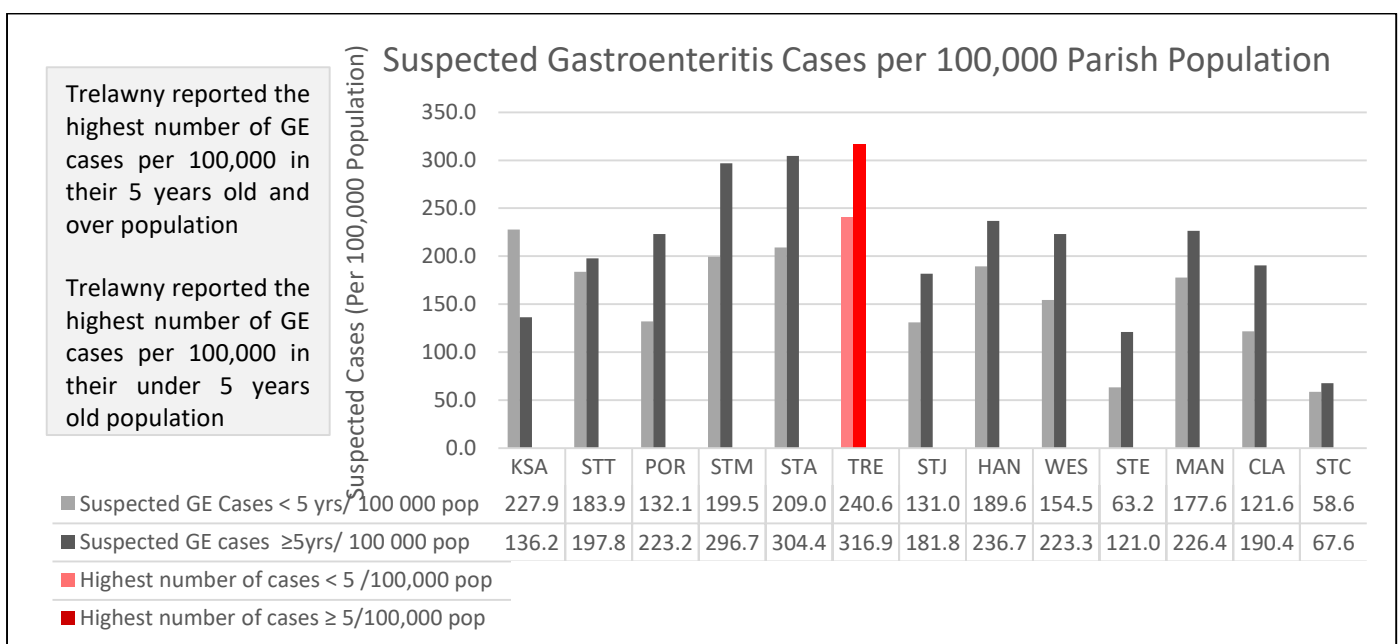
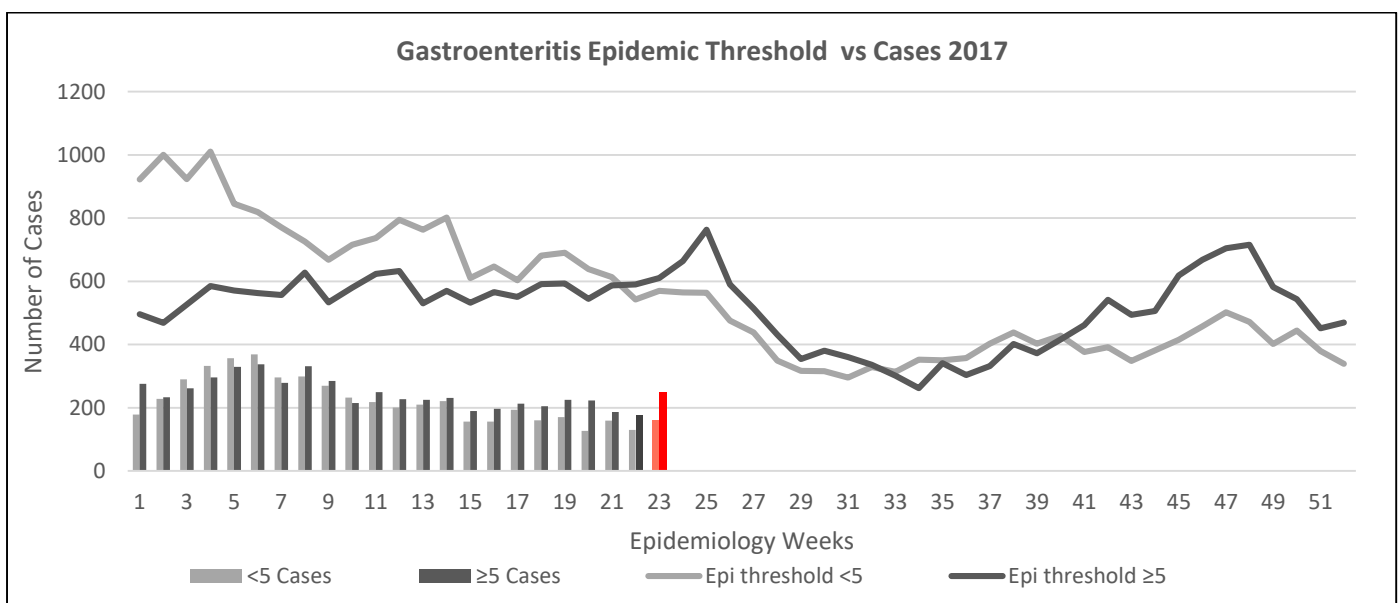
### Gastroenteritis:

In Epidemiology Week 23, 2017, the total number of reported GE cases showed an 4% decrease compared to EW 23 of the previous year.

The year to date figure showed a 25% increase in cases for the period.



**Figure 1: Total Gastroenteritis Cases Reported 2016-2017**



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# RESEARCH PAPER

## Estimating Cost Effectiveness of HPV Vaccination or Pap Smear Expansion or VIA Screening Introduction By Using the CERVIVAC Model

*J Barnett, K Lewis-Bell*

*Ministry of Health, Jamaica*

**Objective:** To examine the potential costs, health benefits and value for money (e.g. cost per DALY saved primarily) of introducing the HPV vaccination for a cohort of girls entering high school; or expanding pap smear screening; or introduction of Visual Inspection with Acetic Acid (VIA) screening method.

**Method:** Analysis was conducted using a prospective cohort-based model (CERVIVAC) which incorporated meta-analysis to project the changes in the natural history of the disease based on the intervention's scale and scope. Information required related to demographics and system costs and structure for each intervention.

**Results:** The VIA programme produced the highest cost-effectiveness result i.e. lowest cost per DALY averted, from the government and society perspective, US\$75 and US\$4,212 respectively. Societal, the least cost effective was the expanded pap smear screening option US\$6,773.00 (US\$2,094.00 – government). Cost per DALY averted for the vaccination intervention were US\$5,360 and US\$5,313 respectively and it produced the highest number of DALYs averted. Notwithstanding, the results of an incremental cost effectiveness analysis between VIA and vaccination supports the clear dominance of the former.

**Conclusion:** Using the WHO classification as our proxy income threshold, VIA (US\$75 and US\$4,212) is less than the country's GDP per capita (US\$4,471), thus it is highly cost effective and a justifiable investment for the country. Therefore on the basis of technical efficiency alone, Jamaica should select the VIA option.



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