

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Cervical Cancer



Worldwide, cervical cancer is the fourth most frequent cancer in women with an estimated 604 000 new cases in 2020. Of the estimated 342 000 deaths from cervical cancer in 2020, about 90% of these occur in low- and middle-income countries.

Screening

Cervical cancer screening involves testing for HPV infection to detect pre-cancer and cancer, followed by treatment as appropriate. Testing is done among women who have no symptoms and may feel perfectly healthy. When screening detects an HPV infection or pre-cancerous lesions, these can easily be treated and cancer can be avoided. Screening can also detect cancer at an early stage where treatment has a high potential for cure. Screening should start from 30 years of age in the general population of women, with regular screening with a validated HPV test every 5 to 10 years, and from 25 years of age for women living with HIV. Women living with HIV also need to be screened more frequently, every 3 to 5 years.

Symptoms of cervical cancer

Symptoms of early-stage cervical cancer may include:

- irregular blood spotting or light bleeding between periods in women of reproductive age;
- postmenopausal spotting or bleeding;
- bleeding after sexual intercourse; and
- increased vaginal discharge, sometimes foul smelling.

As cervical cancer advances, more severe symptoms may appear including:

- persistent back, leg or pelvic pain;
- weight loss, fatigue, loss of appetite;
- foul-smell discharge and vaginal discomfort; and
- swelling of a leg or both lower extremities.

<https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>

EPI WEEK 15



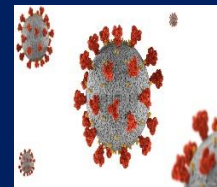
- Syndromic Surveillance
- Accidents
- Violence

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Class 1 Notifiable Events

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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.

Table showcasing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks - 12 to 15 of 2023

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

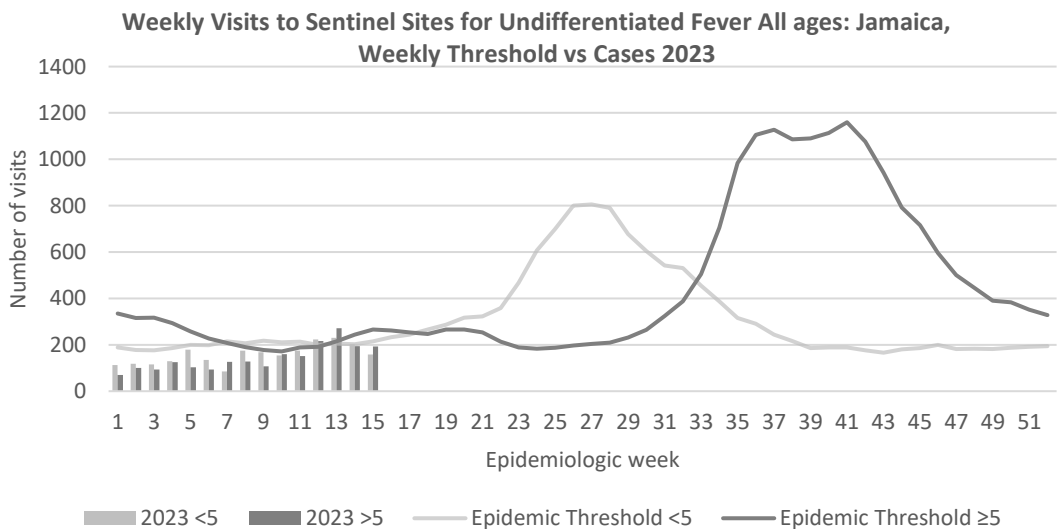
KEY:
Yellow - late submission on Tuesday
Red - late submission after Tuesday

Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
	2023												
12	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
13	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
14	On Time	On Time	late (w)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time
15	On Time	On Time	late (t)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED FEVER

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



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



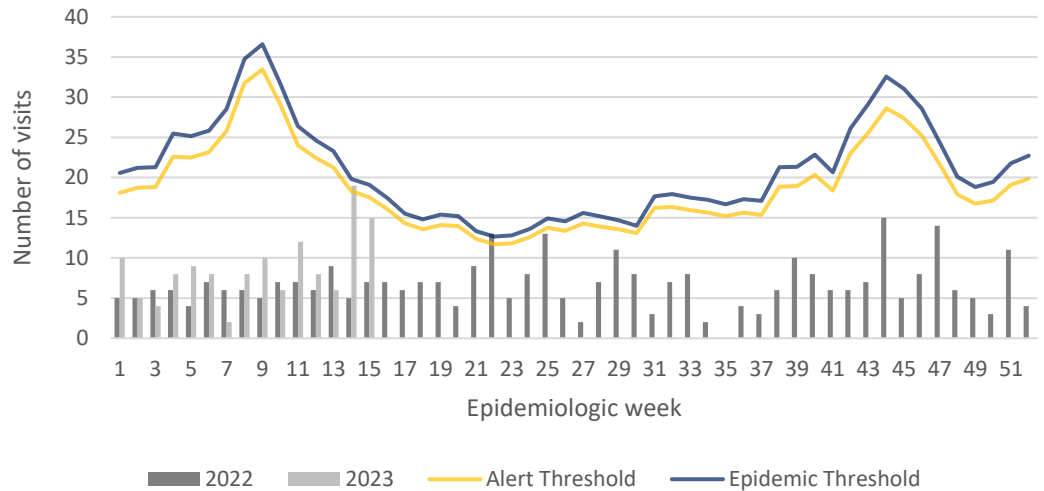
SENTINEL REPORT- 78 sites. Automatic reporting

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 2022 and 2023 vs. Weekly Threshold: Jamaica

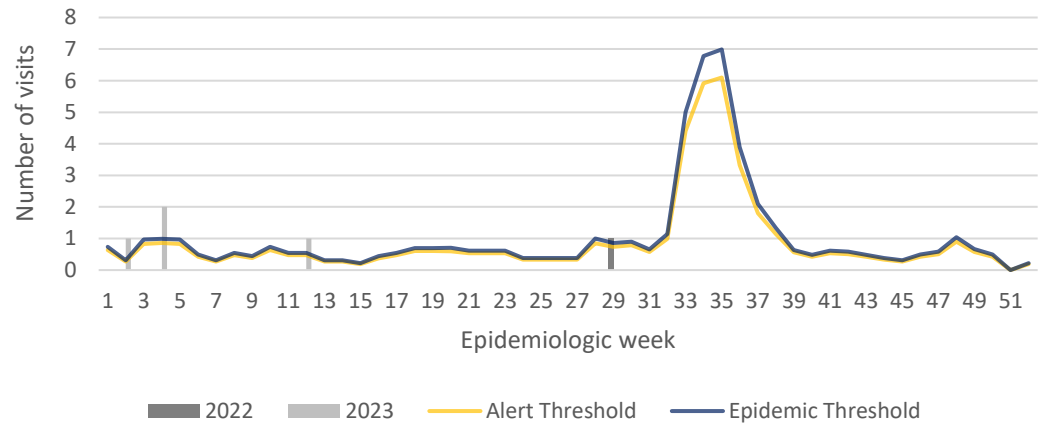


FEVER AND HAEMORRHAGIC

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 2022 and 2023 vs Weekly Threshold; Jamaica



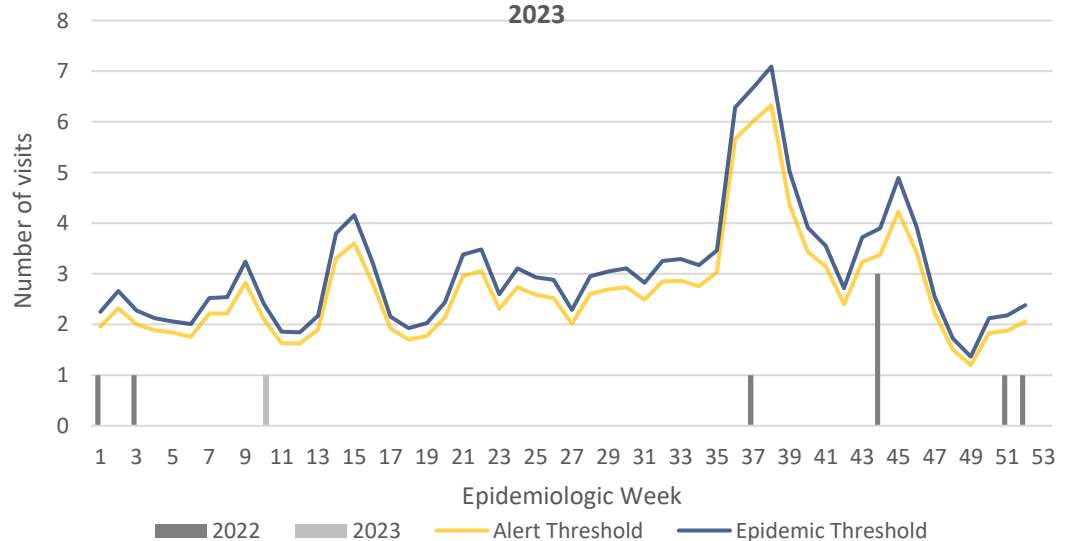
FEVER AND JAUNDICE

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 2022 and 2023



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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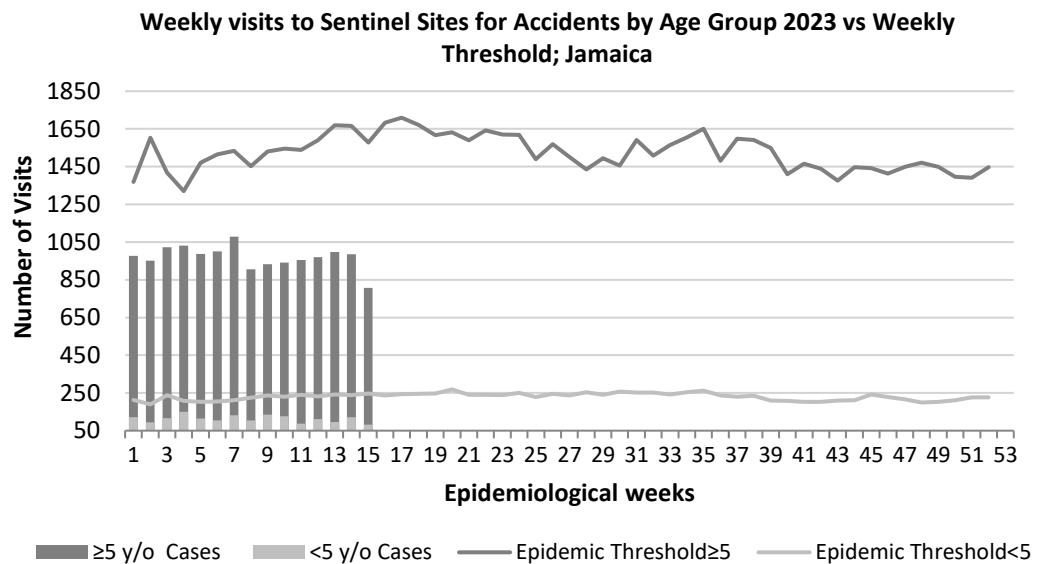


SENTINEL REPORT- 78 sites. Automatic reporting



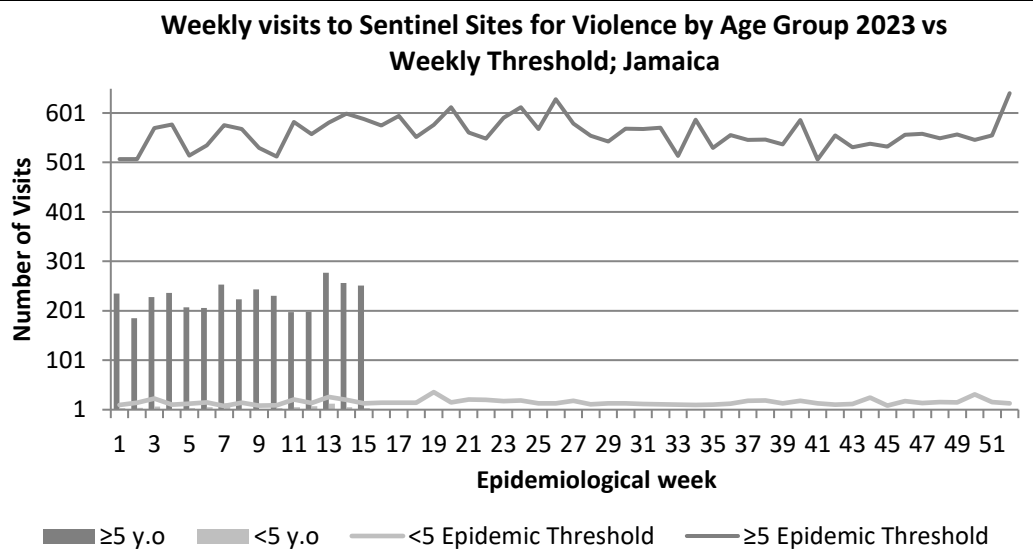
ACCIDENTS

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



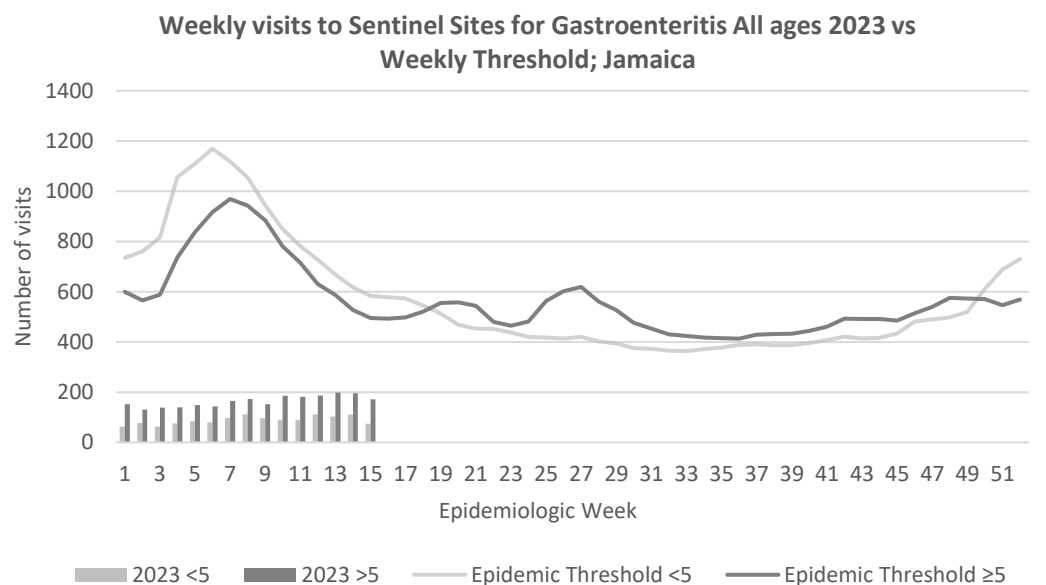
VIOLENCE

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				Comments	
	CLASS 1 EVENTS	Confirmed YTD ^α			
		CURRENT YEAR 2023	PREVIOUS YEAR 2022		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	88 ^β	78 ^β	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; ^δ Figures include all deaths associated with pregnancy reported for the period.	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	COVID-19 (SARS-CoV-2)	1862	32174		
	Hansen’s Disease (Leprosy)	0	0		
	Hepatitis B	12	3		
	Hepatitis C	3	1		
	HIV/AIDS	N/A	N/A		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	10	7		
	Monkeypox	3	N/A		
EXOTIC/ UNUSUAL	Plague	0	0	^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	12	20		
	Ophthalmia Neonatorum	34	29		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
	Tuberculosis	4	10		
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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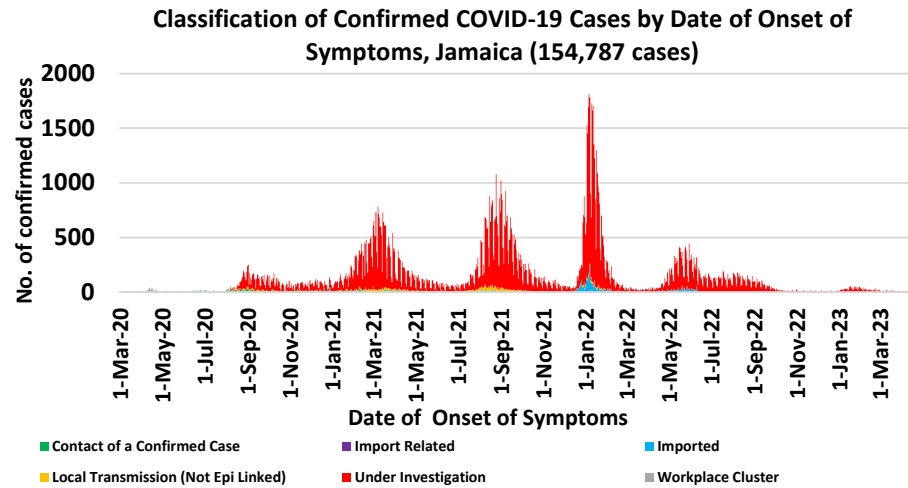


SENTINEL REPORT- 78 sites. Automatic reporting

COVID-19 Surveillance Update

March 10, 2020 – EW 15, 2023

CASES	EW 15	Total
Confirmed	53	154787
Females	32	89290
Males	21	65494
Age Range	83 days old to 91 years	1 day to 108 years
* 3 positive cases had no gender specification * PCR or Antigen tests are used to confirm cases		

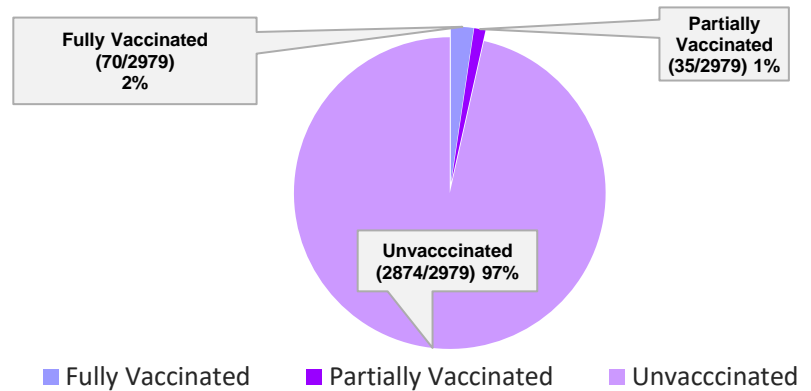


COVID-19 Outcomes

Outcomes	EW 15	Total
ACTIVE *past 2 weeks*		96
DIED – COVID Related	0	3536
Died - NON COVID	0	300
Died - Under Investigation	0	350
Recovered and discharged	0	102803
Repatriated	0	93
Total		154787

*Vaccination programme March 2021 – YTD

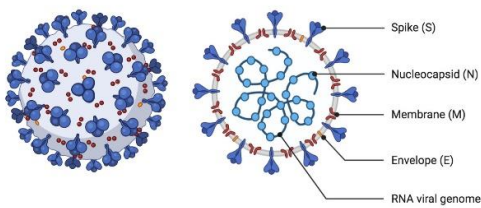
2979 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

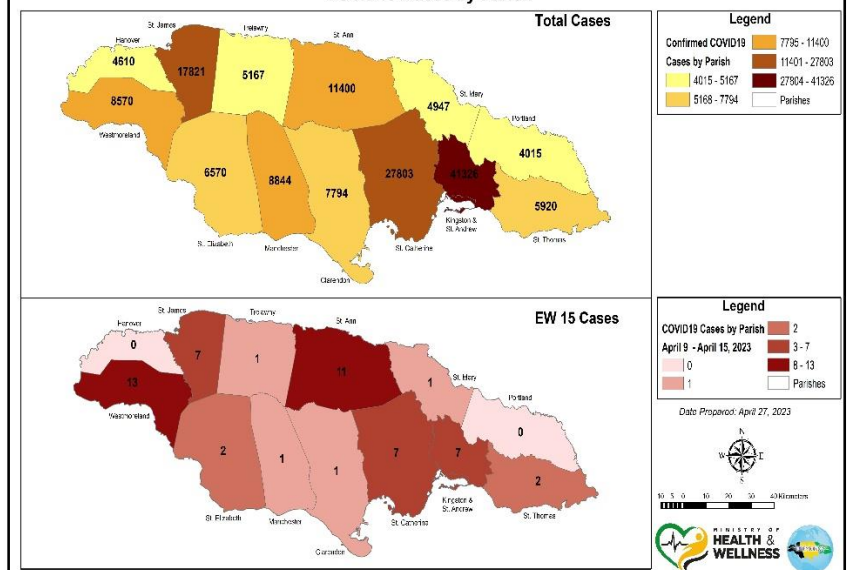
SARS-CoV-2



COVID-19 WHO Global Statistics EW12-EW15

Epi Week	Confirmed Cases	Deaths
12	781,563	1,546
13	705,447	4,540
14	691,495	4,174
15	594,269	2,835
Total (4weeks)	2,772,774	13,095

COVID19 Cases by Parish



6 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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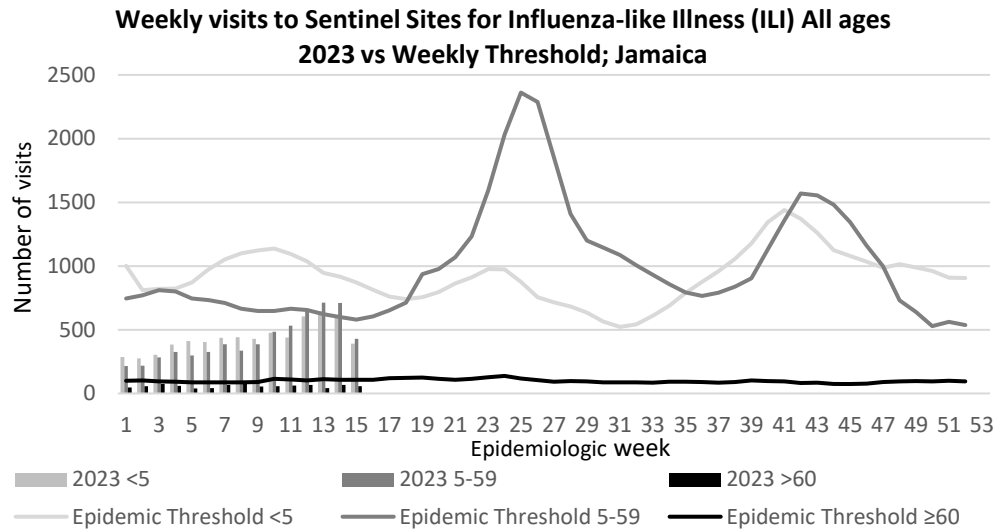


NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 15

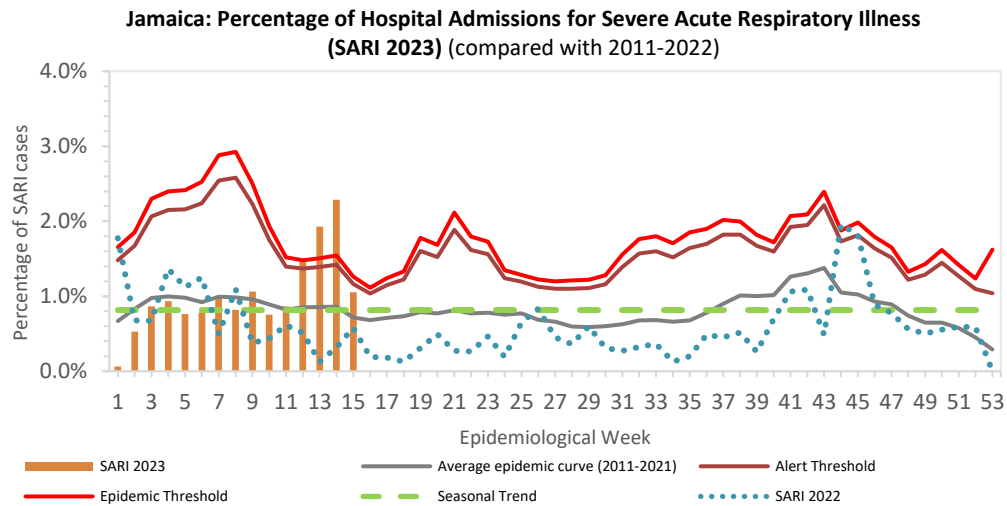
April 9 – April 15, 2023 Epidemiological Week 15

	<i>EW 15</i>	<i>YTD</i>
SARI cases	17	250
Total Influenza positive Samples	0	46
Influenza A	0	12
H3N2	0	1
H1N1pdm09	0	10
Not subtyped	0	1
Influenza B	2	34
B lineage not determined	0	2
B Victoria	2	32
Parainfluenza	0	1
Adenovirus	0	2
RSV	0	13



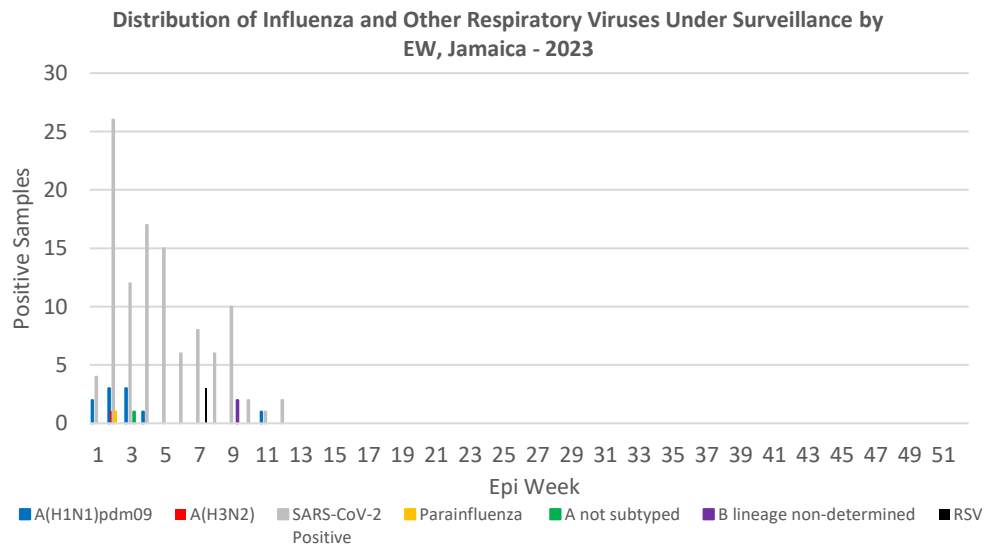
Epi Week Summary

During EW 15, seventeen (17) SARI admissions were reported.



Caribbean Update EW 15

Caribbean: Influenza percent positivity was moderate, driven by influenza B/Victoria lineage viruses; influenza A(H1N1)pdm09 virus co-circulated. In Belize, influenza activity was increased, with influenza B/Victoria lineage and influenza A(H3N2) co-circulation, at low-intensity levels. SARS-CoV-2 and RSV activity were low in the subregion.



7 NOTIFICATIONS-
All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

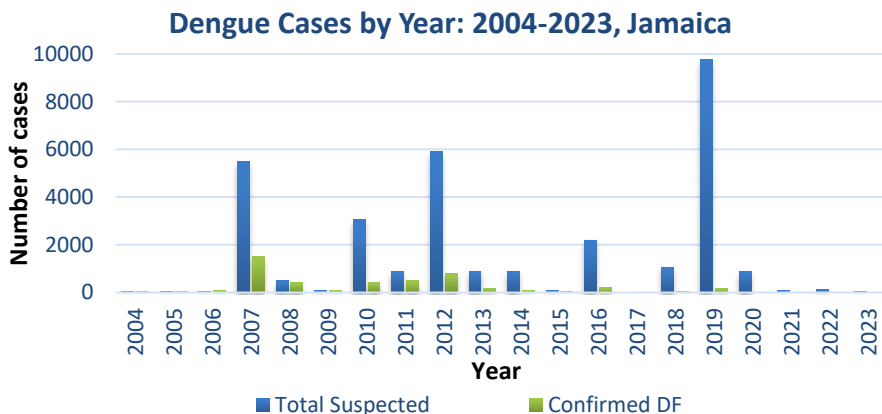
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

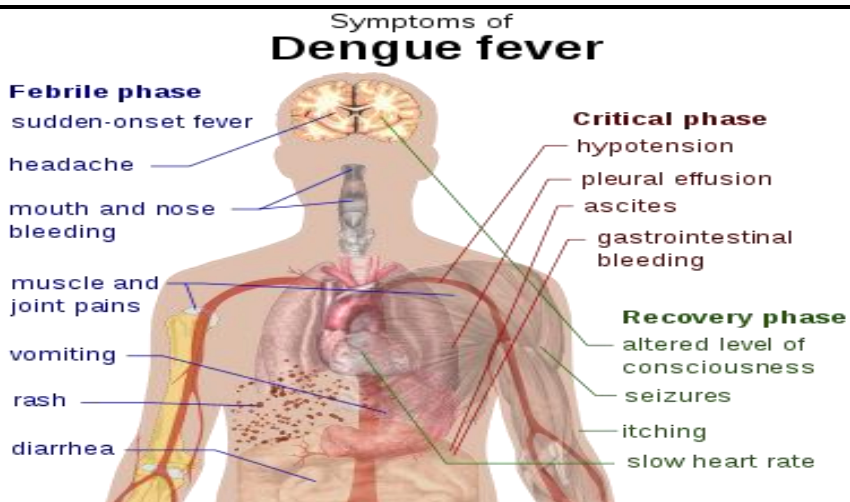
April 9 – April 15, 2023 Epidemiological Week 15

Epidemiological Week 15



Reported suspected and confirmed dengue with symptom onset in week 15 of 2023

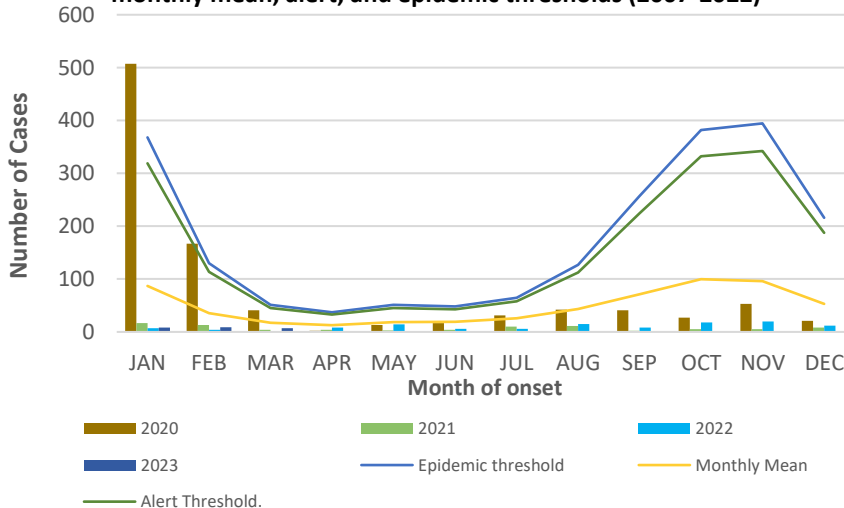
	2023*	
	EW 15	YTD
Total Suspected Dengue Cases	0	24
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at April 15, 2023
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected dengue cases for 2020, 2021, 2022 and 2023 versus monthly mean, alert, and epidemic thresholds (2007-2022)



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

RESEARCH PAPER

Abstract

NHRC-21-03

The Neurodevelopmental Outcomes of Congenital Zika Syndrome in Jamaican Children

R Melbourne-Chambers^{1,5}, P Palmer⁵, Y Brown², T James-Powell^{3,5}, J Tapper⁴, L Mowatt^{1,5}, I Siqueira⁶, C Thorne⁷, ZIKAction Paediatric Registry Study Group, CDC Christie^{1,5}

¹University Hospital of the West Indies, ²Victoria Jubilee Hospital, ³Spanish Town Hospital, ⁴Bustamante Hospital for Children, ⁵The University of the West Indies, ⁶Instituto Gonçalo Moniz-Fiocruz, Brazil, ⁷UCL Great Ormond Street Institute of Child Health, University College London

This project has received funding from the European Union's Horizon 2020 research and Innovation Program under grant agreement No. 734857.

Introduction: As part of a multicentre registry, this study aimed to characterize the clinical, radiological, neurodevelopmental and laboratory features of children antenatally exposed to ZIKV and/or presenting with suspected congenital zika syndrome (CZS) in Jamaica.

Methods: Retrospective study of children potentially exposed to Zika antenatally and attended clinics at/ admitted to either of four public hospitals in the Kingston and St Andrew (KSA) region and St. Catherine, Jamaica who met ≥ 1 inclusion criteria: 1. Microcephalic at birth, 2. Features of CZS 3. Exposed to Zika in utero. Data: maternal demography, antenatal, labour, delivery history, newborn anthropometry, results of hearing, vision screening, neurodevelopmental assessment, laboratory, radiologic investigations were extracted from hospital records. Descriptive and Chi square analyses were performed. Ethical approval was obtained.

Results: 55 participants; 34 (61.8%) female; 4 (7.3%) born premature; 4 (7.2%) neonates -lab confirmed Zika; 6 (10.9%) mothers - lab confirmed Zika, 6 (10.9%) mothers Zika symptomatic (no lab confirmation); 31 (56.4%) congenital microcephaly, 14 (25.9%) severe; 20 (36.3%) craniofacial disproportion, 3 (5.4%) arthrogyposis. 9/34 (26.5%) abnormal ophthalmology findings; 6/12 (50.0 %) abnormal hearing. 26/33 (78.8%) had abnormal neuroimaging findings. 8 (33.3%) ventriculomegaly, 7 (29.2%) cerebral/basal ganglia calcifications, 5 (20.8%) migrational abnormalities, 5 (20.8%) cortical atrophy, 3 (12.5%) cerebellar malformations. 20/36 (55.5%) had developmental delay. There was one death. Developmental delay was associated with abnormal neuroimaging ($p=0.003$), ophthalmology abnormalities ($p=0.023$) and hearing abnormalities ($p=0.005$) but not with head circumference ($p=0.89$).

Conclusions: CZS was more common in Jamaican females. Half developed developmental delay significantly associated with abnormal neuroimaging, ophthalmology and hearing.



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



9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
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