

## Modeling study suggests that schools can safely reopen with proper mitigation strategies

June 8 2021



Credit: Unsplash/CC0 Public Domain

A modeling study found that with controlled community transmission and moderate mitigation strategies in place, schools can reopen safely.



Asymptomatic screening is one mitigation strategy identified that could facilitate reopening at higher local incidence while minimizing transmission risk. The findings are published in *Annals of Internal Medicine*.

Researchers from the University of Maryland School of Medicine, Harvard University, Stanford University, and Massachusetts General Hospital used a <u>simulation model</u> to assess the risk for SARS-CoV-2 <u>transmission</u> in schools. The model considered average U.S. classroom sizes for both elementary and high schools. Interactions within schools and homes, as well as those between households outside <u>school</u>, were incorporated. Mitigation strategies included were isolation of symptomatic individuals, quarantine of an infected individual's contacts, reduced class sizes, alternative schedules, staff vaccination, and weekly asymptomatic screening. Transmission was projected among students, staff, and families after a single infection in school and over an 8-week quarter, contingent on local incidence.

The data showed that school transmission varied according to student age and local incidence and was substantially reduced with mitigation measures, such as teacher vaccination, masking, social distancing, and asymptomatic screening. Testing was impactful because when transmission occurs, it may be difficult to detect as most school-aged children experience asymptomatic or mild infections. While the data suggest that reopening with careful mitigation strategies in place is safe, the authors noted that the risk for transmission was substantially higher in high schools than elementary schools.

An accompanying editorial from New York City Health + Hospitals suggests that during the pandemic, emergency department visits for children aged 5 to 11 and 12 to 17 years that were mental health-related increased approximately 24% and 31%, respectively. Isolation associated with remote learning may be partially to blame. As such, in-person



learning is one of the most powerful tools available to support children's and adolescents' mental health. Based on the science, local, state, and <u>federal agencies</u> should prioritize effective interventions that permit the benefits of in-person education while protecting the safety of both students and educators.

**More information:** Study:

https://www.acpjournals.org/doi/10.7326/M21-0600

Editorial: https://www.acpjournals.org/doi/10.7326/M21-2291

## Provided by American College of Physicians

Citation: Modeling study suggests that schools can safely reopen with proper mitigation strategies (2021, June 8) retrieved 17 May 2024 from <a href="https://medicalxpress.com/news/2021-06-schools-safely-reopen-proper-mitigation.html">https://medicalxpress.com/news/2021-06-schools-safely-reopen-proper-mitigation.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.