Trade name	Manufacturer	Presentation	Mercury content from thimerosal (μg Hg/0.5 mL)	Ovalbumin content (μg/0.5mL)	Age indications	Latex	Route
Inactivated influenza vaccine, quadrivalent (IIV4), standard dose *Contraindications*: Severe allergic reaction to any vaccine component, including egg protein, or after previous dose of any influenza vaccine. Precautions*: Moderate to severe acute illness with or without fever; history of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.*							
Fluarix Quadrivalent	GlaxoSmithKline	0.5 mL single-dose prefilled syringe	—	≤0.05	≥3 yrs	No	IM†
FluLaval Quadrivalent	ID Biomedical Corp. of Quebec (distributed by GlaxoSmithKline)	5.0 mL multi-dose vial	<25	≤0.3	≥3 yrs	No	IM†
Fluzone Quadrivalent	Sanofi Pasteur	0.25 mL single-dose prefilled syringe	—	§	6–35 mos	No	IM†
		0.5 mL single-dose prefilled syringe	—	§	≥36 mos	No	IM†
		0.5 mL single-dose vial	—	§	≥36 mos	No	IM†
		5.0 mL multidose vial	25	§	≥6 mos	No	IM†

Fluzone Intradermal[¶] Quadrivalent	Sanofi Pasteur	0.1 mL single-dose prefilled microinjection system	—	[§]	18–64 yrs	No	ID**
Inactivated influenza vaccine, trivalent (IIV3), standard dose *Contraindications*: Severe allergic reaction to any vaccine component, including egg protein, or after previous dose of any influenza vaccine.* *Precautions*: Moderate to severe acute illness with or without fever; history of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.*							
Afluria	bioCSL	0.5 mL single-dose prefilled syringe	—	<1	≥9 yrs[††]	No	IM[†]
		5.0 mL multi-dose vial	24.5	<1	≥9 yrs[††] via needle; 18-64 years via jet injector	No	IM[†]
Fluvirin	Novartis Vaccines and Diagnostics	0.5 mL single-dose prefilled syringe	≤1	≤1	≥4 yrs	Yes[§§]	IM[†]
		5.0 mL multi-dose vial	25	≤1	≥4 yrs	No	IM[†]
Fluzone	Sanofi Pasteur	5.0 mL multi-dose vial	25	[§]	≥6 mos	No	IM[†]

Inactivated influenza vaccine, cell-culture-based (ccIIV3), standard dose *Contraindications*: Severe allergic reaction to any vaccine component, including egg protein, or after previous dose of any influenza vaccine.* *Precautions*: Moderate to severe acute illness with or without fever; history of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.*							
Flucelvax	Novartis Vaccines and Diagnostics	0.5 mL single-dose prefilled syringe	—	¶¶	≥18 yrs	Yes[§§]	IM[†]
Inactivated influenza vaccine, trivalent (IIV3), high dose *Contraindications*: Severe allergic reaction to any vaccine component, including egg protein, or after previous dose of any influenza vaccine.* *Precautions*: Moderate to severe acute illness with or without fever; history of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.*							
Fluzone High-Dose***	Sanofi Pasteur	0.5 mL single-dose prefilled syringe	—	[§]	≥65 yrs	No	IM[†]
Recombinant influenza vaccine, trivalent (RIV3), standard dose *Contraindications*: Severe allergic reaction to any vaccine component.* *Precautions*: Moderate to severe acute illness with or without fever; history of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.*							
FluBlok	Protein Sciences	0.5 mL single-dose vial	—	0	≥18 yrs	No	IM[†]

Live attenuated influenza vaccine, quadrivalent (LAIV4)

Contraindications: Severe allergic reaction to any vaccine component, including egg protein, or after previous dose of any influenza vaccine. Concomitant use of aspirin or aspirin-containing medications in children and adolescents.*

In addition, ACIP recommends LAIV4 not be used for pregnant women, immunosuppressed persons, persons with egg allergy, and children aged 2 through 4 years who have asthma or who have had a wheezing episode noted in the medical record within the past 12 months, or for whom parents report that a health care provider stated that they had wheezing or asthma within the last 12 months.

LAIV4 should not be administered to persons who have taken influenza antiviral medications within the previous 48 hours.

Persons who care for severely immunosuppressed persons who require a protective environment should not receive LAIV4, or should avoid contact with such persons for 7 days after receipt.

Precautions: Moderate to severe acute illness with or without fever; history of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine; asthma in persons aged 5 years and older; medical conditions which might predispose to higher risk for complications attributable to influenza.*

FluMist Quadrivalent[†††]	MedImmune	0.2 mL single-dose prefilled intranasal sprayer	—	<0.24 (per 0.2 mL)	2–49 yrs	No	IN

Abbreviations: ACIP = Advisory Committee on Immunization Practices; ID = intradermal; IM = intramuscular; IN = intranasal.

* Immunization providers should check Food and Drug Administration-approved prescribing information for 2015–16 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 www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm.

† For adults and older children, the recommended site for intramuscular influenza vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh. Specific guidance regarding site and needle length for intramuscular administration may be found in the ACIP General Recommendations on Immunization, available at www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm.

§ Available upon request from Sanofi Pasteur (1–800–822–2463 or MIS.Emails@sanofipasteur.com).

[¶] Quadrivalent inactivated influenza vaccine, intradermal: a 0.1-mL dose contains 9 μg of each vaccine antigen (36 μg total).

** The preferred injection site is over the deltoid muscle. Fluzone Intradermal Quadrivalent is administered using the delivery system included with the vaccine.

[††] Age indication per package insert is ≥5 years; however, ACIP recommends Afluria not be used in children aged 6 months through 8 years because of increased risk of febrile reactions noted in this age group with bioCSL's 2010 Southern Hemisphere IIV3. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available for a child aged 5 through 8 years who has a medical condition that increases the child's risk for influenza complications, Afluria can be used; however, providers should discuss with the parents or caregivers the benefits and risks of influenza vaccination with Afluria before administering this vaccine. Afluria may be used in persons aged ≥9 years.

[§§] Syringe tip cap may contain natural rubber latex.

[¶¶] Information not included in package insert. Estimated to contain <50 femtograms (5x10-8 μg) of total egg protein (of which ovalbumin is a fraction) per 0.5 mL dose of Flucelvax.

*** Trivalent inactivated influenza vaccine, high-dose: a 0.5-mL dose contains 60 μg of each vaccine antigen (180 μg total).

[†††] FluMist is shipped refrigerated and stored in the refrigerator at 35°F–46°F (2°C–8°C) after arrival in the vaccination clinic. The dose is 0.2 mL divided equally between each nostril. Health care providers should consult the medical record, when available, to identify children aged 2 through 4 years with asthma or recurrent wheezing that might indicate asthma. In addition, to identify children who might be at greater risk for asthma and possibly at increased risk for wheezing after receiving LAIV, parents or caregivers of children aged 2 through 4 years should be asked: "In the past 12 months, has a health care provider ever told you that your child had wheezing or asthma?" Children whose parents or caregivers answer "yes" to this question and children who have asthma or who had a wheezing episode noted in the medical record within the past 12 months should not receive FluMist.