State of Alaska Epidemiology Bulletin

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Influenza Vaccine Recommendations and Administration for the 2012–13 Season

Recommendations for Vaccination

Routine annual influenza vaccination is recommended for all persons aged ≥6 months. To permit time for production of protective antibody levels, vaccination optimally should occur before onset of influenza activity in the community. Health care providers should begin offering influenza vaccine as soon as it is available and throughout the influenza season. Updated vaccine dosage guidance for children aged 6 months through 8 years, and a list of approved influenza vaccines for the 2012–13 season are provided here (Tables 1 and 2, respectively).

Table 1. Vaccine Dosage for Children Aged 6 Months — 8 Years[1]

Administer 1 dose if child received:	**Administer 2 doses,** separated by ≥4 weeks, if child:
• 2 or more doses of seasonal influenza vaccine **since** July 1, 2010; **or** • 2 or more doses of seasonal influenza vaccine **before** July 1, 2010 *and* 1 or more doses of monovalent 2009 (H1N1) vaccine; **or** • 1 or more doses of seasonal influenza vaccine **before** July 1, 2010 *and* 1 or more doses of seasonal influenza vaccine **since** July 1, 2010	• Has an unknown vaccination history; **or** • Does not meet any of the conditions listed in the first column of this table

Recommendations for Persons Who Have or Report Egg Allergy[1]

All vaccines should be administered in settings where personnel and equipment for treatment of anaphylaxis are available.

- Persons able to eat lightly cooked (e.g., scrambled) eggs are unlikely to be egg-allergic; however, tolerance does not exclude the possibility of egg allergy. Vaccinate per usual protocol.
- Egg-allergic persons who have experienced only hives or a less severe reaction can be vaccinated by a health care provider familiar with potential egg allergy manifestations; use only TIV and observe for at least 30 minutes.
- Persons who experienced a reaction to eggs involving angioedema, respiratory distress, hypotension, nausea/vomiting, or a reaction requiring epinephrine or EMS should be referred to a health care provider with expertise in managing allergic conditions.
- A previous severe allergic reaction (e.g., anaphylaxis) to influenza vaccine, regardless of suspected vaccine component, is a contraindication for influenza vaccination.

References

1. CDC. Prevention and Control of Influenza with Vaccines: Recommendations of the ACIP – United States, 2012–13 Influenza Season. *MMWR* 2012;61(32):613-18. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6132a3.htm?s_cid=mm6132a3_e%0d%0a
2. CDC. Prevention and Control of Influenza with Vaccines. *MMWR* 2010;59(RR-8):1-62. Available at: http://www.cdc.gov/mmwr/pdf/rr/rr5908.pdf
3. CDC. Update: Recommendations of the Advisory Committee on Immunization Practices (ACIP) Regarding Use of CSL Seasonal Influenza Vaccine (Afluria) in the United States During 2010–11. *MMWR* 2010;59:989-92. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5931a4.htm
4. Alaska Section of Epidemiology. TIV and LAIV Influenza Vaccines for 2012–13 *Bulletin* No. 17 August 29, 2012. Available at: http://www.epi.alaska.gov/bulletins/docs/b2012_17.pdf

Table 2. Approved Influenza Vaccines for Different Age-Groups — United States, 2012–13 Season[1-4]

Vaccine*	Trade Name	Manufacturer	Presentation	Age-Group	Mercury content µg /0.5 mL dose	Ovalbumin content† µg /0.5 mL dose	# of Doses	Route
TIV	**Fluzone** (State-supplied[4])	Sanofi Pasteur	0.25 mL prefilled syringe	6–35 mos	0	§	1 or 2¶	IM**
			0.5 mL prefilled syringe	≥36 mos				
			0.5 mL vial	≥36 mos				
			5.0 mL multidose vial	≥6 mos	25.0	§		
TIV	**Agriflu**	Novartis	0.5 mL prefilled syringe	≥18 yrs	0	≤0.4	1	IM**
TIV	**Fluvirin**	Novartis	0.5 mL prefilled syringe	≥4 yrs	<1.0	≤1	1 or 2¶	IM**
			5.0 mL multidose vial		25.0			
TIV	**Fluarix**	GlaxoSmithKline	0.5 mL prefilled syringe	≥3 yrs	0	≤0.05	1 or 2¶	IM**
TIV	**FluLaval**	ID Biomedical (distributed by GlaxoSmithKline)	5.0 mL multidose vial	≥18 yrs	25.0	≤0.3	1	IM**
TIV	**Afluria**††	CSL Biotherapies (dist. by Merck)	0.5 mL prefilled syringe	≥9 yrs††	0	≤1	1	IM**
			5.0 mL multidose vial		24.5			
TIV High-Dose	**Fluzone High-Dose***	Sanofi Pasteur	0.5 mL prefilled syringe	≥65 yrs	0	§	1	IM**
TIV Intradermal	**Fluzone Intradermal*** (State-supplied[4])	Sanofi Pasteur	0.1 mL prefilled microinjection system	18–64 yrs	0	§	1	Intradermal
LAIV	**FluMist**§§ (State-supplied[4])	MedImmune	0.2 mL intranasal sprayer§§	2–49 yrs§§	0	Insufficient data available for use of LAIV in egg-allergic persons	1 or 2¶	Intranasal

TIV = Trivalent Inactivated Influenza Vaccine; LAIV = Live, Attenuated Influenza Vaccine (also trivalent).

**U.S. influenza vaccines for 2012–13 will contain A/California/7/2009(H1N1)-like, A/Victoria/361/2011(H3N2)-like, and B/Wisconsin/1/2010-like (Yamagata lineage) antigens. Vaccination providers should consult U.S. Food and Drug Administration-approved prescribing information for the most updated information. A 0.5 mL dose of TIV High-Dose contains 60 µg of each antigen (180 µg total). A 0.1ml dose of TIV intradermal contains 9 µg of each antigen (27 µg total).*

†Data on maximum ovalbumin content are supplied in package inserts of certain vaccines. Persons with a history of mild allergy to egg (specifically, those who experience hives) should receive TIV with additional precautions.

§Information not included in package insert but is available upon request from Sanofi Pasteur by telephone 1-800-822-2463 or e-mail MIS.Emails@sanofipasteur.com

¶Table 1 describes the decision criteria for determining the number of doses needed for children aged 6 months through 8 years.

***IM = Intramuscular. The recommended vaccination site is the deltoid muscle for adults and older children, and the anterolateral aspect of the thigh for infants and young children.*

††Afluria is approved, per package insert, for persons aged ≥5 years; however, ACIP recommends that Afluria not be administered to children aged 6 mos–8 yrs due to reports of increased febrile reactions in this age-group. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available for a child 5–8 yrs 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.

§§FluMist is shipped refrigerated and, after receipt at the shipping destination, is stored in the refrigerator at 35–46°F (2–8°C). The dose is 0.2 mL, divided equally between each nostril. FluMist should not be administered to persons with asthma. Providers should carefully screen children for asthma or wheezing. (See package insert for additional information. FluMist is indicated for healthy, nonpregnant persons aged 2–49 years. Persons who care for severely immunosuppressed persons who require a protective environment should not receive FluMist due to theoretical risk for transmission of the live-attenuated vaccine virus.

Note: This Epidemiology *Bulletin* provides **summary information only.** For complete information, consult the appropriate manufacturer package inserts (available at: http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM093833) and the ACIP.[1-4]