

# WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## EPI WEEK 33

### Diphtheria

- Diphtheria is an infectious disease caused by the bacterium *Corynebacterium diphtheria*, which primarily infects the throat and upper airways, and produces a toxin affecting other organs. The illness has an acute onset and the main characteristics are sore throat, low fever and swollen glands in the neck, and the toxin may, in severe cases, cause myocarditis or peripheral neuropathy. The diphtheria toxin causes a membrane of dead tissue to build up over the throat and tonsils, making breathing and swallowing difficult. The disease is spread through direct physical contact or from breathing in the aerosolized secretions from coughs or sneezes of infected individuals.
- Vaccination against diphtheria has reduced the mortality and morbidity of diphtheria dramatically, however diphtheria is still a significant child health problem in countries with poor EPI coverage. In countries endemic for diphtheria, the disease occurs mostly as sporadic cases or in small outbreaks. Diphtheria is fatal in 5 - 10% of cases, with a higher mortality rate in young children. Treatment involves administering diphtheria antitoxin to neutralize the effects of the toxin, as well as antibiotics to kill the bacteria.
- Diphtheria vaccine is a bacterial toxoid, ie. a toxin whose toxicity has been inactivated. The vaccine is normally given in combination with other vaccines as DTwP/DTaP vaccine or pentavalent vaccine. For adolescents and adults the diphtheria toxoid is frequently combined with tetanus toxoid in lower concentration (Td vaccine).
- WHO recommends a 3-dose primary vaccination series with diphtheria containing vaccine followed by 3 booster doses. The primary series should begin as early as 6-week of age with subsequent doses given with a minimum interval of 4 weeks between doses. The 3 booster doses should preferably be given during the second year of life (12-23 months), at 4-7 years and at 9-15 years of age. Ideally, there should be at least 4 years between booster doses.
- To further promote immunity against diphtheria, combined diphtheria and tetanus toxoid vaccine (Td or TD) should be used rather than tetanus toxoid alone. This can be used in pregnancy as well as following injuries.



SYNDROMES

PAGE 2



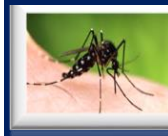
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6




GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

<b>DIPHTHERIA</b>	
<ul style="list-style-type: none"> <li>▶ A bacterial infection usually affecting the mucous membranes of nose and throat</li> <li>▶ In advanced stages, diphtheria can damage heart, kidneys, nervous system</li> </ul>	
<b>SYMPTOMS</b>	<b>CAUSES</b>
<ul style="list-style-type: none"> <li>▶ A thick, gray membrane covering throat, tonsils</li> <li>▶ A sore throat and hoarseness</li> <li>▶ Swollen glands (enlarged lymph nodes) in neck</li> <li>▶ Difficulty in breathing or rapid breathing</li> <li>▶ Nasal discharge</li> <li>▶ Fever and chills</li> </ul>	<ul style="list-style-type: none"> <li>▶ Airborne droplets</li> <li>▶ Contaminated personal items</li> <li>▶ Contaminated household items</li> </ul>
<p style="font-size: 1.2em; font-weight: bold;">“ We have been shocked by the Koottayi case. We will monitor the neighbourhood and distribute medicines and vaccines.”</p> <p style="text-align: right; font-weight: bold; color: red;">R. Renuka</p> <p style="text-align: right;">District Deputy Medical Officer</p>	

SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



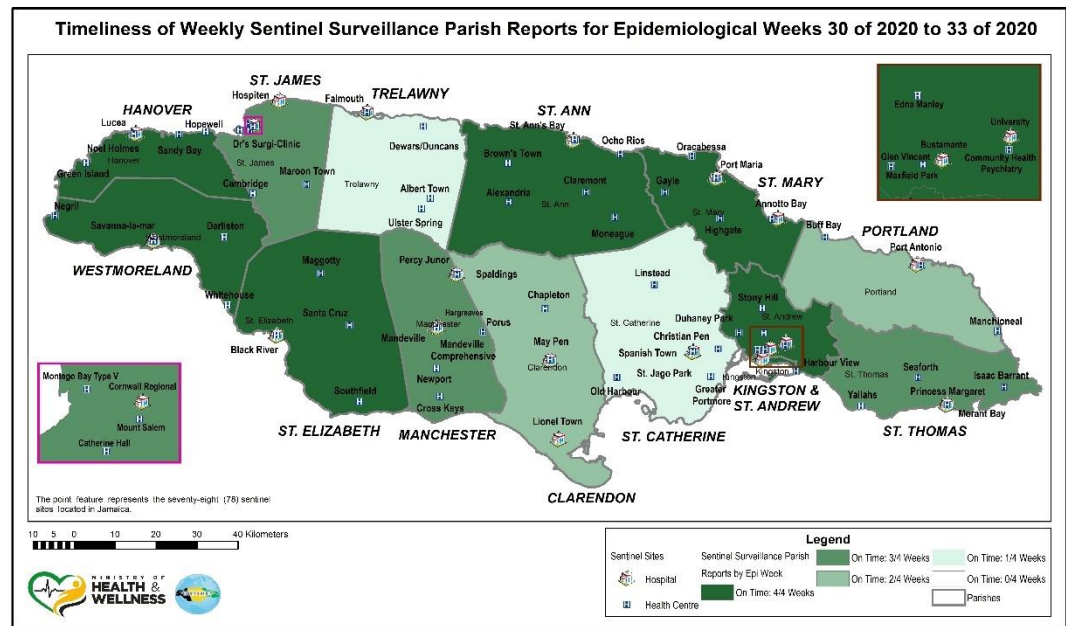
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 30 to 33 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

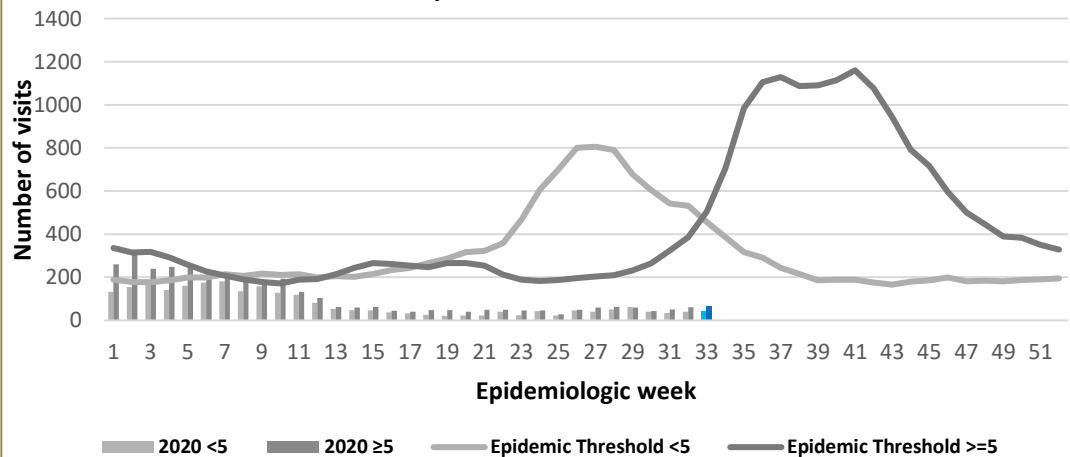
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) with or without an obvious diagnosis or focus of infection.



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



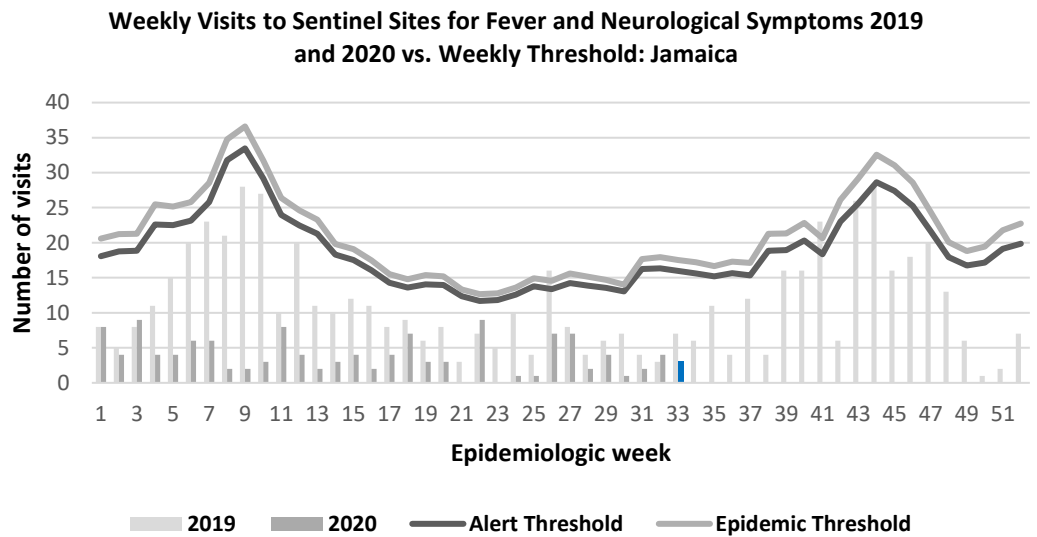
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

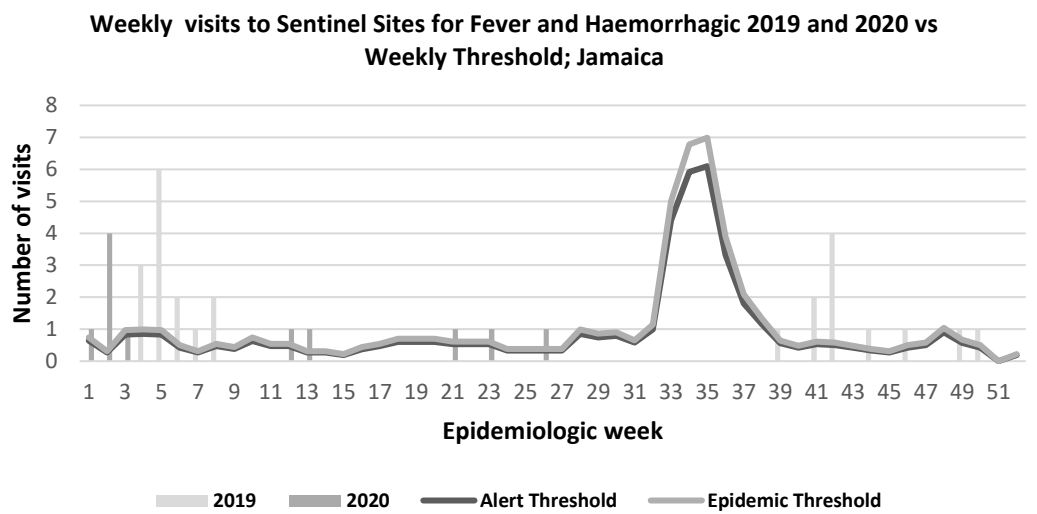
**FEVER AND NEUROLOGICAL**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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**

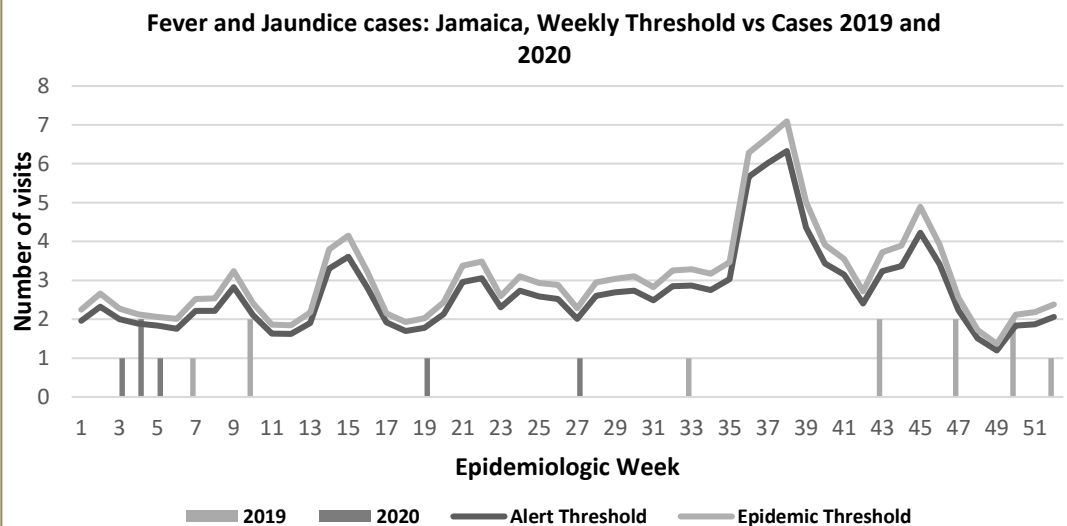
Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



**FEVER AND JAUNDICE**

Temperature of  $>38^{\circ}\text{C}$  /  $100.4^{\circ}\text{F}$  (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



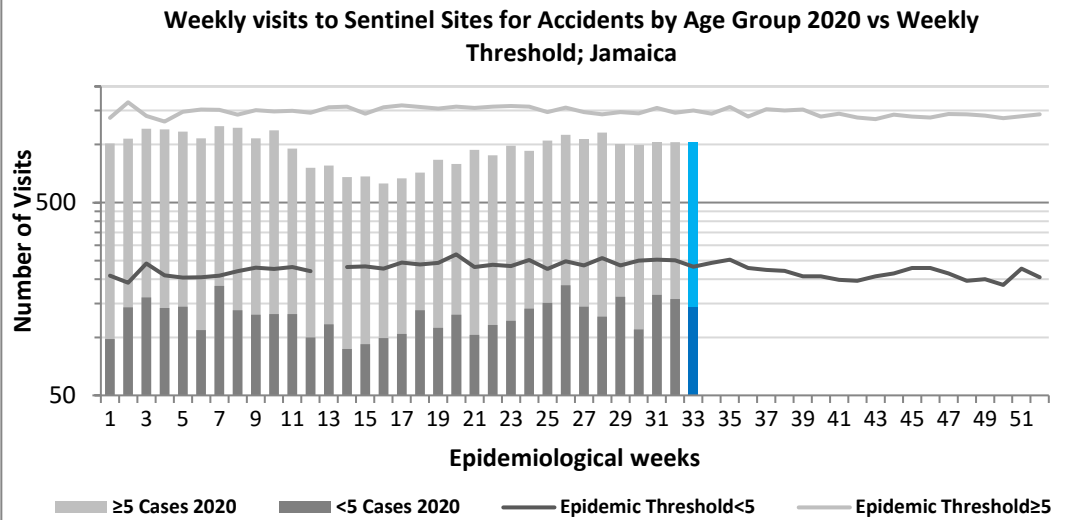
**SENTINEL REPORT-** 78 sites. Automatic reporting

**ACCIDENTS**

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

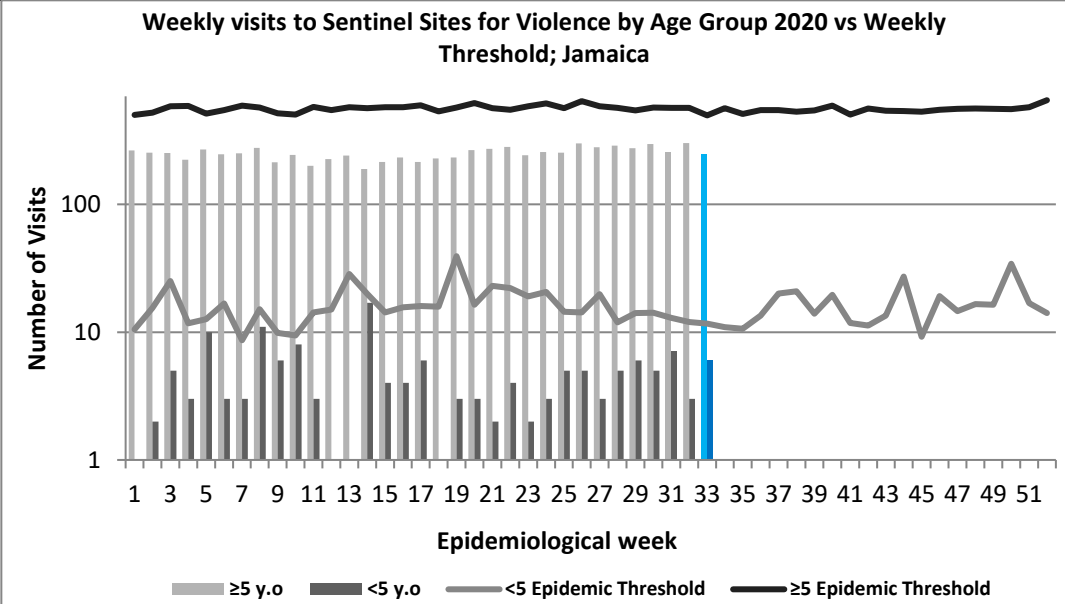
**KEY**

VARIATIONS OF BLUE SHOW CURRENT WEEK



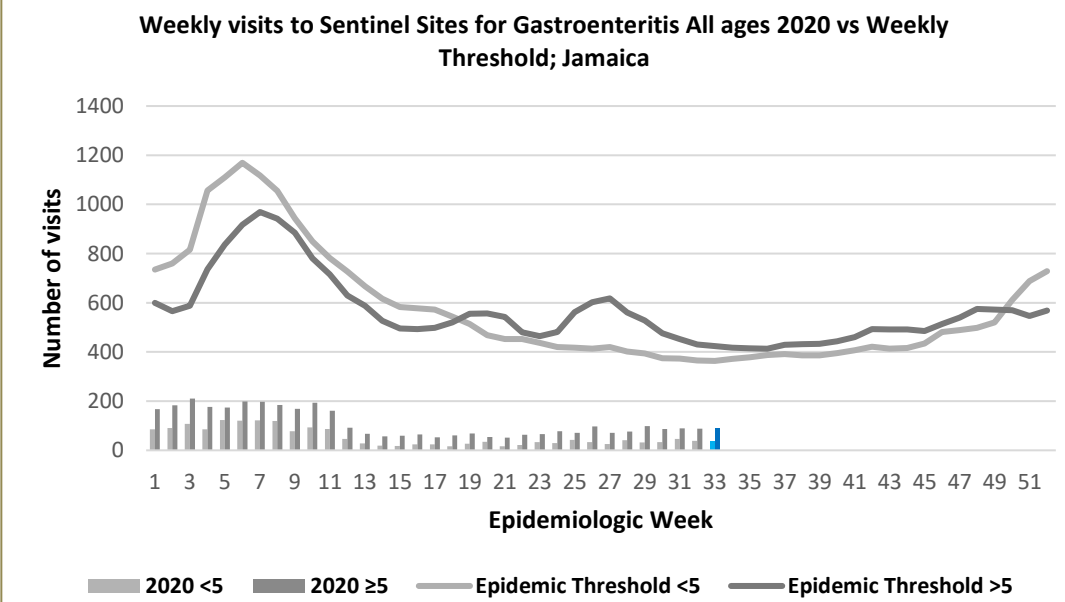
**VIOLENCE**

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	40	
	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	15	
EXOTIC/ UNUSUAL	Plague	0	0	
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**	28	42	
	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	0		
Zika Virus****	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.

\* Dengue Hemorrhagic Fever data include Dengue related deaths;


\*\* Figures include all deaths associated with pregnancy reported for the period. \* 2019 YTD figure was updated.

\*\*\* CHIKV IgM positive cases




\*\*\*\* Zika PCR positive cases

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

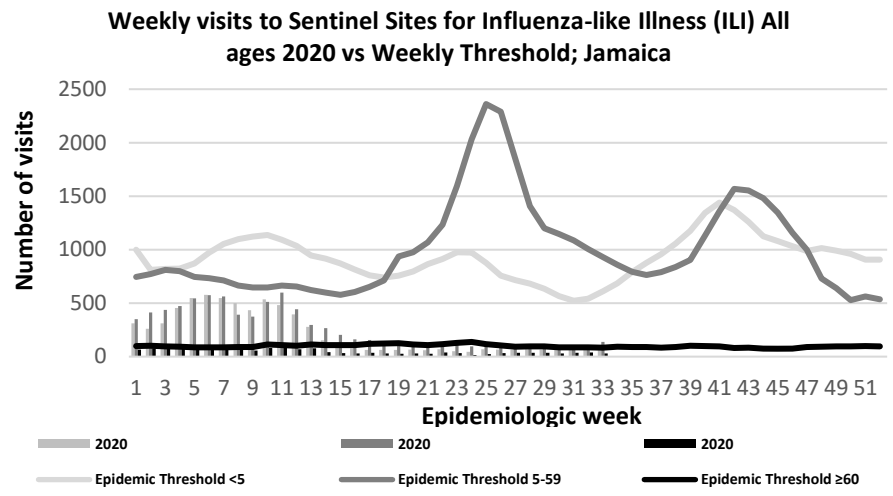
 SENTINEL REPORT- 78 sites. Automatic reporting

# NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

*EW 33*

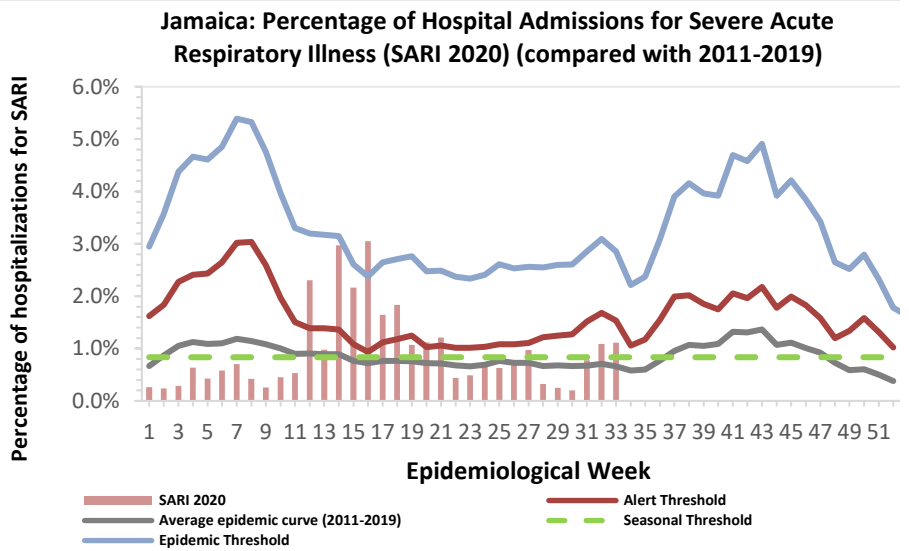
August 09, 2020-August 15, 2020 Epidemiological Week 33

	<i>EW 33</i>	<i>YTD</i>
SARI cases	18	393
<b>Total Influenza positive Samples</b>	<b>0</b>	<b>69</b>
<b>Influenza A</b>	<b>0</b>	<b>45</b>
H3N2	0	4
H1N1pdm09	0	38
Not subtyped	0	3
<b>Influenza B</b>	<b>0</b>	<b>24</b>
<b>Parainfluenza</b>	<b>0</b>	<b>0</b>



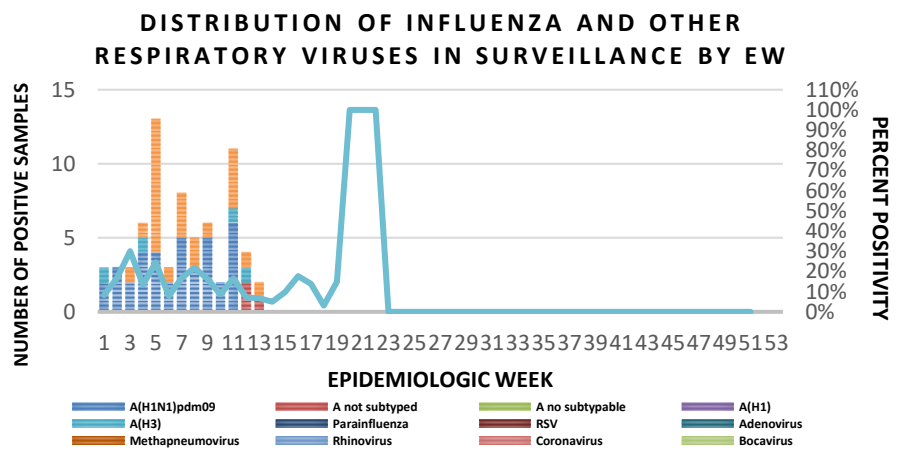
### Epi Week Summary

During EW 33, 18 (eighteen) SARI admissions were reported.



### Caribbean Update EW 33

Caribbean: Influenza and other respiratory virus activity remained low in the subregion. In Haiti and Suriname, detections of SARS-CoV-2 continue elevated and increasing..



**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

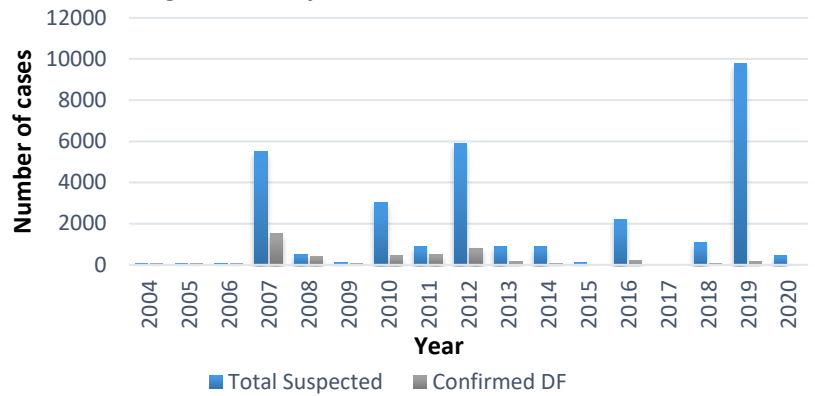
# Dengue Bulletin

August 09, 2020-August 15, 2020 Epidemiological Week 33

Epidemiological Week 33

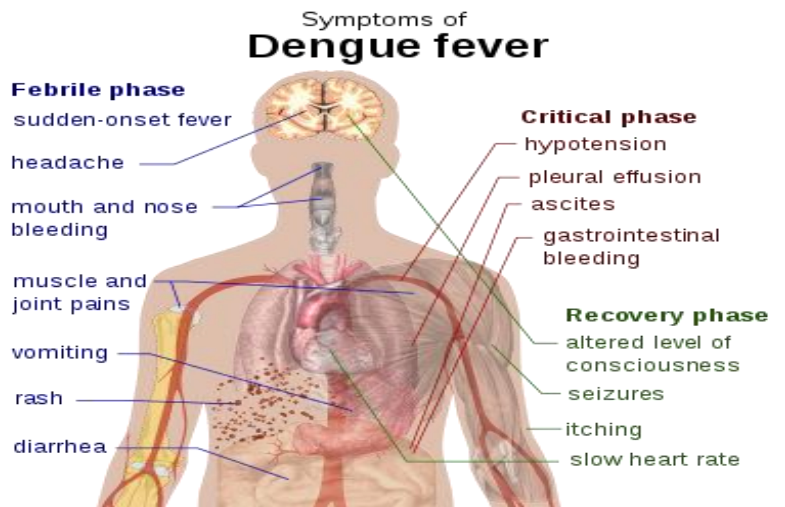


Dengue Cases by Year: 2004-2020, Jamaica



## Reported suspected and confirmed dengue with symptom onset in week 33 of 2020

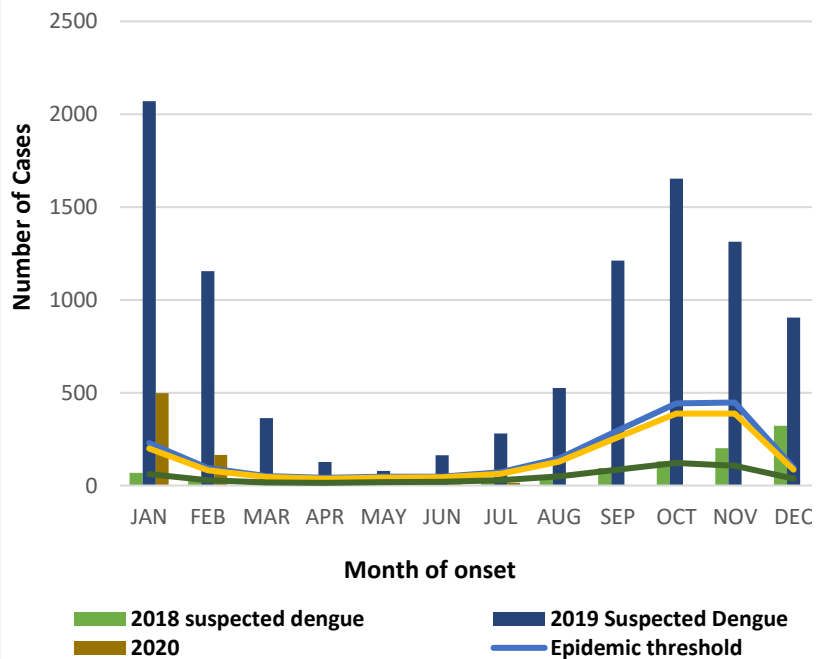
	2020	
	EW 33	YTD
Total Suspected Dengue Cases	0**	736**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**



### Points to note:

- \*\* figure as at August 17 , 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



**HOSPITAL ACTIVE SURVEILLANCE-** 30 sites. Actively pursued



**SENTINEL REPORT-** 78 sites. Automatic reporting

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# RESEARCH PAPER

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## The Occurrence of Chronic Sorrow and Coping Strategies Employed by Adult Oncology Patients in Western Jamaica

*VH Waugh-Brown, GA Wright*

*The University of the West Indies, Mona, Kingston, Jamaica*

*Email Address: veronica.waughbrown02@uwimona.edu.jm or veraugh@gmail.com*

**Objective:** To explore the occurrence of chronic sorrow and describe the coping strategies used by patients diagnosed with cancer.

**Method:** A phenomenological study was conducted among adult patients attending oncology clinic in western Jamaica. Purposive sampling was used to select eight participants who met the criteria for a Focus Group Discussion. Informed consent and demographic data were obtained. A Focus Group Discussion Guide aided the exploration of participants' feelings and coping mechanisms. The discussion was audiotaped. Data were transcribed verbatim and checked for accuracy. Common themes were connected, inter-relationships identified and narrative constructed.

**Results:** Eight persons diagnosed with cancer and receiving treatment at the Oncology Clinic participated in the focus group discussion. The chronicity of the illness, negative shift in the equilibrium of life and financial challenges caused major stress which contributed to chronic sorrow. Strong spiritual belief was the major common element expressed that helped persons to cope. Keeping physically active and volunteerism were other coping mechanisms that emerged. Participants with greater family and financial supports expressed greater ability to cope with the illness than those with poor family or financial support. Psychological / emotional therapy from a professional source was lacking.

**Conclusion:** Persons diagnosed with cancer experience chronic sorrow resulting from emotional strain and stress. Spiritual and psychological support forms the bed-rock of their mental well-being and coping ability. The magnitude of the impact of chronic sorrow experienced by cancer patients can be reduced by integrating these critical components in the patient's medical management plan.



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8 NOTIFICATIONS-  
All clinical  
sites



INVESTIGATION  
REPORTS- Detailed Follow  
up for all Class One Events



HOSPITAL  
ACTIVE  
SURVEILLANCE-  
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