

# KIDS HEALTH

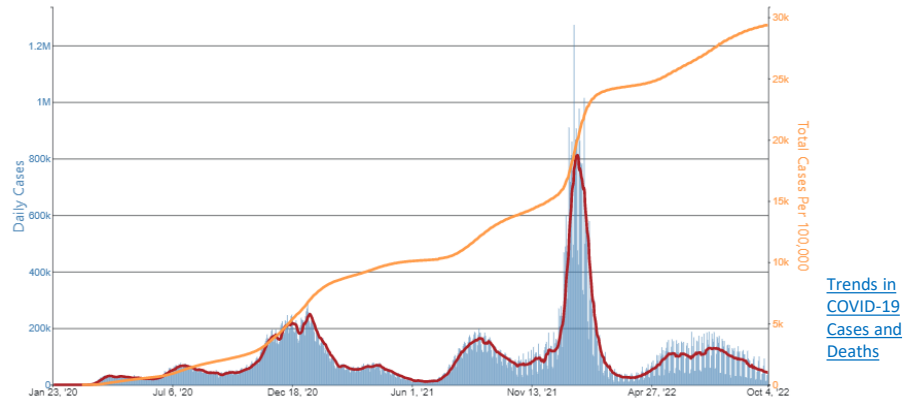
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COVID-19 IN CHILDREN AND WHAT DO WE KNOW ABOUT THE VACCINATION RATE & EFFICACY?

## Are Boosters Needed? YES!!!

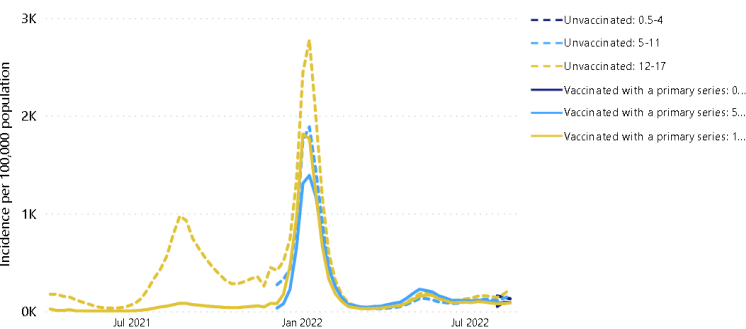
COVID-19 can cause severe illness in children and adolescents from 0-17 years. According to the American Academy of Pediatrics, nearly 14.8 million children have tested positive for COVID-19 since the beginning of the pandemic ([Children & COVID-19](#)) and at least 1,774 deaths. Among the states reporting, children contribute from 1.2%-4.6% of the total cumulated hospitalizations.

Daily Trends in Number of Cases and Cumulative Incidence Rate of COVID-19 Cases in The United States Reported to CDC, per 100,000 population.



[Trends in COVID-19 Cases and Deaths](#)

Rates of COVID-19 Cases by Vaccination Status and Age Group  
April 04, 2021–August 20, 2022 (32 U.S. jurisdictions)



[Rates of COVID-19 Cases and Deaths by Vaccination Status](#)



According to the CDC, unvaccinated persons 6 months and older had **2.4 times** the risk of testing positive in July 2022 and **5 times** the risk of dying compared to those with at least the primary series of vaccine. More impressive, unvaccinated persons aged 5 and older had 7 times the risk of dying in July 2022 compared to those who were vaccinated with a primary series and at least one booster dose.

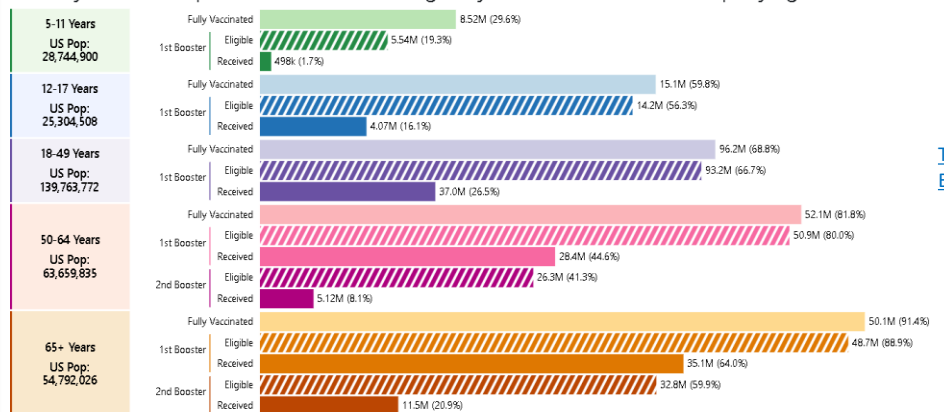
[Rates of COVID-19 Cases and Deaths by Vaccination Status](#)

As of September 28, 2022, 1.4 million (8%) US children ages 6 months-4 years have received at least one dose of COVID-19 vaccine, 8.8 million (31%) children between 5-11 years have been fully vaccinated (2-doses), and among them, 15.1% have received their first booster. Among 12-17 years, 15 million (57%) are fully vaccinated and among them, 29% have received their first booster. [COVID-19 Vaccinations in the United States, Trends on COVID-19 boosters](#)

### DID YOU KNOW?

- **Booster doses induce a more robust immune response against other variants than infection by one of the omicron variants and are more effective at preventing severe disease and death.**
- **The bivalent (original + omicron) booster appears to give broader immune responses than the original vaccine or the omicron version alone. This means that the vaccine is likely to induce protection against more variants that could come along.**

Primary Series Completion, Booster Dose Eligibility, and Booster Dose Receipt by Age, United States



[Twitter-Dr. Eric Topol](#)

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## QUICK LINKS

[COVID-19 Vaccine Recommendations for Children and Teens](#)

[Why Children and Teens Should Get Vaccinated Against COVID-19](#)

[COVID-19 Vaccine Side Effects in Children and Teens](#)

[COVID-19 Vaccinations in the United States](#)

[COVID-19 Vaccinations in the United States](#)

[COVID-19 Vaccine Schedule for 6 months & older](#)

[Interim Clinical Considerations for Use of COVID-19 vaccines currently approved or authorized in the US](#)

[Rates of COVID-19 Cases and Deaths by Vaccination Status](#)

## GET VACCINATED

Find a vaccine near you.

Text your zip code to 438829

Call 1-800-232-0233

Message & data rates apply.

[Privacy Policy](#)

U.S. Department of Health and Human Services

## MYTH BUSTER!!!

MYTH: mRNA vaccine will alter your DNA

TRUTH: mRNA also known as messenger-RNA is simply a message coded with protein information that triggers your immune response against a disease. It CANNOT change your DNA or genes.



## WHAT'S NEW: BIVALENT BOOSTERS

On October 10, 2022, the [FDA authorized](#) the use of an updated **bivalent booster** for everyone age 5 and older ([Pfizer 5+ or Moderna 6+](#)). A bivalent booster contains both the original vaccine strain, plus the omicron BA.4/BA.5 variant strain in the same shot. The CDC has moved to make being **up to date** on COVID vaccination to mean that a person has completed their primary series (original strain) *plus* has received the most recently recommended booster shot (currently bivalent original + BA.4/BA.5). Like getting an annual flu shot, this means the total number of shots isn't being counted, but rather that the most up to date version has been received.

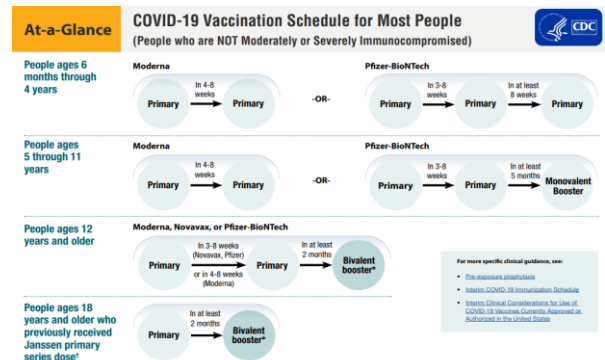
Reports show that COVID-19 vaccine and booster have provided protection against COVID-19 related emergency department and urgent care encounters [Effectiveness of COVID-19 Pfizer-BioNTech vaccine \(ED & Urgent Care\)](#).

## WHY SHOULD KIDS GET BOOSTED?

Previous studies in adults have shown a decrease in effectiveness against Omicron variant with the primary series and waning of mRNA vaccine protection against symptomatic infection. However, there is evidence that boosters increase the protection against symptomatic infections [Association between 3 dose of mRNA COVID-19 Vaccine and Symptomatic infection caused by the SARS-CoV-2 Omicron and Delta Variants](#). Among adolescents 12 to 15 years old, the odds for symptomatic infections was lowered after a booster dose and the estimated vaccine effectiveness was increased by 60.1% for 5-11 years and 59.5% for 12-15 years [Association of prior BNT162b2 COVID-19 Vaccination with Symptomatic SARS-CoV-2 infection in children and adolescents during Omicron predominance](#).

Rate of confirmed infections were lowered in people aged 16-29 years who received a booster than people who did not receive a booster by 17.2 times [Protection against COVID-19 by BNT162b2 booster across age groups](#).

Everyone 6 months+, regardless of which COVID-19 vaccine they first received, should **get a booster** to help protect against severe disease caused by infection with COVID-19. **Some people may also get a second booster.**



COVID-19 Vaccine Schedule