BOSTON PUBLIC HEALTH COMMISSION
Communicable Disease Control Division
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WWW.BPHC.ORG/CDC

PUBLIC HEALTH ADVISORY:
Updated Recommendations for Prevention and Control of Influenza for the 2017-2018 Season

As of October 1, 2017, influenza activity remains low both in the city of Boston and nationwide. Annual influenza vaccination is recommended for everyone ≥6 months who does not have a specific vaccine contraindication[1]. For the 2017-8 influenza season, the CDC and ACIP continue to recommend AGAINST the use of live attenuated influenza vaccine (LAIV4), also referred to as FluMist®, due to continuing concerns about its effectiveness against H1N1 viruses during previous influenza seasons in the US. There is no preferential recommendation for any licensed inactivated or recombinant vaccine product over another. Providers are encouraged to vaccinate patients with whatever appropriate vaccine product they have in stock during the patient encounter to avoid missed opportunities to vaccinate.

***Healthcare providers and laboratories in Boston are required by city health department regulations to report all laboratory-confirmed cases of influenza, as well as any clusters of illness*, to the Boston Public Health Commission (BPHC) by phone (617) 534-5611 or fax (617) 534-5905.**

BACKGROUND

- During the 2016-2017 influenza season (defined by the timeframe between 10/1/2017 and 4/30/2017), 3,285 cases of laboratory-confirmed influenza were reported in Boston residents. Of these, 579 (18%) were hospitalized, 14 (2.4%) of whom died. Influenza A (H3N2) predominated through most of the season, and all influenza A components of the 2016-2017 vaccine were well-matched to circulating strains. Two distinct lineages of Influenza B appeared mainly later in the season and were well-matched to the vaccine strain (especially quadrivalent formulations which contained both B lineages). **Detailed information on the 2016-2017 Boston influenza season can be found by clicking here: Boston's 2016-2017 Influenza Season in Review.**

- The CDC's ***Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2017–18 Influenza Season*** can be viewed by clicking here: https://www.cdc.gov/mmwr/volumes/66/rr/pdfs/rr6602.pdf

- Compared with 2016–17, the composition of the 2017–18 vaccine is essentially unchanged except for the A(H1N1)pdm09–like virus component, which has changed slightly for the first time since the 2009 H1N1 pandemic. The new H1N1 strain will be an A/Michigan/45/2015 (H1N1)pdm09-like virus.

- The influenza season is unpredictable. BPHC will be monitoring influenza activity throughout the season. For an update on influenza activity in the United States and Worldwide, from May 21–September 23, 2017, please see: https://www.cdc.gov/mmwr/volumes/66/wr/mm6639a3.htm

VACCINATION

- Annual influenza vaccination is recommended for everyone ≥6 months who does not have a specific vaccine contraindication. Vaccination of an individual offers protection to the person vaccinated as well as to those around them who may be at higher risk from influenza such as young children, the elderly, pregnant women, and those with underlying medical conditions and for whom vaccine may be contraindicated.

[1] See https://www.cdc.gov/flu/professionals/vaccination/vaccine_safety.htm for a list of medical contraindications by vaccine product.

There is **no** preferential recommendation for one vaccine type over another in any age group. However, for the 2017-8 influenza season, CDC has *extended* the recommendation that live attenuated influenza vaccine (LAIV4), also referred to as FluMist®, NOT be used based on information demonstrating the low effectiveness of the H1N1 component. CDC recommends inactivated influenza vaccine (IIV) in children and adults, and either standard dose or high dose IIV in those >64 years old. There is no preferred vaccine type for either group, and no preference for either trivalent or quadrivalent formulations. Providers are urged to vaccinate patients with whatever age-appropriate influenza vaccine is available at their facility at the time of the patient encounter.

TREATMENT

- A summary of CDC treatment guidelines is available at: https://www.cdc.gov/flu/professionals/antivirals/index.htm
- Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who:
    - is hospitalized; or
    - has severe, complicated, or progressive illness; or
    - is at higher risk for influenza complications. This includes:
        - children aged younger than 2 years;
        - adults aged 65 years and older;
        - persons with chronic pulmonary (including asthma), cardiovascular, renal, hepatic, hematological, metabolic, or neurologic disorders; and persons with immunosuppression;
        - women who are pregnant, or postpartum (within 2 weeks after delivery);
        - persons under 19 years old who are receiving long-term aspirin therapy;
        - persons who are morbidly obese (i.e., body-mass index >= 40); and
        - residents of chronic-care facilities.
- Antiviral treatment can also be considered for suspected or confirmed influenza in previously healthy, symptomatic outpatients not at high risk on the basis of clinical judgment, especially if treatment can be initiated within 48 hours of illness onset.
- **In prior years, localized shortages of influenza antivirals have been reported. Healthcare providers in Boston who become aware that patients are experiencing difficulty obtaining these medications are asked to contact the BPHC Medical Intelligence Center (MIC) by calling (617) 343-6920 or emailing** MIC@bphc.org**.**

TESTING

- Molecular testing (PCR) is preferred over rapid antigen testing due to improved sensitivity and specificity. Serologic testing for influenza is not recommended as single acute serum specimens are uninterpretable. CDC guidance on diagnostic testing for influenza is available at: https://www.cdc.gov/flu/professionals/diagnosis/index.htm
- Rapid influenza diagnostic tests (RIDTs) (see: http://www.cdc.gov/flu/professionals/diagnosis/rapidlab.htm) have sensitivities ranging from 50-70% and may produce false negative results
- PCR testing (see: https://www.cdc.gov/flu/professionals/diagnosis/molecular-assays.htm) offers greater sensitivity and specificity. Contact your laboratory to see if PCR testing is available at your facility.

EDUCATION

- BPHC has a variety educational materials, including fact sheets in several languages, available on its website: http://bphc.org/whatwedo/infectious-diseases/flu-information-center/Pages/Educational-Material.aspx
- A 30 second PSA on influenza and vaccination is available in both English and Spanish though YouTube: BPHC Influenza PSA (English), YouTube and BPHC Influenza PSA (Spanish), YouTube.

REPORTING

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