

Long-Term Care Updates

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Influenza Vaccination Updates for the 2020-2021 Season

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Introduction

It is estimated that between 3% to 11% of the United States population gets sick from influenza annually.¹ As the COVID-19 pandemic continues, it is increasingly important to ensure that patients are vaccinated against influenza. This year, it is critical that providers vaccinate as many people as possible to not only decrease the risk of flu, but also save potentially scarce health care resources and reduce stress on the U.S. health care system. Additionally, vaccination lessens the chance of influenza symptoms being confused with those associated with COVID-19.

Who Should be Vaccinated?

The Centers for Disease Control and Prevention (CDC) recommend that everyone 6 months of age and older receive an annual influenza vaccine; however, several groups are at high risk for complications from influenza.² These vulnerable individuals should be strongly encouraged to receive the influenza vaccine. The box to the right illustrates people at high risk of complications from influenza.

The CDC also recommends that all health care personnel (HCP) receive an influenza vaccine. During the 2018-2019 flu season, the percentage of health care workers receiving the vaccine was around 80%. However, the percentage among health care workers in the long-term care setting was lower, around 70%.⁴ The Society for Post-Acute and Long-Term Care Medicine (AMDA) “supports man-

Box. People at high risk of complications from influenza³

- People with
 - Asthma
 - Neurologic or neurodevelopment disorders
 - Blood disorders
 - Chronic lung disease
 - Endocrine disorders
 - Heart disease
 - Kidney or liver disorders
 - Metabolic disorders
 - A body mass index ≥ 40
 - A weakened immune system
 - A previous stroke
- People < 19 years of age taking chronic aspirin or salicylates
- Adults ≥ 65 years of age
- Children < 2 years of age
- Pregnant women and women ≤ 2 weeks after pregnancy
- American Indians and Alaska Natives
- Residents of long-term care facilities and nursing homes

andatory annual influenza vaccination for all post-acute and long-term care HCP unless there is a medical contraindication.” AMDA suggests that the vaccination should be made available at no cost to the employee. Additionally, they recommend that HCP who have not received the vaccine wear personal protective masks when in contact with residents during influenza season.⁵

Vaccination Timing

Despite the presence of COVID-19, the recommendation of vaccination timing has not changed. July and August are still considered too early, especially for elderly patients, because of possible waning immunity. September or October would be ideal months for vaccination; however, the vaccine can be given as long as the virus is still circulating.⁶ Guidelines suggest that due to COVID-19, influenza vaccination programs may need to adapt to ensure social distancing and accommodate stay-at-home orders. This may necessitate an earlier start to these programs. In this case, the consideration of persons going unvaccinated versus the possibility of waning immunity should be balanced.⁶ It should be noted that it is not recommended to give a flu vaccine to someone who has confirmed or suspected COVID-19.²

Composition and Availability of the Vaccine

For the 2020-2021 influenza season, almost all virus strains in the vaccine have been updated.⁶ See Table I for vaccine compositions.

Table I. Composition of 2020-2021 influenza vaccines⁶

Virus strain	Trivalent egg-based vaccines	Quadrivalent egg-based vaccines	Cell- or recombinant-based vaccines
A/Guangdong Maonan/SWL1536/2019 (H1N1) pdm09-like virus	X	X	
A/Hawaii/70/2019 (H1N1) pdm09-like virus			X
A/Hong Kong/2671/2019 (H3N2)-like virus	X	X	
A/Hong Kong/45/2019 (H3N2)-like virus			X
B/Phuket/3073/2013 (Yamagata lineage)-like virus		X	X
B/Washington/02/2019 (B/Victoria lineage)-like virus	X	X	X

For the 2020-2021 influenza season, providers may administer any licensed and age-appropriate vaccine. This would include the inactivated influenza vaccine (IIV), the recombinant influenza vaccine (RIV4), or the live attenuated influenza vaccine (LAIV). There is no recommendation for one vaccine over another when more than one is appropriate for administration.⁶ Immunocompromised patients may receive any licensed and age-approved injectable vaccine. Persons 65 years of age and older have the additional option to receive the high-dose or adjuvanted vaccine. While the Advisory Committee on Immunization Practices continues to review data on the efficacy of the high-dose and adjuvanted vaccines, it does not express preference for these over other formulations.⁶

Patients with a history of severe egg allergy can still usually tolerate any flu vaccine. In these patients, the vaccine should be given in a medical setting with health care professionals who are familiar with and can treat allergic reactions, unless RIV4 (Flublok) or the cell-cultured quadrivalent vaccine (Flucelvax) are given, as these are not egg-based.^{6,7}

Two new vaccine formulations are available for the 2020-2021 season and both are approved only for patients 65 years of age and older. Fluzone High-Dose Quadrivalent (HD-IIV4) will be replacing the previous trivalent version. It should be noted that the dose of the new quadrivalent formulation is 0.7mL given intramuscularly (IM) which is higher than the dose for the previously available trivalent formulation. A new Fluad Quadrivalent formulation is also available for this season. The trivalent version will continue to be available; both the quadrivalent and trivalent formulations contain the adjuvant, MF59.⁶ See Table 2 for vaccines available for the 2020-2021 season.

Table 2. Influenza vaccines available for the 2020-2021 season⁶

Brand name	Route	Approved age	Dose
Quadrivalent Inactivated Influenza Vaccine (IIV4)			
<i>Standard dose, egg-based</i>			
Afluria Quadrivalent	IM	≥6 months	6-35 months: 0.25 mL ≥36 months: 0.5 mL
Fluarix Quadrivalent	IM	≥6 months	0.5 mL
FluLaval Quadrivalent	IM	≥6 months	0.5 mL
Fluzone Quadrivalent	IM	≥6 months	6-35 months: 0.25 mL or 0.5 mL ≥36 months: 0.5 mL
<i>Standard dose, cell culture-based (cIIV4)</i>			
Flucelvax Quadrivalent	IM	≥4 years	0.5 mL
<i>Standard dose, egg-based with adjuvant (aIIV4)</i>			
Fluad Quadrivalent	IM	≥65 years	0.5 mL
<i>High dose, egg-based (HD-IIV4)</i>			
Fluzone Quadrivalent	IM	≥65 years	0.7 mL
Trivalent Inactivated Influenza Vaccine (IIV3)			
<i>Standard dose, egg-based with adjuvant (aIIV3)</i>			
Fluad	IM	≥65 years	0.5 mL
Quadrivalent Inactivated Influenza Vaccine, Recombinant Hemagglutinin (RIV4)			
Flublok Quadrivalent	IM	≥18 years	0.5 mL
Quadrivalent Live Attenuated Influenza Vaccine, Egg-Based (LAIV4)			
FluMist Quadrivalent	Intranasal	2-49 years	0.1 mL in each nostril

Conclusion

Due to the threat of influenza and COVID-19 circling concurrently, production of the flu vaccine for this season has been increased by 15% to provide around 200 million doses to Americans. During a typical year, it is estimated that only 50% of people in the U.S. get a flu vaccination, with the rate dropping even lower among Black, Hispanic, and American Indian adults. Most years, the vaccination is between 40% to 60% effective. For the 2020-2021 season, the CDC's goal is for 65% of Americans to receive the influenza vaccination.⁸ Among populations at high risk for complications, including residents of long-term care facilities, it will be crucial for providers to ensure that vaccination rates are even higher.

CDC Director Robert Redfield stated, "This fall, nothing can be more important than to try to increase the American public's decision to embrace the flu vaccine with confidence."⁹

References

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