

# COVID-19 Vaccines for Young Children Ages 5 – 11 Years

## What COVID-19 vaccines are available for young children?

The Food and Drug Administration (FDA) has granted emergency use authorization (EUA) for two different COVID-19 vaccines for children ages 5 years through 11 years. Those vaccines are from Moderna and Pfizer, and they may receive either one.

## Staying Up to Date on COVID-19 Vaccinations

Most individuals 5 years and older are [considered up to date on COVID-19 vaccination](#) if they have received just one 2023-2024 COVID-19 vaccine that was given at least 2 months after any COVID-19 dose that had been received. The 2023-2024 COVID-19 vaccine has been updated to match more prevalent strains.

## COVID-19 Illness & Complications in Ages 5-11 years

### Symptomatic Infection

It is true that children are less likely to develop symptoms if infected with COVID-19. However, there is still the risk that any child, including previously healthy children, could develop symptoms and/or become severely ill due a COVID-19 infection. Additionally, children with underlying health conditions are even more susceptible to experiencing mild to severe symptomatic infection.

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- Nationally, there have been over [6 million positive cases of COVID-19](#) reported among the 5-11 year old age group.
- As of May 2, 2023, there have been reported among the 5-11 year old age group in North Dakota.
  - An estimated 29% of the total 5-11 year old North Dakotan population has tested positive for COVID-19.

## Hospitalizations

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.

- As of May 2, 2023, North Dakota has reported **55 hospitalizations** among children ages 5-11 years who were positive for COVID-19.
- North Dakota's hospitalization rate for children between the ages of 5-11 years is 3.1 hospitalizations per 1,000 positive COVID-19 cases.

## Deaths

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 **3 deaths** in the 5-11 age group.
- Nationally, there have been [568](#) deaths among the 5-11 age group.

## Multisystem Inflammatory Syndrome

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 May 02, 2023, North Dakota has reported **9 cases of MIS-C** for children ages 5-11 years.
- There have been [over 9,500 cases](#) of MIS-C recorded in the United States. Almost half of cases of MIS-C were among children ages 5-11 with the median age of cases being 9 years old.
- As of August 01, 2023, there have been a total of [79 MIS-C deaths](#) in the United States.

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## Post COVID-19 Conditions (“Long COVID”)

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.

- A [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.
- 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.
- There is [accumulating evidence](#) that COVID-19 vaccination reduces Post-COVID conditions among children and adults.

## Reasons to Vaccinate Adolescents

- To date, there have been over [6 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, the quality of protection is dependent on the severity of that infection. The CDC recommends that all children between the ages of 5 and 11 years 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.

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- 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.

## About the COVID-19 Vaccines for Adolescents

### 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 2<sup>nd</sup> dose. Many children will not experience any vaccine side effects. A January 13, 2023 [report](#) on COVID-19 vaccine safety monitoring highlights that after administration of more than 950,000 doses of bivalent booster vaccine to children aged 5-11 years **only two** serious VAERS reports have been received, equating to approximately 99.8% of reports to VAERS for this age group being classified as **nonserious**. 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.

### Is there a risk of developing myocarditis after vaccination?

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 or Moderna's vaccine trials for this age group. However, there have been [20 cases of myocarditis](#) reported after more than 18.1 million doses administered of COVID-19 vaccine in the 5-11 year old population. No cases of myocarditis have been [reported](#) following a bivalent booster in this population. It is important to note that the risk of myocarditis/pericarditis after receiving a COVID-19 vaccine has been found to be lower than the risk of myocarditis/pericarditis associated with a COVID-19 infection in adolescents and adults.

### Are immunocompromised children ages 5-11 eligible for an [additional dose of COVID-19 vaccine](#)?

Children ages 5-11 that are not moderately to severely immunocompromised are NOT authorized to receive additional doses at this time; however, those who are moderately to

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severely immunocompromised are recommended to receive anywhere from 1-3 doses of 2023-2024 COVID-19 vaccine. The number of doses recommended for this group is dependent on vaccination history.

Moderately or severely immunocompromised children can include those 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
- 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

Parents or guardians should talk to their child's health care provider if they have further questions regarding their child's immunocompromising medical condition and whether getting an additional dose is appropriate for them.

### **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. 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 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.

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### Some highlights from Moderna's COVID-19 vaccine trial in ages 6-11:

- Over 4,000 children ages 6-11 years were vaccinated during [Moderna's phase 2 child and adolescent vaccine trial](#). The ratio of Moderna vaccine to placebo vaccine participants was 3:1.
- There were 18 cases of COVID-19 that met CDC case definition in the placebo (unvaccinated) group and only 7 cases in the COVID-19 vaccinated group (88% 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.
- Most side effects observed after vaccination were mild to moderate and more frequently reported after dose 2. The most common reactions included pain at the injection site, headache, and fatigue.

### Who Recommends COVID-19 Vaccine for Adolescents?

- 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 6 months to receive COVID-19 vaccine.

COVID-19 vaccines are being administered under the most intensive vaccine safety monitoring effort in the 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:

- [Vaccine Adverse Event Reporting System \(VAERS\)](#): VAERS is the national system that collects reports of adverse events that happen after vaccination.
- [Vaccine Safety Datalink \(VSD\)](#): VSD utilizes data from nine different health systems in the U.S. and compares health and vaccine safety outcomes of those vaccinated to those who are not to determine if the outcome is caused by the vaccine.

### For more information...

- [COVID-19 Vaccination | CDC](#)

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- [COVID-19 Vaccine for Children \(aap.org\)](#)
- [Pfizer Recipients and Caregivers Emergency Use Authorization Fact Sheet](#)
- [Moderna Recipients and Caregivers Emergency Use Authorization Fact Sheet](#)
- [COVID-19 Vaccine Checklist for Kids Age 5 and Up- HealthyChildren.org](#)

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