National Center for Immunization & Respiratory Diseases

ACIP Influenza Update

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National Adult and Influenza Immunization Summit

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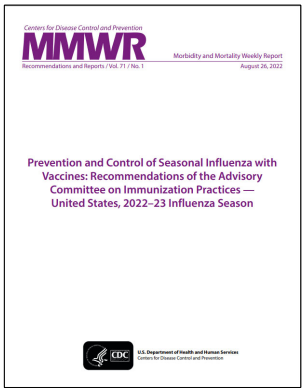
ACIP Influenza Statement, 2022-23

- 2022-23 recommendations published August 2022.
  - Vaccine composition update.
  - Updates to the vaccine table.
    - Age indication for Flucelvax Quadrivalent expanded from ≥2 years to ≥6 months.
  - Preferential recommendation for higher dose and adjuvanted influenza vaccines for adults ages ≥65 years.
    - ACIP recommends that adults aged ≥65 years preferentially receive any one of the following higher dose or adjuvanted influenza vaccines: quadrivalent high-dose inactivated influenza vaccine (HD-IIV4), quadrivalent recombinant influenza vaccine (RIV4), or quadrivalent adjuvanted inactivated influenza vaccine (aIIV4).
    - If none of these three vaccines is available at an opportunity for vaccine administration, then any other age-appropriate influenza vaccine should be administered.



https://www.cdc.gov/mmwr/volumes/71/rr/rr7101a1.htm

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ACIP Influenza Statement, 2023-24

- Will be discussed at the June 2023 ACIP meeting.
- Anticipated publication August 2023

U.S. Influenza Vaccine Composition, 2023-24

- FDA Vaccines and Related Biological Products Advisory Committee (VRBPAC) Meeting, March 7, 2023.
- Includes updates to the H1N1pdm09 components for both egg based and non-egg based vaccines:
  - an A/Victoria/4897/2022 (H1N1)pdm09-like virus (egg based vaccines) ***OR***
    an A/Wisconsin/67/2019 (H1N1)pdm09-like virus (cell based or recombinant vaccines)
  - an A/Darwin/9/2021 (H3N2)-like virus (egg based vaccines) ***OR***
    an A/Darwin/6/2021 (H3N2)-like virus (cell based or recombinant vaccines)
  - a B/Austria/1359417/2021-like virus (B/Victoria lineage)
  - a B/Phuket/3073/2013-like virus (B/Yamagata lineage)

https://www.fda.gov/advisory-committees/advisory-committee-calendar/vaccines-and-related-biological-products-advisory-committee-march-7-2023-meeting-announcement

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Influenza Vaccines by Age Indication, United States, 2022–23 Season

Vaccine type		0 through 6 months	6 through 23 months	2 through 17 years	18 through 49 years	50 through 64 years	≥65 years
IIV4s	Egg-based standard-dose, unadjuvanted Inactivated (IIV4)		Afluria Quadrivalent Fluarix Quadrivalent FluLaval Quadrivalent Fluzone Quadrivalent				
	Cell culture-based unadjuvanted inactivated (ccIIV4)		Flucelvax Quadrivalent				
	Adjuvanted inactivated (aIIV4)						Fluad Quadrivalent
	High-dose inactivated (HD-IIV4)						Fluzone High-Dose Quadrivalent
RIV4	Recombinant (RIV4)				Flublok Quadrivalent		
LAIV4	Live attenuated (LAIV4)			FluMist Quadrivalent			

Not approved for age group *Egg-based* *Not egg-based*

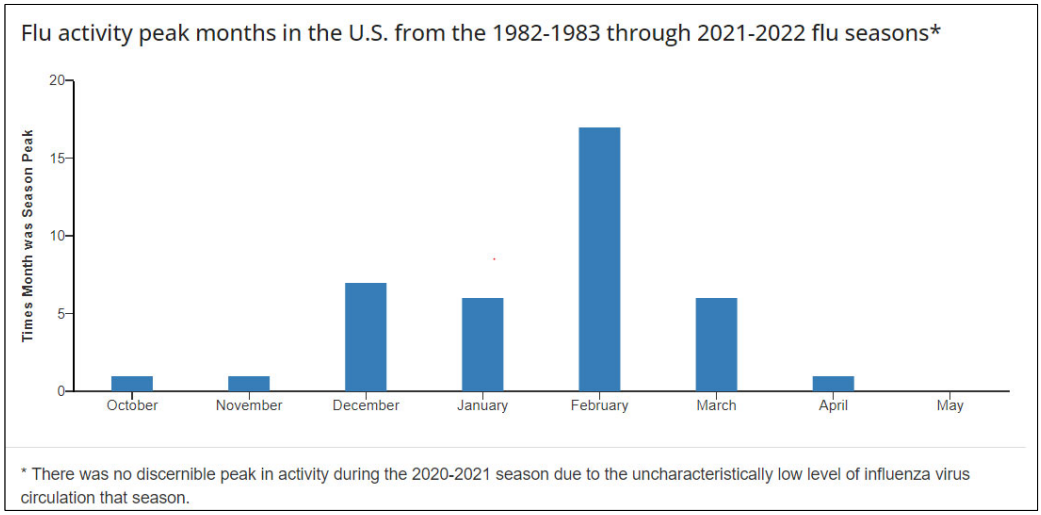
IIV4 = Inactivated influenza vaccine, quadrivalent **RIV4** = recombinant influenza vaccine, quadrivalent **LAIV4** = Live attenuated influenza vaccine, quadrivalent
cc = cell culture **HD** = high-dose **a** = adjuvanted

https://www.cdc.gov/mmwr/volumes/71/rr/rr7101a1.htm

Timing of Vaccination—Considerations

- Variable timing of start, peak, and end of influenza activity each season.
- Potential for waning of vaccine-induced immunity over the course of the season.

Peak Month of U.S. Influenza Activity



CDC. The Flu Season. https://www.cdc.gov/flu/about/season/index.html

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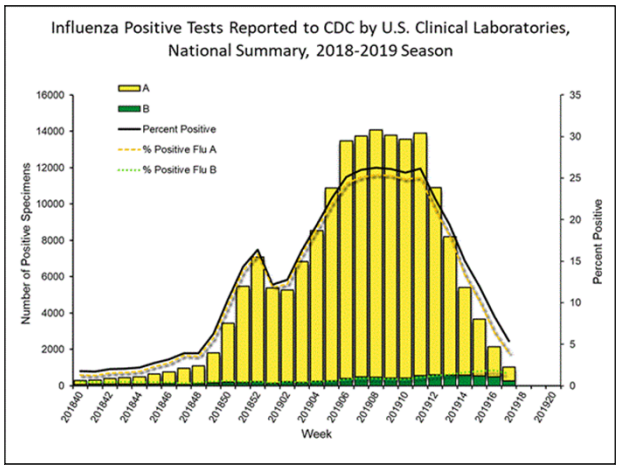
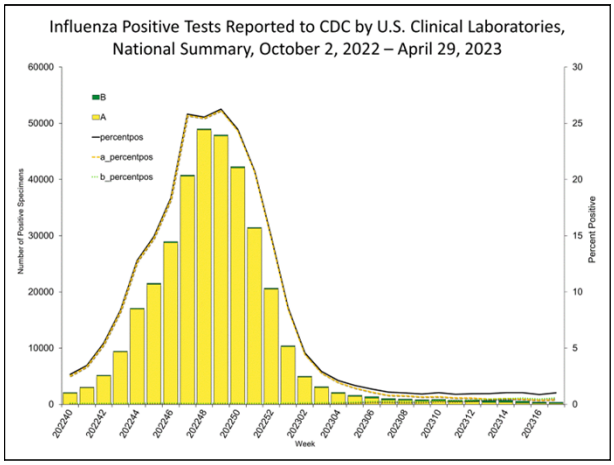
Percent of Specimens Positive: Two Examples from Week 17





CDC. Fluview. https://www.cdc.gov/flu/weekly/index.htm

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Waning of Vaccine-Induced Immunity

- Observed in many studies.
  - Variability in rate and degree to which waning occurs across seasons, as well as among different age groups.
  - Most consistently observed among older adults.
  - Noted among children in a few studies.
    - However, fewer studies specifically included children.
  - In some studies, more pronounced for H3N2 viruses than for H1N1 viruses.
- Variability of results, combined with unpredictability of flu season timing, prevents determination of an ideal time to vaccinate.

Timing of Vaccination—2022-23

- Vaccination during July and August is not recommended for most groups because of the possible waning of immunity over the course of the influenza season.
- For most persons who need only 1 dose of influenza vaccine for the season, vaccination should ideally be offered during September or October.
- However, vaccination should continue after October and throughout the influenza season as long as influenza viruses are circulating and unexpired vaccine is available.

https://www.cdc.gov/mmwr/volumes/71/rr/rr7101a1.htm

Timing of Vaccination—2022-23

Considerations for specific groups:

- **Most adults (particularly ages ≥65 years) and pregnant persons in 1st or 2nd trimester:** July and August should be avoided *unless there is concern that vaccination later in the season might not be possible*.
- **Children who require 2 doses:** Should receive first dose as soon as possible (including during July and August, if vaccine is available) to allow the second dose (which must be administered ≥4 weeks later) to be received, ideally, by the end of October.
- **Children who require only 1 dose:** Vaccination during July and August can be considered for children of any age who need only 1 dose of influenza vaccine for the season.
  - Not as much evidence for waning as adults (though there are fewer studies including children).
  - Children in the group might visit healthcare providers in late summer.
- **Pregnant persons in 3rd trimester during July/August:** Vaccination during July and August can be considered (might reduce risk for influenza illness in infants during the first months after birth).

https://www.cdc.gov/mmwr/volumes/71/rr/rr7101a1.htm

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