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Influenza Vaccines Available During the 2020–21 Season

Vaccines Available

Influenza vaccine options available in the United States this season include the following: Afluria®, Fluarix®, FluLaval®, Fluzone®, Flucelvax®, Fluzone High-Dose®, Fluad®, Flublok®, and FluMist®.¹ The Alaska Immunization Program will supply 10 presentations of quadrivalent influenza vaccine this season (Table).

2020–21 Influenza Vaccine Composition¹

Egg-based influenza vaccines (i.e., vaccines other than ccIIV4 and RIV4) will contain hemagglutinin (HA) derived from:

- influenza A/Guangdong-Maonan/SWL1536/2019 (H1N1) pdm09-like virus
- influenza A/Hong Kong/2671/2019 (H3N2)-like virus
- influenza B/Washington/02/2019 (Victoria lineage)-like virus
- for quadrivalent egg-based vaccines only, an influenza B/Phuket/3073/2013 (Yamagata lineage)-like virus

Cell culture-based inactivated (ccIIV4) and recombinant (RIV4) influenza vaccines will contain HA derived from:

- influenza A/Hawaii/70/2019 (H1N1) pdm09-like virus
- influenza A/Hong Kong/45/2019 (H3N2)-like virus
- influenza B/Washington/02/2019 (Victoria lineage)-like virus
- influenza B/Phuket/3073/2013 (Yamagata lineage)-like virus

Influenza Vaccine Abbreviations¹

- IIV: inactivated influenza vaccine
- RIV: recombinant influenza vaccine
- LAIV: live attenuated influenza vaccine
- cc: prefix indicating cell culture-based vaccine (e.g., ccIIV4)
- a: prefix indicating adjuvanted vaccine (e.g., aIIV3)
- Numeric suffix: specifies the number of hemagglutinin (HA) antigens in the vaccine (e.g., IIV3=trivalent, and IIV4=quadrivalent)

Storage

All influenza vaccine should be stored at 36°–46°F (2°–8°C), and should not be frozen.

Inactivated Influenza Vaccines (IIV)

Inactivated influenza vaccine contains inactivated viruses. The IIV vaccines available this season are as follows:

- **Egg-based (IIV4):** Afluria®, Fluarix®, FluLaval®, and Fluzone® are licensed for persons aged ≥6 months.²
- **Cell culture-based (ccIIV4):** Flucelvax® is licensed for persons aged ≥4 years² (note: the influenza viruses are propagated in Madin-Darby canine kidney cells instead of eggs).
- **Egg-based high dose (HD-IIV4):** Fluzone High-Dose® is licensed for persons aged ≥65 years.²
- **Egg-based with MF59 adjuvant (aIIV3 or aIIV4):** Fluad® is licensed for persons aged ≥65 years.²

Recombinant Influenza Vaccine (RIV)

Flublok® (RIV4) contains recombinant HA produced in an insect cell line using genetic sequences from cell-derived influenza viruses and is manufactured without the use of influenza viruses or eggs. Flublok® (RIV4) may be used in persons aged ≥18 years.²

Live-Attenuated Influenza Vaccine (LAIV)

FluMist (LAIV4) contains live, attenuated (weakened), temperature-sensitive (cold-adapted) viruses that are able to replicate efficiently only at temperatures present in the nasal mucosa. If the recipient sneezes immediately after administration, the dose should not be repeated.¹ FluMist (LAIV4) is available for nonpregnant persons aged 2 through 49 years.²

References

1. CDC. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the ACIP — United States, 2020–21 Influenza Season. *MMWR* 2020;69(8):1-24. Available at: <https://www.cdc.gov/mmwr/volumes/69/rr/rr6908a1.htm>
2. U.S. Food and Drug Administration, Vaccines, Blood, and Biologics: Manufacturer Package Inserts. Available at: <http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM093833>
3. Alaska Epidemiology *Bulletin*. “Influenza Vaccine Recommendations and Administration for the 2020–21 Season”. No. 7, September 28, 2020. Available at: http://www.epi.alaska.gov/bulletins/docs/b2020_07.pdf

Table. Alaska Immunization Program Supplied Influenza Vaccines

Trade Name	Manufacturer	Presentation	Age Indication	HA (IIVs/ RIV4) or virus count (VAIV4) for each vaccine virus (per dose)	Route	Mercury (from thimerosal) µg/0.5 mL dose	Late Season Arrival
Standard dose, egg based (IIV4)							
Afluria	Seqirus	0.25 mL PFS*	6–35 months	75 µg/0.25 mL dose	IM [†]	--	No
Afluria	Seqirus	0.5 mL PFS*	≥3 years	15 µg/0.5 mL dose	IM [†]	--	Yes
Fluarix	GlaxoSmithKline	0.5 mL PFS*	≥6 months	15 µg/0.5 mL dose	IM [†]	--	No
FluLaval	GlaxoSmithKline	0.5 mL PFS*	≥6 months	15 µg/0.5 mL dose	IM [†]	--	No
Fluzone	Sanofi Pasteur	0.5 mL PFS*	≥6 months	15 µg/0.5 mL dose	IM [†]	--	No
Fluzone	Sanofi Pasteur	0.5 mL MDV*	≥6 months	15 µg/0.5 mL dose	IM [†]	25	No
Standard dose, cell culture based (ccIIV4)							
Flucelvax	Seqirus	0.5 mL PFS*	≥4 years	15 µg/0.5 mL dose	IM [†]	--	No
Flucelvax	Seqirus	5.0 mL MDV**	≥4 years	15 µg/0.5 mL dose	IM [†]	25	Yes
High dose, egg based (HD-IIV4)							
Fluzone HD	Sanofi Pasteur	0.7 mL PFS*	≥65 years	60 µg/0.5 mL dose	IM [†]	--	No
Egg based (LAIV4)							
FluMist	AstraZeneca	0.2 mL PFNS [‡]	2–49 years	10 fluorescent focus units/0.2mL	NAS ^{††}	--	No

*PFS = Pre-Filled syringe ** = Multi-Dose Vial [‡] = Pre-Filled Intranasal Spray

[†]IM = Intramuscular ^{††}NAS = Nasal