

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

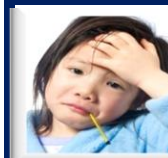
EPI WEEK 23

Vector-Borne Diseases Series 6 of 10: Zika Virus Disease

Overview: Zika virus is primarily transmitted by the bite of an infected mosquito from the Aedes genus, mainly Aedes aegypti, in tropical and subtropical regions. Aedes mosquitoes usually bite during the day, peaking during early morning and late afternoon/evening. This is the same mosquito that transmits dengue, chikungunya and yellow fever. Zika virus is also transmitted from mother to fetus during pregnancy, through sexual contact, transfusion of blood and blood products, and organ transplantation. In October 2015, Brazil reported an association between Zika virus infection and microcephaly. Outbreaks and evidence of transmission soon appeared throughout the Americas, Africa, and other regions of the world. To date, a total of 86 countries and territories have reported evidence of mosquito-transmitted Zika infection. No vaccine is yet available for the prevention or treatment of Zika virus infection. Development of a Zika vaccine remains an active area of research

Symptoms and Treatment: The incubation period (the time from exposure to symptoms) of Zika virus disease is estimated to be 3–14 days. The majority of people infected with Zika virus do not develop symptoms. Symptoms are generally mild including fever, rash, conjunctivitis, muscle and joint pain, malaise, and headache, and usually last for 2–7 days. Complications of Zika virus disease. Zika virus infection during pregnancy is a cause of microcephaly and other congenital abnormalities in the developing fetus and newborn. Zika infection in pregnancy also results in pregnancy complications such as fetal loss, stillbirth, and preterm birth. Zika virus infection is also a trigger of Guillain-Barré syndrome, neuropathy and myelitis, particularly in adults and older children. Research is ongoing to investigate the effects of Zika virus infection on pregnancy outcomes, strategies for prevention and control, and effects of infection on other neurological disorders in children and adults

Prevention and Control: Protection against mosquito bites during the day and early evening is a key measure to prevent Zika virus infection. Special attention should be given to prevention of mosquito bites among pregnant women, women of reproductive age, and young children. Personal protection measures include wearing clothing (preferably light-coloured) that covers as much of the body as possible; using physical barriers such as window screens and closed doors and windows; and applying insect repellent to skin or clothing that contains DEET, IR3535 or icaridin according to the product label instructions. Young children and pregnant women should sleep under mosquito nets if sleeping during the day or early evening. Travellers and those living in affected areas should take the same basic precautions described above to protect themselves from mosquito bites. Prevention of sexual transmission of Zika virus. Aedes mosquitoes breed in small collections of water around homes, schools, and work sites. It is important to eliminate these mosquito breeding sites, including: covering water storage containers, removing standing water in flower pots, and cleaning up trash and used tires. Community initiatives are essential to support local government and public health programs to reduce mosquito breeding sites. Health authorities may also advise use of larvicides and insecticides to reduce mosquito populations and disease spread.



SYNDROMES

PAGE 2



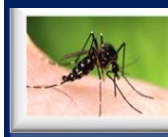
CLASS 1 DISEASES

PAGE 4



INFLUENZA

PAGE 5



DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

Beware of the virus Zika

What is Zika?
Zika virus is transmitted to people through the bite of an infected Aedes mosquito. This is the same mosquito that transmits dengue and chikungunya.

World Vision®
Por los niños

Zika symptoms:
Mild fever, Conjunctivitis, skin rash, Headache and muscle or joint pain.
Symptoms may appear from two to seven days after a mosquito bite.
1 of 4 people develop zika symptoms.
Few people have complications after becoming ill with zika.

Can it be prevented?
To avoid being bitten by mosquitoes that transmit the Zika virus, it is recommended:
Cover exposed skin with long-sleeved shirts, trousers, and hats.
Use repellents recommended by the health authorities (and apply them as indicated on the label).
Pregnant women should be protected as priority, receiving prenatal controls and accurate preventing information. In case of infection, they should receive close medical monitoring to detect signs of microcephaly or other disorders in the fetus and baby at birth.
Sleep under mosquito nets.
To avoid mosquito breeding, it is important to clean, empty, turn and cover any container that may retain water such as tires, buckets, or pots inside and outside the house.
How to help? Go to: www.worldvision.com/cuba/ja

which is the recommended treatment?
There is no vaccine or specific drug against Zika virus. You can only treat pain and fever.
Patients who have symptoms of Zika is recommended:
Rest in places protected by nets.
Drinking plenty of liquid, especially water.
treated with medication against fever and pain.
sleep covered with mosquito nets.
Wearing clothes that cover the limbs.
If symptoms persist or worsen with the appearance of other complications, consult a doctor immediately or go to the nearest health center.

HEA (Jamaica Health Authority) logo.
Source: Pan American Health Organization and World Health Organization.

SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



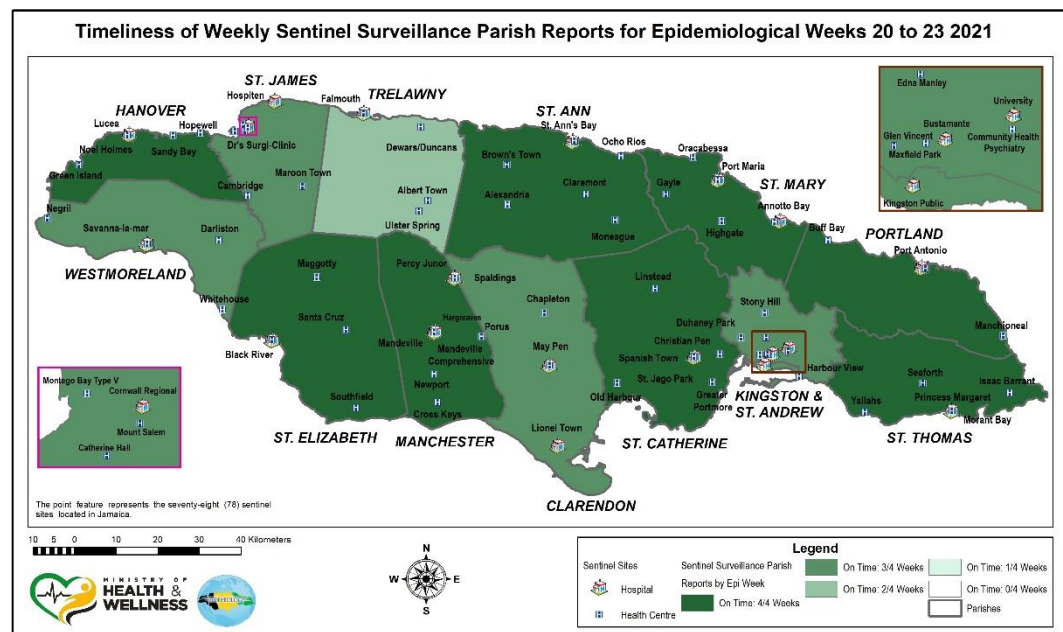
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 20 2021 to 23 of 2021

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

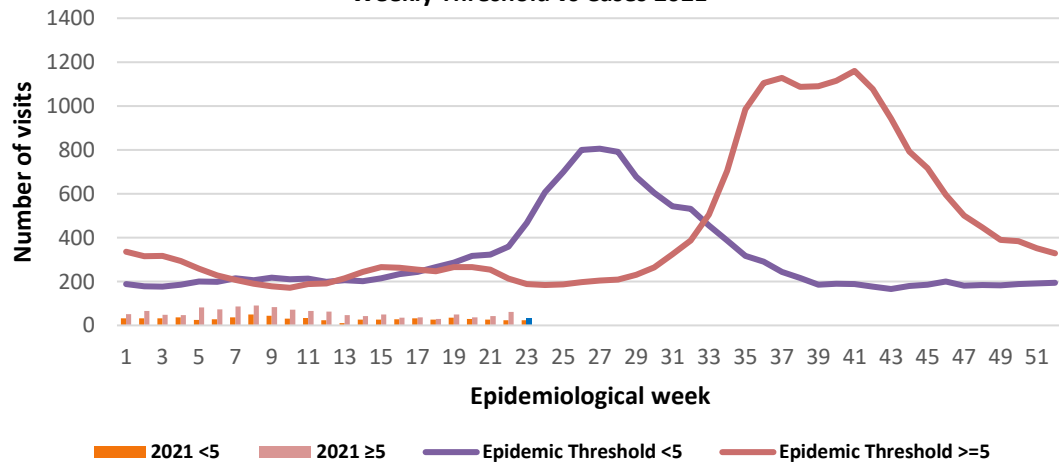
Temperature of >38°C /100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.



KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK

Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2021



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



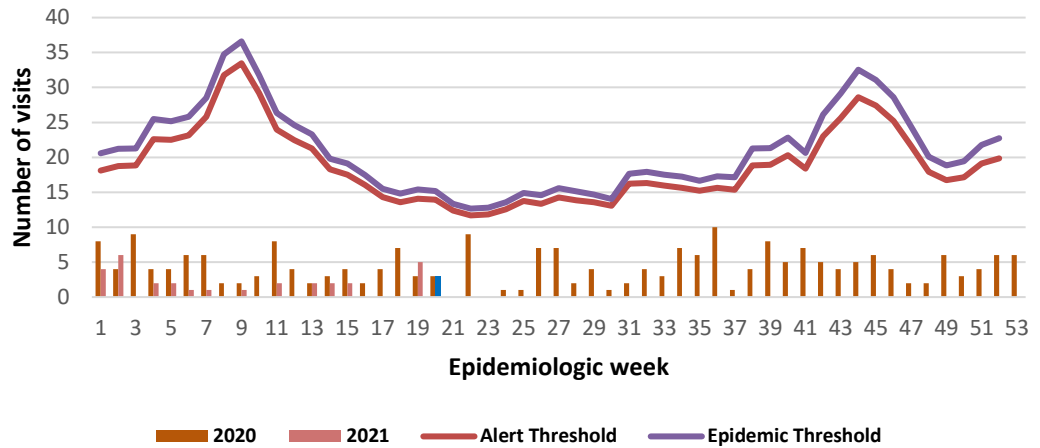
SENTINEL REPORT- 78 sites. Automatic reporting

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).



Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2020 and 2021 vs. Weekly Threshold: Jamaica

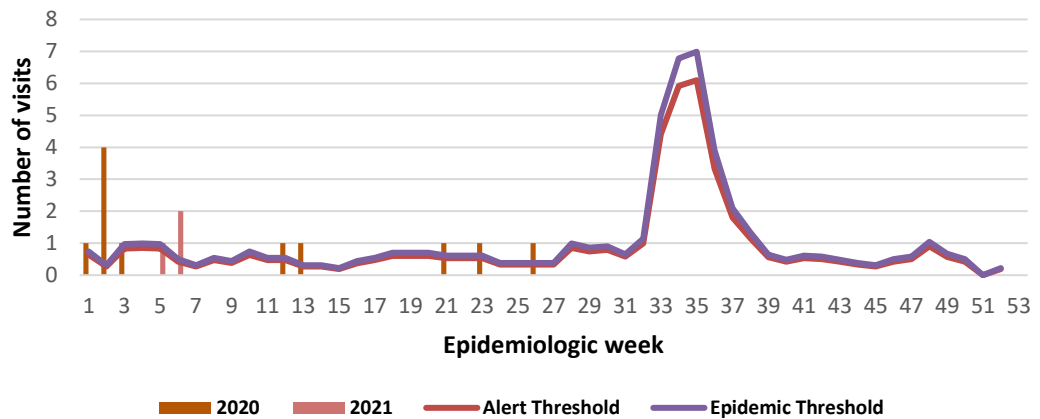


FEVER AND HAEMORRHAGIC

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.



Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2020 and 2021 vs Weekly Threshold; Jamaica



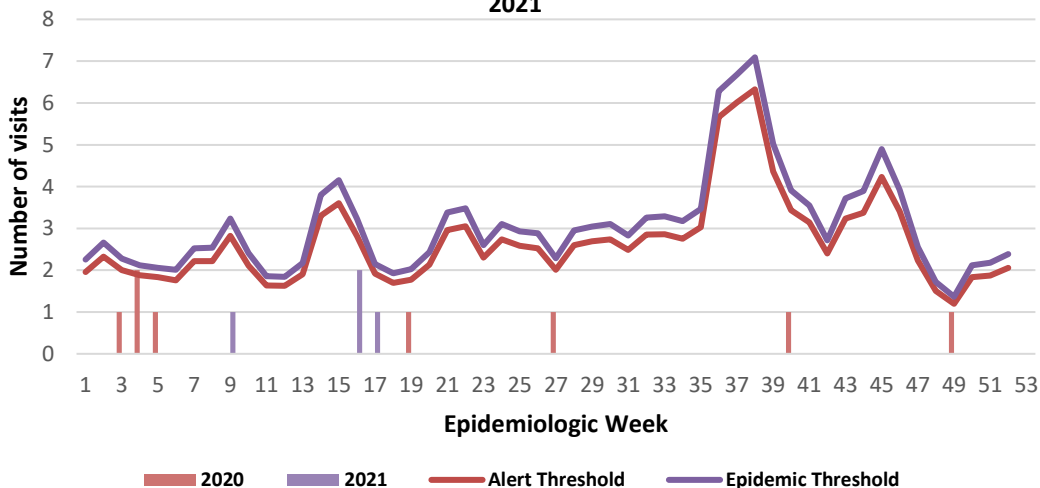
FEVER AND JAUNDICE

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.



Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2020 and 2021



3 NOTIFICATIONS-
All clinical sites



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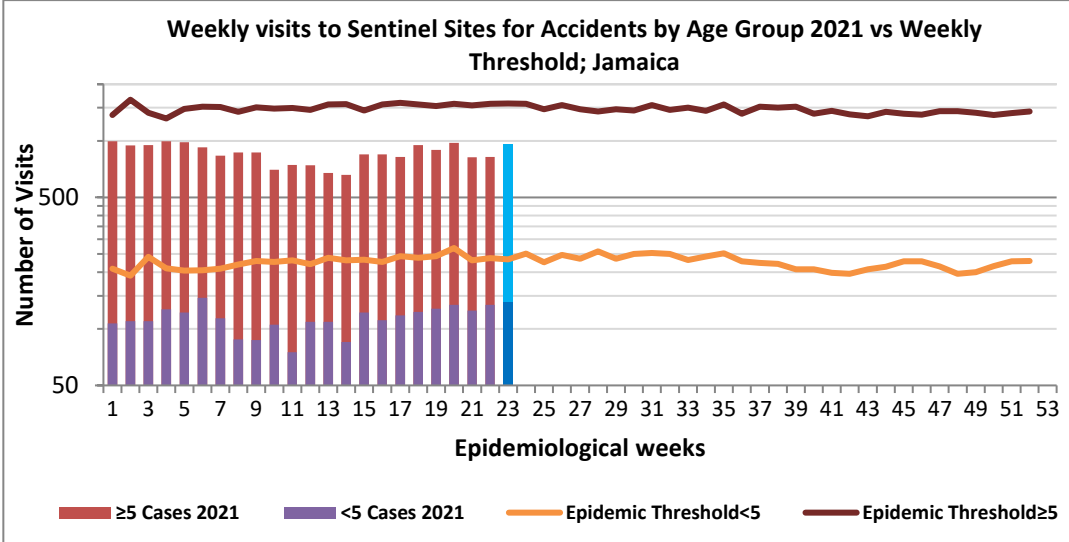
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

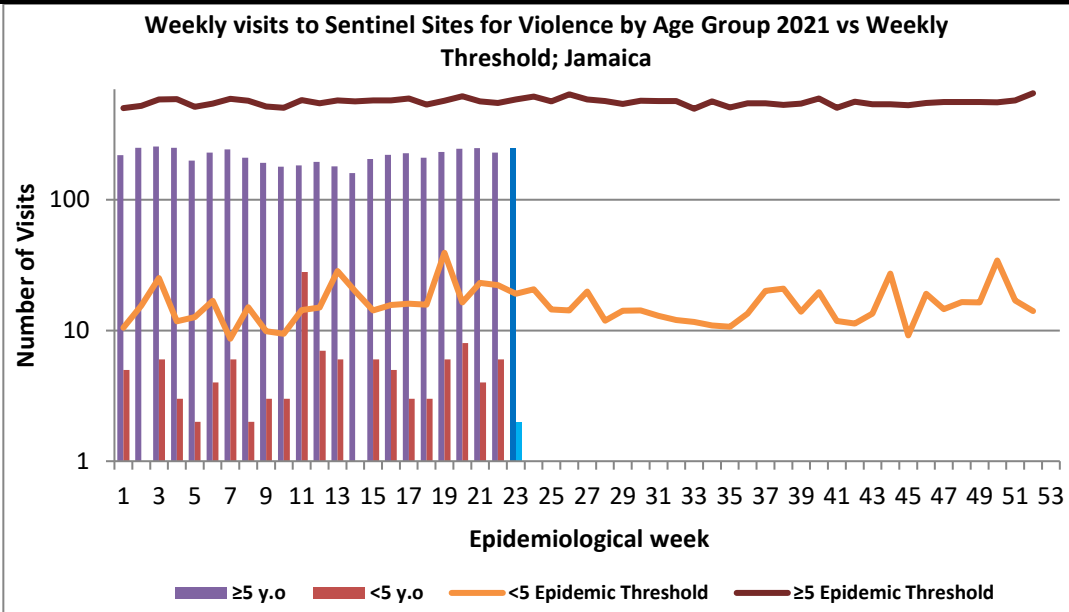
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



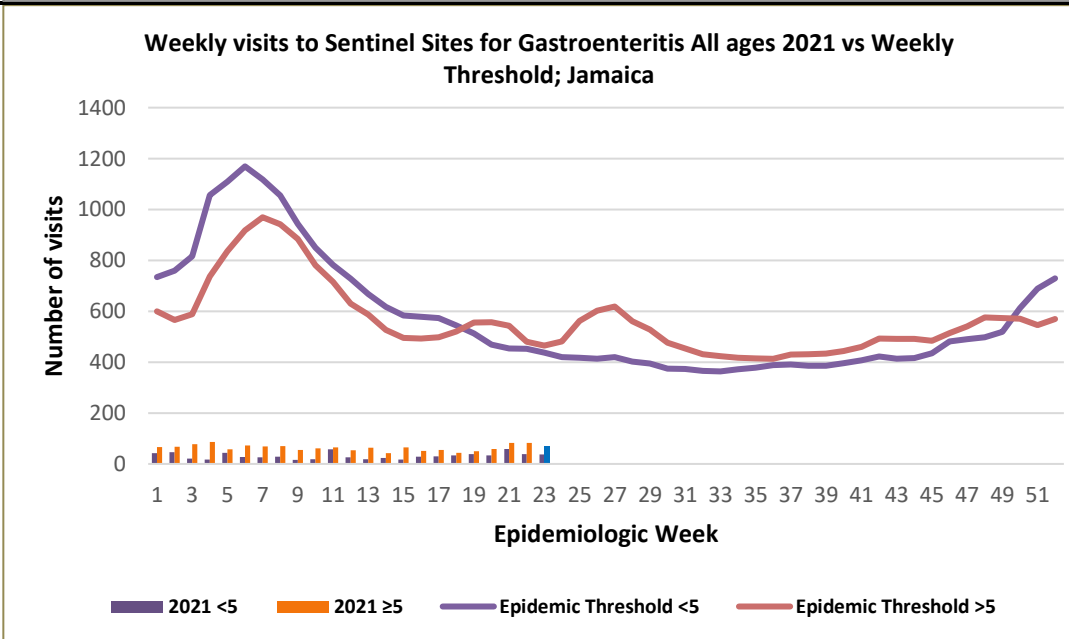
VIOLENCE

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 ^α		Comments	
	CLASS 1 EVENTS	CURRENT YEAR 2021	PREVIOUS YEAR 2020		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	20 ^β	65	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	2	3		
	Hepatitis C	0	0		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	0	1		
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	16	18		
	Ophthalmia Neonatorum	0	38		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
Tuberculosis	0	21			
Yellow Fever	0	0			
	Chikungunya ^ε	0	0		
	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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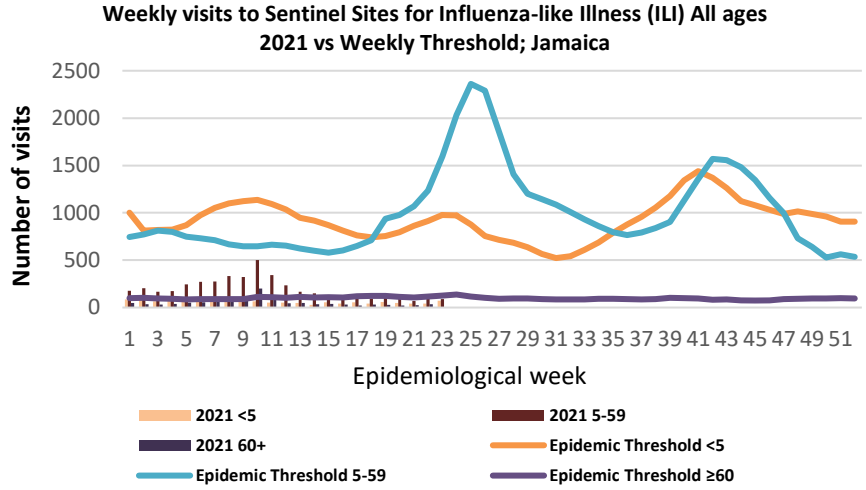
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 23

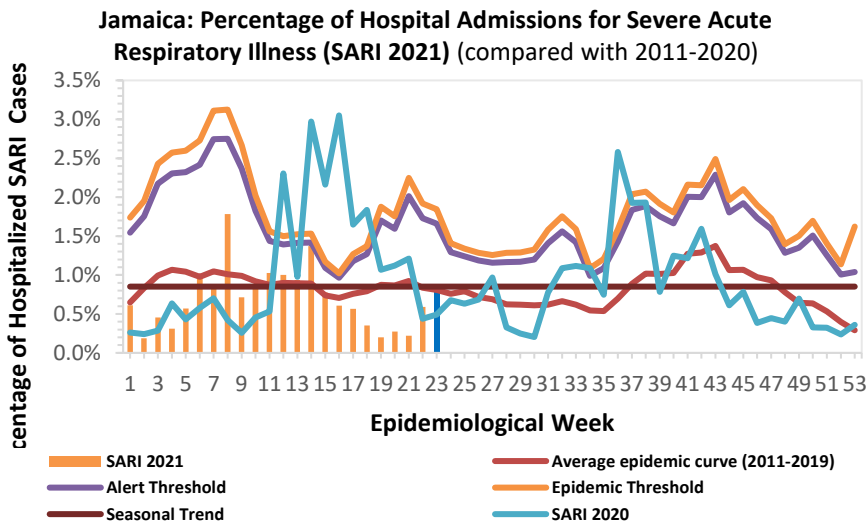
June 06, 2021 – June 12, 2021 Epidemiological Week 23

	EW 23	YTD
SARI cases	08	231
Total Influenza positive Samples	0	0
Influenza A	0	0
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0



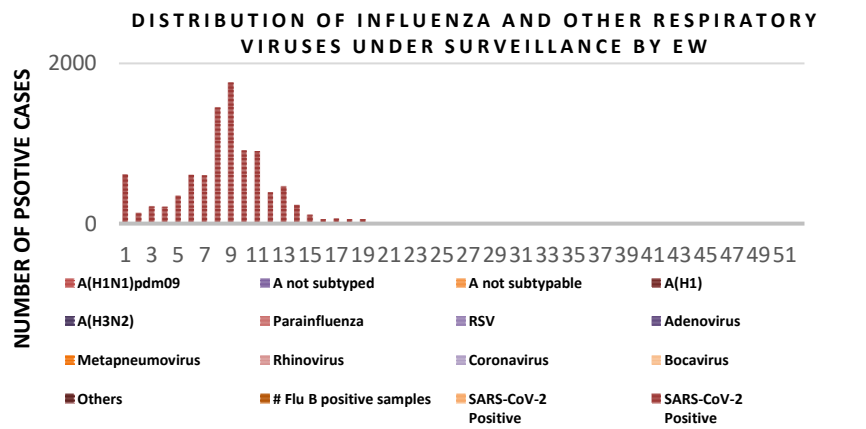
Epi Week Summary

During EW 23, 08 (eight) SARI admissions were reported.



Caribbean Update EW 23

Caribbean: Influenza activity remained low. In Belize, SARS-CoV-2 detections continue to increase, and activity remained moderated. In Haiti, SARS-CoV-2 activity continued elevated and increasing.



6 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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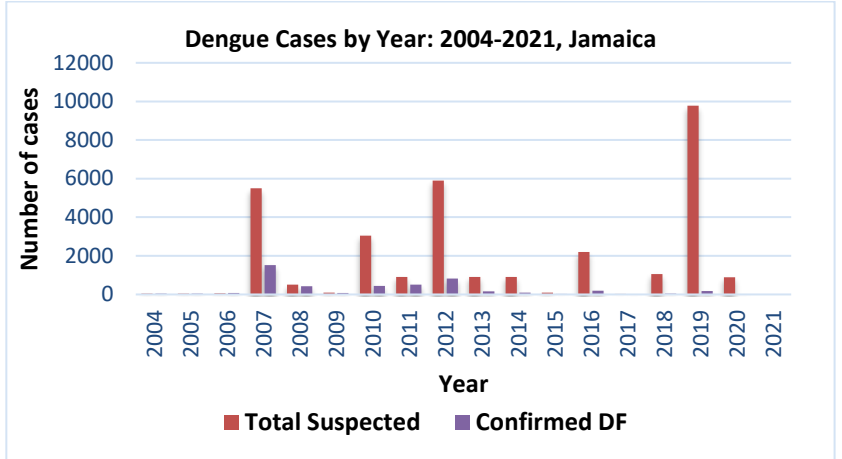


SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

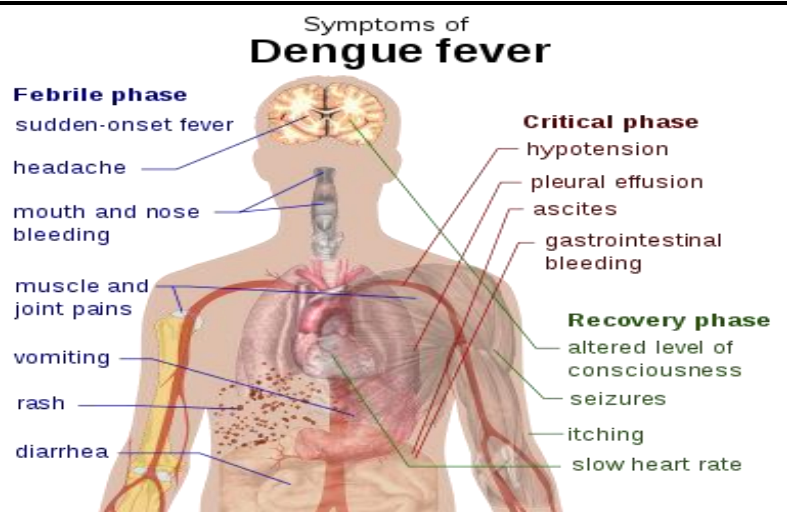
June 06, 2021 – June 12, 2021 Epidemiological Week 23

Epidemiological Week 23



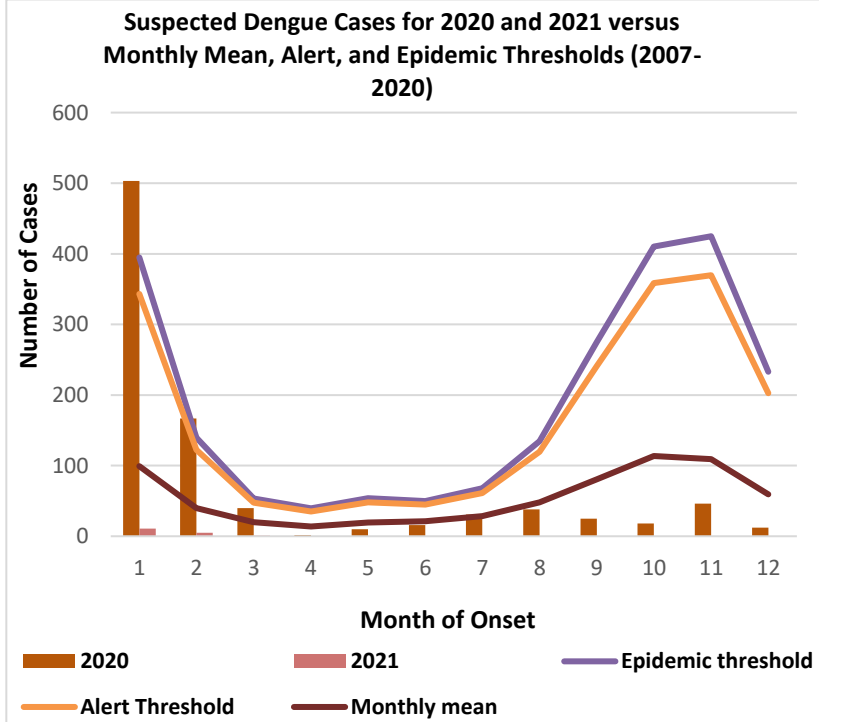
Reported suspected and confirmed dengue with symptom onset in week 23 of 2021

	2021*	
	EW 23	YTD
Total Suspected Dengue Cases	0	17
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at June 08, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



7 NOTIFICATIONS-
All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

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SENTINEL REPORT- 78 sites. Automatic reporting

RESEARCH PAPER

ABSTRACT

Ministry of Health & Wellness Annual National Health Research Conference 2019

Major Findings from Project JA Livity: Jamaica's first National Food Consumption Study (NFCS).

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College of Health Sciences, University of Technology, Jamaica

Objective: Jamaica's first NFCS measured wide issues impacting food choices among the free living population 18 years and over that have bearing on the nation's growing obesity problem. These factors include the kind of foods and drinks consumed and associated nutritional values. Reasons for food preferences were determined and a ratio between household earning and money spent on food was calculated. The findings were used to establish baselines for food choices and the micronutrient status of the Jamaican population.

Method: A multi-stage sample design was used to select the 295 Enumeration Districts (EDS) from the 5776 EDS in Jamaica according to the STATINJA 2011 census. Using systematic sampling, three households were selected in each of the 295 EDS producing a sample size of 885 households. Questionnaires were administered in face to face interviews. Researchers set out to collect 60 blood samples on a systematic basis.

Results: The NFCS found that staples were the highest food group consumed with the majority of households choosing bread and white rice daily. High fat foods were frequently consumed and sugary snacks and salty foods were eaten once daily. Jamaicans eat takeout/fast foods once daily such as chicken and chips, fish and chips and patty and cocoa bread. Five out of 10 respondents were overweight or obese while only 2.47% were so diagnosed. Persons chose foods based on "likes", cost, availability and lastly religion. Jamaican households spend an estimated 30% of earnings monthly on food.

Conclusion: The study unearthed several factors that contribute to Jamaica's burgeoning obesity problem.



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8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
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SENTINEL
REPORT- 78 sites.
Automatic reporting