Influenza A 2082 (97.0%)
Influenza B 60 (2.8%)
Influenza A and B 5 (0.2%)
Influenza (type unspecified) 0
TOTAL (season-to-date) 2147

Boston ED ILI Surveillance*
This Week ILI% (Week 8) 2.43%
Last Week ILI% (Week 7) 2.59%

State/National ILI Surveillance**
This Week Massachusetts ILI% (Week 8) 3.46%
This Week National ILI% (Week 8) 5.01%

Summary: As of 2/23/2019, 2,147 total cases of laboratory-confirmed influenza in Boston residents have been reported to the BPHC since 9/30/2018. Through death certificate review and voluntary reporting by healthcare facilities, BPHC tracks all influenza-related deaths among Boston residents. Since the beginning of the season, four influenza-associated deaths in older Boston residents with multiple medical conditions have been reported. Nationally and statewide, only pediatric flu-related deaths are reportable. To date, the Massachusetts Department of Public Health has reported three influenza-related pediatric deaths; none were Boston residents. Influenza-like illness (ILI) comprised 2.43% of all ED visits this week, a decrease from the previous week. Geographic distribution of flu activity in MA continues to be widespread. Intensity of ILI in the Commonwealth remains high.

From 9/30/2018-2/23/2019, 67.6% of influenza specimens tested by public health laboratories were positive for A(H1N1). Of the remaining, 25.2% were A(H3N2), 4.8% were A (untyped), and 2.4% were type B. A(H1N1) viruses are associated with increased flu activity in persons ≤17 years of age. The circulating influenza viruses, including A(H1N1) viruses, are well matched to the 2018-2019 seasonal vaccine.

CDC released interim vaccine effectiveness (VE) estimates. The overall VE is 47% (95% CI: 34%-57%). This is consistent with what has been seen (40%-60%) in recent seasons when vaccine is well-matched to circulating strains, as is the case this season. Estimates vary by age with highest overall VE (61%) noted in children 6 months of age to 17 years of age. These estimates are interim and subject to change at the end of the season. For more information go to: https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6806-H.pdf

Vaccination with influenza vaccine, including vaccination of household and other close contacts, is the best way to prevent influenza. Vaccinated persons who develop flu tend to have milder illness and are less likely to spread flu to others including those unable to receive vaccine. Flu vaccine has been shown to be life-saving in children. 80% of pediatric flu deaths occur in unvaccinated children.

There are currently no reported shortages of the vaccine. Information on vaccination sites is available at https://vaccinefinder.org/. Pharmacies also offer vaccine; however, children under the age of 9 must receive vaccine through a medical provider.

Providers should continue to offer vaccine, particularly to children, through the remainder of the season.

**Massachusetts and National ILI data are calculated using ILInet outpatient surveillance data from sentinel sites. The City of Boston uses different methodology derived from the BPHC Syndromic Surveillance System. For more information on ILInet go to: https://www.cdc.gov/flu/weekly/overview.htm.

***% Hospitalized=proportion of all confirmed influenza cases who were hospitalized.
Weekly ILI ED visits are shown from the 2016-2017 season to present. For the week ending 2/23/2019, ILI accounted for 2.43% of ED visits, a decrease of 0.16% from the prior week.

Race/Ethnicity and Age Distribution Through Week Ending 2/23/2019

Black and Latino Boston residents, who account for 42% of all Boston residents, continue to be disproportionately impacted by influenza, representing a total of 58% of all confirmed cases reported to BPHC.

*Boston Population, 2010 Census Data
**Other includes American Indian, Alaskan Native, Native Hawaiian, Pacific Islander, and unspecified "other" race

*Boston Population, 2010 Census Data
Influenza disproportionately impacts Black and Latino residents as seen in Figure 3. For the 2018-19 season through MMWR week 8, Black and Latino residents comprise 59% of all cases, compared to 51% of cases during the previous 2017-18 season through MMWR week 8.

For the 2018-19 season through MMWR week 8, children <5 years of age accounted for 12% of confirmed influenza cases compared to 10% for the 2017-18 season through MMWR week 8. This is likely related to the current predominant circulation of H1N1 viruses in contrast to the predominance of H3N2 viruses during the 2017-18 season.
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/