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Committee on Infectious Diseases

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AMERICAN ACADEMY OF PEDIATRICS

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

Recommendations for Prevention and Control of Influenza in Children, 2025–2026: Policy Statement

Committee on Infectious Diseases

ABSTRACT. This statement updates the recommendations of the American Academy of Pediatrics (AAP) for the use of influenza vaccines and antiviral medications in the prevention and treatment of influenza in children during the 2025–2026 influenza season. A review of the evidence supporting these recommendations is in the accompanying technical report (https://doi.org/10.1542/peds.2025-073622).

The AAP recommends annual influenza vaccination of all children without medical contraindications starting at 6 months of age. Influenza vaccination is an important strategy for protecting children and the broader community as well as reducing the overall burden of respiratory illnesses when other viruses are cocirculating. Any licensed influenza vaccine appropriate for age and health status can be administered, as soon as possible in the season, without preference for one product or formulation.

Antiviral treatment of influenza is recommended for children with suspected or confirmed influenza who are hospitalized or have severe or progressive disease or have underlying conditions that increase their risk of complications of influenza. In this

situation, antiviral treatment should be started as soon as possible regardless of duration of illness. Antiviral treatment is an option in the outpatient setting for other children with suspected or confirmed influenza in some circumstances.

Antiviral chemoprophylaxis is an option in certain individuals, especially exposed children who are asymptomatic and are at high risk for influenza complications but have not yet been immunized or those who are not expected to mount an effective immune response.

ABBREVIATIONS: AAP, American Academy of Pediatrics; FDA, US Food and Drug Administration; ccIIV, cell culture-based inactivated (non-live) influenza vaccine; ccIIV3, trivalent cell culture-based inactivated (non-live) influenza vaccine; IIV, inactivated (non-live) influenza vaccine; IIV3, trivalent inactivated (non-live) influenza vaccine; LAIV, live attenuated influenza vaccine; LAIV3, trivalent live attenuated influenza vaccine; RIV, recombinant influenza vaccine; RIV3, trivalent recombinant influenza vaccine; WHO, World Health Organization.

INTRODUCTION

Children, especially those younger than 5 years and those with certain underlying medical conditions, can experience substantial morbidity, including severe or fatal complications, from influenza virus infection.[1,2,3] Children also play a pivotal role in the transmission of influenza virus infection to household and other close contacts.[1,4,5,6]

Influenza vaccination of children can reduce disease burden directly and among household members, close contacts, and community members of all ages.[7,8] By reducing the burden of respiratory illnesses, influenza vaccination helps to preserve health care capacity, especially when other viruses are cocirculating. **The American Academy of Pediatrics (AAP) recommends routine influenza vaccination of children ≥6 months of age for the prevention**

of influenza. Despite this recommendation, influenza vaccination coverage decreased again during the 2024-2025 influenza season. Through April 26, 2025, only 49.2% of children 6 months through 17 years had been vaccinated, 14.5 percentage points lower than at the end of 2020 (https://www.cdc.gov/fluvaxview/interactive/general-population-coverage.html). Differences in vaccination rates were noted by age, race, and ethnicity; poverty status; urbanicity; and maternal immunization status.[9] Continued efforts to increase influenza vaccination, including strategies to decrease disparities in vaccine access and delivery and to counter vaccine hesitancy, are urgently needed.

This policy statement summarizes updates and recommendations for the 2025–2026 influenza season. An accompanying technical report provides further detail.[10]

UPDATES FOR THE 2025–2026 INFLUENZA SEASON

1. All licensed vaccines available in the United States this season are trivalent.
2. The compositions of influenza vaccines for the 2025–2026 season have been updated (Table 1).
3. Recommendations for influenza treatment and prophylaxis have been simplified.
4. Live attenuated influenza vaccine (LAIV) is available for administration in the home by a caregiver for eligible children ≥2 years of age.
5. Recombinant baculovirus-expressed hemagglutinin (HA) influenza vaccine (RIV3) is now licensed for individuals as young as 9 years of age.[11]

HIGH-RISK GROUPS IN PEDIATRICS

Children younger than 5 years, especially those younger than 2 years, and children with certain underlying medical conditions are at increased risk of hospitalization and complications attributable to influenza (Table 2).[10] Although influenza vaccination is recommended for everyone starting at 6 months of age, emphasis should be placed on ensuring that high-risk children, medically vulnerable children, and children with medical complexity, as well as their parents/guardians, other household contacts, and caregivers, receive annual influenza vaccine (Table 3). Additionally, increased efforts are needed to eliminate barriers to vaccination in all persons experiencing higher rates of adverse outcomes from influenza. Racial and ethnic disparities exist in severe outcomes from influenza, with some group experiencing higher rates of severe outcomes.[12] In 1 cross-sectional study spanning 10 influenza seasons, Black, Hispanic, and American Indian/Alaska Native people had higher rates of influenza-associated hospitalizations and intensive care unit admissions, and disparities were highest in children ≤4 years of age.[12] Influenza-associated in-hospital deaths were three- to fourfold higher in Black, Hispanic, and Asian/Pacific Islander children compared with white children.[12] Inequities in health care system access and other social drivers of health contribute to severe outcomes and increased mortality in these groups.

SEASONAL INFLUENZA VACCINES

The seasonal influenza vaccines licensed for children for the 2025–2026 season are described in Table 4 As in the 2024-2025 season, all 2025–2026 seasonal influenza vaccines available in the United States are trivalent and contain hemagglutinin derived from the same influenza strains as recommended by the World Health Organization (WHO) and the US Food and Drug Administration (FDA) for the Northern Hemisphere (Table 1).[13,14] The influenza A

(H3N2) vaccine component for the 2025–2026 season has been updated. The influenza A (H1N1) and influenza B Victoria lineage are unchanged.

INFLUENZA VACCINE RECOMMENDATIONS

General Recommendations

1. The AAP recommends influenza vaccination of everyone 6 months and older during the 2025–2026 influenza season.
2. The AAP recommends any licensed influenza vaccine product appropriate for age and health status and does not prefer one product over another, including inactivated (non-live) influenza vaccine (IIV) or recombinant influenza vaccine (RIV) and LAIV. RIV is now an option for persons ≥9 years of age.[11] Influenza vaccination should not be delayed to obtain a specific product, including a thimerosal-free product. The safety of thimerosal-containing vaccines is discussed in the TR (https://doi.org/10.1542/peds.2025-073622).
3. LAIV should not be used for immunocompromised persons and persons with certain chronic medical conditions (Table 5).
4. The number of influenza vaccine doses recommended for children remains unchanged in the 2025–2026 influenza season and depends on the child's age at first dose administration and influenza vaccination history (Figure 1). Doses given up to 4 days prior to the minimum suggested interval are acceptable.
5. When a child is recommended to receive 2 doses of vaccine in a given season, the doses do not need to be the same brand or formulation. A child may receive a combination of IIV, RIV, and LAIV if appropriate for age and health status.

6. Influenza vaccine should be offered to children as soon as it becomes available, especially to those recommended to receive 2 doses. The recommended dose(s) ideally should be received by the end of October for optimal protection before the influenza season.
7. For children with malignant neoplasms receiving chemotherapy, IIV or RIV should be administered ≥2 weeks before cytotoxic chemotherapy, when clinically possible.
8. For children who will be starting anti-B cell therapies (eg, rituximab, alemtuzumab), IIV or RIV should optimally be provided at least 2 to 4 weeks before starting these therapies. For children who have received anti-B cell therapies, IIV should be deferred for 6 months after last dose, and ideally once there is evidence of B cell recovery.
9. Non-live vaccines should be considered ≥6 months after CD19-targeted chimeric antigen receptor (CAR)-T–cell infusion in patients who are in remission and do not require additional chemotherapy or hematopoietic cell transplantation.
10. For hematopoietic cell transplant (HCT) recipients, IIV can be given starting 4 to 6 months after transplantation.
11. Although high-dose IIV is not approved for use in children, clinicians could consider administering 2 doses of high-dose trivalent inactivated (non-live) influenza vaccine (IIV3) 28 to 42 days apart in pediatric HCT recipients 3 to 17 years of age.[15,16]
12. For solid organ transplant (SOT) recipients, IIV can be given starting 3 months after receipt of an SOT, although it may be considered ≥1 month after SOT during the influenza season.
13. Household contacts of immunocompromised individuals should receive influenza vaccine annually.

Additional Recommendations for Pregnant and Breastfeeding Persons

14. Pediatricians who interact with pregnant individuals should recommend influenza

vaccination, emphasizing the benefits of vaccination for them and their infants.

15. Pregnant individuals may receive IIV or RIV at any time during pregnancy to protect themselves and their infants. Those who do not receive it during pregnancy should receive influenza vaccine before hospital discharge. Those who decline the vaccine during hospitalization should be encouraged to discuss influenza vaccination with their obstetrician, family physician, nurse midwife, or other trusted clinician.
16. Influenza vaccination of a breastfeeding parent provides protection to both the parent and the infant and is recommended and safe.

Additional Recommendations for Travelers

17. Individuals traveling to the tropics, on cruise ships, or to the Southern hemisphere during April to September should consider seasonal influenza vaccination ≥2 weeks before departure if not vaccinated during the preceding fall or winter and if vaccine is available (https://doi.org/10.1542/peds.2025-073622).[10]

Additional Recommendations for Health Care Personnel

18. The AAP supports influenza vaccination of health care personnel as a condition of employment as a crucial strategy for reducing health care-associated influenza virus infections.

Influenza Vaccine Implementation

19. Efforts should be made to promote influenza vaccination of all children, especially children younger than 5 years and those in high-risk groups (Table 2) and their contacts, unless contraindicated (Table 5), using evidence-based strategies (Table 3). To promote influenza vaccination in communities affected by health disparities, it is important to include community members in the development of culturally relevant strategies.

20. Strategies for communicating with families about vaccines and promoting vaccine confidence are available at https://www.aap.org/vaccinecommunication.
21. Increasing access and reducing barriers to vaccination through schools, pharmacies, hospitals, and other nontraditional settings may improve vaccination rates. However, vaccination in the medical home is the preferred option for young children to facilitate other necessary services, including well care, preventive screening, anticipatory guidance, and other important childhood vaccinations. For patients and families for whom resource constraints would present an obstacle to receiving the vaccine in the medical home, at-home administration of LAIV is an alternative for some eligible individuals 2 through 49 years of age. Practical considerations for LAIV administered in the home setting are presented in the technical report (https://doi.org/10.1542/peds.2025-073622).[10]
22. When influenza vaccination takes place in a nontraditional setting, appropriate documentation should be provided to patients and the medical home and submitted to the state or regional immunization information systems (IISs).
23. Practices serving children and adolescents may consider offering influenza vaccine to family members and close contacts.[17]

Influenza Vaccine Advocacy

24. All participants in immunization efforts should work to eliminate disparities in influenza vaccine supply between privately insured patients and those eligible for vaccination through the Vaccines for Children (VFC) program.
25. Information about influenza vaccine and influenza vaccine clinics should be provided to eligible children and their families in their preferred language, especially those who may experience barriers to preventive care.

26. Public and private payers should offer adequate payment for influenza vaccine supply and administration to pediatric populations, update payments for influenza vaccine so that physicians and other clinicians who care for children are paid for administering doses in July and August and eliminate remaining "patient responsibility" cost barriers to influenza vaccination where they still exist.

INFLUENZA VACCINE CONTRAINDICATIONS AND PRECAUTIONS

Contraindications and precautions for the use of influenza vaccines are described in Table 5, and further details are provided in the technical report.[10] Key points include:

1. Product-specific contraindications must be considered when selecting the type of influenza vaccine to administer.[18]
2. Although a history of severe allergic reaction (eg, anaphylaxis) to any influenza vaccine is generally a contraindication to future receipt of influenza vaccines, children who have had a severe allergic reaction after influenza vaccination should be evaluated by an allergist to help identify the vaccine component responsible for the reaction and to determine whether future vaccine receipt is appropriate. Children who are allergic to gelatin (very rare) should receive IIV (or RIV if age appropriate) instead of LAIV. Overlap between gelatin and alpha-gal allergy has been reported.[19]
3. Children with egg allergy can receive any influenza vaccine without any additional precautions beyond those recommended for all vaccines.
4. Children with acute moderate or severe illness may receive influenza vaccine as soon as their acute illness has improved; strategies to promote timely receipt once recovered from illness should be employed (ie, schedule return visit; send reminder message; if hospitalized,

administer prior to discharge from hospital setting); children with mild illness, including a low-grade fever, should still be vaccinated.

INFLUENZA TESTING

Influenza testing recommendations are informed by setting and anticipated impact on clinical management.

1. Influenza testing should be performed in children with signs and symptoms of influenza when test results are anticipated to impact clinical management (eg, to inform the decision to initiate antiviral or avoid antibiotic therapy, pursue other diagnostic testing, initiate infection prevention and control measures, or distinguish from other respiratory viruses with similar symptoms). Testing for avian influenza or other novel strains should be performed at the direction of public health authorities.[20] **Clinicians should consider asking about exposures to sick or dead animals, particularly wild birds, poultry, or dairy cows, to inform the need for testing for avian influenza**.
2. When influenza is circulating in the community, hospitalized patients with signs and symptoms of influenza should be tested with a nucleic acid amplification test with high sensitivity and specificity (eg, reverse transcriptase-polymerase chain reaction [RT-PCR]).
3. At-home tests are available for children as young as 2 years of age (https://www.fda.gov/medical-devices/in-vitro-diagnostics/influenza-diagnostic-tests), but data on the use of these tests in pediatric patients is limited. The use of at-home test results to inform treatment decisions should be informed by the sensitivity and specificity of the test, the prevalence of influenza in the community, the presence and duration of compatible signs and symptoms, and individual risk factors and comorbidities.

INFLUENZA TREATMENT

Antiviral medications (Table 6) are an important adjunct in the control of influenza but are not a substitute for influenza vaccination. **The role of antivirals for the prevention and treatment of influenza in children depends on illness severity and risk considerations (Table 7).** Options for antiviral medications along with potential benefits and harms of antiviral treatment are summarized in the technical report (https://doi.org/10.1542/peds.2025-073622); see section "Rationale for Influenza Treatment in Children").[10] Although best results are observed when the child is treated within 48 hours of symptom onset, antiviral therapy should still be considered beyond 48 hours in certain cases.

1. Physicians and other clinicians who care for children should promptly identify patients suspected of having influenza for timely initiation of antiviral treatment, when indicated, to reduce morbidity and mortality. Treatment of children who are not at high risk for influenza complications in the outpatient setting should be based on shared decision making between the clinician and child's parent/guardian.
2. Provision of antiviral therapy does not require a positive test for influenza when influenza is circulating in the community. Initiation of antiviral therapy should be based on signs and symptoms consistent with influenza infection, patient risk factors, and epidemiologic factors (eg, influenza circulating in the community, known exposure, etc).
3. The AAP considers oseltamivir the preferred antiviral medication for patients with influenza A and B because of the cumulative experience of this drug in children, relative cost, and ease of administration. Clinicians should refer to the CDC (https://www.cdc.gov/flu/hcp/antivirals/summary-clinicians.html#cdc_generic_section_9-influenza-antiviral-resistance-considerations) for the most up-to-date information on antiviral

susceptibilities.

Recommendations for Treatment and Chemoprophylaxis of Specific Populations

4. Antiviral treatment should be offered as early as possible to the following individuals, regardless of influenza vaccination status and duration of symptoms[1]:
    - Any child hospitalized with suspected or confirmed influenza disease.
    - Any child with severe, complicated, or progressive influenza disease, regardless of health care setting (ie, inpatient or outpatient).
    - Any child with suspected or confirmed influenza disease of any severity if they are younger than 5 years or they belong to other high-risk groups for influenza complications, regardless of health care setting (ie, inpatient or outpatient) (Table 2).
5. Treatment is an option for the following individuals in the outpatient setting:
    - Any child with suspected or confirmed influenza disease who is not at high risk for influenza complications, if treatment can be initiated within 48 hours of illness onset.
    - Any child with suspected or confirmed influenza disease whose siblings or household contacts are either younger than 6 months or at high risk for influenza complications (Table 2).

INFLUENZA CHEMOPROPHYLAXIS RECOMMENDATIONS

1. Chemoprophylaxis is not a substitute for vaccination, and among some high-risk people, both vaccination with IIV or RIV and antiviral chemoprophylaxis is an option.
2. The AAP considers oseltamivir to be the preferred postexposure chemoprophylaxis for influenza A and/or B.

[1] Recommendations for the use of oseltamivir differ from FDA-approved labeling.

3. Postexposure chemoprophylaxis should only be used when antiviral agents can be initiated within 48 hours of exposure.
4. Postexposure chemoprophylaxis should not be used for routine or widespread prophylaxis outside of institutional outbreaks. Postexposure chemoprophylaxis is recommended for unvaccinated staff and unvaccinated children in a closed institutional setting with children at high risk for influenza complications (eg, extended-care facilities) to control influenza outbreaks.
5. Postexposure chemoprophylaxis can be considered after known or suspected influenza exposure for children in the following situations:
    - Any child at high risk for influenza complications if:
        - They cannot receive the influenza vaccine.
        - They have not yet been administered influenza vaccination this season.
        - They received influenza vaccine in the past 2 weeks or may not have mounted a sufficient response because of immunosuppression (ie, suboptimal immunity).
        - Influenza virus strains circulating in the community are not well-matched with those of the seasonal influenza vaccine.
    - Any unvaccinated child with a family member or close contact who is at high risk for influenza complications and is unable to be otherwise effectively protected from influenza.
6. Postexposure chemoprophylaxis can be considered for known or suspected influenza exposed family members or close contacts of children at high risk for influenza complication in the following situations:

- Unvaccinated family members and close contacts who are likely to have ongoing, close exposure to unvaccinated children at high risk for influenza complications or unvaccinated children who are younger than 24 months.
- Influenza virus strains circulating in the community are not well matched with those of the seasonal influenza vaccine, per the CDC.

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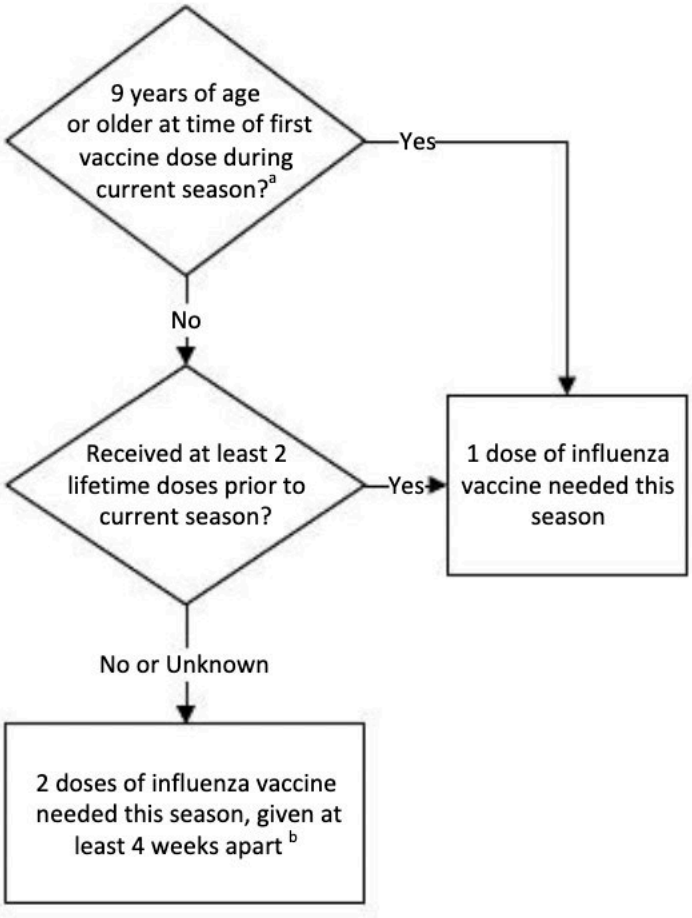
Figure 1. Number of 2025–2026 seasonal influenza vaccine doses recommended for children based on age and prior vaccination history



[a] Must be at least 6 months of age to be eligible for influenza vaccine.
[b] Second dose still required for children who turn 9 between first and second dose.

Table 1. Trivalent Influenza Vaccine Composition for the 2025–2026 Season

	Specific Strain
Influenza A	
H1N1	A/Victoria/4897/2022 (H1N1)pdm09-like virus (egg-based)[a]
	A/Wisconsin/67/2022 (H1N1)pdm09-like virus (cell culture-based or recombinant)[a]
H3N2	A/Croatia/10136RV/2023 (H3N2)-like virus (egg-based)[b] A/District of Columbia/27/2023 (H3N2)-like virus (cell culture-based or recombinant)[b]
Influenza B	
Victoria	B/Austria/1359417/2021-like virus (B/Victoria lineage)[a]

Quadrivalent vaccines are still available outside the United States.

[a] Unchanged this season.

[b] New this season.

Table 2. High-Risk Groups for Influenza Complications

Category	Description
Demographic Characteristics	Children <5 years, especially those <2 years[a]
	Children born preterm or near term[b]
	Residents of a chronic care facility or nursing home
Underlying Condition or Treatment with Common Examples[c]	
Chronic pulmonary disease	Asthma[21]
	Cystic fibrosis
	Bronchopulmonary dysplasia[21]
	Compromised respiratory function (eg, requiring mechanical ventilation, tracheostomy)
Cardiovascular disease	Hemodynamically significant conditions (excluding hypertension alone)
Kidney disease	Chronic kidney disease, including end-stage kidney disease
	Dialysis
Hepatic disease	Chronic liver disease
	Cirrhosis[22,23]
Hematologic disease	Sickle cell disease
	Other hemoglobinopathies
Metabolic disorders	Diabetes mellitus
Neurologic and neurodevelopmental conditions	Cerebral palsy
	Epilepsy
	Stroke
	Intellectual developmental disorder
	Moderate to severe developmental delay
	Neuromuscular disorders, including muscular dystrophy
	Spinal cord injury
Extreme obesity	BMI ≥40 for adults; BMI ≥the 95th percentile in children[d]

Immunosuppression	Receipt of immunocompromising medications
	Receipt of hematopoietic cell transplant or solid organ transplant
	Congenital or acquired immune deficiency, including HIV
	Asplenia
Receiving treatment with aspirin or salicylate-containing therapies[e]	
Pregnancy and up to 2 weeks postpartum	

[a] Regardless of the presence of underlying medical conditions.

[b] Higher risk of influenza hospitalization in the first 5 years of life.
[c] List of examples is not exhaustive.
[d] BMI associated with increased risk not well-defined in children but could consider BMI at or above the 95th percentile for children and adolescents of the same age and sex.[24,25]
[e] Applies to children and adolescents <19 years who may be at increased risk of Reye syndrome.

Source: Adapted from Grohskopf LA, et al. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices—United States, 2025-2026 influenza season. *MMWR Recomm Rep*. 2025; in press.[1]

Table 3. Strategies for Increasing Childhood Influenza Vaccination

Clinician/Care Team
• Offer strong, presumptive influenza vaccine recommendation • Bundle recommendation for influenza vaccine with recommendations for other needed vaccines • Use consistent messaging across care team members • Identify influenza vaccine champion(s)
Practice/Health System
• Review influenza vaccination status at all visits • Bundle influenza vaccine with other needed vaccines • Vaccinate at all visit types (eg, well child, acute care visits) • Vaccinate in all health care settings (eg, hospital, emergency department, subspecialty practice) • Increase access to influenza vaccine (eg, expanded hours, vaccine-only clinic) • Provide evidence-based information to patients and families (eg, office-based educational handout) • Offer scripting for staff and messaging for patients and families to address common questions, including frequent misconceptions and relevant contraindications and precautions, including allergies • Consider an early or expedited allergy referral for patients with a potential flu vaccine allergy to ensure timely vaccination when appropriate • Send influenza vaccine reminder/recall messages • Use electronic health record (EHR)-based tools to identify and classify high-risk patients for targeted outreach • Utilize standing orders for influenza vaccine • Implement influenza vaccine prompts/clinical decision support • Perform audits and share feedback reports
Community/Public Health
• Integrate electronic health record with regional or state immunization information system (IIS) and automate reconciliation of electronically received influenza vaccine administration data • Partner with stakeholders to support vaccine initiatives within the community, including school-based programs and pharmacies • Engage with communities affected by health disparities to develop tailored strategies that promote trust, encourage dialogue, and increase access to preventive services

Table 4. Recommended Seasonal Influenza Vaccines for Children and Adolescents: United States, 2025-2026 Influenza Season

Vaccine	Trade Name (Manufacturer)	Age Group	Presentation and Hemagglutinin Antigen Content (IIVs and RIV3) or Virus Count (LAIV3) per Dose for Each Antigen	Recommended Dose	Thimerosal Mercury Content[a] (mcg Hg/0.5-mL dose)
Trivalent Standard Dose – Egg-Based Vaccines					
IIV3	Afluria *(Seqirus)*	≥36 mo	0.5-mL prefilled syringe (15 mcg/0.5 mL)	0.5 mL	0
					0
IIV3	Fluarix (*GlaxoSmithKline)*	≥6 mo	0.5-mL prefilled syringe (15 mcg/0.5 mL)	0.5 mL	0
IIV3	FluLaval (*GlaxoSmithKline)*	≥6 mo	0.5-mL prefilled syringe (15 mcg/0.5 mL)	0.5 mL	0

IIV3	Fluzone (*Sanofi Pasteur)*	≥6 mo	0.5-mL prefilled syringe (15 mcg/0.5 mL)	0.5 mL	0
		6 through 35 mo	5-mL multidose vial[b,c] (15 mcg/0.5 mL)	0.25 **or** 0.5 mL	25
		≥36 mo	5-mL multidose vial[b,c] (15 mcg/0.5 mL)	0.5 mL	25
Trivalent Standard Dose – Cell Culture-Based Vaccines					
ccIIV3	Flucelvax (*Seqirus)*	≥6 mo	0.5-mL prefilled syringe (15 mcg/0.5 mL)	0.5 mL	0
Recombinant Vaccine					
RIV3	Flublok (*Sanofi Pasteur)*	≥9 y	0.5-mL prefilled syringe (45 mcg/0.5 mL)	0.5 mL	0
Live Attenuated Vaccine-Egg Based Vaccine					

LAIV3	FluMist (*AstraZeneca)*	2–49 y	0.2-mL prefilled intranasal sprayer (Virus dose: $10^{6.5–7.5}$ FFU/0.2 mL)	0.2 mL (0.1 mL per nostril)	0

aIIV3, trivalent adjuvanted inactivated (non-live) influenza vaccine; ccIIV3, trivalent cell culture-based inactivated (non-live) influenza vaccine; FFU, fluorescent focus unit; LAIV3, trivalent live attenuated influenza vaccine; RIV3, trivalent recombinant influenza vaccine.

[a] See section on Thimerosal-Containing Vaccines.

[b] For vaccines that include a multidose vial presentation, the maximum number of doses withdrawn should not exceed the number specified in the package insert (eg, 10 doses for Fluzone). Residual product should be discarded.

[c] A total of 0.25 mL drawn from a multidose vial is an acceptable dose for children 6 to 35 months of age.

Data sources: Grohskopf LA, et al. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2025-2026 influenza season. *MMWR Recomm Rep.* 2025; in press

Implementation guidance on supply, pricing, payment, billing, coding, and liability issues can be found at aap.org/influenza.

Table 5. Influenza Vaccine Contraindications and Precautions

Vaccine	Contraindication	Precaution	Clinician Discretion	Not Contraindication or Precaution
Egg-based inactivated (non-live) influenza vaccine (IIV)[a]	• Anaphylaxis or severe allergic reaction to any previous influenza vaccination or to any vaccine component	• Moderate to severe acute illness with or without fever, including COVID-19 • History of Guillain-Barré syndrome (GBS) within 6 weeks of prior influenza vaccination		• Mild illness, with or without fever • Egg allergy
Cell culture-based inactivated (non-live) influenza vaccine (ccIIV)[a]	• Anaphylaxis or severe allergic reaction to previous dose of ccIIV or any component of ccIIV3	• Moderate to severe acute illness with or without fever, including COVID-19 • History of GBS within 6 weeks of prior influenza vaccination • Anaphylaxis or severe allergic reaction to any other influenza vaccine (ie, any egg-based IIV, LAIV, or RIV)		• Mild illness, with or without fever • Egg allergy
Live attenuated influenza vaccine (LAIV)[a]	• Anaphylaxis or severe allergic reaction to any previous influenza vaccination or to any vaccine component, including gelatin • Age 2–4 y with diagnosis of asthma or history of wheezing in last 12 months • Cochlear implants • Active cerebrospinal fluid leaks • Immunosuppression due to any cause, including: o Primary or acquired immunodeficiency, including HIV o Immunosuppressive or immunomodulatory therapy o Anatomic or functional asplenia • Close contacts or caregivers of severely immunocompromised individuals • Taking aspirin or salicylate-containing medications • Receiving or recently received influenza antiviral medication[b]	• Moderate to severe acute illness with or without fever, including COVID-19 • History of GBS within 6 weeks of prior influenza vaccination • Diagnosis of asthma and age ≥5 y • Certain underlying chronic conditions that might predispose to complications after influenza (eg, chronic pulmonary disease, cardiovascular disease, renal, hepatic, neurologic, hematologic, or metabolic disorders)	• Defer to resolution of symptoms or use IIV if a patient has nasal congestion that could impede vaccine delivery	• Mild illness, with or without fever • Egg allergy

	• Currently pregnant[c]		
Recombinant HA vaccine (RIV3)[a]	• Anaphylaxis or severe allergic reaction to previous dose of RIV3 or any component of RIV3	• Moderate to severe illness, with or without fever, including COVID-19 • History of GBS within 6 weeks of prior influenza vaccination • Anaphylaxis or severe allergic reaction to any other influenza vaccine (ie, any egg-based IIV, LAIV, or ccIIV)	• Mild illness, with or without fever • Egg allergy

[a] Egg-based IIVs for children include Afluria, Fluarix, FluLaval, and Fluzone. Cell-culture based IIV includes Flucelvax. RIV includes Flublok. LAIV includes FluMist.

[b] Within 48 hours (oseltamivir, zanamivir), 5 days (peramivir), or 17 days (baloxavir) of stopping influenza antiviral therapy.

[c] Pregnancy is not a labeled contraindication for LAIV. The prescribing information for FluMist Quadrivalent, 2023-2024 formula indicated that FluMist is not absorbed systemically following intranasal administration and use during pregnancy is not expected to result in fetal exposure to the drug.

Table 6. Recommended Dosage and Schedule of Influenza Antiviral Medications for Treatment and Chemoprophylaxis in Children for the 2025–2026 Influenza Season: United States

Medication	Treatment		Chemoprophylaxis		Common Adverse Events[a]
	Dosage	**Duration**	**Dosage**	**Duration After Last Exposure**	
Oseltamivir[b,c]					
Adults	75 mg, twice daily, orally or by feeding tube	5 days	75 mg, once daily	7 days	
Children ≥12 mo					
≤15 kg	30 mg, twice daily, orally or by feeding tube	5 days	30 mg, once daily	7 days	Nausea
>15 kg–23 kg	45 mg, twice daily, orally or by feeding tube	5 days	45 mg, once daily	7 days	Vomiting
>23 kg–40 kg	60 mg, twice daily, orally or by feeding tube	5 days	60 mg, once daily	7 days	Headache
>40 kg	75 mg, twice daily, orally or by feeding tube	5 days	75 mg, once daily	7 days	Skin reactions Diarrhea (children <1 year of age)

Infants 9–11 mo[d]	3.5 mg/kg per dose, twice daily, orally or by feeding tube	5 days	3.5 mg/kg per dose, once daily	7 days	
Term infants 0–8 mo[d]	3 mg/kg per dose, twice daily, orally or by feeding tube	5 days	3–8 mo: 3 mg/kg per dose, once daily	7 days	
Preterm infants[e]					
<38 weeks' PMA	1 mg/kg per dose, twice daily, orally or by feeding tube	5 days	See footnote		
38–40 weeks' PMA	1.5 mg/kg per dose, twice daily, orally or by feeding tube	5 days			
>40 weeks' PMA	3 mg/kg per dose, twice daily, orally or by feeding tube	5 days			
Zanamivir[c,f]					
Adults	10 mg (two 5-mg inhalations), twice daily	5 days	10 mg (two 5-mg inhalations), once daily	7 days[c]	Bronchospasm Skin reactions
Children	≥7 y: 10 mg (two 5-mg inhalations), twice daily	5 days	≥5 y: 10 mg (two 5-mg inhalations), once daily	7 days[b]	
Peramivir[g]					
Adults	One 600-mg dose via intravenous infusion, given over 15–30 min	N/A	Not recommended		

Children					Diarrhea
6 months–12 y	One 12-mg/kg dose (600 mg maximum) via intravenous infusion over 15–30 min	N/A	Not recommended		Skin reactions
13–17 y	One 600-mg dose, via intravenous infusion over 15–30 min	N/A	Not recommended		
Baloxavir[h]					
Individuals ≥5 y					
<20 kg	2 mg/kg as single dose orally or by feeding tube,	N/A	2 mg/kg as single dose, orally	N/A	Adverse events reported in clinical trials, including nausea, vomiting, and diarrhea, similar to placebo
20 kg–<80 kg	One 40-mg dose, orally or by feeding tube	N/A	One 40-mg dose, orally	N/A	
≥80 kg	One 80-mg dose, orally or by feeding tube	N/A	One 80-mg dose, orally	N/A	

[a] Although only common adverse events are listed in this table, hypersensitivity reactions, including anaphylaxis, have been reported postmarketing with oseltamivir and baloxavir. Hypersensitivity reactions have also been reported with peramivir and zanamivir.

[b] Oseltamivir is administered orally or by feeding tube without regard to meals, although administration with meals may improve gastrointestinal tolerability. Oseltamivir is available as a generic drug or as Tamiflu in 30-mg, 45-mg, and 75-mg capsules and as a powder for oral suspension that is reconstituted to provide a final concentration of 6 mg/mL. For the 6-mg/mL suspension, a 30-mg dose is given with 5 mL of oral suspension, a 45-mg dose is given with 7.5 mL oral suspension, a 60-mg dose is given with 10 mL oral suspension, and a 75-mg dose is given with 12.5 mL oral suspension. If the commercially manufactured oral suspension is not available, a suspension can be compounded by retail pharmacies (final concentration also 6 mg/mL), based on instructions contained in the package label. For infants younger than 1 year, an appropriate measuring device such as a 3-mL or 5-mL oral syringe should be used to measure the dose instead of the syringe supplied.

In patients with renal insufficiency, the dose should be adjusted on the basis of creatinine clearance. Renal dosing of oseltamivir is not available in the package insert for pediatric patients. However, the package insert instructions may useful for children who qualify for adult doses based on weight >40 kg. For treatment of patients with creatinine clearance 10–30 mL/min: 75 mg, once daily, for 5 days. For chemoprophylaxis of patients with creatinine

clearance 10–30 mL/min: 30 mg, once daily, for 10 days after exposure or 75 mg, once every other day, for 10 days after exposure (5 doses). See Infectious Diseases Society of America (IDSA) Guidelines.[26]

[c] The Centers for Disease Control and Prevention (CDC) recommends routine chemoprophylaxis with oseltamivir or zanamivir for 7 days after last known exposure; minimum of 14 days and continuing for 7 days after last known exposure if part of institutional outbreak (https://www.cdc.gov/flu/hcp/antivirals/summary-clinicians.html). This differs from the package insert for zanamivir, which recommends prophylaxis for 10 days in community settings and 28 days in community outbreaks (https://www.accessdata.fda.gov/drugsatfda_docs/label/2010/021036s025lbl.pdf).

[d] Approved by the US Food and Drug Administration (FDA) for treatment of children as young as 2 weeks of age. Given preliminary pharmacokinetic data and limited safety data, oseltamivir can be used to treat influenza in both term and preterm infants from birth because benefits of therapy are likely to outweigh possible risks of treatment. Oseltamivir is not FDA-approved for postexposure prophylaxis (PEP) in children younger than 1 year. Oseltamivir is not recommended by the American Academy of Pediatrics (AAP) or CDC for chemoprophylaxis of infants <3 months because of limited safety and efficacy data in this age group. Of note, the dose recommended by the AAP for treatment of infants 9 to 11 months of age is higher than the FDA approved dose of 3.0 mg/kg, twice daily and is based on data that indicated that the higher dose was needed to achieve the protocol-defined targeted exposure for infants in this age group as defined in the National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group 114 study.[27] The CDC recommends a dose of 3.0 mg/kg, twice daily, for all infants <12 months; the IDSA guidelines[26] include both AAP and CDC recommendations.

[e] Oseltamivir dosing for preterm infants. The weight-based dosing recommendation for preterm infants is lower than for term infants.[28-30] Preterm infants may have lower clearance of oseltamivir because of immature renal function, and doses recommended for full-term infants may lead to very high drug concentrations in this age group. Limited data from the National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group provide the basis for dosing preterm infants using their postmenstrual age (PMA) (gestational age + chronologic age). For extremely preterm infants (<28 weeks), please consult a pediatric infectious disease physician. PEP is not generally recommended for preterm infants because of limited data on use in these infants unless PEP is determined to be essential for outbreak control based on clinician judgment. Optimal dosing has not been defined in this circumstance.

[f] Zanamivir is administered by inhalation using a proprietary “Diskhaler” device distributed together with the medication. Zanamivir is a dry powder, not an aerosol, and should not be administered using nebulizers, ventilators, or other devices typically used for administering medications in aerosolized solutions. Zanamivir is not recommended for people with chronic respiratory diseases, such as asthma or chronic obstructive pulmonary disease, which increase the risk of bronchospasm.

[g] Peramivir requires dose adjustment in patients with renal insufficiency. For treatment of pediatric patients 6 months to 12 years of age: 2 mg/kg if creatinine clearance is 10–29 mL/min; 4 mg/kg if creatinine clearance is 30 to 49 mL/min. For treatment of adolescents 13 years and older, 100 mg if creatinine is clearance 10–29 mL/min; 200 mg if creatinine clearance is 30 to 49 mL/min (https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/206426s004lbl.pdf).

[h] Oral baloxavir marboxil is approved by the FDA for treatment of acute uncomplicated influenza within 2 days of illness onset. It should not be administered with dairy products, calcium-fortified beverages, polyvalent cation-containing laxatives, antacids, or oral supplements (eg, calcium, iron, magnesium, selenium, or zinc). Baloxavir marboxil is not recommended as monotherapy for treatment of influenza in individuals who are severely immunocompromised. It is not recommended for persons who are pregnant or breastfeeding.

Sources: IDSA[26] and https://www.cdc.gov/flu/hcp/antivirals/summary-clinicians.html

Table 7. Summary of Antiviral Treatment and Chemoprophylaxis Recommendations

Applicable Subpopulation	Who Would Receive Antiviral Medications	Time Since Symptoms or Exposure	Medication Plan
Hospitalized children	Child with symptoms and known or suspected infection[a]	No time limit on starting although treatment should ideally be started as soon as possible after symptom onset	Recommend treatment
Children with severe illness	Child with symptoms and known or suspected infection[a]	No time limit on starting	Recommend treatment
Children with complicated illness	Child with symptoms and known or suspected infection[a]	No time limit on starting	Recommend treatment
Children with progressive illness	Child with symptoms and known or suspected infection[a]	No time limit on starting	Recommend treatment
Children at higher risk for complications (<5 years of age or with underlying condition [Table 2])	Child with symptoms and known or suspected infection[a]	No time limit on starting	Recommend treatment
Children with household contacts at high risk	Child with symptoms and known or suspected infection[a]	No time limit on starting	Consider treatment
Children with household contacts under age 6 months	Child with symptoms and known or suspected infection[a]	No time limit on starting	Consider treatment
Other children with flu-like symptoms	Child with symptoms and known or suspected infection[a]	Within 48 hours of symptoms starting	Consider treatment
Unvaccinated or incompletely vaccinated children at high risk of complications	Asymptomatic child with known or suspected exposure	Within 48 hours of exposure	Consider chemoprophylaxis

Vaccinated children at high risk of complications who may have not mounted an immune response	Asymptomatic child with known or suspected exposure	Within 48 hours of exposure	Consider chemoprophylaxis
Vaccinated children at high risk of complications when vaccination strain does not match or is ineffective against circulating strains	Asymptomatic child with known or suspected exposure	Within 48 hours of exposure	Consider chemoprophylaxis
Unvaccinated children with a family member or close contact who is at high risk for influenza complications and is unable to be otherwise effectively protected from influenza	Asymptomatic child with known or suspected exposure	Within 48 hours of exposure	Consider chemoprophylaxis
Unvaccinated family members and close contacts of unvaccinated children at high risk of complications or unvaccinated children under 24 months old	Asymptomatic close contact with known or suspected exposure	Within 48 hours of exposure	Consider chemoprophylaxis
Family members and close contacts of children at high risk of complications when vaccination strain does not match or is ineffective against circulating strains	Asymptomatic close contact with known or suspected exposure	Within 48 hours of exposure	Consider chemoprophylaxis

[a]Once testing results are available, treatment could be tailored accordingly.

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DISCLAIMER

Embedded links to cdc.gov and fda.gov sites were active and reviewed by AAP subject matter experts as of July 5, 2025.

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