

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

EPI WEEK 48

Zoonotic Diseases Series 7: Influenza (avian and other zoonotic)

Overview: Animal influenza viruses are distinct from human seasonal influenza viruses and do not easily transmit between humans. However, zoonotic influenza viruses - animal influenza viruses that may occasionally infect humans through direct or indirect contact - can cause disease in humans ranging from a mild illness to death. Birds are the natural hosts for avian influenza viruses. After an outbreak of A(H5N1) virus in poultry in Hong Kong SAR, China, since 2003, this avian and other influenza viruses have spread from Asia to Europe and Africa. In 2013, human infections with the influenza A(H7N9) virus were reported in China. Most swine influenza viruses do not cause disease in humans, but some countries have reported cases of human infection from certain swine influenza viruses. Close proximity to infected pigs or visiting locations where pigs are exhibited has been reported for most human cases, but some limited human-to-human transmission has occurred. Just like birds and pigs, other animals such as horses and dogs, can be infected with their own influenza viruses (canine influenza viruses, equine influenza viruses, etc.).

Symptoms: Avian, swine and other zoonotic influenza infections in humans may cause disease ranging from mild upper respiratory infection (fever and cough) to rapid progression to severe pneumonia, acute respiratory distress syndrome, shock and even death. Gastrointestinal symptoms such as nausea, vomiting and diarrhea has been reported more frequently in A(H5N1) infection. Conjunctivitis has also been reported in influenza A(H7). Disease features such as the incubation period, severity of symptoms and clinical outcome varies by the virus causing infection but mainly manifests with respiratory symptoms.

Treatment: Evidence suggests that some antiviral drugs, notably neuraminidase inhibitor (oseltamivir, zanamivir), can reduce the duration of viral replication and improve prospects of survival, however ongoing clinical studies are needed. Emergence of oseltamivir resistance has been reported.

Avian Influenza
Disease caused by infection with avian (bird) influenza (flu) Type A viruses

Human transmission is rare

These viruses occur naturally among wild aquatic birds worldwide

Can infect domestic poultry and other birds

Humans can get the virus through the infected birds' saliva, mucus, feces

Virus enters through the eyes, nose or mouth

Severe respiratory illness
-shortness of breath
-pneumonia,
-acute respiratory distress

Symptoms:
Fever, cough, sore throat, muscle aches, abdominal pain, diarrhea, nausea, vomiting

Prevention:
Avoid exposure to infected birds
Use masks and gloves
Wash hands regularly

Conjunctivitis

Neurologic changes
-altered mental status, seizures

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SYNDROMES

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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



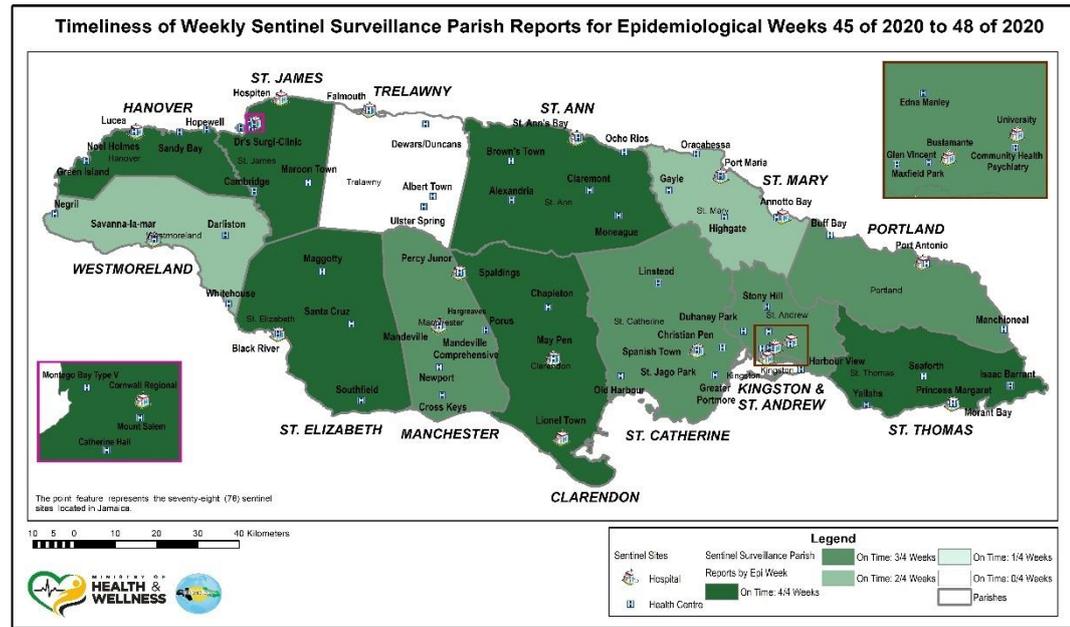
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 45 to 48 of 2020

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



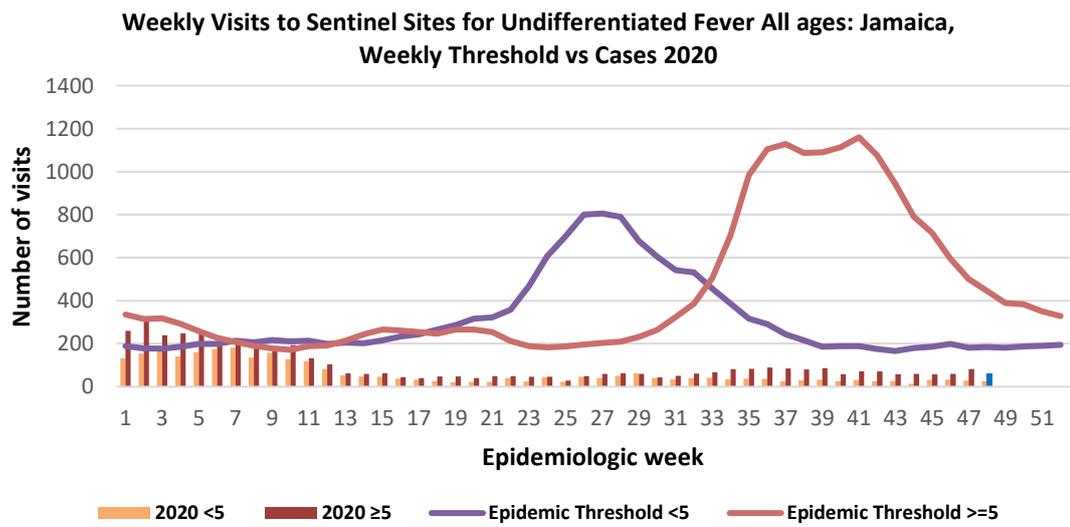
REPORTS FOR SYNDROMIC SURVEILLANCE

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



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



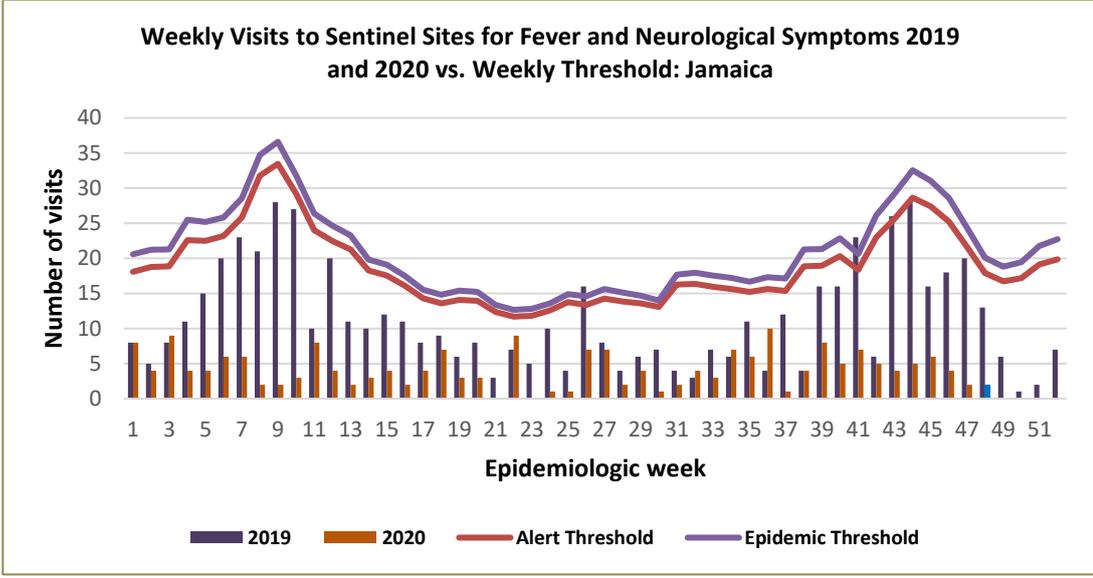
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

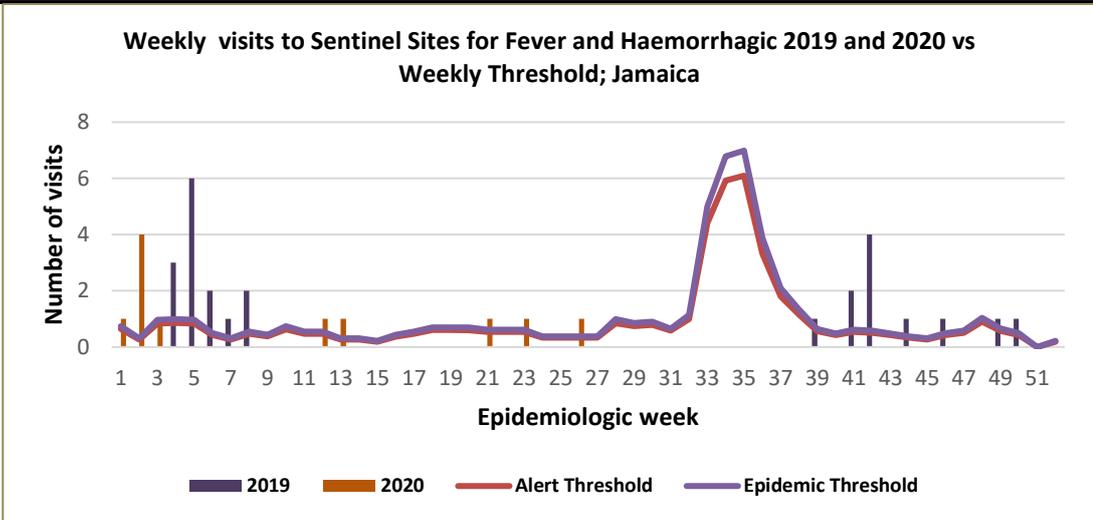
FEVER AND NEUROLOGICAL

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

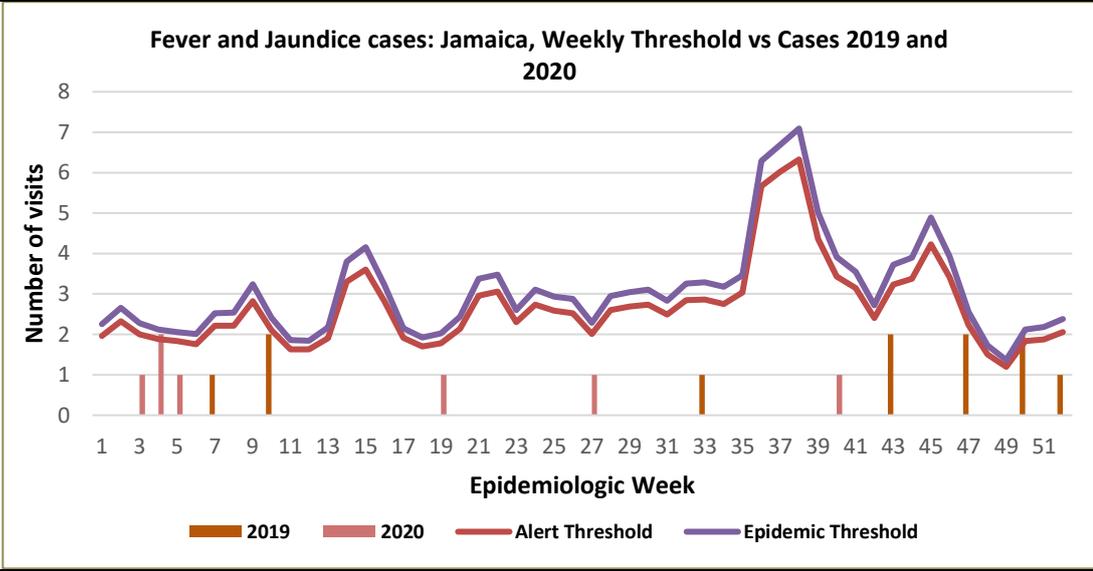
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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



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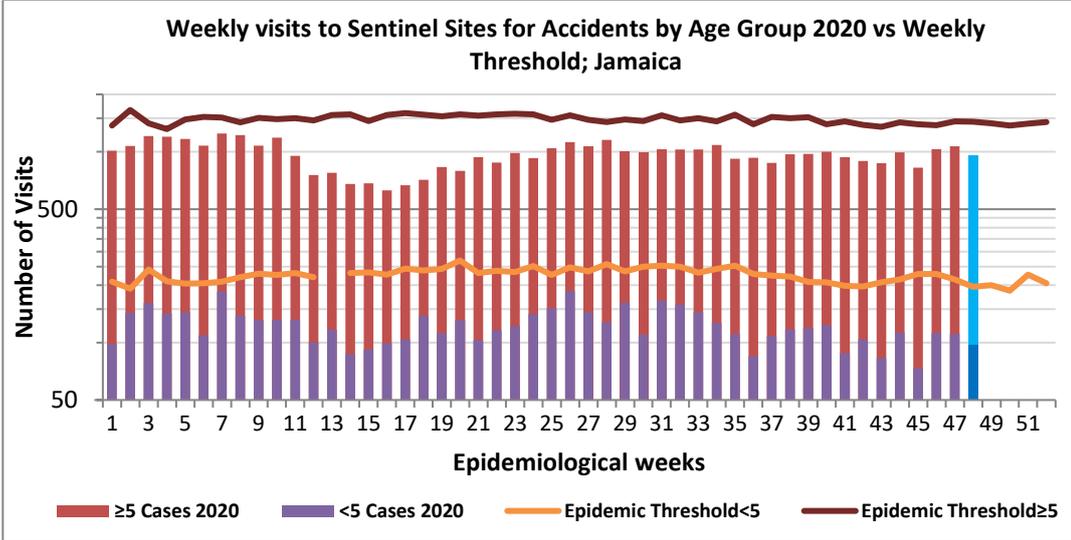
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

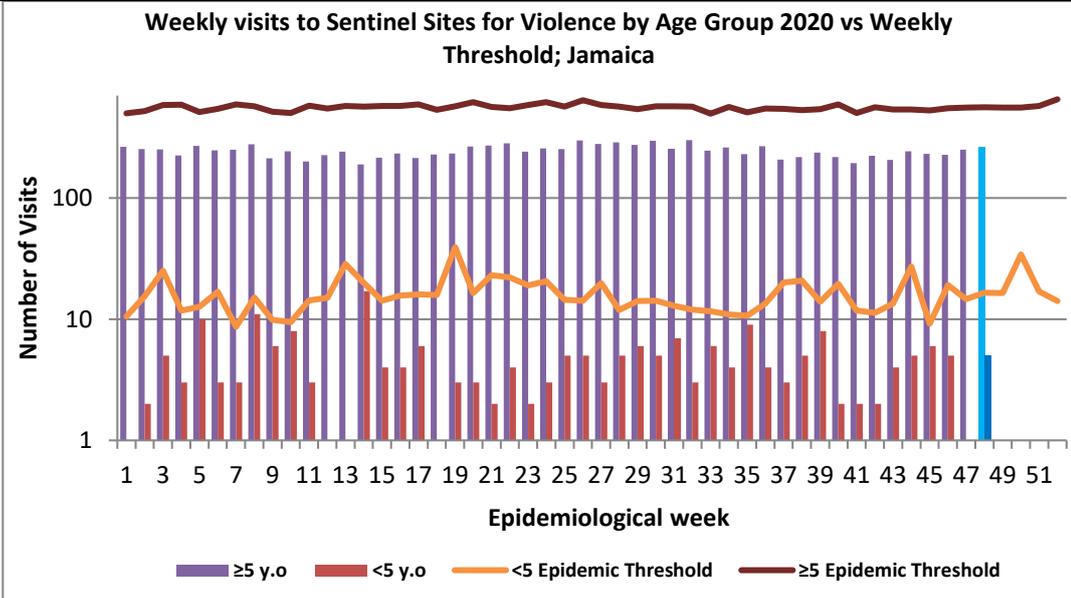
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



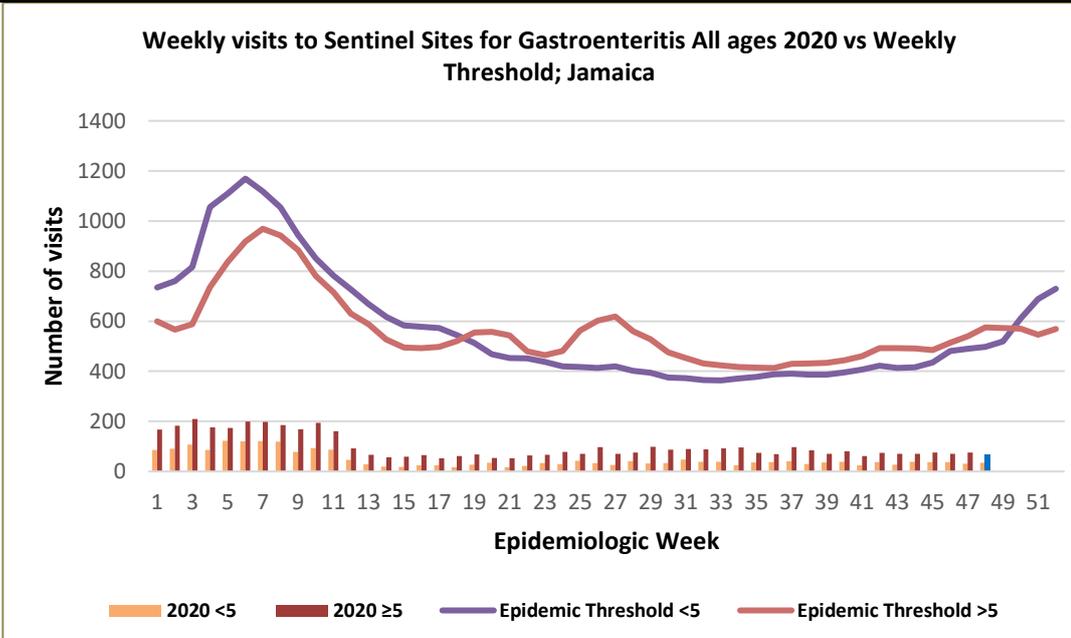
VIOLENCE

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



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- CLASS ONE NOTIFIABLE EVENTS		Comments			
	CLASS 1 EVENTS	Confirmed YTD ^α			
		CURRENT YEAR 2020	PREVIOUS YEAR 2019		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	69 ^β	106	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;	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	Hansen's Disease (Leprosy)	0	0		
	Hepatitis B	3	23		
	Hepatitis C	0	2		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	1	1		
	Meningitis (Clinically confirmed)	1	21		
EXOTIC/ UNUSUAL	Plague	0	0	^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.	
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 ^δ	37	66		
	Ophthalmia Neonatorum	23	222		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
Tuberculosis	29	58			
Yellow Fever	0	0			
	Chikungunya ^ε	0	7		
	Zika Virus ^θ	0	0	NA- Not Available	



5 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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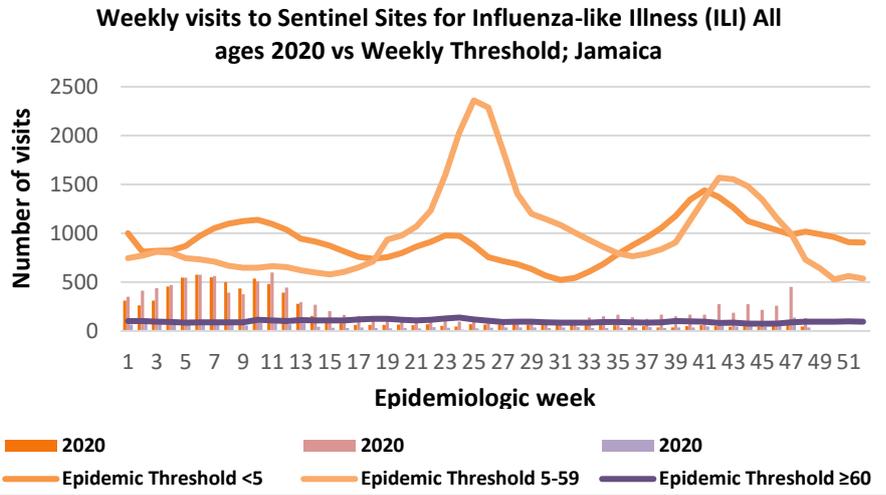
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 48

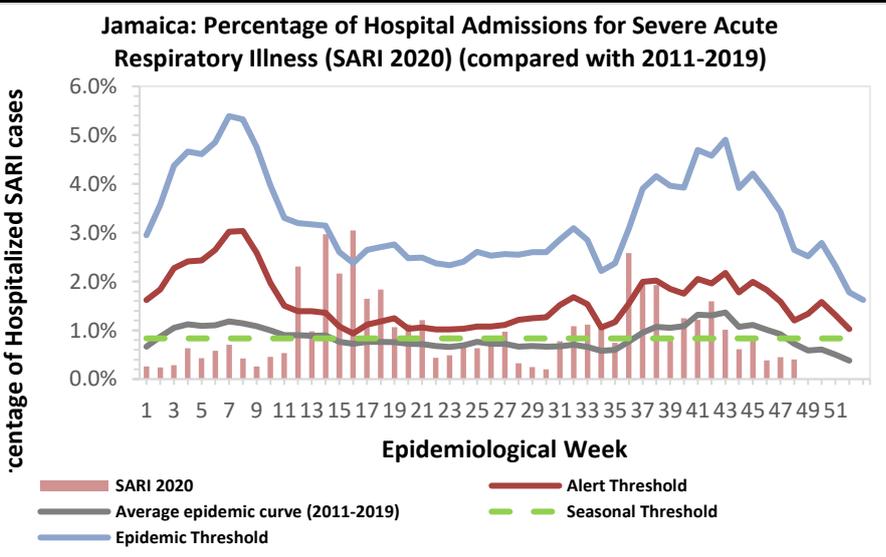
November 22, 2020 – November 28, 2020 Epidemiological Week 48

	EW 48	YTD
SARI cases	6	633
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



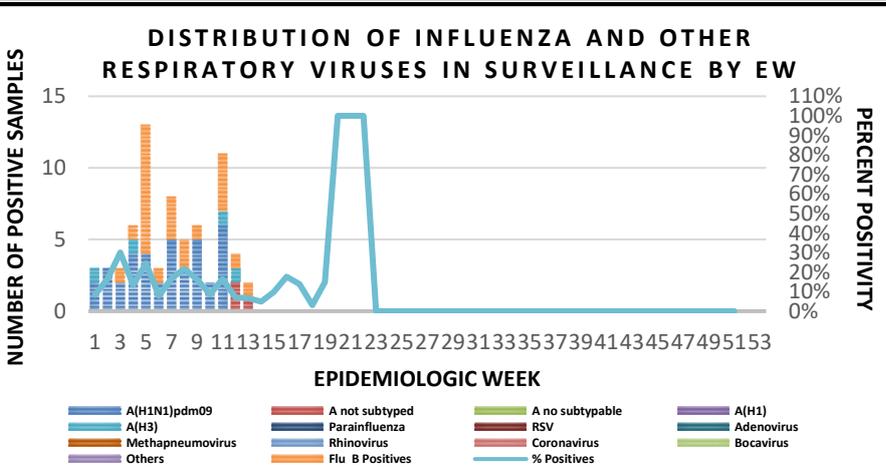
Epi Week Summary

During EW 48, 6 (six) SARI admissions were reported.



Caribbean Update EW 48

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



6 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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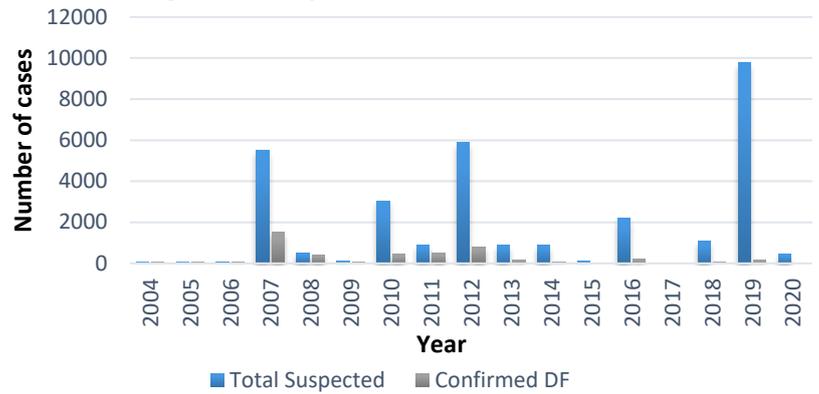
Dengue Bulletin

November 22, 2020 – November 28, 2020 Epidemiological Week 48

Epidemiological Week 48



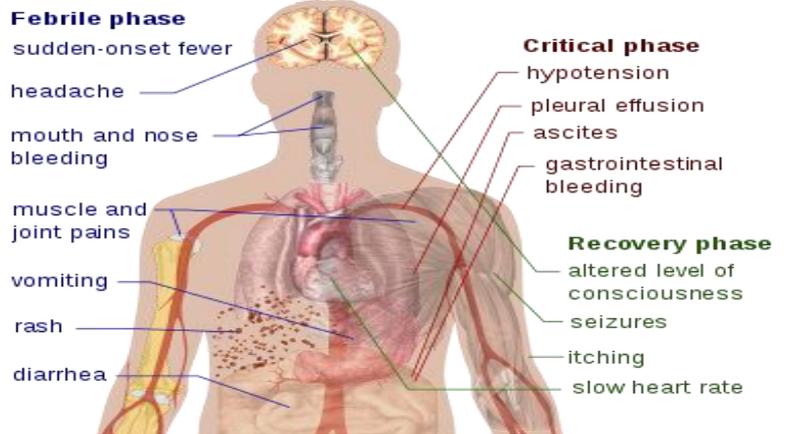
Dengue Cases by Year: 2004-2020, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 48 of 2020

	2020*	
	EW 48	YTD
Total Suspected Dengue Cases	0	824
Lab Confirmed Dengue cases	0	15
CONFIRMED Dengue Related Deaths	0	1

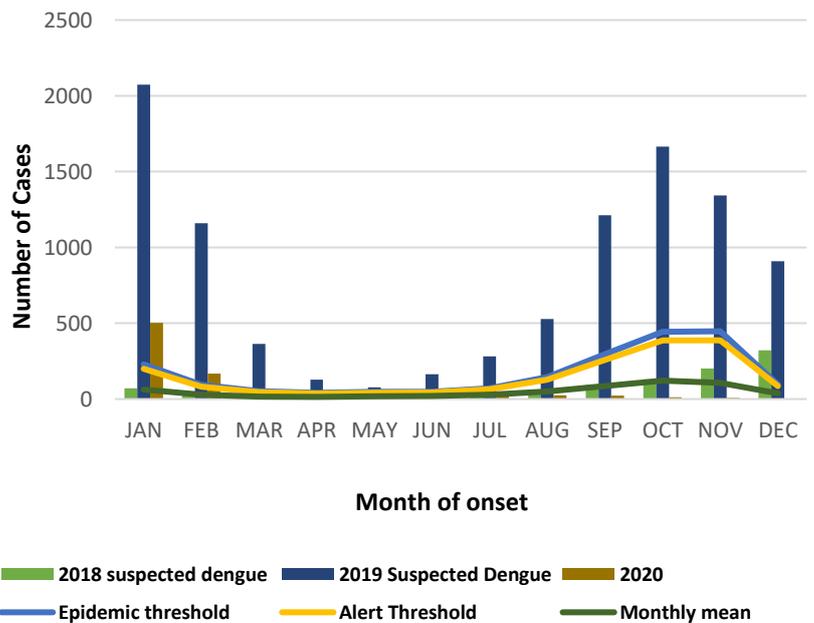
Symptoms of Dengue fever



Points to note:

- * figure as at December 10, 2020
- 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



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RESEARCH PAPER

ABSTRACT

Title:

Psychiatric Relapse and Hospital Readmissions:

A Qualitative Study to Explore the Perspectives of Persons Living with Serious Mental Illness in Western Jamaica

*Author: Debra Roof, Department of Psychiatry, Cornwall Regional Hospital, Western Region Mental Health Services
Email: debbiroof@yahoo.co.uk*

Theme: Chronic Non-communicable diseases (mental health)

Objectives: To conduct a qualitative study that explores patients' perspectives of the barriers and facilitators to recovery by:

Exploring accounts of what is helpful or unhelpful for persons in staying well and out of hospital through a set of face-to-face semi-structured interviews with a sample of outpatients frequently hospitalised.

Examining the overarching themes and shared experiences between patients by conducting a thematic analysis across the interview data.

Methods: A qualitative research methodology was used to investigate the perspectives of nine outpatients with a diagnosis of serious mental illness and frequent hospitalisation. Data collection was through face-to-face semi-structured interviews which explored the lived experience of staying well and out of hospital. Interviews were transcribed verbatim, data was manually coded and analysed using thematic analysis.

Findings: Six overarching themes: unmet basic needs, stopping medication, stress, marijuana use, influences of other people and physical effects were identified for the barriers to recovery. Five overarching themes: obtaining basic needs, taking medication, occupation, faith and the therapeutic aspect of the ward were the facilitators to recovery.

Conclusions: For this psychiatric setting there needs to be more concerted efforts to develop outpatient follow-up with psychosocial programmes that enhance rehabilitation and integrated care continuum for persons with mental illness. The importance of this study is that it provides a platform for patients living in Western Jamaica and gives insights into the lived experience. This has implications for therapists by building local knowledge and links to evidence-based practices that can improve patients' treatment and recovery outcomes.



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8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
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30 sites. Actively
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