



VACCINE SAFETY: CHILDREN & ADOLESCENTS



Is the COVID-19 vaccine safe and effective for children 5 and older?

Yes! COVID-19 vaccination is now recommended for children 5 and older. Clinical trials, which more than 4,600 children participated in, showed the vaccine being **91% effective** at preventing COVID-19 in the 5-11 age group. Mild side effects after vaccination were similar to adults: sore arm at injection site, fatigue, headache, chills, muscle pain, fever, and joint pain lasting 1-3 days [1].

Why should children get vaccinated if they are not an at-risk group?

Children are not entirely free from health risks. While cases of COVID-19 in children can be mild compared to cases in adults, there is still risk for serious illness. Between January 2020 and August of 2021, there have been **544 deaths in children due to COVID-19** [2]. In addition, even mild infection leads to further transmission of COVID-19 in the community. The more a virus is able to pass from person to person, the more chances we give it to mutate. This could eventually lead to future variants that are more dangerous for younger age groups [3]. We've already seen this happen with the delta variant [4].

Hospitalizations among ages 0-4 were 10X higher with the delta variant [5].

Why does it take longer to develop a vaccine for children and adolescents?

Children vary so much by age. From physical size to strength of immune system, children and adolescents can be vastly different from one another. This requires us to conduct additional studies to decide proper dosing and formulation. In addition, children are a vulnerable population and require additional safety measures as well as consent from both child and parent/guardian to participate in clinical trials [6,7]. Since children have not been at an increased risk for serious illness for COVID-19, initial vaccination development focused on adults.

- CITATIONS:**
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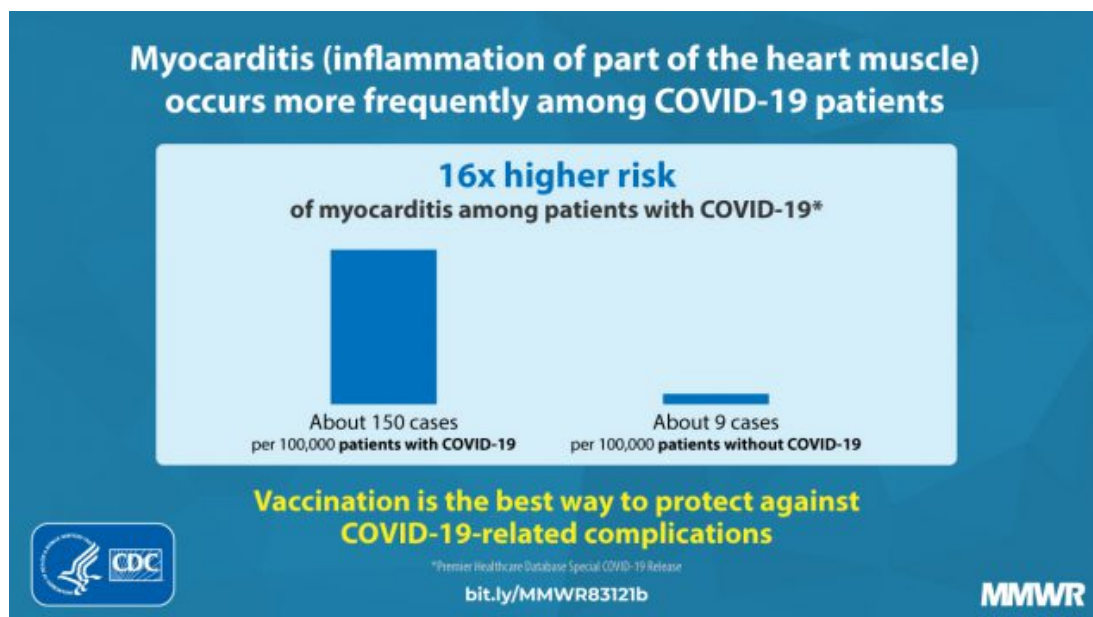
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I've heard of side effects impacting children like myocarditis. Should I be concerned?

No! There have been several reported cases of myocarditis/pericarditis (heart inflammation) in males under 40 after the second dose of Pfizer or Moderna. Not only are these cases **extremely rare**, but they are also generally **mild and resolve quickly** with medicine and rest [8]. Keep in mind, **COVID-19 infection has also lead to myocarditis, blood clotting, other cardiovascular issues at a much greater rate than vaccination** [9,10].

30% of COVID-19 deaths are due to heart, liver, or kidney failure, and 20% of ICU patients with COVID-19 develop blood clots [11,12].

As of January 31, 2022, **more than 539 million doses of the COVID-19 vaccine have been given in the United States. There have been 1,277 verified reports of myocarditis** [13].



CITATIONS:

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12. Katella, Kathy. The Link Between J&J's COVID Vaccine and Blood Clots: What You Need to Know. Yale Medicine. Updated Dec 17, 2021.
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