

CDC: Delta variant causing increase in pediatric COVID-19 cases, not severity

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Melissa Jenco, News Content Editor

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Editor's note: For the latest news on COVID-19, visit <http://bit.ly/AAPNewsCOVID19>.

Two new studies found COVID-19 cases in children and adolescents have been increasing in number but not severity since the delta variant became predominant.

The studies from the Centers for Disease Control and Prevention (CDC) also showed adolescent COVID-19 hospitalization rates are highest among those who are not vaccinated and in communities with low vaccine coverage.

“What is clear from these data is community level vaccination coverage protects our children,” CDC Director Rochelle P. Walensky, M.D., M.P.H., said at a news conference. “As the number of COVID-19 cases increase in the community, the number of children getting sick, presenting to the emergency room and being admitted to the hospital will also increase.”

Both studies in the [Morbidity and Mortality Report](#) looked at COVID-19 among children and adolescents ages 0-17 years and compared data from July and August when the highly transmissible delta variant was dominant to earlier periods in the pandemic.

[A study of national data on COVID-19 cases](#) among children and adolescents in 2021 found they peaked in January, dropped in June and spiked in August. The weekly COVID-19 hospitalization rate followed a similar pattern.

During the week ending Aug. 14, about 1.4 of every 100,000 children and adolescents were hospitalized for COVID-19, nearly five times the weekly rate in late June and close to the peak in January, according to [another study of 14 states](#).

Children ages 0-4 years have had the highest pediatric hospitalization rates since the start of the pandemic, and their weekly rate of 1.9 per 100,000 children in mid-August was nearly 10 times that of late June.

Researchers looked for signs if delta is causing more severe disease. Both studies found statistically similar levels of severity before and after delta was dominant. For instance, about

[23% of those hospitalized were admitted to the intensive care unit](#) in the delta period compared to 27% pre-delta. Likewise, 10% required invasive mechanical ventilation and 2% died in the delta period compared to 6% and 1%, respectively, before delta.

“Although we are seeing more cases in children and more overall cases, these studies demonstrated that there was not increased disease severity in children,” Dr. Walensky said. “Instead, more children have COVID-19 because there is more disease in the community.”

The increased hospitalizations are coming at the same time as a [spike in respiratory syncytial virus](#), causing many [children’s hospitals to report](#) intensive care units at or near capacity.

Impact of vaccination

Both studies showed vaccination has a significant impact on COVID-19 hospitalizations. [One found](#) unvaccinated adolescents were hospitalized in July at a rate 10 times higher than fully vaccinated adolescents.

The [other showed](#) emergency department visits and hospitalizations for COVID-19 were 3.4 and 3.7 times higher in states with the lowest vaccination coverage compared to states with the highest vaccination coverage.

About 53% of adults, 46% of adolescents ages 16-17 years and 37% of those ages 12-15 years are fully vaccinated, [according to CDC data](#) and an [AAP analysis](#). About 404,000 adolescents received their first dose this past week, a rate that has declined for three weeks.

“We know what we need to do to protect our children,” Dr. Walensky said. “Get vaccinated, wear masks and follow CDC guidance. We must come together to ensure that our children, indeed our future, remain safe and healthy during this time.”

Associate Editor Alyson Sulaski Wyckoff contributed to this report.

Resources

- [Information from the CDC on clinical considerations for COVID-19 vaccines](#)
- [CDC COVID vaccination toolkit for pediatricians](#)
- [AAP guidance on providing COVID-19 vaccines to adolescents](#)
- [Information for parents from HealthyChildren.org on preparing children and adolescents for COVID-19 vaccination](#)
- [CDC COVID-19 guidance for schools](#)
- [AAP COVID-19 guidance for schools](#)