Influenza Activity Increasing in New Hampshire, 2019-2020

Key Points and Recommendations:

1. Influenza has been circulating in New Hampshire with low activity over the last several weeks, but activity is increasing and risk for influenza is expected to continue to increase over the coming weeks.

2. Nationally, influenza A(H1N1), A(H3N2), and B/Victoria virus strains are co-circulating.

3. This year’s influenza vaccines contain updated A(H1N1) and A(H3N2) strains of the virus, which have been the predominant circulating influenza A virus strains for the last decade.

4. Healthcare providers should recommend influenza vaccination for anyone six months of age or older who has not yet received the updated 2019-2020 influenza vaccine and who does not have a medical contraindication.

5. Pregnant and postpartum women are at higher risk of severe illness and complications from influenza infection. Therefore, all pregnant women without a medical contraindication should receive an influenza vaccine during any trimester of their pregnancy to protect themselves and their babies (note: LAIV should not be used during pregnancy).

6. The updated 2019-2020 influenza immunization recommendations can be reviewed here: https://www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm

7. Antiviral therapy is recommended as early as possible for patients with confirmed or suspected influenza infection who are hospitalized; have severe, complicated, or progressive illness; or who are at higher risk of complications. Detailed guidance on use of antiviral medications is available at: https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm

8. Healthcare providers and facilities should report outbreaks of influenza-like-illness to the NH Division of Public Health Services at 603-271-4496.

9. Influenza testing can be arranged at the NH Public Health Laboratories (PHL). To acquire influenza specimen collection kits, contact the NH Public Health Laboratories office at 1-800-852-3345 x4605, or 603-271-4605.

Epidemiology:

Both influenza A and B viruses have been detected during the current influenza season in NH, and influenza activity has been gradually increasing over the past several weeks. So far this season the NH Public Health Laboratories (PHL) has received 12 specimens for testing, of which two tested positive for influenza A(H1N1) pdm09 and one for influenza B/Victoria. Nationally, influenza A(H1N1)pdm09, A(H3N2), and B/Victoria viruses are co-circulating; the predominant virus varies by region.

Vaccination:

For the current 2019-20 season, both quadrivalent and trivalent influenza vaccines are available. Providers may choose to administer any licensed, age-appropriate flu vaccine, including injectable and nasal spray vaccines. This includes inactivated influenza vaccine (IIV), recombinant influenza
vaccine (RIV4), or live attenuated influenza vaccine (LAIV4). Refer to Table 2 of the recent MMWR publication for contraindications and precautions for the use of LAIV4.

2019–2020 influenza vaccine composition:

- Trivalent vaccines will contain
  - A/Brisbane/02/2018 (H1N1)pdm09–like virus
  - A/Kansas/14/2017 (H3N2)–like virus
  - B/Colorado/06/2017–like virus (Victoria lineage)

- Quadrivalent vaccines will contain the same three antigens as trivalent vaccines, plus B/Phuket/3073/2013–like virus (Yamagata lineage).

- Compared with the 2018–19 season, the composition for the 2019–20 vaccine represents changes in both the A(H3N2) and A(H1N1)pdm09 components of both the trivalent and quadrivalent vaccines.

All persons ≥6 months of age who do not have a contraindication should be vaccinated against influenza annually, especially those who are at increased risk for severe complications and those who live with or care for persons at higher risk for influenza-related complications, including healthcare professionals. Persons with a history of influenza illness or vaccination in past years should be recommended to get the vaccine again this year due to natural waning of immunity and changes in circulating virus. It takes approximately 14 days for antibodies to form after vaccination, so vaccination is encouraged now given increasing influenza activity in NH and nationally. Vaccination should be offered throughout the season as long as influenza is circulating.

Vaccinating Children:
Children 6 months to 8 years of age who are undergoing their first season of vaccination, or who have not previously received 2 or more total doses of influenza vaccine before July 1, 2019, should receive 2 doses of influenza vaccine this season administered at least 4 weeks apart. The two previous doses need not have been given during the same or consecutive seasons in order to qualify for only one dose of vaccine this season. Further guidance on which children should receive 2 doses is available at: https://www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm

Vaccinating Pregnant Women:
Pregnant and postpartum women are at higher risk for severe influenza illness and complications. Therefore, all women who are pregnant or might be pregnant during the influenza season without a contraindication should receive the influenza vaccine. LAIV4 should not be used during pregnancy. Vaccination will also help to protect newborns for whom vaccination is not recommended (i.e. children <6 months of age). Please review the following if there are questions or concerns about the safety of influenza vaccination during pregnancy: https://www.cdc.gov/flu/professionals/vaccination/vaccination-possible-safety-signal.html

Diagnostic Testing:
Several tests are available to help with influenza diagnosis, including rapid influenza diagnostic tests (RIDTs), immunofluorescence, viral culture, and RT-PCR. Healthcare providers should be aware that rapid tests vary in their ability to detect flu viruses, depending on the type of rapid test used, and on the type of flu viruses circulating. Also, rapid tests appear to be better at detecting flu in children than adults. Negative rapid test results should be interpreted with caution given the potential for false-negative results. Because of the lower sensitivity of the rapid influenza diagnostic tests, clinicians should consider confirming negative test results with molecular assays, especially during periods of peak community influenza activity. Specimens from persons with ILLI (defined as fever 100°F [37.8°C]
or higher with cough and/or sore throat) may be tested at the NH Public Health Laboratories (PHL) by RT-PCR.

The approved specimen types for RT-PCR testing at the NH PHL are nasopharyngeal swabs, nasal swabs, throat swabs, nasal aspirates, nasal washes, dual nasopharyngeal/throat swabs, bronchoalveolar lavage, bronchial wash, tracheal aspirate, sputum, and lung tissue from human patients with signs and symptoms of respiratory infection.

To conduct RT-PCR testing for influenza at the NH PHL:
- Collect the specimen as soon as possible after illness onset.
- Collection should be by trained personnel using droplet precautions.
- Place the sample in viral transport media and store and transport at 4°C within 48 hours of collection.

To acquire influenza specimen collection kits, contact the NH Public Health Laboratories office at 1-800-852-3345, extension 4605 or 603-271-4605. Further guidance regarding influenza diagnostic testing is available at: https://www.cdc.gov/flu/professionals/diagnosis/rapidlab.htm.

Additional Resources:
- For additional information on the 2019-20 Influenza Season from CDC refer to their website at: https://www.cdc.gov/flu/about/season/current.htm
- For any questions regarding the contents of this message, please contact NH DHHS, DPHS, Bureau of Infectious Disease Control at 603-271-4496 (after hours 1-800-852-3345 ext.5300).
- To change your contact information in the NH Health Alert Network, contact Adnela Alic at 603-271-7499 or Adnela.Alic@dhhs.nh.gov.