

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Crimean-Congo haemorrhagic fever


Overview: Crimean-Congo haemorrhagic fever is a viral haemorrhagic fever usually transmitted by ticks. It can also be contracted through contact with viraemic animal tissues (animal tissue where the virus has entered the bloodstream) during and immediately post-slaughter of animals. CCHF outbreaks constitute a threat to public health services as the virus can lead to epidemics, has a high case fatality ratio (10-40%), potentially results in hospital and health facility outbreaks, and is difficult to prevent and treat. CCHF is endemic in all of Africa, the Balkans, the Middle East and in Asia. The disease was first described in the Crimea in 1944 and given the name Crimean haemorrhagic fever. In 1969 it was recognized that the pathogen causing Crimean haemorrhagic fever was the same as that responsible for an illness identified in 1956 in the Congo. The linkage of the two place names resulted in the current name for the disease and the virus.

Symptoms: Following infection by a tick bite, the incubation period of Crimean-Congo haemorrhagic fever (CCHF) is usually one to three days, with a maximum of nine days. Following contact with infected blood or tissues, the incubation period is usually five to six days, with a maximum of 13 days. Onset of symptoms is sudden, with fever, muscle ache, dizziness, neck pain, backache, headache, sore eyes and photophobia (sensitivity to light). There may be nausea, vomiting, diarrhoea, abdominal pain and sore throat early on, followed by sharp mood swings and confusion. After two to four days, the agitation may be replaced by sleepiness, depression and lassitude, and the abdominal pain may localize to the upper right quadrant, with detectable hepatomegaly (liver enlargement). Other clinical signs include tachycardia (fast heart rate), lymphadenopathy (enlarged lymph nodes), and a petechial rash (a rash caused by bleeding into the skin) on internal mucosal surfaces, such as in the mouth and throat, and on the skin. The petechiae may give way to larger rashes called ecchymoses, and other haemorrhagic phenomena. There is usually evidence of hepatitis, and severely ill patients may experience rapid kidney deterioration, sudden liver failure or pulmonary failure after the fifth day of illness.

Treatment: General supportive care with treatment of symptoms is the main approach to managing Crimean-Congo haemorrhagic fever (CCHF) in people. The antiviral drug ribavirin has been used to treat CCHF infection with apparent benefit. Both oral and intravenous formulations seem to be effective. The mortality rate from CCHF is approximately 30%, with death occurring in the second week of illness. In patients who recover, improvement generally begins on the ninth or tenth day after the onset of illness. It is difficult to prevent or control CCHF infection in animals and ticks as the tick-animal-tick cycle usually goes unnoticed and the infection in domestic animals is usually not apparent. Furthermore, the tick vectors are numerous and widespread, so tick control with acaricides (chemicals intended to kill ticks) is only a realistic option for well-managed livestock production facilities. There are no vaccines widely available for human or animal use. In the absence of a vaccine, the only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus.

Crimean-Congo Haemorrhagic Fever

Ticks of the genus *Hyalomma* are the principal vector of Crimean-Congo haemorrhagic fever



FEMALE MALE

SIGNS AND SYMPTOMS

Headache, high fever, back pain, joint pain, stomach pain, vomiting, red eyes, flushed face, red throat, petechiae (red spots) on the palate

TRANSMISSION

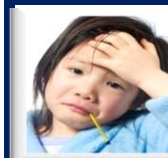
- Ticks of the genus *Hyalomma* are both a reservoir and a vector for the virus
- Numerous wild and domestic animals serve as amplifying hosts for the virus
- Transmission to humans occurs through contact with infected ticks or animal blood
- Can be transmitted with infectious blood or body fluids

RISK REDUCTION - ANIMAL TO HUMAN

- Wear gloves and other protective clothing while handling animal
- Quarantine animals before they enter slaughterhouses
- Routinely treat animals with pesticides two weeks prior to slaughter

SOURCE: WHO

EPI WEEK 36



SYNDROMES

PAGE 2



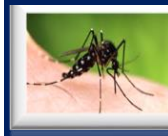
CLASS 1 DISEASES

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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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SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



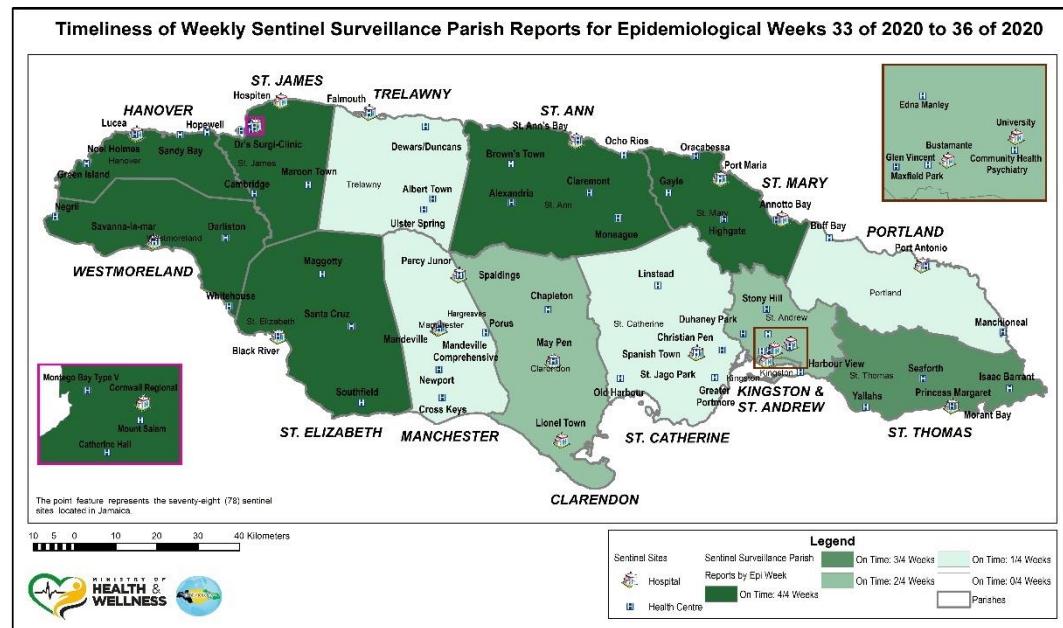
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 33 to 36 of 2020

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

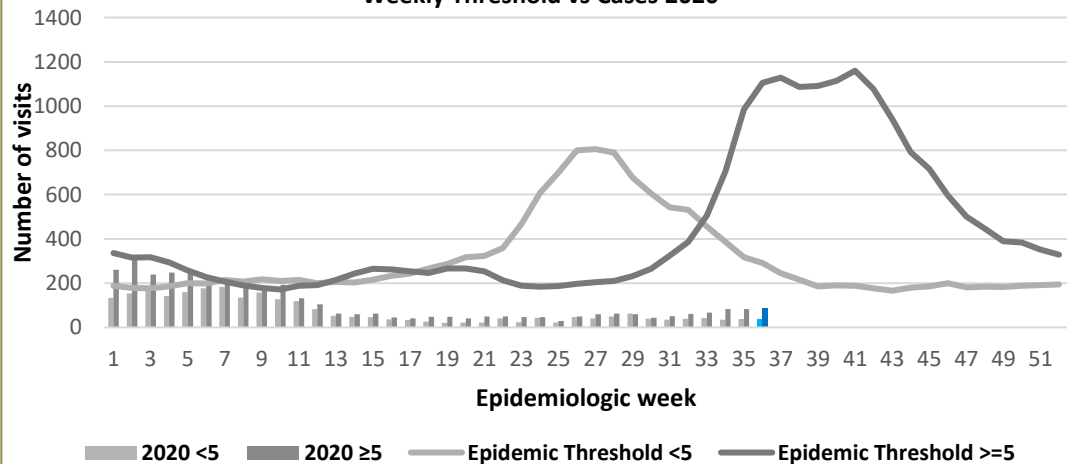
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2020



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



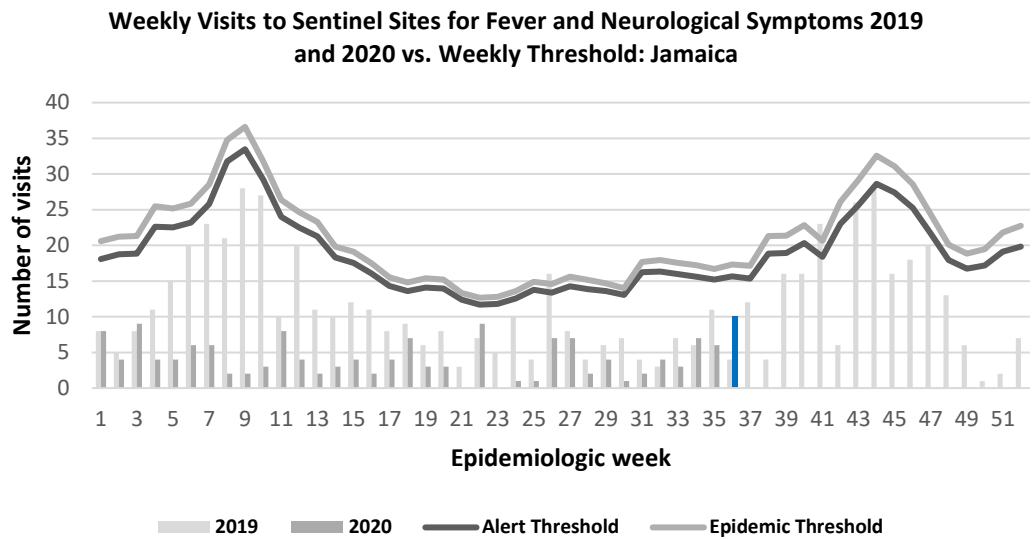
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

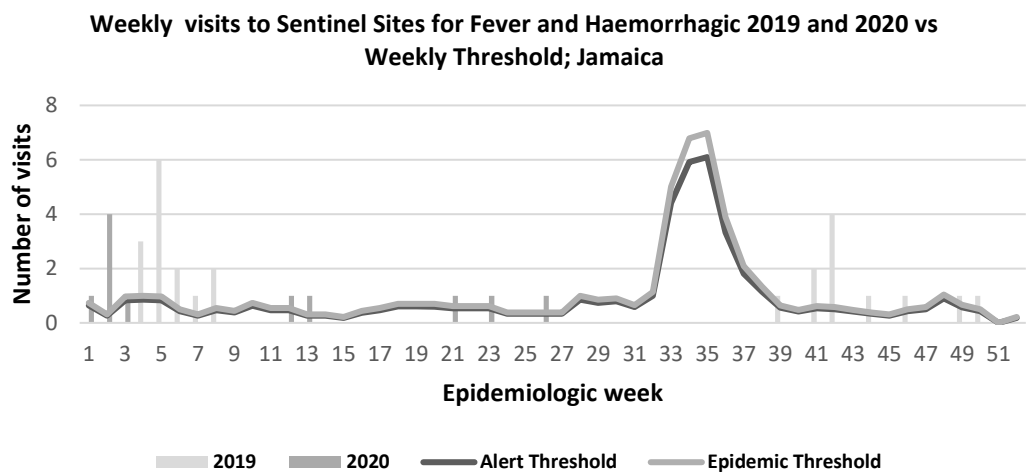
FEVER AND NEUROLOGICAL

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

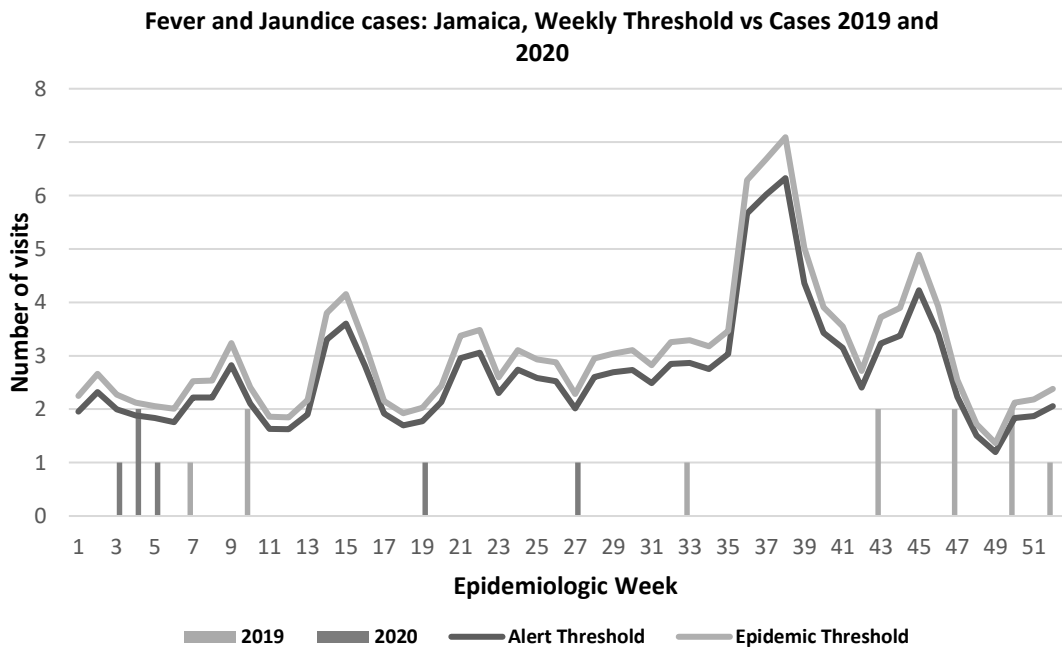
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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.



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



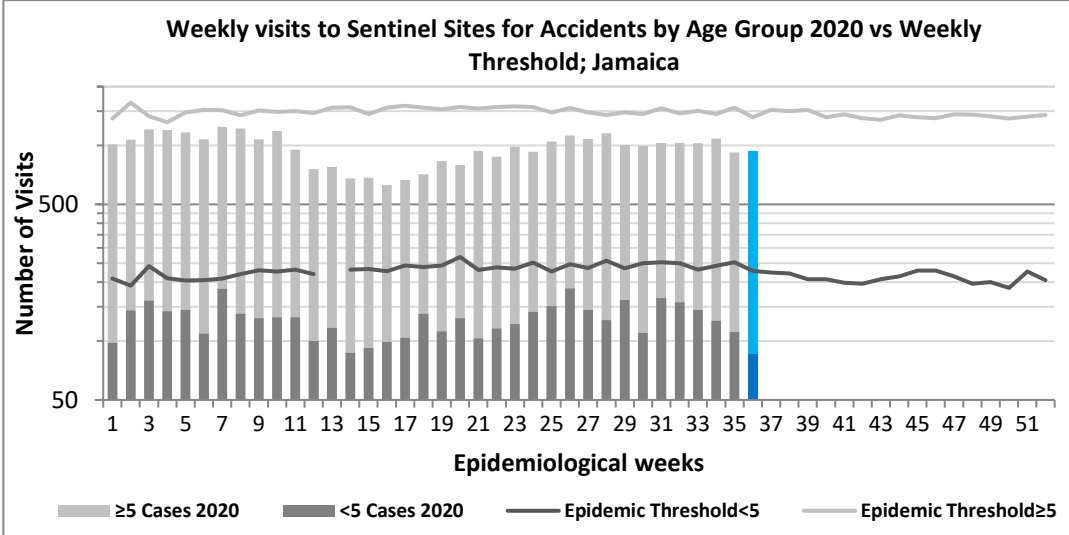
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

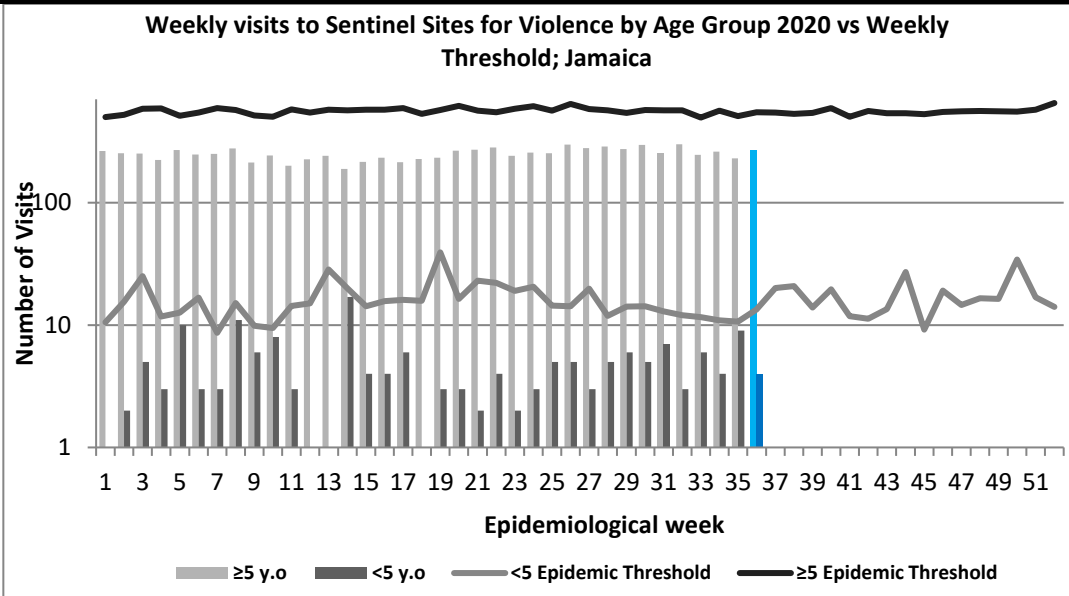
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



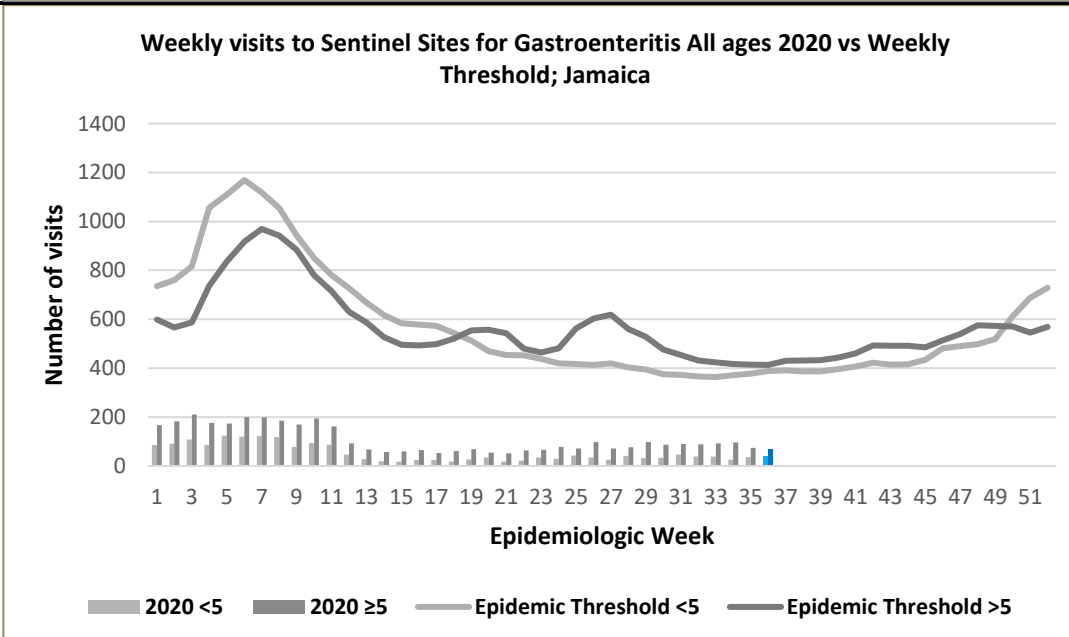
VIOLENCE

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 2020	PREVIOUS YEAR 2019		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	5	56	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	0	11		
	Hepatitis C	0	2		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	1	18		
EXOTIC/ UNUSUAL	Plague	0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths;	
HIGH MORBIDITY/ MORTALITY	Meningococcal Meningitis	0	0	** Figures include all deaths associated with pregnancy reported for the period. * 2019 YTD figure was updated.	
	Neonatal Tetanus	0	0		
	Typhoid Fever	0	0		
	Meningitis H/Flu	0	0		
SPECIAL PROGRAMMES	AFP/Polio	0	0	*** 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**	29	45		
	Ophthalmia Neonatorum	23	161		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	6	33		
Yellow Fever	0	0			
	Chikungunya***	0	1		
	Zika Virus****	0	0	NA- Not Available	

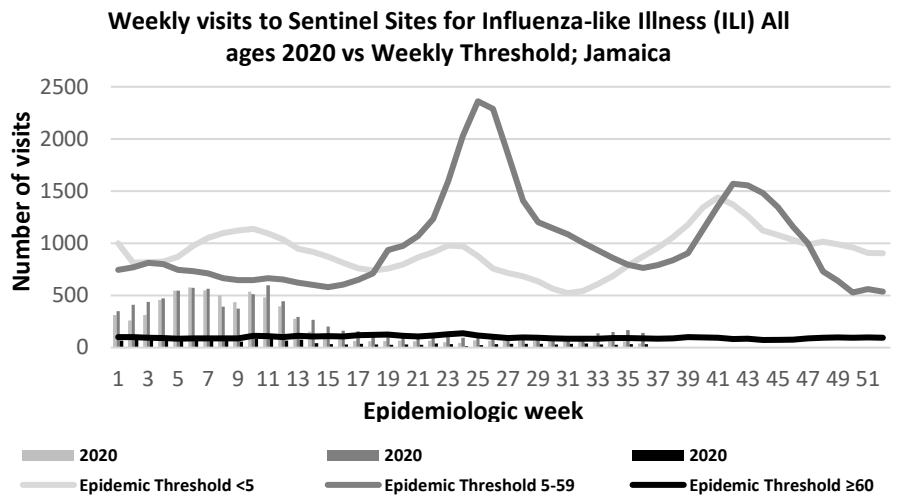
 <p>5 NOTIFICATIONS- All clinical sites</p>	 <p>INVESTIGATION REPORTS- Detailed Follow up for all Class One Events</p>	 <p>HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued</p>	 <p>SENTINEL REPORT- 78 sites. Automatic reporting</p>
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NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 36

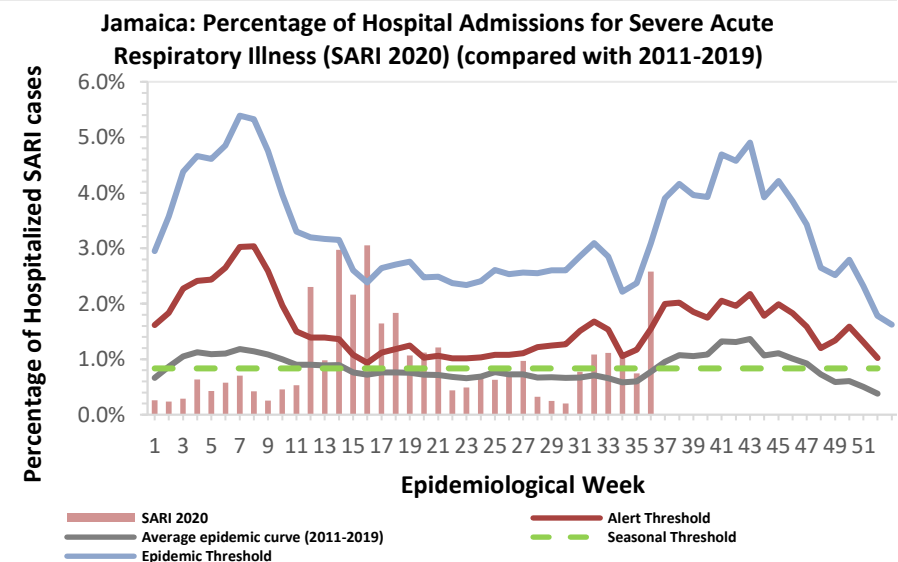
August 30, 2020 -September 05, 2020 Epidemiological Week 36

	EW 36	YTD
SARI cases	34	454
Total Influenza positive Samples	0	69
Influenza A	0	45
H3N2	0	4
H1N1pdm09	0	38
Not subtyped	0	3
Influenza B	0	24
Parainfluenza	0	0



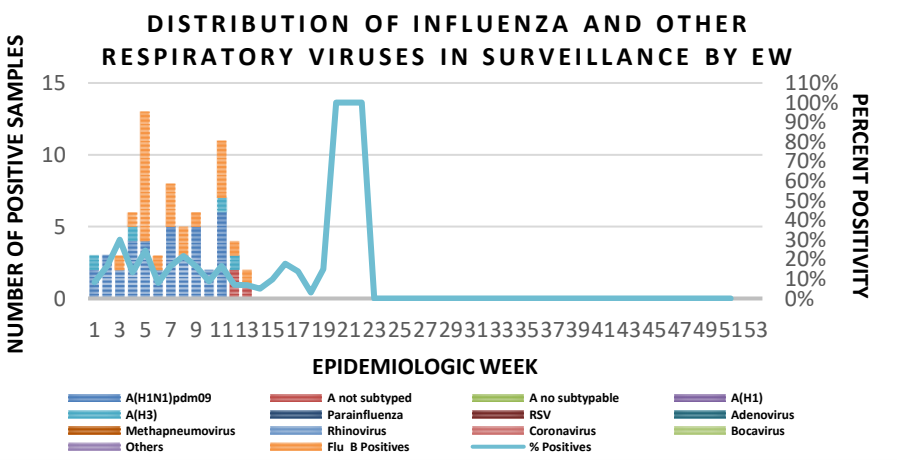
Epi Week Summary

During EW 36, 34 (thirtyfour) SARI admissions were reported.



Caribbean Update EW 36

Caribbean: Influenza and other respiratory virus activity remained low in the subregion. In Haiti and Jamaica SARI activity continue at epidemic levels.



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

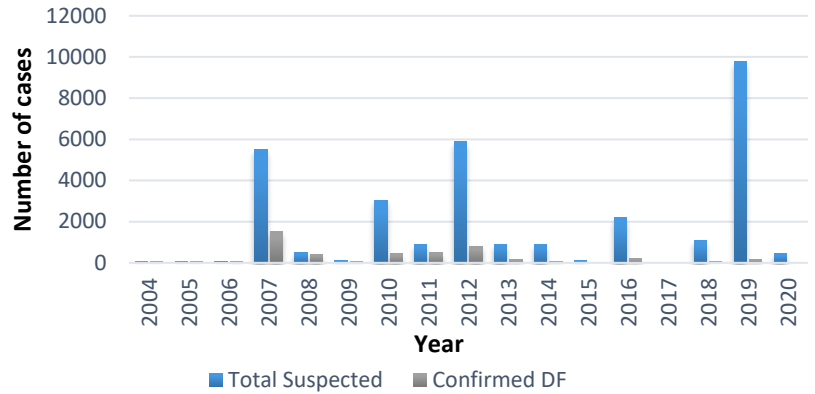
Dengue Bulletin

August 30, 2020 – September 05, 2020 Epidemiological Week 36

Epidemiological Week 36

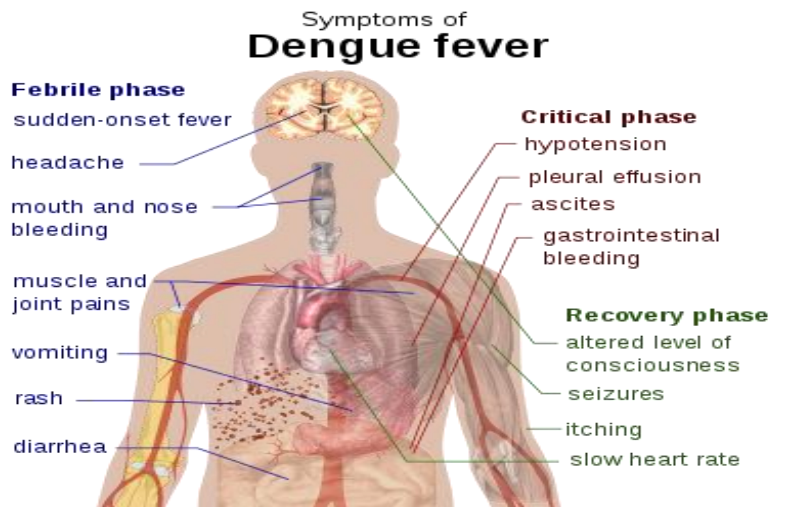


Dengue Cases by Year: 2004-2020, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 36 of 2020

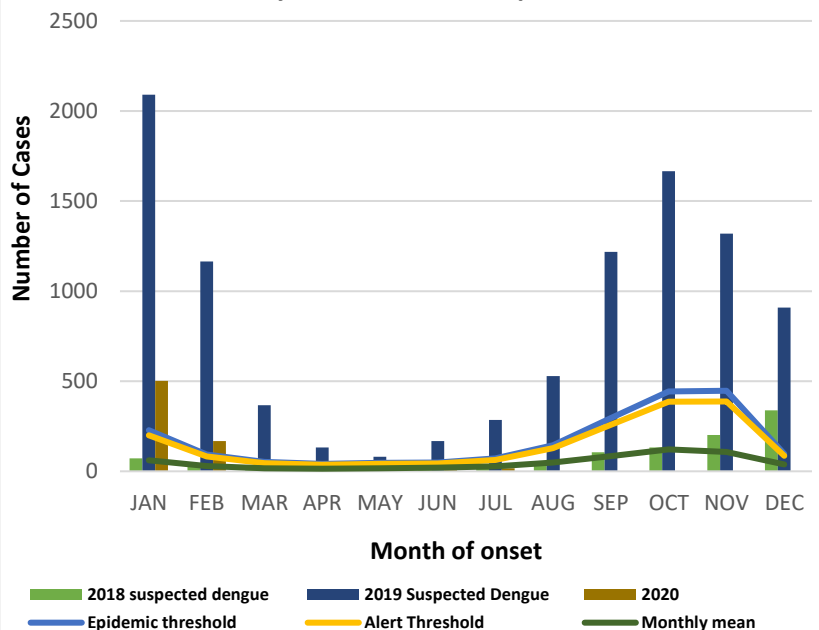
	2020	
	EW 36	YTD
Total Suspected Dengue Cases	0**	747**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**



Points to note:

- ** figure as at September 15, 2020
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2018, 2019 and 2020 versus monthly mean, alert, and epidemic thresholds



7 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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RESEARCH PAPER

Abstract

*Depression and the Impact on Productivity in the Workplace: Findings from a Jamaican Survey on
Depression in the Workplace*

Margarett Barnett

Objectives: The World Health Organization predicts the rise of the global burden of depression to become the leading cause of disability by 2030. The study aims to 1) address a gap in the literature in terms of baseline data for assessing the burden and impact of depression in the Jamaican workplace, and 2) quantify the links between depression, cognitive dysfunction, absenteeism and presenteeism by means of the The Work Limitation Questionnaire (WLQ) was developed by Lerner et al., to measure the degree to which health problems interfere with specific aspects of job performance and the productivity impact of these work limitations.

Methods: 300 employed adults in a Jamaican Quasi-government institution have been recruited for the survey. Self-reported answers will be recorded for various demographic variables, diagnosis of depression, number of days taken off for depression (absenteeism), and work performance ratings and behaviours while working with depression (presenteeism). The responses pertaining to absenteeism and presenteeism will be analysed according to the presence or absence of cognitive dysfunction.

Conclusion: Absenteeism causes increased workload for other employees, reduced output, and lost income from hiring temporary workers. In addition, reduced productivity at work, or 'presenteeism', is a major but less acknowledged concern for employers, and may be even more costly than absenteeism. It is hoped that this research will bring to the fore that there is a vital need to improve employees' access to quality treatment preferably through programs based on integrated care models.



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8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
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SENTINEL
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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
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