

Practice Guidelines

Influenza Vaccination Recommendations for 2018-2019: Updates from ACIP

Key Points for Practice

- Vaccination should be offered by the end of October, although vaccine administered in December or later is likely beneficial in most influenza seasons.
- In contrast with the past two influenza seasons, LAIV is an option this season for appropriately selected patients two to 49 years of age.
- Persons with a history of egg allergy can receive any age-appropriate licensed influenza vaccine, but those with severe egg reactions will require supervision by a health care professional to manage any adverse reactions.

From the AFP Editors

The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) has released its recommendations for routine influenza vaccination in the 2018-2019 season. Updates this year include the antigenic composition of seasonal influenza vaccines available in the United States; a reversal of the recommendation for the past two seasons against the use of live attenuated influenza vaccine (LAIV); information about expanded age indications for two quadrivalent inactivated influenza (IIV4) vaccines; and recommendations for vaccination of persons with egg allergy.

Routine annual influenza vaccination is recommended for all persons six months and older who do not have contraindications (see Table 2 at <https://www.cdc.gov/mmwr/volumes/67/rr/rr6703a1.htm>). No specific vaccine is preferred in persons for whom more than one formulation is appropriate. Vaccination should be offered by the end of October, although vaccine administered in December or later—even if influenza activity has already begun—is likely beneficial in most influenza seasons. Children six months to eight years of age who require two doses of vaccine this season (i.e., those who have not received two doses of trivalent or quadrivalent inactivated influenza vaccine before

July 2018, or those whose influenza vaccination history is not known) should be vaccinated as soon as possible after vaccine is available so that the second dose can be administered by the end of October. Vaccination should be offered as long as influenza viruses are circulating and unexpired vaccine is available.

Inactivated influenza vaccines, recombinant influenza vaccine, and LAIV are expected to be available for the 2018-2019 influenza season (see Table 1 at <https://www.cdc.gov/mmwr/volumes/67/rr/rr6703a1.htm>). Standard-dose, unadjuvanted, inactivated influenza vaccines are available in quadrivalent and trivalent formulations. Recombinant influenza vaccine and LAIV are available in quadrivalent formulations. High-dose inactivated influenza vaccine and adjuvanted inactivated influenza vaccine are available in trivalent formulations.

Viruses included in the 2018-2019 trivalent influenza vaccines are an A/Michigan/45/2015 (H1N1) pdm09-like virus, an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus, and a B/Colorado/06/2017-like virus (Victoria lineage). Quadrivalent vaccines contain an additional virus: a B/Phuket/3073/2013-like virus (Yamagata lineage). Both the trivalent and quadrivalent vaccines contain different A (H3N2) and B (Victoria) strains compared with the 2017-2018 influenza vaccines.

In contrast with the past two influenza seasons, LAIV is an option this season for appropriately selected patients two to 49 years of age. LAIV should not be administered to children two to four years of age who have asthma, or to immunocompromised persons, close contacts and caregivers of severely immunosuppressed persons who require a protected environment, pregnant women, or persons who have received influenza antiviral medications within the previous 48 hours.

The U.S. Food and Drug Administration has expanded the age indications for two IIV4 vaccines. Afluria Quadrivalent is now licensed for use in persons five years and older,

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A collection of Practice Guidelines published in *AFP* is available at <https://www.aafp.org/aafp/practguide>.

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and Fluarix Quadrivalent is now licensed for use in children six months and older. Children six to 35 months of age can receive Fluarix Quadrivalent at the same dose (0.5 mL) used in older children and adults.

Although severe allergic reactions to vaccines can occur, they are rare. A severe reaction to influenza vaccine is a contraindication for future influenza vaccination. ACIP recommends that persons with a history of egg allergy who have experienced only urticaria after exposure to egg should receive influenza vaccine. Any licensed, recommended, age-appropriate vaccine—including LAIV—can be used. Persons who have had symptoms other than urticaria (e.g., angioedema, respiratory distress, lightheadedness, recurrent emesis) or who required epinephrine or another emergency medical intervention after being exposed to egg also can receive any licensed, recommended, and age-appropriate influenza vaccine that is otherwise appropriate for their health status. The selected vaccine should be administered in an inpatient or outpatient medical setting, and vaccine administration should be supervised by a health care professional who can recognize and manage severe allergic reactions. Although no postvaccination observation period is specifically recommended for persons allergic to egg, ACIP recommends that clinicians consider observing patients (seated or supine) for 15 minutes after vaccine administration to decrease the risk of syncope-related injury.

Persons of all ages are susceptible to seasonal influenza, but vaccination is particularly important in persons at increased risk of severe complications or influenza-related hospitalizations, as well as persons who live with or care for such persons. When vaccine supply is limited, vaccination efforts should target the following groups:

- Adults 50 years and older
- American Indians/Alaska Natives
- Children and adolescents six months to 18 years of age who are receiving aspirin- or salicylate-containing medications and may be at risk of Reye syndrome after influenza virus infection
- Children six to 59 months of age

- Health care professionals and students, and employees of long-term care facilities who have contact with patients or residents
- Household contacts and caregivers of children younger than five years, adults 50 years or older, or persons with medical conditions that increase their risk of severe influenza-related complications
- Immunocompromised persons
- Persons with a body mass index of 40 kg per m² or greater
- Persons with chronic pulmonary, cardiovascular, renal, hepatic, neurologic, hematologic, or metabolic disorders (e.g., asthma, diabetes mellitus)
- Pregnant women
- Residents of nursing homes or other long-term care facilities

Editor's Note: The American Academy of Family Physicians' recommendations for LAIV differ from ACIP's (see <https://www.aafp.org/patient-care/public-health/immunizations/influenza.html>). Although LAIV is an option this season for age-appropriate patients who might not otherwise be vaccinated, the AAFP's preference is for the inactivated vaccine. The LAIV formulation was adjusted this season to include a newer substrain of influenza A (H1N1), but there are no population-based results to conclude that it is more effective (see <https://www.aafp.org/news/health-of-the-public/20180906seasonalfuarecs.html>).

Guideline source: Advisory Committee on Immunization Practices

Evidence rating system used? No

Systematic literature search described? No

Guideline developed by participants without relevant financial ties to industry? No

Recommendations based on patient-oriented outcomes? No

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Available at: <https://www.cdc.gov/mmwr/volumes/67/rr/rr6703a1.htm>

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