

WEEKLY EPIDEMIOLOGY BULLETIN

NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

Hepatitis D

EPI WEEK 22

Key facts

- Hepatitis D virus (HDV) is a virus that requires hepatitis B virus (HBV) for its replication. HDV infection occurs only simultaneously or as super-infection with HBV.
- The virus is most commonly transmitted from mother to child during birth and delivery, as well as through contact with blood or other body fluids.
- Vertical transmission from mother to child is rare.
- At least 5% of people with chronic HBV infection are co-infected with HDV, resulting in a total of 15 – 20 million persons infected with HDV worldwide. However, this is a broad global estimation since many countries do not report the prevalence of HDV.
- Worldwide, the overall number of HDV infection has decreased since 1980s. This trend is mainly due to a successful global HBV vaccination programme.
- HDV-HBV co-infection is considered the most severe form of chronic viral hepatitis due to more rapid progression towards liver-related death and hepatocellular carcinoma.
- Currently, treatment success rates are generally low.
- Hepatitis D infection can be prevented by hepatitis B immunization.

Transmission

The routes of HDV transmission the same as for HBV: percutaneously or sexually through contact with infected blood or blood products. Vertical transmission is possible but Vaccination against HBV prevents HDV coinfection, and hence expansion of childhood immunization programmes has resulted in a decline in hepatitis incidence worldwide. Symptoms

Hepatitis D

- ❖ **Caused by delta agent**
 - Protein capsule surrounding low-molecular weight RNA
 - Defective virus that requires the presence of HBV (antigen coat) for assembly, replication
---> infection
 - Causes disease only in the presence of HBV infection (**co-infection vs. superinfection**)
 - Can cause quiescent HBV to suddenly appear
- ❖ **Especially prevalent in drug users and dialysis patients since same mode of transmission as HBV (i.e., parenteral)**
- **Chronic HDV seldom resolves**

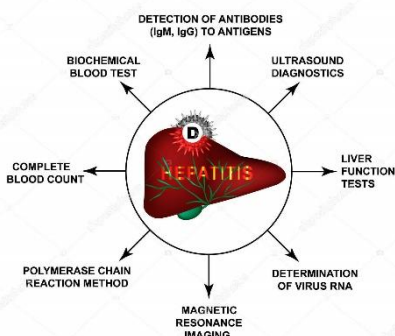
are

rare.

HBV

D

DIAGNOSIS OF HEPATITIS D



Who is at risk?







- Chronic HBV carriers are at risk for infection with HDV.
- People who are not immune to HBV (either by natural disease or immunization with the hepatitis B vaccine) are at risk of infection with HBV which puts them at risk of HDV infection.
- High prevalence in persons who inject drugs (PWID) suggest that injecting drug use is an important risk factor for HDV co-infection.
- High-risk sexual activity (e.g. sex worker) is also an increased risk for HDV infection.
- Migration from high HDV prevalence countries to lower prevalence areas might

have an effect on the epidemiology of the host country.

Prevention

Prevention and control of HDV infection requires prevention of HBV transmission through hepatitis B immunization, blood safety, injection safety, and harm reduction services. Hepatitis B immunization does not provide protection against HDV for those already HBV infected.

Source: <https://www.who.int/news-room/fact-sheets/detail/hepatitis-d>

	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.

Table showcasing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks - 19 to 22 of 2022

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
	2022												
19	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	Late (T)	Late (W)
20	On Time	On Time	On Time	Late (T)	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	On Time
21	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
22	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time	Late (T)	On Time	On Time	On Time	On Time	On Time

REPORTS FOR SYNDROMIC SURVEILLANCE

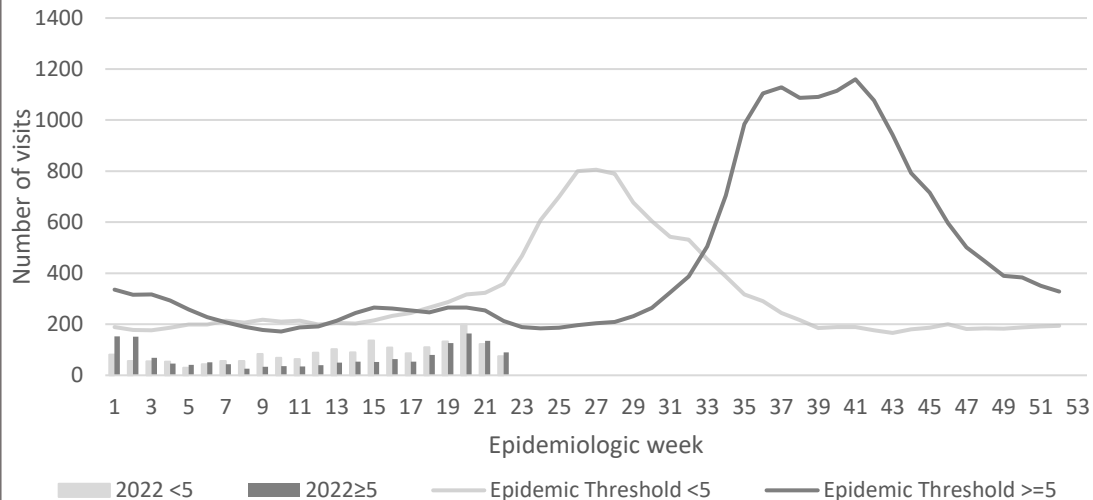
UNDIFFERENTIATED FEVER

Temperature of >38°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 2020



2 NOTIFICATIONS- All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued



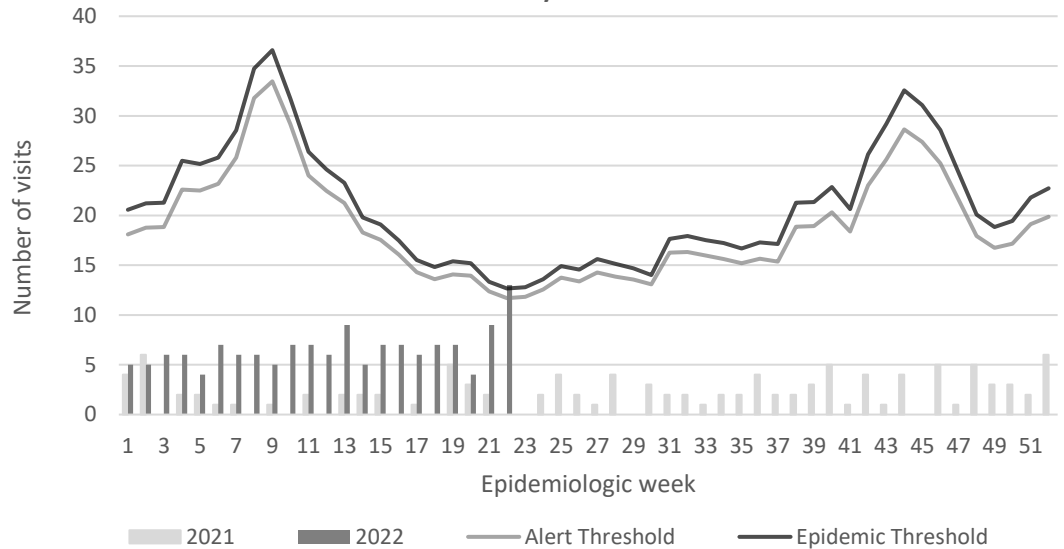
SENTINEL REPORT- 78 sites. Automatic reporting

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 2021 and 2022 vs. Weekly Threshold: Jamaica

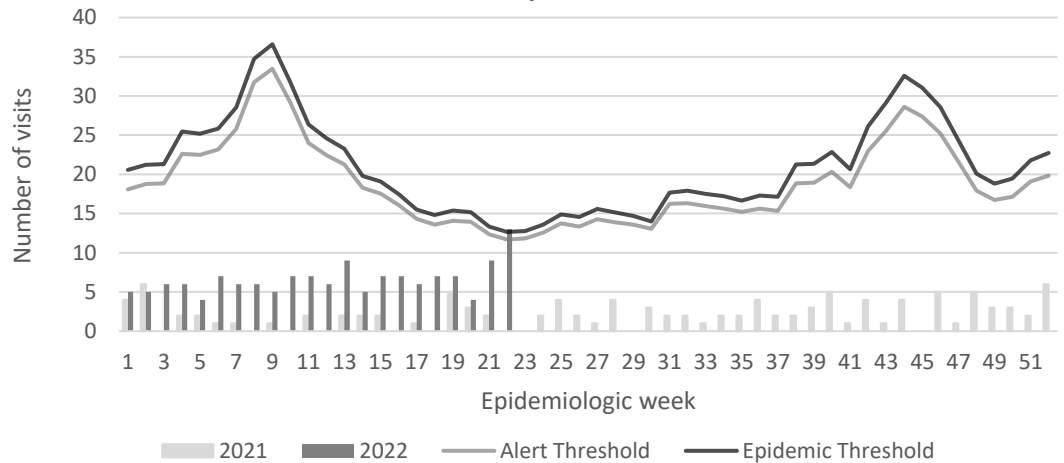


FEVER AND HAEMORRHAGIC

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 Neurological Symptoms 2021 and 2022 vs. Weekly Threshold: Jamaica



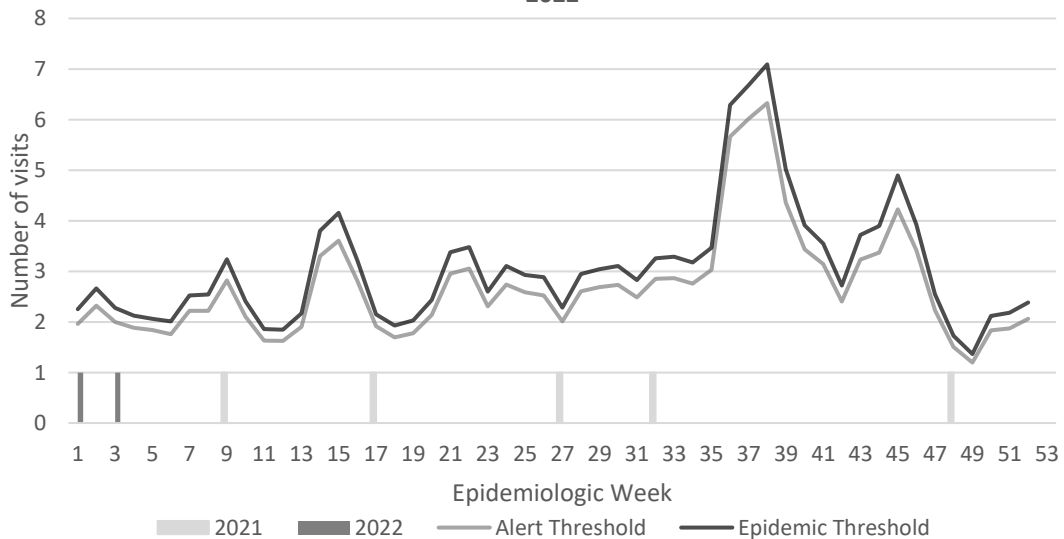
FEVER AND JAUNDICE

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 2021 and 2022



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

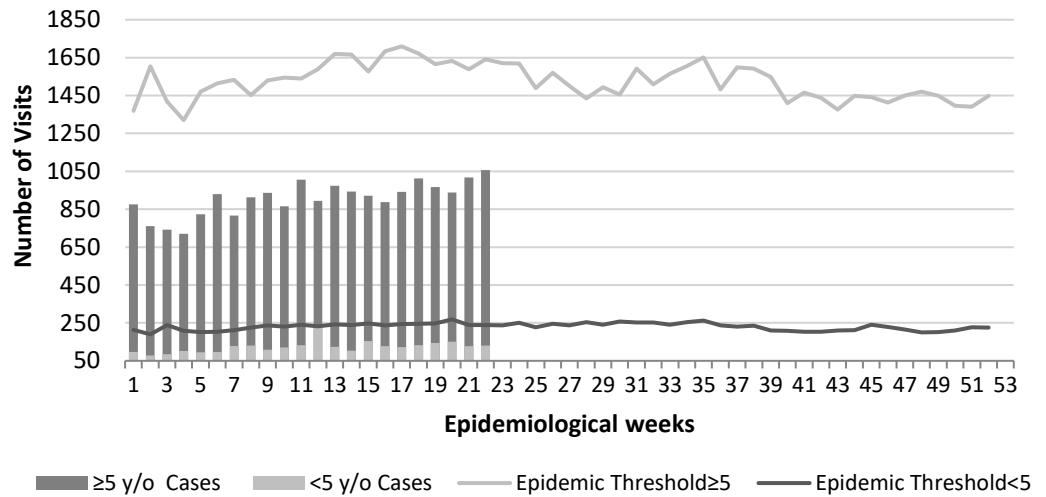
Any injury for which the cause is unintentional, e.g. motor vehicle, falls, burns, etc.

KEY

VARIATIONS OF BLUE SHOW CURRENT WEEK



Weekly visits to Sentinel Sites for Accidents by Age Group 2022 vs Weekly Threshold; Jamaica

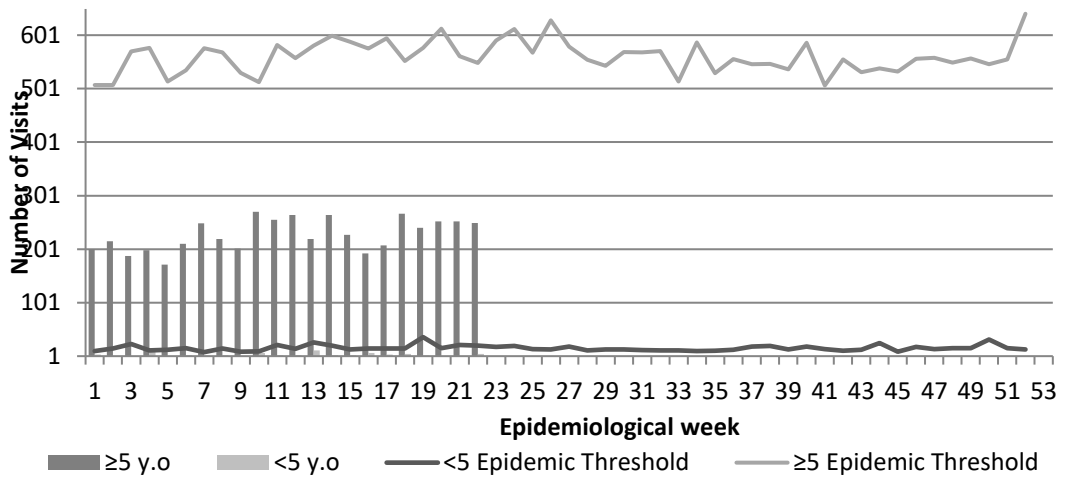


VIOLENCE

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



Weekly visits to Sentinel Sites for Violence by Age Group 2022 vs Weekly Threshold; Jamaica

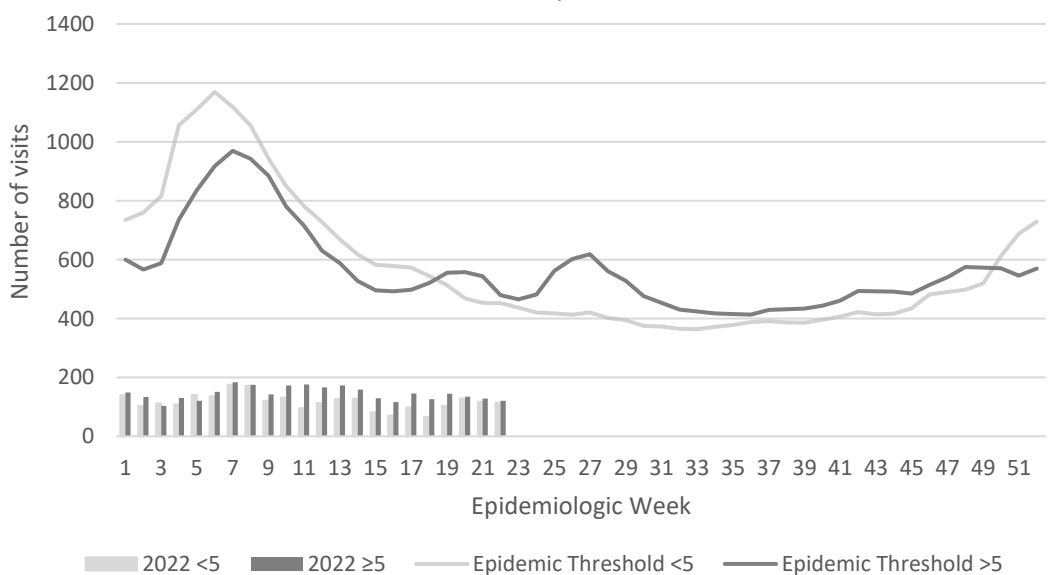


GASTROENTERITIS

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 2022 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			
		CURRENT YEAR 2022	PREVIOUS YEAR 2021		
NATIONAL /INTERNATIONAL INTEREST	Accidental Poisoning	96 ^β	64 ^β	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		
	COVID-19 (SARS-CoV-2)	42201	35303		
	Hansen's Disease (Leprosy)	0	0		
	Hepatitis B	8	6		
	Hepatitis C	2	4		
	HIV/AIDS	NA	NA		
	Malaria (Imported)	0	0		
	Meningitis (Clinically confirmed)	8	9		
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	22	19		
	Ophthalmia Neonatorum	48	40		
	Pertussis-like syndrome	0	0		
	Rheumatic Fever	0	0		
	Tetanus	0	0		
Tuberculosis	13	19			
Yellow Fever	0	0			
	Chikungunya ^ε	0	0	NA- Not Available	
	Zika Virus ^θ	0	0		



5 NOTIFICATIONS-
All clinical sites



INVESTIGATION
REPORTS- Detailed Follow
up for all Class One Events



HOSPITAL
ACTIVE
SURVEILLANCE-
30 sites. Actively
pursued



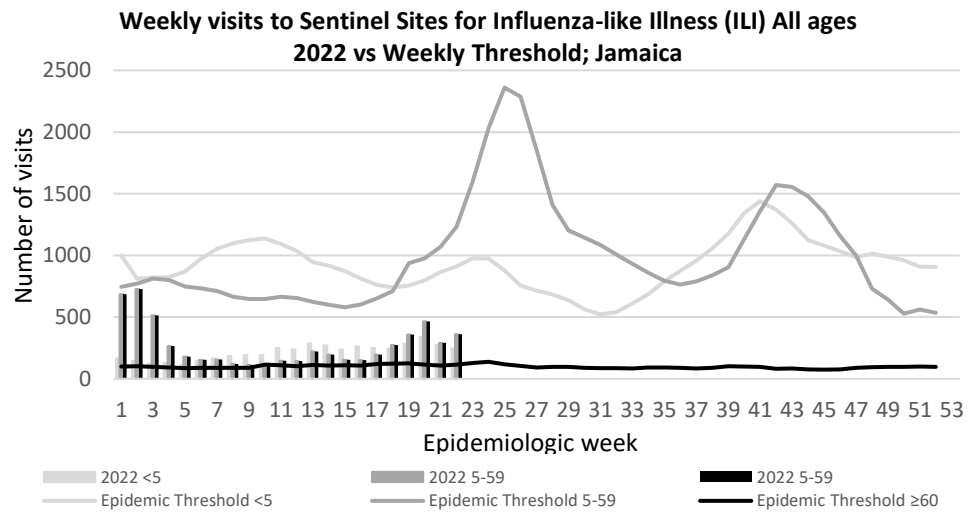
SENTINEL
REPORT- 78 sites.
Automatic reporting

NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

EW 22

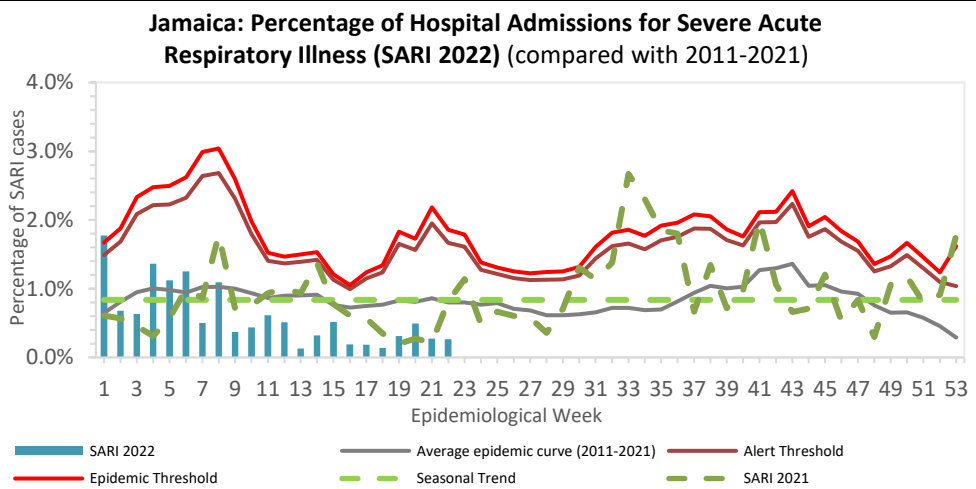
May 29 – June 4, 2022 Epidemiological Week 22

	EW 22	YTD
SARI cases	4	204
Total Influenza positive Samples	0	0
Influenza A	0	0
H3N2	0	0
H1N1pdm09	0	0
Not subtyped	0	0
Influenza B	0	0
Parainfluenza	0	0



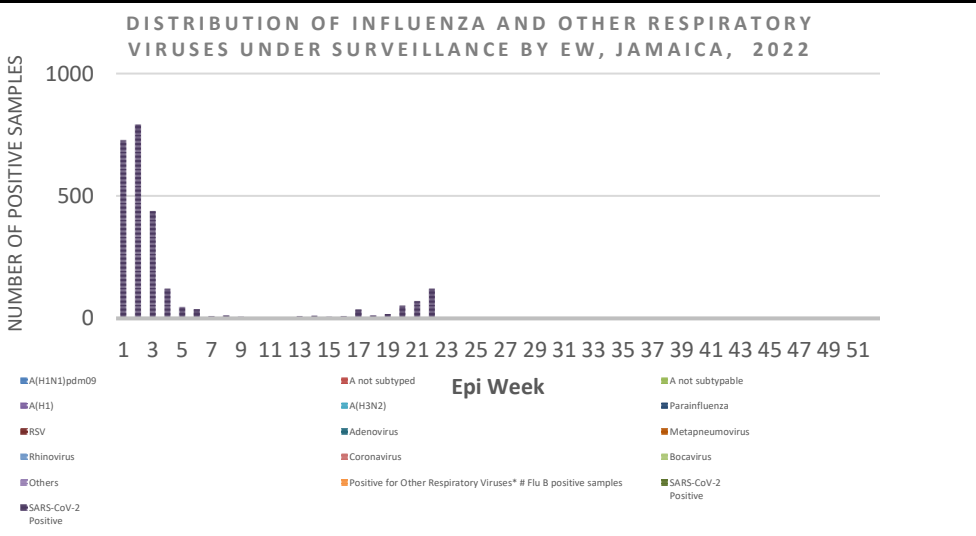
Epi Week Summary

During EW 22, four (4) SARI admissions were reported.



Caribbean Update EW 22

Caribbean: Influenza activity remained low. In Belize, SARS-CoV-2 and RSV detections continued to increase and in Haiti, SARS-CoV-2 activity continued elevated and increasing.



6 NOTIFICATIONS-
All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE- 30 sites. Actively pursued

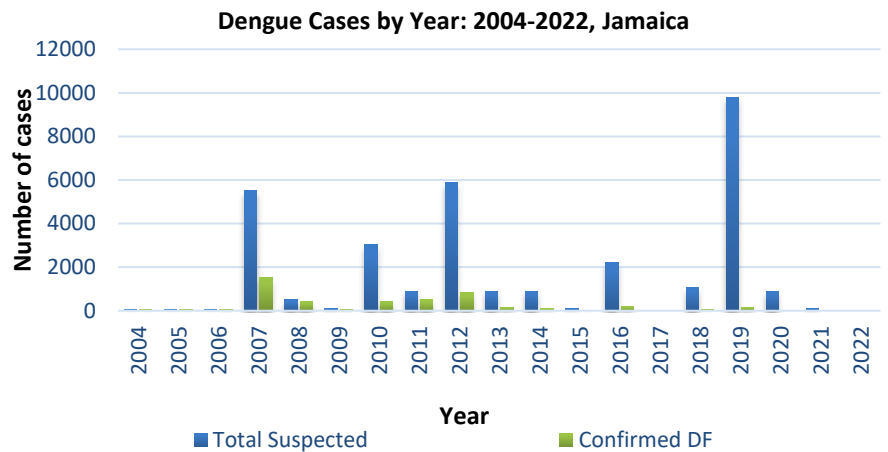


SENTINEL REPORT- 78 sites. Automatic reporting

Dengue Bulletin

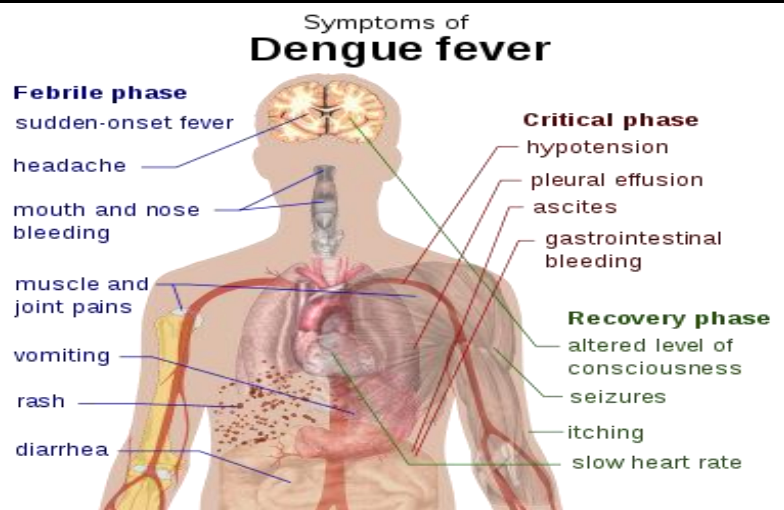
May 29 – June 4, 2022 Epidemiological Week 22

Epidemiological Week 22



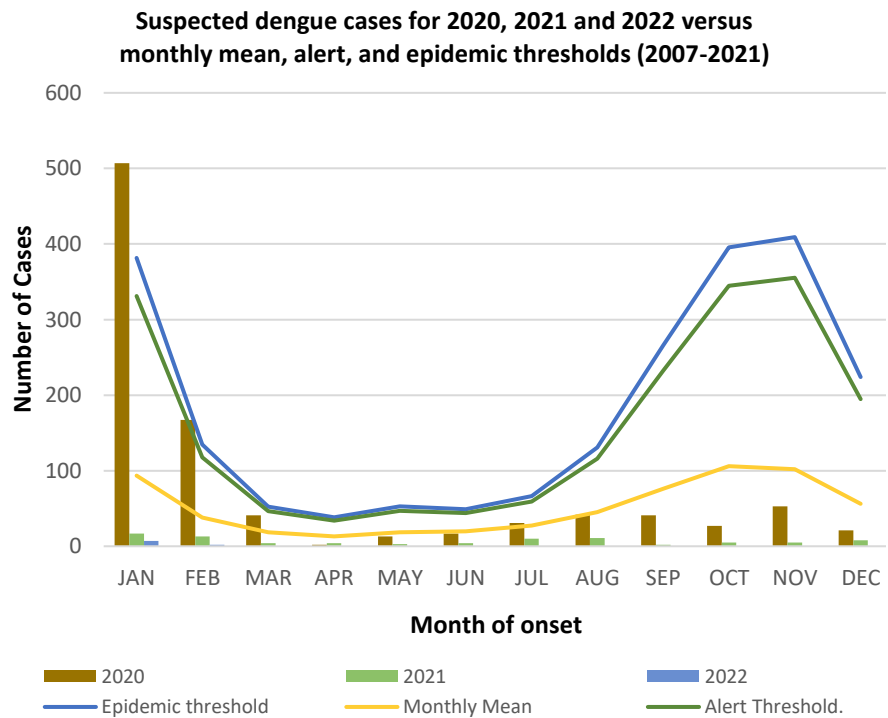
Reported suspected and confirmed dengue with symptom onset in week 22 of 2022

	2022*	
	EW 22	YTD
Total Suspected Dengue Cases	0	28
Lab Confirmed Dengue cases	0	0
CONFIRMED Dengue Related Deaths	0	0



Points to note:

- *Figure as at June 4, 2022
- 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

Title: Paternal Parenting and Depressive Symptoms in Adolescents

Author: Nickiesha Natasha Passard

Corresponding Author: Nickiesha Natasha Passard (Nickiesha.Passard@utech.edu.jm) Institution:
The University of Technology, Jamaica

Objectives: This current research seeks to examine the relationship between adolescents' perception of paternal parenting and self-reported depressive symptoms. Hence, this study aimed to answer the following research questions: 1) What is the degree of nurturance, monitoring and discipline adolescents perceive they receive from their paternal parent? 2) Which paternal parenting style is most prevalent in Jamaica? 3) Which paternal parenting style is associated with higher levels of depressive symptoms among Jamaican adolescents? and 4) Which paternal parenting style is associated with lower levels of depressive symptoms among Jamaican adolescents?

Method: Stratified random sampling technique was used to obtain participants from three traditional high schools in Jamaica (Merl Grove High, Calabar High and Camperdown High). A total of 120 fourth form students participated in this study.

Results: The results revealed that the majority of the sample (56.7%) reported that their paternal parent's style of parenting as being highly authoritative. Authoritarian paternal parenting style was associated with a higher level of depressive symptoms while authoritative paternal parenting style was associated with a lower level of depressive symptoms.

Conclusion: .



The Ministry of Health and Wellness
24-26 Grenada Crescent
Kingston 5, Jamaica
Tele: (876) 633-7924
Email: surveillance@moh.gov.jm



8 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