**TABLE 1. Influenza vaccines — United States, 2021–22 influenza season***

| Trade name (manufacturer) | Presentations | Age indication | μg HA (IIV4s and RIV4) or virus count (LAIV4) for each vaccine virus (per dose) | Route | Mercury (from thimerosal, if present), μg/0.5 mL |
|---|---|---|---|---|---|
| **IIV4 (standard-dose, egg-based vaccines†)** | | | | | |
| Afluria Quadrivalent (Seqirus) | 0.25-mL PFS§ | 6 through 35 mos§ | 7.5 μg/0.25 mL | IM¶ | — |
| | 0.5-mL PFS§ | ≥3 yrs§ | 15 μg/0.5 mL | IM¶ | — |
| | 5.0-mL MDV§ | ≥6 mos§ (needle/syringe) 18 through 64 yrs (jet injector) | 15 μg/0.5 mL | IM¶ | 24.5 |
| Fluarix Quadrivalent (GlaxoSmithKline) | 0.5-mL PFS | ≥6 mos | 15 μg/0.5 mL | IM¶ | — |
| FluLaval Quadrivalent (GlaxoSmithKline) | 0.5-mL PFS | ≥6 mos | 15 μg/0.5 mL | IM¶ | — |
| Fluzone Quadrivalent (Sanofi Pasteur) | 0.5-mL PFS** | ≥6 mos** | 15 μg/0.5 mL | IM¶ | — |
| | 0.5-mL SDV** | ≥6 mos** | 15 μg/0.5 mL | IM¶ | — |
| | 5.0-mL MDV** | ≥6 mos** | 15 μg/0.5 mL 7.5 μg/0.25 mL | IM¶ | 25 |
| **ccIIV4 (standard-dose, cell culture–based vaccine)** | | | | | |
| Flucelvax Quadrivalent (Seqirus) | 0.5-mL PFS | ≥2 yrs | 15 μg/0.5 mL | IM¶ | — |
| | 5.0-mL MDV | ≥2 yrs | 15 μg/0.5 mL | IM¶ | 25 |
| **HD-IIV4 (high-dose, egg-based vaccine†)** | | | | | |
| Fluzone High-Dose Quadrivalent (Sanofi Pasteur) | 0.7-mL PFS | ≥65 yrs | 60 μg/0.7 mL | IM¶ | — |
| **aIIV4 (standard-dose, egg-based† vaccine with MF59 adjuvant)** | | | | | |
| Fluad Quadrivalent (Seqirus) | 0.5-mL PFS | ≥65 yrs | 15 μg/0.5 mL | IM¶ | — |
| **RIV4 (recombinant HA vaccine)** | | | | | |
| Flublok Quadrivalent (Sanofi Pasteur) | 0.5-mL PFS | ≥18 yrs | 45 μg/0.5 mL | IM¶ | — |
| **LAIV4 (egg-based vaccine†)** | | | | | |
| FluMist Quadrivalent (AstraZeneca) | 0.2-mL prefilled single-use intranasal sprayer | 2 through 49 yrs | $10^{6.5–7.5}$ fluorescent focus units/0.2 mL | NAS | — |

**Abbreviations:** ACIP = Advisory Committee on Immunization Practices; FDA = Food and Drug Administration; HA = hemagglutinin; IIV4 = inactivated influenza vaccine, quadrivalent; IM = intramuscular; LAIV4 = live attenuated influenza vaccine, quadrivalent; MDV = multidose vial; NAS = intranasal; PFS = prefilled syringe; RIV4 = recombinant influenza vaccine, quadrivalent; SDV = single-dose vial.

* Vaccination providers should consult FDA-approved prescribing information for 2021–22 influenza vaccines for the most complete and updated information, including (but not limited to) indications, contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at https://www.fda.gov/vaccines-blood-biologics/approved-products/vaccines-licensed-use-united-states. Availability and characteristics of specific products and presentations might change or differ from what is described in this table and in the text of this report.

† Although a history of severe allergic reaction (e.g., anaphylaxis) to egg is a labeled contraindication to the use of egg-based IIV4s and LAIV4, ACIP recommends that persons with a history of egg allergy may receive any licensed, recommended influenza vaccine that is otherwise appropriate for their age and health status. Those who report having had reactions to egg involving symptoms other than urticaria (e.g., angioedema or swelling, respiratory distress, lightheadedness, or recurrent emesis) or who required epinephrine or another emergency medical intervention should be vaccinated in an inpatient or outpatient medical setting (including but not necessarily limited to hospitals, clinics, health departments, and physician offices) supervised by a health care provider who is able to recognize and manage severe allergic reactions, if a vaccine other than ccIIV4 or RIV4 is used.

§ The dose volume for Afluria Quadrivalent is 0.25 mL for children aged 6 through 35 months and 0.5 mL for persons aged ≥3 years.

¶ IM-administered influenza vaccines should be given by needle and syringe only, with the exception of the MDV presentation of Afluria Quadrivalent, which may alternatively be given by the PharmaJet Stratis jet injector for persons aged 18 through 64 years only. For adults and older children, the recommended site for IM influenza vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh. Additional specific guidance regarding site selection and needle length for IM administration is available in the ACIP General Best Practice Guidelines for Immunization, available at https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html.

** Fluzone Quadrivalent is currently approved for ages 6 through 35 months at either 0.25 mL or 0.5 mL per dose; however, 0.25-mL prefilled syringes are not expected to be available for the 2021–22 influenza season. If a prefilled syringe of Fluzone Quadrivalent is used for a child in this age group, the dose volume will be 0.5 mL per dose.

# Methods

ACIP provides annual recommendations for the use of influenza vaccines for the prevention and control of influenza in the United States. The ACIP Influenza Work Group meets by teleconference once to twice per month throughout the year. Work group membership includes several voting members of ACIP, representatives of ACIP liaison organizations, and consultants. Discussions include topics such as influenza surveillance, vaccine effectiveness and safety, vaccination coverage, program feasibility, cost-effectiveness, and vaccine supply. Presentations are requested from invited experts, and published and unpublished data are discussed.

The Background Document that supplements this report is updated periodically to reflect recent additions to the literature