## WEEKLY EPIDEMIOLOGY BULLETIN NATIONAL EPIDEMIOLOGY UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

#### **International Health Regulations**

#### Overview

While disease outbreaks and other acute public health risks are often unpredictable and require a range of responses, the International Health Regulations (2005) (IHR) provide an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies that have the potential to cross borders.

The IHR are an instrument of international law that is legally-binding on 196 countries, including the 194 WHO Member States. The IHR grew out of the response to deadly epidemics that once overran Europe. They create rights and obligations for countries, including the requirement to report public health events. The Regulations also outline the criteria to determine whether or not a particular event constitutes a "public health emergency of international concern".

At the same time, the IHR require countries to designate a National IHR Focal Point for communications with WHO, to establish and maintain core capacities for surveillance and response, including at designated points of entry. Additional provisions address the areas of international travel and transport such as the health documents required for international traffic.

Finally, the IHR introduce important safeguards to protect the rights of travelers and other persons in relation to the treatment of personal data, informed consent and non-discrimination in the application of health measures under the Regulations.



https://www.who.int/health-topics/international-health-regulations#tab=tab\_2

https://nonprofitquarterly.org/doctors-without-borders-comments-on-quarantine-of-volunteer-nurse-in-nj/



#### Released June 12, 2020

SENTINEL SYNDROMIC SURVEILLANCE Sentinel Surveillance in





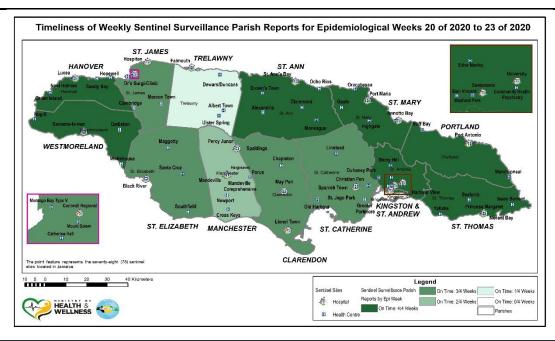


**Parish health departments** submit reports weekly by 3 p.m. on Tuesdays. **Reports submitted after 3** p.m. are considered late.

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.



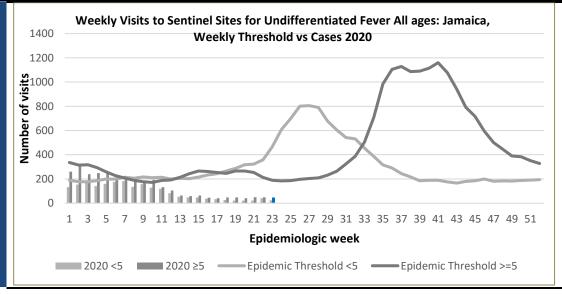
## **REPORTS FOR SYNDROMIC SURVEILLANCE**

#### **FEVER**

Temperature of >38°C /100.4<sup>o</sup>F (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



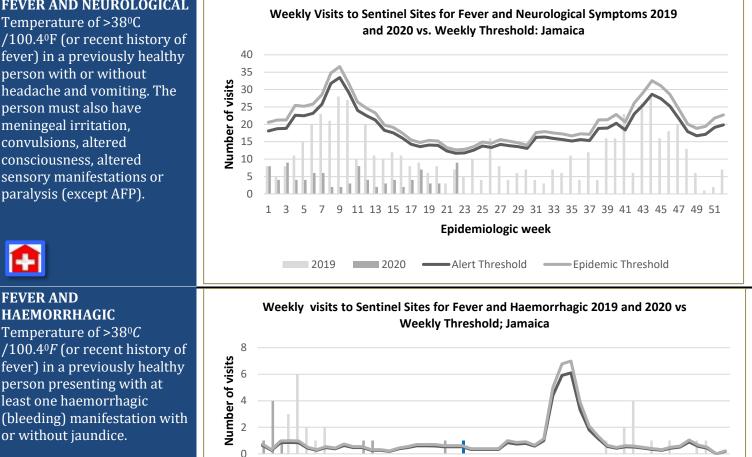
HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



#### Released June 12, 2020

### **FEVER AND NEUROLOGICAL**

Temperature of >38°C /100.4<sup>o</sup>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).



ISSN 0799-3927



**FEVER AND** 

HAEMORRHAGIC

Temperature of >38°C

or without jaundice.

fever) in a previously healthy

person presenting with at least one haemorrhagic

#### **FEVER AND JAUNDICE**

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



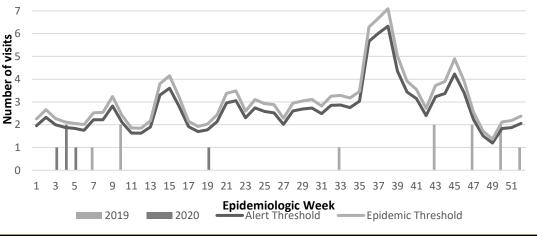
Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2019 and 2020

11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51

Epidemic Threshold

Epidemiologic week

Alert Threshold



NOTIFICATIONS-All clinical sites



**INVESTIGATION REPORTS-** Detailed Follow up for all Class One Events

5

7 9

2019

2020

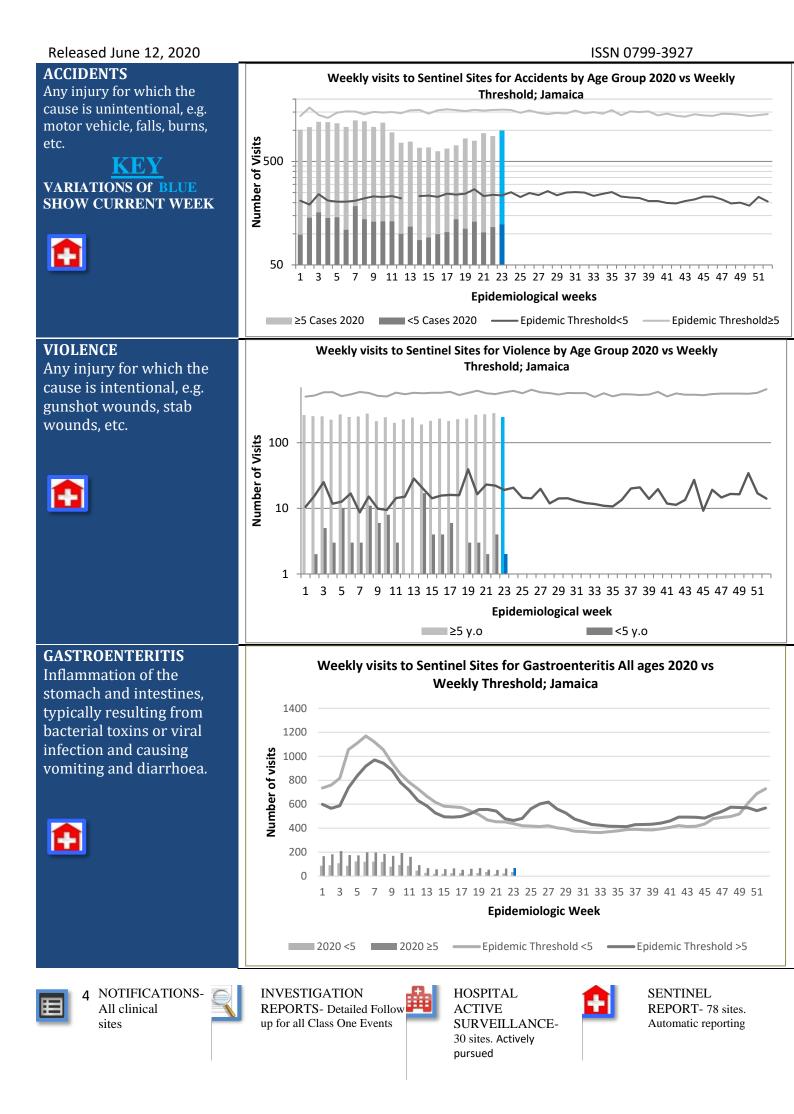
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### CLASS ONE NOTIFIABLE EVENTS

#### Comments

			Confirmed YTD		AFP Field Guides
	CLASS 1 EVENTS		CURRENT YEAR 2020	PREVIOUS YEAR 2019	from WHO indicate that for an effective
AL	Accidental Poisoning		5	18	surveillance system, detection rates for AFP should be 1/100,000 population under 15 years old (6 to 7) cases annually.
NOV4	Cholera		0	0	
ATI	Dengue Hemorrhagic Fever*		NA	NA	
EST	Hansen's Disease (Leprosy)		0	0	
L /INTERN	Hepatitis B		0	11	
NATIONAL /INTERNATIONAL INTEREST	Hepatitis C		0	2	Pertussis-like syndrome and Tetanus are clinically confirmed classifications.
	HIV/AIDS		NA	NA	
	Malaria (Imported)		0	0	
	Meningitis (Clinically confirmed)		1	5	
EXOTIC/ UNUSUAL	Plague		0	0	<ul> <li>* Dengue Hemorrhagic Fever data include Dengue related deaths;</li> <li>** Figures include all deaths associated with pregnancy reported for the period. * 2019 YTD figure was updated.</li> <li>*** CHIKV IgM</li> </ul>
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	positive cases
		Rubella	0	0	
	Maternal Deaths**		16	27	PCR positive cases
	Ophthalmia Neonatorum		23	105	_
	Pertussis-like syndrome		0	0	-
	Rheumatic Fever		0	0	-
	Tetanus		0	0	-
	Tuberculosis		0	11	
	Yellow Fever		0	0	
	Chikungunya <sup>***</sup>		0	0	
	Zika Virus <sup>****</sup>		0	0	NA- Not Available



All clinical sites



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### NATIONAL SURVEILLANCE UNIT INFLUENZA REPORT

# *EW 23*

ISSN 0799-3927

#### May 31, 2020-June 6, 2020 Epidemiological Week 23 Weekly visits to Sentinel Sites for Influenza-like Illness (ILI) All *EW 23* **YTD** ages 2020 vs Weekly Threshold; Jamaica 2500 SARI cases 7 292 2000 **Total** Number of visits Influenza 0 69 1500 positive Samples 1000 45 Influenza A 0 500 0 4 H3N2 H1N1pdm09 0 38 0 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 1 5 7 0 3 Not subtyped Epidemiologic week Influenza B 0 24 2020 2020 2020 Parainfluenza 0 0 Epidemic Threshold <5 Epidemic Threshold 5-59 ■Epidemic Threshold ≥60 **Epi Week Summary** Jamaica: Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI 2020) (compared with 2011-2019) Percentage of hospitalizations for During EW 23, 7 (seven) SARI 6.0% admissions were reported. 5.0% 4.0% **SARI** 3.0% 2.0% 1.0% 0.0% 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 1 3 5 7 Epidemiological Week SARI 2020 Alert Threshold Average epidemic curve (2011-2019) \_ \_ Seasonal Threshold Enidemic Threshold Caribbean Update EW 23 DISTRIBUTION OF INFLUENZA AND OTHER Caribbean: Influenza and other **RESPIRATORY VIRUSES IN SURVEILLANCE BY EW** NUMBER OF POSITIVE SAMPLES 110% 100% 90% 80% respiratory virus activity PERCENT POSITIVITY remained low in the subregion. 70% 60% 50% 40% In Haiti and Suriname, detections of SARS-CoV-2 continue elevated 30% and increasing. 20% 10% 0% 9 11131517192123252729313335373941434547495153 1 3 5 7 **EPIDEMIOLOGIC WEEK** A(H1N1)pdm09 A no subtypable A(H1) A not subtyped A(H3) Parainfluenza RSV Adenovirus Methanneumoviru Rhinovirus Coronavirus Bocavirus



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NOTIFICATIONS-All clinical sites



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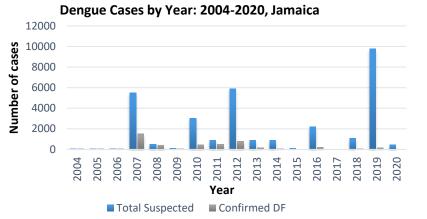


## Dengue Bulletin

#### May 31, 2020-June 6, 2020 Epidemiological Week 23

Epidemiological Week 23

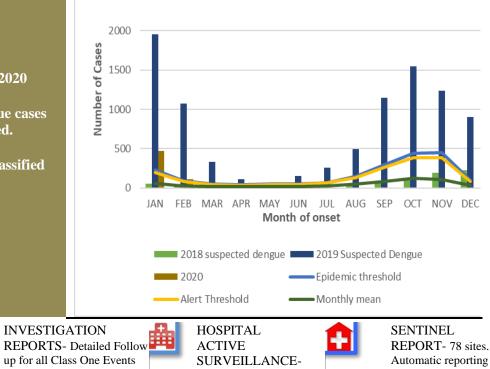




**Reported suspected and confirmed dengue** with symptom onset in week 23 of 2020 2020 EW YTD 23 **Total Suspected Dengue** 0\*\* 643\*\* Cases Lab Confirmed Dengue 1\*\* 0\*\* cases CONFIRMED 0\*\* 1\*\* **Dengue Related Deaths** 

#### Symptoms of Dengue fever Febrile phase Critical phase sudden-onset fever hypotension headache pleural effusion ascites mouth and nose bleeding gastrointestinal bleeding muscle and joint pains **Recovery phase** altered level of vomiting consciousness seizures rash itchina diarrhea slow heart rate

### Suspected dengue cases for 2018 and 2019 versus monthly mean, alert, and epidemic thresholds



30 sites. Actively pursued

#### **Points to note:**

- \*\* figure as at June 12 , 2020
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

7 NOTIFICATIONS-

All clinical

sites

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## **RESEARCH PAPER**

#### ABSTRACT

# *Entada gigas*: Underutilized Plant for Food and Nutrition from an Indigenous Community in Jamaica

Foster S R, Randle M M, Bozra D, Riley C K, Watson C T Scientific Research Council, Kingston, Jamaica

**Background:** *Entada gigas* (cacoon) is a leguminous plant used by the Accompong maroons from St. Elizabeth, Jamaica, for medicinal and nutritional purposes. The plant seeds contain high protein levels, but are underutilized due to the anti-nutrients present.

**Objectives:** The effects of three processing methods (soaking, cooking and autoclaving) on proximate composition, anti-nutritional compounds and mineral content of *E. gigas* seeds collected were investigated. **Methods:** Qualitative and quantitative evaluations of active phytochemical constituents, proximate and mineral analyses were performed on differentially processed *E. gigas* seed extracts using standard assays. **Results:** Nutritional composition of mature *E. gigas* seeds corresponds with most edible legumes containing per 100 g edible portion: carbohydrate 50-55 g, protein 21-26 g, fat 15-20 g, crude fibre 5.3 g, and moisture 4.4 -5.9 g. Essential minerals including calcium (84.87 mg/L), iron (3.24 mg/L), potassium (793 mg/L), magnesium (112 mg/L), manganese (0.94 mg/L), sodium (7.24 mg/L) and zinc (1.49 mg/L) were also detected. Flavonoids, glycosides, steroids, terpenoids, saponins, tannins and phenols were among the phytochemicals present. Anti-nutritional substances present in the raw seeds, were effectively diminished after soaking for 21 days without significantly affecting the nutritionally beneficial compounds. **Conclusion:** *Entada gigas* has nutritive values, comparable to other plant protein sources. Hence, its utilization is encouraged provided that an appropriate processing method is used to reduce the anti-nutrient content.

(Funded by Scientific Research Council)



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3 NOTIFICATIONS All clinical sites



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