

# Research Informing Changes in K-12 COVID-19 Guidance

*The following references and data inform what's being learned about the limited transmission of COVID-19 in schools when guidance and protocols like Ready Schools, Safe Learners are closely followed. This is not intended to be a complete list.*

*Please note that evidence changes and OHA continues to monitor and digest scientific findings to inform state policy and public health decision-making.*

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## **Center for Disease Control's information on effectiveness of face coverings**

The CDC has [useful and updated evidence-based guidance on masking](#). **Face masking/face coverings are one of the most important tools we have for reduction of transmission, whether in the community, on a bus, or in the schools.**

*"SARS-CoV-2 infection is transmitted predominantly by respiratory droplets generated when people cough, sneeze, sing, talk, or breathe. CDC recommends community use of [masks](#), specifically non-valved multi-layer cloth masks, to prevent transmission of SARS-CoV-2. **Masks are primarily intended to reduce the emission of virus-laden droplets ("source control"), which is especially relevant for asymptomatic or presymptomatic infected wearers who feel well and may be unaware of their infectiousness to others, and who are estimated to account for more than 50% of transmissions.** Masks also help reduce inhalation of these droplets by the wearer ("filtration for personal protection"). The community benefit of masking for SARS-CoV-2 control is due to the combination of these effects; individual prevention benefit increases with increasing numbers of people using masks consistently and correctly."*

The CDC also states that, "Experimental and epidemiological data support community masking to reduce the spread of SARS-CoV-2...Adopting universal masking policies can help avert future lockdowns, especially if combined with other non-pharmaceutical interventions such as social distancing, hand hygiene, and adequate ventilation."

## **List of research informing decisions related to RSSL guidance**

Below are additional sources of information and research that add to the body of evidence on school reopening and COVID-19 transmission. More recent studies in the United States now augment many months of international literature demonstrating what educational systems have learned from effective and well-implemented safety protocols to reopen schools to in-person learning, while still minimizing risk of increasing transmission of the virus.

1. [This University of Washington summary](#)<sup>1</sup> contains a comprehensive bibliography of the research to date for further reference.

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<sup>1</sup> [Summary of Evidence Related to Schools During the COVID-19 Pandemic](#)

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2. OHA has seen very few school outbreaks so far in Oregon; none large. As of December 3, 2020, 139 schools have reported at least one COVID-19 case in a student or staff member. Of these, 77 schools have had only one case.
3. [Summary of Evidence Related to Schools During the COVID-19 Pandemic](#), U. of Washington, October 19, 2020
4. [Robust surveillance from a district in Germany demonstrated little transmission in schools over two months](#)
  - Ehrhardt, J., Ekinci, A., Krehl, H., Meincke, M., Finci, I., Klein, J., Geisel, B., Wagner-Wiening, C., Eichner, M. and Brockmann, S.O., 2020. Transmission of SARS-CoV-2 in children aged 0 to 19 years in childcare facilities and schools after their reopening in May 2020, Baden-Württemberg, Germany. *Eurosurveillance*, 25(36), p.2001587.
5. [Robust surveillance from England demonstrated little transmission in schools over one month](#)
  - Ismail, S.A., Saliba, V., Bernal, J.L., Ramsay, M.E. and Ladhani, S., 2020. SARS-CoV-2 infection and transmission in educational settings: cross-sectional analysis of clusters and outbreaks in England.
6. [Limited school attendance did not appear to significantly affect transmission.](#) Reopening of schools for all students in countries with low community transmission (Denmark and Norway) has not resulted in a significant increase in the growth rate of COVID-19 cases. Return of most students to school in countries with higher levels of community transmission (Germany) has been accompanied by increased transmission among students, but not school staff.
  - Stage HB, Shingleton J, Ghosh S, Scarabel F, Pellis L, Finnie T. Shut and re-open the role of schools in the spread of COVID-19 in Europe. medrxiv. June 2020.
7. [Investigation of 27 cases from 25 schools found attack rate of 2.8% in Australia.](#) Similar low numbers of cases found in Ireland and Singapore before schools closed.
8. [In a study of just under 900 children and adolescents aged <18 years in Mississippi](#), close contact with persons with COVID-19 and gatherings with persons outside the household and lack of consistent mask use in school were associated with SARS-CoV-2 infection, whereas attending school or child care was not associated with receiving positive SARS-CoV-2 test.

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9. [North Carolina: in 11 school districts with nearly 100,000 students/staff open for 9 weeks of in-person instruction](#), researchers tracked secondary transmission of SARS-CoV-2; within-school infections were extremely rare, demonstrating that strict enforcement of SARS-CoV-2 mitigation policies such as masking, physical distancing, and hand hygiene, resulted in minimal clusters of SARS-CoV-2 infection and low rates of secondary transmission in schools, and did not cause a larger community infection burden.
10. [Data from the Public Health Agency of Sweden](#) showed that fewer than 10 preschool teachers and 20 schoolteachers in Sweden received intensive care for Covid-19 up until June 30, 2020 (20 per 103,596 schoolteachers, which is equal to 19 per 100,000). Note that in Sweden, Covid-19 was prevalent in the community during the spring of 2020; social distancing was encouraged in Sweden, but wearing face masks was not.
11. [Norway: transmission of SARS-CoV-2 from children under 14 years of age was minimal in primary schools in Oslo and Viken](#), the two Norwegian counties with the highest COVID-19 incidence and in which 35% of the Norwegian population resides. In a period of low to medium community transmission (a 14-day incidence of COVID-19 of < 150 cases per 100,000 inhabitants), when symptomatic children were asked to stay home from school, there were < 1% SARS-CoV-2–positive test results among child contacts and < 2% positive results in adult contacts in 13 contact tracings in Norwegian primary schools. Most index cases were asymptomatic and were tested for SARS-CoV-2 by PCR because they were contacts of positive household members, supporting that household transmission is a considerable source of SARS-CoV-2 infection in children.
12. [Study examining how reopening schools in-person has affected COVID-19 hospitalizations by using large databases across the US, by county](#). Researchers found no evidence that reopening schools in-person or in a hybrid form increased COVID hospitalizations in the 75 percent of counties that had low COVID hospitalization rates during the summer, prior to reopening schools. Results suggest that it seems safe to reopen schools when there are no more than 36 to 44 total new COVID hospitalizations per 100,000 people per week.
13. [Harvard Global Health Institute. Key Metrics for COVID Suppression](#). Researchers and Public Health Experts unite to bring clarity to key metrics guiding coronavirus response. Harvard Global Health Institute, Harvard’s Edmond J. Safra Center for Ethics, Rockefeller Foundation, CovidActNow, Covid-Local, CIDRAP and many others join forces, launch new COVID Risk Level map and COVID suppression guidance for policy makers and the public.
14. [Harvard Global Health Institute. A Framework for Policy Makers and the Public](#). This memo focuses only on key epidemiological metrics and key performance indicators for testing, tracing and supported isolation response capacity.