

# What doctors wish parents knew about kids' COVID-19 vaccine safety

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A Kaiser Family Foundation poll found that one-third of parents say they planned to get their children vaccinated right away. Yet other parents are taking a wait-and-see approach to COVID-19 vaccination for kids. But with the Delta-Omicron variant tag team, widespread vaccination is an essential tool for preventing COVID-19 deaths, hospitalizations and illnesses.

To help parents move from that “wait-and-see” mentality and calm their fears, two physicians shared what to know about COVID-19 vaccine safety for children.

The Pfizer-BioNTech COVID-19 vaccine received emergency use authorization for children and teens 5–15 years old. For those 16 or older, the Pfizer COVID-19 vaccine is fully approved. The vaccine for children 5–11 years old is distributed in smaller dosing and with smaller needles to make it easier for physicians and others to administer. It is one-third the adolescent and adult dose and is given in two doses, 21 days apart. Vaccination was nearly 91% effective in preventing COVID-19 among children 5–11 years old.

The AMA’s What Doctors Wish Patients Knew™ series provides physicians with a platform to share what they want patients to understand about today’s health care headlines, especially throughout the COVID-19 pandemic.

In this installment, two AMA members took time to share what parents should know about COVID-19 vaccine safety for kids. They are:

- Joanne Loethen, MD, an internal medicine and pediatrics physician in Kansas City, Missouri. Dr. Loethen is also an alternate delegate for Missouri’s Delegation and a member of the AMA Ambassador Program, which equips individuals with the skills and knowledge to confidently speak to the AMA's initiatives and the value of AMA membership.
- Luis Seija, MD, an internal medicine and pediatrics resident at Icahn School of Medicine at Mount Sinai in New York City. Dr. Seija is also a delegate for the AMA Resident and Fellow

Section and the AMA Minority Affairs Section.

## Children have high incidence now

“We're at this time right now in the pandemic where we're seeing another surge and a lot of it's the 5- to 11-year-olds. They're the ones with the highest incidence,” said Dr. Seija. “Something that people also forget is children in general are vectors for diseases, especially with school being back in session.”

“Children are carriers of SARS-CoV-2. Even if they don't have symptoms, they could carry it and they could infect someone who maybe couldn't get vaccinated,” he said.

“The rates of severe illness in children are far lower than what we have seen in the adult population or those with existing comorbidities, but no risk or extremely low risk is better than even a little risk,” said Dr. Loethen. “If we have something that can prevent kids from getting COVID and the long-term effects of that infection, I would hate for parents to regret not getting this when we could have prevented this from the beginning.”

“From a public health standpoint, by protecting all of us and creating a bubble of prevention, we can prevent COVID and those who are ineligible to get the vaccine, including those that are 5-years-old and younger,” she said.

Discover why COVID-19 is now a childhood illness, according to Paul Offit, MD.

## COVID-19 vaccines are very safe for kids

“We know that they're extremely safe for kids and the side effect profiles are very similar in the 5 and up group as they are 16 and up,” which is similar to what “we saw with adults,” said Dr. Loethen. “So we know they're very safe and protect a lot of children, not only on the individual level, but also on the population level.”

“I completely understand if parents have hesitations about any new medical device, drug, vaccine that their child is potentially eligible to get,” she said. “That is completely natural to be hesitant about those things.”

“What I can say is we have studied thousands of kids and hundreds of thousands have now gotten this vaccine,” Dr. Loethen added. “We know that it's safe and effective. And when you look at the numbers, it certainly supports the vaccine because of its safety and efficacy against COVID 19.”

Discover how we know the COVID-19 vaccine for kids is safe.

## Side effects will be mild

For 5–11-year-olds, the side effects from the COVID-19 vaccine will be like that of those who are 16 or older.

That means “pain in the arm where they got the shot, fatigue, headache, chills, muscle aches and pains,” said Dr. Loethen.

“It is a very specially designed vaccine that helps your body build immunity to COVID, but you're going to feel certain types of symptoms,” said Dr. Seija. “Your child could have a fever, they could have some body aches, or they can just feel overall—just icky.”

The good news is the side effects’ “onset is within 12 hours and usually resolve within 24 hours of getting the vaccine,” Dr. Loethen said. Parents should “always reach out to your family doctor or pediatrician if you have any questions or concerns following the vaccine.”

## Risk for myocarditis is low

“There have been very rare case reports of myocarditis, or inflammation of the heart muscles, as it relates to the COVID-19 vaccine,” said Dr. Seija. “But again, very few, very rare.”

“We did see increasing cases of myocarditis in younger individuals getting the vaccine, specifically in that teenage range,” said Dr. Loethen. “And certainly, that risk is there, but what we see from the numbers is that risk is so very low—lower than your actual risk of myocarditis from COVID 19.”

“Myocarditis is a common thing that people bring up, but the statistics show there have been 54 cases per million doses in kids 12 to 17 who had gotten the vaccine,” she said. “When you put those risks to paper and look at the numbers, the benefits still outweigh the risk.”

“Additionally, all of those cases of myocarditis that we have seen have recovered completely if it was associated with the vaccine,” said Dr. Loethen.

“From the pediatrician perspective, we have an obligation to obtain informed consent.” said Dr. Seija. “We want to tell you about the benefits *and* risks. That’s why we always go through certain questions before we administer any immunization to ensure it’s safe for your child. And with vaccines, the benefits always outweigh the risk.”

## The vaccine prevents hospitalization

“No vaccine that we have to date is 100% effective,” said Dr. Loethen. “And so even with kids getting vaccinated, we will see breakthrough infections in them.

“But we do know that it helps prevent hospitalization and severe COVID,” she added. “So even if it doesn't protect you from the virus itself, if you are a victim to a breakthrough infection your illness will not be as severe had you not gotten the vaccine.”

## It protects against severe illness

“While you can still get COVID—that's always a possibility—what the vaccine does is it reduces the severity of disease and more than likely you will not be hospitalized,” said Dr. Seija.

While “kids have a lower likelihood of getting COVID and severe COVID, they also tolerate the shot very well,” said Dr. Loethen. “Even though kids don't as often get COVID-19 or even severe COVID-19, it's really hard to tell a parent whose child unfortunately got that infection and has aftereffects that kids don't need to be vaccinated.

“I guarantee that every single one of those parents who now have to deal with the aftereffects of a child with COVID-19 would've jumped on the vaccine in a heartbeat,” she added. “I just hate for anyone to have to be that parent, so prevention is the key here.”

There are “still cases of what we call long COVID, where even after recovering from the acute illness or the most immediate illness of COVID, we still have people who have ongoing headaches, fatigue and difficulty breathing that are really debilitating and keeping kids from school, keeping people from work,” Dr. Loethen explained.

## There's ongoing monitoring

“The mRNA vaccines have been in development even since before the pandemic had started,” said Dr. Seija. It is through “that innovation in the way that we do vaccine development and vaccine approval” that allowed for these COVID-19 vaccines to come to fruition.

“And the vaccines have been tested on hundreds of thousands and continue to be monitored,” he added. “In order for it to be approved in this age group, there were actually children that were involved

in the clinical trials.”

“It wouldn't have been authorized in this age group if it wasn't tested on children in clinical trials first,” emphasized Dr. Seija.

## Think about protecting the whole family

Just as getting immunized against influenza can help protect infants under 6 months old who are ineligible for that type of vaccination, receiving the COVID-19 vaccination can help protection to younger family members, said Dr. Loethen.

“We need to create a bubble of immunity for the flu, so everyone in the family should be vaccinated against the flu so that we can protect your child who cannot get the vaccine.

“It's very similar with COVID-19 vaccination. A lot of the kids now eligible to get the vaccine have siblings who are younger than 5 and can't get the vaccine,” she added. “By protecting the older siblings, we can then protect the younger siblings.”

## Vaccines protect against variants

“From what we know so far, COVID-19 vaccination does protect against variants,” said Dr. Loethen. “Now we're talking about the new variant Omicron and the evidence is still coming out about that and how effective the vaccine is against it.

“But we still know that the COVID-19 vaccines are very effective against the original virus and many of its variants,” she added.

Vaccinating children also has a benefit for the population as a whole.

“The virus looks very different than it did at the beginning of the pandemic, but our way out of this remains the same: masking, testing, physical distancing and vaccination. We have to get our children vaccinated,” Dr. Seija said.

The AMA recognizes the critical importance of scientific integrity, transparency and public trust as we fight to contain the global spread of COVID-19 and plan for the authorization, distribution and administration of COVID-19 vaccines. Stay up to date with the AMA on COVID-19 vaccine development.