

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Weekly Spotlight

Healthier women and children through Environmental Health Policy

Survive, Thrive and Transform

Environmental health risks especially affect women and children, because they are more vulnerable socially and because exposures to environmental contaminants create greater risks for children's developing bodies and cognitive functions. According to the 2016 World Health Organization estimates, modifiable environmental risk factors cause about 1.7 million deaths in children younger than five years and 12.6 million total deaths every year.



Since women and children are especially affected by the environment, intersectoral interventions that reduce environmental risks will improve early childhood survival as well as reducing risks of premature death throughout the life-course.

Improving access to reliable electricity and clean water in health-care facilities can also help reduce maternal and newborn mortality, as such infrastructure is a critical determinant of quality of care. Ensuring that health-care facilities have access to power and water is a minimum requirement for attracting women to facilities and guaranteeing quality services for safe childbirth.

While non-communicable diseases now constitute two-thirds of the environmentally-related health burden,¹ controlling environmentally-related infectious diseases also remains a challenge. Infectious diseases continue to present significant risks for the unborn child and for young children whose adaptive immune systems are under-developed.



Such urbanization, as well as changing climate patterns, has been recognized as a driver promoting the proliferation of *Aedes aegypti*, the primary vector for dengue and Zika viruses.

The global strategy aims for a holistic approach by supporting strategies that reduce avoidable risks to women's, children's and adolescents' health. Interventions to transform health-care delivery, social and gender equity are core themes. However, as part of a holistic approach, the strategy also needs to prioritize environmental health interventions in cities as well as rural areas.

Using the Sustainable Developmental Goals to make cities healthier, promote cleaner air and water, and ensure clean, reliable energy access in climate resilient health-care facilities will reduce pollution-related deaths and illnesses, particularly among women and children. Therefore, interventions addressing environmental health risks should be integral to the vision of the global strategy.

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<http://www.who.int/bulletin/volumes/95/8/16-171736/en/>

EPI WEEK 30

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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RESEARCH PAPER



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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

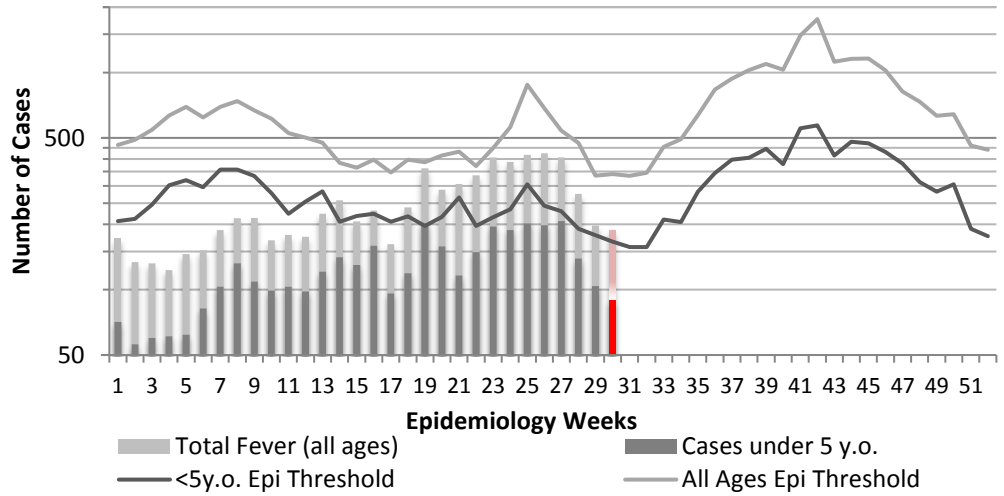
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

RED CURRENT WEEK

Fever in under 5y.o. and Total Population 2017 vs Epidemic Thresholds, Epidemiology Week 30

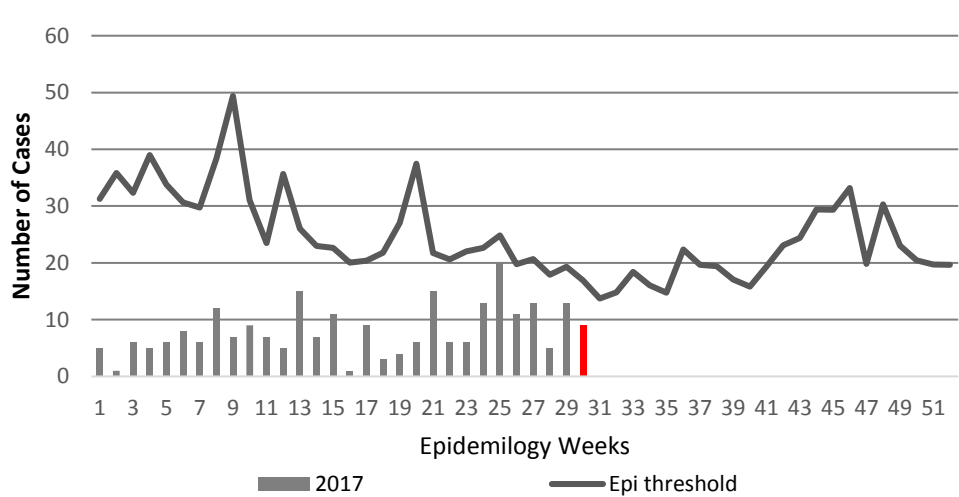


FEVER AND NEUROLOGICAL

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).



Fever and Neurological Symptoms Weekly Threshold vs Cases 2017, Epidemiology Week 30

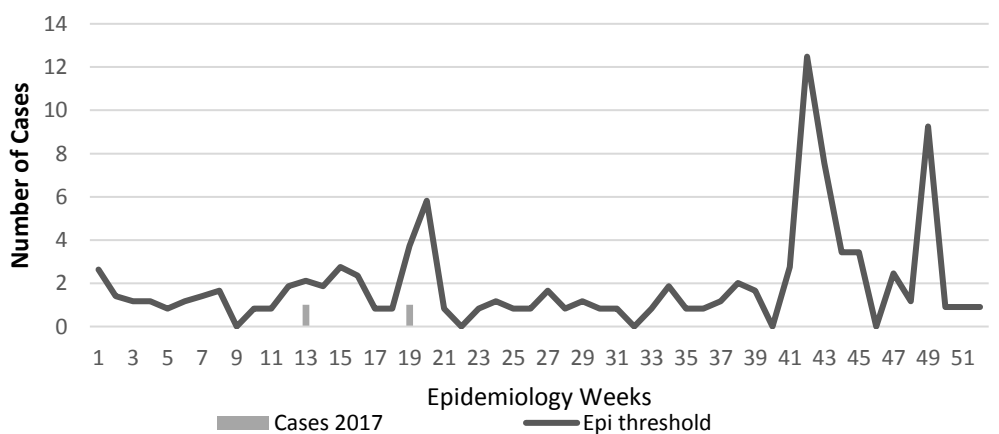


FEVER AND HAEMORRHAGIC

Temperature of $>38^{\circ}\text{C}$ / 100.4°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 30



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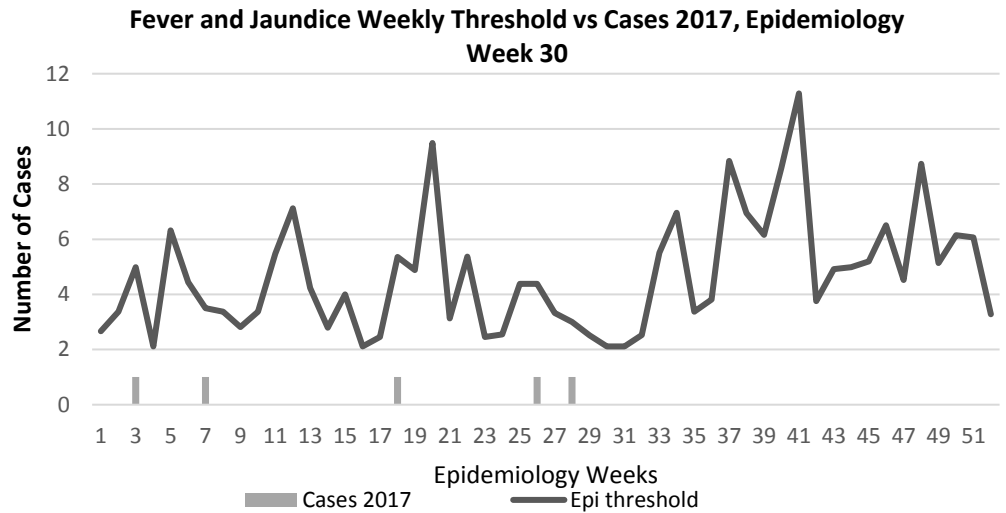


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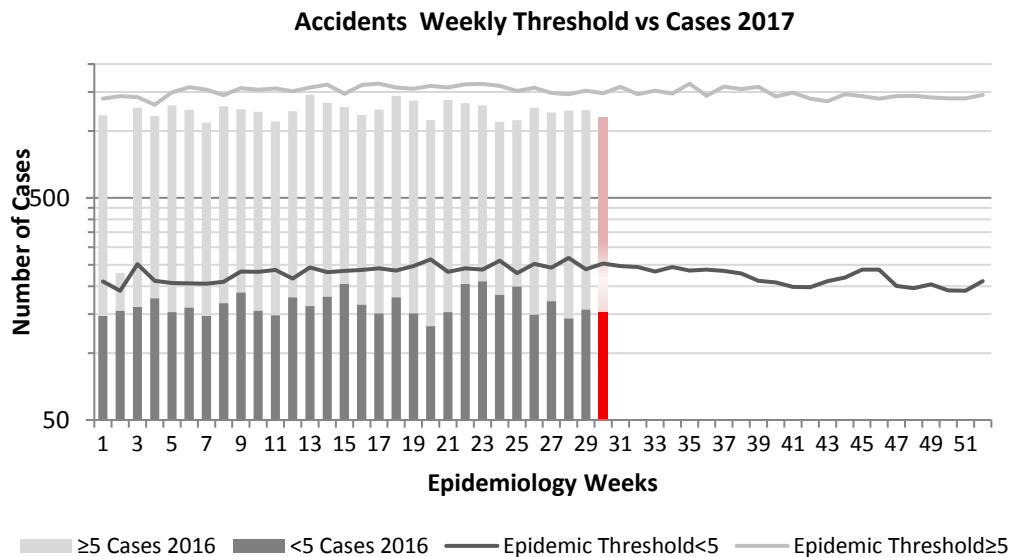
FEVER AND JAUNDICE

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



ACCIDENTS

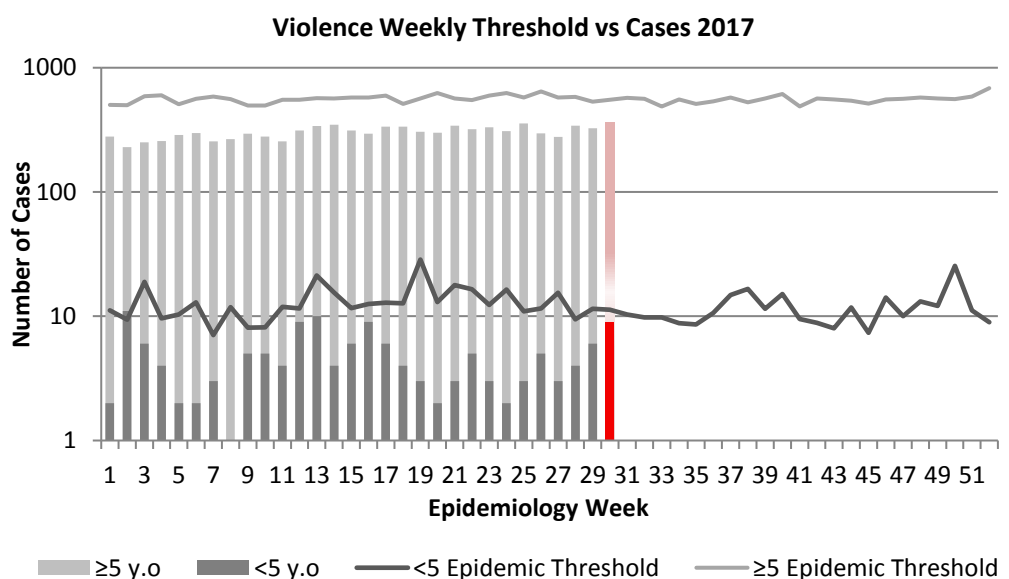
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.



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	60	95	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 ¹	0	3		
	Hansen’s Disease (Leprosy)	0	2		
	Hepatitis B	32	19		
	Hepatitis C	5	4		
	HIV/AIDS - See HIV/AIDS National Programme Report				
	Malaria (Imported)	7	2		
	Meningitis (Clinically confirmed)	27	39		
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		
	Typhoid Fever	0	0		
	Meningitis H/Flu	0	0		
SPECIAL PROGRAMMES	AFP/Polio	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.	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths ²	18	25		
	Ophthalmia Neonatorum	147	266		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	3	6		
	Tetanus	1	0		
	Tuberculosis	22	33		
Yellow Fever	0	0			
	Chikungunya	0	4	 	
	Zika Virus	0	123		



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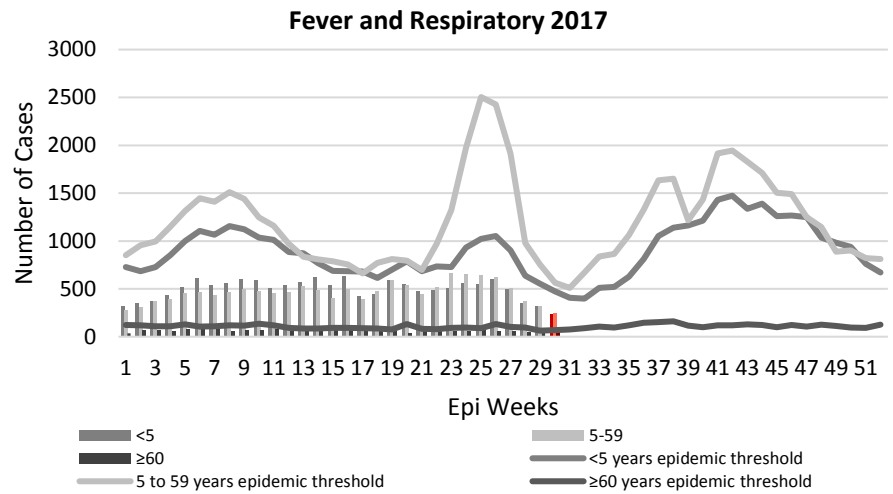
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 30

July 23-29, 2017

Epidemiology Week 30

July 2017		
	EW 30	YTD
SARI cases	2	299
Total Influenza positive Samples	2	26
Influenza A	0	0
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
Influenza B	4	26
Other	0	0



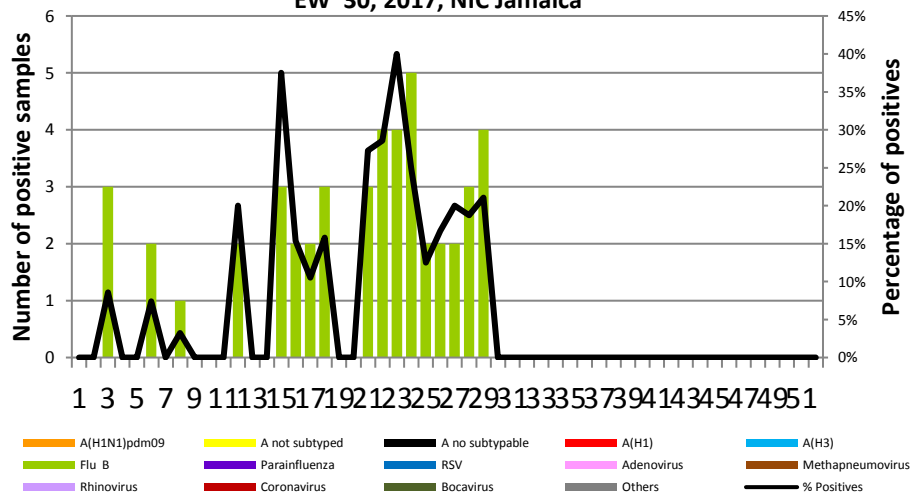
Comments:

During EW 30, 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 30, the number of SARI cases slightly decreased as compared to previous weeks and was lower than the previous seasons for the same period.

During EW 30, few influenza detections were reported, with slightly decreased activity (18% positivity) and influenza B predominating.

Distribution of Influenza and other respiratory viruses among SARI cases by EW surveillance EW 30, 2017, NIC Jamaica



INDICATORS

Burden

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

Incidence

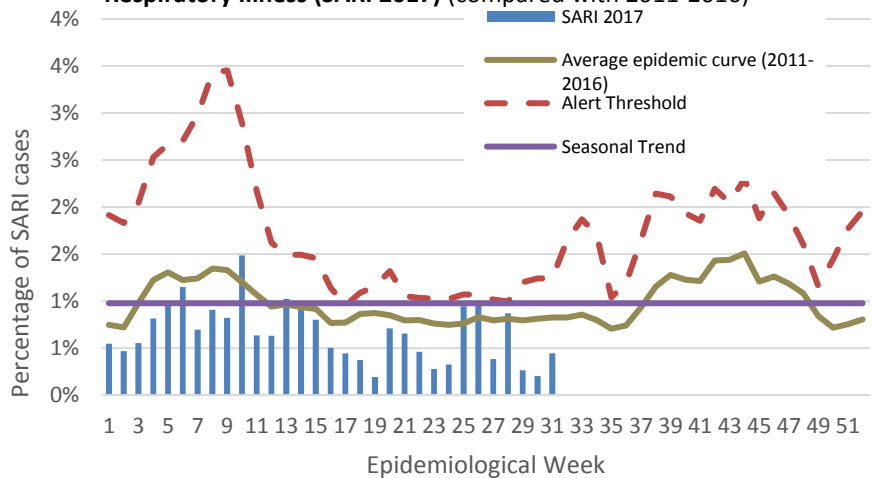
Cannot be calculated, as data sources do not collect all cases of Respiratory illness.



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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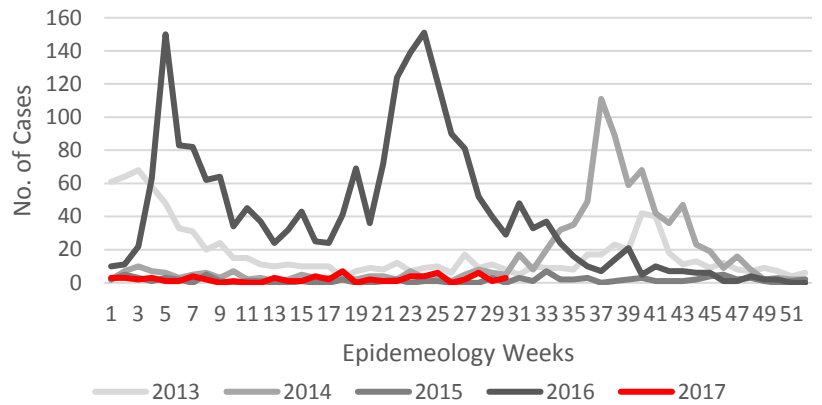
Dengue Bulletin

July 23-29, 2017

Epidemiology Week 30



Dengue Cases by Epidemiology Weeks 2013-2017

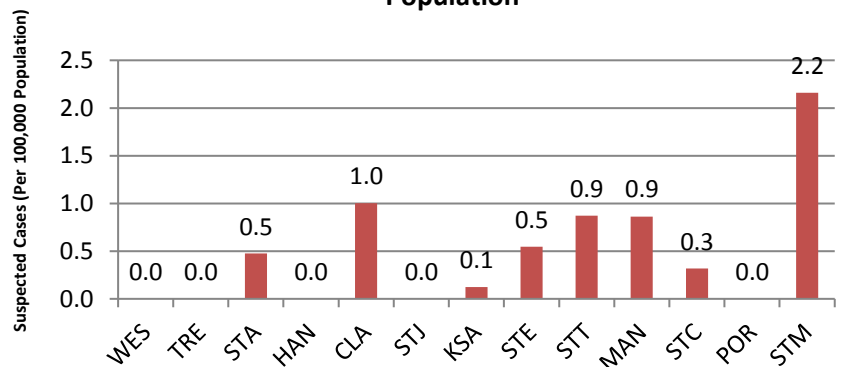


DISTRIBUTION

Year-to-Date Suspected Dengue Fever

	M	F	Un-known	Total	%
<1	1	0	0	1	1.5
1-4	4	2	0	6	8.8
5-14	6	10	0	16	23.5
15-24	7	7	0	14	20.6
25-44	13	7	1	21	30.9
45-64	4	4	0	8	11.8
≥65	0	0	0	0	0
Unknown	1	1	0	2	2.9
TOTAL	36	31	1	68	100

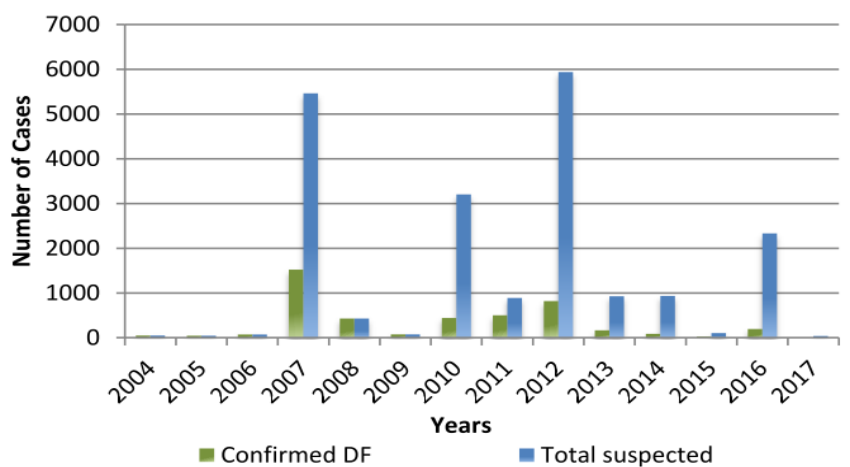
Suspected Dengue Fever Cases per 100,000 Parish Population



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

		2017		2016 YTD
		EW 30	YTD	
Total Suspected Dengue Cases		3	68	1691
Lab Confirmed Dengue cases		0	11	133
CONFIRMED	DHF/DSS	0	0	3
	Dengue Related Deaths	0	0	0

Dengue Cases by Year: 2007-2017, Jamaica



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Gastroenteritis Bulletin

EW
30

July 23-29, 2017

Epidemiology Week 30

Weekly Breakdown of Gastroenteritis cases

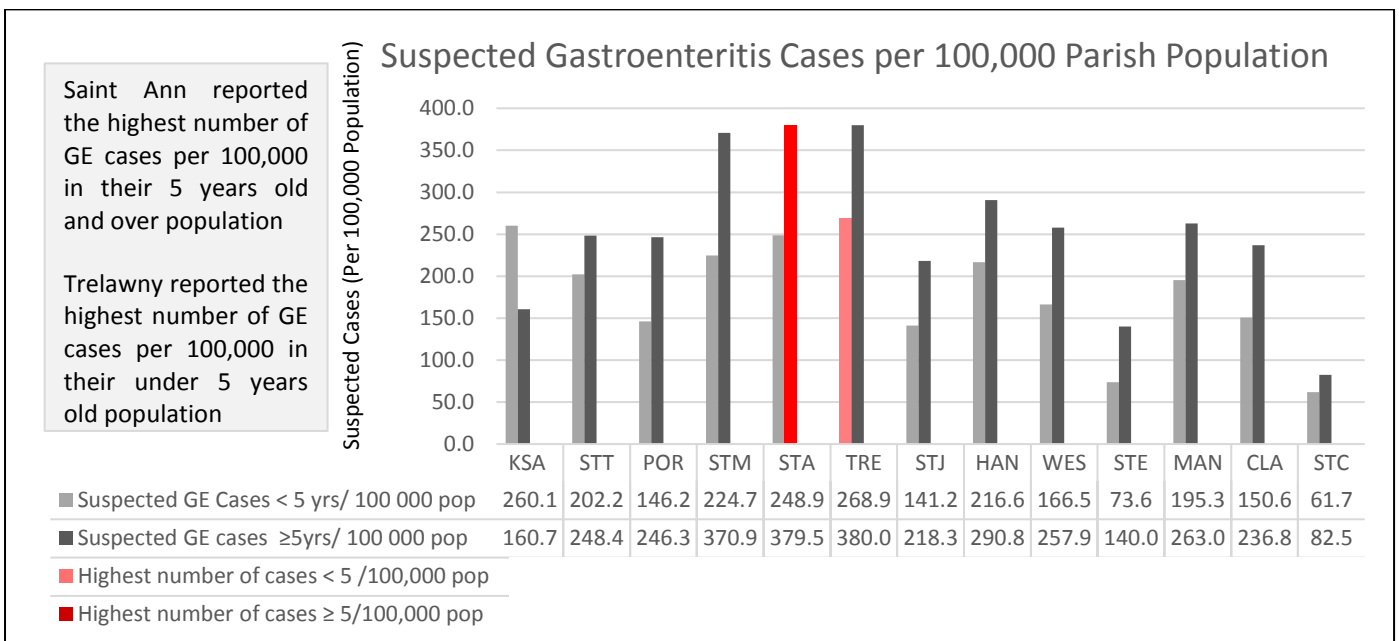
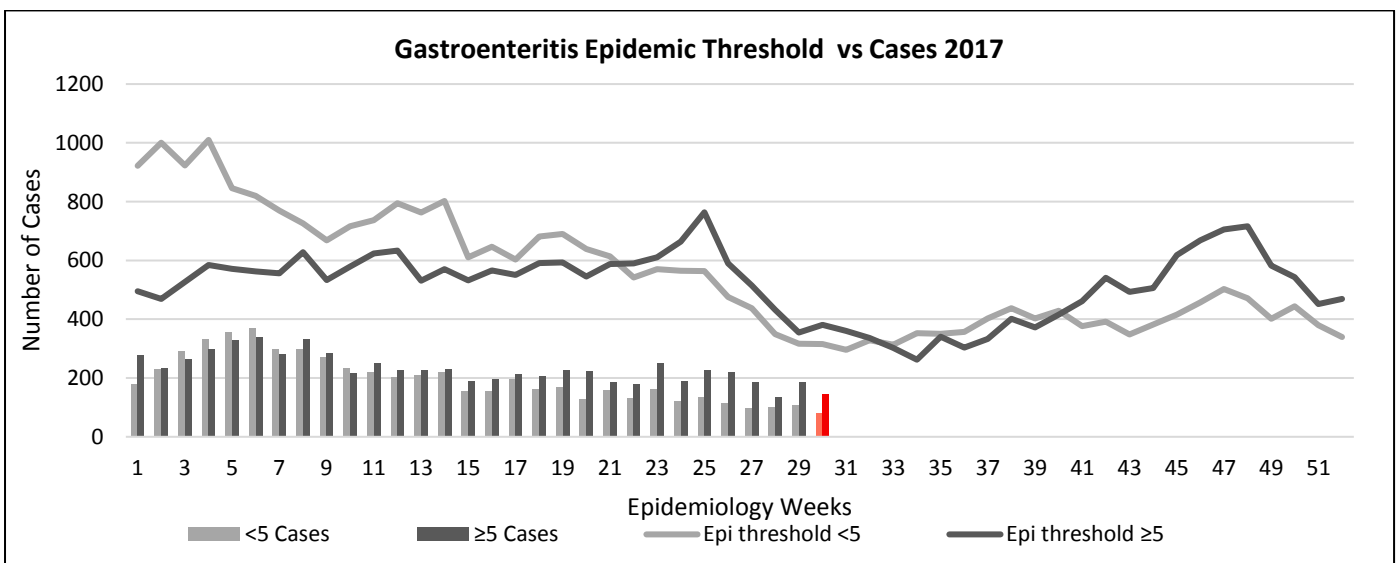
Year	EW 30			YTD		
	<5	≥5	Total	<5	≥5	Total
2017	79	145	224	5,910	7,043	12,953
2016	94	201	295	4,409	7,150	11,559

Gastroenteritis:

In Epidemiology Week 30, 2017, the total number of reported GE cases showed an 16% decrease compared to EW 30 of the previous year. The year to date figure showed a 12% increase in cases for the period.



Figure 1: Total Gastroenteritis Cases Reported 2016-2017



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RESEARCH PAPER

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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