## WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

### **Weekly Spotlight**

PAHO Launches New Initiative to Eliminate **Mother-to-Child Transmission of Four Diseases** 



Every year an estimated 2,100 children in Latin America and the Caribbean are born with HIV or contract it from their mothers; 22,400 are infected with syphilis; some 9,000 are born with Chagas disease; and 6,000 contract the hepatitis B virus. If not detected and treated in time, these infections can cause miscarriages,

congenital malformations, neurological and heart problems, cirrhosis, liver cancer, and in some cases, even death.

To end mother-to-child transmission of these four diseases by 2020, the Pan American Health Organization (PAHO) has launched the Framework for elimination of mother-to-child transmission of HIV, syphilis, hepatitis B and Chagas (EMTCT-PLUS). The new framework is an opportunity to integrate and redouble efforts to diagnose and treat pregnant women during prenatal check-ups to prevent miscarriages, malformations, and deaths from syphilis and to keep children from being infected with diseases.

In order to reduce mother-to-child transmission of these four

diseases to a minimum, the PAHO initiative proposes universal screening of all pregnant women, a policy that every country in the Region and the world has adopted for the diagnosis of HIV and syphilis though not yet for Chagas disease and hepatitis B. Up to now, the fight against Chagas disease has focused on vector control.



environmental clean-up, and the screening of blood for transfusions. However, the next step toward eliminating this disease as a public health problem is to focus on preventing mother-to-child transmission, which currently accounts for roughly one-third of new infections. The EMTCT-PLUS framework urges that all pregnant women be screened, and that the babies of those who test positive be tested and treated, as well as mothers after delivery.

Downloaded from:

http://www.paho.org/hq/index.php?option=com\_content&view=article&id=13567%3Apaho- $\underline{launches-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-to-child-transmission-of-four-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-to-eliminate-mother-new-initiative-new-initiatiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initiative-new-initia$  $\underline{diseases\&catid=740\%3Apress-releases\&ltemid=1926\&lang=en}$ 



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

WEEK 31



**SYNDROMES** 

PAGE 2



**CLASS 1 DISEASES** 

PAGE 4



**INFLUENZA** 

PAGE 5



DENGUE FEVER

PAGE 6



**GASTROENTERITIS** 

PAGE 7



RESEARCH PAPER

PAGE 8

NOTIFICATIONS-





## REPORTS FOR SYNDROMIC SURVEILLANCE

#### **FEVER**

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







# FEVER AND NEUROLOGICAL

Temperature >3800 of /100.40F (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).





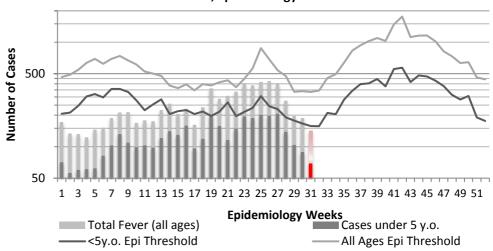
# FEVER AND HAEMORRHAGIC

Temperature of  $>38^{\circ}C$  /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.

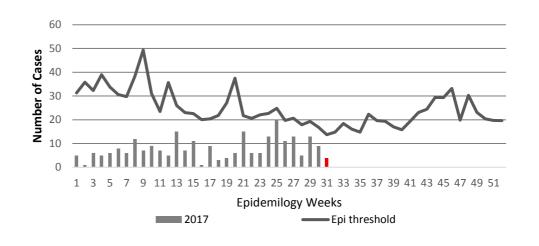




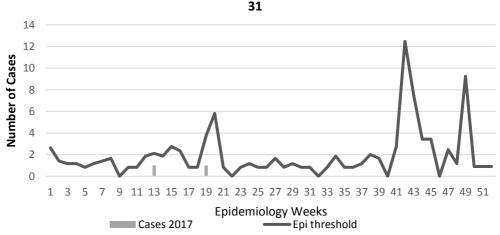




#### Fever and Neurological Symptoms Weekly Threshold vs Cases 2017, Epidemiology Week 31



## Fever and Haem Weekly Threshold vs Cases 2017, Epidemiology Week





NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites\*. Actively pursued



SENTINEL 2 REPORT- 79 sites\*. Automatic reporting

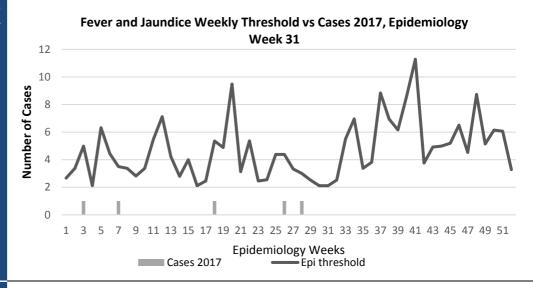
\*Incidence/Prevalence cannot be calculated

#### **FEVER AND JAUNDICE**

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







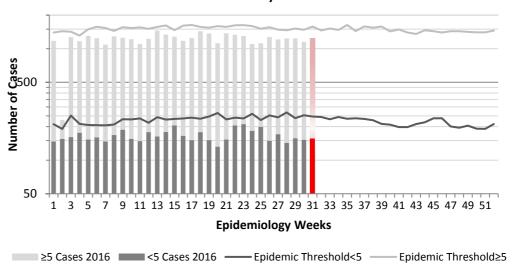
#### **ACCIDENTS**

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





#### **Accidents Weekly Threshold vs Cases 2017**



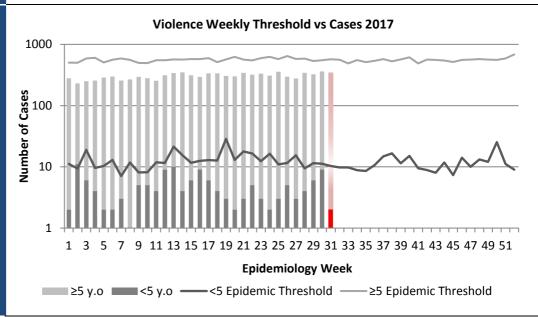
#### **VIOLENCE**

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.









NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites\*. Actively pursued



SENTINEL 3 REPORT- 79 sites\*. Automatic reporting

### CLASS ONE NOTIFIABLE EVENTS

### Comments

			CONFIRI	AFP Field Guides		
	CLASS 1 EV	VENTS	CURRENT YEAR	PREVIOUS YEAR	from WHO indicate that for an	
Ţ	Accidental Poisoning		65	98	effective surveillance	
NATIONAL /INTERNATIONAL INTEREST	Cholera		0	0	system, detection	
ATI	Dengue Hemorrhagic Fever <sup>1</sup>		0	3	rates for AFP should be	
ERN	Hansen's Disease (Leprosy)		0	2	1/100,000 population under 15 years old (6 to	
L /INTERN	Hepatitis B		32	22		
AL /	Hepatitis C		5	4	7) cases annually.	
NO/NO	HIV/AIDS -	See HIV/AIDS Natio	nal Programme Re	port		
ATI	Malaria (Im	ported)	7	2	Pertussis-like syndrome and	
Z	Meningitis (Clinically confirmed)		28	40	Tetanus are	
EXOTIC/ UNUSUAL	Plague		0	0	clinically confirmed	
) L	Meningococcal Meningitis		0	0	classifications.	
H IGH ORBIDJ ORTAL	Neonatal Tetanus		0	0	The TB case	
H IGH MORBIDIT, MORTALIY	Typhoid Fever		0	0	detection rate established by	
ΣΣ	Meningitis H/Flu		0	0	PAHO for Jamaica is at least 70% of their calculated estimate of cases in the island, this is 180 (of 200) cases	
	AFP/Polio		0	0		
	Congenital Rubella Syndrome		0	0		
$\infty$	Congenital Syphilis		0	0		
ME	Fever and	Measles	0	0	per year.	
Y Y	Rash	Rubella	0	0		
SPECIAL PROGRAMMES	Maternal Deaths <sup>2</sup>		18	25	1 Dengue Hemorrhagic Fever data include	
PRO	Ophthalmia Neonatorum		164	268	Dengue related deaths;	
JAL	Pertussis-like syndrome		0	0	2 Maternal Deaths include early and late	
PEC	Rheumatic Fever		3	6	deaths.	
SIS	Tetanus		1	0	Hep B increase for wk	
	Tuberculosis		28	34	29, 2017 due to results received from NBTS/NPHL	
	Yellow Fever		0	0		
Chikungunya			0	4		
	Zika Virus		0	129		









HOSPITAL ACTIVE SURVEILLANCE-30 sites\*. Actively pursued



SENTINEL REPORT- 79 sites\*. Automatic reporting

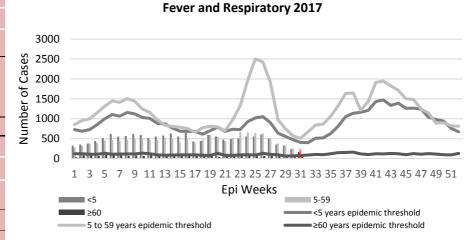
### NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 31

July 30- August 5, 2017

#### Epidemiology Week 31

July 2017				
	EW 31	YTD		
SARI cases	5	304		
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		

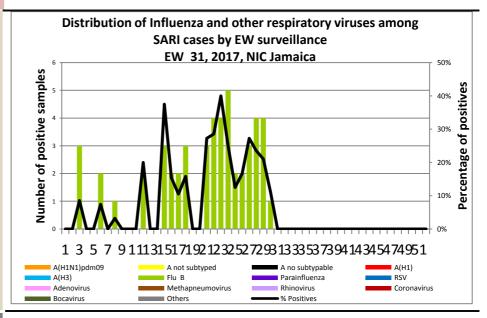


#### **Comments:**

During EW 31, the proportion of SARI hospitalizations among all hospitalizations increased 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

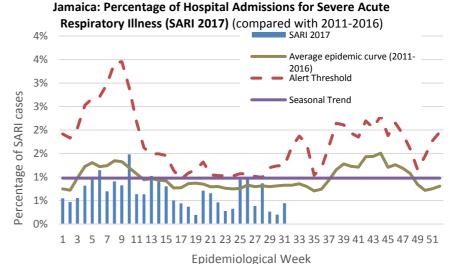
Year to date, respiratory syndromes account for 4.4% of visits to health facilities.

#### **Incidence**

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

#### Prevalence

Not applicable to acute respiratory conditions.





NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites\*. Actively pursued

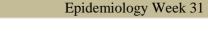


SENTINEL 5 REPORT- 79 sites\*. Automatic reporting

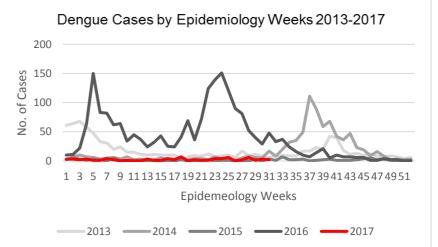
\*Incidence/Prevalence cannot be calculated

# Dengue Bulletin

July 30- August 5, 2017



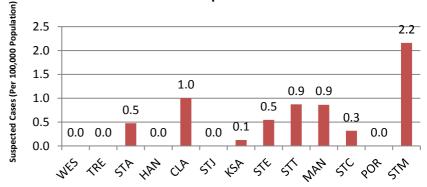




### DISTRIBUTION

#### Year-to-Date Suspected Dengue Fever Un-Total F M % known 2 0 2 <1 0 2.9 1-4 5 4 1 0 7.1 5-14 6 11 0 17 24.3 7 15-24 8 0 15 21.4 25-44 21 14 6 1 30 8 45-64 4 4 0 11.4 >65 0 0 0 0 0 Unknown 2 1 1 0 2.9 **TOTAL** 1 38 31 70 100

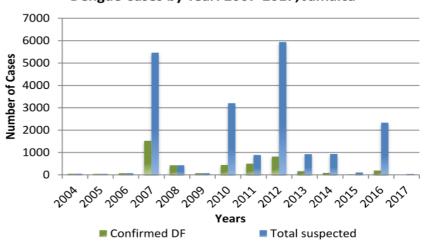
#### Suspected Dengue Fever Cases per 100,000 Parish **Population**



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

		2017		
		EW 31	YTD	2016 YTD
Total Suspected Dengue Cases		2	70	1808
Lab Confirmed Dengue cases		0	11	145
CONFIRMED	DHF/DSS	0	0	3
	Dengue Related Deaths	0	0	0

#### Dengue Cases by Year: 2007-2017, Jamaica





**NOTIFICATIONS-**All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE **SURVEILLANCE-30** sites\*. Actively pursued



**SENTINEL** 6 REPORT- 79 sites\*. Automatic reporting

\*Incidence/Prevalence cannot be calculated

# Gastroenteritis Bulletin

EW

July 30-August 5, 2017

Epidemiology Week 31

31

#### Weekly Breakdown of Gastroenteritis cases

Year	EW 31			YTD		
	<5	≥5	Total	<5	≥5	Total
2017	45	121	166	5,913	7,048	12,961
2016	98	194	292	4,409	7,150	11,559

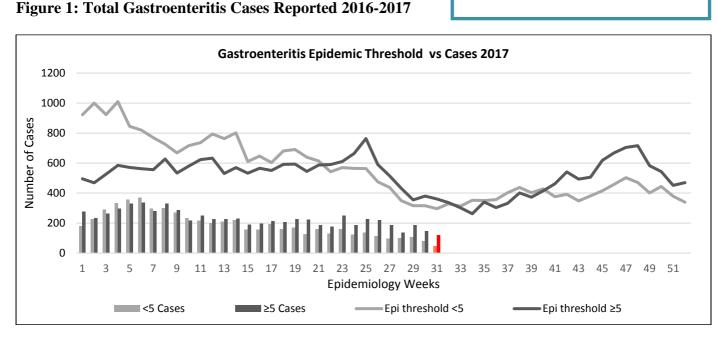
#### **Gastroenteritis:**

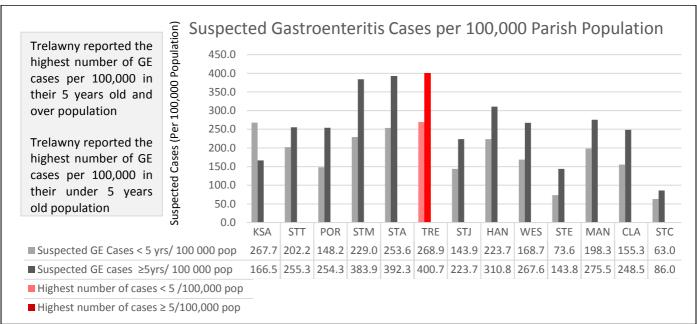
In Epidemiology Week 31, 2017, the total number of reported GE cases showed an 17% decrease compared to EW 31 of the previous year.

The year to date figure showed a 12% increase in cases for the period.











NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites\*. Actively pursued



SENTINEL 7 REPORT- 79 sites\*. Automatic reporting

## 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.



The Ministry of Health 24-26 Grenada Crescent Kingston 5, Jamaica Tele: (876) 633-7924

Email: surveillance@moh.gov.jm



**NOTIFICATIONS-**

clinical

All

sites



