

## **COVID VACCINE for pediatrics FAQs**

A HUGE thank you to Katelyn Jetelina, MPH as an invaluable resource.

### **Q: What brand is suggested for children?**

Both the Pfizer-BioNTech and the Moderna COVID-19 vaccines for children are safe and effective. Parents and caregivers should get their child vaccinated with the COVID-19 vaccine that is available to them. We currently only carry Pfizer-BioNTech vaccines at Blue Fish Pediatrics.

### **Q: Will the lower dose be as effective as the adult dose?**

Immune responses of children 5 to 11 years of age were comparable to those of individuals 16 to 25 years of age. In addition, the vaccine was found to be 90.7% effective in preventing symptomatic COVID infection in children 5 to 11.

### **Q: How does the COVID-19 vaccine dosage work for children and teens?**

The vaccine dosage is not dependent on a child's size or weight. As opposed to medications, vaccine dosages are based on the maturity of the immune system. The dosage should be based on the child's age on the day of vaccination.

### **Q: Should my child wait for the next dose until after their birthday to transition to the next age group product?**

No, the vaccination should not be delayed. Getting a vaccine as soon as possible is the safest recommendation.

### **Q: What if my child turns from 4 to 5 years or 11 to 12 years between their first and second dose?**

If a person moves from a younger age group to an older age group during the primary series or between the primary series and receipt of the booster doses(s), they should receive the vaccine product and dosage for the older age group for all subsequent doses. FDA emergency use authorization(EUA) allows for different dosing for certain age transitions, which are not considered vaccine administration errors.

### **Q: Should/Can I space out the doses more than 3 weeks?**

There is no data to support this at this time; however, there has been some discussion among scientists that this may be helpful. Hopefully, we will continue to learn more as the UK has a longer interval between vaccines so they should eventually provide helpful data. At this time the prudent thing would be to get both doses with a minimum 3-week interval between them. As long as COVID prevalence is low, longer intervals are safe and effective (and possibly better) but there is some increased risk in acquiring natural COVID infection prior to receiving the second dose and achieving full immunity. The lower the prevalence of COVID infection in the community, the lower the urgency in receiving the second dose.

**Q: Should children with underlying health conditions receive the vaccine?**

Children should get the vaccine regardless of underlying health conditions as they are at higher risk of hospitalization and complications.

**Q: Should children with previous COVID infections get the vaccine?**

Children should get the vaccine regardless of previously recovering from COVID disease. Approximately, 40% of children aged 5–11 years have detectable antibodies from natural infection. This is higher than estimates among adults. But natural immunity, on a population-level, is insufficient in protecting kids. This is due to four reasons:

1. Naturally immunity protection is random: Some people will mount a strong protection and some people won't get protection. We have no way to predict who will land in each category (Harvard is working on it). The risk of reinfection after natural infection is 2 - 5 times higher than risk of reinfection with vaccines.
2. Naturally immunity is protective at first. For some, protection can last 8 months (because we have 8 months of data, it's probably more). For others, though, protection wanes within weeks. Again, who gets long protection from natural immunity is random.
3. Vaccination following infection increases protection from subsequent infection, including in the setting of more infectious variants.
4. Clinical trials in children show that vaccines can be given safely to those with evidence of a prior SARS-CoV-2 infection

**Q: If my child has previously had COVID, will one vaccine be sufficient?**

Hybrid immunity (a combo of natural infection and at least one vaccine) has been shown in adult studies to have high levels of immunity. We do not have this data in children at this time. The safest thing would be to receive both doses until more data regarding this is available.

**Q: Should children with a positive antibody test get the vaccine?**

Children should get a vaccine even if they have a positive antibody test. This is because of the naturally immunity reasons above and an additional three reasons:

1. Antibody testing cannot determine when a person was infected. So, we don't know if, and how, their antibodies are waning.
2. Antibody tests greatly vary in their ability to detect protection. This is particularly true for those >3 months after infection. People can test positive on a commercial antibody test even after other markers of immunological response, such as neutralizing antibodies, have waned.
3. At this time, there is no FDA-authorized or approved test that providers or the public can use to reliably determine whether a person is protected from infection.

**Q: Do I need to be worried about the timing of the COVID vaccine in regard to other immunizations?**

COVID vaccines may be administered without regard to timing of other vaccines. This includes getting a COVID vaccine with other vaccines on the same day.

**Q: What about the risk of myocarditis?**

The risk of myocarditis with infection is 16x higher than risk with vaccine. All vaccine associated cases thus far have resolved. Risk-benefit analysis favors getting the vaccine.

**Q: What about long term effects?**

Throughout the history of vaccines, serious adverse effects have occurred within 2 months. Vaccine ingredients are cleared quickly (mRNA is quite fragile and degrades within 72 hours) and doesn't linger around causing health issues.

**Q: Should I be worried about my child's future fertility?**

No, there is no scientifically plausible mechanism and zero data to support this.

**Q: Can my 12- year-old and older child receive their COVID vaccine at Blue Fish?**

For patients that are 12 and older, please continue to use other vaccination sites. We do not plan on giving the COVID-19 vaccine to patients 12 years and older as it is so easily accessible in the community for this older age group.