Breast cancer most commonly presents as a painless lump or thickening in the breast.

It is important that women finding an abnormal lump in the breast consult a health practitioner without a delay of more than 1-2 months even when there is no pain associated with it. Seeking medical attention at the first sign of a potential symptom allows for more successful treatment.

Generally, symptoms of breast cancer include:
- a breast lump or thickening;
- alteration in size, shape or appearance of a breast;
- dimpling, redness, pitting or other alteration in the skin;
- change in nipple appearance or alteration in the skin surrounding the nipple (areola);
- and/or abnormal nipple discharge.

There are many reasons for lumps to develop in the breast, most of which are not cancer. As many as 90% of breast masses are not cancerous. Non-cancerous breast abnormalities include benign masses like fibroadenomas and cysts as well as infections.

Over time, cancerous cells may spread to other organs including the lungs, liver, brain and bones. Once they reach these sites, new cancer-related symptoms such as bone pain or headaches may appear.

Rapid diagnosis needs to be linked to effective cancer treatment that in many settings requires some level of specialized cancer care. By establishing centralized services in a cancer facility or hospital, using breast cancer as a model, treatment for breast cancer may be optimized while improving management of other cancers.

Source: https://www.who.int/news-room/fact-sheets/detail/breast-cancer
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 showing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks – 31 2021 to 35 of 2021

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

<table>
<thead>
<tr>
<th>Epi week</th>
<th>Kingston and Saint Andrew</th>
<th>Saint Thomas</th>
<th>Saint Catherine</th>
<th>Portland</th>
<th>Saint Mary</th>
<th>Saint Ann</th>
<th>Trelawny</th>
<th>Saint James</th>
<th>Hanover</th>
<th>Westmoreland</th>
<th>Saint Elizabeth</th>
<th>Manchester</th>
<th>Clarendon</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
</tr>
<tr>
<td>32</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (T)</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
</tr>
<tr>
<td>33</td>
<td>Late (W)</td>
<td>On Time</td>
<td>Late (W)</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (W)</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
</tr>
<tr>
<td>34</td>
<td>Late (W)</td>
<td>On Time</td>
<td>Late (W)</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (W)</td>
<td>Late (W)</td>
<td>On Time</td>
<td>On Time</td>
</tr>
<tr>
<td>35</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>Late (T)</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
<td>On Time</td>
</tr>
</tbody>
</table>

### 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

### REPORTS FOR SYNDROMIC SURVEILLANCE

#### Weekly Visits to Sentinel Sites for Undefrentiated Fever All ages: Jamaica, Weekly Threshold vs Cases 2021

- **Number of visits**
  - 0 to 20
  - 20 to 40
  - 40 to 60
  - 60 to 80
  - 80 to 100
  - 100 to 120
  - 120 to 140

- **Epidemiologic week**
  - 1 to 53

- **Thresholds**
  - 2021 <5
  - 2021 >=5
  - Epidemic Threshold <5
  - Epidemic Threshold >=5
FEVER AND NEUROLOGICAL
Temperature of >38°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°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°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.
**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.

**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

<table>
<thead>
<tr>
<th>CLASS 1 EVENTS</th>
<th>CURRENT YEAR 2021</th>
<th>PREVIOUS YEAR 2020</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidental Poisoning</td>
<td>22&lt;sup&gt;β&lt;/sup&gt;</td>
<td>80</td>
<td>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.</td>
</tr>
<tr>
<td>Cholera</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Dengue Hemorrhagic Fever&lt;sup&gt;γ&lt;/sup&gt;</td>
<td>See Dengue page below</td>
<td>See Dengue page below</td>
<td>Pertussis-like syndrome and Tetanus are clinically confirmed classifications.</td>
</tr>
<tr>
<td>Hansen’s Disease (Leprosy)</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Malaria (Imported)</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Meningitis (Clinically confirmed)</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Plague</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Meningococcal Meningitis</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Neonatal Tetanus</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Typhoid Fever</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Meningitis H/Flu</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>AFP/Polio</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Congenital Rubella Syndrome</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Congenital Syphilis</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Fever and Rash Measles</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rubella</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maternal Deaths&lt;sup&gt;δ&lt;/sup&gt;</td>
<td>23</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Ophthalmia Neonatorum</td>
<td>0</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Pertussis-like syndrome</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Rheumatic Fever</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Tetanus</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>19</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Yellow Fever</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Chikungunya&lt;sup&gt;ε&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Zika Virus&lt;sup&gt;θ&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<sup>α</sup> Figures are cumulative totals for all epidemiological weeks year to date.

<sup>β</sup> Updates made to prior weeks in 2020.

<sup>γ</sup> Dengue Hemorrhagic Fever data include Dengue related deaths;

<sup>δ</sup> Figures include all deaths associated with pregnancy reported for the period.

<sup>ε</sup> CHIKV IgM positive cases

<sup>θ</sup> Zika PCR positive cases

NA - Not Available
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

Epidemiological Week Summary
During EW 35, 21 (twentyone) SARI admissions were reported.

Caribbean Update EW 35
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.
Dengue Bulletin

August 29, to September 4, 2021  Epidemiological Week 35

Reported suspected and confirmed dengue with symptom onset in week 35 of 2021

<table>
<thead>
<tr>
<th></th>
<th>2021*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EW 35</td>
</tr>
<tr>
<td>Total Suspected Dengue Cases</td>
<td>0</td>
</tr>
<tr>
<td>Lab Confirmed Dengue cases</td>
<td>0</td>
</tr>
<tr>
<td>CONFIRMED Dengue Related Deaths</td>
<td>0</td>
</tr>
</tbody>
</table>

Points to note:

- *Figure as at August 5, 2021
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Dengue Cases by Year: 2004-2021, Jamaica

Suspected dengue cases for 2020 and 2021 versus monthly mean, alert, and epidemic thresholds (2007-2020)

Symptoms of Dengue fever

- Fibrile phase: sudden-onset fever, headache, mouth and nose bleeding, muscle and joint pains
- Critical phase: hypotension, pleural effusion, ascites, gastrointestinal bleeding
- Recovery phase: altered level of consciousness, seizures, itching, slow heart rate
- Suspected dengue cases for 2020 and 2021 versus monthly mean, alert, and epidemic thresholds (2007-2020)
Abstract

Knowledge and Practice Related to Lifestyle Among Adults with Diabetes and Hypertension

Colleen Campbell1, Delani Campbell1, Khadijah Estick1, Mario McCallum1, Martin McIntosh1, Jourdain Masters1, Alliyah Mentor1, Yakeev Morris1, Ta’Mal Phillips1, Gabriella Ranjit1, Orlando Smith1, Gayan White,1 Norman Waldron2

1MBBS Class of 2020, Department of Community Health and Psychiatry, Faculty of Medical Sciences, The University of the West Indies, Mona, Jamaica

2Department of Community Health and Psychiatry, Faculty of Medical Sciences, The University of the West Indies, Mona, Jamaica

Aim: To determine the level of knowledge and assess the lifestyle practices of adult patients with Diabetes and/or Hypertension attending the primary health care clinics in Jamaica.

Background: Diabetes and Hypertension are among the leading causes of preventable morbidity and related disability worldwide. The shift in disease burden from infectious diseases to non-communicable diseases has been attributed to dietary and physical activity changes.

Method: In this cross-sectional study using 150 randomly selected adults from primary health care centres in seven parishes of Jamaica. A 69-item interviewer-administered questionnaire was used. The questions measured knowledge and lifestyle practices related to diet, smoking, exercise and alcohol consumption.

Results: The majority (%) of the sample was female (76%) and most persons were within the age group of 56 years or over (68.6%). The mean knowledge score of exercise was 4.7 (SD 1.2) with a score range of 1 to 6. No statistical differences presented in mean knowledge of exercise by socioeconomic and demographic characteristics. Nine of the ten questions assessing knowledge of diet were answered correctly by the majority (50.7% - 93.3%).

The mean knowledge score for alcohol consumption and smoking was 5.5 (SD 0.9) and 2.9 (SD 0.3), respectively. Just over a half (52.3%) of the sample reported exercising (52.3%) and consuming sugar-sweetened beverages (53%). Very little reported drinking alcohol in the last three months (10.7%) and a minority (4.7%) of the sample reported that they are currently smoking.

Conclusion: Mean knowledge scores for exercise, alcohol consumption and smoking were relatively high, while lifestyle practices among participants was relatively low. We recommend further research to assess the facilitators and barriers to adopting lifestyle changes among Jamaican adults.

Keywords: Knowledge, Lifestyle, Practice, Diabetes, Hypertension