

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Dracunculiasis (Guinea-worm disease)

Key facts

- Dracunculiasis is a crippling parasitic disease on the verge of eradication, with 54 human cases reported in 2019.
- From the time infection occurs, it takes between 10–14 months for the transmission cycle to complete until a mature worm emerges from the body.
- The parasite is transmitted mostly when people drink stagnant water contaminated with parasite-infected water fleas.
- Dracunculiasis was endemic in 20 countries in the mid-1980s.
- The total of 54 cases in 2019 were reported from four countries: Angola (1 case), Chad (48 cases), South Sudan (4 cases) and Cameroon (1 case, likely imported from Chad).

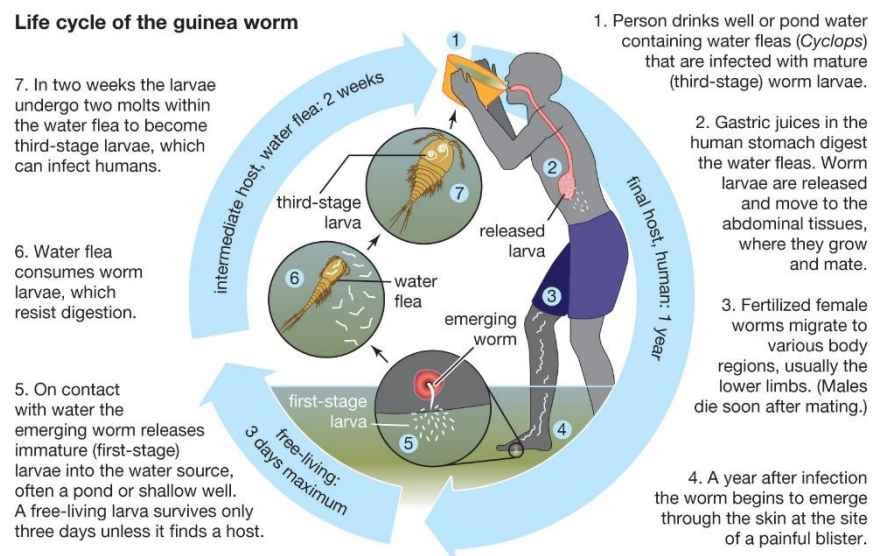
Dracunculiasis is rarely fatal, but infected people become non-functional for weeks. It affects people in rural, deprived and isolated communities who depend mainly on open surface water sources such as ponds for drinking water.

Scope of the problem: During the mid-1980s an estimated 3.5 million cases of dracunculiasis occurred in 20 countries worldwide, 17 countries of which were in Africa. The number of reported cases fell to fewer than 10 000 cases for the first time in 2007, dropping further to 542 cases (2012). Over the past eight years, human cases have stayed at double digits (28 in 2018 and a slightly higher number of 54 human cases in 2019).

Transmission, life-cycle and incubation period: About a year after infection, a painful blister forms – 90% of the time on the lower leg – and one or more worms emerge accompanied by a burning sensation. To soothe the burning pain, patients often immerse the infected part of the body in water. The worm(s) then releases thousands of larvae (baby worms) into the water. These larvae reach the infective stage after being ingested by tiny crustaceans or copepods, also called water fleas.

People swallow the infected water fleas when drinking contaminated water. The water fleas are killed in the stomach but the ineffective larvae are liberated. They then penetrate the wall of the intestine and migrate through the body. The fertilized female worm (which measures 60–100 cm long) migrates under the skin tissues until it reaches its exit point, usually at the lower limbs, forming a blister or swelling from which it eventually emerges. The worm takes 10–14 months to emerge after infection.

Life cycle of the guinea worm



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EPI WEEK 35



SYNDROMES

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CLASS 1 DISEASES

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GASTROENTERITIS

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SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



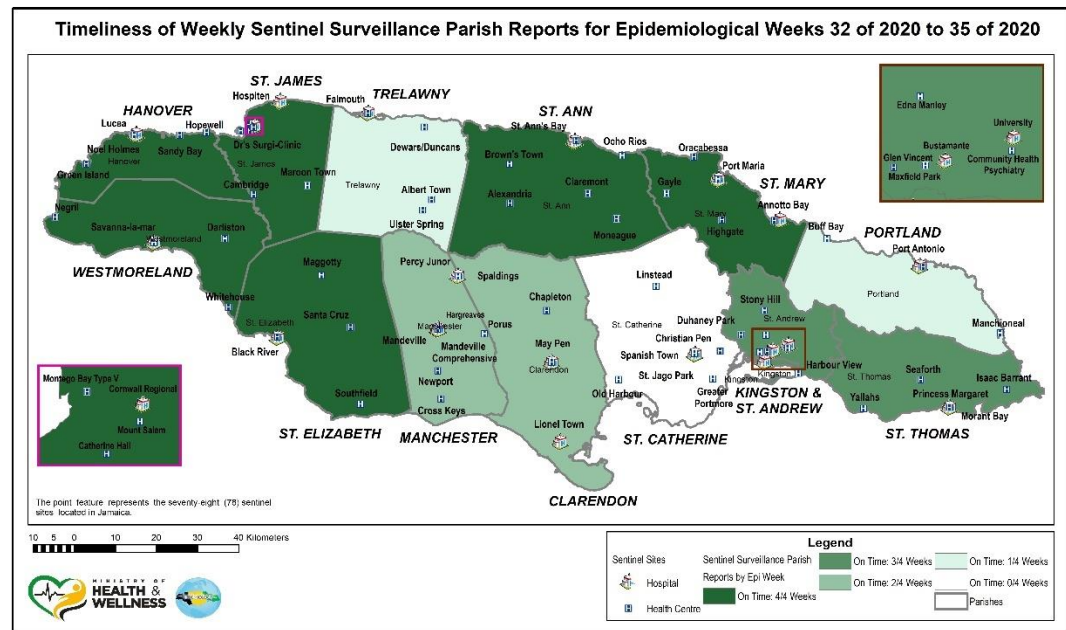
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 32 to 35 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

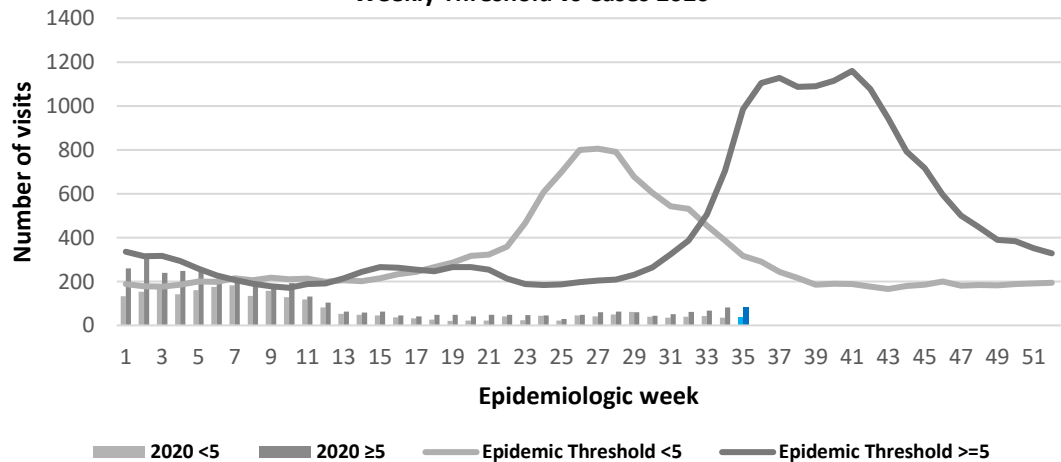
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



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



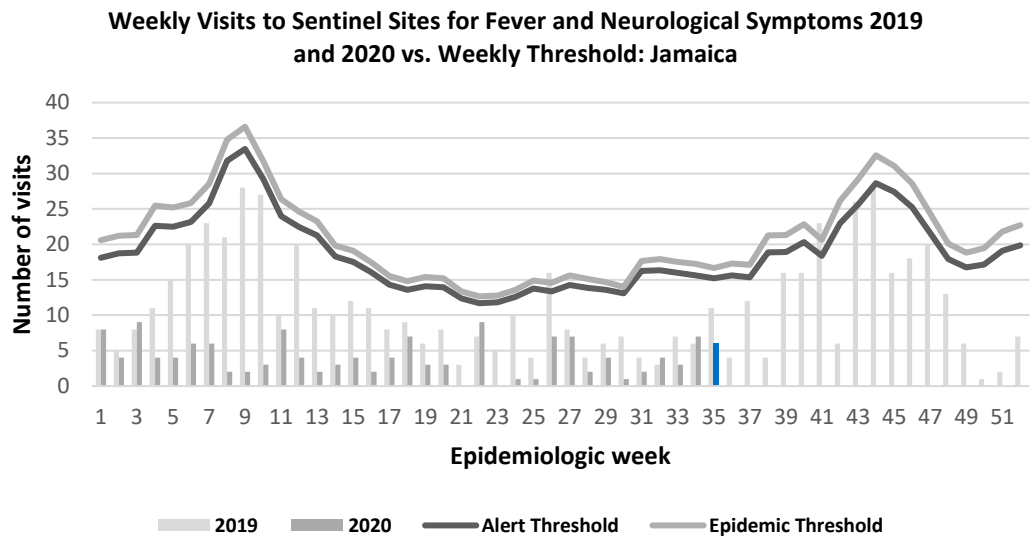
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

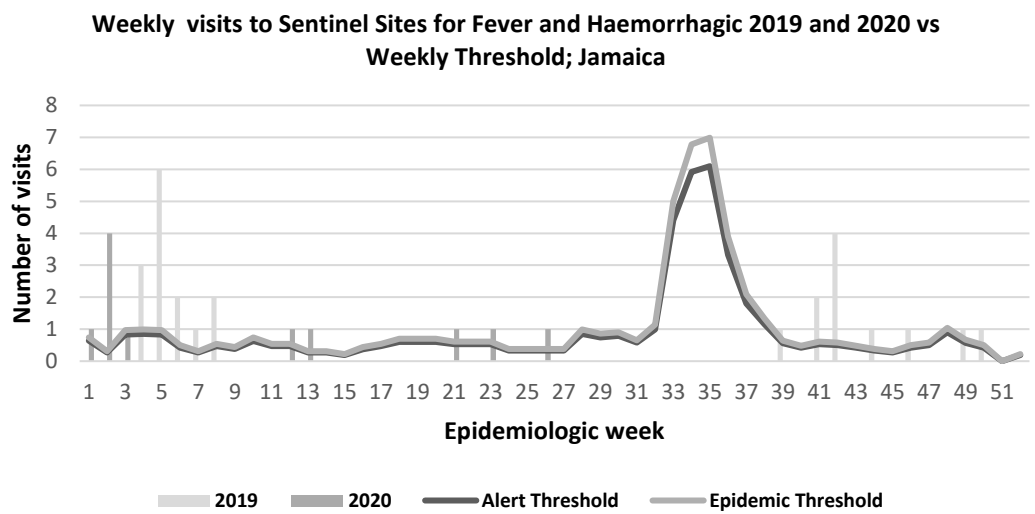
FEVER AND NEUROLOGICAL

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

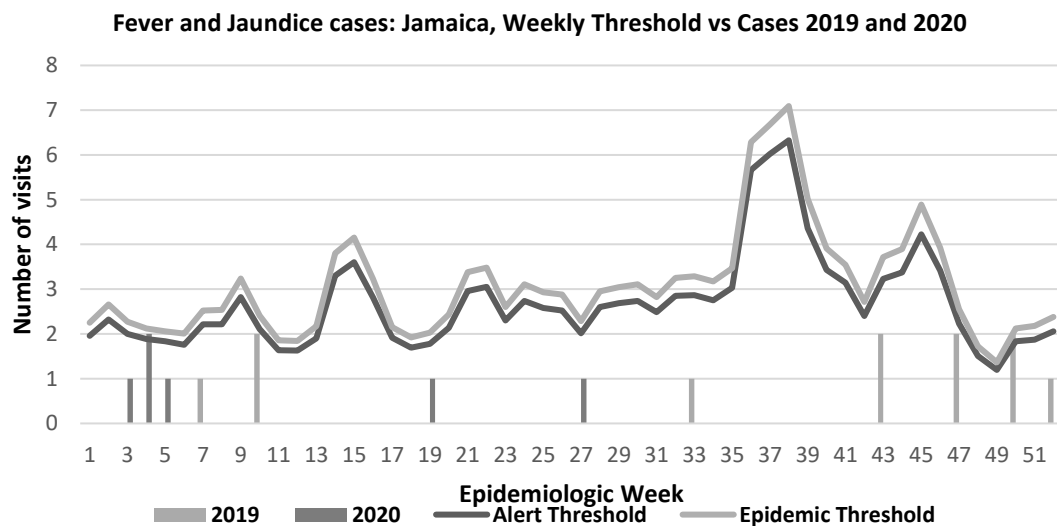
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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



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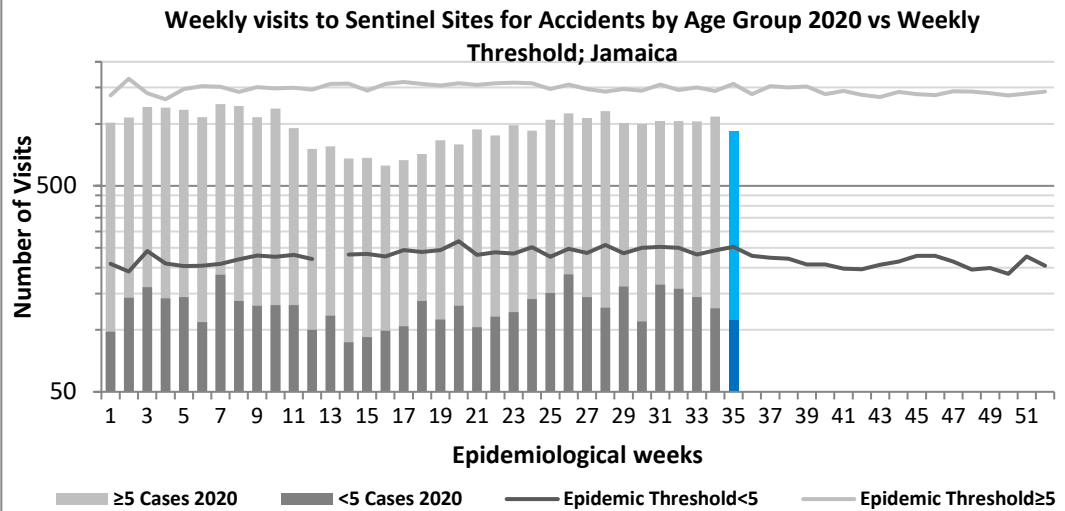
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

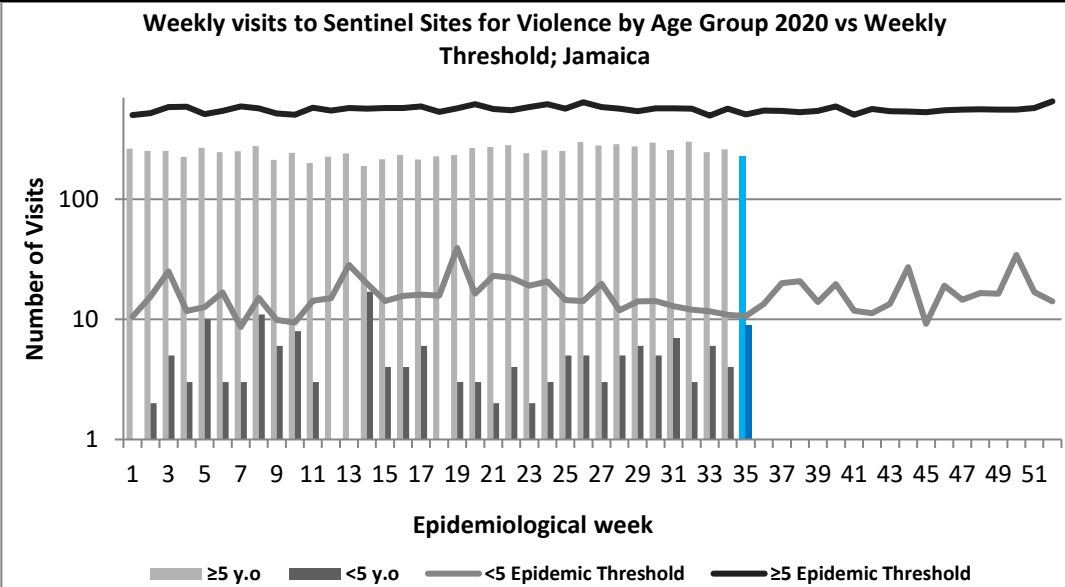
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



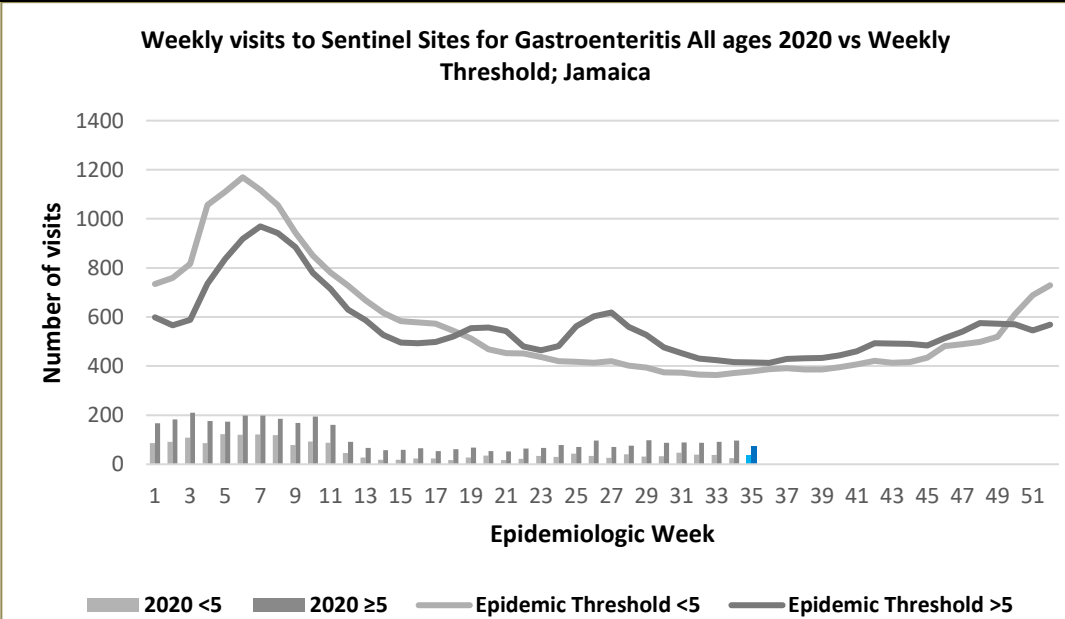
VIOLENCE

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




INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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CLASS ONE NOTIFIABLE EVENTS		Confirmed YTD		Comments	
	CLASS 1 EVENTS	CURRENT YEAR 2020	PREVIOUS YEAR 2019		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	5	48	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	17		
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 Rubella	0 0		0 0
	Maternal Deaths**		29		44
	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	

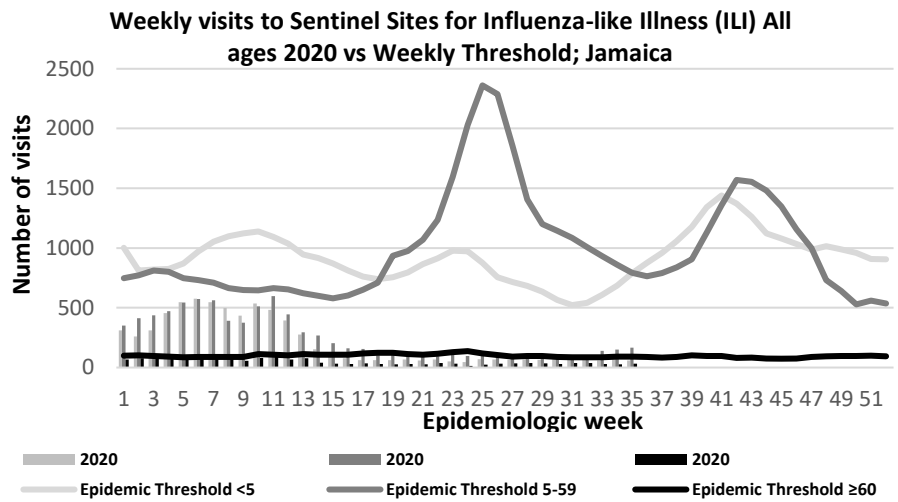
 <p>5 NOTIFICATIONS- All clinical sites</p>	 <p>INVESTIGATION REPORTS- Detailed Follow up for all Class One Events</p>	 <p>HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued</p>	 <p>SENTINEL REPORT- 78 sites. Automatic reporting</p>
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NATIONAL SURVEILLANCE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

EW 35

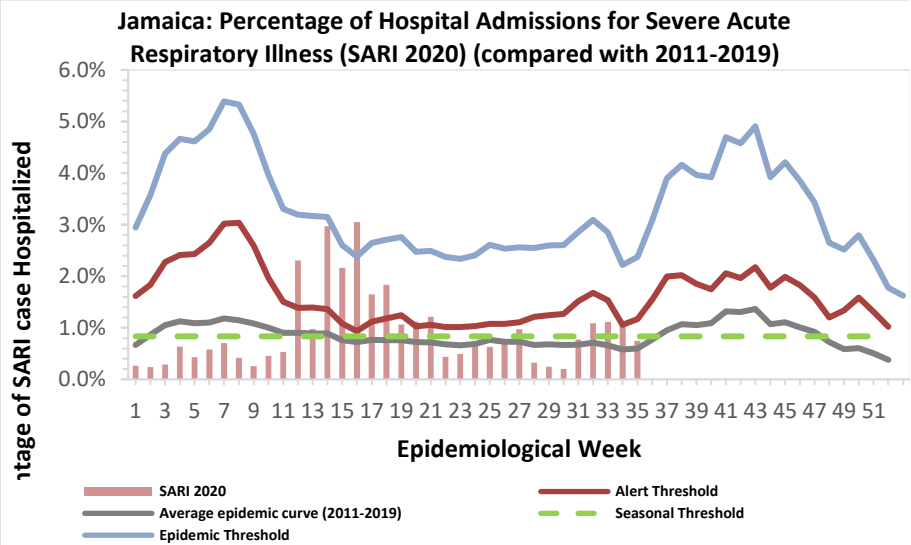
August 23, 2020 - August 29, 2020 Epidemiological Week 35

	<i>EW 35</i>	<i>YTD</i>
SARI cases	10	420
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



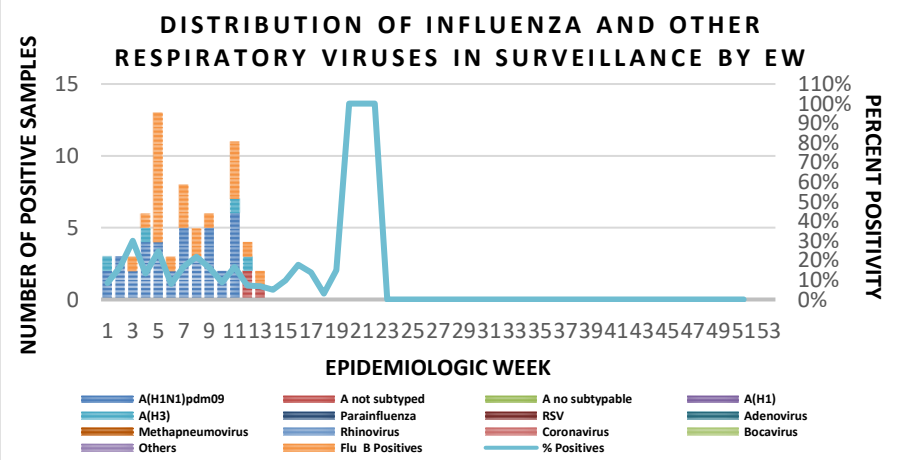
Epi Week Summary

During EW 35, 10 (ten) SARI admissions were reported.



Caribbean Update EW 35

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

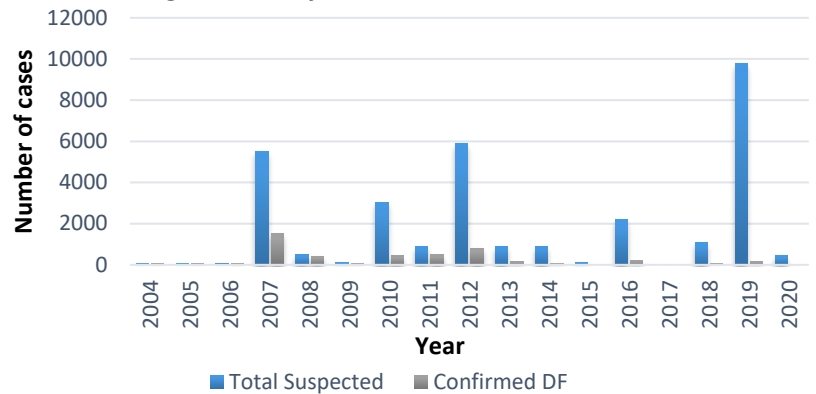
Dengue Bulletin

August 23, 2020 - August 29, 2020 Epidemiological Week 35

Epidemiological Week 35

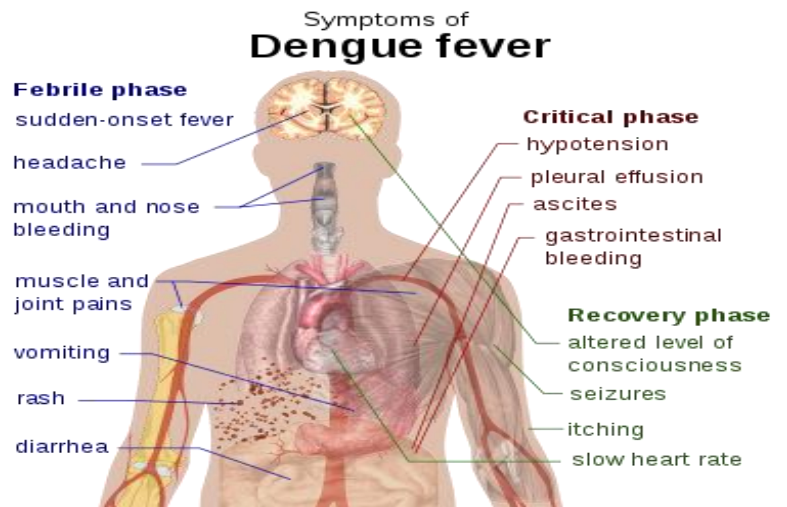


Dengue Cases by Year: 2004-2020, Jamaica



Reported suspected and confirmed dengue with symptom onset in week 35 of 2020

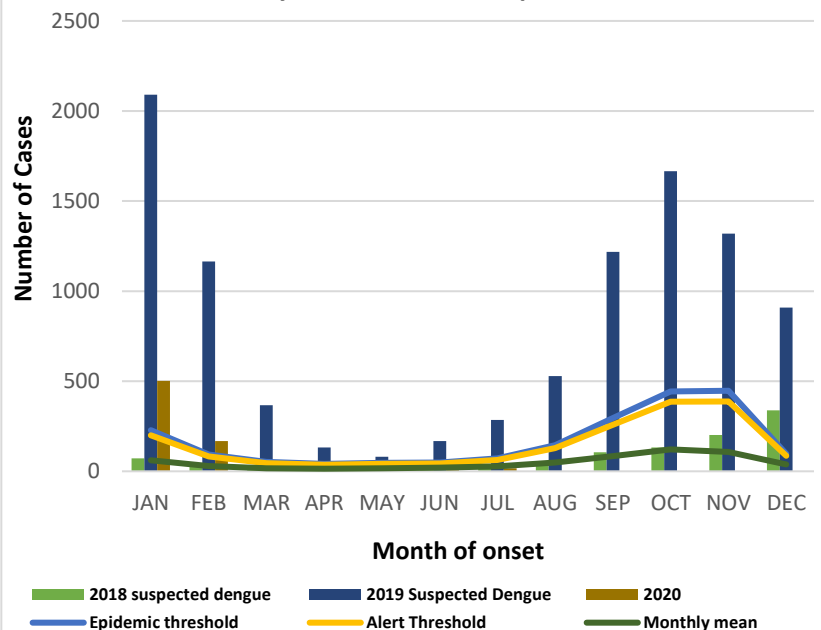
	2020	
	EW 35	YTD
Total Suspected Dengue Cases	0**	747**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**



Points to note:

- ** figure as at September 9 , 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

RESEARCH PAPER

Abstract

Knowledge and Practice Related to Lifestyle Among Adults with Diabetes and Hypertension

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Aim: To determine the level of knowledge and assess the lifestyle practices of adult patients with Diabetes and/or Hypertension attending the primary health care clinics in Jamaica.

Background: Diabetes and Hypertension are among the leading causes of preventable morbidity and related disability worldwide. The shift in disease burden from infectious diseases to non-communicable diseases has been attributed to dietary and physical activity changes.

Method: In this cross-sectional study using 150 randomly selected adults from primary health care centres in seven parishes of Jamaica. A 69-item interviewer-administered questionnaire was used. The questions measured knowledge and lifestyle practices related to diet, smoking, exercise and alcohol consumption.

Results: The majority (%) of the sample was female (76%) and most persons were within the age group of 56 years or over (68.6%). The mean knowledge score of exercise was 4.7 (SD 1.2) with a score range of 1 to 6. No statistical differences presented in mean knowledge of exercise by socioeconomic and demographic characteristics. Nine of the ten questions assessing knowledge of diet were answered correctly by the majority (50.7% - 93.3%).

The mean knowledge score for alcohol consumption and smoking was 5.5 (SD 0.9) and 2.9 (SD 0.3), respectively. Just over a half (52.3%) of the sample reported exercising (52.3%) and consuming sugar-sweetened beverages (53%). Very little reported drinking alcohol in the last three months (10.7%) and a minority (4.7%) of the sample reported that they are currently smoking.

Conclusion: Mean knowledge scores for exercise, alcohol consumption and smoking were relatively high, while lifestyle practices among participants was relatively low. We recommend further research to assess the facilitators and barriers to adopting lifestyle changes among Jamaican adults.

Keywords: Knowledge, Lifestyle, Practice, Diabetes, Hypertension



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8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
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