Kids (ages 5-11) and the COVID-19 Vaccine

What Parents Need to Know

Should I worry the vaccine is too "new"?

No. As of October 2021, more than 6.63 billion doses of the COVID-19 vaccine have been given worldwide, with more than 416 million doses in the United States. For adolescents alone, over 11 million doses of COVID-19 vaccine tell us that this vaccine is no longer "new." Scientists and pediatricians feel confident in the safety of the COVID-19 vaccine. Waiting puts you at higher risk for infection and illness.

The vaccine got to us fast due to:

- The vaccine research for mRNA started in 1961 and, in the last decade specifically, was focused on SARS.
- The vaccine was released more quickly than other vaccines because the production started before the clinical trials. This was due to the pandemic, which provided funding and resources to make that happen.
- During vaccine development the same standard of total number of cases for a clinical trial was reached. It was reached quickly due to the high disease rates in our community.

Will we need booster shots every year?

We don't know yet. It depends on how many people get vaccinated and if the virus continues to spread and change. As the population becomes vaccinated, we reduce the spread of the virus, which helps to prevent it from continuing to change. We won't need boosters if we are reducing and eliminating variants of COVID-19.

Does it affect puberty or fertility?

No. Based on our knowledge of mRNA, we are confident that the COVID-19 vaccine will not have long-term effects on puberty or fertility. mRNA cannot enter the part of the cell that holds DNA. They never can come into contact with each other.

- Vaccine ingredients are cleared from the body quickly. mRNA is fragile and breaks down within 72 hours after injection. Ingredients do not linger in the body.
- Thousands upon thousands have gotten pregnant after receiving the COVID-19 vaccine.
- There are reports of menstrual cycle changes after the COVID-19 vaccine. This is due to the body mounting an immune response and a temporary side effect, like a fever.

What are the most common side effects for kids?

They can vary, but are minimal. Side effects are less common for this age group than adolescents and adults!

- Side effects that have been reported are mild to moderate such as fever, fatigue, headache, chills, diarrhea, or muscle aches.
- More kids reported side effects with the second dose compared to the first dose.
- Rare side effects can happen, such as swollen lymph nodes or skin sensitivity, but these are not long-term and resolved in most cases in a few days.

How do we know about long term side effects?

Decades of research. Based on our knowledge of mRNA and the human body, we don't expect long-term side effects since it breaks down in the body in 72 hours.

- As will all vaccines, including the COVID-19 mRNA vaccines, concerning side effects have all occurred within 6-8 weeks after injection. Vaccine development is based on decades of research. Scientists have done a rigorous review of all available data before approving for children. Our history of science tells us that if there are no side effects in those first few weeks, we are confident that concerns that arise with any patient decades later are unlikely to be related to any vaccine.
- mRNA cannot be converted to or inserted into DNA. It's not scientifically possible.

How common is Myocarditis for children after vaccination?

Extremely rare. Myocarditis means "inflammation of the heart muscle." This can happen due to the robust immune response the vaccine can have on your body.

- It is very rare. We expect 26 cases of myocarditis per 1 million doses given. That's 0.0026%.
- Symptoms of myocarditis are most commonly chest pain or difficulty breathing and usually happen within the first week after injection.
- Adolescents who have had this rare side effect are monitored closely. Most make a full recovery in 3-4 weeks by using anti-inflammatory medications like ibuprofen.
- No kids have died of myocarditis after the COVID-19 vaccine.
- Myocarditis can also happen if you get the actual COVID-19 virus. In those cases, unfortunately, the myocarditis is more common, more severe and can last long-term.
- Because the dose of vaccine is lower for this age group, we are expecting lower rates of myocarditis.

What are the ingredients?

Put simply, it's fat, salt, electrolytes and sugar.

- Lipids: This "fatty layer" protects the delicate mRNA so it has time to work before getting chopped up. Polyethylene glycol (PEG), the most famous lipid, is also the main ingredient in MiraLAX (which you know about if your child has ever been constipated).
- Potassium chloride, monobasic potassium phosphate, sodium chloride, and dibasic sodium phosphate dihydrate and sucrose: These fancy names are just salt, some electrolytes, and sugar. These ingredients help keep the vaccine stable and are natural preservatives.

My child had COVID. Do they need the vaccine?

- **Yes.** We know that "natural immunity" can be high at first. However, protection can drop off quickly or change based on circulating variants.
- Getting a vaccine, even for those who have already had COVID-19, strengthens your immune response.
- If you had COVID-19 once, it is possible to get a different strain again. The immune response after infection is not as focused. Evidence shows the vaccines protect you longer and for all the variants to date.
- Most importantly, the vaccine gives protection and prevents hospitalization for several of the COVID variants.
- Your child can get the COVID-19 vaccine once they are out of quarantine. There is no "waiting period," as another strain may come, and the vaccine will protect from getting hospitalized.

Can kids become very sick with COVID?

Yes. COVID-19 disease in kids can range from no symptoms to severe illness.

- As of October 2021, over 6.3 million COVID-19 pediatric cases have been reported.
- Only 43% of kids under 12 have natural immunity.
- 30% of hospitalizations for kids with COVID-19 had no underlying medical conditions. As of October 2021, there were 5,217 MIS-C cases linked to COVID-19 in kids. This multi-organ system effect makes children extremely ill and requires hospitalization, often in the ICU.
- Long COVID, or lingering COVID-19 symptoms, can lead to learning problems, heart problems, exercise fatigue with sports, and respiratory issues. This has been reported in about 8% of children who have had COVID-19.
- Since the pandemic began, over 600 pediatric deaths due to COVID-19 have been reported. It is now a top 10 cause of death for kids in the United States.

Is there less quarantine from school, sports or activities if vaccinated?

- **Yes.** This pandemic has been traumatizing, especially for children. Their lives were abruptly disrupted in March 2020, and their mental and physical health have suffered. Anxiety and depression rates are up.
- Based on the State of Michigan's current guidelines, students who are vaccinated and exposed to COVID-19 can remain in school and wear a mask.
- We know that less quarantining will only benefit all children.

If you have more questions, please visit stjoeshealth.org/COVID or speak with your doctor.

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