

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Weekly Spotlight

Scabies



Scabies is one of the commonest dermatological conditions, accounting for a substantial proportion of skin disease in many low- and middle-income countries. Globally, it is estimated to affect more than 200 million people at any time and more than 400 million people every year. Scabies is caused by infestation of the skin with a microscopic mite (*Sarcoptes scabiei* var. *hominis*) characterized by itch and a skin eruption. Scabies is frequently complicated by bacterial skin infection (impetigo). In turn, impetigo may result in abscesses, sepsis and invasive infections with bacteria, most frequently *Staphylococcus aureus* and *Streptococcus pyogenes*, the latter of which may result in kidney disease and rheumatic heart disease. Scabies also impacts quality of life: itch and visible rash often lead to poor sleep, stigmatization and social exclusion, interrupting school and work attendance.

Scabies affects the world's most disadvantaged populations, especially people living in crowded and impoverished conditions, from island communities in the Pacific to favelas of Latin America, remote and rural communities across Africa and Australia, and displaced populations living in camps. In resource-poor settings, scabies and its complications impose a major cost on health care systems. In high-income countries, cases are sporadic, yet outbreaks in health institutions and vulnerable communities contribute to significant economic costs for national health services.

Scabies mites burrow under the upper layer of the skin to lay their eggs, resulting in intense itching. Characteristics of scabies are papules or burrows in typical locations, including the web spaces of the fingers and toes, wrists, buttocks, breasts in females, and genitals. In young children and the elderly, scabies lesions may also be present on the palms, soles and scalp. The itching and rash cause poor sleep, stigmatization and social exclusion, as well as absenteeism from education and employment, resulting in reduced learning potential for children and economic impacts for families and communities. Presence of redness, pus or crusts may indicate a secondary bacterial infection. This should be differentiated from crusted scabies, a severe form of scabies, that is characterized by thick, scaly, plaques over the skin and, in severe cases, deep fissures.

Primary management of affected individuals involves application of a topical scabicide such as 5% permethrin, 0.5% malathion in aqueous base, 10–25% benzyl benzoate emulsion or 5–10% sulfur ointment. Oral ivermectin is also highly effective and is approved in several countries. The safety of ivermectin in pregnant women or children below 15 kg body weight has not been established, so ivermectin should not be used in these groups until more safety data are available. Itch commonly intensifies with effective treatment for 1–2 weeks and treated individuals should be informed accordingly.

Because people in the early stage of new infestation may be asymptomatic, it is critical to treat the whole household at the same time as the diagnosed case. Repeating treatment in the time frame appropriate for the chosen medication (typically after 7–14 days) will lead to a higher efficacy, particularly for oral ivermectin, which does not kill mite eggs.

Taken from WHO website on 28/August/2024
https://www.who.int/health-topics/scabies#tab=tab_1
https://www.who.int/health-topics/scabies#tab=tab_2
https://www.who.int/health-topics/scabies#tab=tab_3

EPI WEEK 33



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 – 30 to 33 of 2024

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 |
|----------|---------------------------|--------------|-----------------|----------|------------|-----------|----------|-------------|---------|--------------|-----------------|------------|-----------|
| 2024 | | | | | | | | | | | | | |
| 30 | 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 |
| 31 | On Time | On Time | On Time | Late (W) | On Time | Late (W) | On Time | Late (W) | On Time | On Time | On Time | On Time | On Time |
| 32 | 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 |
| 33 | 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 |

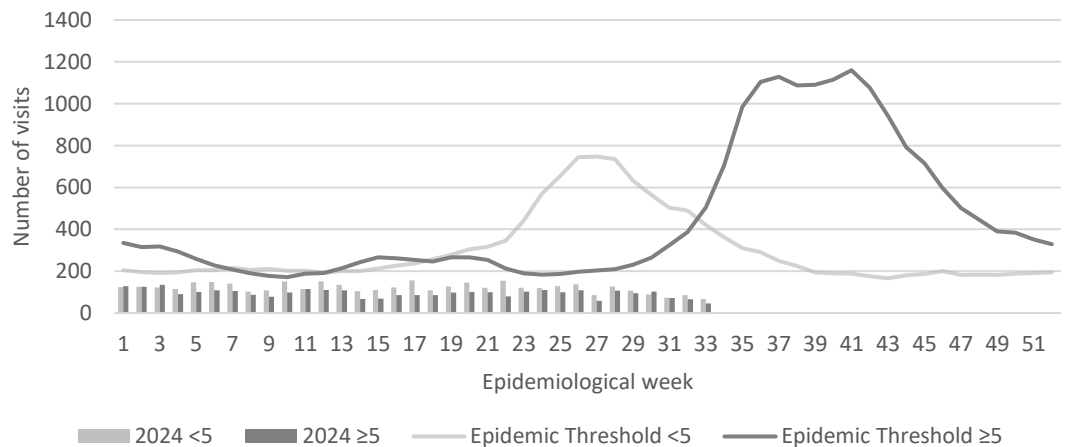
REPORTS FOR SYNDROMIC SURVEILLANCE

UNDIFFERENTIATED 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.



Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2024



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



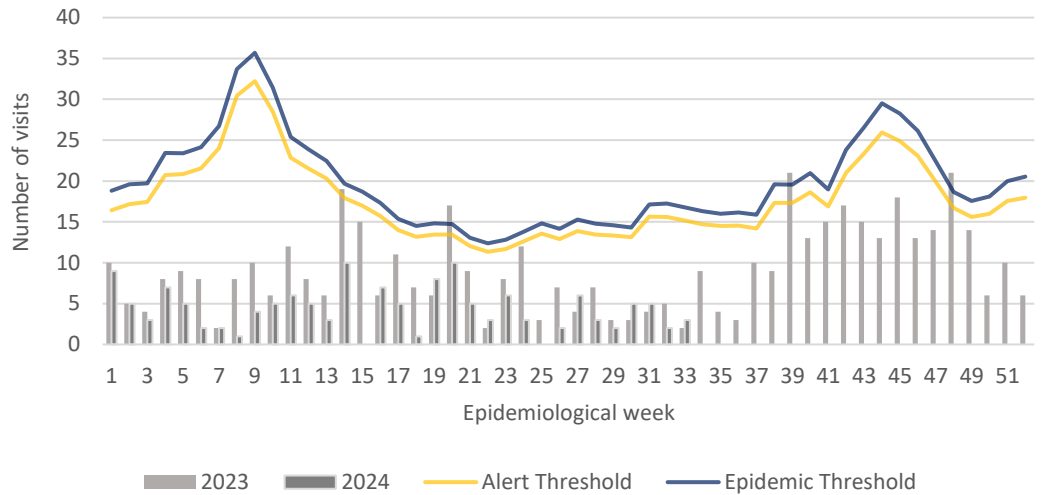
SENTINEL REPORT- 78 sites. Automatic reporting

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 2023 and 2024 vs. Weekly Threshold: Jamaica

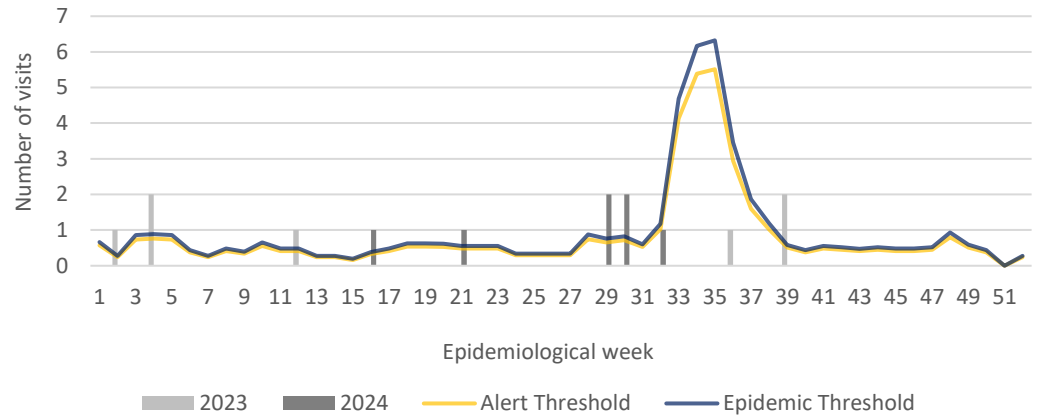


FEVER AND HAEMORRHAGIC

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 2023 and 2024 vs Weekly Threshold; Jamaica



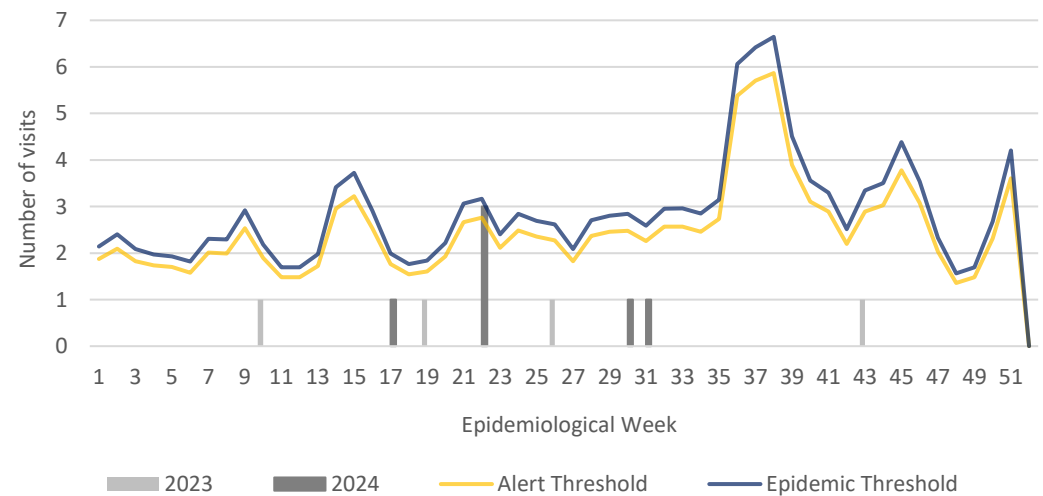
FEVER AND JAUNDICE

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 2023 and 2024



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



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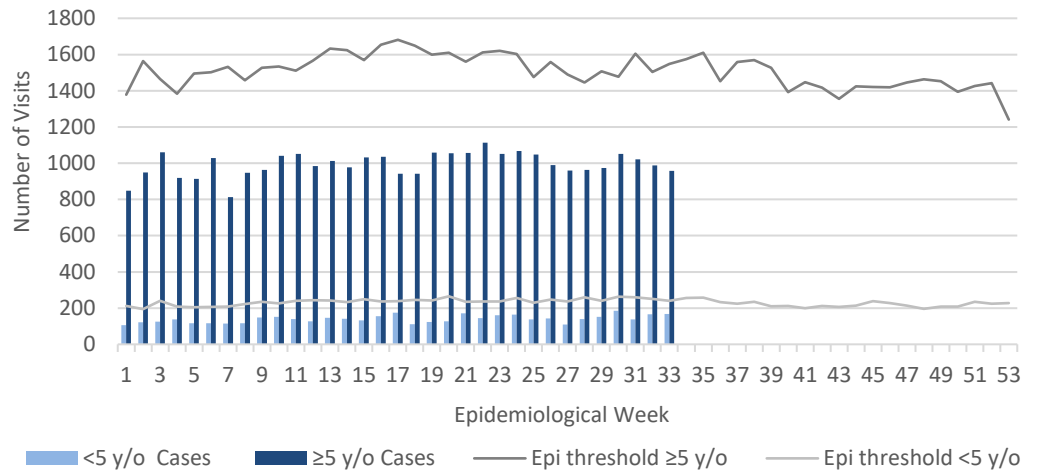


ACCIDENTS

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



Weekly Visits to Sentinel Sites for Accident by Age Group 2024 vs. Weekly Threshold

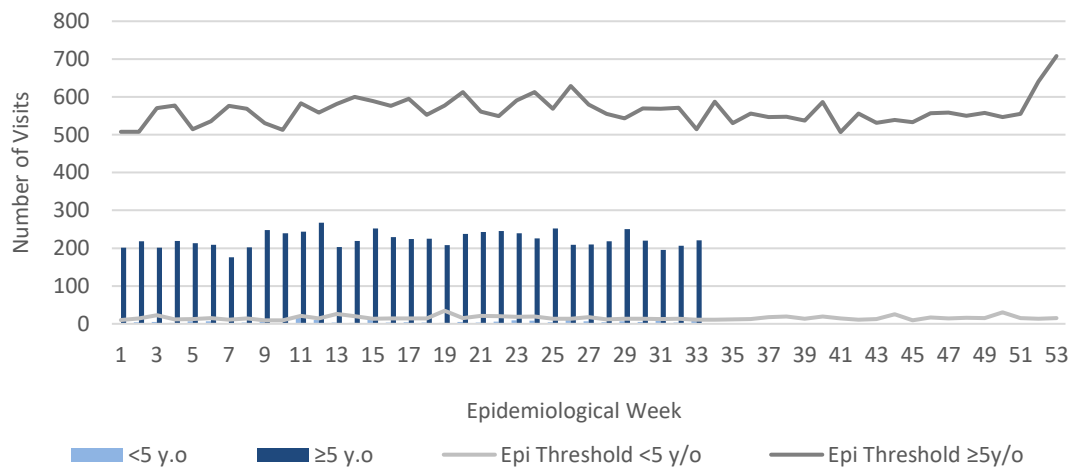


VIOLENCE

Any injury for which the cause is intentional, e.g. gunshot wounds, stab wounds, etc.



Weekly Visits to Sentinel Sites for Violence by Age Groups 2024 vs. Weekly Threshold

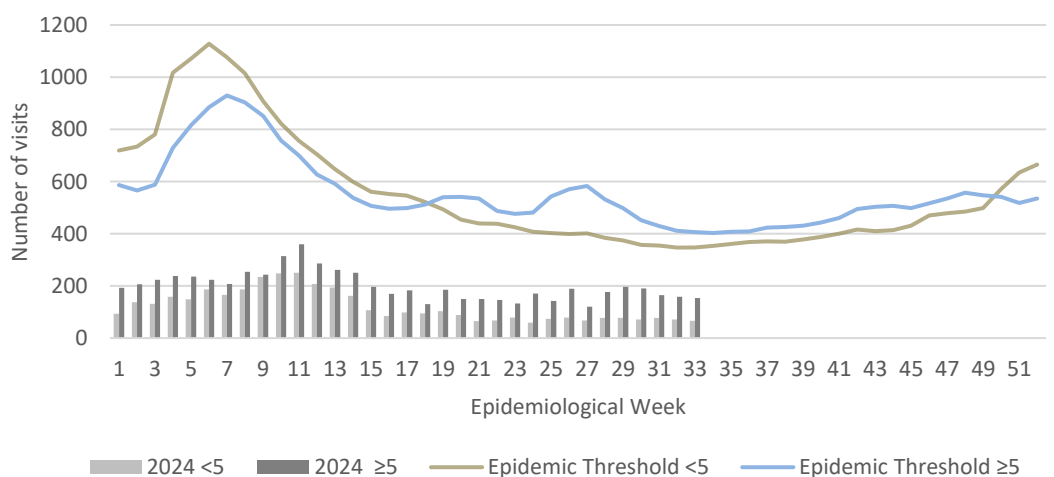


GASTROENTERITIS

Inflammation of the stomach and intestines, typically resulting from bacterial toxins or viral infection and causing vomiting and diarrhoea.



Weekly visits to Sentinel Sites for Gastroenteritis All ages 2024 vs Weekly Threshold; Jamaica



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 ^α | | 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. | |
| | | CURRENT YEAR 2024 | PREVIOUS YEAR 2023 | | |
| NATIONAL /INTERNATIONAL INTEREST | Accidental Poisoning | 206 ^β | 246 ^β | 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 | | |
| | Severe Dengue ^γ | See Dengue page below | See Dengue page below | | |
| | COVID-19 (SARS-CoV-2) | 590 | 3393 | | |
| | Hansen’s Disease (Leprosy) | 0 | 0 | | |
| | Hepatitis B | 14 | 50 | | |
| | Hepatitis C | 3 | 24 | | |
| | HIV/AIDS | NA | NA | | |
| | Malaria (Imported) | 1 | 0 | | |
| | Meningitis | 9 | 20 | | |
| | Monkeypox | 0 | 3 | | |
| EXOTIC/ UNUSUAL | Plague | 0 | 0 | ^ε CHIKV IgM positive cases ^θ Zika PCR positive cases ^β Updates made to prior weeks. ^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 | 1 | 2 | | |
| 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 | 42 | 36 | | |
| | Ophthalmia Neonatorum | 72 | 91 | | |
| | Pertussis-like syndrome | 0 | 0 | | |
| | Rheumatic Fever | 0 | 0 | | |
| | Tetanus | 0 | 0 | | |
| | Tuberculosis | 19 | 45 | | |
| 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



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

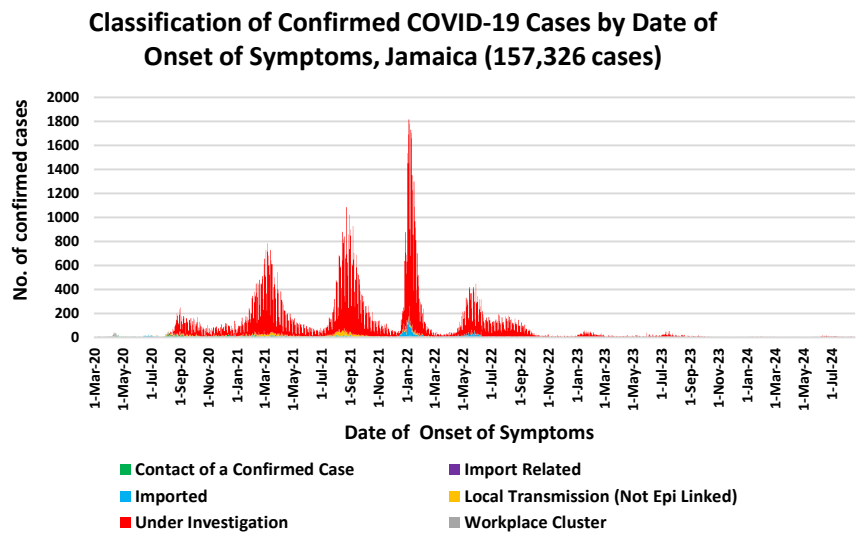


SENTINEL REPORT- 78 sites. Automatic reporting

COVID-19 Surveillance Update

| CASES | EW 33 | Total |
|-----------|-------------------------|--------------------|
| Confirmed | 21 | 157326 |
| Females | 9 | 90660 |
| Males | 12 | 66663 |
| Age Range | 38 days to 79 years old | 1 day to 108 years |

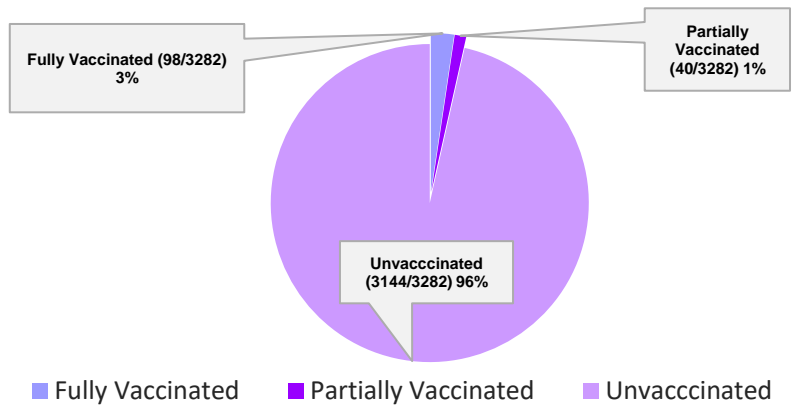
* 3 positive cases had no gender specification
 * PCR or Antigen tests are used to confirm cases
 * Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.



COVID-19 Outcomes

| Outcomes | EW 33 | Total |
|----------------------------|-------|--------|
| ACTIVE *2 weeks* | | 43 |
| DIED – COVID Related | 0 | 3845 |
| Died - NON COVID | 0 | 380 |
| Died - Under Investigation | 0 | 164 |
| Recovered and discharged | 0 | 103226 |
| Repatriated | 0 | 93 |
| Total | | 157326 |

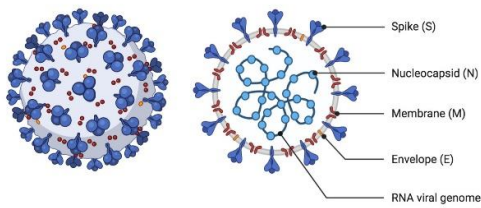
3282 COVID-19 Related Deaths since March 1, 2021 – YTD Vaccination Status among COVID-19 Deaths



COVID-19 Parish Distribution and Global Statistics

COVID-19 Virus Structure

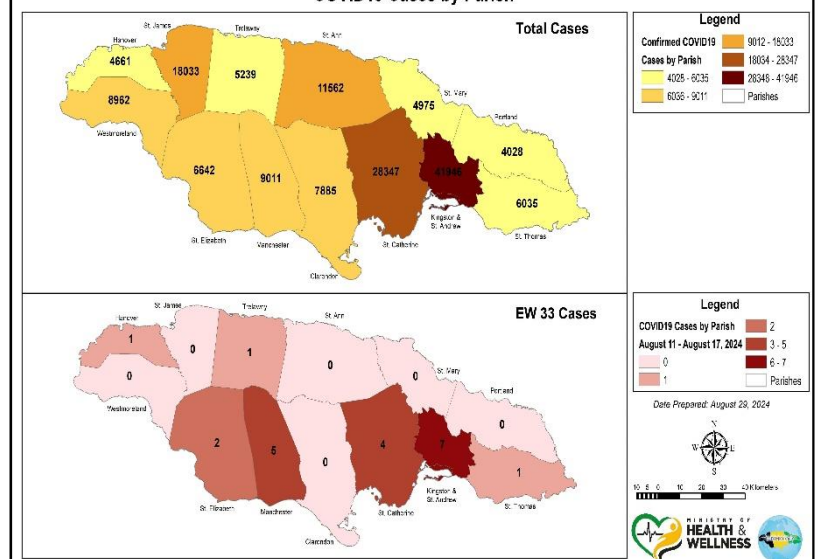
SARS-CoV-2



COVID-19 WHO Global Statistics EW 30-33, 2024

| Epi Week | Confirmed Cases | Deaths |
|-----------------------|-----------------|-------------|
| 30 | 52800 | 854 |
| 31 | 57300 | 998 |
| 32 | 48800 | 987 |
| 33 | 42800 | 903 |
| Total (4weeks) | 201700 | 3742 |

COVID19 Cases by Parish



6 NOTIFICATIONS- All clinical sites

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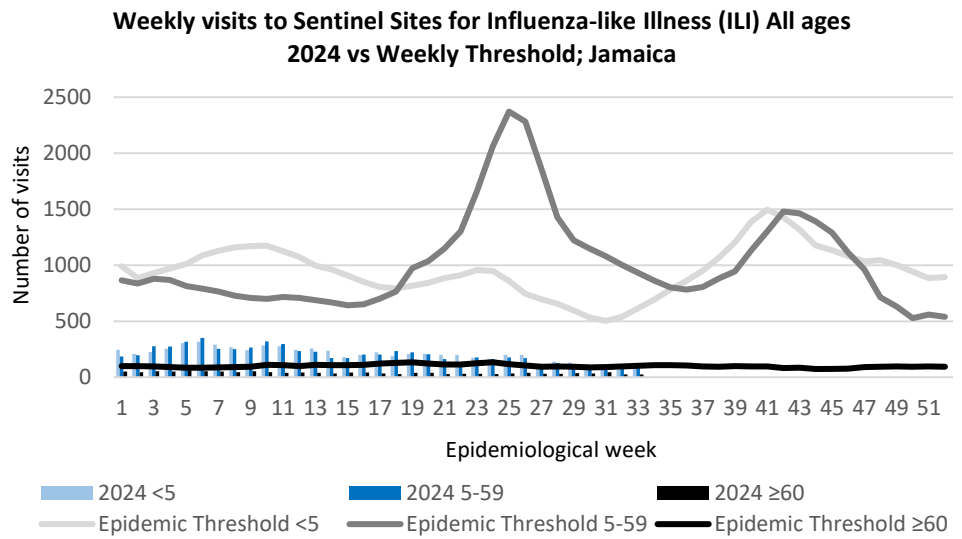


NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 33

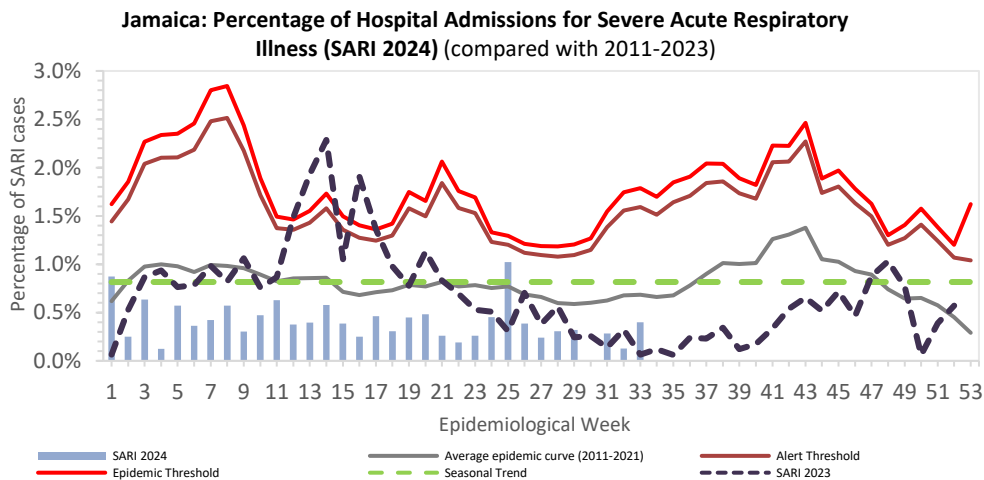
August 11, 2024 – August 17, 2024 Epidemiological Week 33

| | EW 33 | YTD |
|---|----------|------------|
| SARI cases | 6 | 206 |
| Total Influenza positive Samples | 0 | 128 |
| Influenza A | 0 | 123 |
| H3N2 | 0 | 32 |
| H1N1pdm09 | 0 | 91 |
| Not subtyped | 0 | 0 |
| Influenza B | 0 | 5 |
| B lineage not determined | 0 | 0 |
| B Victoria | 0 | 5 |
| Parainfluenza | 0 | 0 |
| Adenovirus | 0 | 0 |
| RSV | 0 | 34 |



Epi Week Summary

During EW 33, six (6) SARI admissions were reported.

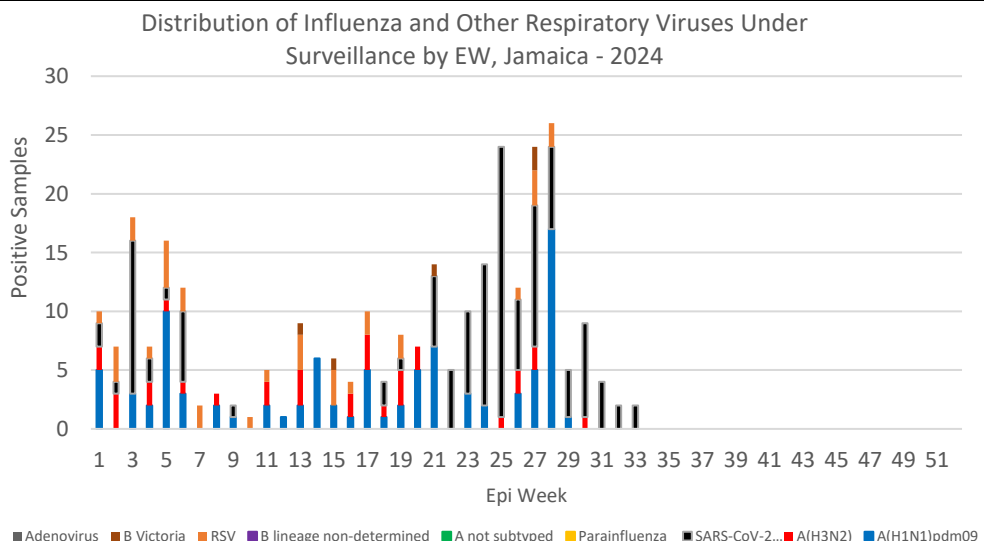


Caribbean Update EW 33

Caribbean: Following the rise observed in previous weeks, ILI cases have shown a decreasing trend over the past four EW, associated with a higher proportion of positive influenza cases. SARI cases have remained low. Influenza activity has fluctuated, though declining at moderate levels over the past four EW, with A(H3N2) being predominant, followed by A(H1N1)pd09. RSV activity has remained low, though showing a slight increase and SARS-CoV-2 activity remains high.

By country: In the last four EW, influenza activity has been observed in Belize, the Dominican Republic and Guyana. Additionally, SARS-CoV-2 activity has been recorded in Belize, Jamaica, Saint Lucia, Barbados, Guyana, the Cayman Islands and Saint Vincent and the Grenadines. RSV activity has also been observed in Suriname

(taken from PAHO Respiratory viruses weekly report) <https://www.paho.org/en/influenza-situation-report>



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

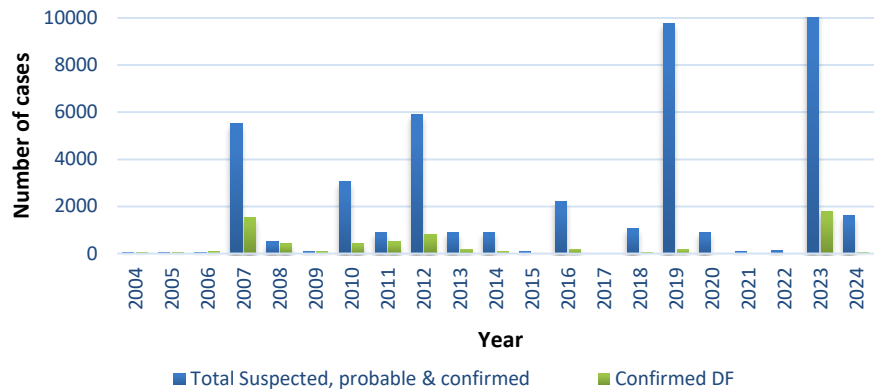
Dengue Bulletin

August 11, 2024 – August 17, 2024 Epidemiological Week 33


Epidemiological Week 33



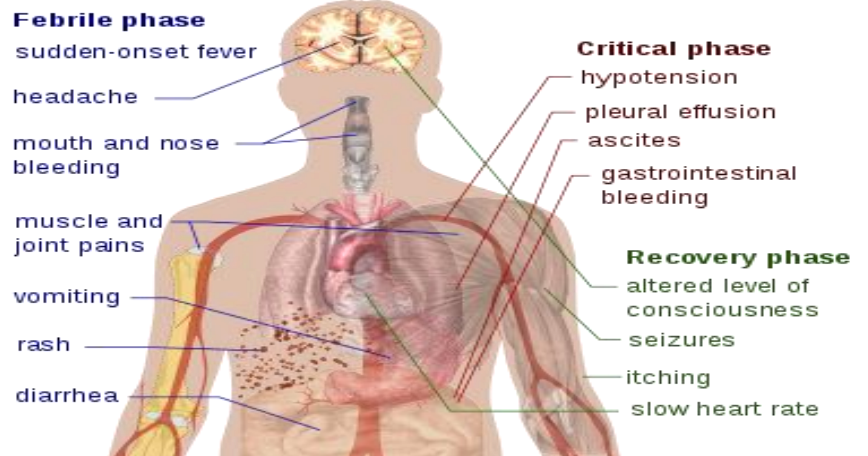
Dengue Cases by Year: 2004-2024, Jamaica



Reported suspected, probable and confirmed dengue with symptom onset in week 33 of 2024

| | 2024* | |
|---|-------|------|
| | EW 33 | YTD |
|  Total Suspected, Probable & Confirmed Dengue Cases | 8 | 1597 |
| Lab Confirmed Dengue cases | 0 | 36 |
| CONFIRMED Dengue Related Deaths | 0 | 1 |

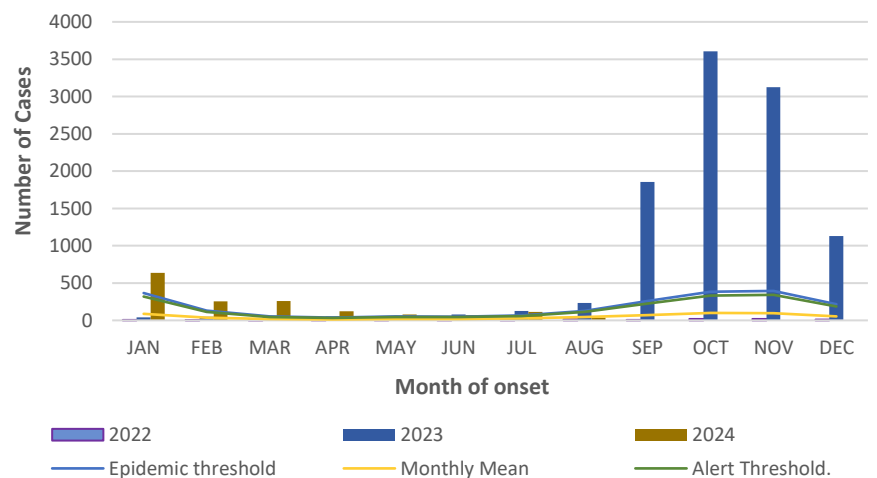
Symptoms of Dengue fever



Points to note:

- Dengue deaths are reported based on date of death.
- *Figure as at August 28, 2024
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Suspected, probable and confirmed dengue cases for 2022 - 2024 versus monthly mean, alert, and epidemic thresholds (2007-2022)



8 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

NHRC-23-O13

Impact of the COVID-19 Pandemic on the Utilization of Jamaican Health Clinics

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Objective: The objective of this study was to determine the impact of COVID-19 Family Planning (FP), Antenatal (ANC), Postnatal (PNC), Child Health (CHC) Psychiatry, and NCD- Curative Clinics by comparing their utilisations during the first ten months of the pandemic March-December 2020, with the corresponding non-COVID reference period March-December 2019.

Method: Retrospective data from the MCSR was extracted for the clinics evaluated, and patient count was compared between the COVID-19 and non-COVID-19 reference period by calculating the per cent change in utilisation. Utilisation was analysed by Parish, Health Region, Age, Sex, and Service. Bivariate (X2) and multivariate analyses (Poisson regression models) were conducted to test statistical significance and to calculate incidence risk ratios (IRR).

Results: There was a significant decline in CHC (-19.3%) and PNC (-4.77%) attendance. All other clinics showed an increase in utilisation. This increase was not seen across all parishes and Regions. For Curative Clinics, marginal differences were observed for Diabetes and Hypertension Clinics. However, there was an increase in patients presenting with Uncontrolled Diabetes and Uncontrolled Hypertension.

The results of the bivariate analyses were corroborated by the IRR for Child Health (0.74 (C.I. 0.74-0.75)), indicating a 26% decline.

Conclusion: The COVID-19 pandemic affected healthcare utilisation in Jamaica, and Child Health Clinics were the most affected. Increases in the utilisation of family planning, antenatal and psychiatric services are notable. The declines in utilisation of clinic services found by Region and Parish require further investigation.



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9 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
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30 sites. Actively
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