WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Air Pollution

Overview

Air pollution kills an estimated seven million people worldwide every year. WHO data shows that 9 out of 10 people breathe air containing high levels of pollutants. WHO is working with countries to monitor air pollution and improve air quality.

From smog hanging over cities to smoke inside the home, air pollution poses a major threat to health and climate. The combined effects of ambient (outdoor) and household air pollution cause about seven million premature deaths every year, largely as a result of increased mortality from stroke, heart disease, chronic obstructive pulmonary disease, lung cancer and acute respiratory infections.

More than 80% of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed WHO guideline limits, with low- and middle-income countries suffering from the highest exposures, both indoors and outdoors.
From smog hanging over cities to smoke inside the home, air pollution poses a major threat to health and climate. Ambient air pollution accounts for an estimated 4.2 million deaths per year due to stroke, heart disease, lung cancer and chronic respiratory diseases.

Around 91% of the world's population live in places where air quality levels exceed WHO limits. While ambient air pollution affects developed and developing countries alike, low- and middle-income countries experience the highest burden, with the greatest toll in the WHO Western Pacific and South-East Asia regions.

https://www.who.int/health-topics/air-pollution#tab=tab_1https://public.wmo.int/en/events/events-of-interest/who-global-conference-air-pollution-and-health

EPI WEEK 24

Released June 26, 2020 ISSN 0799-3927

SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica

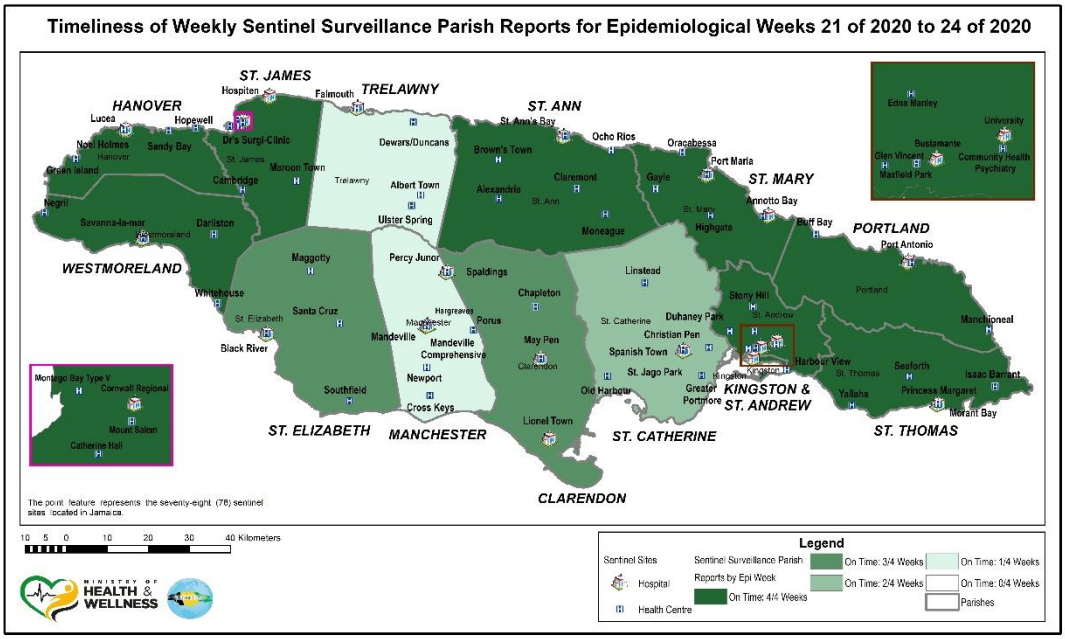
A syndromic surveillance system is good for early detection of and response to public health events.

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 – 21 to 24 of 2020

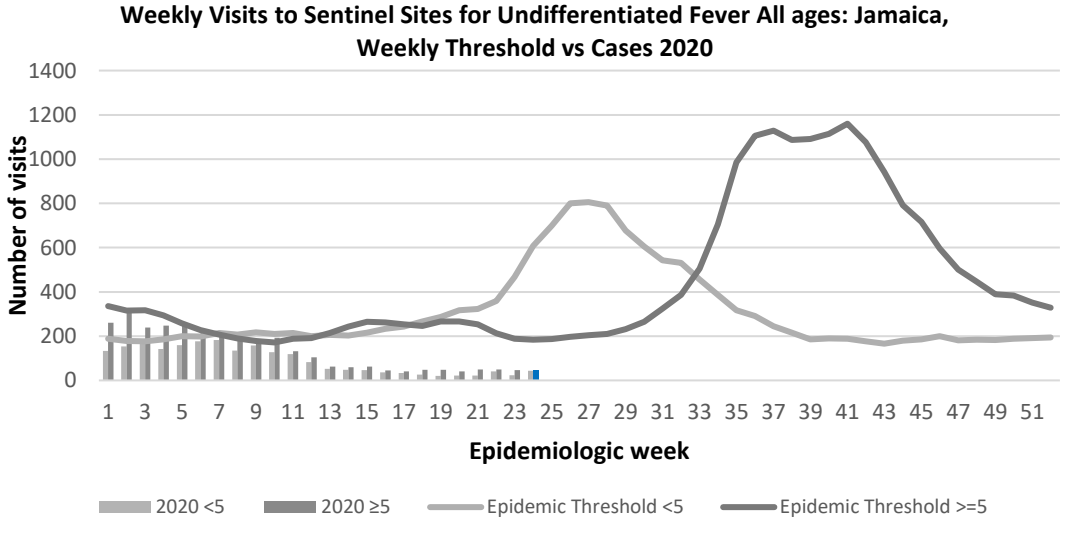
Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.



REPORTS FOR SYNDROMIC SURVEILLANCE

FEVER
Temperature of >38^0C /100.4^0F (or recent history of fever) with or without an obvious diagnosis or focus of infection.

KEY
VARIATIONS OF BLUE SHOW CURRENT WEEK



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

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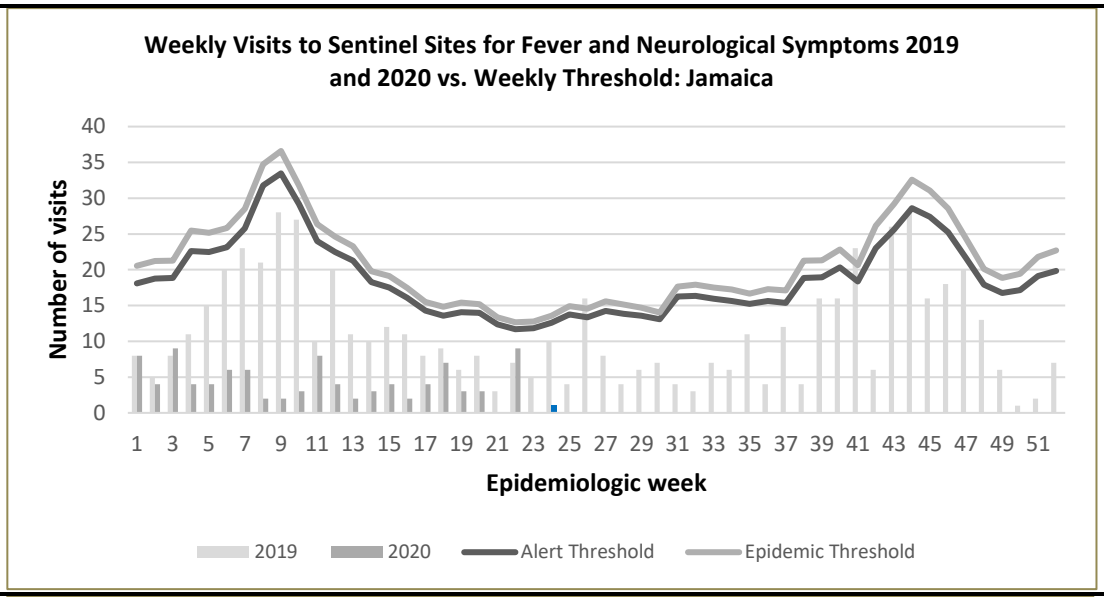
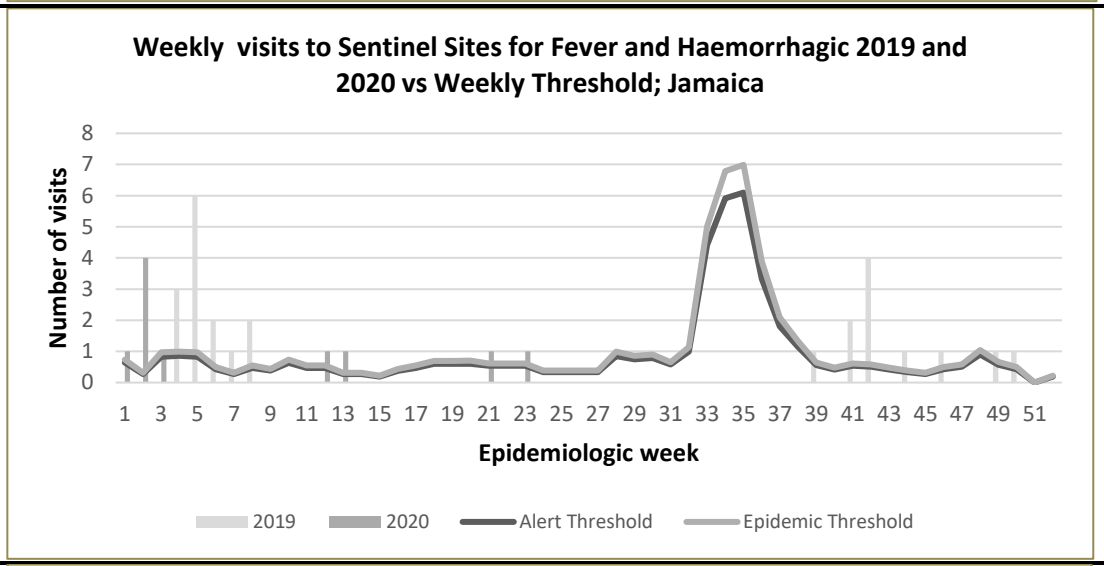
FEVER AND NEUROLOGICAL
Temperature of >38^{0}C /100.4^{0}F (or recent history of fever) in a previously healthy person with or without headache and vomiting. The person must also have meningeal irritation, convulsions, altered consciousness, altered sensory manifestations or paralysis (except AFP).

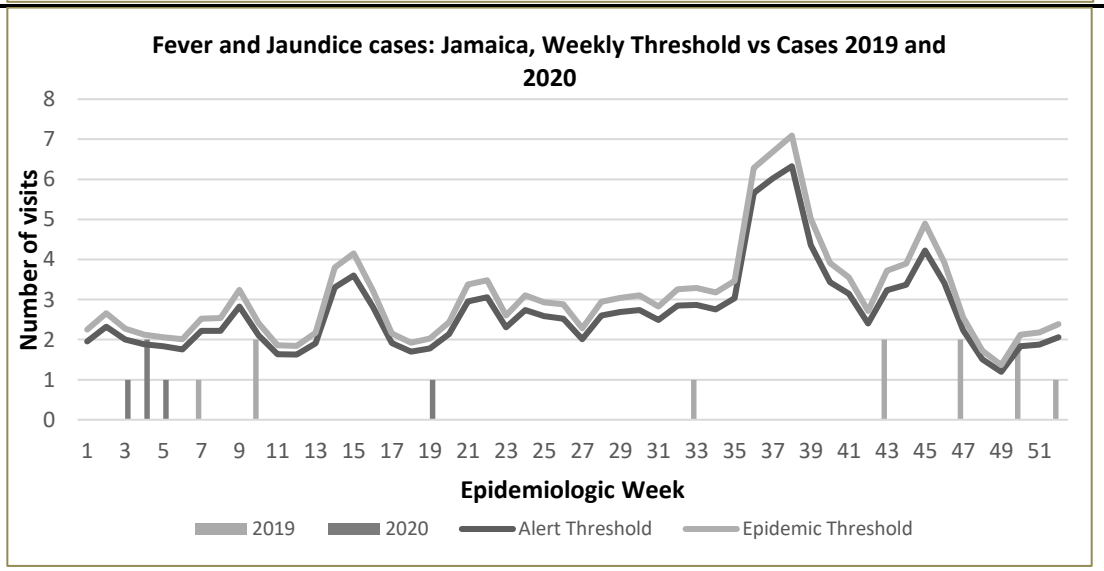


FEVER AND HAEMORRHAGIC
Temperature of >38^0*C* /100.4^0*F* (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE
Temperature of >38^0*C* /100.4^0*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.



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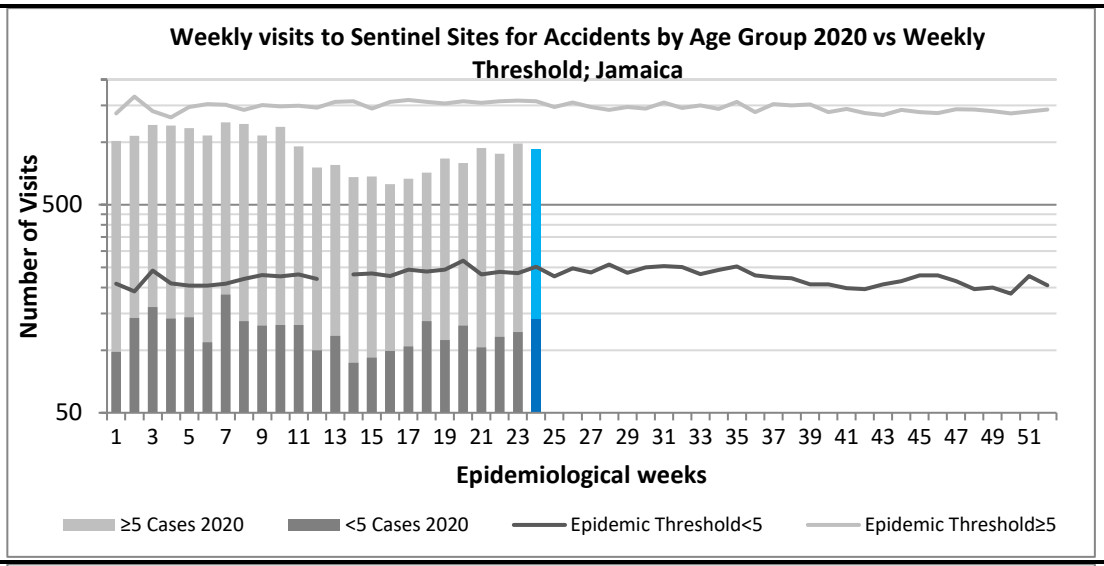
ACCIDENTS

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

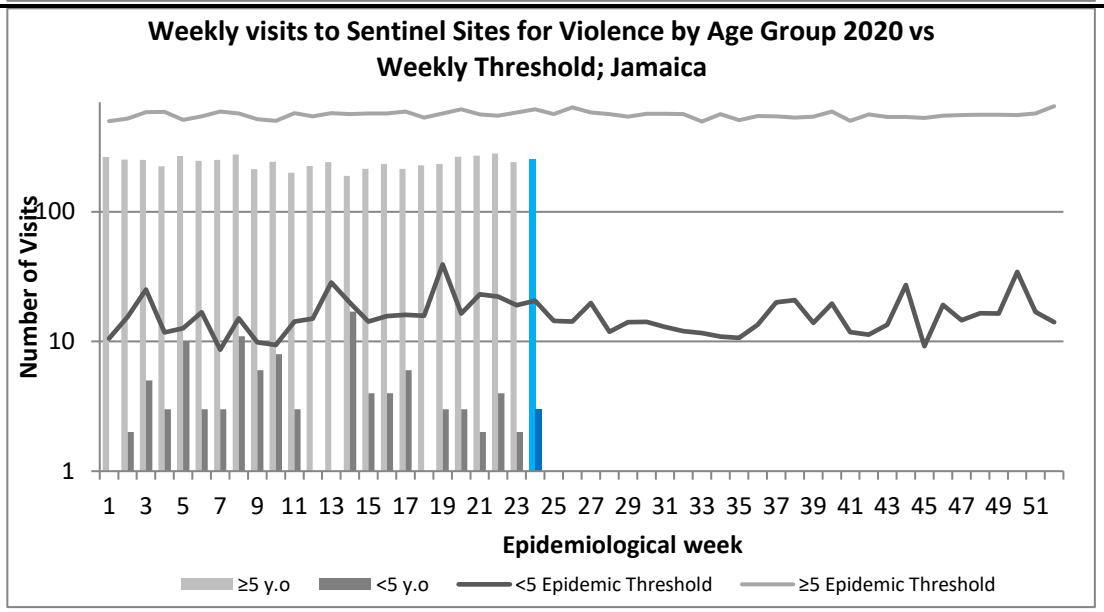
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



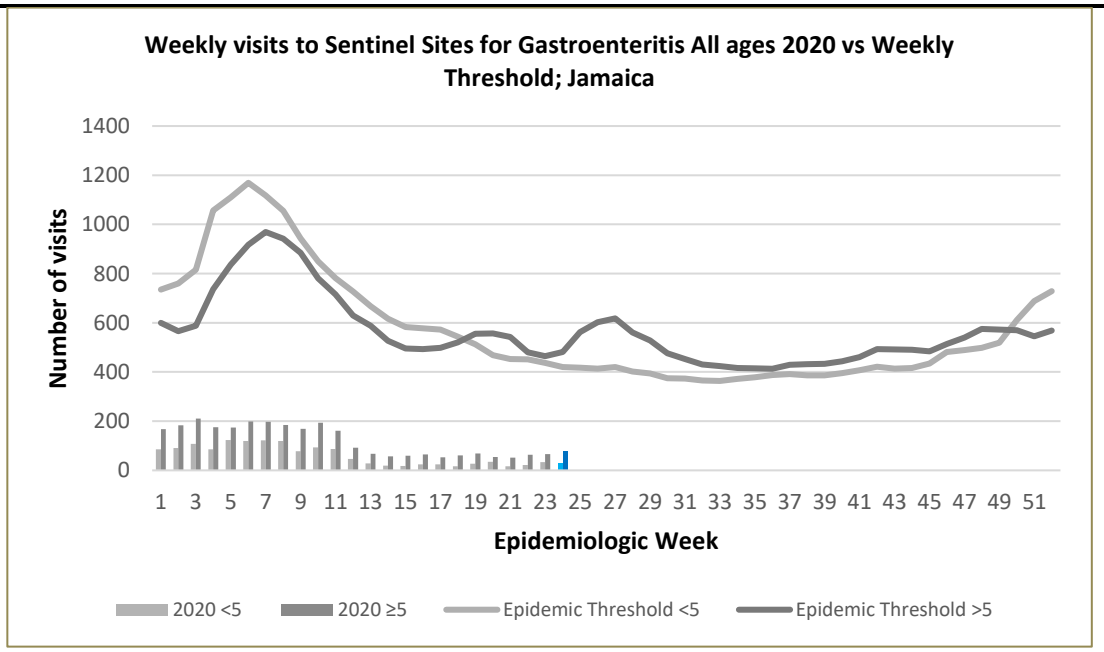
VIOLENCE

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.



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- CLASS ONE NOTIFIABLE EVENTS

	CLASS 1 EVENTS	Confirmed YTD CURRENT YEAR 2020	Confirmed YTD PREVIOUS YEAR 2019
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	5	18
	Cholera	0	0
	Dengue Hemorrhagic Fever*	NA	NA
	Hansen's Disease (Leprosy)	0	0
	Hepatitis B	0	11
	Hepatitis C	0	2
	HIV/AIDS	NA	NA
	Malaria (Imported)	0	0
	Meningitis (Clinically confirmed)	1	5
EXOTIC/ UNUSUAL	Plague	0	0
H IGH MORBIDIT/ MORTALIY	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
	Fever and Rash – Rubella	0	0
	Maternal Deaths**	16	28
	Ophthalmia Neonatorum	23	105
	Pertussis-like syndrome	0	0
	Rheumatic Fever	0	0
	Tetanus	0	0
	Tuberculosis	0	11
	Yellow Fever	0	0
	Chikungunya***	0	0
	Zika Virus****	0	0

Comments

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.

* Dengue Hemorrhagic Fever data include Dengue related deaths;

** Figures include all deaths associated with pregnancy reported for the period. * 2019 YTD figure was updated.

*** CHIKV IgM positive cases

**** Zika PCR positive cases

NA- Not Available

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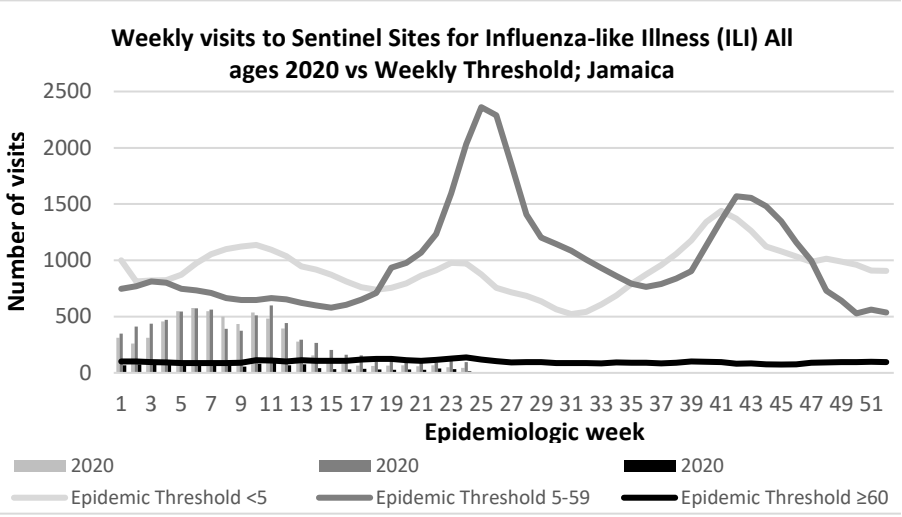
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 24

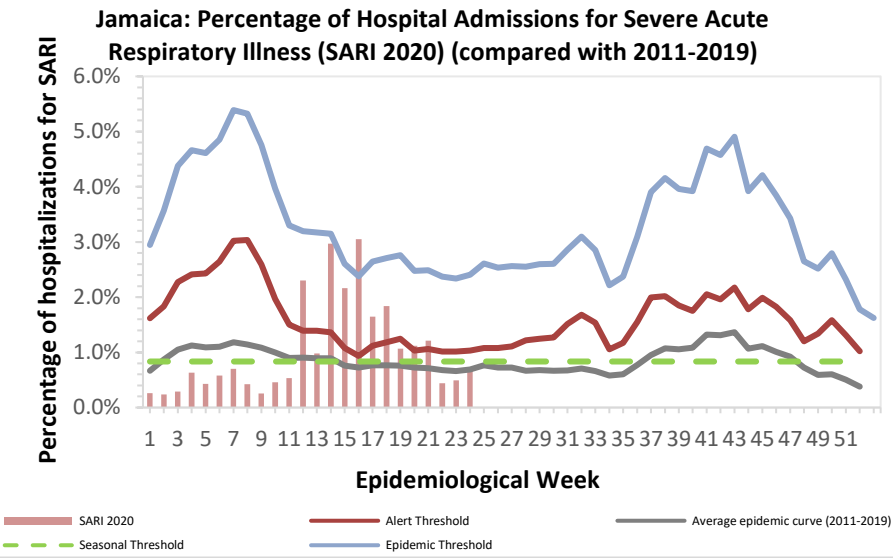
June 07, 2020-June 13, 2020 Epidemiological Week 24

	EW 24	*YTD*
SARI cases	*10*	*302*
Total Influenza positive Samples	*0*	*69*
Influenza A	*0*	*45*
H3N2	*0*	*4*
H1N1pdm09	*0*	*38*
Not subtyped	*0*	*3*
Influenza B	*0*	*24*
Parainfluenza	*0*	*0*



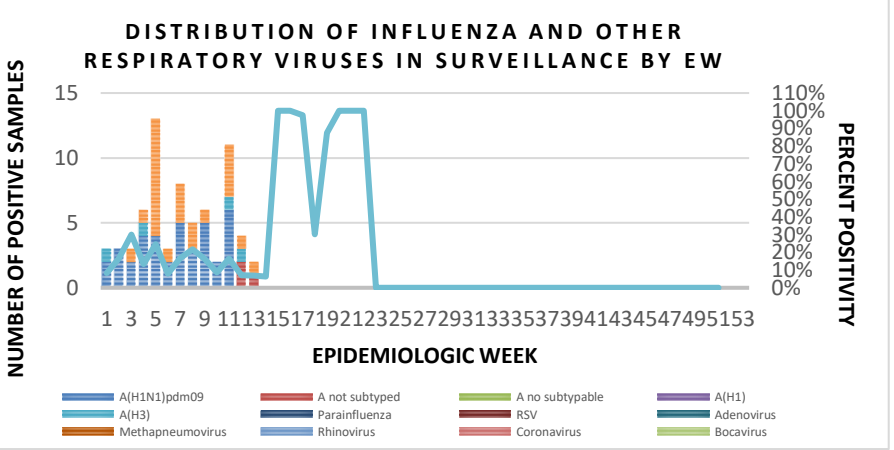
Epi Week Summary

During EW 24, 10 (ten) SARI admissions were reported.



Caribbean Update EW 24

Caribbean: Influenza and other respiratory virus activity remained low in the subregion. In Haiti and Suriname, detections of SARS-CoV-2 continue elevated and increasing..



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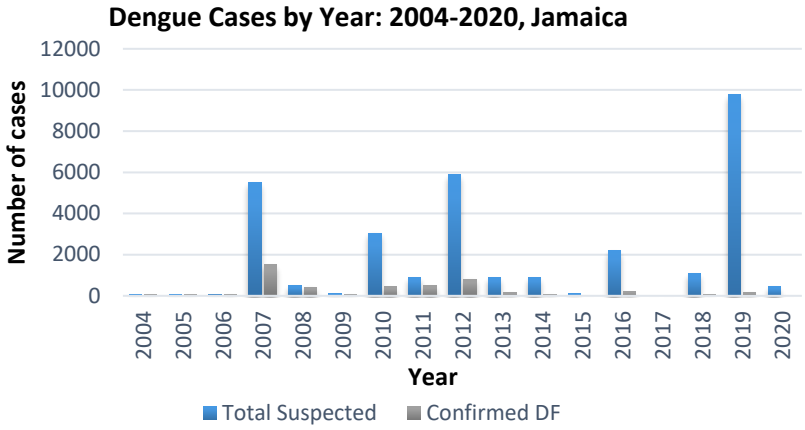
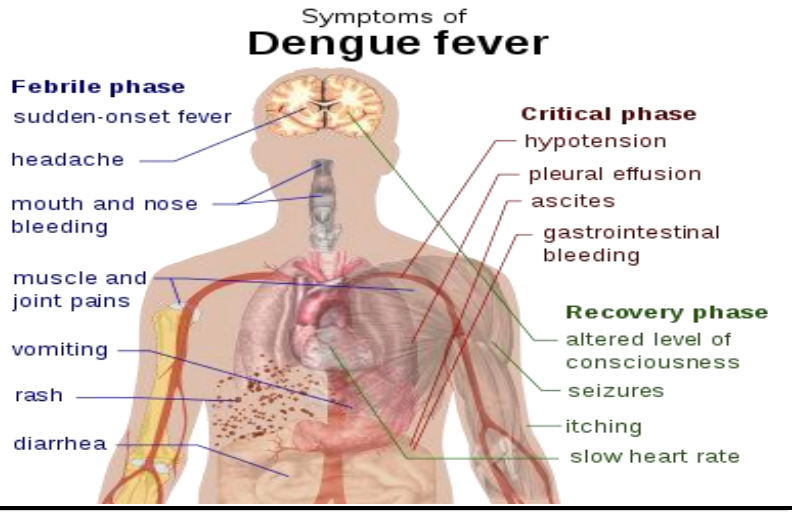
Dengue Bulletin

June 07, 2020-June 13, 2020 Epidemiological Week 24 | Epidemiological Week 24



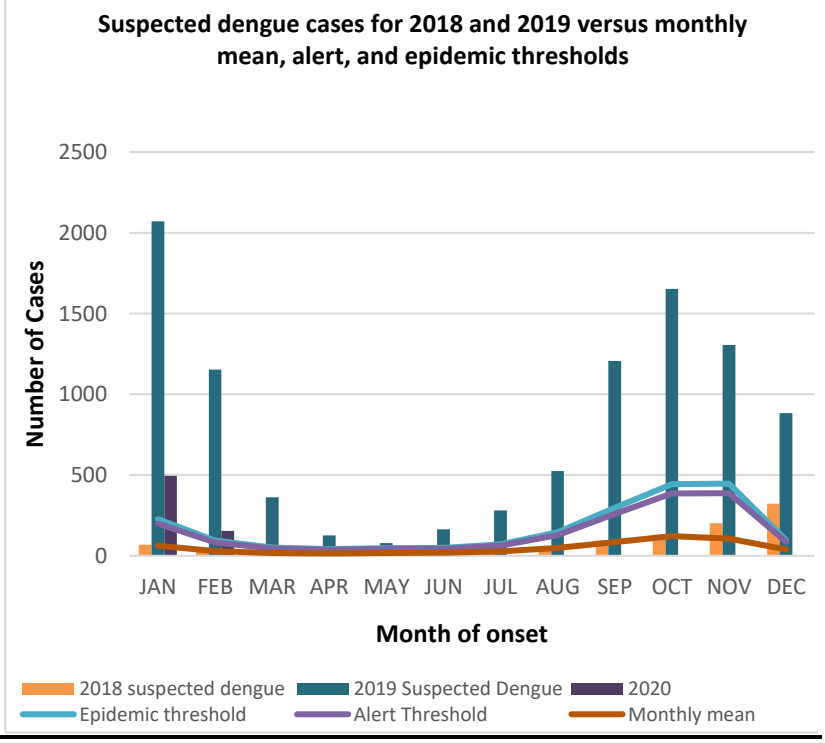
Reported suspected and confirmed dengue with symptom onset in week 24 of 2020

	2020	
	EW 24	YTD
Total Suspected Dengue Cases	0**	688**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**



Points to note:

- ** figure as at June 19 , 2020
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



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RESEARCH PAPER

ABSTRACT

RETROSPECTIVE REVIEW OF CHEMICAL BURNS IN JAMAICA 2015-2018

R. Venugopal [1] 1, S. Moore [1]J. Jones[1,] C. Neblett [1]R. Thomas [1], M. Johnson [1], , M. Wanliss [1], , L Logan, G Williams, K Appiah, R. Arscott and G. Arscott [1]

[1] Department of Plastic & Reconstructive Surgery, University Hospital of the West Indies, Kingston, Jamaica.

Objectives: The observation of a resurgence of chemical assault has stimulated the documentation of burn admissions at tertiary hospitals in Jamaica. We aim to bring about public awareness of the incidence, look at the impact of these injuries on health care and also evaluate the need for better legislature and control of corrosive agents.

Method: A retrospective review of the medical records between January 1st, 2015 and December 31st, 2018 was done to obtain data. The parameters recorded were: age, sex, circumstance of injury (accidental vs assault), burnt surface area, anatomical pattern of burn injury, length of hospital admission and the hospital charges (where applicable). Also, a telephone or outpatient interview was conducted with the victims to evaluate productivity and justice dispensed.

Results: There was a total of 547 admissions for burns during this time, 86 of which were for chemical burns accounting for 15.7% of all admissions. Assault accounted for 52.7% of the injuries; the majority of the burns were distributed to the face and upper limbs. 47.8% of these admissions required surgery as compared to the other burn types where surgery was needed in 14.2 % of cases. Of the victims who were assaulted using a chemical, only 2 cases are currently before the court. One patient has successfully returned to employment, the other sited inability to return to work after injury due to functional deficits or the disfiguring nature of injury.

Conclusion: The incidence of assault using chemicals have remained consistently high in the last 20 years. These injuries are debilitating for the victims resulting in permanently devastating, physical, psychological and social impairment. These victims are predominantly younger; which leads to a prolonged period of productivity in society and increased financial burden for the state.

The need to follow the footsteps countries such as Bangladesh, India and the United Kingdom, who have created specific legislation targeting these types of assaults legal. The need to implement public awareness and social advocacy are also necessary. This will lead to prevention and reduction in the morbidity, mortality and financial burden with chemical assaults.

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