



## Study details COVID-19 characteristics, co-infections in children

by Melissa Jenco, News Content Editor

**Editor's note:** For the latest news on COVID-19, visit <https://www.aapublications.org/news/2020/01/28/coronavirus>.

Children with COVID-19 have different symptom presentations, laboratory findings and severity than adults, and co-infections are common, according to a new study.

From Jan. 20 through Feb. 27, 2020, researchers looked at data on 74 pediatric patients with COVID-19 in China and found nearly all had been in contact with adults in their household who were infected with the virus before them.

About 27% of the children were asymptomatic. Their cases typically were discovered after a family member was diagnosed. Another 32% had an acute upper respiratory tract infection, 39% had mild pneumonia, 1% had severe pneumonia and none were critical, according to "Co-infection and Other Clinical Characteristics of COVID-19 in Children," (Wu Q, et al. *Pediatrics*. May 6, 2020, <https://doi.org/10.1542/peds.2020-0961>).

Cough and fever were the most common symptoms for both children and adults but were significantly lower in children. About 32% of children had a cough, while other studies have found a cough in about 59%-82% of adult cases. Likewise, 27% of children had a fever compared to 83%-99% of adults.

Only 31% of children had an abnormal leukocyte count and 13.5% had an abnormal lymphocyte count, while most adult patients have abnormal counts.

Similarly, chest computed tomography found changes in one or both lungs of half of the pediatric patients and most of those were nonspecific for SARS-CoV-2 infection, while adults typically have multifocal areas of ground glass shadows and bilateral infiltration, according to the study.

Authors suggested several possible explanations for the mild nature of many COVID-19 cases in children - their immune system may not mount the aggressive inflammatory response seen in adults and they also tend to have fewer comorbidities. None of the children in the current study had a chronic disease.

The study also explored the commonality of children having both COVID-19 and another respiratory infection. Co-infections were found in about half of those tested, and the most common was *mycoplasma pneumoniae*.

"The high co-infection rate in children highlights the importance of SARS-CoV-2 screening, especially during the peak season for colds, influenza and other respiratory ailments," authors wrote.

Eight patients whose nasopharyngeal swabs turned negative continued to have positive viral RNA in their fecal samples for another five to 23 days. "The possibility of fecal-oral transmission cannot be ignored," authors said.

"The emerging disease brings new challenges to preparedness response and prophylactic control, in particular, massive efforts should be made at all levels to minimize the spread of the virus among children after reopening of kindergartens and schools," they wrote.

### Resources

- [Information from the CDC for health care professionals](#)



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