COVID-19 Vaccine for Children Ages 5-11

The American Academy of Pediatrics (AAP), Advisory Committee on Immunization Practices (ACIP), Centers for Disease Control and Prevention (CDC) and the North Dakota Department of Health (NDDoH) all recommend COVID-19 vaccination of children and adolescents 5 years of age and older. The Food and Drug Administration (FDA) has granted emergency use authorization (EUA) for a Pfizer-BioNTech COVID-19 vaccine for children ages 5-11 years old. Pfizer's 2-dose 10mcg mRNA vaccine is currently the only COVID-19 vaccine available for children ages 5-11.

The information presented in this handout is meant to help parents and guardians make an informed decision about COVID-19 vaccination for children and adolescents.

COVID-19 Illness in Children Ages 5-11

- While most children who contract COVID-19 have mild symptoms or have no symptoms, some children become severely ill from COVID-19 infection. They may require hospitalization, intensive care, or a ventilator to help them breathe.
  - North Dakota’s hospitalization rate of children between the ages of 5-11 is 2.69 per 1,000 cases.
  - As of January 9th, 2022, North Dakota has reported 32 hospitalizations and 11,916 total positive COVID-19 cases in the 5-11 age group.

- COVID-19 infection has also been linked to a rare but serious health condition called multisystem inflammatory syndrome in children (MIS-C). Children who develop MIS-C experience inflammation in different body parts, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. These children may face ongoing health issues due to heart or other organ damage as a result of COVID-19 infection.
  - As of January 11th, 2021, North Dakota has reported 7 cases of MIS-C for children ages 5-11.
  - There have been over 6,000 cases of MIS-C recorded in the United States. MIS-C is most frequent among children ages 5-11 with the median age of cases being 9 years old.

- In rare cases, children who contract COVID-19 may die. Children with underlying health conditions such as asthma, diabetes, or obesity are at increased risk.
  - North Dakota has reported zero deaths in the 5-11 age group.
• A January 6th, 2022 Joint Status Report by the AAP and Children’s Hospital Association, reported that children make up 17.4% of all positive COVID-19 cases in the United States.
  o In North Dakota, 16.8% of children 5 to 11 years old have tested positive for COVID-19.
  o 72.4% of confirmed cases in children 5 to 11 years old were symptomatic. Of those symptomatic cases, the most common symptoms reported as fever (15.5%), chills (10.4%), and myalgia (11.8%).

• A person of any age who has had COVID-19 can later develop a post-COVID condition. Although post-COVID conditions appear to be less common in children and adolescents than in adults, long-term effects after COVID-19 can and do occur in children and adolescents. Because young children may have trouble describing the problems they are experiencing; information on post-COVID conditions in children and adolescents is limited.
  o A recent study from the United Kingdom found that children can have prolonged symptoms of COVID-19, including fatigue, headache, muscle/joint pain, rashes, heart palpitations and mental health issues such as lack of concentration and short-term memory problems. A survey of the parents of 510 children with persistent COVID-19 symptoms revealed that their children experienced ongoing COVID-19 symptoms for an average of 8.2 months. Only 10% of the children included in the study returned to previous levels of physical activity.
  o Another recent article from Italy found that more than 50% of pediatric patients previously diagnosed with COVID-19 reported at least one symptom 120 days after having COVID-19, and 42.6% reported being impaired by these symptoms during daily activities.

Reasons to Vaccinate Children & Adolescents

• To date, there have been over 2.8 million cases of COVID-19 among the 5 to 11 year old population in the United States. While previous infection can lead to some immunity from COVID-19, vaccination after infection significantly enhances protection and further reduces risk of reinfection. The CDC recommends that all children over the age of 5 get vaccinated against COVID-19 regardless of previous infection of COVID-19.

• COVID-19 vaccines are safe, effective, and provide protection from COVID-19 infection, hospitalization, and death. Vaccines are the single best way to protect children and prevent serious illness or even death due to COVID-19 disease.
From September 1, 2021 through January 6, 2022, North Dakota has had 16 hospitalizations among our 5-11 year old population. All but one case was unvaccinated.

- Fully vaccinated children with no symptoms do not need to quarantine following exposure to COVID-19, as their risk of infection is low – meaning they can attend school, participate in sports, playdates, and other activities.

- Vaccinating every eligible person helps us reach community immunity so we can continue to enjoy the activities that we love. It is important for children's development that they can return to the routines and activities that support learning and growth.

- Most children have a grandparent or other person in their lives who are at higher risk of serious illness from COVID-19. Vaccination of children and adolescents will help to prevent them from passing COVID-19 to loved ones and other vulnerable people in the community.

- Vaccinating children ages 5-11 can also help protect family members, including siblings under 5 years of age who are not yet eligible for vaccination.

**About COVID-19 Vaccines for Children**

**How do COVID-19 vaccines work?**

COVID-19 vaccines work similarly to other vaccines. The vaccine stops the virus by helping the immune system make special proteins, called antibodies, to fight the virus. COVID-19 vaccines are not live virus vaccines and do not alter human DNA.

**Are there side effects of COVID-19 vaccines?**

Children may experience mild to moderate side effects after receiving a COVID-19 vaccine. Side effects have been most frequently reported one day after vaccination and usually after the 2nd dose. Many children will not experience any vaccine side effects. As of December 20, 2021, less than 1% of children ages 5-11 have had to seek medical care due to side effects from vaccination. The most common side effects reported after COVID-19 vaccination include pain, swelling, or redness where the shot was given, mild fever, headache, muscle pain and joint aches. Side effects indicate that the immune system is working and building antibodies to fight the virus.

Updated 1/5/2022
Pfizer’s vaccine trial found children ages 5-11 were more likely to experience symptoms after their second dose. However, children ages 5-11 are less likely to experience side effects related to the vaccine when compared to adolescents and adults over the age of 12.

In rare cases, some young people may experience myocarditis/pericarditis (inflammation of the heart muscle) following a COVID-19 mRNA vaccination. These occur most often in males and are typically mild to not life-threatening. Zero cases of myocarditis/pericarditis occurred during Pfizer’s vaccine trials. There have been 12 cases of myocarditis reported after more than 8 million doses administered of COVID-19 vaccine in the 5-11 year old population. The risk of myocarditis/pericarditis after receiving a COVID-19 vaccine are lower than the risk of myocarditis/pericarditis associated with a COVID-19 infection in adolescents and adults.

What is different about the Pfizer COVID-19 vaccine for 5 to 11-year-olds and Pfizer’s vaccine for ages 12 years and older?

In addition to having vaccine vial caps with different colors, younger kids will be getting a different dose of vaccine (10 mcg) and a lower injected volume of vaccine (0.2ml). Additionally, this new formulation of Pfizer’s COVID-19 vaccine for 5 to 11-year-olds contains a different buffer, tromethamine, which is also used in Moderna’s COVID-19 vaccine. These small changes to inactive ingredients and packaging were made to improve shelf life and stability, and to help healthcare providers with vaccine administration. The active ingredients in all of Pfizer’s COVID-19 vaccines remain the same.

If my 11-year-old is turning 12 during their vaccine series, which vaccine and dosage should they receive?

The CDC recommends that children should receive the age-appropriate vaccine formulation regardless of their size or weight. Children’s vaccine dosages should be based on the child’s age on the day of vaccinations.

- For example, if your child turns 12 years of age in between their first and second dose, they may receive the 10mcg Pediatric (5-11) Pfizer vaccine for their first dose and the 30mcg Adolescent and Adult (12+) Pfizer vaccine for their second dose.

Are immunocompromised children ages 5-11 eligible for an additional dose of the Pfizer pediatric vaccine?

Children ages 5-11 years who are moderately to severely immunocompromised can also plan to get an additional (3rd) primary dose 28 days after receiving their second shot. This includes children who have:

- Been receiving active cancer treatment for tumors or cancers of the blood
- Received an organ transplant and are taking medicine to suppress the immune system
- Received a stem cell transplant within the last 2 years or are taking medicine to suppress the immune system

Updated 1/5/2022
- Moderate or severe primary immunodeficiency (such as DiGeorge syndrome, Wiskott-Aldrich syndrome)
- Advanced or untreated HIV infection
- Active treatment with high-dose corticosteroids or other drugs that may suppress your immune response

People should talk to their healthcare provider about their medical condition, and whether getting an additional primary dose is appropriate for them.

**Are children ages 5-11 eligible for a booster dose of the Pfizer pediatric vaccine?**

Currently, children ages 5-11 are not authorized to receive a booster dose against COVID-19.

**Can my child receive the COVID-19 vaccine at the same time as other vaccines?**

Yes. COVID-19 and other vaccines can be administered at the same time. It is recommended that children and adolescents receive other important vaccines, including those that protect against the flu, whooping cough, tetanus, diphtheria, cancer-causing human papillomavirus (HPV) and meningitis. Certain vaccines are required for kindergarten, 7th, 11th, and 12th grades as well as entry to college. Schedule an appointment TODAY for COVID-19 and adolescent vaccines. This is especially important if your child fell behind on immunizations during the pandemic.

**Some highlights from Pfizer’s pediatric COVID-19 vaccine trial in ages 5-11:**

- Over 3,000 children ages 5-11 were vaccinated during Pfizer’s pediatric vaccine trial. The ratio of Pfizer vaccine to placebo vaccine among participants was 2:1.
- There were 16 cases of COVID-19 in the placebo (unvaccinated) group and only 3 cases of COVID-19 in the vaccinated group (90.9% efficacy)
- No hospitalizations due to COVID-19 or cases of MIS-C were reported by any trial participant.
- No severe adverse events were determined to be related to vaccination in either group.
- Only 2.7% of COVID-19 vaccinated children experienced reactions to either dose of the vaccine. Vaccine reactions were more commonly observed after dose 2. The most common reactions included injection site pain, fatigue and headaches.

**Who Recommends COVID-19 Vaccine for Ages 5-11?**

- The American Academy of Pediatrics (AAP) recommends COVID-19 vaccination for all children and adolescents 5 years of age and older who do not have contradictions using a COVID-19 vaccine authorized for use for their age.
- The Advisory Committee on Immunization Practices (ACIP) recommends all individuals over the age of 5 to receive COVID-19 vaccine.
The Centers for Disease Control and Prevention (CDC) recommends all individuals ages 5 to 11 years old be vaccinated against COVID-19 with the Pfizer-BioNTech pediatric vaccine.

Where to Get Vaccinated

Currently children ages 5-11 can receive their COVID-19 vaccinations at local public health departments, at family practices, pediatric clinics, and pharmacies. Information on COVID-19 vaccine providers and clinics near you can also be found at Vaccines.gov. You can also contact the NDDoH Hotline at 1.866.207.2880 for assistance.

Vaccine Safety Monitoring

COVID-19 vaccines are being administered under the most intensive vaccine safety monitoring effort in United States History. These web-based platforms give CDC scientists information about the safety of COVID-19 vaccines in real time. If any vaccine safety issues—also called adverse events—are reported, CDC scientists can quickly study them and determine if there is a safety concern with a particular vaccine. Here are some of the tools that CDC uses to keep close tabs on the safety of COVID-19 vaccines:

- **v-safe**: Use your smartphone to tell CDC how you’re feeling after your COVID-19 vaccination and personalized health check-ins to make sure you’re doing well
- **Vaccine Adverse Event Reporting System (VAERS)**: VAERS is the national system that collects reports of adverse events that happen after vaccination.

Additional Information

Visit [www.health.nd.gov/protect](http://www.health.nd.gov/protect) for more information

COVID-19 Vaccination | CDC
COVID-19 Vaccine for Children (aap.org)
COVID-19 Vaccine Checklist for Kids Age 5 and Up- HealthyChildren.org
Pfizer EUA Fact Sheet for Recipient and Caregivers