Unvaccinated kids at much higher risk of severe MIS-C outcomes

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Amid new COVID-19 research indicating serious health risks for unvaccinated children, Sandra Fryhofer, MD, can’t underscore this point enough: vaccination matters.

The SARS-CoV-2 Omicron variant has fueled the pandemic’s fire, resulting in record-breaking case counts in the U.S., with teenagers seeing some of the highest incidence rates.

COVID-19 cases and hospitalizations are seven and 11 times higher in unvaccinated adolescents respectively, compared with their vaccinated counterparts. Boosting teens is important but promoting the primary vaccination series is just as crucial, according to Dr. Fryhofer. She is the AMA’s liaison to the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices (ACIP) and chair-elect of the AMA Board of Trustees.

Only half of country’s 16.7 million adolescents 12-15 years old are fully vaccinated.

“We've been talking a lot about boosters, but you can't boost until you get your primary vaccine series,” she said.

In a recent episode of the “AMA COVID-19 Update,” Dr. Fryhofer shared new data about preventing multisystem inflammatory syndrome in children (MIS-C), the safety of booster shots, and actions to expand vaccinate eligibility to more children.

**MIS-C: “a nightmare potential complication”**

Compelling findings published in the CDC’s *Morbidity and Mortality Weekly Report* underscore the
health risks associated with unvaccinated children.

“MIS-C is a nightmare potential complication of COVID infection. It's serious and can be deadly,” said Dr. Fryhofer.

A study of 12–18-year-olds demonstrated that a two-dose series of Pfizer-BioNTech vaccine, the only vaccine authorized for children, was 91% effective at preventing MIS-C. Among those children hospitalized with MIS-C, 95% had not been vaccinated. None of the vaccinated children required respiratory or cardiovascular life support, compared with 39% of unvaccinated children with MISC.

Boosters: a way to get through Omicron

ACIP’s message on boosters, meanwhile, was concise and clear: all people 12 or older should get the vaccine booster.

“With Omicron on the scene, an initial primary vaccine series alone is not enough to protect you. Everyone aged 12 and older should get a booster. No if, ands or buts,” said Dr. Fryhofer.

The CDC updated its recommendation for teens following ACIP’s vote to expand Pfizer-BioNTech boosters to kids 12–17 at least five months after their primary series. The 12 and up recommendation opens the booster to about 5 million more children.

Studies and data from multiple laboratories show that a Pfizer vaccine booster strengthens antibody response against the Omicron variant, said Dr. Fryhofer.

In other actions, the CDC expanded eligibility for a third vaccine dose to children 5–11 with immunocompromising conditions, in addition to those 12 or older.

Addressing safety concerns

Myocarditis incidence among vaccinated teens has been a prevailing concern, although recent data from Israel suggest the risk is low, said Dr. Fryhofer.

The data, which reflects five months of booster-safety data among 40,000 doses in 12–15-year-olds, yielded just two cases of myocarditis.

“We also know that myocarditis rates among 12-to-15-year-olds who received a primary series are lower than rates among 16- and 17-year-olds. In older age groups, rates of myocarditis after a third
dose are lower than after a second dose,” she said.

ACIP’s Vaccine Safety Technical Work Group reviewed the most recent safety data on the primary vaccine series in 12–15-year-olds and booster doses in 16–24-year-olds and found no new safety signals.

Myocarditis risk concern is not just for vaccines, she added. “COVID disease itself can also cause myocarditis.”

The ongoing pandemic has also exacerbated mental health problems in children and young people. It’s affected school and college life. “Booster doses may help decrease transmission and could help us get through Omicron and help kids and keep kids in school and keep our country going,” Dr. Fryhofer said.

Get the latest news on the COVID-19 pandemic, vaccines and variants, and more reliable information directly from experts and physician leaders with the “AMA COVID-19 Update.”

You can catch every episode by subscribing to the AMA’s YouTube channel or the audio-only podcast version.