

COVID-19 Vaccine Risks and Benefits in Young Children

When considering any medical intervention, the risks must be weighed against the benefits.

So, when it comes to vaccination, four things must be considered:

1. **Disease Risk:** How great is the risk of not vaccinating? What are the odds that an unvaccinated person will suffer serious illness or death from the virus?
2. **Disease Recovery Benefit:** What are the benefits of contracting the disease and surviving it? Does natural immunity have any benefits superior to vaccine-induced immunity?
3. **Vaccine Risk:** How great is the risk of the vaccine itself? What are the odds that a vaccinated person will suffer serious illness or death because of how the vaccine impacts their body?
4. **Vaccine Benefit:** How much does the vaccine improve the odds of avoiding severe illness or death?

Disease Risk of COVID-19 in Young Children

The data currently shows that the risk of hospitalization or death from COVID-19 in healthy children is extremely low. In addition, most children have already had SARS-CoV-2 infection and successfully recovered from it, in most cases gaining long-lasting natural immunity:

- As of February 2002, the CDC estimated that [over 75% of U.S. children under age 12](#) have already had SARS-CoV-2 infection. [1]
- As of August 2022, it is estimated that [94% of 1-4-year-olds and 99% of ages 5-14 in England](#) have already had SARS-CoV-2 infection. [2]
- In England and Wales in 2020 and 2021, [no children aged 1-9 died where COVID-19 was the sole diagnosis on the death certificate](#), according to the UK's Office for National Statistics. [3]
- A comprehensive study from March 1, 2020 to March 1, 2021 found [only 6 children in England under 18 years died of COVID-19 with no comorbidities. There were no deaths in the 1-4 year age range.](#) [4]
- Children [clear coronaviruses more easily](#) than adults. [5]
- Children mount [effective, robust, and sustained immune responses](#) to SARS-CoV-2 infection. [6]
- Since the arrival of the Omicron variant, [risks for severe clinical outcomes in children under 5 in the U.S. were significantly lower](#) than those infected by the Delta variant. [7]

Disease Recovery Benefit of COVID-19 in Young Children

There are differences between natural immunity (getting the virus and recovering from it) and vaccine-induced immunity. Current data indicates that COVID-19 natural immunity is robust and lasts longer than vaccine-induced immunity.

- Recent data from Israel shows [excellent long-lasting natural immunity](#) for at least 18 months following infection in children, especially for ages 5-11. [8]

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- This study published in the *New England Journal of Medicine* in June 2022 showed that [natural immunity far outperforms vaccine-induced immunity](#). At 4-6 months, those who had received two doses of the vaccine had nearly 7 times as many cases of COVID-19 than those who were unvaccinated and had recovered from infection. [9]
 - An investigation published in JAMA, showed that immune response to mild or asymptomatic infection in patients younger than 3 years was [5 times better than that of adults](#). [10]

COVID-19 Vaccine Risk in Young Children

Human beings are not identical. Every person has a unique mix of genetics and environmental exposure. Scientists know that there will be some percentage of the population that has a negative reaction to any given vaccine. That's why the United States government established the [National Vaccine Injury Compensation Program](#) and the [Countermeasures Injury Compensation Program](#). The question is: how much do we know about the COVID-19 vaccine risks for children?

- There is an increased risk of myocarditis (heart damage) in both male and female adolescents and young adults. A recent study released June 2022 showed that there was an [8 times increased risk from two doses of the Pfizer vaccine and a 30 times increased risk from two doses of the Moderna vaccine](#). [11]
- Many European nations, including Germany and France have [restricted the Moderna vaccine to adults over 30](#) due to this risk. [12]
- The emerging evidence of [persistent cardiac abnormalities up to 8 months later](#), suggests this damage is not 'mild and short-lived'. [13]
- The Pfizer and Moderna clinical trials used to show safety and efficacy of the vaccine in children 6 months to 5 years had many flaws. You can read critiques of the trial data [here](#), [here](#), and [here](#). [14, 15, 16]
- U.S. Vaccine Adverse Events Reporting System (VAERS) data from Dec. 14, 2020, to October 28, 2022, for 5- to 11-year-olds show: 14,285 [adverse events](#), including 343 [rated as serious](#) and 11 [reported deaths](#). Among the serious events were [24 reports](#) of myocarditis and pericarditis and [51 reports](#) of blood clotting disorders. [17, 18, 19, 20, 21]
- The number of adverse events reported for the COVID-19 vaccines are substantially larger than for any other vaccine in history. They are being reported at a rate [27 times the rate of the flu vaccine](#). [22]
- Because they are so new, it is not possible to know how the COVID-19 vaccines may affect children's health in the long run. No studies have yet been done on toxicity, carcinogenicity, fetal and reproductive risks, or other important aspects of safety.
- The COVID-19 vaccines and the bivalent (Omicron) booster for young children are authorized under an [Emergency Use Authorization \(EUA\)](#). No COVID-19 vaccine is FDA-approved for young children. This means neither the vaccine manufacturer, nor the government, is liable if your child is injured by the vaccine. [23]
- The Moderna and Pfizer Bivalent (Omicron) vaccines were authorized for children ages 6-11 despite the fact that they [were not tested on a single child](#). Up until 2021, this would have been unheard of, since it is well-known that children's immune systems react differently than adults. [24]

COVID-19 Vaccine Benefit in Young Children

Vaccine efficacy is how well the vaccine protects the vaccinated against contracting a disease, compared to an unvaccinated control group. The latest data shows that COVID-19 vaccine efficacy wanes quickly in children, providing little protection after the first 30 days.

- Vaccine efficacy has waned more rapidly in children ages 5-11 than in ages 12-17, possibly related to the lower dose used in the pediatric formulation. One study from New York showed [efficacy against Omicron falling to only 12% by 4-5 weeks and to negative values by 5-6 weeks](#) post second dose. [25]
- In the Pfizer ages 0-4 trial, [the efficacy after two doses fell to negative values](#), necessitating a change to the trial protocol. After a third dose, there was a suggestion of efficacy from 7-30 days but efficacy was not tracked past 30 days, so it is unknown how quickly it wanes. [26]
- COVID-19 vaccines are non-sterilizing, meaning that [vaccinated individuals can contract and spread the disease](#). So vaccinating the child population does not improve the well being of the community as a whole. Denmark recently [halted their child vaccination program](#) for this reason. [27, 28]
- Two recent studies on the efficacy of the updated bivalent boosters shows that [there is no meaningful difference](#) between them and the monovalent booster they replaced. [29]

Risk-Benefit Summary

To summarize the data listed above:

- Most U.S. children have already had COVID-19 and are likely to have long-lasting natural immunity.
- When a healthy child gets the COVID-19 Omicron variant, it is generally a short, mild illness.
- The vaccine protection in children wanes quickly — possibly in as little as 30 days.
- There are an unusual amount of adverse reactions reported from the COVID-19 vaccines and some reactions could result in permanent injury or death.
- The long-term health consequences of the COVID-19 vaccines are unknown.

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