WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Measles

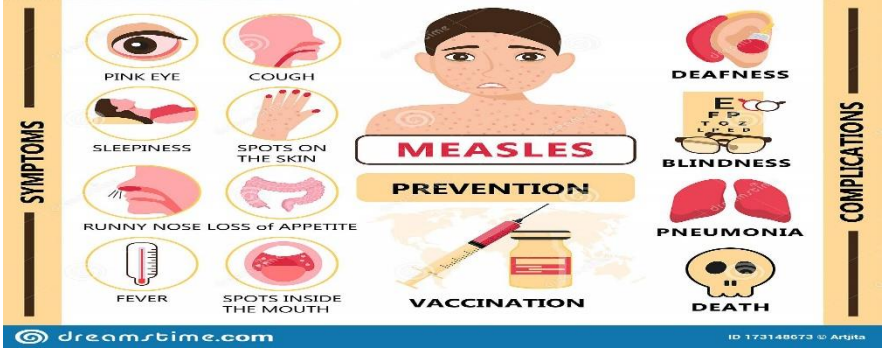
Measles is a highly contagious viral disease, which affects mostly children. It is transmitted via droplets from the nose, mouth, or throat of infected persons. Initial symptoms, which usually appear 10-12 days after infection, include high fever, runny nose, bloodshot eyes, and tiny white spots on the inside of the mouth. Several days later, a rash develops, starting on the face and upper neck and gradually spreading downwards. There is no specific treatment for measles and most people recover within 2-3 weeks. However, particularly in malnourished children and people with reduced immunity, measles can cause serious complications, including blindness, encephalitis, severe diarrhea, ear infection, and pneumonia. Measles can be prevented by immunization.

Key facts

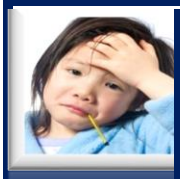
1. Measles is a very contagious viral disease that especially affects children and can cause severe health problems, including severe diarrhea, ear infections, blindness, pneumonia, and encephalitis (swelling of the brain). Some of these complications can lead to death.Icono de sarampión.
2. At the global level, measles continues to be one of the leading causes of death among young children, despite the fact that there is a safe and effective vaccine to prevent it. There is no specific antiviral treatment against the measles virus.
3. Serious cases are especially frequent in malnourished young children, especially those whose immune systems are weakened. In populations with high levels of malnutrition and inadequate health care, measles can kill in up to 10% of cases.
4. Measles is transmitted by airborne droplets from the nose, mouth, or throat of an infected person. The virus can stay active and contagious in the air or on surfaces for two hours.
5. Symptoms tend to be high fever, runny nose, cough, red and watery eyes, small white spots on the inside of the cheeks, and widespread rash all over the body.
6. Before widespread vaccination began in 1980, measles caused 2.6 million deaths a year throughout the world, 12,000 of them in the Americas.
7. Between 1970 and 1979, Latin American countries reported about 220,000 cases of measles a year.
8. There has been a 95% drop in cases over a 35-year period, from 4.5 million cases in 1980 to approximately 244,700 in 2015.

Prevention

Routine measles vaccination for children, combined with mass immunization campaigns in countries with high case and death rates, are key public health strategies to reduce global measles deaths. The measles vaccine has been in use for nearly 60 years. It is safe, effective and inexpensive. It costs approximately one US dollar to immunize a child against measles. The measles vaccine is often incorporated with rubella and/or mumps vaccines. It is equally safe and effective in the single or combined form. Adding rubella to measles vaccine increases the cost only slightly, and allows for shared delivery and administration costs. In 2018, about 86% of the world's children received 1 dose of measles vaccine by their first birthday through routine health services – up from 72% in 2000. Two doses of the vaccine are recommended to ensure immunity and prevent outbreaks, as about 15% of vaccinated children fail to develop immunity from the first dose. In 2018, 69% of children received the second dose of the measles vaccine. Of the estimated 19.2 million infants not vaccinated with at least one dose of measles vaccine through routine immunization in 2018, about 6.1 million were in 3 countries: India, Nigeria and Pakistan.
https://www.paho.org/en/topics/measles



EPI WEEK 30



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Sentinel Surveillance in Jamaica

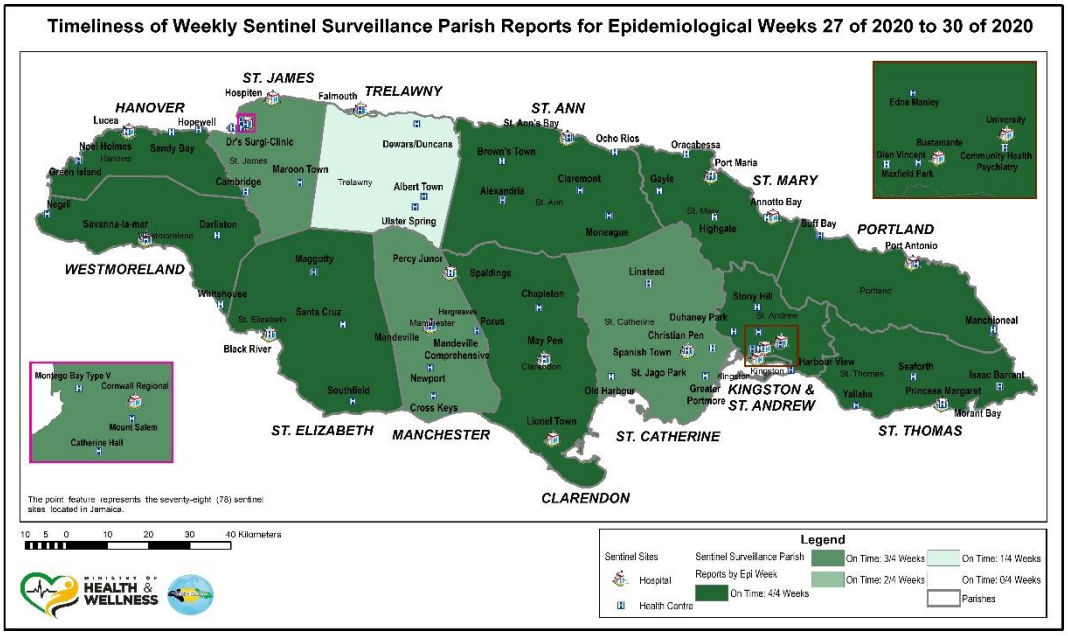
A syndromic surveillance system is good for early detection of and response to public health events.

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.

Map representing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks – 27 to 30 of 2020

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

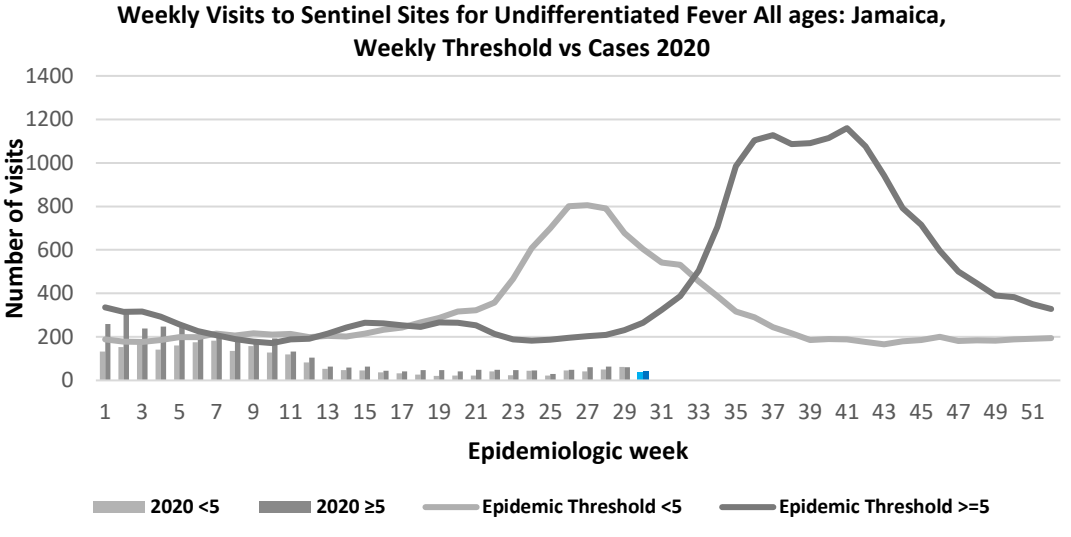


REPORTS FOR SYNDROMIC SURVEILLANCE

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



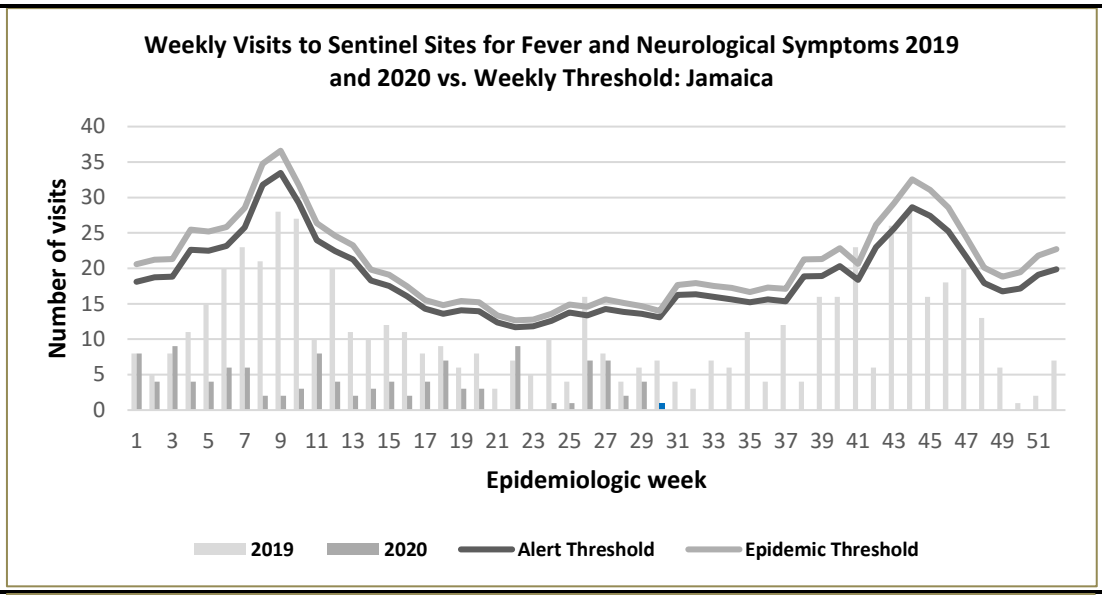
2 NOTIFICATIONS- All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

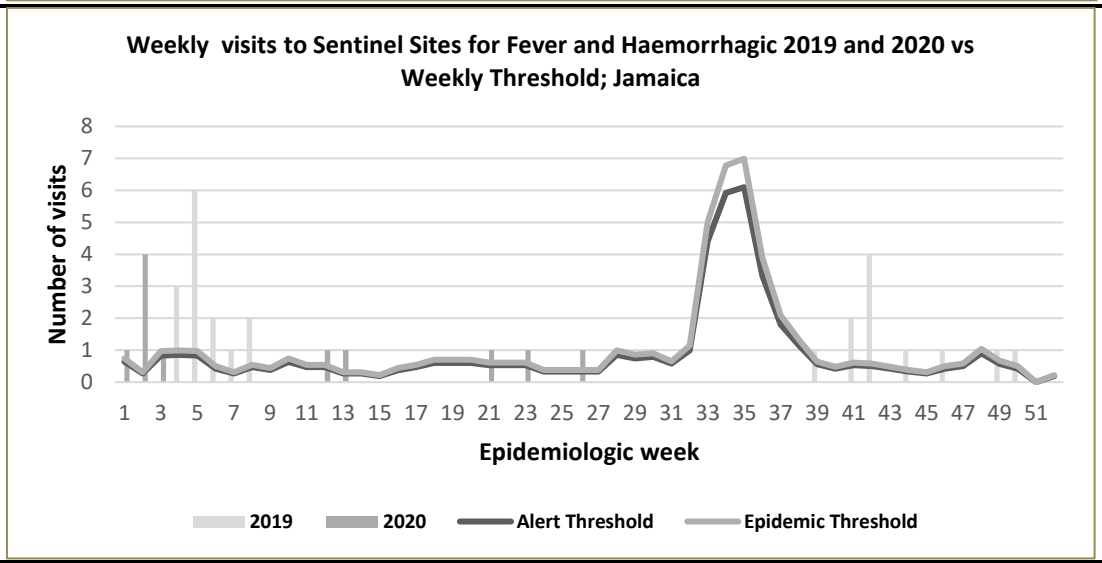
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

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).

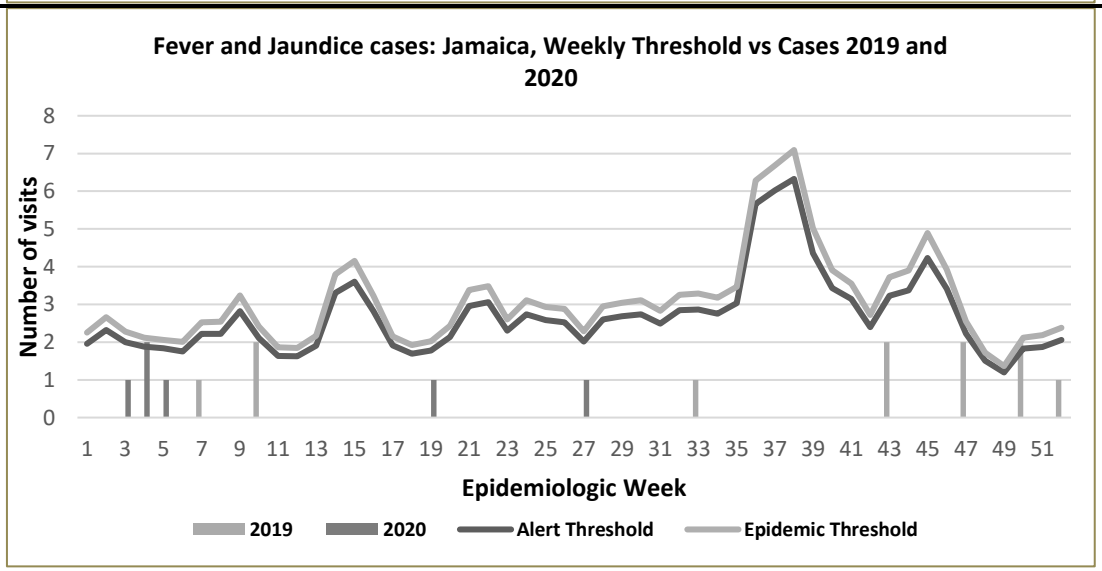


FEVER AND HAEMORRHAGIC
Temperature of >38^0C /100.4^0F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



FEVER AND JAUNDICE
Temperature of >38^0C /100.4^0F (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

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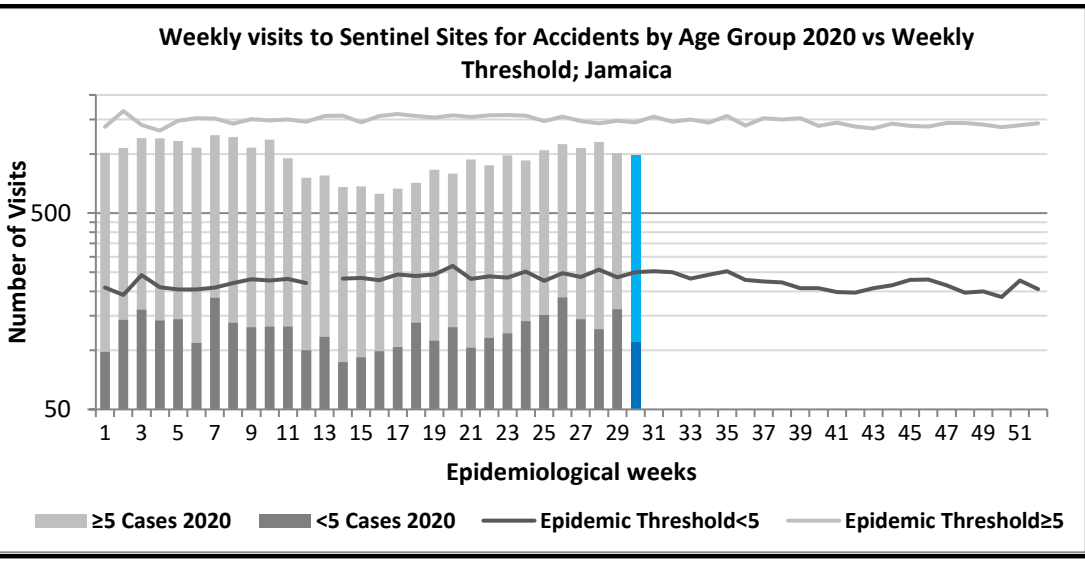
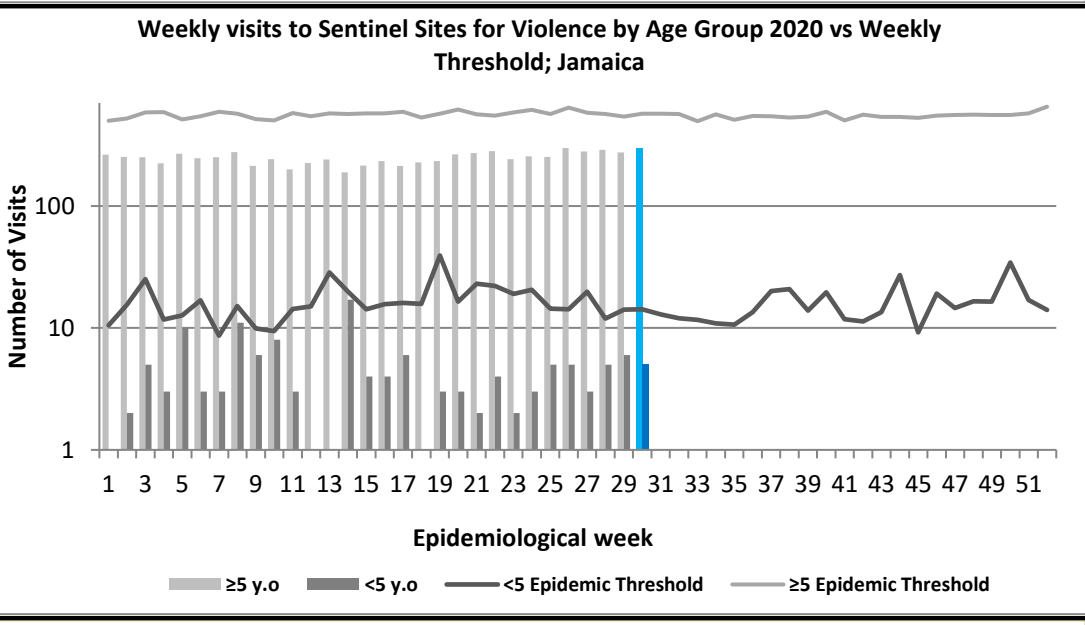


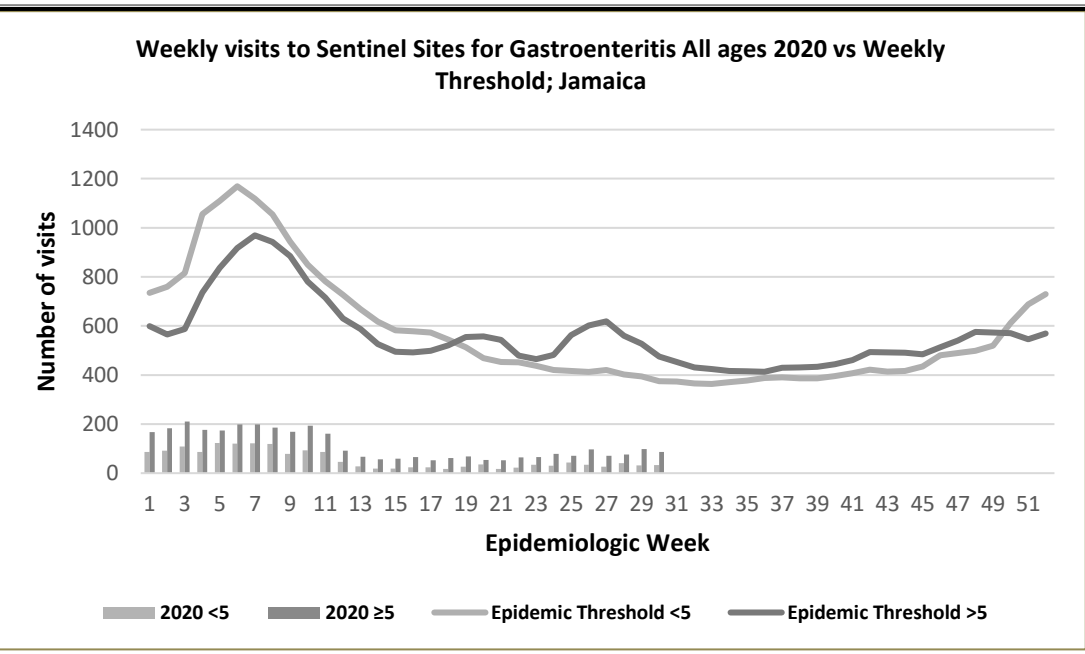
VIOLENCE

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	24
	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	13
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
		Rubella	0	0
	Maternal Deaths**		22	35
	Ophthalmia Neonatorum		23	116
	Pertussis-like syndrome		0	0
	Rheumatic Fever		0	0
	Tetanus		0	0
	Tuberculosis		6	27
	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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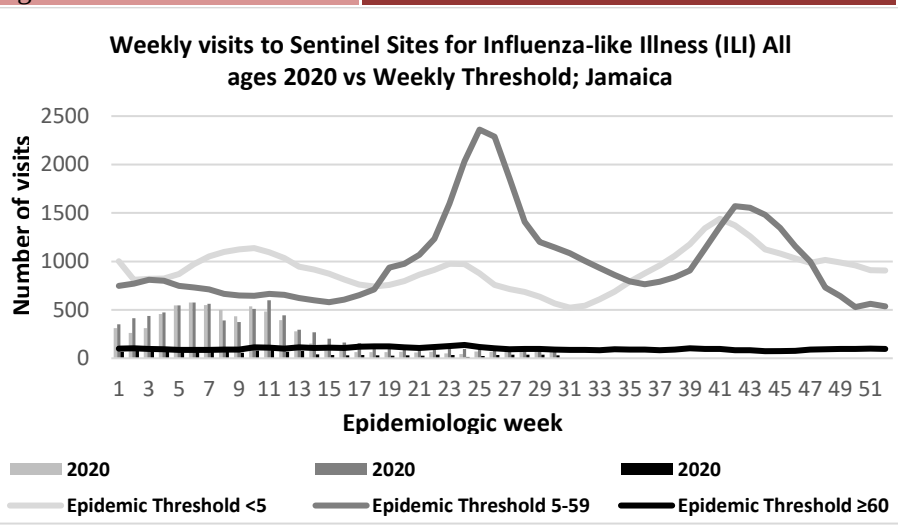
NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 30

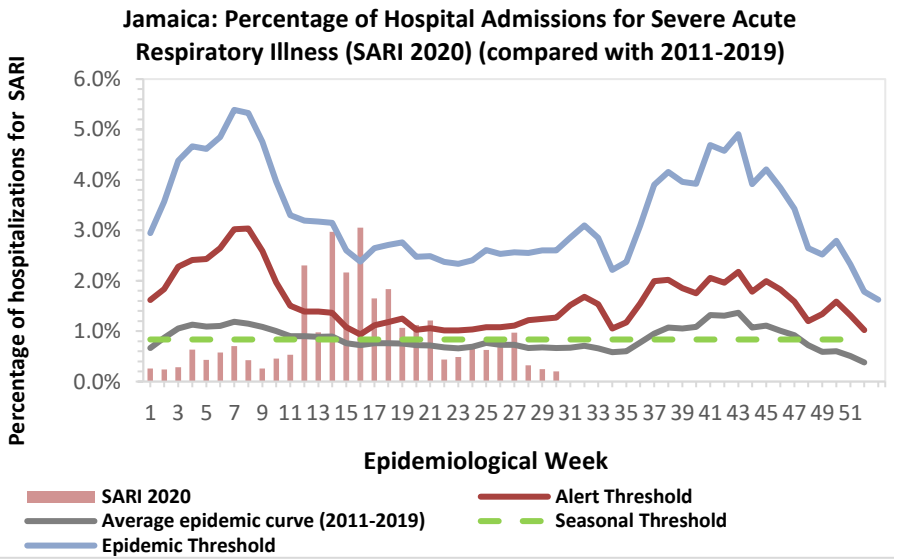
July 19, 2020-July 25, 2020 Epidemiological Week 30

	EW 30	*YTD*
SARI cases	*3*	*347*
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*



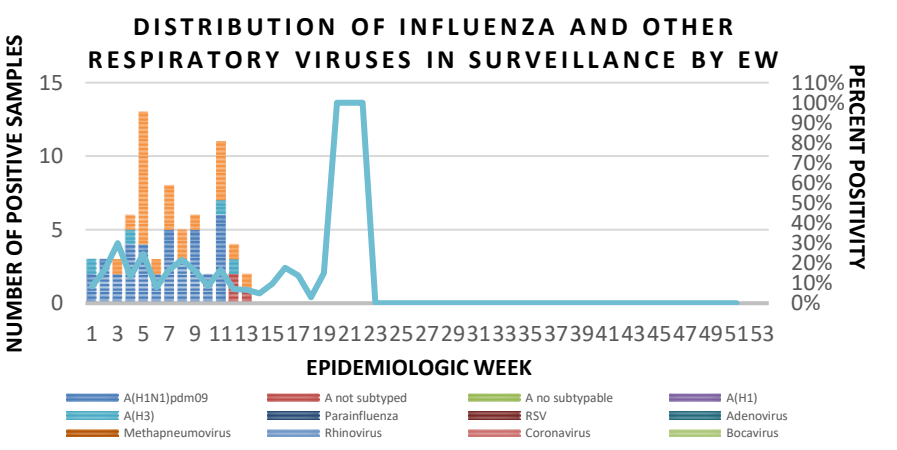
Epi Week Summary

During EW 30, 3 (three) SARI admissions were reported.



Caribbean Update EW 30

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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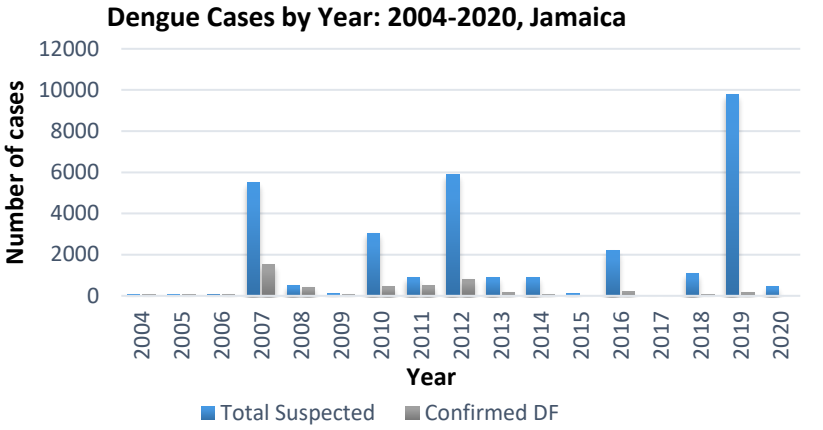
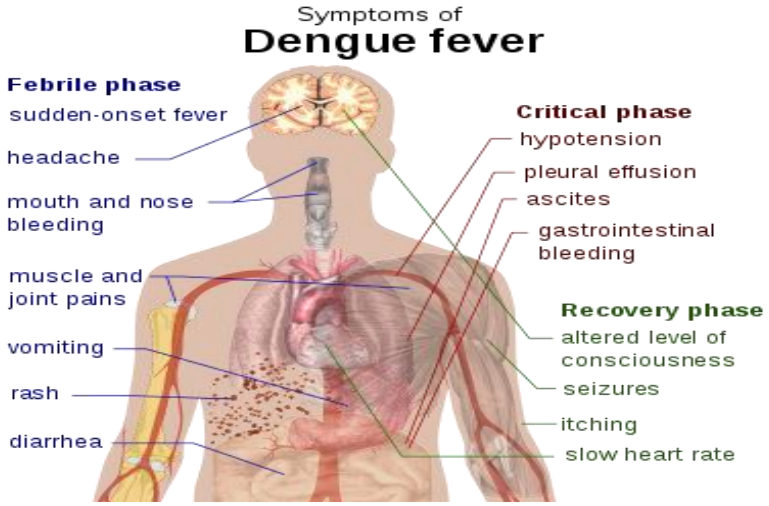
Dengue Bulletin

July 19, 2020-July 25, 2020 Epidemiological Week 30 | Epidemiological Week 30



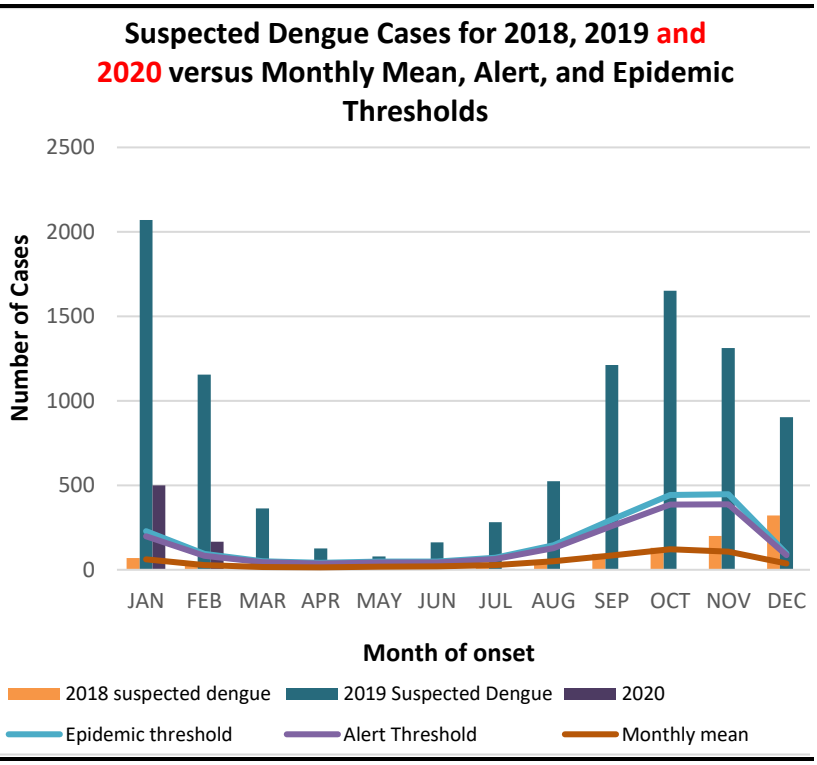
Reported suspected and confirmed dengue with symptom onset in week 30 of 2020

	2020	
	EW 30	YTD
Total Suspected Dengue Cases	0**	729**
Lab Confirmed Dengue cases	0**	1**
CONFIRMED Dengue Related Deaths	0**	1**



Points to note:

- ** figure as at July 31 , 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

Barriers to Adherence of Nurses and Patient Care Assistants to Hand Hygiene Practices and Equipment Decontamination Policy at an Urban Hospital in Jamaica

Feron Brown Hamilton1, Antoinette Barton-Gooden2

Aim: To determine the barriers to adherence of Nurses and Patient Care Assistants to hand hygiene practices and Equipment Decontamination Policy.
Methods: Cross-sectional study design was utilized among 109 Registered Nurses and 26 Patient Care Assistants (PCAs) who were conveniently sampled from the Medical and Surgical Departments. A 54 item self- administered Behaviours and Levers to hand hygiene instrument and the Infection Control Policy Audit Tool. Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 20. Descriptive statistics included ANOVA and chi-squared test.

Results: Response rate was 68% with nurses (109/135) and PCAs (26/37). Most of the respondents were female (97%), age range 20-30 years (54.4%) and had 0-4 years' experience (63%). Self-reported adherence to appropriate hand hygiene practices were high: 84% reported 81-100% adherence. Barriers identified were: Social influences ($\bar{x}$ 3.24, ±1.67), knowledge of decontamination of equipment policy ($\bar{x}$ 4.18, ±2.01), environment context and resources ($\bar{x}$ 4.64 ±1.48) and action planning ($\bar{x}$ 4.96 ±1.59). There were no statistical significant relationship between socio-demographic characteristics: age ($\chi 2$ 4.684; $p>.05$; job title ($\chi 2$ 1.709; $p > .05$); years of service ($\chi 2$ 1.237, $p > .05$); unit assigned ($\chi 2$ 4.684; $p>0.05$) and adherence. While participants who were 31 years and older were more knowledge of equipment decontamination policy ($\bar{x}$ 5.71±2.01; $p<0.05$). PCAs had greater knowledge of the equipment decontamination policy ($\bar{x}$ 5.41, ±1.75; $p<0.05$) when compared to Enrolled Assistant Nurses ($\bar{x}$4.09±1.90) and Registered Nurses ($\bar{x}$3.85±1.58).

Conclusion: Nurse and PCAs reported high hand hygiene adherence. Barriers were knowledge of the equipment decontamination policy, environment context and resources.

Key words: Nurses, Patient Care Assistants, Hand Hygiene and Decontamination Policy

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