

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH, JAMAICA

Measles cases spike globally due to gaps in vaccination coverage



Reported measles cases spiked in 2017, as multiple countries experienced severe and protracted outbreaks of the disease. This is according to a new report published today by leading health organizations. Because of gaps in vaccination coverage, measles outbreaks

occurred in all regions, while there were an estimated 110 000 deaths related to the disease. Using updated disease modelling data, the report provides the most comprehensive estimates of measles trends over the last 17 years. It shows that since 2000, over 21 million lives have been saved through measles immunizations. However, reported cases increased by more than 30 percent worldwide from 2016.

The Americas, the Eastern Mediterranean Region, and Europe experienced the greatest upsurges in cases in 2017, with the Western Pacific the only World Health Organization (WHO) region where measles incidence fell.

Measles is a serious and highly contagious disease. It can cause debilitating or fatal complications, including encephalitis (an infection that leads to swelling of the brain), severe diarrhoea and dehydration, pneumonia, ear infections and permanent vision loss. Babies and young children with malnutrition and weak immune systems are particularly vulnerable to complications and death. The disease is preventable through two doses of a safe and effective vaccine. For several years, however, global coverage with the first

dose of measles vaccine has stalled at 85 percent. This is far short of the 95 percent needed to prevent outbreaks, and leaves many people, in many communities, susceptible to the disease. Second dose coverage stands at 67 percent.

Responding to the recent outbreaks, health agencies are calling for sustained investment in immunization systems, alongside efforts to strengthen routine vaccination services. These efforts must focus especially on reaching the poorest, most marginalized communities, including people affected by conflict and displacement.

The agencies also call for actions to build broad-based public support for immunizations, while tackling misinformation and hesitancy around vaccines where these exist.



EPI WEEK 47



SYNDROMES

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CLASS 1 DISEASES

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RESEARCH PAPER

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REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER

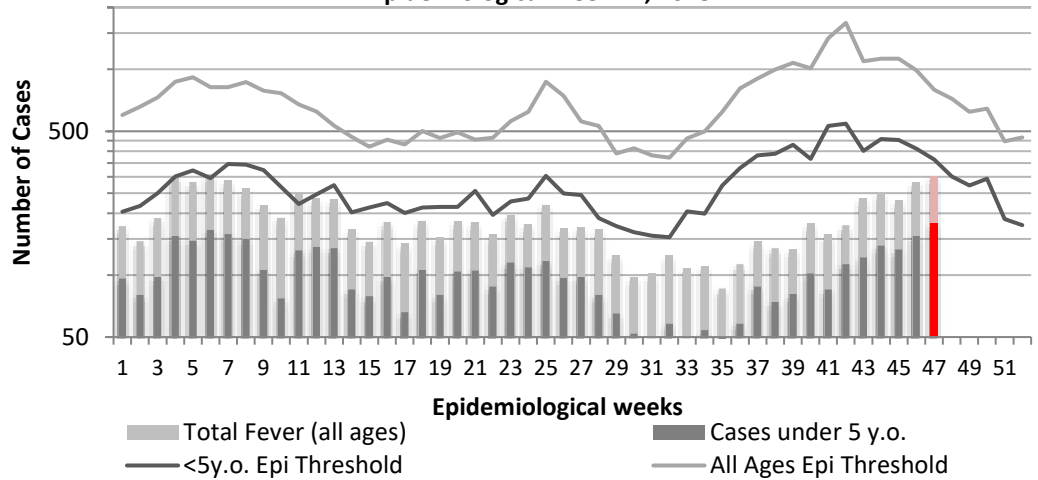
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

RED CURRENT WEEK

Fever in under 5y.o. and Total Fever vs epidemic Thresholds, Jamaica
Epidemiological week 47, 2018

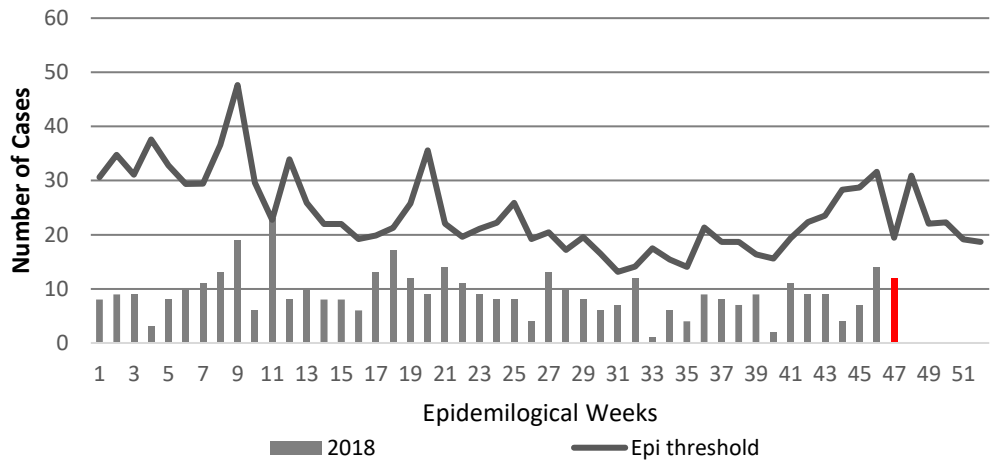


FEVER AND NEUROLOGICAL

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).



Total Fever and Neurological Symptoms vs epidemic threshold
Jamaica: Week 47, 2018

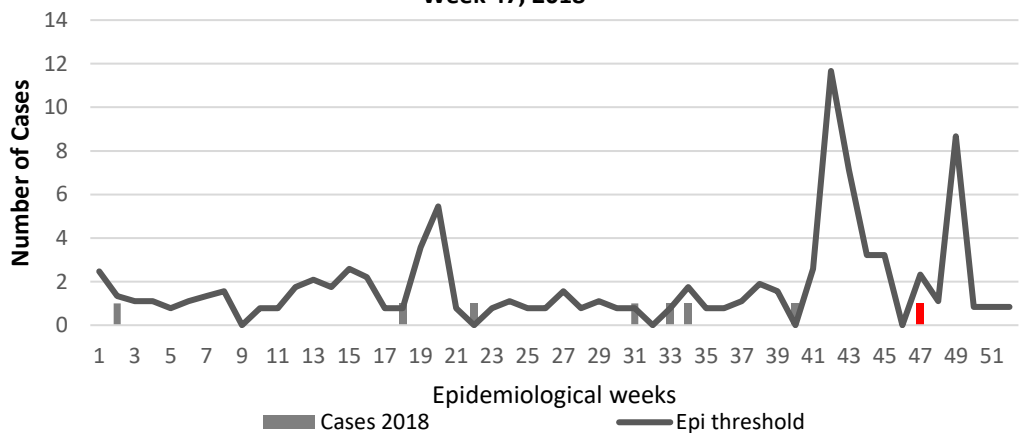


FEVER AND HAEMORRHAGIC

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.



Total Fever and Haemorrhagic Symptoms vs epidemic threshold Jamaica:
Week 47, 2018



2 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

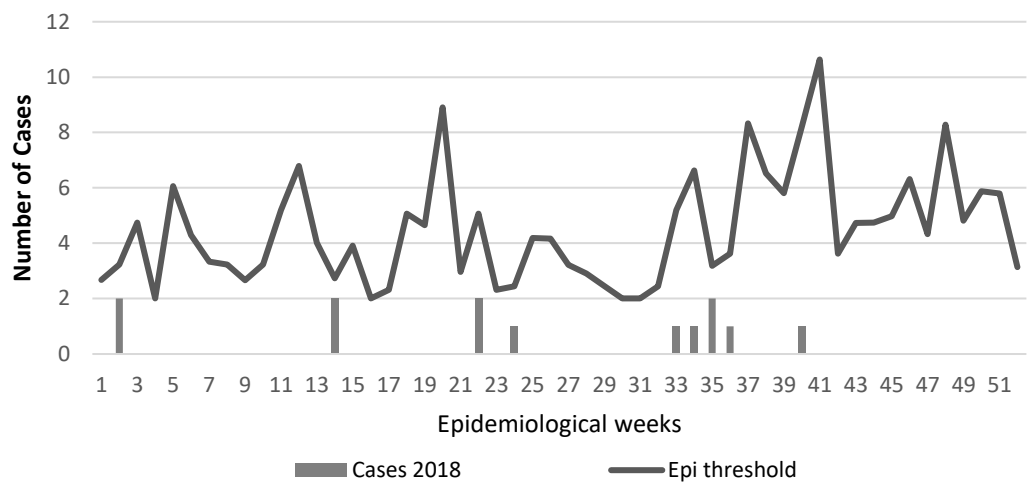
FEVER AND JAUNDICE

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

The epidemic threshold is used to confirm the emergence of an epidemic in order to implement control measures. It is calculated using the mean reported cases per week plus 2 standard deviations.



Total Fever and Jaundice vs epidemic threshold, Jamaica: Week 47, 2018



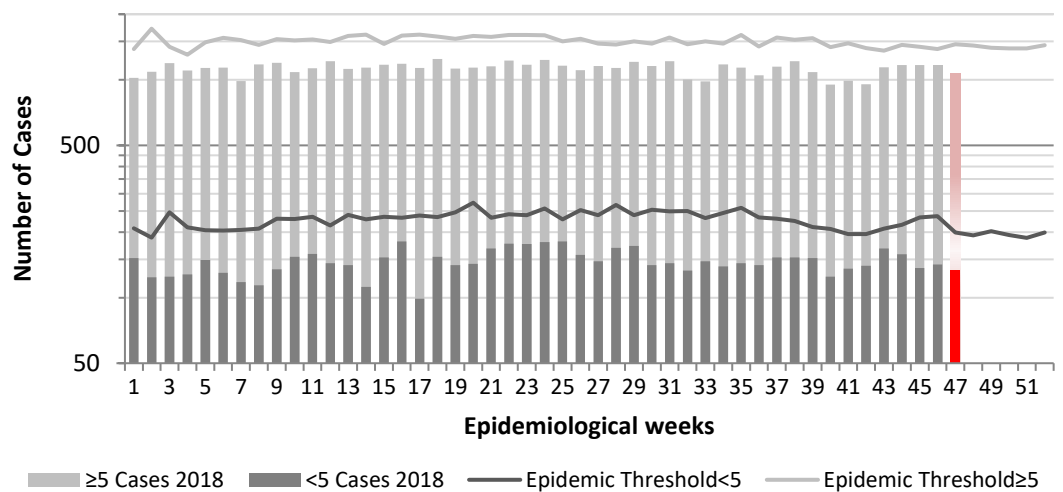
ACCIDENTS

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

KEY
RED CURRENT WEEK



Accidents by age group versus epidemic thresholds, Jamaica: Week 47, 2018

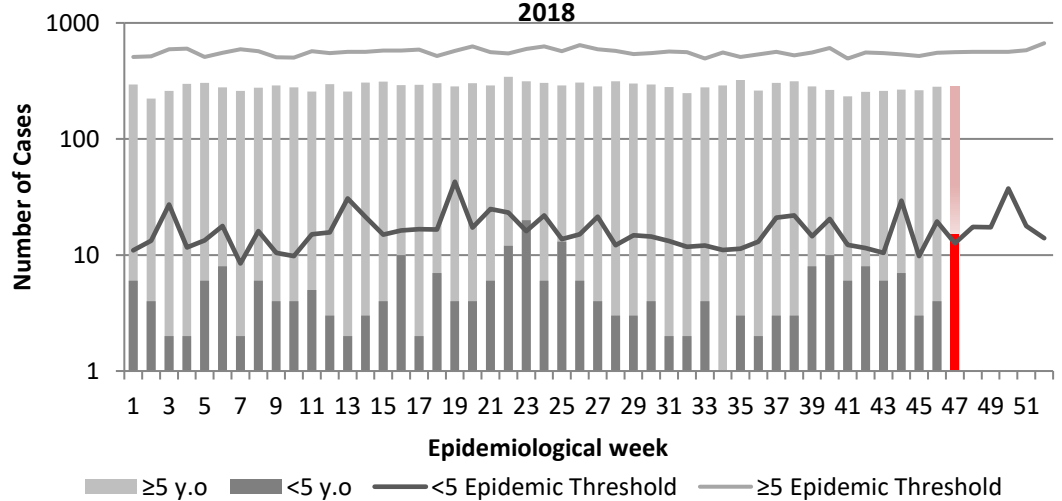


VIOLENCE

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



Violence by age group versus epidemic thresholds, Jamaica: Week 47, 2018



3 NOTIFICATIONS-
All clinical sites



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CLASS ONE NOTIFIABLE EVENTS				Comments	
			CONFIRMED YTD		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.
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning ¹		(439) 135	(466) 192	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	Cholera		0	0	
	Dengue Hemorrhagic Fever ²		2	3	
	Hansen's Disease (Leprosy)		0	2	
	Hepatitis B		43	53	
	Hepatitis C		7	10	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		5	0	
	Meningitis (Clinically confirmed)		35	102	
EXOTIC/ UNUSUAL	Plague		0	0	¹ Numbers in brackets indicate combined suspected and confirmed Accidental Poisoning cases ² Dengue Hemorrhagic Fever data include Dengue related deaths; ³ Figures include all deaths associated with pregnancy reported for the period. ⁴ CHIKV IgM positive cases ⁵ Zika IgM positive cases
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	
	Congenital Rubella Syndrome		0	0	
	Congenital Syphilis		0	0	
	Fever and Rash	Measles	0	0	
		Rubella	0	0	
	Maternal Deaths ³		56	46	
	Ophthalmia Neonatorum		275	331	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		41	113	
Yellow Fever		0	0		
Chikungunya ⁴		10	0		
Zika Virus ⁵		1	0	NA- Not Available	

 <p>4 NOTIFICATIONS- All clinical sites</p>	 <p>INVESTIGATION REPORTS- Detailed Follow up for all Class One Events</p>	 <p>HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued</p>	 <p>SENTINEL REPORT- 79 sites. Automatic reporting</p>
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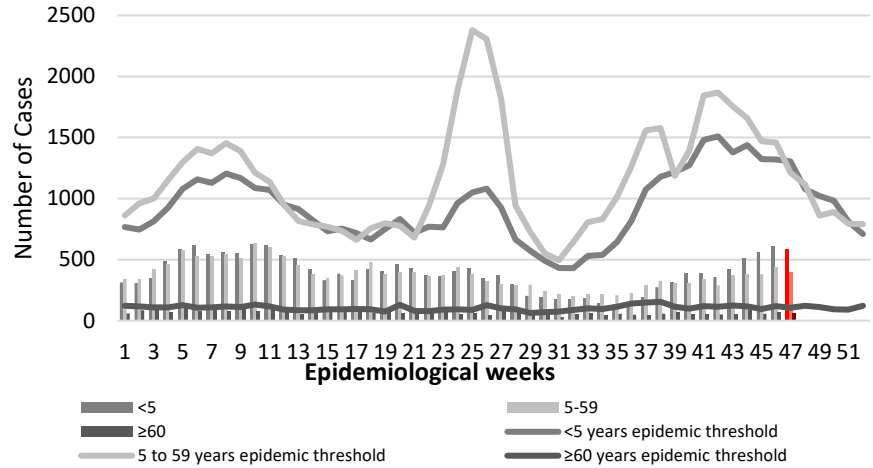
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 47

November 18-24, 2018 Epidemiological Week 47

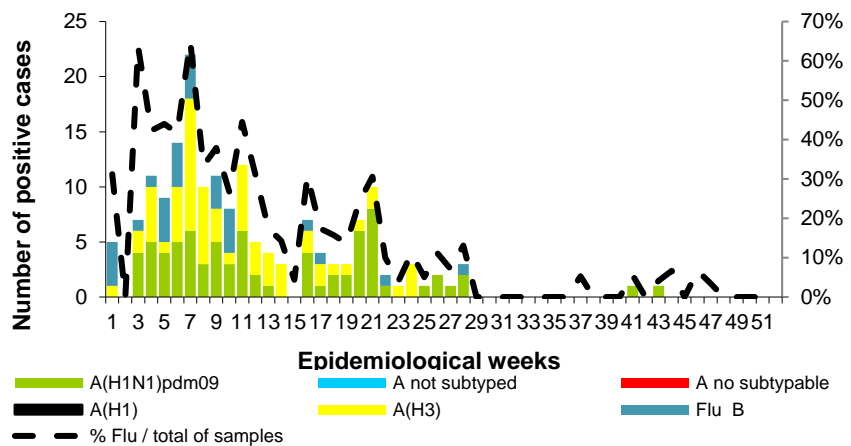
November 2018		
	EW 47	YTD
SARI cases	21	329
Total Influenza positive Samples	0	170
Influenza A	0	141
H3N2	0	65
H1N1pdm09	0	76
Not subtyped	0	1
Influenza B	0	29
Parainfluenza	0	7

**Influenza- Like Illness by age group versus epidemic threshold
Jamaica 2018**



Comments:
During EW 47 SARI activity remained below the seasonal threshold, similar to the previous seasons for the same period. Decreased influenza activity was reported; with influenza A(H1N1)pdm09 predominating in previous weeks

Distribution of influenza and subtype

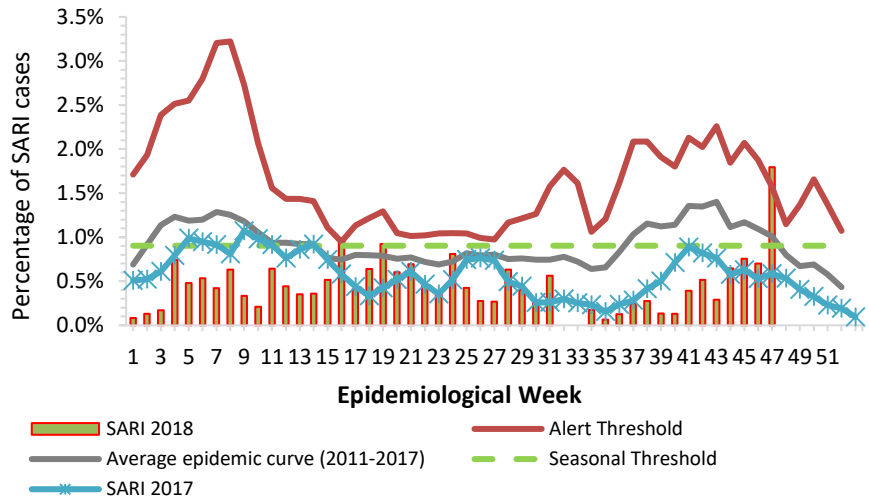


GLOBAL AND REGIONAL UPDATES

Worldwide: Seasonal influenza subtype A accounted for the majority of influenza detections.

Caribbean: Influenza virus activity slightly increased, and low RSV activity was reported throughout most of the sub-region. In Jamaica, influenza activity decreased, with influenza A(H1N1)pdm09 and A(H3N2) co-circulating.

Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2018) (compared with 2011-2017)



5 NOTIFICATIONS-
All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

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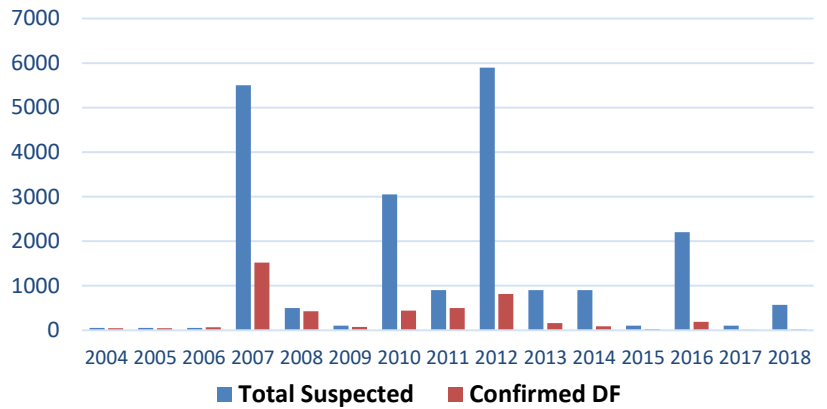
Dengue Bulletin

November 18-24, 2018

Epidemiological Week 47



Dengue Cases by Year: 2007-2018, Jamaica



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

	2018		2017 YTD
	EW 47	YTD	
Total Suspected Dengue Cases	7	570	151
Lab Confirmed Dengue cases	0	11	6
CONFIRMED	*DHF/DSS	0	4
	Dengue Related Deaths	0	0

DENGUE FEVER

Symptoms

- High Fever
- Headache
- Nausea
- Stomach Ache
- Vomiting
- Muscle Pain
- Rashes
- Diarrhea
- Mild Bleeding gums

Diagnoses

- Antibody detection
- Antigen detection
- RNA detection
- Viral isolation

Prevention

- Cover containers
- Use mosquito nets, sprays.
- Wear full sleeves
- Fumigation

Treatment

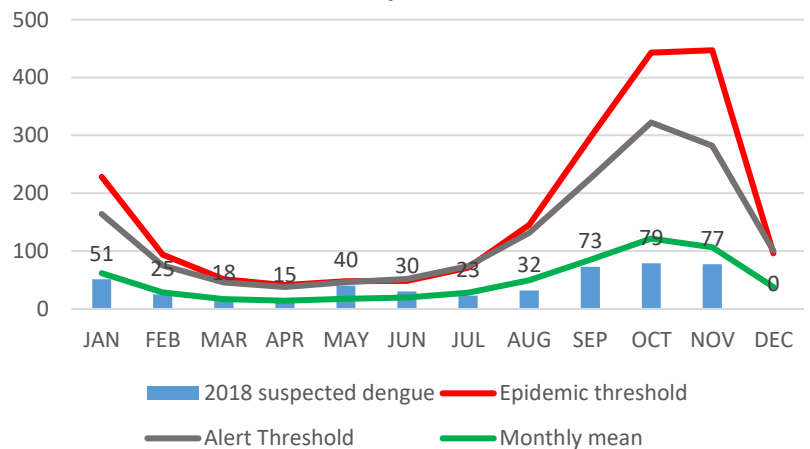
- There is no specific treatment for dengue or dengue hemorrhagic fever. Only symptomatic treatment is given.

*DHF/DSS: Dengue Haemorrhagic Fever/ Dengue Shock Syndrome

Points to note:

- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2018 versus monthly mean, alert, and epidemic thresholds



6 NOTIFICATIONS-
All clinical sites



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Gastroenteritis Bulletin

EW
47

November 18-24, 2018

Epidemiological Week 47

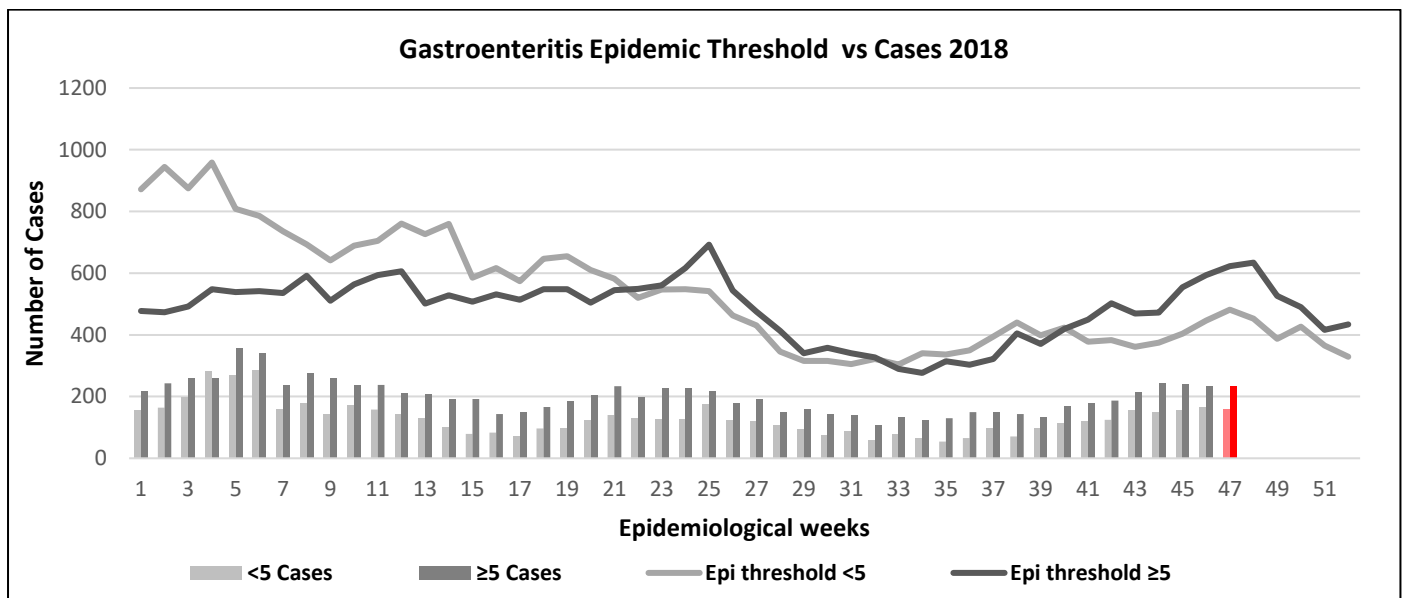
Weekly Breakdown of Gastroenteritis cases

Year	EW 47			YTD		
	<5	≥5	Total	<5	≥5	Total
2018	160	233	393	6,172	9,444	15,616
2017	136	207	343	7,288	9,369	16,657

Gastroenteritis:

In epidemiological week 47, 2018, the total number of reported GE cases showed a 15% increase compared to EW 47 of the previous year. The year to date figures showed a 6% decrease in cases for the period.

Figure 1: Total Gastroenteritis Cases Reported 2017-2018



Total number of GE cases per parish for Week 47, 2018

Parishes	KSA	STT	POR	STM	STA	TRE	STJ	HAN	WES	STE	MAN	CLA	STC
<5	2076	154	104	421	643	355	355	228	260	211	554	437	374
≥5	1665	313	168	736	1216	615	812	350	511	374	963	856	856



7 NOTIFICATIONS-
All clinical sites



INVESTIGATION
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SENTINEL
REPORT- 79 sites.
Automatic reporting

RESEARCH PAPER

Knowledge, Attitudes, and Practices regarding screening for Cervical Cancer of Female Health Care Workers age 20-60 years employed to Manchester Health Services.

By: Thompson-Nelson K

Southern Regional Health Authority

Recent statistics highlighted that there is a problem of low compliance in cervical cancer screening among women of reproductive age in Manchester.

Objectives : To assess the knowledge, attitudes and practices of female health care workers regarding screening for cervical cancer, to assess level of compliance to the screening guidelines and to identify barriers to screening.

Methods: This study was a cross-sectional descriptive one, utilizing both quantitative and qualitative designs. Quantitative design was done using a researcher to administer the questionnaires. These study participants were selected using random sampling (N=150) and the staff lists were coded using numbers to ensure anonymity of subjects. The qualitative design included in-depth interviews of four participants who were not included in the quantitative phase of the study.

Results: There was a high awareness of cervical cancer and Pap smear among the group in that 99% and 100% respectively heard about cervical cancer and Pap smear. More than 50% scored, "poor to very poor." regarding knowledge of risk factors for the disease. Of the sample 55% were in compliance with the cervical cancer screening guidelines and 91% displayed a positive attitude to screening while 89% had ever done a Pap smear. Fear, comfort and privacy were the most outstanding barriers to screening mentioned, and the majority of the smears were done at private facilities.

Conclusion : This study has revealed information that will help Coordinators at the National and Local level to devise strategies necessary to strengthen the existing screening programme, educate re risk factors of the disease as well as to empower health care workers to improve compliance to the screening guidelines and uptake of screening in the public health care facilities.



8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
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SURVEILLANCE-
30 sites. Actively
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SENTINEL
REPORT- 79 sites.
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