

Children unlikely to be the main drivers of the COVID-19 pandemic

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It is highly likely that children can transmit the new coronavirus, which causes COVID-19, but several factors suggest that children are unlikely to be the main drivers of the pandemic. Opening up schools and kindergartens is unlikely to impact COVID-19 mortality rates in older people, according to a systematic review that spanned 47 publications and was conducted by researchers at Karolinska Institutet. The paper is published in the scientific journal *Acta Paediatrica*.

Globally to date, there are around five million confirmed cases of COVID-19, and more than 300,000 deaths from the disease. Many countries have implemented lockdowns to stop the spread of the disease, and closed kindergartens and schools. Opening up schools and kindergartens raises questions about the role of [children](#) in COVID-19 transmission. Now, a paper published in *Acta Paediatrica* summarises the findings of a systematic literature review on the current knowledge of COVID-19 transmission in children.

Through a systematic literature search, two highly experienced librarians at Karolinska Institutet, Love

Strandberg and Carl Gornitzki on May 11, 2020, identified 508 [scientific papers](#) and letters in the databases MEDLINE and EMBASE and 192 unpublished preprints from the preprint servers medRxiv and bioRxiv. In all, 47 publications on COVID-19 were deemed relevant for the study on disease transmission in children.

Rarely the first case in a household

"This review suggests that children are not the main drivers of the COVID-19 pandemic," says author Jonas F Ludvigsson, paediatrician at Örebro University Hospital and professor at the Department of Medical Epidemiology and Biostatistics, Karolinska Institutet. "Children mainly have social contacts with peers and parents, rather than with older people who face a risk of severe disease. It is highly likely that children can transmit the disease, but studies show that children rarely initiate the spread of the infection in a household.

A previous review by Ludvigsson on COVID-19 in children found that children tend to have milder or no respiratory symptoms. He argues that this probably decreases the risk of viral transmission.

The viral load is lower in children

It seems clear that even asymptomatic children can have viral loads, but data from a small number of studies suggest that the viral load is generally lower in children than in adults. According to Ludvigsson, this should decrease [disease transmission](#) even further.

"Case studies have indicated that children with COVID-19 seldom cause outbreaks, and we have seen no major outbreaks among [school](#) children in Sweden, despite the fact that schools and kindergartens have remained open throughout the pandemic," says Jonas F Ludvigsson.

More information: Jonas F Ludvigsson. Children

are unlikely to be the main drivers of the COVID-19 pandemic – a systematic review, *Acta Paediatrica* (2020). DOI: [10.1111/apa.15371](https://doi.org/10.1111/apa.15371)

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