



# Summary and Work Group Considerations

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# Acknowledgments

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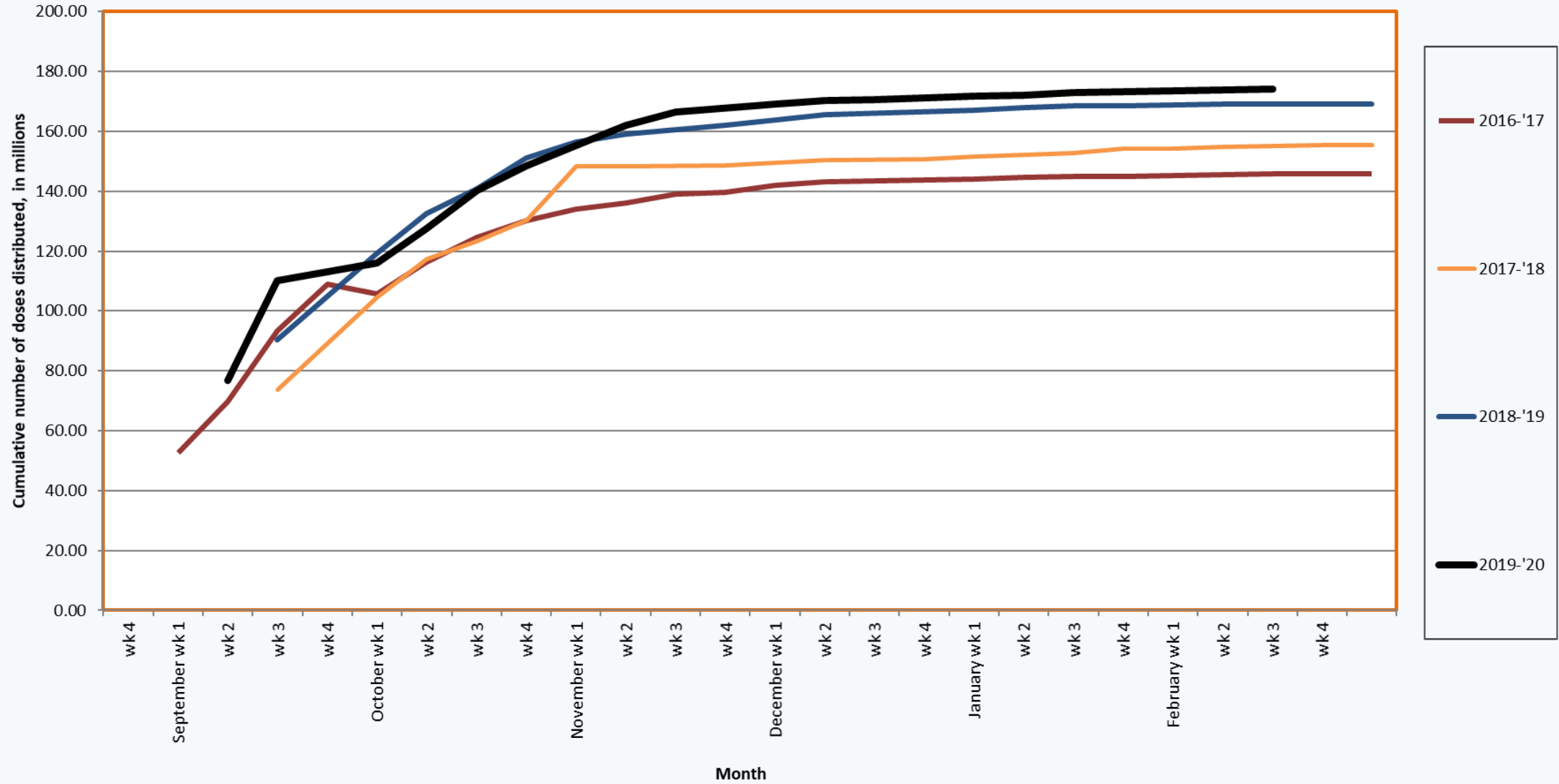
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# Influenza Vaccine Distribution Update

Cumulative doses of influenza vaccines distributed by month, by season:  
2016-'17 - 2019-'20



# Influenza Vaccines for Older Adults— WG Considerations

# Abbreviations

IIV	Inactivated Influenza Vaccine
cclIV	Cell culture based Inactivated Influenza Vaccine
aIIV	Adjuvanted Inactivated Influenza Vaccine
HD-IIV	High-Dose Inactivated Influenza Vaccine
RIV	Recombinant Influenza Vaccine
LAIV	Live Attenuated Influenza Vaccine

Numbers indicate the number of influenza virus antigens:

3 for trivalent: an A(H1N1), an A(H3N2), and one B (from one lineage)

4 for quadrivalent: an A(H1N1), an A(H3N2), and two Bs (one from each lineage)

# U.S.-Licensed Influenza Vaccines Available for 2019-20

Available vaccines by FDA-licensed age indication:

Vaccine type	6 through 23 mos	2 through 3 yrs	4 through 17 yrs	18 through 49 yrs	50 through 64 yrs	≥65 yrs
IIV4s (egg-based)	Afluria Quadrivalent Fluarix Quadrivalent FluLaval Quadrivalent Fluzone Quadrivalent					
IIV4 (cell-based)			Flucelvax Quadrivalent			
RIV4 (recombinant)				Flublok Quadrivalent		
Adjuvant IIV3 (egg-based)						Fluad
High-dose IIV3 (egg-based)						Fluzone High-dose
LAIV4 (egg-based)		FluMist Quadrivalent				

- ACIP recommends that a licensed, age-appropriate influenza vaccine should be used.
- No preferential recommendations are made for any specific influenza vaccine for any age group, where there is more than one that is appropriate.

# Systematic Review/Meta-analysis--Question

Whether the relative benefits and harms of HD-IIV, aIIV, and RIV, as compared with one another and with other influenza vaccines, favor the use of any one or more of these vaccines over other age-appropriate influenza vaccines for persons  $\geq 65$  years of age.



# Current Systematic Review/Meta-analysis—PICO (1)

**Population:** Adults aged  $\geq 65$  years

**Interventions:** Trivalent/quadrivalent high dose IIV, adjuvanted IIV, or RIV  
(U.S.-licensed, or similar in formulation/manufacture to U.S.-licensed)

**Comparators:** Other trivalent or quadrivalent influenza vaccine  
(U.S.-licensed, or similar in formulation/manufacture to U.S.-licensed)  
Non-influenza control vaccine  
Placebo  
No vaccine

# Current Systematic Review/Meta-analysis—PICO (2)

**Primary Outcomes:** Efficacy/Effectiveness

- All influenza -- A and B
- Influenza-associated outpatient/emergency visits
- Influenza-associated hospitalizations
- Influenza-associated deaths

Safety

- Any systemic adverse event (grade  $\geq 3$ )
- Any injection site adverse event (grade  $\geq 3$ )
- Any serious adverse event (SAE)
- Guillain-Barre syndrome

# Current Systematic Review/Meta-analysis—PICO (3)

## Secondary Outcomes:

- To the extent data are available, the following will be summarized:
  - Influenza-associated outpatient/emergency visits, hospitalizations, and deaths, stratified by influenza virus type/subtype
  - Serious adverse events (SAEs) judged to be related to study intervention

# Inclusion/Exclusion Criteria

- **Peer-reviewed literature; no language restriction**
- **Publication dates from 1990 forward**
- **Main inclusion criteria:**
  - Randomized studies (individually- and cluster-randomized designs)
  - Retrospective case-control studies (traditional and test-negative designs)
  - Retrospective and prospective cohort studies.
- **Main exclusion criteria:**
  - Data involving influenza vaccines not licensed in the United States for persons  $\geq 65$  years of age
  - Studies/data for which the entire population falls outside age range of interest
  - Studies/data assessing monovalent or bivalent vaccines
  - Case series, case reports, registry reports without comparator or denominator information
  - Animal studies
  - Interim reports superseded by final reports

*Thank you*

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