**Influenza Report - For the Week Ending 3/17/2018**

**Reported Cases (Boston Residents) # (% of total)**

<table>
<thead>
<tr>
<th>Influenza Type</th>
<th>Cases</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td>2,747</td>
<td>77%</td>
</tr>
<tr>
<td>Influenza B</td>
<td>819</td>
<td>23%</td>
</tr>
<tr>
<td>Influenza A and B</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Influenza (type unspecified)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL (season-to-date)</strong></td>
<td><strong>3,572</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Boston ED ILI Surveillance**

<table>
<thead>
<tr>
<th>ILI%</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Week</td>
</tr>
<tr>
<td>Last Week</td>
</tr>
</tbody>
</table>

**State/National ILI Surveillance**

<table>
<thead>
<tr>
<th>ILI%</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Week Massachusetts</td>
</tr>
<tr>
<td>This Week National</td>
</tr>
</tbody>
</table>

**Summary:** As of 3/17/2018, 3,572 cases of laboratory-confirmed influenza among Boston residents have been reported to Boston Public Health Commission (BPHC); 615 (17%) have required hospitalization for the season to date [no overall % change from week prior]. Nine influenza-associated deaths have been reported; all deaths occurred in persons of advanced age or with multiple underlying medical conditions. Emergency Department visits for influenza-like illness (ILI) comprised 1.46% of all ED visits this week [down 0.64% from week prior].

Boston City data may not parallel aggregate statewide data as other geographic regions of Massachusetts are experiencing different levels of influenza activity.

Providers should continue to offer vaccine to all persons ≥6 months of age through the remainder of the season. Vaccination is the best way to prevent influenza and its complications.

Cases of influenza diagnosed in Boston and confirmed by any laboratory test must be reported to BPHC by calling (617) 534-5611 or faxing reports to (617) 534-5905.

*Influenza-like illness (ILI) is defined as “flu” OR “fever AND (cough OR sore throat)” in ED chief complaint captured by BPHC Syndromic Surveillance Sys.

**Massachusetts and CDC use a different methodology than the City of Boston to calculate ILI%. State and National ILI data are calculated using ILInet outpatient surveillance data from sentinel sites (see: https://www.cdc.gov/flu/weekly/overview.htm for more information).**

On December 27, 2017, a Health Advisory was released by CDC providing: 1) notice of increased influenza A(H3N2) activity and its clinical implications; 2) summary of influenza antiviral drug treatment recommendations; 3) update on approved antiviral medications and current supply; and 4) background information for patients about influenza treatment. For more information, go to: https://emergency.cdc.gov/han/han00409.asp

While possible for individuals who have been vaccinated to get the flu (though NOT from the vaccine itself), studies have shown prior vaccination during the season can attenuate the severity of illness, reduce the risk of flu-associated hospitalization, and result in fewer flu-associated deaths particularly for children, pregnant women, and persons with chronic health conditions. Vaccination also protects persons around you, including those more vulnerable to serious flu illness. **Influenza A(H1N1) and influenza B viruses currently represent a greater proportion of circulating viruses in the community compared with previous weeks. Influenza A(H1N1) and one (or two) influenza B strains are contained in this seasons vaccine and have demonstrated higher vaccine effectiveness rates of 67% and 42%, respectively.**

As of February 7, 2018, CVS pharmacies reported limited supply of flu vaccine and had placed a repurchase order intended for the remainder of the season. Currently there are no shortages of vaccine at Walgreens or Rite Aid pharmacies. Providers are encouraged to continue offering vaccine to all eligible persons. There is currently no reported shortage of antiviral medication. Providers should instruct patients to contact their local pharmacy to confirm availability of vaccine or antiviral medication prior to filling their prescription. Pharmacies out of stock will redirect callers to other locations where product is available.

Providers should inform patients that MassHealth will cover the cost of Tamiflu if the pharmacy is out of generic. Health Safety Net will cover cost of Tamiflu if generic is unavailable.

Patients may call the Mayor's Health Line, M-F, 9a-5p at 617-534-5050 or toll free at 1-800-847-6710.
Weekly ILI ED visits are shown from 2012-2013 season to present. Influenza A(H3N2), which has been the predominant influenza strain this season, predominated in 2012-2013, 2014-2015 (with antigenic drift from the vaccine strain), and 2016-2017. The 2012-2013 season had a peak ILI of 4.81%. For the week ending 3/17/2018, ILI accounted for 1.46% of ED visits, a decrease of 0.64% from the week prior.

Weekly Reported Influenza Cases (in Boston Residents) and % ILI ED Visits, 2017-18 Season
Race/Ethnicity and Age Distribution

Race/Ethnicity of Confirmed Influenza Cases, Boston Residents
October 1, 2017 - March 17, 2018

- White: 31%
- Latino / Hispanic: 18%
- Black / African American: 33%
- Asian: 7%
- Other: 5%
- Unknown: 6%

Age Distribution of Confirmed Influenza Cases, Boston Residents
October 1, 2017 - March 17, 2018

- 18-44 yrs: 32%
- 45-64 yrs: 23%
- 5-17 yrs: 15%
- <5 yrs: 10%
- 65+ yrs: 20%

Geographic Distribution

Rate of Confirmed Influenza Cases by Neighborhood per 100,000 Population
October 1, 2017 - March 17, 2018

Rate of ILI Syndrome ED Visits by Neighborhood per 100,000 Population
October 1, 2017 - March 17, 2018

Neighborhood Legend
- A/B = Allston/Brighton
- BB = Back Bay
- CH = Charlestown
- EB = East Boston
- FW = Fenway
- HP = Hyde Park
- JP = Jamaica Plain
- MT = Mattapan
- ND = North Dorchester
- RS = Roslindale
- RX = Roxbury
- SB = South Boston
- SD = South Dorchester
- SE = South End

ILI ED visits per 100,000 population:
- 0-125
- 126-256
- 257-375
- >375
The season-to-date hospitalization rate for laboratory confirmed influenza cases among Boston residents is 17%. This overall hospitalization rate is lower than in previous A(H3N2) predominant years, including the 2014-5 season which was characterized by antigenic drift and severe illness. Although weekly hospitalization rates for the past two reporting weeks are above the 2017-8 seasonal average, week to week variations are expected. We do not believe these recent higher hospitalization rates reflect changes in virulence of circulating strains, but likely reflect changes in reporting patterns.

Comparison of Flu Near You (FNY)* ILI Data and ED Visits for ILI, 2016-2018

*Flu Near You (FNY) compiles weekly data of ILI activity in the United States. The data come from short, weekly internet-based surveys completed by voluntary participants who indicate whether they are healthy or have experienced any of a short list of symptoms.

The public may participate by enrolling in FNY at: https://flunearyou.org/