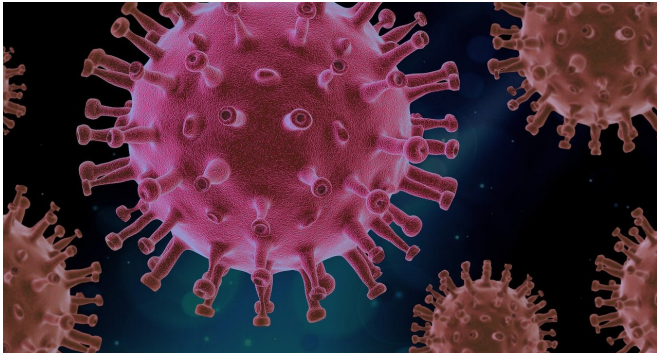


# Children not immune to coronavirus; new study from pandemic epicenter describes severe COVID-19 response in children

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While most children infected with the novel coronavirus have mild symptoms, a subset requires hospitalization and a small number require intensive care. A new report from pediatric anesthesiologists, infectious disease specialists and pediatricians at the Children's Hospital at Montefiore (CHAM) and Albert Einstein College of Medicine, describes the clinical characteristics and outcomes of children hospitalized with COVID-19, during the early days of the pandemic.

Published in the *Journal of Pediatrics*, the report compares 46 children between one month and 21 years old, who received care either on a general unit, or in the Pediatric Critical Care Unit (PCCU) at CHAM. This is the largest single-center study from the United States to date to describe in detail the full spectrum of COVID-19 disease in hospitalized children.

Researchers found that children requiring intensive care had higher levels of inflammation and needed additional breathing support, compared to those who were treated on a general unit. Of the children being cared for in the PCCU, almost 80% had

Acute Respiratory Distress Syndrome (ARDS), which is more commonly associated with critically ill adult COVID-19 patients, and almost 50% of children with ARDS were placed on ventilators. On average, children in the PCCU stayed in the hospital four days longer than children on the general unit. Researchers at CHAM and Einstein also found that while obesity and/or asthma was highly prevalent in children in this study, these complications did not increase the likelihood that a child would need enhanced levels of care.

"We know that in adults, obesity is a risk factor for more severe disease, however, surprisingly, our study found that children admitted to the [intensive care](#) unit did not have a higher prevalence of obesity than those on the general unit," said lead author Jerry Y. Chao, M.D., M.Sc., pediatric anesthesiologist, CHAM, and assistant professor of anesthesiology, Einstein.

Researchers also found that more than half of the children had no known contact with a COVID-positive person. This may reflect the fact that the virus can be spread by asymptomatic people and COVID-19 may be more prevalent in communities with a [high population density](#).

"Thankfully most children with COVID-19 fare well, and some do not have any symptoms at all, but this research is a sobering reminder that children are not immune to this virus and some do require a higher level of care," said senior author Shivanand S. Medar, M.D., FAAP., attending physician, Cardiac Intensive Care, CHAM, and assistant professor of pediatrics, Einstein. "These preliminary findings contribute to our understanding of COVID-19 in pediatric patients, but more research is needed to determine how the virus truly impacts [children](#)."

**More information:** Jerry Y. Chao et al, Clinical Characteristics and Outcomes of Hospitalized and Critically Ill Children and Adolescents with Coronavirus Disease 2019 (COVID-19) at a Tertiary Care Medical Center in New York City, *The Journal of Pediatrics* (2020). [DOI: 10.1016/j.jpeds.2020.05.006](https://doi.org/10.1016/j.jpeds.2020.05.006)

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