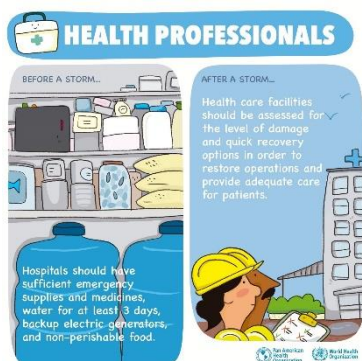


WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

EPI WEEK 35

What to do in a storm



A storm is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation that rotate counterclockwise in the Northern Hemisphere and its classify in 4 different categories:

1. Tropical depression is defined as a tropical cyclone with

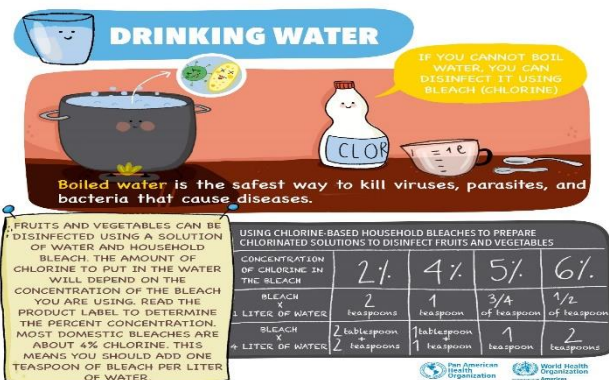
maximum sustained winds of 38 mph.

2. Tropical Storm is a tropical cyclone with maximum sustained winds of 39 to 73 mph.
3. Hurricane is a tropical cyclone with maximum sustained winds of 74 mph.
4. Major Hurricane is a tropical cyclone with maximum sustained winds of 111 mph or higher, corresponding to a Category 3, 4 or 5 on the Saffir-Simpson Hurricane Wind Scale.

The number of people affected by destructive winds and heavy rains from hurricanes is growing. Hurricanes cause the destruction and collapse of infrastructure, with adverse effects on health in the form of injury, trauma, and drowning. House damages generates loss of critical services (water, power) and population displacement to shelter can be prolonged for a long period of time. They also have an impact in the mental health of the affected population, and a have a huge effect on health services, causing an increased risk of vector and water-borne diseases.

Due to the vulnerability of the exposed populations, some extreme phenomena such as prolonged rains, can trigger

secondary events and generate damages and losses, and affect communities.



Downloaded from https://www.paho.org/disasters/index.php?option=com_content&view=article&id=3605:que-hacer-antes-durante-y-despues-de-una-tormenta&Itemid=1278&lang=en



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



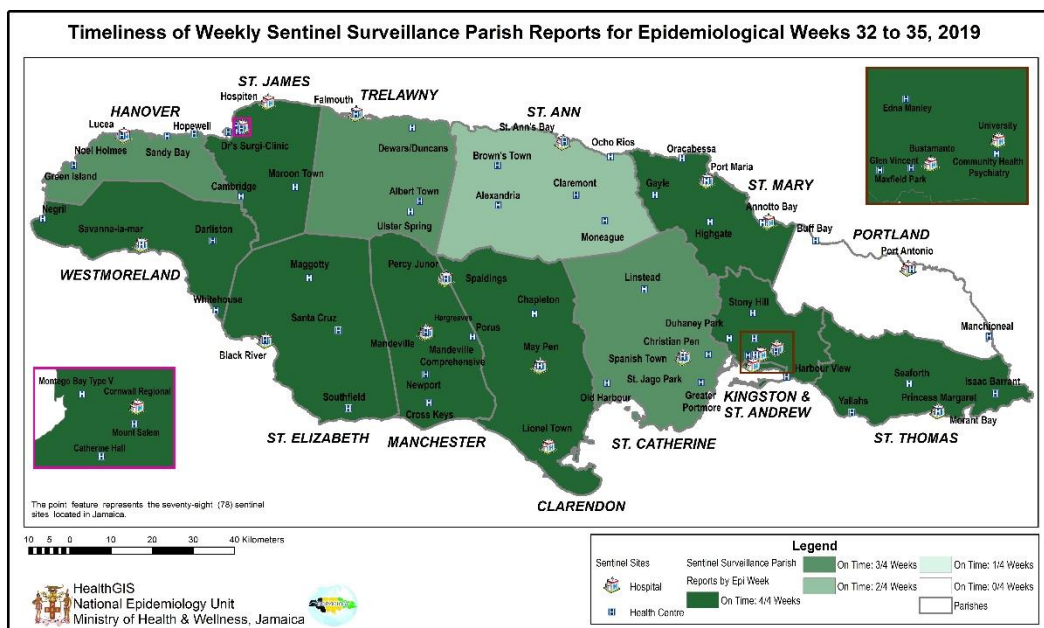
A syndromic surveillance system is good for early detection of and response to public health events.

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 32 to 35

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

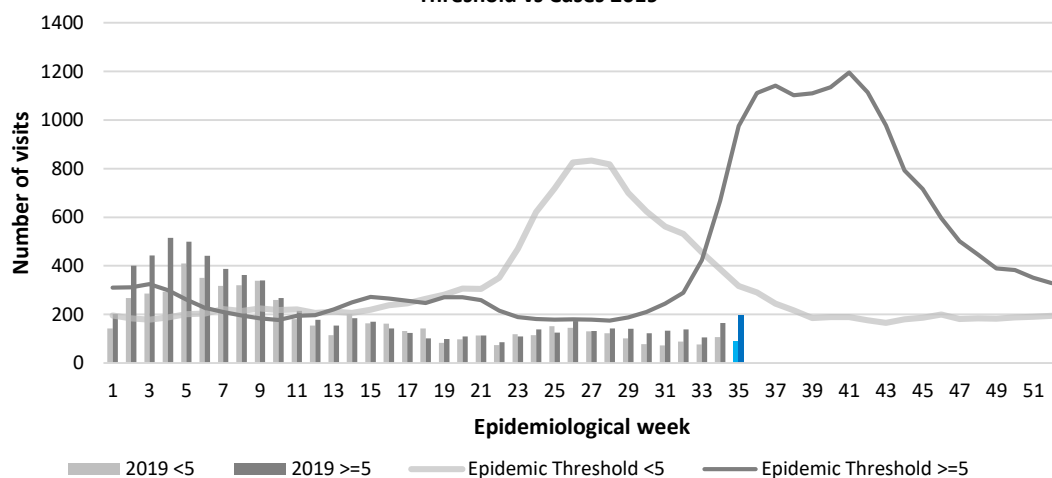
FEVER

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



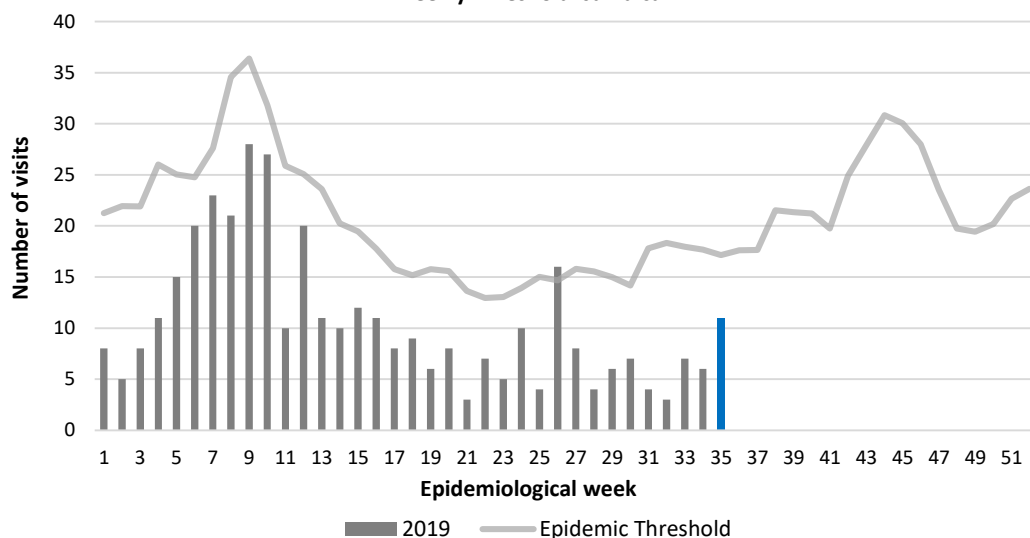
SENTINEL
REPORT- 78 sites.
Automatic reporting

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).



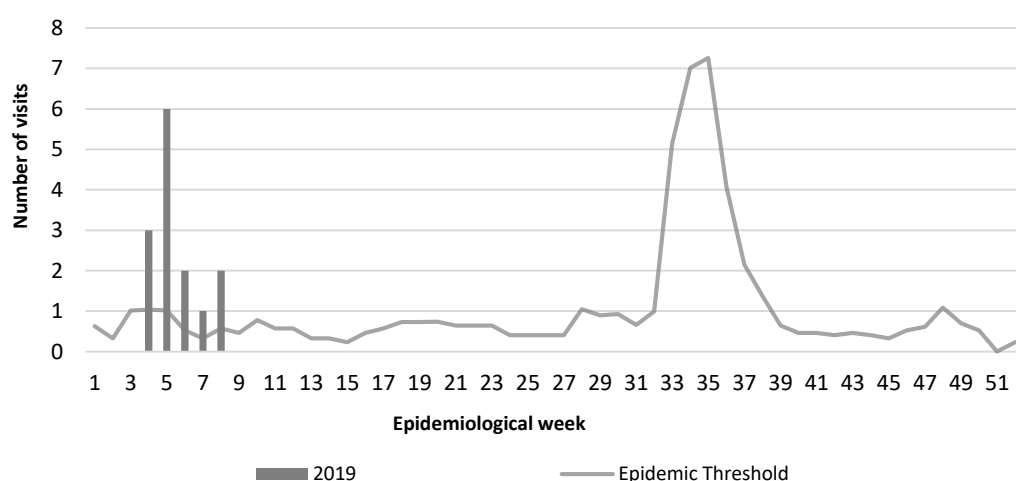
Weekly Visits to Sentinel Sites for Fever and Neurological Symptoms 2019 vs. Weekly Threshold: Jamaica

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



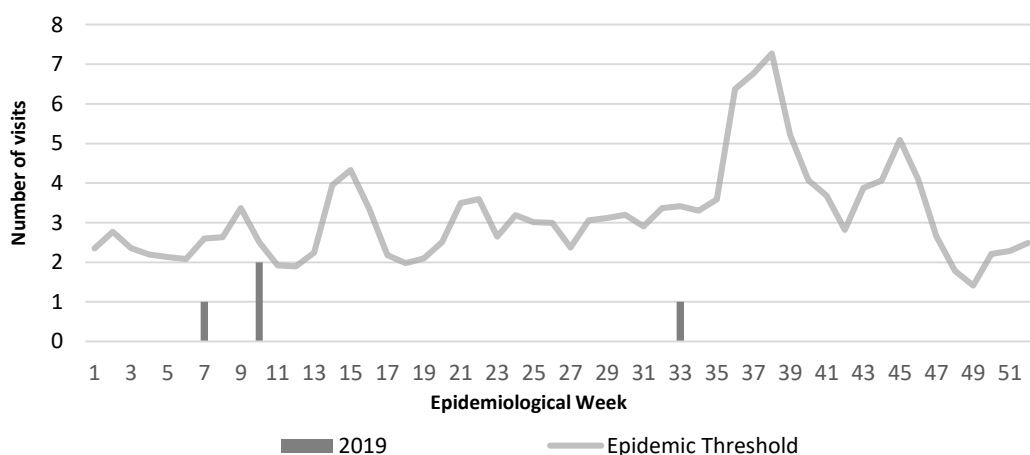
Weekly visits to Sentinel Sites for Fever and Haemorrhagic Symptoms 2019 vs Weekly Threshold; Jamaica

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

Weekly Visits to Sentinel Sites for Fever and Jaundice 2019 vs. Weekly Threshold



3 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



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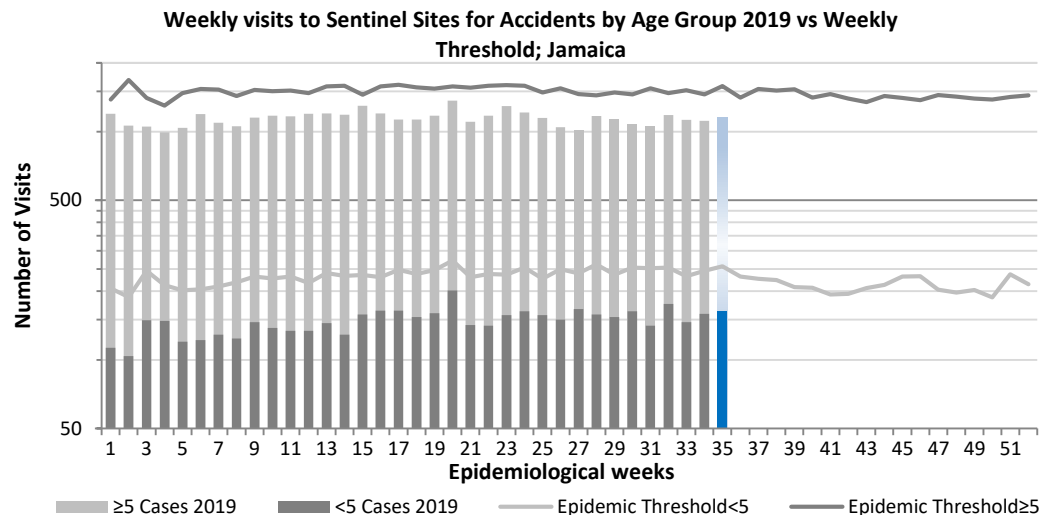
SENTINEL
REPORT- 78 sites.
Automatic reporting

ACCIDENTS

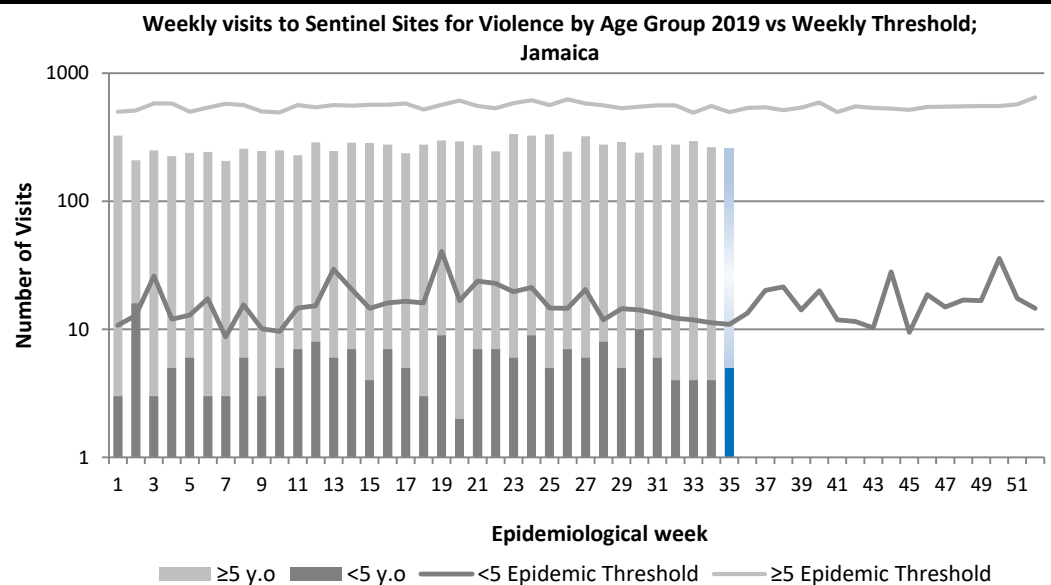
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

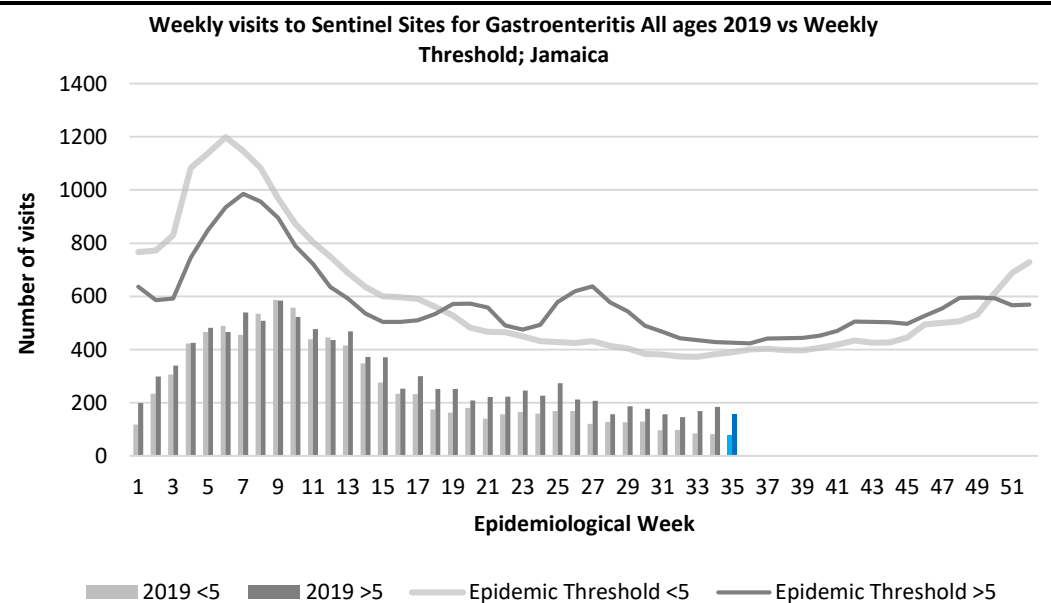
VARIATIONS OF BLUE SHOW CURRENT WEEK

**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



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

| - | CLASS ONE NOTIFIABLE EVENTS | | | | Comments |
|----------------------------------|-----------------------------------|---------|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | Confirmed YTD | | |
| | CLASS 1 EVENTS | | CURRENT YEAR | PREVIOUS YEAR | |
| NATIONAL /INTERNATIONAL INTEREST | Accidental Poisoning | | 48 | 152 | 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 | | 11 | 33 | |
| | Hepatitis C | | 2 | 5 | |
| | HIV/AIDS | | NA | NA | |
| | Malaria (Imported) | | 0 | 2 | |
| | Meningitis (Clinically confirmed) | | 17 | 37 | |
| EXOTIC/ UNUSUAL | Plague | | 0 | 0 | * Dengue Hemorrhagic Fever data include Dengue related deaths; ** Figures include all deaths associated with pregnancy reported for the period. |
| 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 | *** 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** | | 42 | 48 | |
| | Ophthalmia Neonatorum | | 161 | 201 | |
| | Pertussis-like syndrome | | 0 | 0 | |
| | Rheumatic Fever | | 0 | 0 | |
| | Tetanus | | 0 | 0 | |
| | Tuberculosis | | 33 | 45 | |
| | Yellow Fever | | 0 | 0 | |
| | Chikungunya*** | | 1 | 9 | |
| | Zika Virus**** | | 0 | 0 | NA- Not Available |



5 NOTIFICATIONS-
All clinical sites



INVESTIGATION
REPORTS- Detailed Follow
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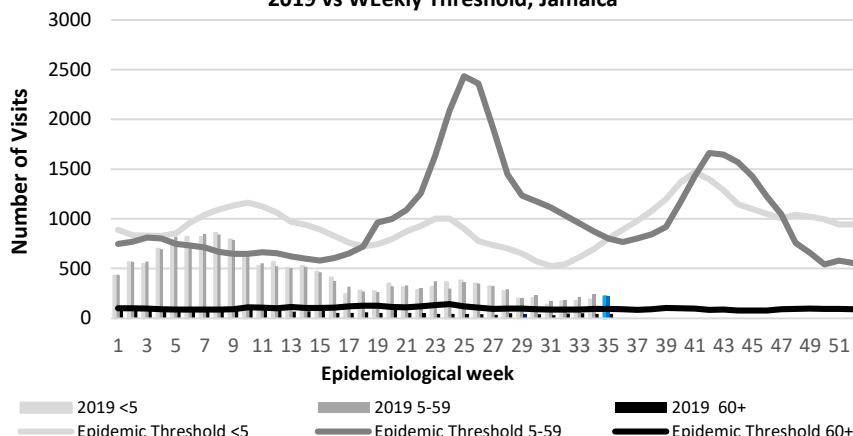
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 35

August 25– August 31, 2019 Epidemiological Week 35

| | EW 35 | YTD |
|----------------------------------|-------|-----|
| SARI cases | 6 | 362 |
| Total Influenza positive Samples | 0 | 367 |
| Influenza A | 0 | 325 |
| H3N2 | 0 | 91 |
| H1N1pdm09 | 0 | 226 |
| Not subtyped | 0 | 5 |
| Influenza B | 0 | 42 |
| Parainfluenza | 1 | 6 |

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

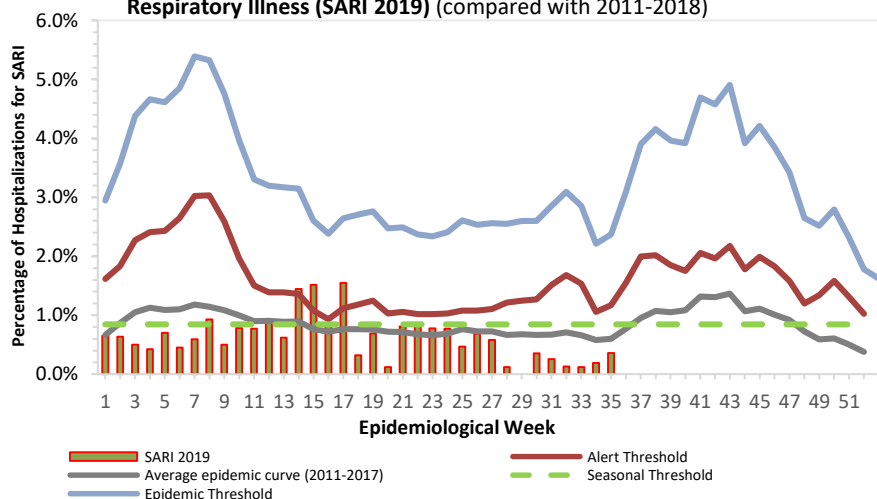


Epi Week Summary

During EW 35, 0 cases of influenza were detected. Percent positivity remained low.

During EW 35, 6 (six) SARI admissions were reported.

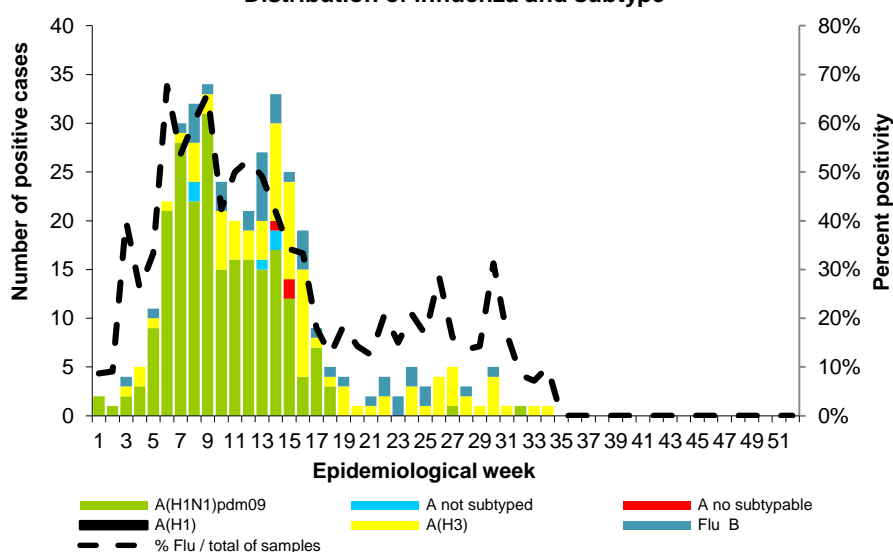
Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2019) (compared with 2011-2018)



Caribbean Update EW 35

Influenza and SARI activity were low and continue to decrease in the sub-region. In Cuba, influenza activity increased with the circulation of influenza A, although was at a low level of intensity. RSV activity decreased in Cuba and the Dominican Republic.

Distribution of influenza and subtype



6 NOTIFICATIONS-
All clinical
sites



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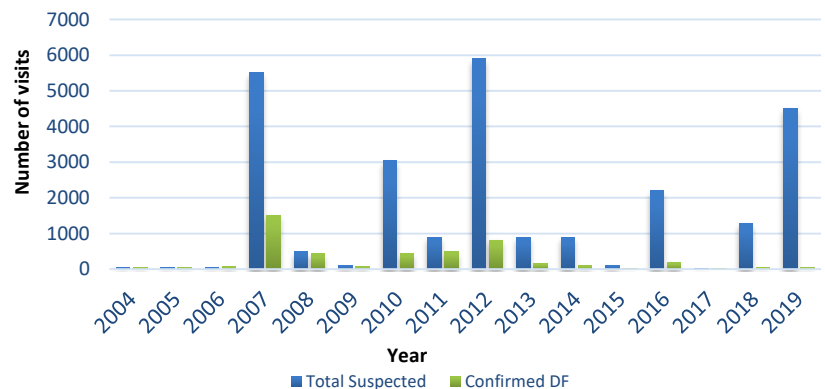
Dengue Bulletin

August 25– August 31, 2019 Epidemiological Week 35

Epidemiological Week 35



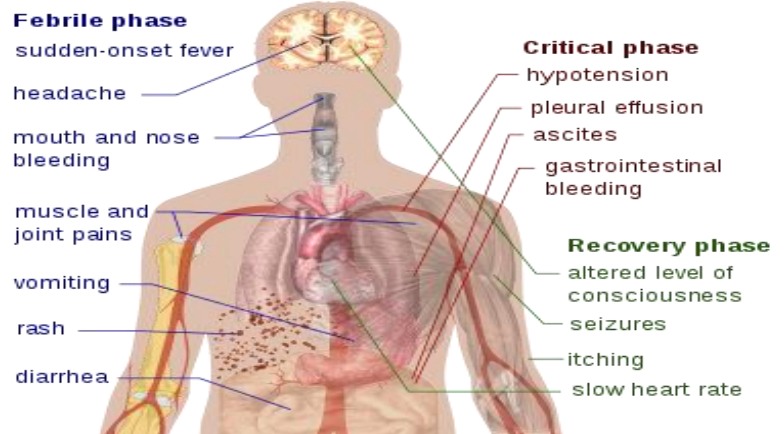
Dengue Cases by Year: 2004-2019, Jamaica



Reported suspected and confirmed dengue with symptom onset in weeks 1-35, 2019

| | | 2019 | | 2018 YTD |
|------------------------------|-----------------------|-------|---------------|----------|
| | | EW 35 | YTD | |
| Total Suspected Dengue Cases | | 17 | **4514 | 211 |
| Lab Confirmed Dengue cases | | 1 | 37 | 1 |
| CONFIRMED | Dengue Related Deaths | 0 | 6 | 0 |

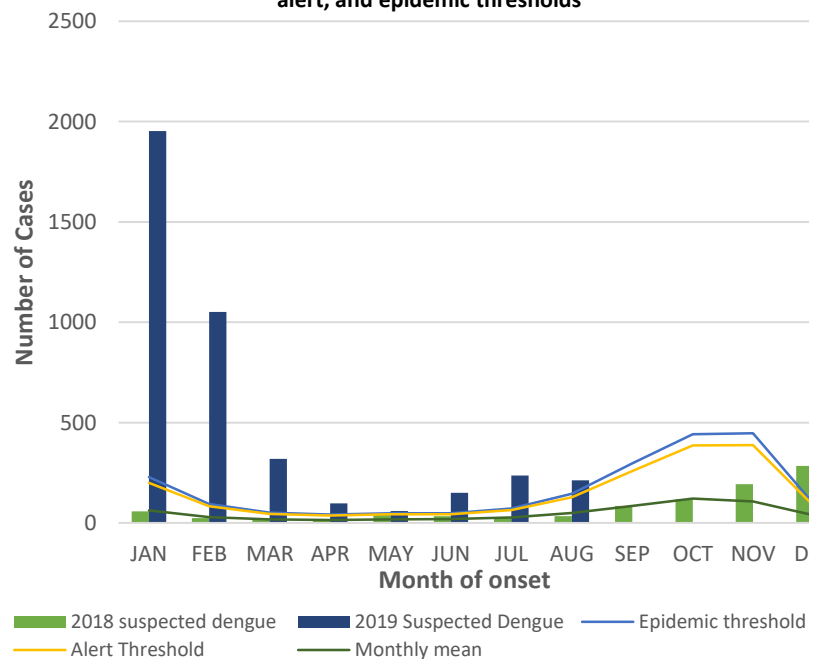
Symptoms of Dengue fever



Points to note:

- ****figure as at September 10, 2019**
- 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

Reduction in Default of Second HIV DNA-PCR Screening of HIV Exposed Infants through Improved Patient Tracking and Information Systems

M Hamilton¹, C Brown¹, K Guerra², C Williams, D Smith-Wint¹, J Thame¹, L Richards¹

National Public Health Laboratory, Ministry of Health, Jamaica

Clinton Health Access Initiative

Objectives: To develop a low cost tracking tool for the monitoring of infant HIV-DNA screens and to determine its effect on the reduction of second test defaults of HIV-exposed infants.

Methods: Data from all infants screened since the introduction of DNA-PCR testing was collated and entered on an Excel based platform. The database created utilized four critical elements for sample identification, mother's full name and patient's full name, date of birth, and gender. It provided the following outputs: total testing levels and results; patient testing history; sample result turnaround time analysis; and second test de-default reports. There optional tracking by health regions and sub-regions, and testing sites. Data for two six month periods, one each before and after the introduction of the database, were compared.

Results: Within the first six months of implementation of the database, second DNA-PCR test defaults reduced by approximately 16%.

Conclusions: Utilization of low cost measures such as the EID Database & Tracking Tool can improve the tracking and management of HIV exposed infants. This system is a low cost solution which does not require major IT infrastructure overhauls, can be developed in a relatively short time, and is not labor intensive.



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Email: surveillance@moh.gov.jm



8 NOTIFICATIONS-
All clinical
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