COVID-19 bivalent boosters for young children: What parents must know

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Bivalent COVID-19 boosters for children 6 months and older couldn't come at a better time, as the “tripledemic” of COVID-19, influenza and respiratory syncytial virus (RSV) rages on in the United States.

Flu season started early this year and COVID-19 cases and hospitalizations spiked after Thanksgiving. Internist Sandra A. Fryhofer, MD, said her phone’s “been ringing off the hook” from sick patients.

“Flu hospitalizations are the highest levels we've seen this time of year in a decade. And at least 14 pediatric deaths from flu have already been recorded,” Dr. Fryhofer said during an episode of “AMA Update” recorded earlier this month. She chairs the AMA Board of Trustees and is the AMA’s liaison to the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP). She’s also a member of ACIP’s COVID-19 Vaccine Workgroup.

The Food and Drug Administration has authorized Pfizer-BioNTech’s and Moderna’s updated bivalent vaccines for emergency use in small children. Within a day, the CDC recommended that parents take advantages of the newly authorized vaccines.

A recent study in the CDC’s Morbidity and Mortality Weekly Report found that updated COVID vaccines help protect against illness and death, Dr. Fryhofer noted.

“This expanded age authorization means more children now have the opportunity to update and broaden their protection against COVID with a bivalent vaccine,” she added.

Booster depends on primary series

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The FDA’s expanded recommendations vary according to the type of vaccine primary series.

Children from 6 months through 4 years old who completed a two-dose Moderna primary series can get the Moderna bivalent booster at least two months after their second primary series dose.

Meanwhile, children 5 or older who completed a two-dose Moderna primary series can get either a Pfizer or a Moderna bivalent boost at least two months after completing the two-dose primary series.

Recommendations for small children who received a Pfizer primary series are a little different, Dr. Fryhofer clarified.

“For these little ones, a primary Pfizer series requires three vaccine doses, not two. And for those aged 6 months through 4 years old getting the Pfizer primary series, the new recommendation for them does not call for a booster per se,” she noted. “Instead, it replaces the third dose of their primary series with the Pfizer bivalent dose.”

An additional bivalent dose is not recommended for this age group who already completed their three monovalent Pfizer doses. That may soon change, said Dr. Fryhofer, who noted that the FDA expects to get the “data needed to support an updated bivalent booster dose for these children” in January. The CDC advises clinicians to administer vaccine product and dose based on the child’s age on the day of vaccination.

The new authorization can be confusing, Dr. Fryhofer acknowledged. “For example, for Moderna, when a child goes from age 5 to age 6, the vaccine dose doubles. The same is true with the transition from age 11 to 12. Yet for Pfizer, from age 11 to 12, the vaccine dose triples.”

The CDC has put together colorful graphics (PDF) to help clarify dosing for these age transitions for children and adolescents.

Find out more by exploring the Department of Health and Human Services’ “We Can Do This” COVID-19 public education campaign to increase confidence in COVID-19 vaccines and reinforce basic prevention measures. Also check out GetMyFluShot.org to find out why nobody has time for the flu.

Science behind recommendations

The FDA’s medical and scientific experts looked at immune-response data comparisons with teens, young adults and older adults to expand Moderna and Pfizer’s authorizations to younger age groups.

Moderna’s safety assessment was based on previous safety data from studies of its investigational Omicron BA.1 bivalent vaccine.
Pfizer’s “was based on data on studies of its investigational bivalent BA.1 booster in older adults and on safety data from clinical trials of primary monovalent vaccination in children six months and older, as well as post-marketing safety data,” explained Dr. Fryhofer.

Unfortunately, most children between 6 months and 5 years old have not received any doses of COVID vaccine.

“We must continue to increase confidence in COVID vaccines” as the virus mutates, Dr. Fryhofer said. Getting vaccinated for flu and COVID-19 and staying up to date on COVID-19 vaccination is a good strategy for staying well during the holidays.

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