

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA



Chagas disease (American trypanosomiasis)



Key facts

- About 6 million to 7 million people worldwide, mostly in Latin America, are estimated to be infected with *Trypanosoma cruzi*, the parasite that causes Chagas disease.
- Vector-borne transmission occurs in the Americas. The insect vector is a triatomine bug that carries *Trypanosoma cruzi* which causes the disease.
- Chagas disease was once entirely confined to the Region of the Americas – principally Latin America – but in the last decades has spread to other continents.
- *Trypanosoma cruzi* infection is curable if treatment is initiated soon after infection.
- In the chronic phase, antiparasitic treatment can also prevent or curb disease progression.
- Up to 30% of chronically infected people develop cardiac alterations and up to 10% develop digestive, neurological or mixed alterations which may require specific treatment.
- Vector control is the most useful method to prevent Chagas disease in Latin America.
- Blood screening is vital to prevent infection through transfusion and organ transplantation.
- Screening of newborns of infected mothers without previous antiparasitic treatment, together with their siblings, is essential.



Chagas disease, also known as American trypanosomiasis, is a potentially life-threatening illness caused by the protozoan parasite *Trypanosoma cruzi* (T. cruzi). About 6 million to 7 million people worldwide are estimated to be infected with *Trypanosoma cruzi*, the parasite that causes Chagas disease. Chagas disease is found mainly in endemic areas of 21 continental Latin American countries (1), where it is mostly vector-borne transmitted to humans by contact with faeces or urine of triatomine bugs, known as 'kissing bugs', among many other popular names, depending on the geographical area.

The medical care cost of patients with chronic cardiac, digestive, neurologic or mixed forms of the disease has been calculated to be >80% higher than the cost of spraying residual insecticide to control vectors and prevent infection.

Chagas disease is named after Carlos Ribeiro Justiniano Chagas, a Brazilian physician and researcher who discovered the disease in 1909.

Distribution

Chagas disease occurs principally in the continental part of Latin America, and not in the Caribbean isles. In the past decades, however, it has been increasingly detected in the United States of America, Canada, and many European and some Western Pacific countries. This is due mainly to population mobility between Latin America and the rest of the world.

Downloaded from: [https://www.who.int/news-room/fact-sheets/detail/chagas-disease-\(american-trypanosomiasis\)](https://www.who.int/news-room/fact-sheets/detail/chagas-disease-(american-trypanosomiasis))

EPI WEEK 32

SYNDROMES

PAGE 2



CLASS 1 DISEASES

PAGE 4



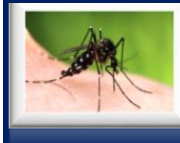
INFLUENZA

PAGE 5



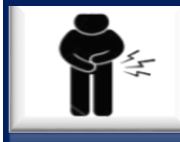
DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8



SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



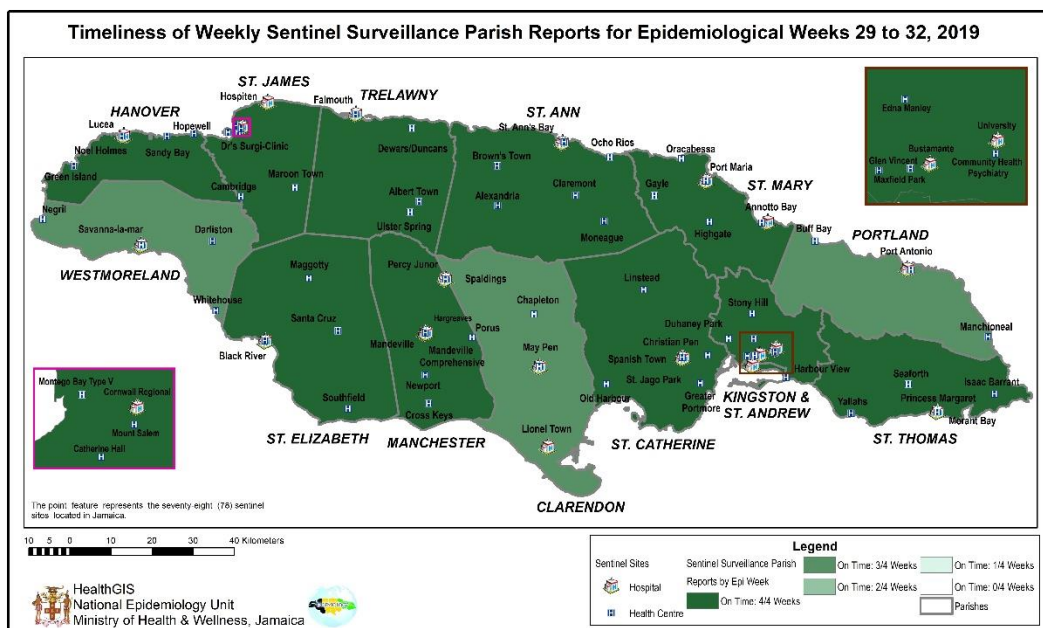
A syndromic surveillance system is good for early detection of and response to public health events.

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 - Weeks 29 to 32

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

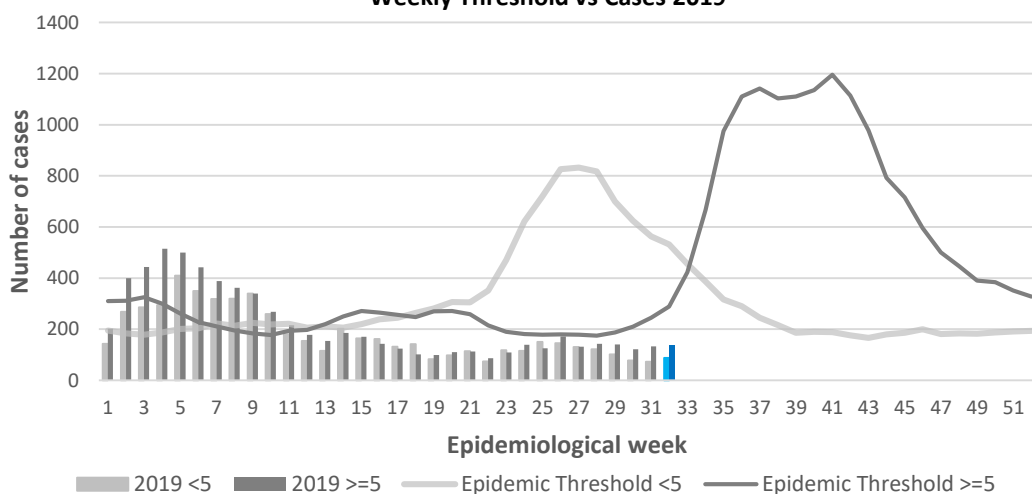
FEVER

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 2019



2 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



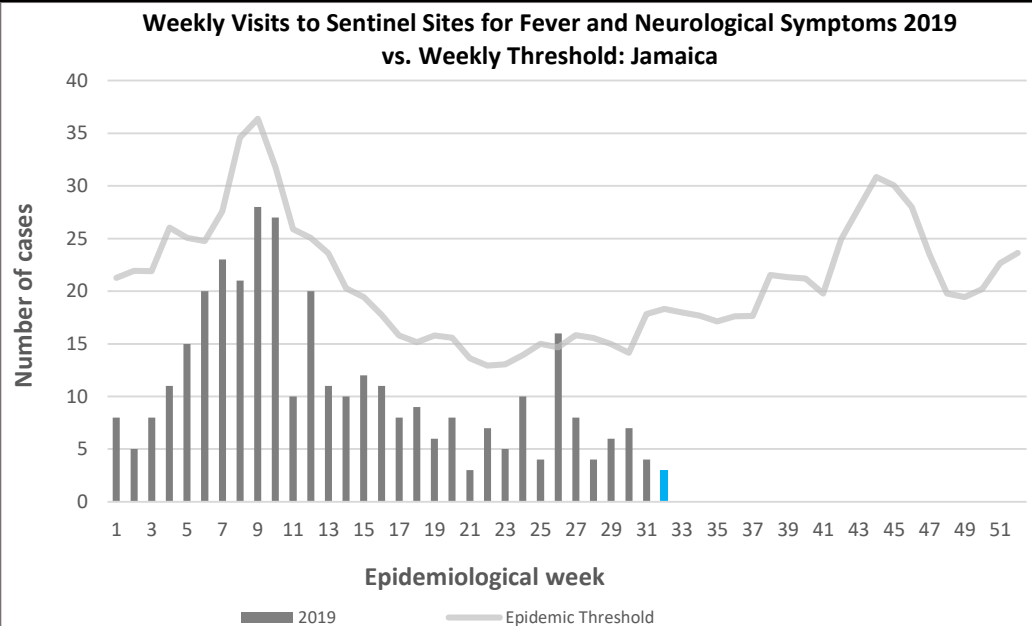
HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



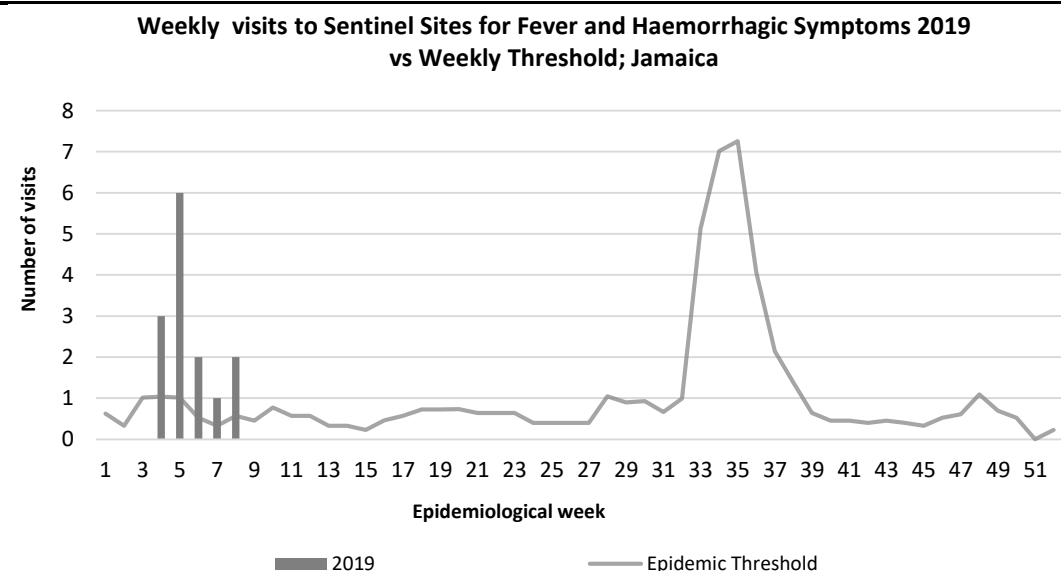
SENTINEL
REPORT- 78 sites.
Automatic reporting

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).

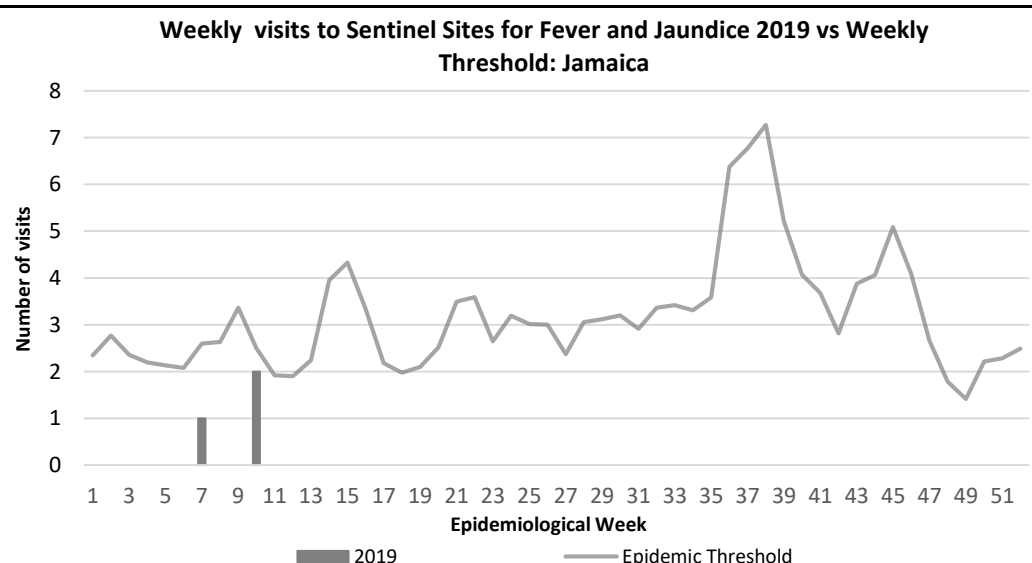
**FEVER AND HAEMORRHAGIC**

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. Visits for Fever and Haemorrhagic symptoms were reported in weeks 4 to 8 only, year to date.

**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. Visits to sentinel sites for Fever and Jaundice were reported in weeks 7 and 10 only, year to date.



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-
30 sites. Actively pursued



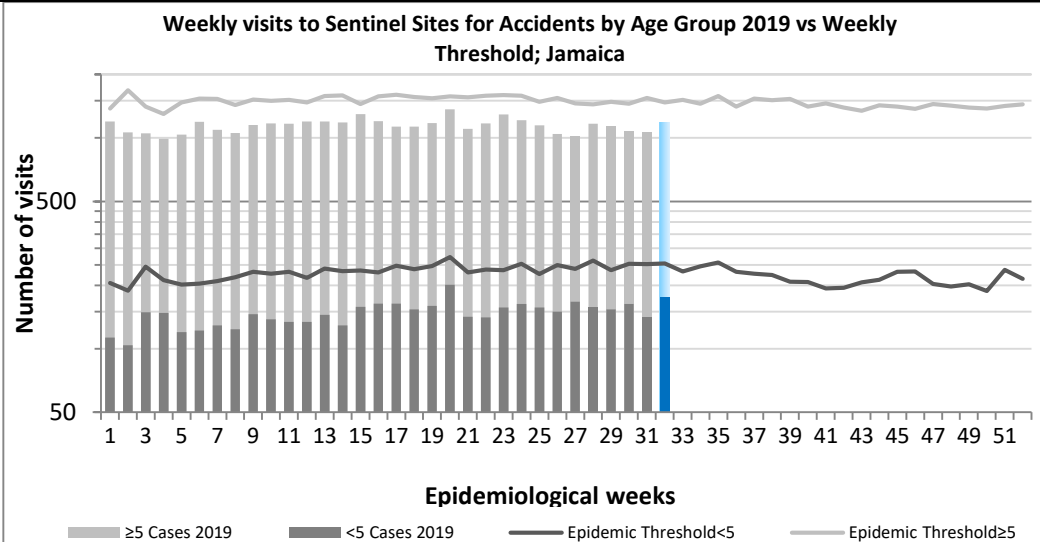
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

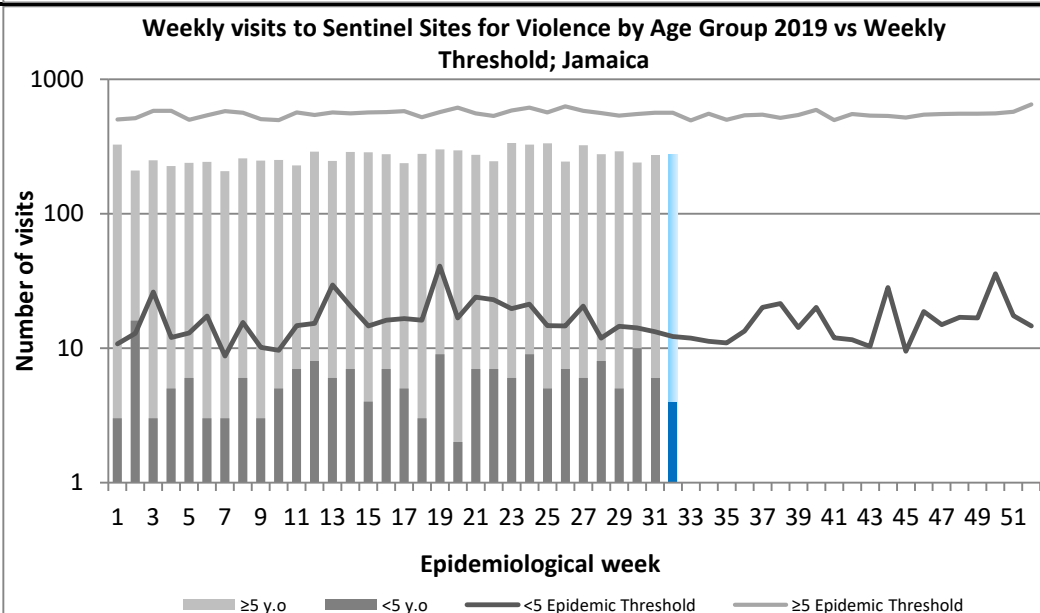
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

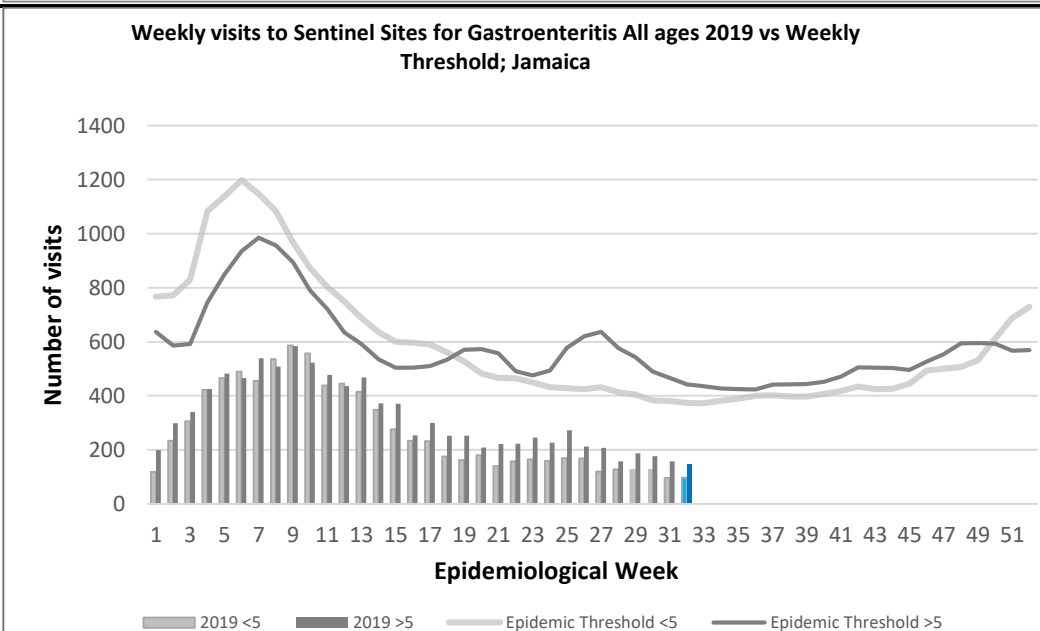
VARIATIONS OF BLUE SHOW CURRENT WEEK

**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
			Confirmed YTD		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.
	CLASS 1 EVENTS		CURRENT YEAR	PREVIOUS YEAR	
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning		29	139	
	Cholera		0	0	
	Dengue Hemorrhagic Fever*		NA	NA	
	Hansen’s Disease (Leprosy)		0	0	
	Hepatitis B		11	24	
	Hepatitis C		2	2	
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	2	
	Meningitis (Clinically confirmed)		15	37	
EXOTIC/ UNUSUAL	Plague		0	0	* Dengue Hemorrhagic Fever data include Dengue related deaths;
HIGH MORBIDIT/ MORTALITY	Meningococcal Meningitis		0	0	
	Neonatal Tetanus		0	0	
	Typhoid Fever		0	0	
	Meningitis H/Flu		0	0	
SPECIAL PROGRAMMES	AFP/Polio		0	0	** Figures include all deaths associated with pregnancy reported for the period. *** 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**		38	44	
	Ophthalmia Neonatorum		116	196	
	Pertussis-like syndrome		0	0	
	Rheumatic Fever		0	0	
	Tetanus		0	0	
	Tuberculosis		30	34	
	Yellow Fever		0	0	
	Chikungunya ***		0	0	
	Zika Virus ****		0	0	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

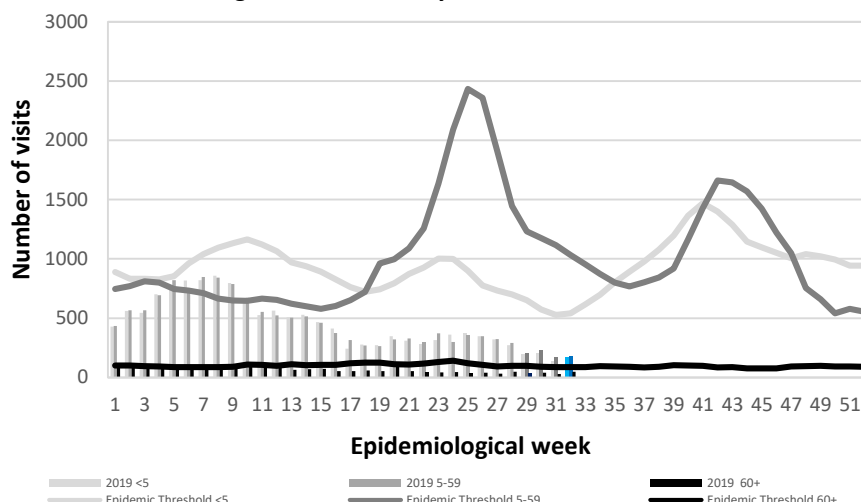
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 32

August 4 – August 10, 2019 Epidemiological Week 32

	EW 32	YTD
SARI cases	2	351
Total Influenza positive Samples	1	366
Influenza A	1	324
H3N2	0	86
H1N1pdm09	0	225
Not subtyped	1	10
Influenza B	0	42
Parainfluenza	0	5

Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All ages 2019 vs Weekly Threshold; Jamaica



Epi Week Summary

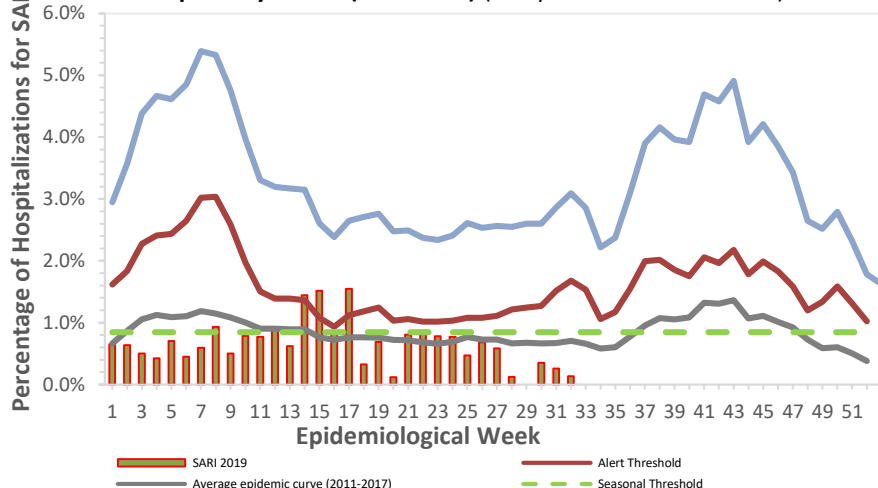
During EW 32, 1 case of influenza was detected. Percent positivity remained low.

During EW 32, 2 SARI admissions were reported.

Regional Update EW32

Caribbean: Influenza and SARI activity were low and continue to decrease in the sub-region. RSV activity was increased in Cuba and the Dominican Republic

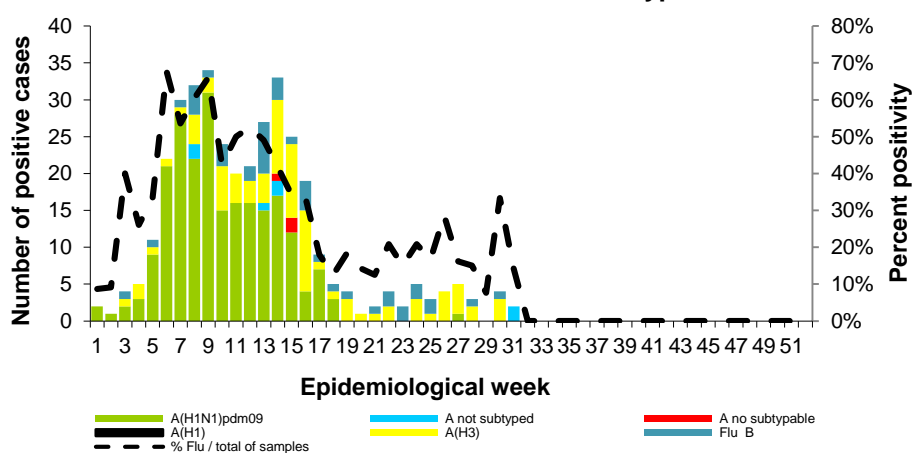
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



Global Update EW32

In the temperate zones of the southern hemisphere, influenza activity appeared to have peaked in most countries. In tropical Africa, influenza activity was low across reporting countries, except for a few countries in Eastern Africa. In Southern Asia, influenza activity was low across reporting countries. In South East Asia, influenza activity was decreasing or low across reporting countries except in Myanmar. In the temperate zone of the northern hemisphere, influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for most detections.

Distribution of influenza and subtype



6 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



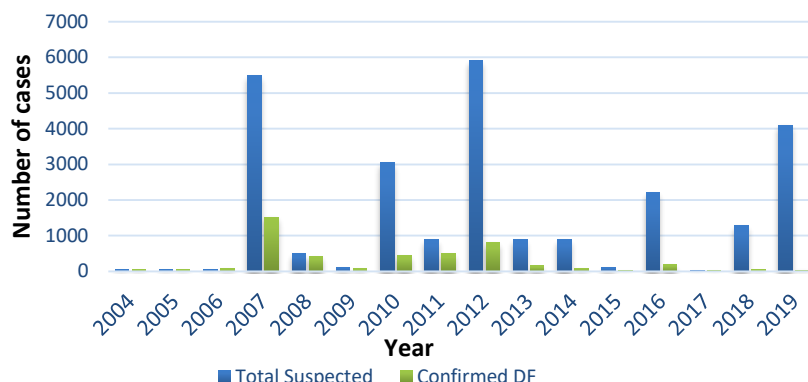
SENTINEL
REPORT- 78 sites.
Automatic reporting

Dengue Bulletin

August 4 – August 10, 2019 Epidemiological Week 32 Epidemiological Week 32



Dengue Cases by Year: 2004-2019, Jamaica



Reported suspected and confirmed dengue with symptom onset in weeks 1-32, 2019

		2019		2018 YTD
		EW 32	YTD	
Total Suspected Dengue Cases		16	4103	175
Lab Confirmed Dengue cases		0	32	1
CONFIRMED	Dengue Related Deaths	0	5	0

Symptoms of Dengue fever

Febrile phase

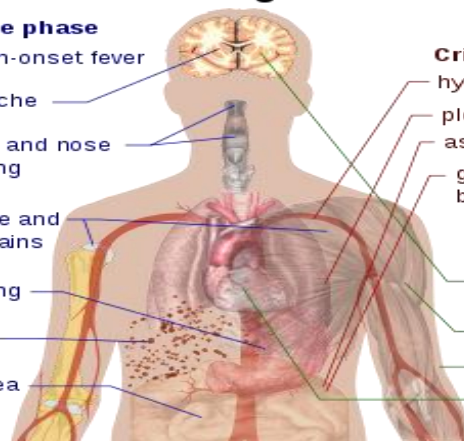
sudden-onset fever
headache
mouth and nose bleeding
muscle and joint pains
vomiting
rash
diarrhea

Critical phase

hypotension
pleural effusion
ascites
gastrointestinal bleeding

Recovery phase

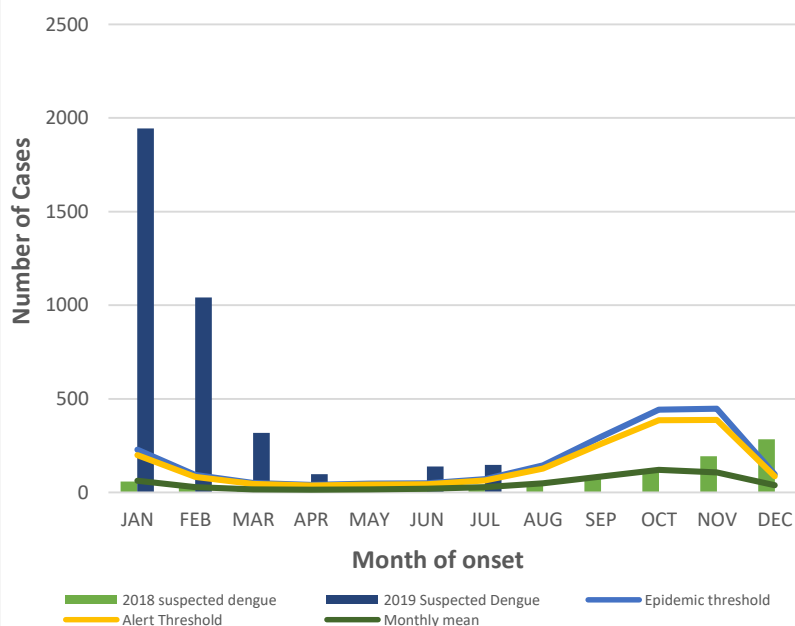
altered level of consciousness
seizures
itching
slow heart rate



Points to note:

- 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



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



SENTINEL
REPORT- 78 sites.
Automatic reporting

RESEARCH PAPER

Working Women and Household Fast-food Consumption

Author: Elroy Galbraith (BSc. Hons, MSc.)

Institution: Consumer Affairs Commission

Corresponding Author: Elroy Galbraith (BSc. Hons, MSc.)

Email: elroy.galbraith@gmail.com

Abstract

Objectives:

This study examined how the participation of married women in the workforce affected household consumption of food away from home (FAFH) in Jamaica. The main hypothesis was that there was a positive relationship between hours worked by married females and household consumption of FAFH.

Method:

This study employed a backward step logistic regression on data collected during the 2012 Jamaica Survey of Living Conditions. Data came from households in which the female was in a married or common-law relationship with another household member. The predictors included employment data for both the husband and wife; household size, composition, economy and location; as well as the status of the female in the household. The outcome variable was a dummy variable indicating the decision to consume any meal away from home (breakfast, lunch or dinner).

Results:

Participation of the wife in the workforce significantly affected the household consumption of FAFH. The longer the wife worked outside the home the more likely it was for the household to purchase and consume FAFH. The most important predictor was the economy of the household, while the age and status of the female and household size were also significant.

Conclusion:

Participation of married females in the workforce increased household consumption of FAFH, even when controlling for various characteristics of the household. Traditional household divisions of labour along gender lines persist in the developing country, and could possibly pose a threat to nutrition and well-being.



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



8 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