THE OFFICIAL NEWSMAGAZINE OF THE AMERICAN ACADEMY OF PEDIATRICS
AAP News

News Articles, Infectious Diseases, Influenza, Vaccine/Immunization, AAP Policy

New flu guidance reiterates importance of vaccine for everyone 6 months and older

by Henry H. Bernstein D.O., M.H.C.M., FAAP; Flor M. Munoz M.D., FAAP

With the 2017-'18 influenza season imminent, the Academy has updated its recommendations for the prevention and treatment of influenza in children. The policy statement *Recommendations for Prevention and Control of Influenza in Children, 2017-2018* is available at https://doi.org/10.1542/peds.2017-2550 and will be published in the October issue of *Pediatrics.* Key points are highlighted below.

The 2016-'17 influenza season was moderate overall.

Influenza A (H3N2) viruses predominated, with a majority of circulating strains matching vaccine strains well. Severity indicators were within the range of what has been observed during previous H3N2-predominant seasons, which have been associated with more severe illness and mortality, especially in older individuals and younger children, compared with seasons during which H1N1 or B viruses predominated.

Since the start of the influenza season is unpredictable, immunization of all children 6 months and older should begin as soon as the seasonal influenza vaccine is available.

The influenza season may start early in the fall/winter, have more than one disease peak and extend into late spring. Complete immunization should occur by the end of October, if possible. There is no evidence that administering the influenza vaccine early in the season increases the risk of infection for children.

Both trivalent and quadrivalent *inactivated* influenza vaccines (IIV) are available in the U.S. for the 2017-'18 season.

Although manufacturers anticipate an adequate supply of quadrivalent vaccine, pediatricians should administer whichever formulation is available in their communities. Neither *inactivated* vaccine formulation is preferred over the other. The vaccine composition has changed.

- The influenza A (H1N1) virus in both formulations differs from that contained in the 2016-'17 seasonal vaccines.
- The influenza A (H3N2) vaccine strain and influenza B vaccine strains included in the trivalent and quadrivalent vaccines are the same as those contained in the 2016-'17 seasonal vaccines.

Quadrivalent live attenuated influenza vaccine (LAIV4) is *not* recommended for use in any setting in the U.S. during the 2017-'18 influenza season.

This interim recommendation made in 2016 resulted from review of observational data from the U.S. Influenza Vaccine Effectiveness Network indicating that LAIV4 performed poorly against influenza A (H1N1) pdm09 viruses in recent influenza seasons. Vaccine effectiveness can vary depending on match/mismatch of circulating virus with vaccine strains, vaccine product, and patient age and immune state. No data have been published to warrant rescinding this recommendation.

Immunization is indicated for all children and adolescents 6 months of age and older.

Special outreach efforts should be made to vaccinate people in the following groups:

- children with conditions that increase the risk of complications from influenza (e.g., asthma and other

chronic lung diseases, diabetes mellitus, sickle cell disease, hemodynamically significant cardiac disease, immunosuppression, renal and hepatic disorders, or neurologic and neurodevelopmental disorders);

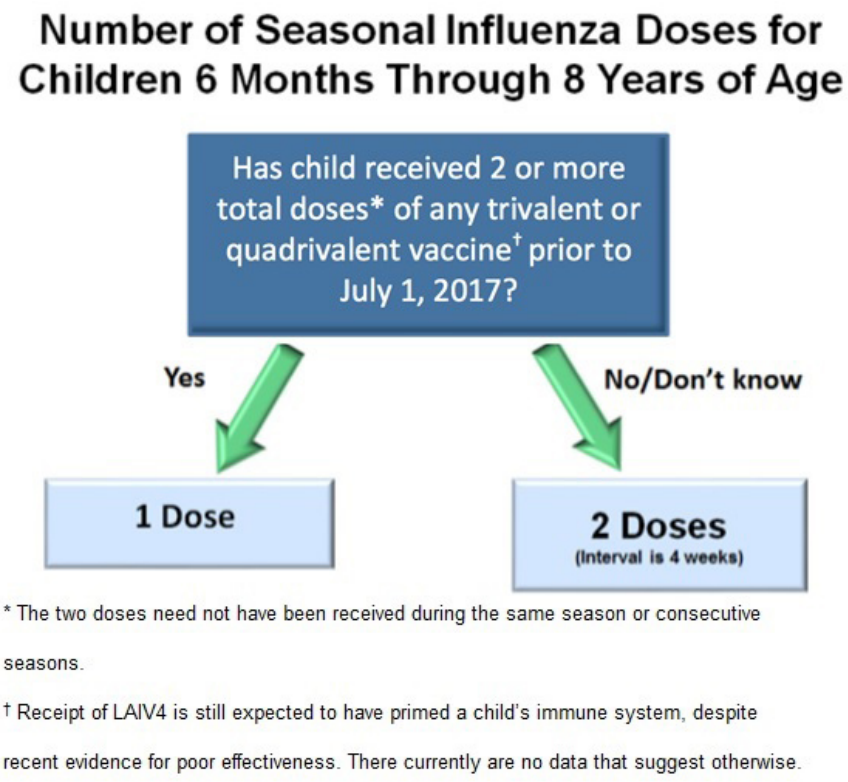
- all household contacts and out-of-home care providers of children with high-risk conditions or children younger than 5 years, especially infants younger than 6 months;
- children and adolescents (6 months through 18 years of age) receiving an aspirin- or salicylate-containing medication, which places them at risk for Reye syndrome following influenza virus infection;
- American Indian/Alaska Native children;
- all health care personnel;
- all child care providers and staff; and
- all women who are pregnant, are considering pregnancy, are in the postpartum period or are breastfeeding during the influenza season.

The number of seasonal influenza vaccine doses to be administered in the 2017-'18 influenza season depends on the child's age at the time of the first administered dose and vaccination history.

Influenza vaccines are not licensed for administration to infants younger than 6 months. Children 6 months through 8 years may need two doses given four weeks apart (see figure). A child who receives only one of the recommended two doses as a quadrivalent formulation is likely to have less protection against the additional B virus. Children 9 years and older need only one dose. Vaccination should not be delayed to obtain a specific vaccine product. Any available, age-appropriate trivalent or quadrivalent *inactivated* vaccine can be used.

THE OFFICIAL NEWSMAGAZINE OF THE AMERICAN ACADEMY OF PEDIATRICS
AAP News

News Articles, Infectious Diseases, Influenza, Vaccine/Immunization, AAP Policy



All children with egg allergy of any severity can receive influenza vaccine without any additional precautions beyond those recommended for any vaccine.

Special precautions for egg-allergic recipients of IIV are not warranted, as the rate of anaphylaxis after IIV administration is no greater in egg-allergic than non-egg-allergic recipients or from other universally recommended vaccines. Standard vaccination practice for all vaccines in children should include the ability to respond to rare acute hypersensitivity reactions.

All health care personnel should receive an annual seasonal influenza vaccine.

This is a crucial step in preventing influenza because health care personnel often care for individuals at high risk for influenza-related complications.

Neuraminidase inhibitors continue to be important in influenza control but are not a substitute for influenza vaccination.

Pediatricians should promptly identify children suspected of having influenza infection for timely initiation of antiviral treatment, when indicated, to reduce morbidity and mortality. Clinical decision based on presence of underlying conditions, disease severity, time since symptom onset and local influenza activity is important in determining treatment for pediatric patients who present with influenza-like illness. Best results are seen when treatment is started within 48 hours of symptom onset. Therefore, antiviral treatment should not be delayed while waiting for a confirmatory influenza test result. Influenza diagnostic tests vary by method, availability, processing time, sensitivity and cost, which should be considered in making the best clinical decision for the patient.

THE OFFICIAL NEWSMAGAZINE OF THE AMERICAN ACADEMY OF PEDIATRICS
AAP News
DEDICATED TO THE HEALTH OF ALL CHILDREN

News Articles, Infectious Diseases, Influenza, Vaccine/Immunization, AAP Policy

Regardless of influenza immunization status and whether illness onset has been less than 48 hours, treatment should be **offered** as early as possible to:

- any hospitalized child clinically presumed to have influenza disease or with severe, complicated or progressive illness attributable to influenza, and
- children with influenza infection of any severity who are at high risk of complications.

Treatment should be **considered** for:

- any otherwise healthy child clinically presumed to have influenza disease even if treatment is initiated after 48 hours of illness onset; and
- children clinically presumed to have influenza disease and whose siblings or household contacts are younger than 6 months or have underlying medical conditions that predispose them to complications of influenza.

Dr. Bernstein *is associate editor of* Red Book Online *and an ex-officio member of the AAP Committee on Infectious Diseases (COID).* ***Dr. Munoz*** *is a member of COID. Angie Lee, B.A., and Shannon Cleary, B.A., clinical research assistants at Cohen Children's Medical Center, contributed to this article.*

Related Content

- AAP News story, "How to code for influenza vaccine in the 2017-'18 season"