



COVID-19 VACCINATIONS FOR CHILDREN:

What parents and guardians want to know?



Adapted from Your Local Epidemiologist, October 2021

- For **5-11 year-olds**, starting November 2021, a COVID-19 vaccine (Pfizer) was authorized for emergency use in November 2021. The vaccine is a 2-dose mRNA series taken 3 weeks apart. Each dose is 10µg, which is one-third of the dosage of the adolescent/adult vaccine.
- For **12-17 year-olds**, a vaccine (Pfizer) is already authorized and more than 11.1 million adolescents have been vaccinated. This vaccine is a 2-dose series taken 3 weeks apart. Each does is 30µg.

IS IT EFFECTIVE?



- Clinical trials showed 90-100% efficacy
- There were no severe cases of COVID-19 during clinical trials
- Vaccines work against Delta and other known variants of concern

WHAT ARE THE SIDE EFFECTS?



- Mostly mild-to-moderate side effects were reported: fever, fatigue, headaches, chills, diarrhea, muscle and joint pain
- More kids report side effects with the 2nd dose compared to the first dose
- Rare side effects include swollen lymph nodes and skin sensitivity

WHAT ABOUT MYOCARDITIS?



- Myocarditis (heart inflammation) has been linked to mRNA vaccines, but it is **very** rare
- It is more common for young males and more common for the second dose
- Symptoms typically arise within 7 days of vaccination
- Majority of cases have been hospitalized, but no kids have died. Cases fully recover within around 34 days.
- Vaccine-induced myocarditis is much milder compared to COVID-19-induced myocarditis.

WHY DOES MY KID REALLY NEED IT?



- COVID-19 disease in kids can range from asymptomatic to severe illness
- As of January 2022, over 9.5 million COVID-19 pediatric cases have been reported
- Only 43% of kids under 12 years old have natural immunity
- In the United States, 91,116 pediatric hospitalizations have been reported
 - 30% of hospitalized kids had **no** underlying medical condition
 - Hospitalization rates for COVID-19 are higher than for the flu
- As of January 2022, 6,431 MIS-C cases have been linked to COVID-19
- Over 700 pediatric deaths have been reported. Although this seems low compared to adults, COVID-19 is now a **top 10 cause of death for kids** in the United States
- Long COVID-19 is reported among 7-8% of kids

DOES THE VACCINE CHANGE DNA?



- It is biologically impossible for messenger RNA (mRNA) to change DNA. RNA serves a different biological purpose than DNA
- mRNA cannot enter the cell nucleus where DNA is kept
- mRNA cannot be converted into DNA with the materials in the vaccine
- mRNA cannot insert itself into DNA with the materials in the vaccine

WHAT ARE THE LONG-TERM EFFECTS?



- We do not know the long-term effects of mRNA COVID-19 vaccines, but based on our knowledge of mRNA and the human body, we do not expect long-term side effects
- Vaccine ingredients leave the body very quickly. mRNA is very fragile and degrades within 72 hours of injection. Ingredients do not linger in the body.
- mRNA vaccines are not made of actual virus, so there are no weakened, dead, or noninfectious parts of the virus in mRNA vaccines
- In the history of vaccines, serious adverse side effects only occur within the first 2 months of rollout. We have over 12 months of follow-up data at this point.
- There is no evidence that the vaccine causes infertility or permanent change to menstrual cycles

MY KID ALREADY HAD COVID-19, SO WHY DO THEY NEED THE VACCINE?



- Efficacy of natural infection is often high but is unpredictable
- Getting a vaccine after recovering from COVID-19 provides additional protection
- Evidence shows the vaccine prevents against variants of concern like Delta better than previous infection with COVID-19