WEEKLY EPIDEMIOLOGY BULLETIN

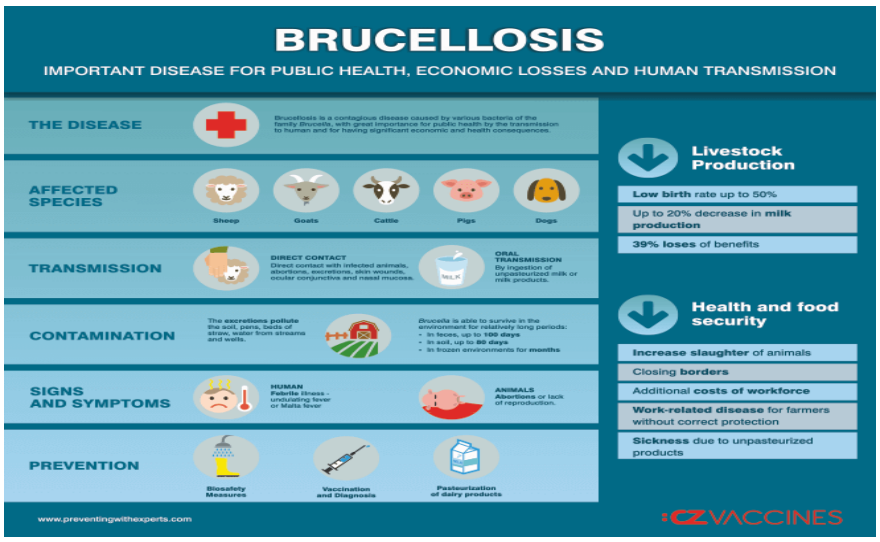
NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Zoonotic Diseases Series 4: Brucellosis

Key facts: 1. Brucellosis is found globally and is a reportable disease in most countries. **2.** The disease causes flu-like symptoms, including fever, weakness, malaise and weight loss. **3.** Person-to-person transmission is rare. **4.** Brucellosis is a bacterial disease caused by various Brucella species, which mainly infect cattle, swine, goats, sheep and dogs. **5.** Brucellosis is a bacterial disease caused by various Brucella species, which mainly infect cattle, swine, goats, sheep and dogs. Humans generally acquire the disease through direct contact with infected animals, by eating or drinking contaminated animal products or by inhaling airborne agents. Most cases are caused by ingesting unpasteurized milk or cheese from infected goats or sheep. **6.** Brucellosis is one of the most widespread zoonoses transmitted by animals and in endemic areas, human brucellosis has serious public health consequences. Expansion of animal industries and urbanization, and the lack of hygienic measures in animal husbandry and in food handling, partly account for brucellosis remaining a public health hazard.

Who is at risk? : 1. Brucellosis is found globally and is a reportable disease in most countries. It affects people of all ages and both sexes. In the general population, most cases are caused by the consumption of raw milk or its derivatives such as fresh cheese. Most of these cases are from sheep and goat products. **2.** The disease is also considered an occupational hazard for people who work in the livestock sector. People who work with animals and are in contact with blood, placenta, foetuses and uterine secretions have an increased risk of contracting the disease. This method of transmission primarily affects farmers, butchers, hunters, veterinarians and laboratory personnel. Worldwide, Brucella melitensis is the most prevalent species causing human brucellosis, owing in part to difficulties in immunizing free-ranging goats and sheep. Human-to-human transmission is very rare.

Prevention and control: Prevention of brucellosis is based on surveillance and the prevention of risk factors. The most effective prevention strategy is the elimination of infection in animals. Vaccination of cattle, goats and sheep is recommended in enzootic areas with high prevalence rates. Serological or other testing and culling can also be effective in areas with low prevalence. In countries where eradication in animals through vaccination or elimination of infected animals is not feasible, prevention of human infection is primarily based on raising awareness, food-safety measures, occupational hygiene and laboratory safety. Pasteurization of milk for direct consumption and for creating derivatives such as cheese is an important step to preventing transmission from animals to humans. Education campaigns about avoiding unpasteurized milk products can be effective, as well as policies on its sale. In agricultural work and meat-processing, protective barriers and correct handling and disposal of afterbirths, animal carcasses and internal organs is an important prevention strategy.



https://www.who.int/news-room/fact-sheets/detail/brucellosis

EPI WEEK 45

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Sentinel Surveillance in Jamaica

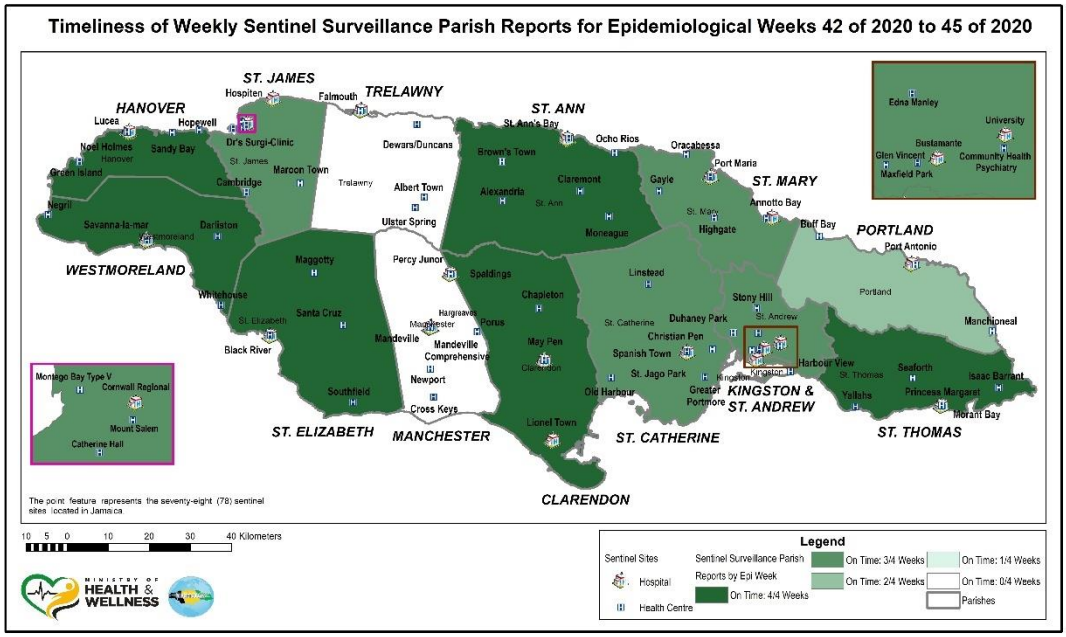
A syndromic surveillance system is good for early detection of and response to public health events.

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 – 42 to 45 of 2020

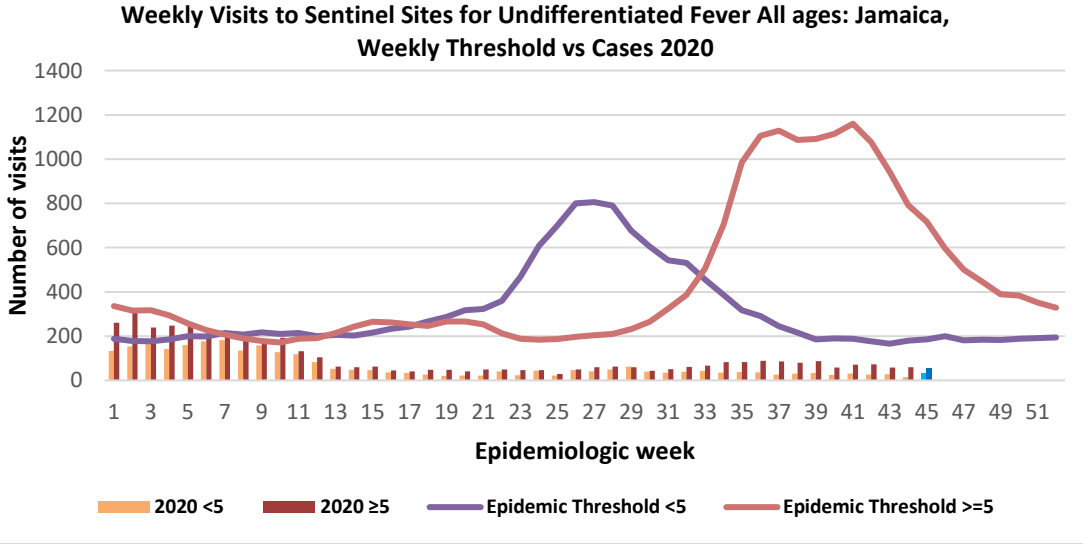
Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.



REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER
Temperature of >38^0C /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.

KEY
VARIATIONS OF BLUE SHOW CURRENT WEEK



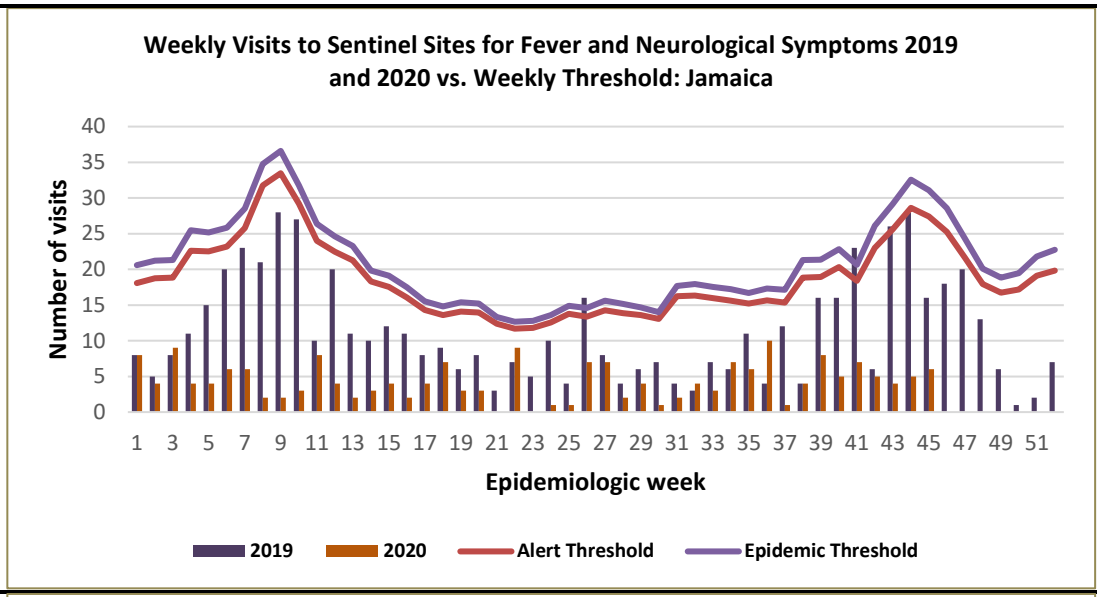
2 NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

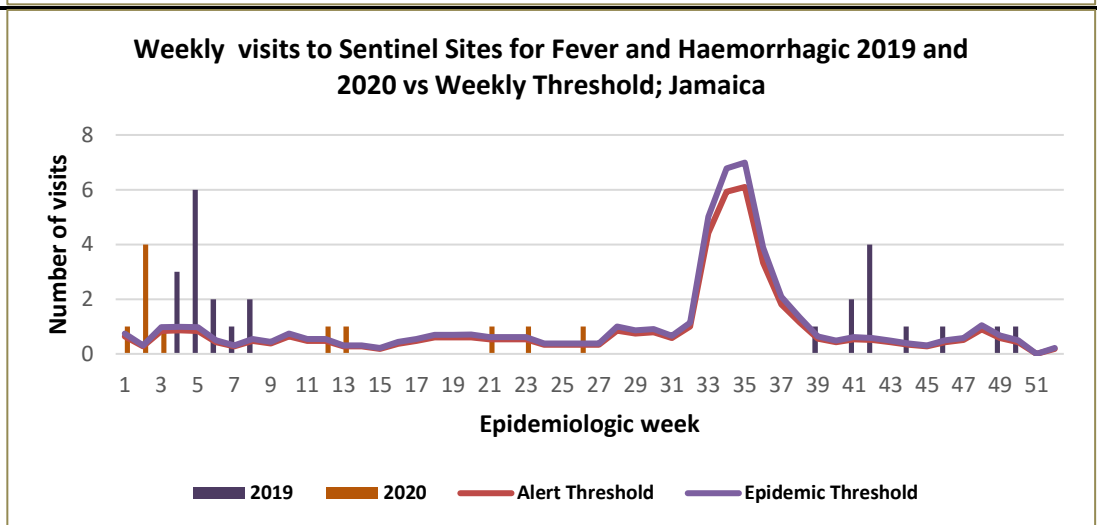
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

FEVER AND NEUROLOGICAL
Temperature of >38^{0}C /100.4^{0}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).

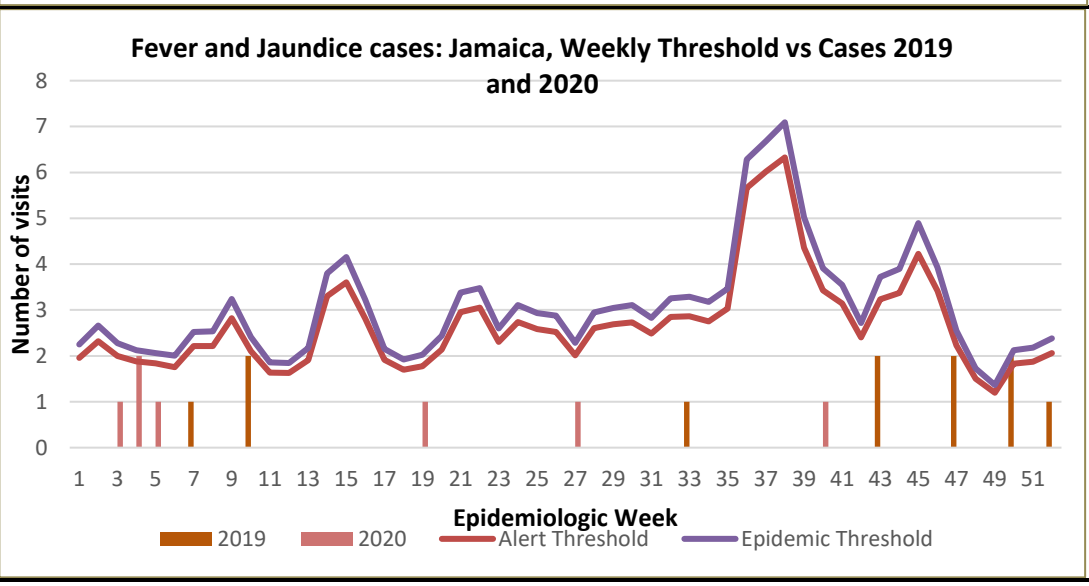


FEVER AND HAEMORRHAGIC
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE
Temperature of >38^0C /100.4^0F (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.



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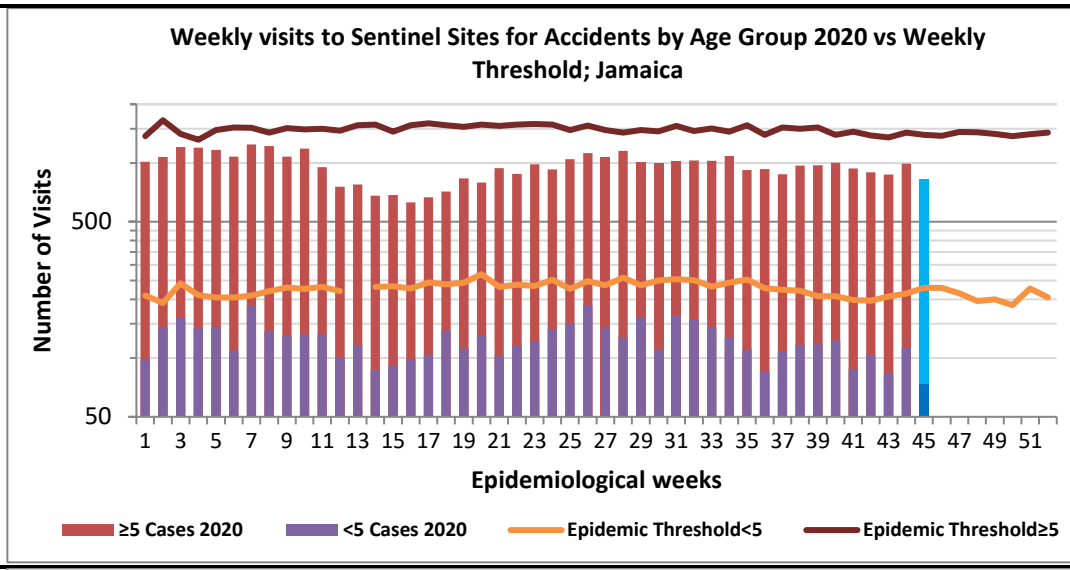
ACCIDENTS

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

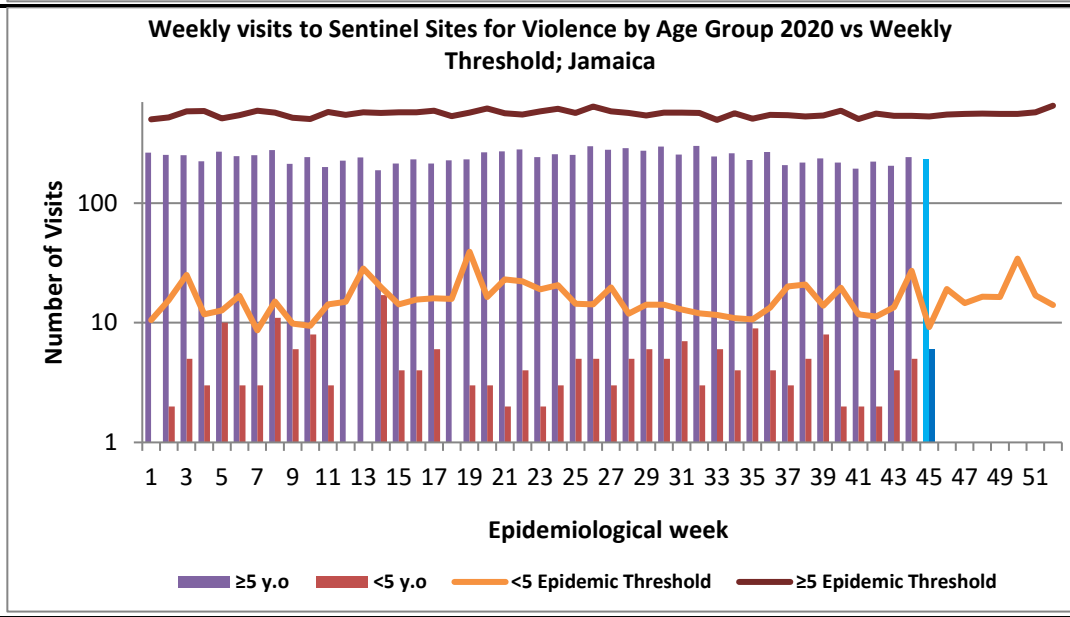
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



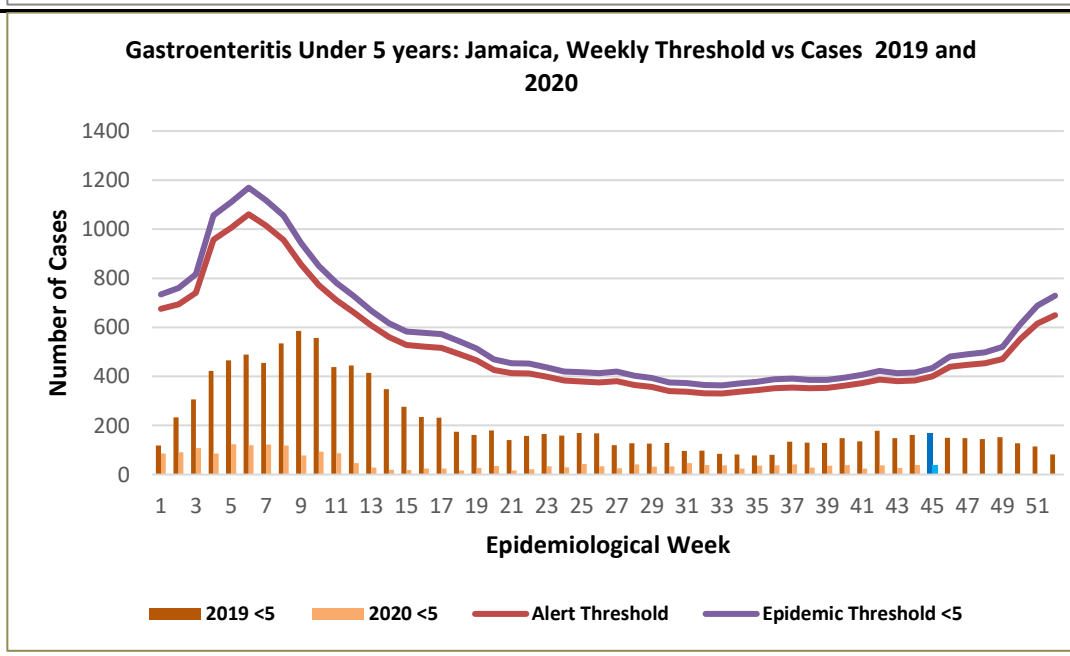
VIOLENCE

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.



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- CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS		Confirmed YTD[α] CURRENT YEAR 2020	PREVIOUS YEAR 2019
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		54[β]	65
	Cholera		0	0
	Dengue Hemorrhagic Fever[γ]		NA	NA
	Hansen's Disease (Leprosy)		0	0
	Hepatitis B		3	23
	Hepatitis C		0	2
	HIV/AIDS		NA	NA
	Malaria (Imported)		0	0
	Meningitis (Clinically confirmed)		1	20
EXOTIC/ UNUSUAL	Plague		0	0
H IGH 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[δ]		37	59
	Ophthalmia Neonatorum		23	201
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		29	51
	Yellow Fever		0	0
	Chikungunya[ε]		0	7
	Zika Virus[θ]		0	0

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.

[γ] Dengue Hemorrhagic Fever data include Dengue related deaths;

[δ] Figures include all deaths associated with pregnancy reported for the period.

[ε] CHIKV IgM positive cases

[θ] Zika PCR positive cases

[β] Updates made to prior weeks in 2020.

[α] Figures are cumulative totals for all epidemiological weeks year to date.

NA- Not Available

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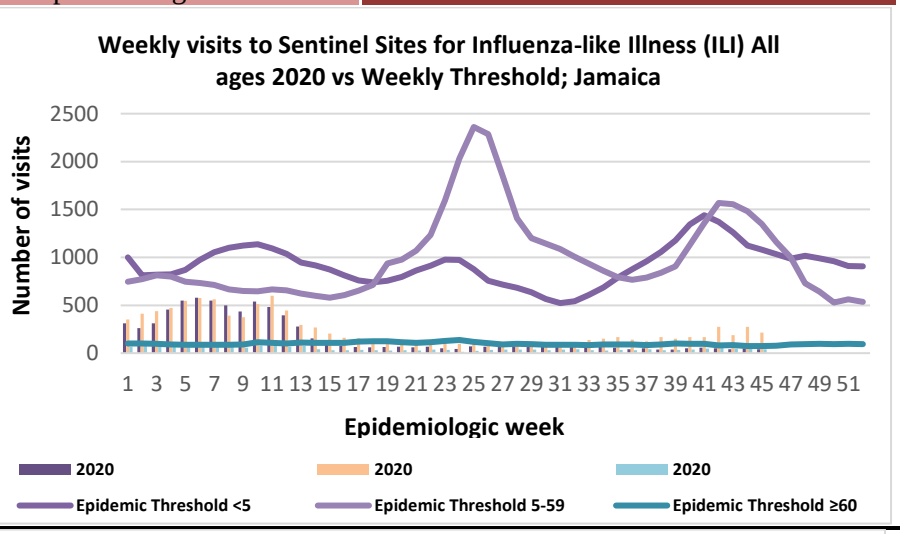
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 45

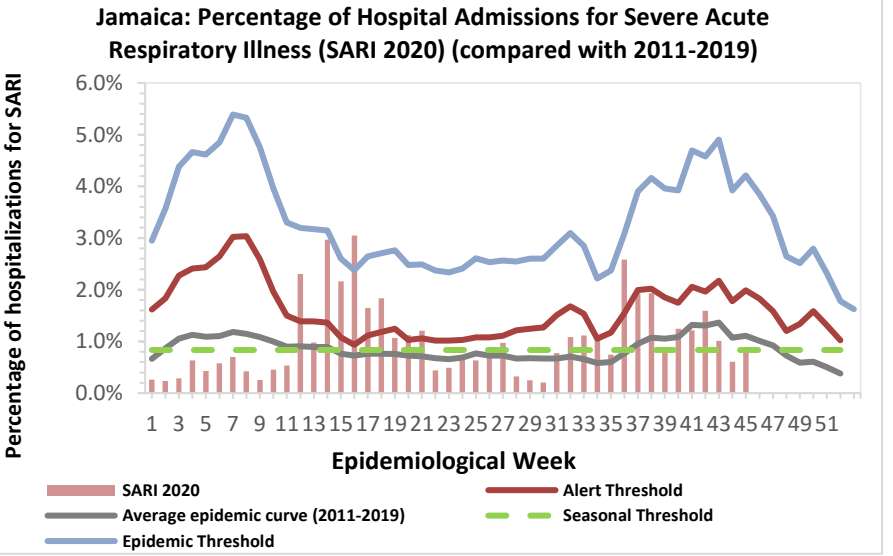
November 01, 2020 – November 07, 2020 Epidemiological Week 45

	EW 45	*YTD*
SARI cases	*11*	*614*
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*



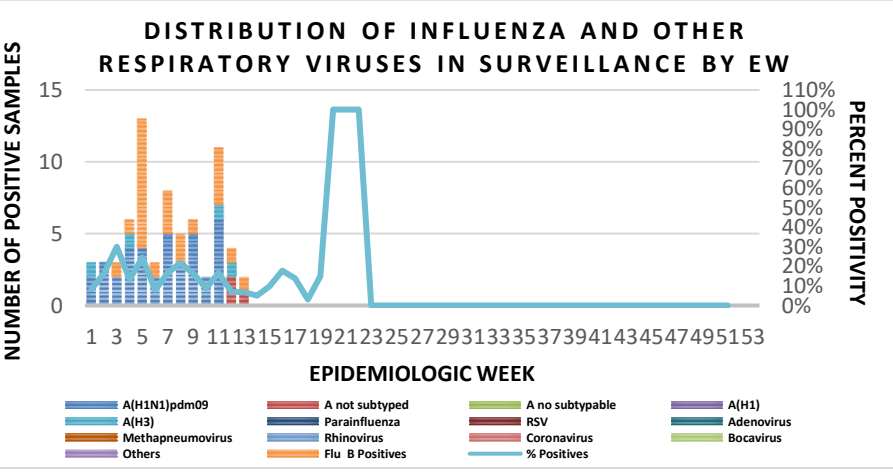
Epi Week Summary

During EW 45, 11 (eleven) SARI admissions were reported.



Caribbean Update EW 45

Caribbean: Influenza and other respiratory virus activity remained low in the subregion. In Haiti, SARI activity increased above epidemic levels.



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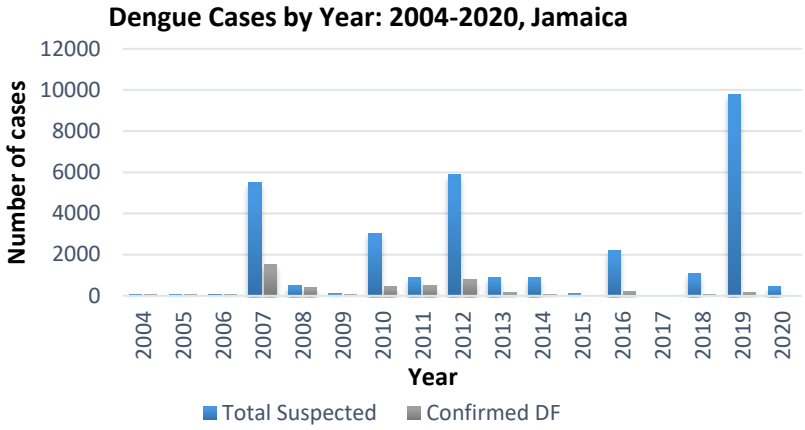
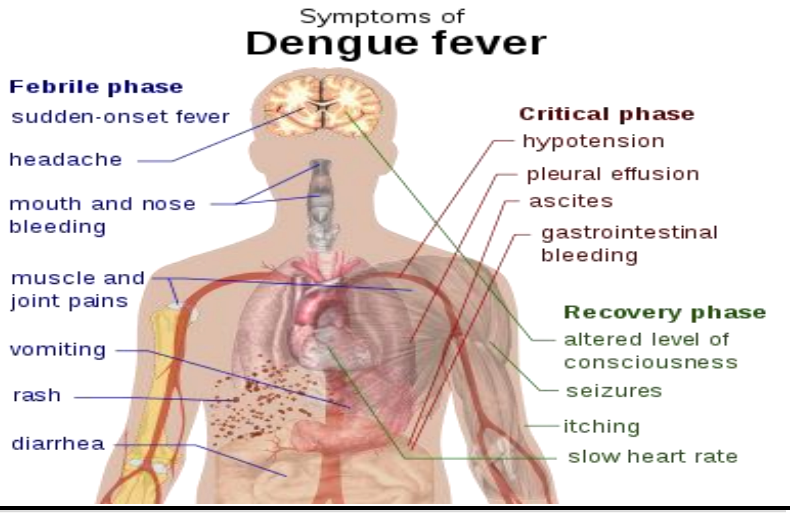
Dengue Bulletin

November 01, 2020 – November 07, 2020 Epidemiological Week 45 | Epidemiological Week 45



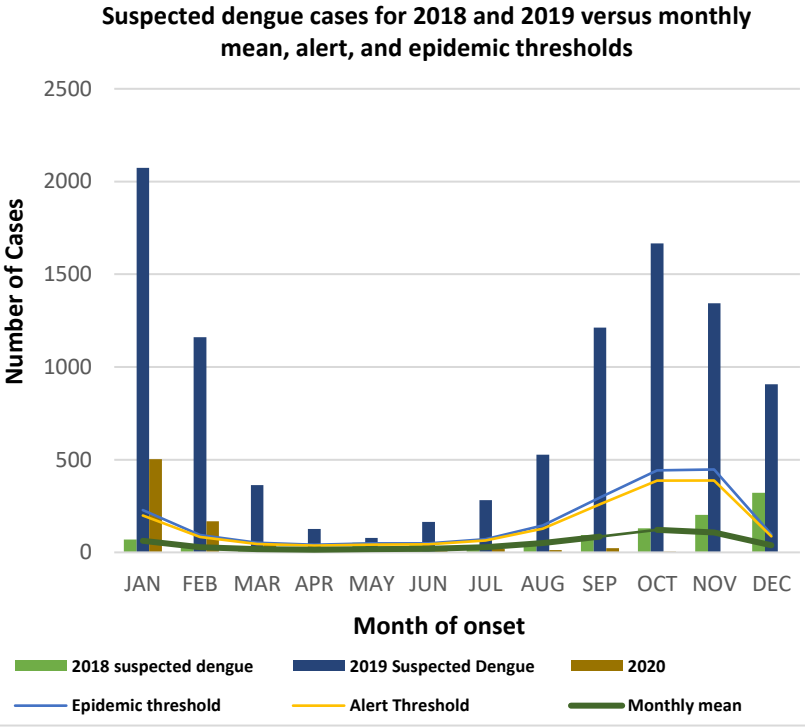
Reported suspected and confirmed dengue with symptom onset in week 45 of 2020

	2020*	
	EW 45	YTD
Total Suspected Dengue Cases	0	789
Lab Confirmed Dengue cases	0	1
CONFIRMED Dengue Related Deaths	0	1



Points to note:

- *** figure as at November 16, 2020**
- **Only PCR positive dengue cases are reported as confirmed.**
- **IgM positive cases are classified as presumed dengue.**



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RESEARCH PAPER

ABSTRACT

The Health Club: A Pilot Study of Opportunities and Challenges of a Faith-Based Health Promotion Initiative

Nicole Cameron, Ph.D.
University of Technology, Jamaica
nocameron@yahoo.com

Objectives: With chronic non-communicable diseases being the leading causes of death in Jamaica, health promotion experts grapple with ways to encourage the population to adopt healthier lifestyles. Faith-based institutions present unique opportunities for health promotion due to their widespread reach, especially among rural populations, which tend to see higher prevalence of lifestyle disease. The present study investigates the opportunities and challenges of The Health Club, a faith-based health promotion initiative.

Method: The Club was piloted in a rural church in Jamaica, with the aim of encouraging members to take incremental steps towards lifestyle change in a supportive environment. Seventeen initial members were given a schedule of healthful activities and practices and asked to commit to them for three months. Activities included drinking more water, regular exercise, getting more rest, a focus on mental and spiritual health, along with other practices aligned with normative medical recommendations. To facilitate Club communication, a social media group using WhatsApp, an instant messaging and audio-visual based platform, was formed. A qualitative content analysis of posts to the WhatsApp group was done.

Results: Results revealed that the Health Club facilitated members' desire to begin wholistic healthful practices. Additionally, members reported that the Health Club increased their health literacy and provided necessary social support on the path to lifestyle change. Challenges include lack of financial resources and unsupportive family members.

Conclusion: Faith-based health initiatives offer numerous benefits and opportunities for health promotion towards lifestyle change. These should be further exploited in Jamaica despite the challenges.

The Ministry of Health and Wellness
24-26 Grenada Crescent
Kingston 5, Jamaica
Tele: (876) 633-7924
Email: surveillance@moh.gov.jm