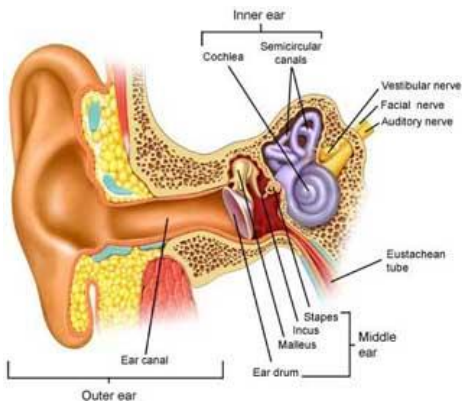


WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

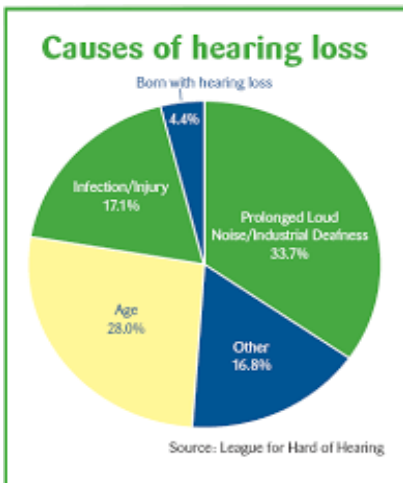
Deafness and hearing loss



Key facts

- Around 466 million people worldwide have disabling hearing loss (1), and 34 million of these are children.
- It is estimated that by 2050 over 900 million people will have disabling hearing loss.
- Hearing loss may result from genetic causes, complications at birth, certain infectious diseases, chronic ear infections, the use of particular drugs, exposure to excessive noise, and ageing.

- 60% of childhood hearing loss is due to preventable causes.
- 1.1 billion young people (aged between 12–35 years) are at risk of hearing loss due to exposure to noise in recreational settings.
- Unaddressed hearing loss poses an annual global cost of US\$ 750 billion. Interventions to prevent, identify and address hearing loss are cost-effective and can bring great benefit to individuals.
- People with hearing loss benefit from early identification; use of hearing aids, cochlear implants and other assistive devices; captioning and sign language; and other forms of educational and social support.



Causes of hearing loss and deafness

The causes of hearing loss and deafness can be congenital or acquired.

Congenital causes

Congenital causes may lead to hearing loss being present at or acquired soon after birth. Hearing loss can be caused by hereditary and non-hereditary genetic factors or by certain complications during pregnancy and childbirth, including:

- maternal rubella, syphilis or certain other infections during pregnancy;
- low birth weight;
- birth asphyxia (a lack of oxygen at the time of birth);
- inappropriate use of particular drugs

during pregnancy, such as aminoglycosides, cytotoxic drugs, antimalarial drugs, and diuretics;

- severe jaundice in the neonatal period, which can damage the hearing nerve in a newborn infant.

Acquired causes

Acquired causes may lead to hearing loss at any age, such as:

- infectious diseases including meningitis, measles and mumps;
- chronic ear infections;
- collection of fluid in the ear (otitis media);
- use of certain medicines, such as those used in the treatment of neonatal infections, malaria, drug-resistant tuberculosis, and cancers;
- injury to the head or ear;
- excessive noise, including occupational noise such as that from machinery and explosions;
- recreational exposure to loud sounds such as that from use of personal audio devices at high volumes and for prolonged periods of time and regular attendance at concerts, nightclubs, bars and sporting events;
- ageing, in particular due to degeneration of sensory cells; and
- wax or foreign bodies blocking the ear canal.

Among children, chronic otitis media is a common cause of hearing loss.

Source: <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>

EPI WEEK 52

SYNDROMES



PAGE 2

CLASS 1 DISEASES



PAGE 4

INFLUENZA



PAGE 5

DENGUE FEVER



PAGE 6

GASTROENTERITIS



PAGE 7

RESEARCH PAPER



PAGE 8

SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



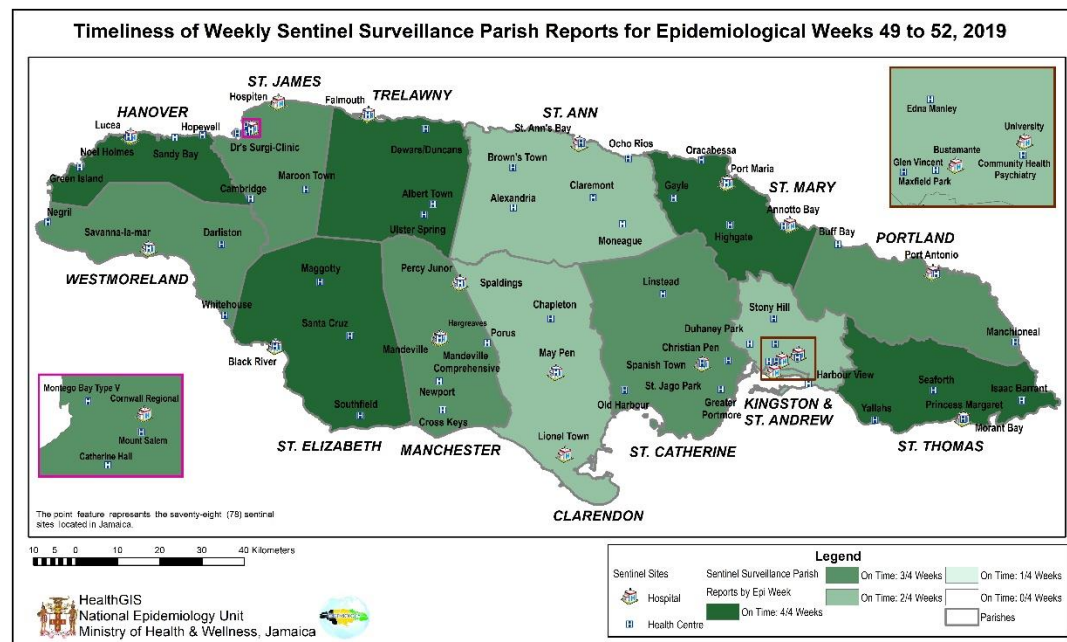
A syndromic surveillance system is good for early detection of and response to public health events.

Sentinel surveillance occurs when selected health facilities (sentinel sites) form a network that reports on certain health conditions on a regular basis, for example, weekly. Reporting is mandatory whether or not there are cases to report.

Jamaica's sentinel surveillance system concentrates on visits to sentinel sites for health events and syndromes of national importance which are reported weekly (see pages 2 -4). There are seventy-eight (78) reporting sentinel sites (hospitals and health centres) across Jamaica.

Map representing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks - Weeks 49 to 52

Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.



REPORTS FOR SYNDROMIC SURVEILLANCE

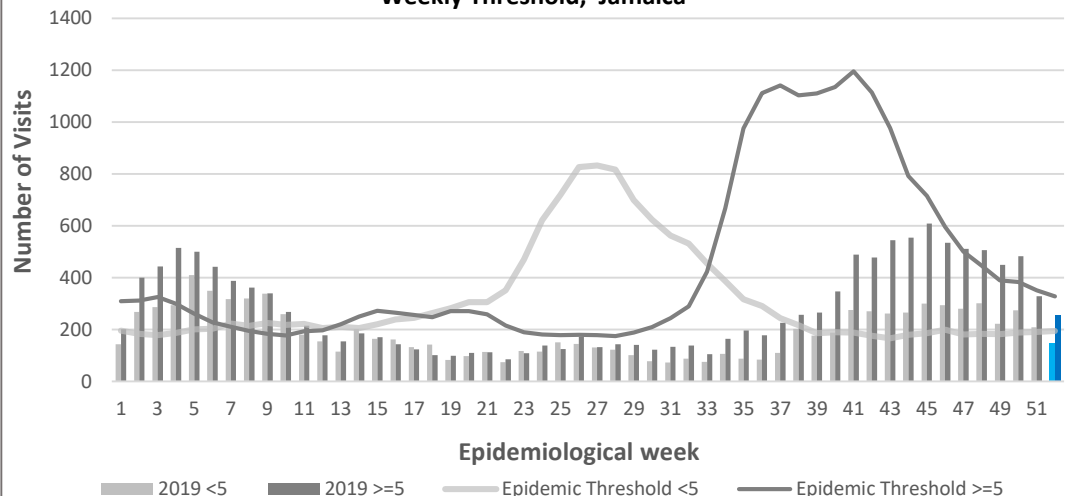
FEVER

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
VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages 2019 vs Weekly Threshold; Jamaica



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



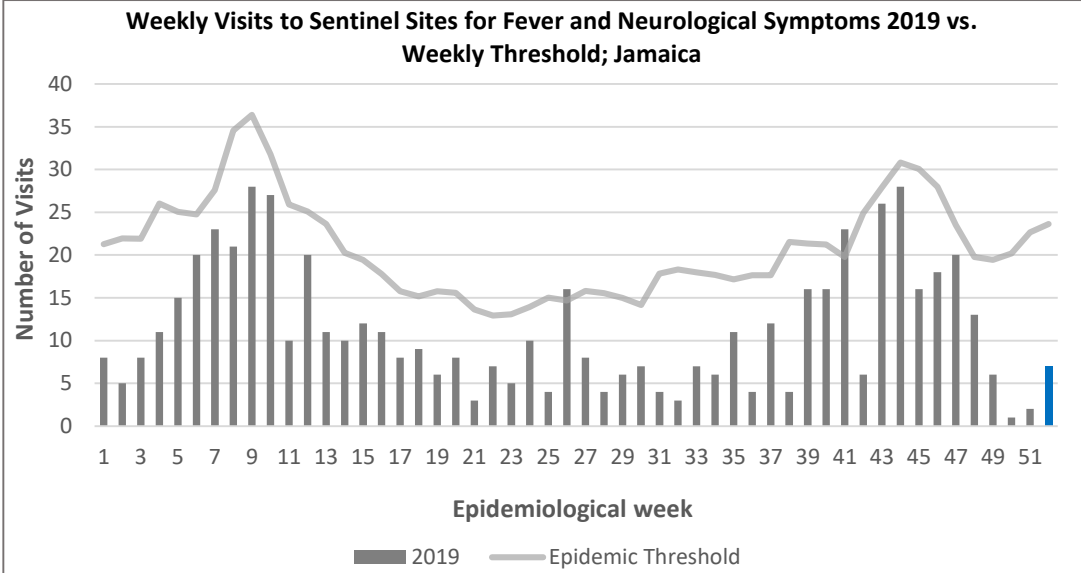
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

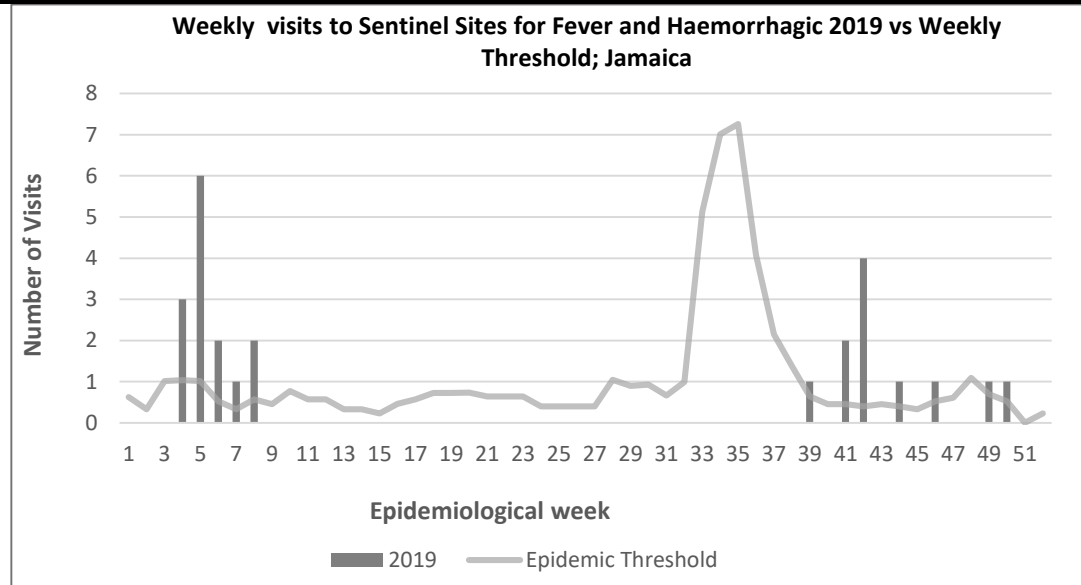
FEVER AND NEUROLOGICAL

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 HAEMORRHAGIC

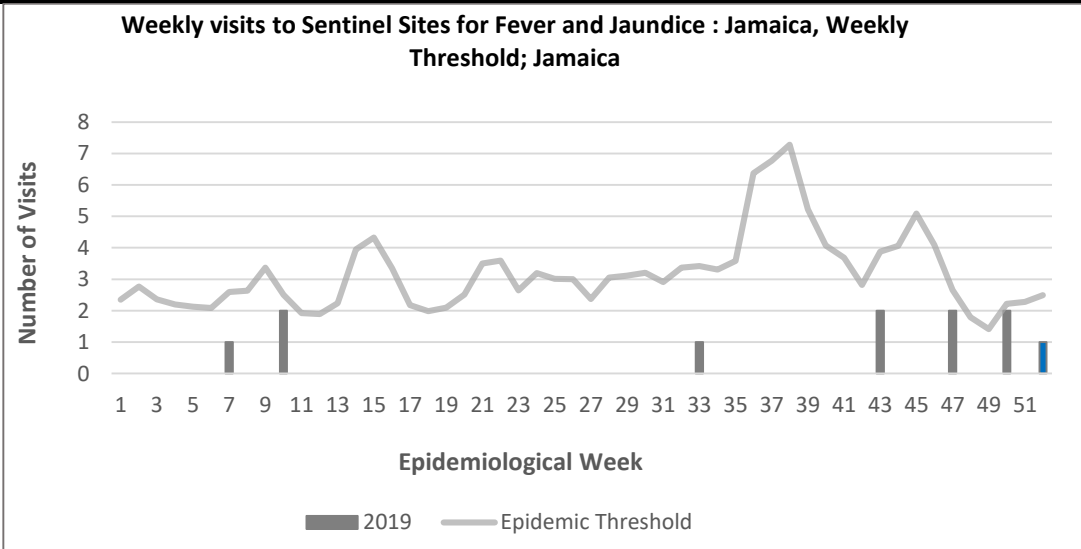
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice. Visits for Fever and Haemorrhagic symptoms were reported in weeks 4 to 8, 39,41,42, 44, 46 and 49 year to date.



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. Visits to sentinel sites for Fever and Jaundice were reported in weeks 7, 10, 33, 43 and 47 only, year to date.



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



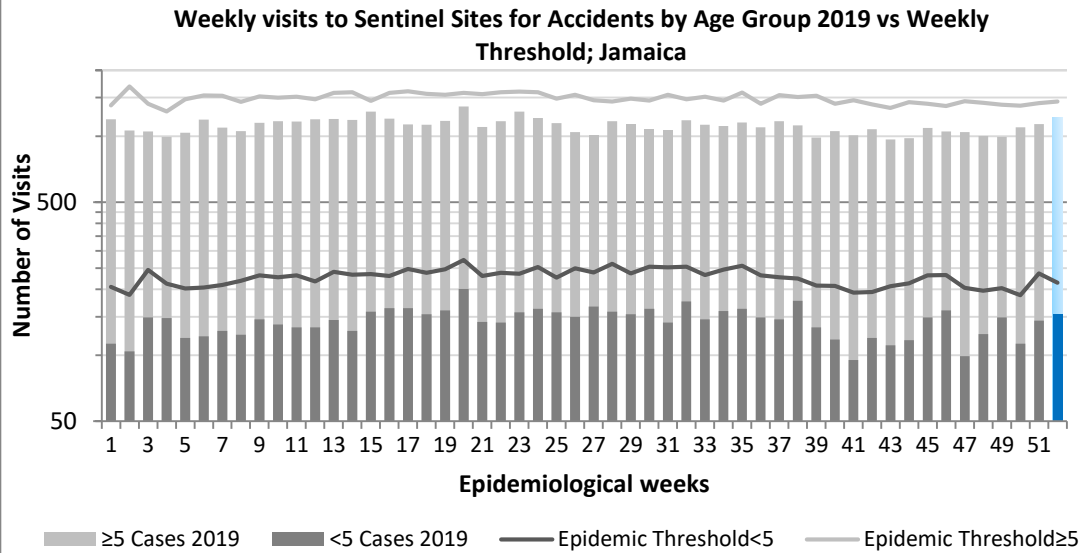
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

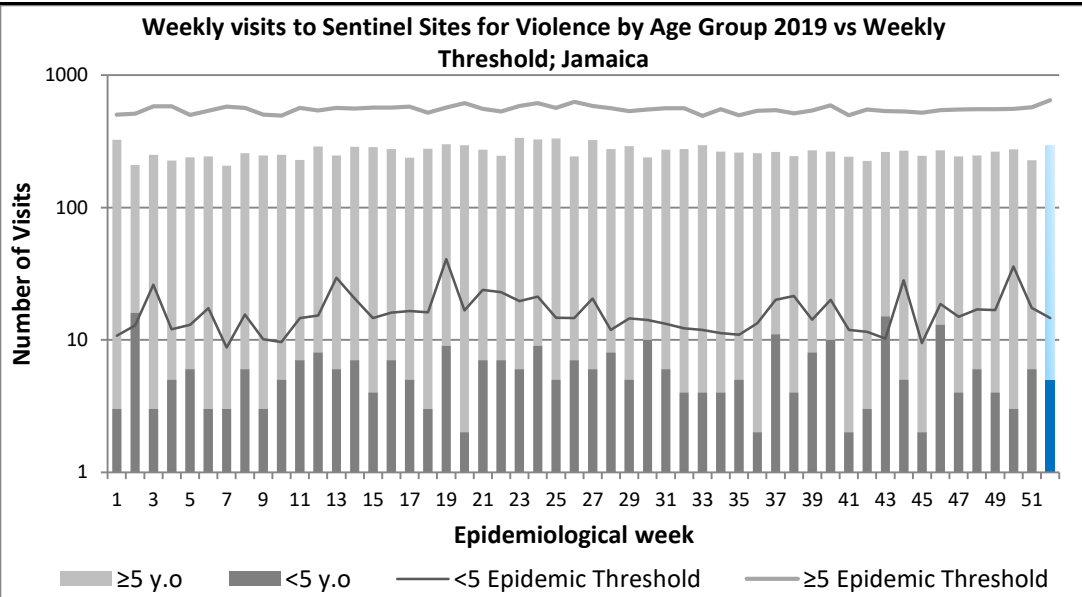
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



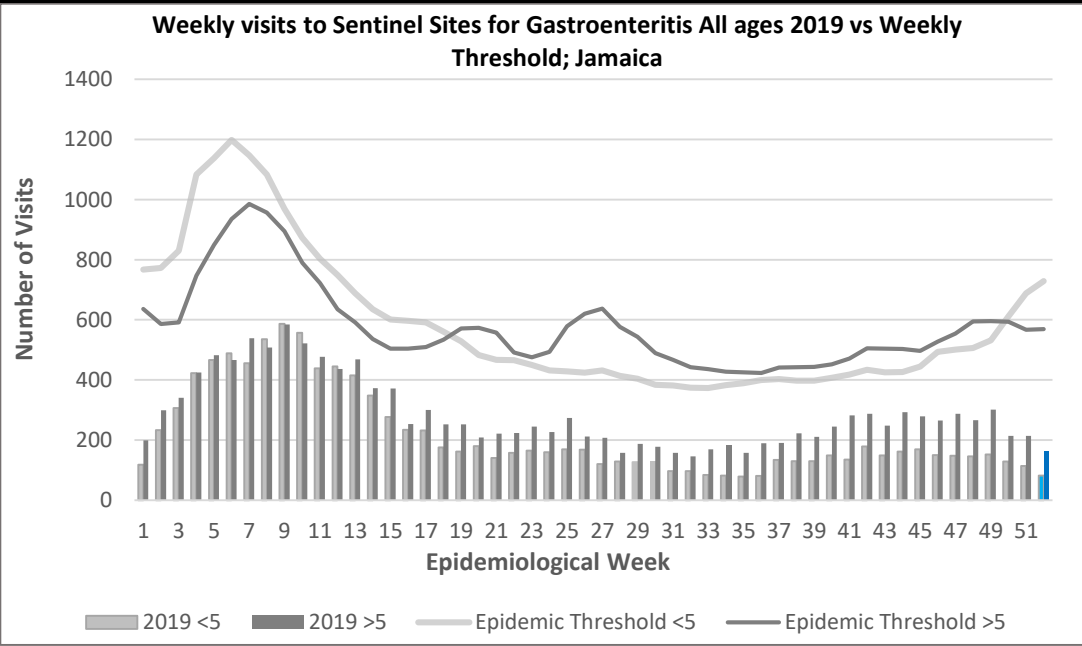
VIOLENCE

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



GASTROENTERITIS

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



4 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

CLASS ONE NOTIFIABLE EVENTS				Comments	
	CLASS 1 EVENTS	Confirmed YTD			
		CURRENT YEAR	PREVIOUS YEAR		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	106	184	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. Pertussis-like syndrome and Tetanus are clinically confirmed classifications.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever*	NA	NA		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	24	90		
	Hepatitis C	2	9		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	3	6		
	Meningitis (Clinically confirmed)	23	37		
EXOTIC/ UNUSUAL	Plague	0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths;	
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	** Figures include all deaths associated with pregnancy reported for the period. *** CHIKV IgM positive cases **** Zika PCR positive cases	
	Congenital Rubella Syndrome	0	0		
	Congenital Syphilis	0	0		
	Fever and Rash	Measles	0		0
		Rubella	0		0
	Maternal Deaths**	61	66		
	Ophthalmia Neonatorum	222	319		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	64	82		
	Yellow Fever	0	0		
Chikungunya***	7	10			
Zika Virus****	0	1	NA- Not Available		



5 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



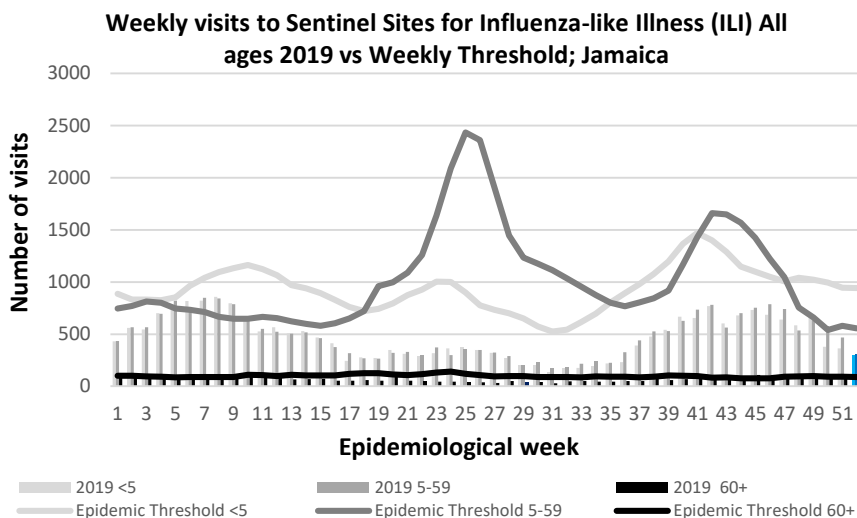
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 52

December 22– December 28, 2019 Epidemiological Week 52

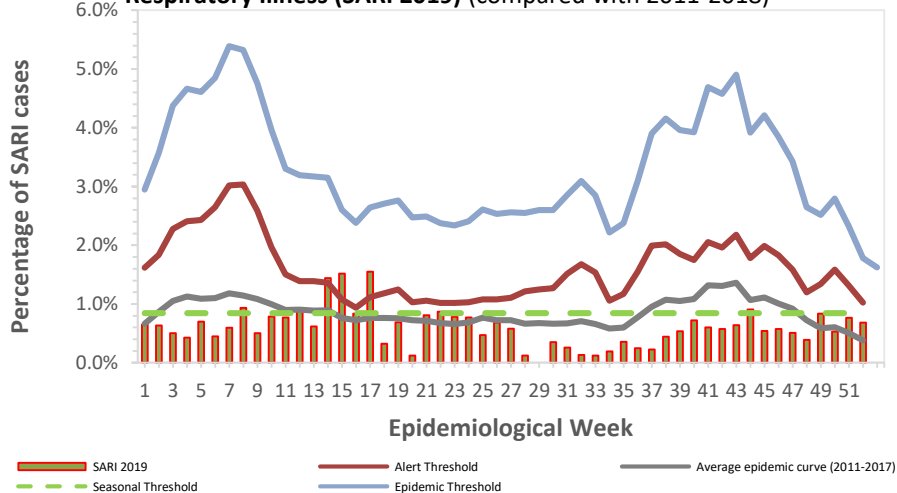
	EW 52	YTD
SARI cases	10	538
Total Influenza positive Samples	1	479
Influenza A	0	434
H3N2	0	198
H1N1pdm09	0	228
Not subtyped	0	5
Influenza B	1	45
Parainfluenza	0	7



Epi Week Summary

During EW 52, 10 (ten) SARI admissions were reported.

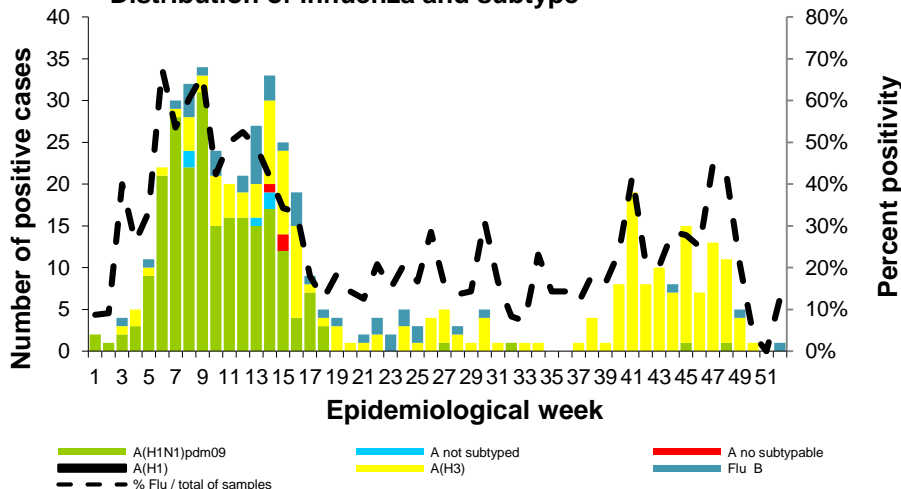
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



Caribbean Update EW 52

Influenza activity decreased overall in the sub-region. In Cuba influenza activity decreased after a peak in EW 49 with influenza B viruses predominance; SARI cases decreased below levels observed in previous seasons for the same period. The Dominican Republic reported moderate influenza activity with A(H1N1)pdm09 and B viruses predominating. Influenza activity decreased to low levels of intensity in Jamaica with influenza A(H3N2) virus predominance and influenza A(H1N1)pdm09 virus co-circulating; SARI cases were at low levels.

Distribution of influenza and subtype



6 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

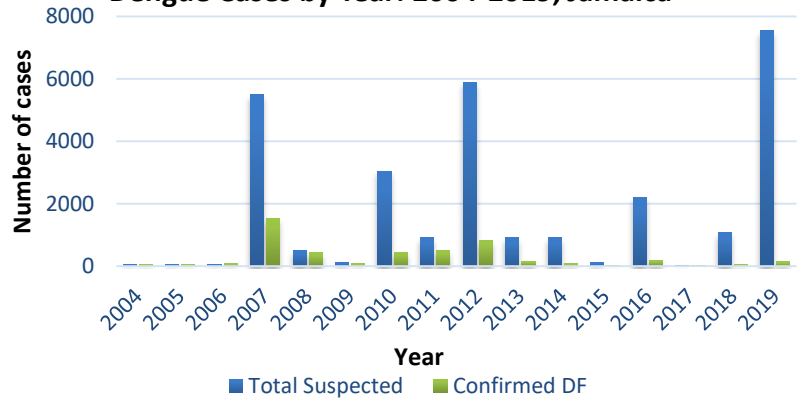
Dengue Bulletin

December 22– December 28, 2019 Epidemiological Week 52


Epidemiological Week 52



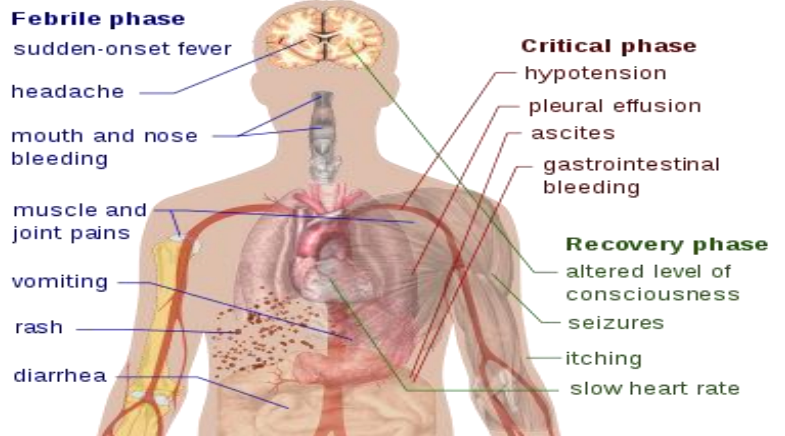
Dengue Cases by Year: 2004-2019, Jamaica



Reported suspected and confirmed dengue with symptom onset in weeks 1-52 2019

	2019		2018 YTD
	EW 52	YTD	
 Total Suspected Dengue Cases	0	7555	856
Lab Confirmed Dengue cases	0	137	23
CONFIRMED Dengue Related Deaths	0	24	4

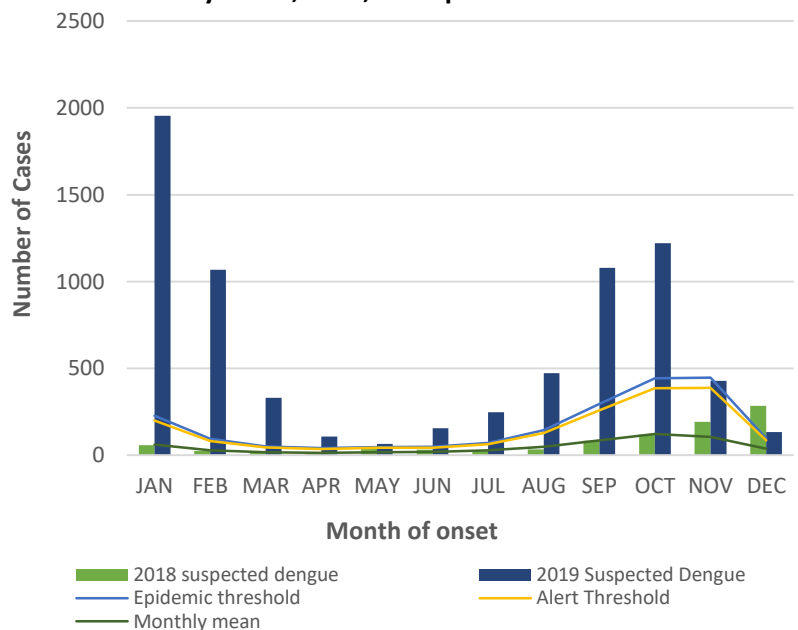
Symptoms of Dengue fever



Points to note:

- ****figure as at December 31, 2019**
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2018 and 2019 versus monthly mean, alert, and epidemic thresholds



7 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

RESEARCH PAPER

Measles Rapid Coverage Survey in Jamaican Schools 2015

D Chin¹, A Grant¹, K Webster-Kerr¹, S Spence¹

¹Ministry of Health, Kingston, Jamaica

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Abstract

Objective: The aim of the survey was to determine the success of the Measles Prevention Campaign 2015.

Design and Methods: A school-based survey was conducted targeting children aged 1-6 years. The study employed a two stage design in which Early Childhood Institutions (ECI) and Primary / Preparatory / All-Age (PPA) schools were randomly selected within each parish, after which ten students were randomly selected from each institution. Seven hundred and fifty (750) students from seventy-five schools were targeted. Immunization teams located within parishes visited schools to obtain dates of MMR1 and MMR2 vaccinations for each child using a standard survey tool. Coverage was calculated after adjusting for “card not seen” and migration out of parish.

Results: Data on 741 students from 75 schools were used for analysis. Jamaica’s MMR1 coverage moved from 99% to 100% while MMR2 coverage increased by 40% from 58% to 98% during the campaign and in mop-up activities.

Conclusion: The campaign was successful. Jamaica’s MMR1 coverage increased from 99% to 100% and MMR2 coverage increased by 40% from 58% to 98%. The improvement in MMR2 coverage was a result of both the campaign and mop-up exercise. Consequently, the post campaign MMR2 coverage rate could be 94% (not considering mop-up) to 98%.



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8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
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