

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

EPI WEEK 03

Global Health Ethics

Overview: Ethical questions related to health, health care, and public health cover topics as diverse as moral issues around reproduction, state obligations in the provision of health care services, and appropriate measures to control infectious disease. Scholars and health care professionals have debated ethical questions related to health and health care since the earliest days of medicine. Recent formal efforts to articulate international standards of ethics applicable to health and health care can be traced to the Nuremberg trials of 1947, during which the horrors of Nazi medical experiments came to light. The principles that emerged from those trials, known as the Nuremberg Code, are broadly applicable to many types of health-related research involving human participants, including clinical trials. The growing breadth and complexity of contemporary health challenges have produced a range of difficult questions that cannot always be adequately addressed by relying exclusively on existing policies, guidelines or codes of conduct. Debates over access to new and expensive pharmaceuticals and medical technologies, as well as increasing awareness of the gross health disparities that exist both within and between countries, have called attention to the need for an ethics of health policy and practice..

Research: Research ethics govern the standards of conduct for scientific researchers. It is important to adhere to ethical principles in order to protect the dignity, rights and welfare of research participants. The WHO Manual (Section XV.2) defines research with human subjects as 'any social science, biomedical, behavioural, or epidemiological activity that entails systematic collection or analysis of data with the intent to generate new knowledge, in which human beings: are exposed to manipulation, intervention, observation, or other interaction with investigators either directly or through alteration of their environment; or become individually identifiable through investigator's collection, preparation, or use of biological material or medical or other records..

Infectious Diseases: 1. Immunization raises a host of challenging ethical questions that researchers, governments, funders, pharmaceutical companies, and communities must confront. 2. TB: Ethical issues include questions about the equitable distribution of resources, protection of vulnerable groups, respect for patient choice of treatment options and solidarity between communities during outbreaks. 3. Zika has raised many specific ethical issues, in particular regarding pregnancy. At the same time, it has highlighted ethical issues that arise in vector-borne diseases more generally. 4. The HIV epidemic has raised many ethical challenges for public health officials, researchers and clinicians, reaching from macro-level policy to micro-level clinical decisions.

Ethical Principles of Research



https://www.who.int/health-topics/ethics-and-health#tab=tab_1



SYNDROMES

PAGE 2



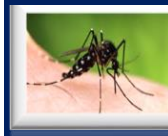
CLASS 1 DISEASES

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INFLUENZA

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DENGUE FEVER

PAGE 6



GASTROENTERITIS

PAGE 7



RESEARCH PAPER

PAGE 8

SENTINEL SYNDROMIC SURVEILLANCE

Sentinel Surveillance in Jamaica



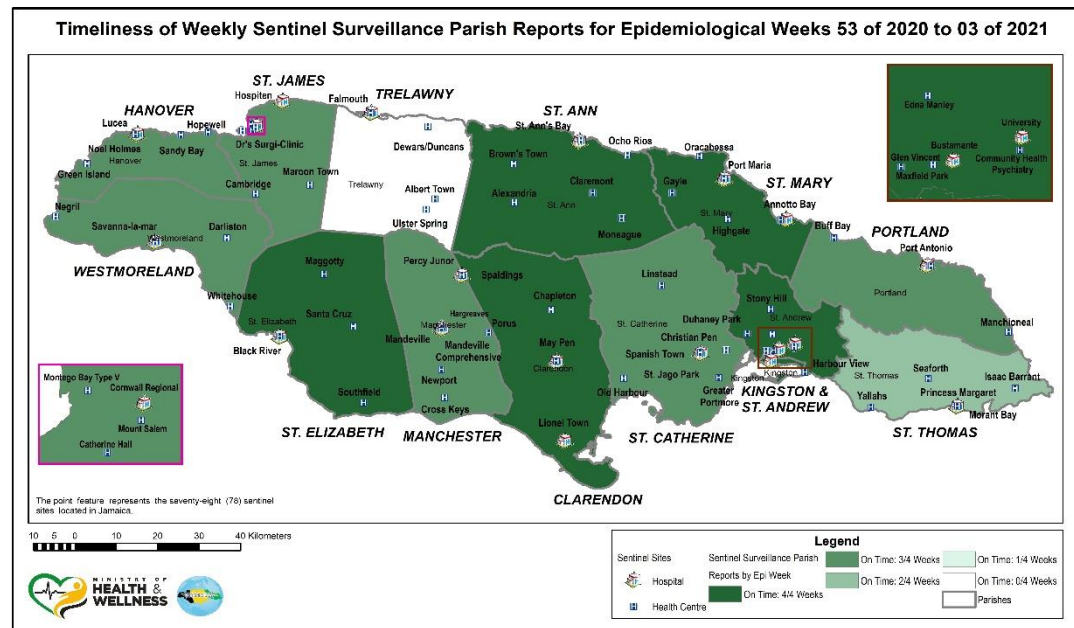
A syndromic surveillance system is good for early detection of and response to public health events.

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 - 53 2020 to 3 of 2021

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

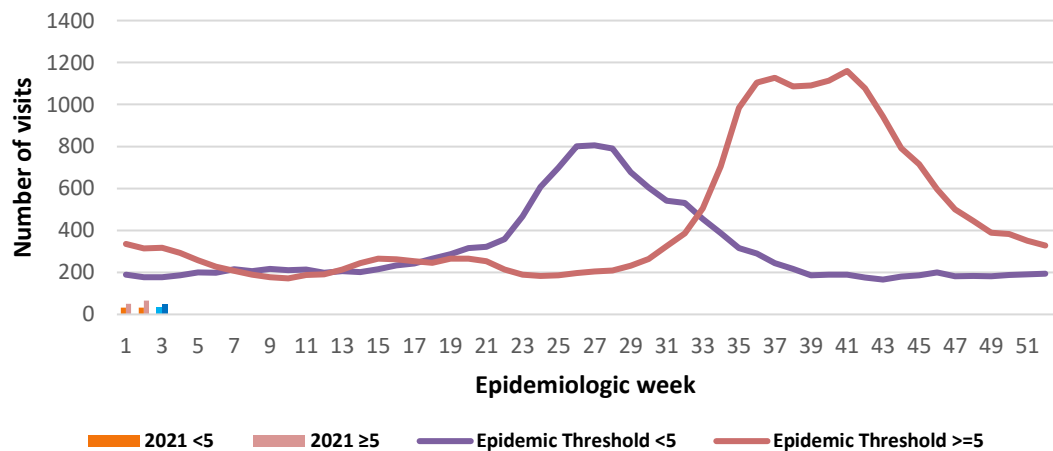
FEVER

Temperature of $>38^{\circ}C$ / $100.4^{\circ}F$ (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 2021



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



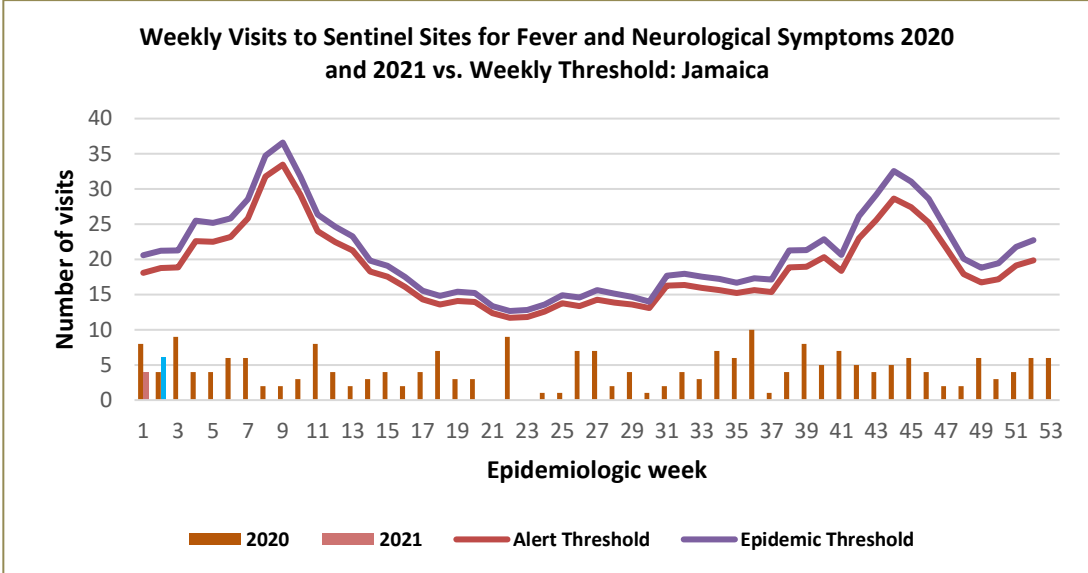
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting

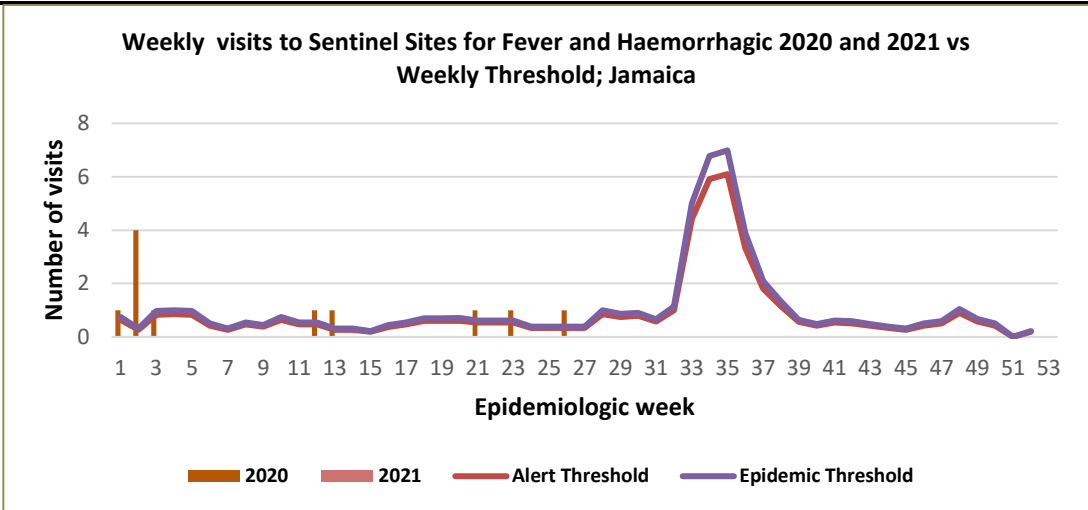
FEVER AND NEUROLOGICAL

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).



FEVER AND HAEMORRHAGIC

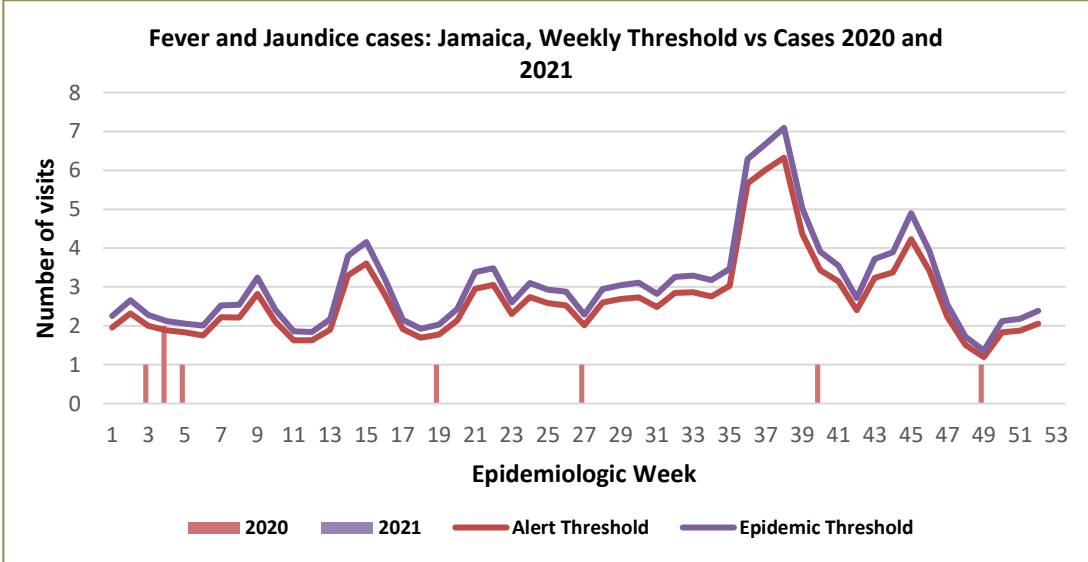
Temperature of $>38^{\circ}\text{C}$ / 100.4°F (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



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.



3 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



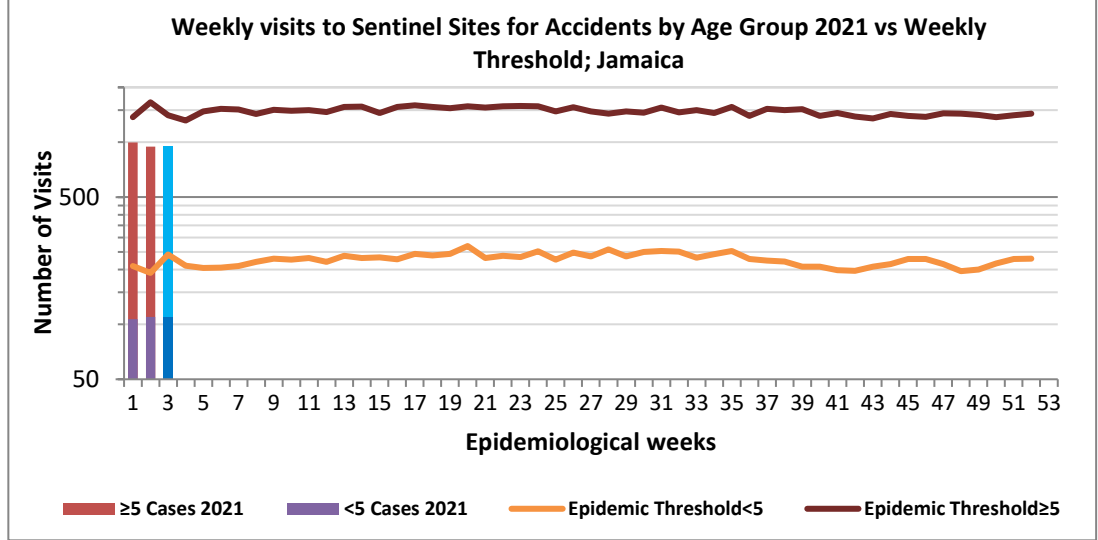
SENTINEL REPORT- 78 sites. Automatic reporting

ACCIDENTS

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

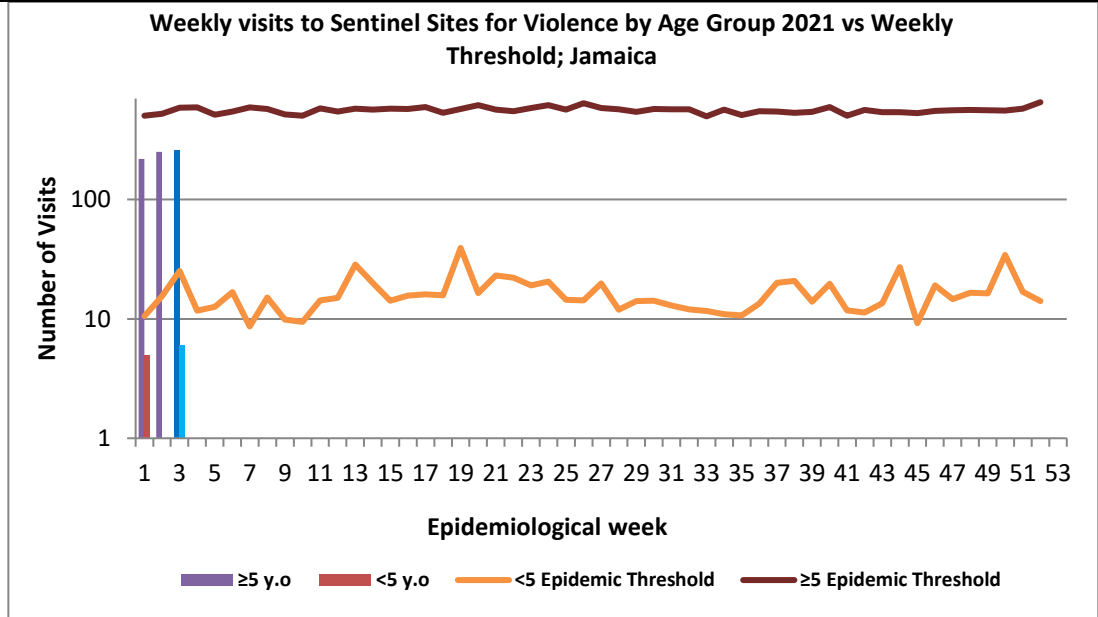
KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



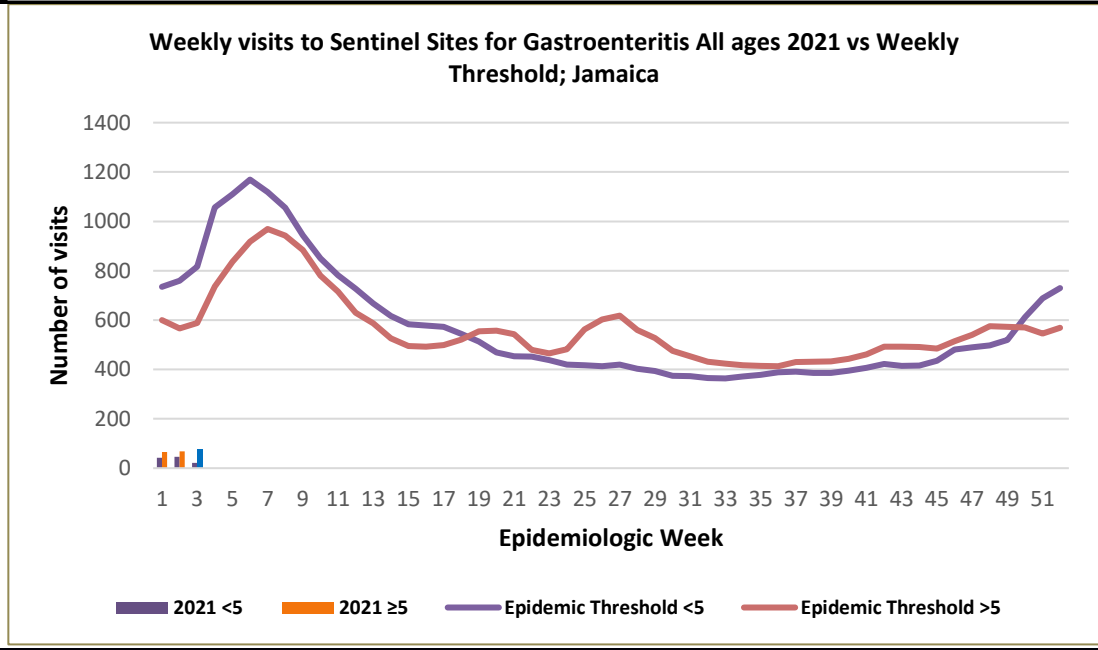
VIOLENCE

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



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CLASS ONE NOTIFIABLE EVENTS		Confirmed YTD ^α		Comments	
CLASS 1 EVENTS		CURRENT YEAR 2021	PREVIOUS YEAR 2020		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	0 ^β	0	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;	
	Cholera	0	0		
	Dengue Hemorrhagic Fever ^γ	See Dengue page below	See Dengue page below		
	Hansen's Disease (Leprosy)	0	0		
	Hepatitis B	0	0		
	Hepatitis C	0	0		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	0	0		
EXOTIC/ UNUSUAL	Plague	0	0	^δ Figures include all deaths associated with pregnancy reported for the period. ^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	0	1		
	Ophthalmia Neonatorum	0	0		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
Tuberculosis	0	0			
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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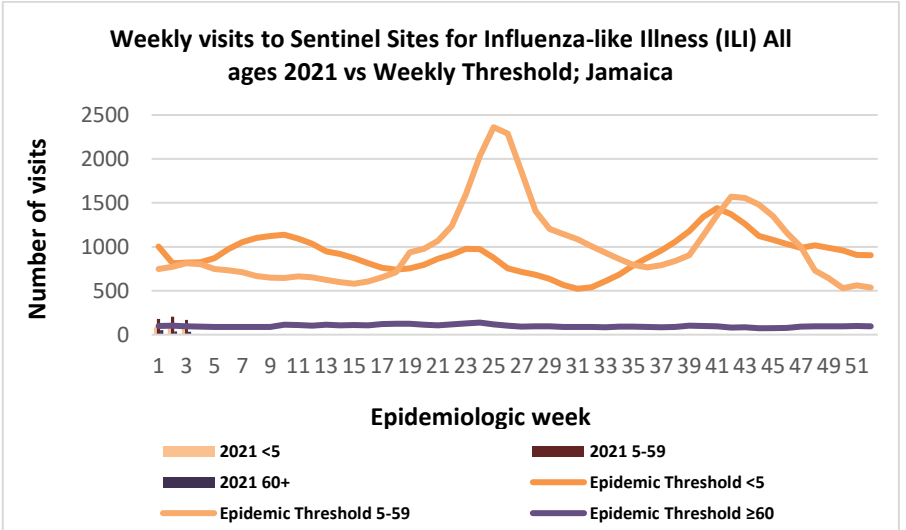
SENTINEL REPORT- 78 sites. Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 03

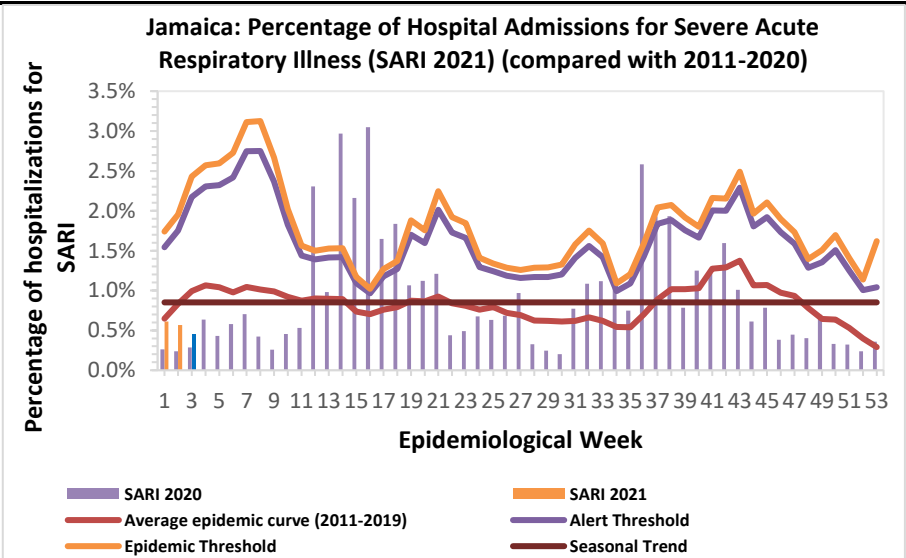
January 17, 2021 – January 23, 2021 Epidemiological Week 03

	<i>EW 03</i>	<i>YTD</i>
SARI cases	7	26
Total Influenza positive Samples	<i>0</i>	<i>0</i>
Influenza A	<i>0</i>	<i>0</i>
H3N2	<i>0</i>	<i>0</i>
H1N1pdm09	<i>0</i>	<i>0</i>
Not subtyped	<i>0</i>	<i>0</i>
Influenza B	<i>0</i>	<i>0</i>
Parainfluenza	<i>0</i>	<i>0</i>



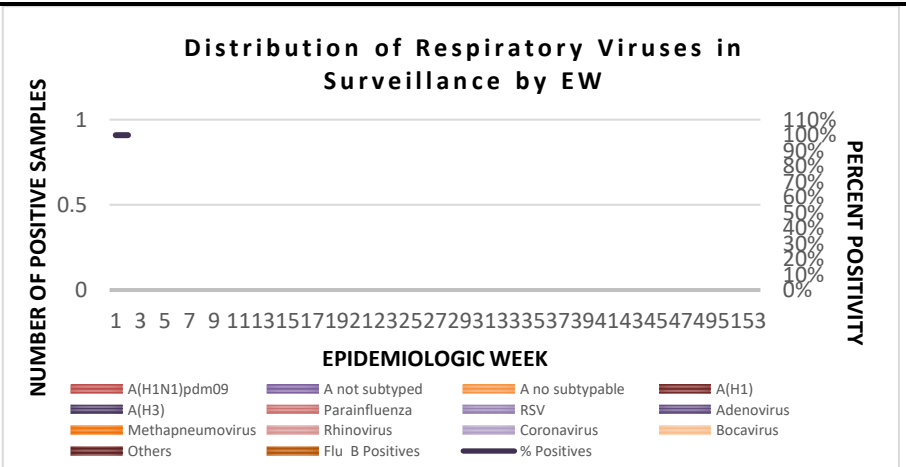
Epi Week Summary

During EW 03, 7 (seven) SARI admissions were reported.



Caribbean Update EW 03

Caribbean: Influenza and other respiratory virus activity remained low. In Belize, SARS-CoV-2 activity was reported at elevated levels and increasing. In Haiti, SARS-CoV-2 activity continued at moderate levels but increasing. In Jamaica, SARSCoV-2 activity was reported at elevated levels and increasing. In Saint Lucia, ILI activity was above expected levels for this time and SARS-CoV-2 detections and activity continued to increase.



6 NOTIFICATIONS-
All clinical sites

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

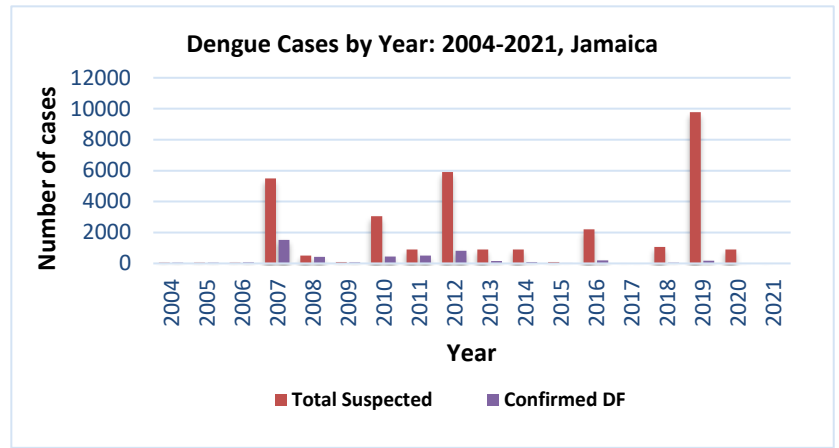
HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

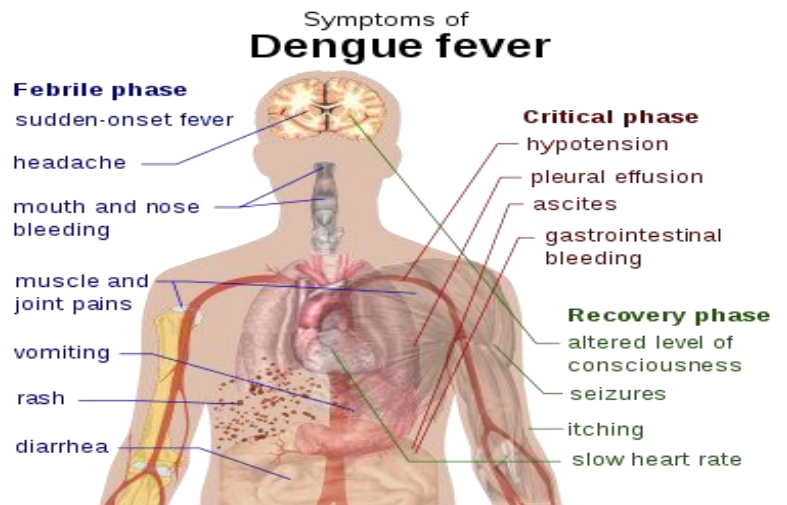
January 17, 2021 – January 23, 2021 Epidemiological Week 03

Epidemiological Week 03



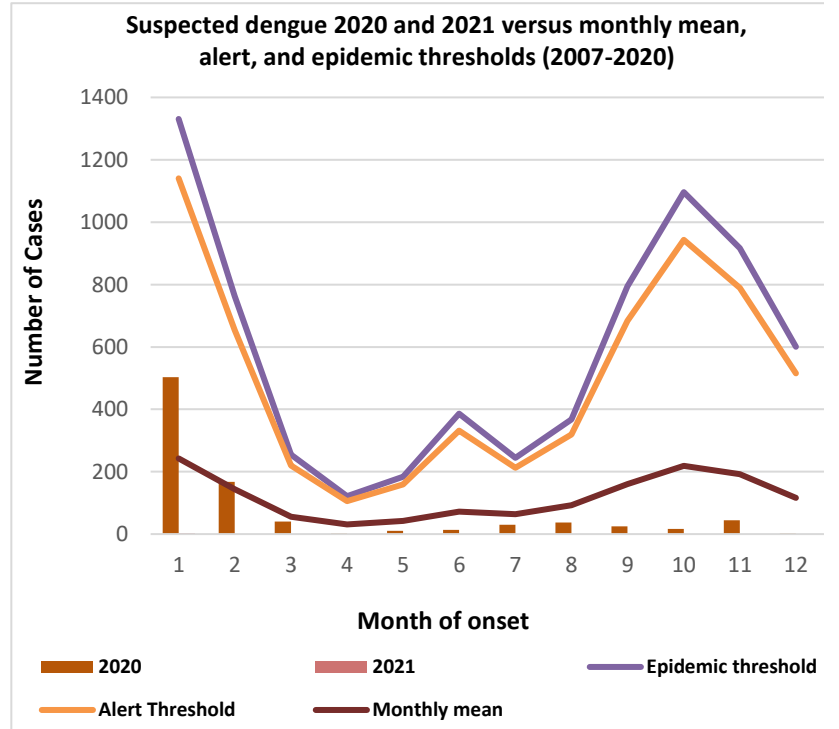
Reported suspected and confirmed dengue with symptom onset in week 03 of 2021

	2021*	
	EW 03	YTD
Total Suspected Dengue Cases	3	3
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- * figure as at January 29, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.



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

ABSTRACT

Title: *A Review of the 1918 Influenza Pandemic - The Jamaica Experience*

Authors: *Iyanna Wellington, Ardene Harris, Nicolas Elias, Shara Williams, Kelly-Ann Gordon-Johnson, Nathlee McMorris, Neisha Vanhorne, Lesley-Ann James, Andriene Grant, Karen Webster-Kerr*

Institution: *National Epidemiology Unit, Ministry of Health, Jamaica*

Corresponding Author / Presenter: *Dr Iyanna Wellington at wellingtoni@moh.gov.jm*

Objective: To describe the 1918 influenza pandemic in Jamaica and explore the socio-political and health-care contexts of the event.

Methods: Reviewed documents to obtain data on demographic parameters, hospital admissions for influenza, social conditions, and health system response.

Results: The Jamaican population in 1918 was 809,005 (384,319 males and 424,686 females). Health care was delivered by a network of: private practices, hospitals, infirmaries, and dispensaries.

The 1918 influenza pandemic started in January; the first recorded case of pandemic influenza in Jamaica occurred around October 1918 and by December the pandemic in Jamaica waned. In 1918/19 the proportion of influenza hospitalizations was 157 times greater than the mean for the preceding 10 years (1,412/10,000 versus 9/10,000). The influenza-specific death rate in 1918/19 was 3,288/10,000 in hospitalized patients while the maximum annual influenza-specific death rate in non-outbreak years was 80/10,000. The crude death rate declined by 32% from 1918/19 to 1919/20.

The First World War, local riots, food shortages, and recent hurricanes may have challenged the local authorities' reaction to the emergence of the pandemic in Jamaica. The response to the outbreak included: school closures, bans on public gatherings, disinfection of public transport, local travel bans, hiring of additional sanitary workers, opening of emergency hospitals and soup kitchens, health education, and policy changes.

Conclusion: The 1918 influenza outbreak in Jamaica was sudden and severe. The response to the 1918 influenza outbreak was affected by the socio-political realities of the day, which should be kept in mind for future pandemic preparedness planning.



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8 NOTIFICATIONS-
All clinical
sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
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REPORT- 78 sites.
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